US Army Corps
of Engineers
New Orleans District

LAKE PONTCHARTRAIN, LOUISIANA, AND VICINITY HURRICANE PROTECTION PROJECT

REEVALUATION STUDY

VOL. III

PUBLIC VIEWS AND RESPONSES APPENDIX

JULY 1984

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160

LAKE PONTCHARTRAIN, LOUISIANA, AND VICINITY HURRICANE PROTECTION PROJECT

VOLUME 1

MAIN REPORT AND FINAL SUPPLEMENT I TO THE ENVIRONMENTAL IMPACT STATEMENT

VOLUME 2

APPENDIX A - ENGINEERING INVESTIGATIONS

APPENDIX B - ECONOMIC ANALYSIS

APPENDIX C - ENVIRONMENTAL RESOURCES

VOLUME 3

APPENDIX D - PUBLIC VIEWS AND RESPONSES

PUBLIC VIEWS AND RESPONSES APPENDIX

APPENDIX D

PUBLIC VIEWS AND RESPONSES

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Region
9450 Koger Boulevard
St. Petersburg, Florida 33702

February 16, 1984 F/SER11/PK
813-893-3509

Colonel Robert C. Lee
District Engineer, New Orleans District
Department of the Army, Corps of Engineers
P.O. Box 60267
New Orleans, LA 70160

1

Dear Colonel Lee:

The National Marine Fisheries Service (NMFS) has received the Draft Supplement to the Environmental Impact Statement (DSEIS) Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project dated December 1983. We have reviewed this DSEIS and offer the following General and Specific Comments for your consideration. Our review concentrated on those parts of the project likely to have greatest impacts on marine fishery resources and their habitats.

General Comments

In general, we feel that the DSEIS adequately addresses the numerous alternatives to future work for the ongoing hurricane protection project for New Orleans metropolitan area. Of the two plans considered in detail, the NMFS had expressed opposition to the Barrier Plan in our comments dated March 21, 1975, May 18, 1978, and June 27, 1978, and in meetings with the Corps of Engineers and other federal and state agencies. The High Level Plan, designated as the Tentatively Selected Plan in the DSEIS, is the least environmentally damaging construction plan and the one that will be least detrimental to marine fisheries and their habitats.

1.1 One topic important to continued production of marine fisheries that was mentioned, but not thoroughly discussed or resolved, was mitigation for the loss of wetlands. We feel that mitigation, necessary to fully offset lost fishery habitat values upon completion of the selected plan, should be proposed, researched and conducted simultaneously with construction of the hurricane protection project. Although the management areas in St. Bernard Parish (already permitted) and/or stabilizing the shoreline of Lake Pontchartrain in St. Charles Parish (partially permitted) are excellent projects, without more detailed plans it is not possible to determine the adequacy of these projects as mitigation for either the High Level Plan or the Barrier Plan. No mitigation has been proposed to offset the impacts of deepening to -60 feet approximately 5 miles x 500 feet of Lake Pontchartrain.

RESPONSE 1.1: Further formulation and coordination of the mitigation plan is underway; the report and EIS are scheduled for completion in 1986. A number of alternative plans to fully offset losses due to direct construction impacts are being considered. These plans will be discussed and reviewed in scoping meetings and workshops to which the interested public, private organizations, and government agencies will be invited. The mitigation features will be implemented concurrently with construction of project features. Some environmental restoration and mitigation has already been implemented concurrently with construction (see paragraph 4.4.2.6.).

1.2 The value of commercial fisheries catch reported for the present, and the predicted fishery losses for future "with and without additional federal action", should be clarified and expanded. Also, at least an estimate of project impacts on sport fishing should be provided.

Specific Comments

4. ALTERNATIVES

4.2. PLANS ELIMINATED FROM FURTHER STUDY

4.2.5. PLAN 5

1.3 Page EIS-22-24, paragraphs 4.2.5.-4.2.11. This section discusses the reasons the Maxent Canal alignment was rejected in favor of the existing alignment (New Orleans East). Paragraph 4.2.10. should note that NMFS is an agency that recommends that tidal exchange be reestablished to increase the productivity of 13,000 acres of wetlands for estuarine fish and shellfish. Even though there is a proposal to develop 9,800 of the 13,000 acres, this section should be expanded to include the benefits to estuarine-dependent fishery resources with the additional habitat if the Maxent Canal alignment were selected.

4.3. FUTURE WITHOUT ADDITIONAL FEDERAL ACTION

1.4 Page EIS-25, paragraph 4.3.2. The approximate acres of marsh that will be converted to water, scrub/shrub, or upland developed habitat should be listed. Table 4.3. should be referenced and the impacts listed in order of decreasing amounts.

4.4. PLANS CONSIDERED IN DETAIL

4.4.2. HIGH LEVEL PLAN DESCRIPTION

1.5 Page EIS-30, paragraph 4.4.2.1. Possible alternatives to the borrow site in Lake Pontchartrain, such as use of maintenance dredged material from the Mississippi River or hauled fill, should be included either in this section or elsewhere (perhaps paragraph 1.4.4.) in the FEIS.

4.4.2.3. MITIGATION.

1.6 Pages EIS-31-32, paragraph 4.4.2.4., lines 12-15. The approximately 300 acres of Lake Pontchartrain that will be deepened to -60 feet should be included in the construction impacts for mitigation needs.

1.7 Page EIS-32, paragraph 4.4.2.4. The FEIS should note that implementation of any or all of the five permitted plans for St. Bernard Parish marsh management should enhance large areas of marsh, slow saltwater intrusion, and support

RESPONSE 1.2: Project impacts on sport fishing have been included by reference to the USFWS Coordination Act Report. An explanatory statement has been added to paragraph 6.1.5.2 to clarify how the fishing losses and monetary values were determined.

RESPONSE 1.3: Paragraph 4.2.10 has been modified accordingly. Selection of the Maxent Canal levee would not necessarily benefit fishery resources. The local sponsor could choose to continue to maintain the existing levee and drainage structures. Paragraph 4.2.10 already mentions the benefits to fishery resources if the tidal interchange were restored.

RESPONSE 1.4: Paragraph 4.3.2 has been modified accordingly.

RESPONSE 1.5: Paragraph 1.4.4 has been modified accordingly.

RESPONSE 1.6: Paragraph 4.4.2.4 has been modified accordingly.

RESPONSE 1.7: While it is true that implementation of any or all of the St. Bernard Parish marsh management plans would improve the marsh, our major task in formulating a mitigation plan is to compensate for the losses incurred. Also see response 1.1.

1.7 marine fishery resources as long as ingress and egress by marine organisms are facilitated or allowed to continue. However, specific mitigation plans should be discussed in detail. Otherwise, it is not possible to equate enhancement of undesignated marsh areas to the predicted wetland losses that would occur with either of the alternative plans discussed in the DSEIS.

1.8 Page EIS-32, paragraph 4.4.2.5. As in the above comments, the proposed mitigation should be described in greater detail in conjuction with the permitted work proposed by St. Charles Parish (Lake Pontchartrain-449) so that the potential benefits can be weighed against predicted losses from the hurricane protection project. Also, the FEIS should discuss the desirability of having any mitigation implemented and maintained concurrently with construction and maintenance of the proposed additions to the existing hurricane protection structures.

1.9 Pages EIS-31-32, paragraphs 4.4.2.3.-4.4.2.5. This section also should discuss additional mitigation of restoring, to the greatest extent possible, the marsh and water circulation of the channel dredged for the Gulf Intracoastal Waterway to by-pass the tidal barriers that would have been constructed in the Barrier Plan.

4.5. COMPARATIVE IMPACTS OF ALTERNATIVES

1.10 Pages EIS-33-35, Table 4.3. This table should include the impacts to the lake bottom and associated benthic fauna that will result from obtaining borrow material from Lake Pontchartrain.

5. AFFECTED ENVIRONMENT

5.2. SIGNIFICANT RESOURCES

5.2.1. GENERAL

1.11 Page EIS-39. Appendix C-XIII should be referenced.

5.2.5. SCRUB SHRUB

1.12 Page EIS-41, paragraph 5.2.5. The predicted increase in scrub shrub habitat from 88 to 782 acres during project life appears excessive. The estimate that 50 percent of marsh would convert to scrub shrub (paragraph 5.2.6.5., last sentence), based on the increase in this type of habitat determined from comparing habitats mapped in 1956 and 1978, could be unrealistic since large spoil areas, conducive to the establishment of scrub shrub habitat, were created by construction of the Mississippi River Gulf Outlet that was completed in 1962. Another similarly large project does not appear likely during the projected project life of hurricane protection levees. The result of altered hydrology from the spoil banks, combined with drying out of the marshes during drought summers, could have allowed the woody species of vegetation (scrub shrub) to

RESPONSE 1.8: See response to comment 1.1.

RESPONSE 1.9: Paragraph 4.4.2.6 has been added to discuss this matter and other already completed mitigation features.

RESPONSE 1.10: Table 4.3 has been modified accordingly.

RESPONSE 1.11: Appendix C-XIII has been referenced.

RESPONSE 1.12: Paragraph 5.2.4.5 has been modified accordingly.

become established (Dr. Karen Wicker, personal communication). The FEIS should note that continued subsidence in the area, along with increased salt water intrusion and erosion, could result in a larger percentage of marsh converting to open water rather than scrub shrub.

5.2.8. WATER QUALITY

1.13 Pages EIS-43-46, paragraphs 5.2.8.1.-5.2.8.5. These paragraphs should discuss the expected impacts of resuspension of pesticides, heavy metals, hydrocarbons, PCB's, etc. on Lake Pontchartrain and the cumulative impacts, if any, of these factors and "dead zones" on water quality.

5.2.9. OPEN WATER

1.14 Pages EIS-46-47, paragraphs 5.2.9.1-5.2.9.6. These paragraphs should include the approximate area (either acres or percent) of Lake Pontchartrain bottom that has been dredged deeper than the "natural maximum depth of 15 feet." Also, it would be helpful to know the area disturbed by shell dredging within the last two years in order to more correctly assess adverse impacts.

5.2.10. FISHERIES

1.15 Page EIS-48, paragraph 5.2.10.1. The topic sentence should be strengthened to state that Lake Pontchartrain with its varying habitats and adjacent marshes is used at various times by numerous species of fishes and crustaceans.

1.16 Pages EIS-48-49, paragraph 5.2.10.2. The value of the commercial catch should be clarified to show that it includes only the ex-vessel prices (dockside prices to the fishermen) of the catch and not the retail values which are generally several times greater. Page C-III-7 of the ENVIRONMENTAL RESOURCES appendix should be referenced. Also, an estimated value of shrimp and crabs harvested by recreational fishermen should be included.

1.17 Page EIS-49, paragraph 5.2.10.3. Sport fishing catch values should be estimated either in approximate pounds caught or man-days fishing. Sport fishing analysis in Appendix C, Monetary Evaluation of Fish and Wildlife Resources in the Area of Direct Project Impacts of Section XIV, U.S. Fish and Wildlife Service Final Coordination Act Report, should be included or referenced. The last sentence of this paragraph should include the approximate acres of the lake less than 8 feet deep and between 8 feet and the natural maximum depth of 15 feet so that the standing crop could be estimated.

6. ENVIRONMENTAL EFFECTS

6.1. SIGNIFICANT RESOURCES

6.1.4. SCRUB SHRUB

1.18 Pages EIS-68-69, paragraphs 6.1.4.1.-6.1.4.2. See above comments on page EIS-41, paragraph 5.2.5.

RESPONSE 1.13: These impacts are discussed in paragraph 6.1.4.5.

RESPONSE 1.14: Paragraph 5.2.5.2 has been modified, and paragraph 5.2.5.6 has been added to briefly discuss shell dredging.

RESPONSE 1.15: Paragraph 5.2.6.1 has been modified accordingly.

RESPONSE 1.16: Paragraph 5.2.6.2 has been modified accordingly.

RESPONSE 1.17: Sport fishing analysis has been referenced, and paragraph 5.2.6.3 has been modified accordingly.

RESPONSE 1.18: Scrub shrub was determined not to be a significant resource and is not addressed in the final EIS.

6.1.7. WATER QUALITY

1.19 Pages EIS-70-72, paragraphs 6.1.7.1.-6.1.7.7. This section should include approximate area and percent of Lake Pontchartrain impacted by deep borrow pits and the increase in such deep areas by either the High Level or Barrier Plans. Also, the relocation, if any, of deep borrow pits and "dead zones" in Lake Pontchartrain should be discussed.

6.1.9 FISHERIES

1.20 Pages EIS-73-78, paragraphs 6.1.9.1.-6.1.9.11. See above comments on FISHERIES, page EIS-48 in estimating the losses of fishery values in both plans discussed. The loss to the sport fishery at least should be roughly estimated for both plans, either as discussed in Appendix C - Environmental Resources, Section XIV, U.S. Fish and Wildlife Service Final Coordination Act Report, Appendix C - Monetary Evaluation of Fish and Wildlife Resources in the Area of Direct Project Impacts, or by some other method.

6.1.9.8. BARRIER PLAN

1.21 Page EIS-76, paragraph 6.1.9.9. The FEIS should fully explain why this paragraph states that the Barrier Plan would reduce the estimated commercial catch for the year 2100 by 265,869 pounds and $68,284 when the Fish and Wildlife Coordination Report (Appendix C, Section XIV) states on page 29 (last paragraph) that the total annual estuarine-dependent commercial fish and shellfish catch is expected to be reduced by over 388,800 pounds valued at almost $100,000.

Sincerely yours,

Richard J. Hoogland
Chief, Environmental Assessment
Branch

RESPONSE 1.19: The information requested in the first sentence of the comment is included in paragraphs 5.2.5.2, 6.1.4.1, and 6.1.4.2. There will be no known "relocation" of deep borrow pits or dead zones.

RESPONSE 1.20: Paragraph 6.1.5.7 and 6.1.5.10 have been modified accordingly.

RESPONSE 1.21: The FEIS has been revised to be consistent with the Fish and Wildlife Coordination Act report.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Region
9450 Koger Boulevard
St. Petersburg, FL 33702

February 24, 1984 F/SER112/JL:gog
409/766-3699

Colonel Robert C. Lee
District Engineer, New Orleans District
Department of the Army, Corps of Engineers
P. O. Box 60267
New Orleans, LA 70160

Dear Colonel Lee:

This is in response to your December 16, 1983 request for our views and comments on the December 1983 Draft Main Report (DMR) and Draft Supplemental Environmental Impact Statement (DSEIS) Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project. The National Marine Fisheries Service (NMFS) comments on the DSEIS have been forwarded for inclusion in the Department of Commerce's comments being submitted under provisions of the National Environmental Policy Act of 1969. This letter is to inform you of our views on the plans presented in the DMR.

The purpose of the proposed and partly completed project is to provide protection from hurricane-induced tidal surges flooding the New Orleans metropolitan area along the southern shore of Lake Pontchartrain and for repair for protection at Mandeville on the northern shore. Proposed repair of the Mandeville Wall is in abeyance.

There are two hurricane protection plans presented in the DMR, as stated in the Syllabus (page 1), (a) the use of barrier structures across tidal openings (Barrier Plan) and (b) raising the height of existing levees (High Level Plan). The High Level Plan, determined by the Corps as the most feasible one, would involve topping of existing levees and construction of a portion of new levee in the St. Charles Parish area. The Barrier Plan, which we commented on previously, (March 21, 1975, May 18, 1978, and June 27, 1978) is considered by the NMFS as being much more detrimental to marine fishery resources and their habitats than the tentatively selected (TS) High Level Plan. The Barrier Plan would have destroyed 28 acres of lake bottom, 2,363 acres of marsh and caused extensive adverse impacts to the estuarine-dependent living marine resources that utilize Lake Pontchartrain.

While the TS High Level Plan would be less damaging than the Barrier Plan, it would still adversely impact an estimated 54 acres of saline/brackish marsh and 984 acres of lake bottom. Filling some of the open water in Lake Pontchartrain and the adjacent marsh would eliminate some nursery habitat and contributions of detritus and nutrients to the marine food web. These losses are a great concern to the NMFS. Also, the degradation through deepening of several hundred acres of the lake bottom with the TS plan is of extreme concern to us since

that plan calls for extensive deep dredging for borrow material along the lakefront. The predicted resulting anoxic conditions of the more than 300 acres of deep borrow area in the lake along with subsequent accumulation of industrial and residential effluents could further degrade the previously shallow productive benthic habitat. Indicative of the Corps' recognition of the value of this existing lake bottom near the shore is the fact that the Corps has not permitted shell dredging within one mile of the shoreline.

Alternative sources that are environmentally preferable exist for needed fill material which would reduce or eliminate any need for dredging material from the lake. Some suggested sources for levee material are the Bonnet Carre' Spillway area, the freshwater diversion channel adjacent to the north side of the Bonnet Carre' Spillway proposed in the TS plan for the Mississippi and Louisiana Estuarine Areas feasibility study, the Mississippi River bottom and upland/fastland sites. Obtaining the needed borrow material without dredging the lake bottom could greatly reduce adverse impacts. Reduction of adverse impacts would, in turn, reduce the amount of offsetting mitigation needed.

Mitigative projects, such as the St. Bernard Parish Marsh Management Plan for enhancement of those wetlands, should be implemented. Another project to be considered for mitigation to offset the adverse impacts to marine fishery resources would be restoring, to the greatest extent possible, marsh and water circulation where the channel was dredged for the Gulf Intracoastal Waterway to by-pass the tidal barrier that would have been constructed at Chef Menteur Pass under the Barrier Plan. Also, should the Corps finally decide not to issue the permit requested by New Orleans East, Inc. (NOE), the Maxent Canal alignment shown on Plate 6 could be used instead of the proposed east levee and reestablishment of tidal exchange to that undeveloped 13,000 acres of wetland habitat in the NOE area could then be considered as mitigation to benefit estuarine fisheries in the High Level Plan. The Maxent Canal alignment was rejected by the Corps in favor of the present levee alignment due in part to the existing levee and a request by NOE to develop 9,800 acres of those wetlands. Pending the final decision on the NOE permit request, the Maxent Canal alignment should remain a viable alternative in the High Level Plan.

It is stated on page 52 of the DMR that "As far as practical, plans should be formulated to maximize the beneficial effects and minimize the adverse effects of the considered improvements." The DMR also states the plan should be environmentally acceptable. The NMFS feels that selection of the High Level Plan, with the levees being built out of hauled fill so that there would be little or no dredging in Lake Pontchartrain and with sufficient offsetting mitigation constructed concurrently with the hurricane protection project, would be environmentally acceptable.

In view of the above, we concur with tentative selection of the High Level Plan, rather than the Barrier Plan as the least damaging construction alternative. However, we recommend that detailed plans be developed to mitigate remaining adverse impacts that cannot be reduced through alternate borrow sources and/or levee alignments as suggested above. The mitigative work should be done simultaneously with project construction of the High Level Plan. As mitigation is an integral part of the plan and the DMR (page 52) states that "Federal participation in developments also should ensure that any plan is complete within itself, ...", the completed plans for the offsetting mitigation should be presented in the Final Main Report.

RESPONSE 2.1: The use of hauled material from upland sites is discussed on pages 90 through 92.

RESPONSE 2.2: The St. Bernard Marsh Management Plan, restoration of the Chef Menteur By-Pass Channel, and restoration of tidal exchange in New Orleans East will all be considered in the mitigation study. Already completed restoration near the By-Pass Channel is discussed in paragraph 4.4.2.6.

RESPONSE 2.3: As stated in paragraph 4.2.7, no benefits for development in the wetland areas of New Orleans East were included in the analysis. The New Orleans East alinement is justified without the proposed development. Due to the greater cost of the Maxent Canal alinement, it is not a viable alternative.

RESPONSE 2.4: See response to comment 1.1.

The NMFS would be pleased to coordinate with the Corps in development of the plans for mitigation. Thank you for this opportunity to review and comment on this proposed project.

Sincerely yours,

Richard J. Hoogland
Chief, Environmental Assessment
Branch

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Washington, D.C. 20034

N/MB2x5:VLS

February 24, 1984

3

TO: PP2 - Joyce M. Wood

FROM: N - Paul M. Wolff

SUBJECT: DEIS 8312.14 - Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project (Vol. I and II)

The subject DEIS has been reviewed within the areas of the National Ocean Service's responsibility and expertise, and in terms of the impact of the proposed action on NOS activities and projects.

The NOS Office of Ocean and Coastal Resource Management has contacted Ms. Helen Kennedy with the Louisiana Department of Natural Resources. That Department is preparing comments and will forward them directly to the Corps of Engineers. Generally, the State feels that there are some potential problems with the proposed project concerning digging into Lake Pontchartrain in order to get building material for a proposed levy. They also feel there is a potential problem with the Federal consistency issue in this case, but they do not wish to discuss specifics until they have had time to properly review the draft document. The NOS will defer to the State's comments.

3.1

RESPONSE 3.1: No response required.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
Silver Spring, Md. 20910

January 26, 1984 W/OSD22:WAS

(4)

TO: W/OM11x1 - Richard Wood

FROM: W/OSD22 - Wilson A. Shaffer

SUBJECT: Comments on Lake Ponchartrain Protection Project

Most of the report deals with environmental matters which aren't a strong concern of the NWS. However, the elevations to which the corps plans to raise the levees are of vital concern. Most of the levees will be raised to about 14 to 16 feet. These elevations were determined by the corps using the Standard Project Hurricane (SPH)--roughly a category 3 hurricane. Of concern is the rare, but extremely intense, hurricane. Brian Jarvinen at the NHC has run the SLOSH model for the Lake Pontchartrain area for category 4 and 5 hurricanes. These indicate surges which, in many cases, easily overtop the planned levees!

New Orleans presents a particularly dangerous problem. There are no high areas near the city that wouldn't flood in extreme cases. High ground is several 10's of miles away. Evacuation routes are limited. To compound these problems, parts of the city are 5 to 10 feet below sea level, protected only by the levee systems. Evacuation of New Orleans is virtually impossible--especially in the 12-24 hours lead time that the NWS hopes that it can give.

Imagine, if you can, the massive destruction and loss of life that could occur if the levees are overtopped or breached. In Galveston in 1900 we lost 6000 people. In comparison, New Orleans has the potential of being a more serious catastrophy. Hurricane Camille, one of this country's most intense hurricanes, made landfall to the east of the city. If the track had been about 40 miles to the west, New Orleans, as we know it today, would suffer extreme damage. Camille gave roughly 24 feet of storm surge east of Bay St. Louis--certainly enough to overtop New Orleans existing levees if the track were more westerly.

4.1 The Corps of Engineers makes its cost/benefit assessments on the SPH, which corresponds roughly to the hundred-year storm in this particular area. According to statistics, another Camille may not appear in the next 500-1000 years along the coast. However, statistics can't guarantee us that it won't happen this year.

4.2 It is desirable to heighten and strengthen the levee system, but the level of protection may not be adequate for class 4-5 storms.

RESPONSE 4.1: The return frequency for the design SPH in Lake Pontchartrain is approximately 300 years. The return frequency of the design SPH critical to the Chalmette, Inner Harbor, Citurs Back, and New Orleans East Back levees is approximately 200 years.

RESPONSE 4.2: The SPH is a class 3 storm. Class 4 and 5 storms are extremely rare on a path critical to the project area, and protection against these rarer events would be prohibitively expensive. During a category 4 or 5 storm, the proposed protection system would not be completely destroyed and would provide some flood protection.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FORT WORTH REGIONAL OFFICE
221 WEST LANCASTER AVENUE
P.O. BOX 2905
FORT WORTH, TEXAS 76113

REGION VI

IN REPLY REFER TO:

February 16, 1984

5

Colonel Robert C. Lee
District Engineer
New Orleans District, Corps of Engineers
PO Box 60267
New Orleans, LA 70160

Dear Colonel Lee:

SUBJECT: Review and comments on December 1983 draft supplement to Lake Pontchartrain, Louisiana and vicinity, Hurricane Protection EIS

The supplement to the subject draft Environmental Impact Statement has been reviewed by our New Orleans Office. The review of the subject draft supplement by that office indicates that the environmental concerns of this Office have been disclosed adequately.

5.1 However, we are concerned about the decrease of numerous recreational facilities throughout the 4921 acre construction area without mitigation measures being implemented. The elimination of a two lane boat launch at the Kenner Race Tracks, the National Recreation Trail in Jefferson Parish and a small play area located at the New Orleans Lakefront will eliminate 115,684 man days of recreational activities without any type of replacement for the entire construction period.

Other than our concern above, our review of the subject draft supplement indicates the environmental concerns of this office have been disclosed adequately. No other adverse comments of any signifigance are offered.

Sincerely,

I. J. Ramsbottom
Environmental Clearance Officer

AREA OFFICES
DALLAS, TEXAS · LITTLE ROCK, ARKANSAS · NEW ORLEANS, LOUISIANA · OKLAHOMA CITY, OKLAHOMA · SAN ANTONIO, TEXAS

RESPONSE 5.1: Report has been modified to indicate that facilities will be avoided or replaced.

United States Department of the Interior
FISH AND WILDLIFE SERVICE
JACKSON MALL OFFICE CENTER
300 WOODROW WILSON AVENUE, SUITE 3185
JACKSON, MISSISSIPPI 39213

March 8, 1984

IN REPLY REFER TO:
Log No. 4-3-81-165

5

Colonel Robert C. Lee
District Engineer
U.S. Army, Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160

Dear Colonel Lee:

This refers to your November 19, 1981, letter regarding the Biological Assessment on the Lake Pontchartrain and Vicinity Hurricane Protection Project and to the Draft Main Report and Draft Supplement to the Environmental Impact Statement (DSEIS) for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project, Reevaluation study. The subject assessment states that the tentatively selected High Level Plan would have no adverse impact on the bald eagle. This assessment also provides a map of the proposed levee alignment. It has come to our attention that there is now a new bald eagle nest located between interstate 10 and Airline Highway (61) and near the St. Charles, Jefferson Parish Line (see the attached figure). This places the nest in the vicinity of the proposed levee location.

The levee alignment in this area as indicated on Figure 1 of the assessment leads this office to believe that the proposed alignment is more than one mile from the subject nest and is unlikely to affect the nesting eagles. However, plate 9 of the DSEIS indicates that the proposed alignment may be very close to the eagle nest.

We recommend that you revise your biological assessment to:

6.1

1) clarify the location of the proposed alignment in regard to the eagle's nest;

2) discuss the adverse impact of the selected alignment upon these nesting eagles; and

3) determine if the project may affect the bald eagle.

Your cooperation in this matter is appreciated.

Sincerely yours,

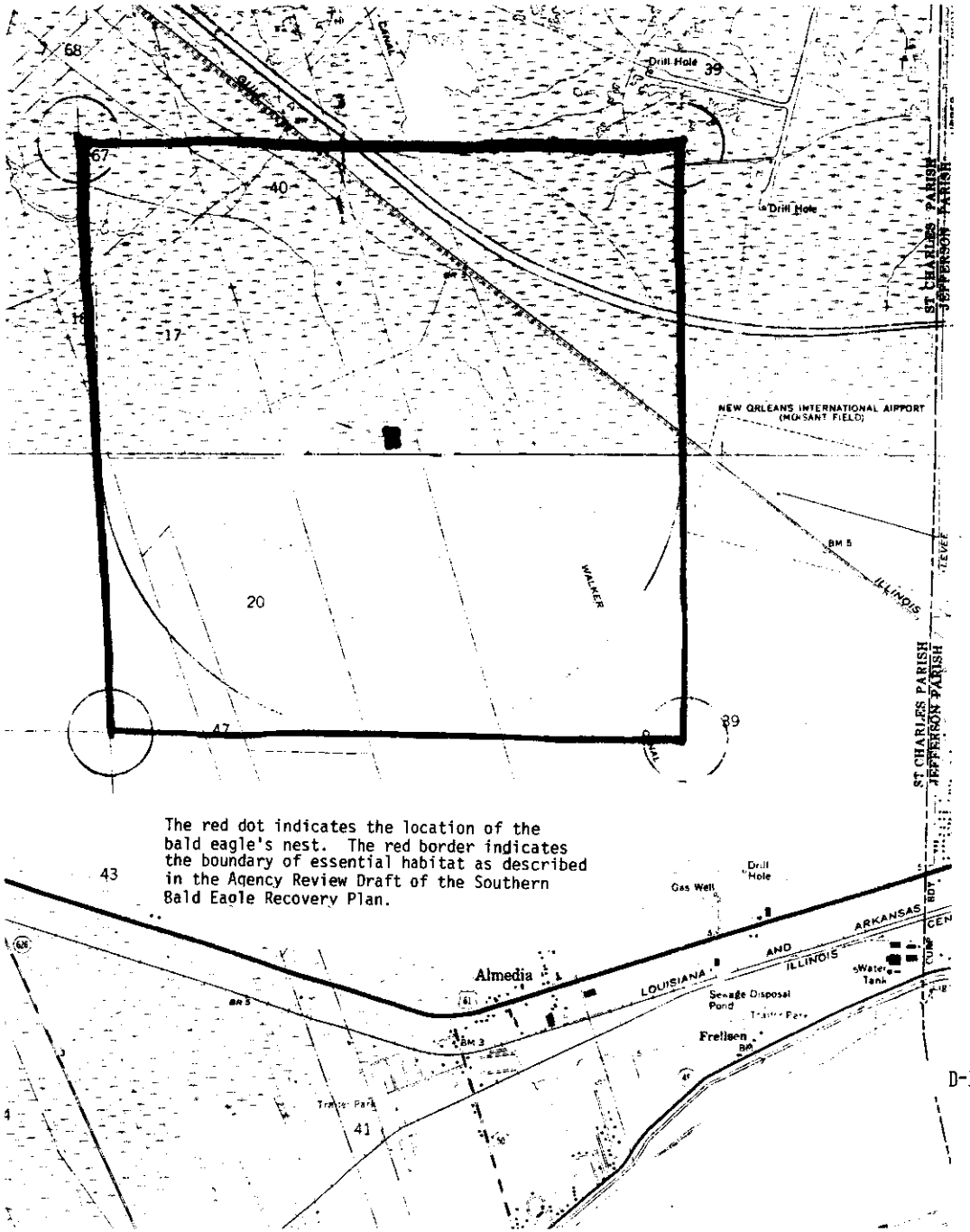
Dennis B. Jordan

Dennis B. Jordan
Field Supervisor
Endangered Species Field Office

Attachment

cc: Department of Wildlife & Fisheries, New Orleans, LA
ES, FWS, Lafayette, LA

RESPONSE 6.1: **The biological assessment in Appendix C, Section 1 has been revised accordingly.**



The red dot indicates the location of the bald eagle's nest. The red border indicates the boundary of essential habitat as described in the Agency Review Draft of the Southern Bald Eagle Recovery Plan.

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Project Review
Post Office Box 2088
ALBUQUERQUE, NEW MEXICO 87103

ER 84/21

FEB 29 1984

Colonel Robert C. Lee
Commander and District Engineer
U.S. Army Engineer District, New Orleans
Post Office Box 60267
New Orleans, Louisiana 70160

7

Dear Colonel Lee:

We have reviewed the Draft Main Report and Draft Supplement to the Environmental Impact Statement, Lake Pontchartrain and Vicinity Hurricane Protection, Louisiana, and have the following comments.

General Comments

Fish and Wildlife Resources

7.1 The draft main report and draft supplement to the environmental impact statement (EIS) are generally well written and comprehensive. However, delineation of a specific levee alignment in St. Charles Parish and identification of a mitigation plan to fully compensate for project-related damages to fish and wildlife resources are necessary before the assessment of project impacts on those resources can be considered adequate.

7.2 The documents, in our opinion, fail to demonstrate compliance with Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands). Executive Order 11988 directs Federal agencies to avoid inducing development in floodplains unless there is no practicable alternative. Executive Order 11990 directs Federal agencies to provide leadership and take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands. The draft main report (page 44) implies that the likelihood for development of the wetland portion of New Orleans East will be enhanced once adequate hurricane protection is provided. Two alternatives to the proposed New Orleans East levee exist, i.e., use of the Maxent Canal alignment and modification of existing water-control structures along the South Point Gulf Intracoastal Waterway levee. The latter alternative has been suggested by the Fish and Wildlife Service (FWS) on numerous occasions and would reopen the 9,700 wetland acres of New Orleans East to estuarine fish and shellfish usage, and would facilitate detritus export of the Lake Pontchartrain-Lake Borne estuarine system. The former alternative would avoid provision of hurricane protection to the referenced 9,700 acres of undeveloped wetlands. Continued use of the proposed New Orleans East alignment without tidal-restoration modifications is considered to be clearly contrary to the intent and spirit of the aforementioned Executive Orders.

RESPONSE 7.1: The levee in St. Charles Parish will be north of and generally parallel to Airline Highway at a distance of probably no more than 1,500 feet. The specific alinement will be determined in the design phase. See also response to comment 1.1.

RESPONSE 7.2: Discussion of compliance with Executive Orders 11990 and 11988 is contained in paragraphs 1.2.5 - 1.2.8 of the EIS. The Maxent Canal alinement is not a practicable alternative. It would cost an additional $70 million, and the benefits attributable to the wetland area are not sufficient to justify this expenditure. Restoration of tidal exchange will be considered as a mitigation measure during the separate mitigation study.

Cultural, Recreational, and Natural Resources

7.3 Construction of the tentatively selected plan, the High-Level Plan, would have significant impacts on recreation facilities in the project area. As indicated on page 112, 115,684 user-days of recreation use will be lost through the destruction of two boat lanes at Kenner Race Track, 10.5-mile Jefferson Linear Park in Jefferson Parish, and three children's play areas in Orleans Parish. These losses will occur even with the levee design modifications discussed in Appendix C, Section XI (page C-XI-1). Without design modifications, 317,557 user-days of recreation use would be lost. The Main Report lists only losses of 115,684 user-days and Appendix C, Section XI states that the design modifications will be necessary. We assume that a definite commitment to incorporate these design modifications into project plans has been made, and our comments will reflect this assumption. The final statement should contain a statement to this effect to avoid confusion.

Several recreation areas in the project area have received funding from the Land and Water Conservation Fund (L&WCF); Jefferson Linear Park, Williams Boulevard Recreation Complex, and New Orleans Small Boat Harbor. The L&WCF is administered in each state by the State Liaison Officer (SLO), appointed by the Governor. In Louisiana, the Recreation and Tourism, P.O. Drawer 1111, Baton Rouge, Louisiana 70821.

7.4 The L&WCF Act, Section 6(f) states that no property acquired or developed with assistance from the L&WCF shall be converted to other than public outdoor recreation uses without the approval of the Secretary of the Interior. Since such conversion of use is anticipated for Jefferson Linear Park, close coordination with the SLO should be initiated and maintained throughout the planning process. Local parks department officials should also be involved.

7.5 Section 6(f) further required that properties of at least equal fair market value and reasonably equivalent usefulness and location be substituted for recreation lands to be converted. The document states (page 112) that impacted recreational features will be replaced by facilities of similar or improved quality, but is not specific as to location, timing, provision for temporary or interim facilities, etc. We recommend that interim facilities be provided to support continuous recreation use of the lakefront area. The final statement should include more specific information on mitigation and the results of coordination with the SLO.

7.6 Jefferson Linear Park has been designated a National Recreational Trail (NRT) by the Secretary of the Interior. While this is a voluntary program, NRT designation provides public recognition of a quality recreation trail. Since the NRT would be destroyed by project construction, NRT designation could very likely be removed since the trail must be available for public use for at least 10 consecutive years. We strongly suggest that continuous use of the NRT be provided by using trail detours during actual levee construction. This is especially important since the document indicates that the trail could be unusable for 6 to 9 years (page C-IX-35).

We suggest that, in the future, the term "man-days" be changed to "user-days," a more generic term.

RESPONSE 7.3: Report has been modified to indicate that design modifications will be included.

RESPONSE 7.4: Coordination will be maintained.

RESPONSE 7.5: Report has been modified accordingly.

RESPONSE 7.6: Trail detours to provide continuous use will be considered in the design phase.

7.7 Cultural resource investigations are proceeding satisfactorily. The results of planned studies and surveys should be reported in the final statement, along with comments from the State Historic Preservation Office.

Specific Comments

Draft Main Report

7.8 Page 88, paragraph 1 - Because the screening of plans is to include environmental considerations (reference page 73), it should be pointed out that the hydraulic fill alternative for the Jefferson Parish Lakefront levee will create a 573-acre hole in Lake Pontchartrain. This hole, which will extend up to 60 feet below the existing lake bottom, will likely fill with saline water and decaying organic material. It is expected that the dense organic layer filling that hole will become anoxic and severely reduce the value of the affected areas as fish and shellfish habitat. The final main report should indicate how the environmental consequences of this potential "dead zone" in Lake Pontchartrain were considered during selection of the method of construction for the Jefferson Parish Lakefront levee.

7.9 Page 95, paragraph 1 - The St. Charles Parish levee is reported to be 9.3 miles long; however, on page 107, paragraph 2, this same levee reach is reported to be 14.1 miles in length. The correct levee length should be used consistently throughout this report.

7.10 Page 110, paragraph 3 - According to this section, the borrow site is about 500 feet wide and 5 miles long, this calculates to 303 acres. However, it was indicated previously in this paragraph that the borrow site encompasses 573 acres. Therefore, we assume that the borrow site should be reported as being 9 miles long rather than 5 miles long.

7.11 Page 111, Recreation Resources - The "ancillary features" which would be lost should be described and the "...two newly constructed boat launch complexes..." which we assume are Williams and Bonnabel Boulevard complexes, should be identified. These "ancillary features" should also be included in Tables 1, 2, and 3 in Appendix C, Section XI. The document should indicate if design modifications would eliminate impacts to these "ancillary features," especially since the Williams Boulevard Recreation Complex was funded through the L&WCF.

7.12 Page 112, paragraph 2 - The summary of losses does not mention the loss of "ancillary features" and only refers to a small play area in Orleans Parish. Tables 1, 2, and 3 in Appendix C, Section XI, list three play areas in Orleans Parish. These discrepancies should be corrected.

7.13 Page 119, paragraph 1 and 2 - Assuming that the St. Charles Parish levee is 9.3 miles long and 180 feet wide (page 95), implementation of the Barrier Plan will impact 203 acres of cypress-tupelo habitat, not 82 acres as indicated. Similarly, implementation of the High-Level Plan will impact an estimated 268 acres of cypress-tupelo swamp, not 105 acres as reported. The appropriate acreages should also be shown on pages 116, 132, and 133.

Page 124, paragraph 1 - Although no specific description of the mitigation plan is presented, cost estimates are provided. It is recommended that the

RESPONSE 7.7: The results of all completed studies are reported in the final EIS, as are the comments of the State Historic Preservation Officer. The results of the few remaining studies are not available, but will be fully coordinated with the State Historic Preservation Officer upon completion in accordance with 36 CFR Part 800.

RESPONSE 7.8: This section modified accordingly.

RESPONSE 7.9: Correct levee length is 9.9 miles. Report modified accordingly.

RESPONSE 7.10: Concur.

RESPONSE 7.11: Report modified accordingly.

RESPONSE 7.12: Report modified accordingly.

RESPONSE 7.13: The acreages have been corrected on the suggested pages. However, the levees are not as wide as the comment assumes; average width for the Barrier Plan is 165 feet and for the High Level Plan is 210 feet. Corrections have been made accordingly.

7.14 final report also indicate the location, type, and objectives of all proposed mitigation measures. It is further recommended that the mitigation plan be designed, in cooperation with the FWS and other appropriate agencies, to fully compensate for quantifiable project-related losses in fish and wildlife productivity.

Draft Supplement to the Environmental Impact Statement (EIS)

7.15 Abstract - The estimate of the acreage of marsh to be impacted by implementation of the High-Level Plan was changed from 142 acres to 54 acres prior to release of the draft EIS. This change was apparently overlooked in the abstract and page EIS-76.

7.16 Page EIS-4, paragraph 1.2.2. - The construction method for the Jefferson Parish Lakefront levee will entail the dredging of a hole as much as 60 feet below the existing lake bottom and encompassing 573 acres. The hole is expected to become anoxic and severly reduce the value of the affected area of fish and wildlife resources. A statement to this effect should be included in this paragraph.

7.17 Page EIS-5, paragraph 1.2.3.- It would be helpful if this section identified the "existing linear recreational areas" to be destroyed and the "large, recently developed recreational complexes" which would be preserved by levee design.

7.18 Page EIS-7, paragraph 1.2.6.- The proposed North of Airline Highway levee alignment will not reduce existing water exchange with the 4,000 acres of wetlands located south of Airline Highway (U.S. Highway 61), particularly if the levee is placed immediately adjacent to the right-of-way for Airline Highway. Therefore, this alignment is not expected to encourage wetland development or adversely impact these wetlands. This paragraph should be revised to include this information.

7.19 Page EIS-9, paragraph 1.4.4.- As stated in our comments on the draft main report, the dredge hole should be reported as extending 9 miles, not 5 miles. A similar revision should also be made on page EIS-30, paragraph 4.4.2.1.

7.20 Page EIS-23, paragraph 4.2.10. - It should be noted that restoring tidal exchange between the New Orleans East wetlands and Lake Pontchartrain would primarily benefit estuarine commercial fishery resources. Applicable laws and regulations allow 100 percent Federal funding of the first costs of commercial fishery enhancement projects if operation, maintenance, and replacement costs are assumed by non-Federal interests or a Federal fisheries agency. Thus, renewal of tidal exchange to the New Orleans East wetlands would not necessarily increase the financial burden of the local levee board.

7.21 Page EIS-28, paragraph 4.4.1.9.- Implementation of the listed action has undoubtedly reduced project impacts on fish and wildlife resources. However, complete mitigation for unavoidable impacts to those resources can only be attained through habitat enhancement and preservation measures. A statement to this effect should be included in this paragraph.

RESPONSE 7.14: See response to comment 1.1.

RESPONSE 7.15: The abstract and the EIS have been corrected.

RESPONSE 7.16: Paragraph 1.2.2 has been modified accordingly.

RESPONSE 7.17: Paragraph 1.2.3. has been modified accordingly.

RESPONSE 7.18: Paragraph 1.2.6 has been modified accordingly.

RESPONSE 7.19: Paragraphs 1.4.4 and 4.4.2.1 have been modified accordingly.

RESPONSE 7.20: Paragraph 4.2.10 has been modified accordingly.

RESPONSE 7.21: Paragraph 4.4.1.9 has been modified accordingly.

7.22 Page EIS-30, paragraph 4.4.2.1. - Despite the orientation of the proposed borrow pit, physical and chemical stratification will probably prevent its flushing except possibly during extreme storm events such as hurricanes.

7.23 Page EIS-31, paragraph 4.4.2.4. - The final statement should indicate the extent to which mitigation needs were determined using a habitat-based assessment methodology, such as the FWS's Habitat Evaluation Procedures. It should also be noted that an average annual loss of 32, not 82, acres of brackish/saline marsh is expected to occur with completion of the High-Level Plan.

7.24 The present marsh deterioration rate being experienced in the wetlands to be affected by the mitigation features considered would be greatly reduced by implementation of the authorized Caernarvon Freshwater Diversion Structure. Therefore, it is expected that implementation of marsh management features proposed to date would only partially fulfill mitigation needs for unavoidable project losses to fish and wildlife resources.

7.25 Page EIS-32, paragraph 4.4.2.5. - The last two sentences of this paragraph are confusing and should be changed to read "...protection of marsh immediately adjacent to Lake Pontchartrain through shoreline stabilization. This would be limited to that portion of the Lake Pontchartrain shoreline in St. Charles Parish."

7.26 Page EIS-33, Table 4.3. (Water Quality) - The FWS believes that water quality in the proposed borrow pit adjacent to the Jefferson Parish levee will be extremely poor, possibly throughout the year. Should large volumes of anoxic water be displaced from this deep hole, biological productivity in adjoining areas would probably be reduced.

7.27 Page EIS-33, Table 4.3. (Fisheries) - The FWS believes that the reduction in gross exvessel value of fish and shellfish harvest is a more valid economic measure of adverse project-related impacts on estuarine-dependent commercial fisheries. This value should be used in lieu of the net profit to the fisherman, which is calculated by subtracting the cost of harvest from exvessel fish and shellfish prices. The latter measure was used in this table and throughout the draft supplement.

7.28 Page EIS-34, Table 4.3. - Impacts of the High-Level Plan on recreation indicated the loss of a total 318,147 user-days. However, design modifications would save 201,873 user-days. The chart and text should agree.

7.29 Page EIS-39, paragraph 5.2.2. - As noted previously, an estimated 268 acres, rather than 105 acres, of cypress-tupelo habitat are in the area of potential construction impacts. The total acreage impacts for this habitat type should be changed throughout the statement, including pages EIS-33, EIS-65, EIS-66, EIS-68, and EIS-78.

7.30 Page EIS-80, paragraph 6.1.13.1. - This section refers to the possible loss of boat launch complexes at Williams and Bonnabel Boulevards. However, Table 2, Appendix C, Section XI, indicates that design modifications will protect the 16 boat lanes at these sites; this discrepancy should be corrected.

RESPONSE 7.22: Concur

RESPONSE 7.23: Paragraph 4.4.2.4 has been modified accordingly and a new paragraph 4.4.2.7 has been added to further discuss the schedule for mitigation.

RESPONSE 7.24: Paragraph 4.4.2.4 has been modified accordingly.

RESPONSE 7.25: Paragraph 4.4.2.5 has been modified accordingly.

RESPONSE 7.26: Table 4.3 and paragraph 6.1.4.5 have been revised in accordance with a recent literature survey and field sampling.

RESPONSE 7.27: Gross exvessel values of fish and shellfish harvest are used in the EIS because the data came from the National Marine Fisheries Commission and the Coordination Act Report. The net profit to the fisherman is used in the economic section of the report as required by Principles and Guidelines.

RESPONSE 7.28: Report has been modified accordingly.

RESPONSE 7.29: See response 7.12. The appropriate pages have been modified accordingly.

RESPONSE 7.30: Paragraph 6.1.9.1 has been modified accordingly.

7.31 Reference is made to Jefferson Downs Race Track. We assume that this is Kenner Race Track and recommend the use of only one name throughout the documents.

7.32 Page EIS-81, paragraph 6.1.13.3. - This paragraph refers to the future of a covered picnic shelter and states that design modification might be necessary. Table 2, Appendix C, Section XI, shows that design modification will protect one covered picnic shelter. This discrepancy should be corrected.

7.33 This paragraph also states that the 18 boat lanes at Seabrook Bridge probably will not be impacted. The document should state conclusively if these facilities will be impacted.

7.34 This paragraph further discusses recreation potential of the levee crown and barge berms, but goes on to state that no new facilities have been recommended. Because of the significance of project-related impacts on recreation, we recommend that recreation development be investigated as part of the project and reported in the final statement.

7.35 Page EIS-82, paragraph 6.1.13.7. - This paragraph should state conclusively if design modifications will be incorporated in project plans.

7.36 Page C-VIII-29, Section III.f(3)(c). - This section states that no long-term adverse effects would occur to water-related recreation. If short-term effects are anticipated, they should be described and mitigated.

7.37 Page C-IX-33, Section III.f(3)(c). - "Disruption of use" appears to be the only effect on Kenner launch and Williams and Bonnabel Boulevard launches. It should be stated that the two boat lanes at Kenner launch will be destroyed and that the 16 boat lanes at Williams and Bonnabel Boulevards will be protected with the proposed design modifications.

7.38 Page C-IX-35, Section III.f(3)(e). - This section, or Section III.f(3)(c), should include discussions of impacts on the three children's play areas (Orleans Parish lakefront), the 330-foot fishing pier (Bonnabel Boulevard), and one covered picnic shelter (Orleans Parish). These are listed on Table 3, Appendix C, Section XI, as areas that would be impacted without design modification.

7.39 Page C-X-9, Guideline 1.7(q). - This discussion should include all impacted recreation areas and, again, refers to "ancillary facilities" near two newly constructed boat launch complexes. Clarification is needed.

Summary Comments

This Department recognizes the urgent need to provide hurricane protection to the project area. However, based on our analysis of environmental impacts, we believe the High-Level Plan, rather than the Barrier Plan, as the Tentatively Selected Plan would be more environmentally acceptable. In the October 13, 1983, draft Fish and Wildlife Coordination Report on this project, the FWS made the following recommendations to reduce adverse project impacts to fish and wildlife resources:

RESPONSE 7.31: Paragraph 6.1.9.1 has been modified accordingly.

RESPONSE 7.32: Paragraph 6.1.9.3 has been modified accordingly.

RESPONSE 7.33: Paragraph 6.1.9.3 has been modified accordingly.

RESPONSE 7.34: Paragraph 6.1.9.3 has been modified accordingly.

RESPONSE 7.35: Paragraph 6.1.9.7 has been modified accordingly.

RESPONSE 7.36: Section III.f(3)(c) has been modified accordingly.

RESPONSE 7.37: Section III.f(3)(c) has been modified accordingly.

RESPONSE 7.38: Section III.f(3)(e) has been modified accordingly.

RESPONSE 7.39: Guideline 1.7(q) has been modified accordingly.

7.40 1. Eliminate the St. Charles Parish alignment, or, if this levee segment is built, operate the proposed water-control structures to assure water circulation and estuarine organism movement through the levee;

7.41 2. Purchase non-development easements over the 9,700-acre wetland area in New Orleans East and modify the water-control structure along the South Point to Gulf Intracoastal Waterway levee segment to allow water and estuarine organism movement through the levee, between the enclosed wetland area and the adjacent estuary;

7.42 3. Eliminate or reduce impacts associated with the proposed borrow holes in Lake Pontchartrain adjacent to the Jefferson Parish Lakefront levee by either hauling levee material from another area or developing a dredge method that will alleviate water quality and biological productivity problems caused by these holes; and

7.43 4. Develop a mitigation plan that will fully compensate for all quantifiable project impacts to biological productivity resulting from past and future project work and that will be implemented simultaneously with construction of all project features.

7.44 This Department recommends that the final main report and impact statement include a detailed plan that prevents project-induced development of wetlands in the New Orleans East area and which fully compensates for unavoidable project-induced habitat losses. Adequate mitigation measures should be implemented simultaneously with the hurricane protection features of the project. We do acknowledge that progress has been made toward this goal. However, because of these remaining concerns, we may, depending on the proposal included in the final main report and statement, refer this project to the Council on Environmental Quality under Section 1504 for the Council's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. We do, however, wish to coordinate in reaching a solution to our concerns to assure implementation of the project with a minimum of delay. Further coordination can be initiated by contacting the Field Supervisor, Division of Ecological Services, U.S. Fish and Wildlife Service, P.O. Box 4305, Lafayette, Louisiana 70502, (318/264-6630).

Sincerely,

Raymond P. Churan
Regional Environmental Officer

RESPONSE 7.40: The structures will remain open, except during threat of high water. See page 132 for proposed operation of structures.

RESPONSE 7.41: This will be considered in the mitigation study.

RESPONSE 7.42: Methods of reducing impacts associated with the borrow holes are still being investigated and those found to be economically feasible will be implemented.

RESPONSE 7.43: See response to comment 1.1.

RESPONSE 7.44: See response to comment 1.1.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
P. O. BOX 3629
BATON ROUGE, LOUISIANA 70821

REGION 6

January 18, 1984

IN REPLY REFER TO

DSEIS and Draft Main Report
Lake Pontchartrain and Vicinity
Hurricane Protection Project

Colonel Robert C. Lee
District Engineer
Corps of Engineers
P. O. Box 60267
New Orleans, LA 70160

Dear Colonel Lee:

8.1 We have no comments on the subject documents.

Sincerely yours,

J. N. McDonald
Division Administrator

RESPONSE 8.1: No response required.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
INTERFIRST TWO BUILDING, 1201 ELM STREET
DALLAS, TEXAS 75270

Colonel Robert C. Lee
District Engineer
New Orleans District
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana 70160

Dear Colonel Lee:

We have completed our review of your agency's Draft Main Report and Draft Supplemental Environmental Impact Statement (EIS) for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project, Reevaluation Study.

The following comment is offered for your consideration:

9.1 Review of the environmental consequences as discussed in the Supplemental EIS indicates that related noise impacts due to construction activity may cause short term inconveniences to those residents living closest to the existing levee right-of-ways. For this reason, it is desirable for the Final EIS to quantify the extent of the anticipated noise impacts and to identify, if necessary, mitigative measures to be taken to assure minimal impact to the affected receptors.

We classify your Draft Environmental Impact Statement as LO-2. Specifically, we have no objections to the proposed project action. However, we ask that the Final EIS provide additional assessment information in the area of noise related impacts. Classification will be published in the Federal Register in accordance with our responsibility to inform the public of our views on the proposed Federal action under Section 309 of the Clean Air Act.

Definitions of the categories are provided on the enclosure. Our procedure is to categorize the EIS on both the environmental consequences of the proposed action and to the adequacy of the EIS at the draft stage, whenever possible.

RESPONSE 9.1: The report has been modified accordingly.

We appreciate the opportunity to review the Draft EIS. Please send our office five (5) copies of the Final EIS at the same time it is sent to our Office of Federal Activities, U.S. Environmental Protection Agency, Washington, D.C.

Sincerely yours,

Allyn M. Davis

for Dick Whittington, P.E.
Regional Administrator

Enclosure

ENVIRONMENTAL IMPACT OF THE ACTION

LO - Lack of Objections

EPA has no objections to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action.

ER - Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to re-assess these aspects.

EU - Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this action. The Agency recommends that alternatives to the action be analyzed further (including the possibility of no action at all).

ADEQUACY OF THE IMPACT STATEMENT

Category 1 - Adequate

The draft impact statement adequately sets forth the environmental impact of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2 - Insufficient Information

EPA believes the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested that the originator provide the information that was not included in the draft statement.

Category 3 - Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonably available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revision be made to the impact statement. If a draft statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make a determination.

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL
Lincoln Center, Suite 881 • 5401 W. Kennedy Blvd.
Tampa, Florida 33609 • Phone: 813/228-2815

March 22, 1984

00.MAR.84*002706

10

Colonel Robert C. Lee
District Engineer, New Orleans District
Department of the Army, Corps of Engineers
P.O. Box 60267
New Orleans, LA 70160

Dear Colonel Lee:

This responds to your request for comments on the Draft Main Report (DMR) and Draft Supplemental Environmental Impact Statement (DSEIS) for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project.

The Gulf of Mexico Fishery Management Council (GMFMC) has been mandated by the Magnuson Fishery Conservation and Management Act to manage fishery resources in the Fishery Conservation Zone of the United States. Since many off-shore fishery resources (e.g. penaeid shrimp) require estuaries during some part of their life cycle, the Gulf Council is concerned with activities in estuarine areas like Lake Ponchartrain which have the potential of adversely affecting these fishery resources.

According to the DMR, two hurricane protection plans are being considered. The first is called the Barrier Plan and the second is called the High Level Plan. The Barrier Plan calls for the construction of structures across tidal openings. This plan would involve the destruction of 28 acres of lake bottoms and 2,363 acres of marsh. The loss of estuarine habitat and fishery resources that use Lake Ponchartrain would be extensive.

The High Level Plan would be less damaging, but still would impact 54 acres of saline/brackish marsh and about 984 acres of lake bottom. The marsh and some lake bottoms would be filled to raise the height of existing levees. A large area of lake bottom also would be deepened to obtain fill. The loss of marsh and lake bottom to filling would permanently remove an important source of detritus and habitat necessary for fishery production. Deepening portions of the lake would further degrade fishery habitat and potentially create a large deep area with water quality problems.

10.1 Clearly the High Level Plan is less environmentally damaging than the Barrier Plan. Accordingly, we favor the High Level Plan, but recommend it be further modified to reduce impacts to fishery resources. The February 24, 1984, letter to you from the National Marine Fisheries Service (NMFS) discusses a number of alternatives as well as mitigation for unavoidable losses of fishery habitat. Also, the levee along the St. Charles portion of the lake should be built adjacent to the north side of Airline Highway.

RESPONSE 10.1: See responses 2.1 through 2.4. The tentatively selected plan recommends construction of the levee adjacent to the north side of Airline Highway. The exact alinement will be worked out in design stages, but it will be as near to the highway as is feasible.

10.2 The Barrier Plan is not acceptable to the GMFMC and we recommend you further modify the High Level Plan to further reduce environmental impact. Alternative borrow areas and levee alignments should be considered along with mitigation to offset unavoidable losses of fishery habitat. We strongly urge you to consider the proposals of the NMFS aimed at significantly reducing the environmental impact associated with this project.

Sincerely yours,

Alex Jernigan
Chairman

AMJ:AM:cf

cc:
Joe Lindsley, DNR
James Pulliam, FWS
Gulf Council
Richard Hoogland
Don Moore
Mississippi/Louisiana Habitat Advisory Panel
Staff

RESPONSE 10.2: Noted.

DAVID C. TREEN
GOVERNOR
MRS. LAWRENCE H. FOX
SECRETARY

State of Louisiana
DEPARTMENT OF CULTURE, RECREATION AND TOURISM
OFFICE OF CULTURAL DEVELOPMENT
ROBERT B. DEBLIEUX
ASSISTANT SECRETARY

DIVISION OF ARCHAEOLOGY
KATHLEEN BYRD, DIRECTOR
DIVISION OF THE ARTS
ALBERT B. HEAD, DIRECTOR
DIVISION OF HISTORIC PRESERVATION
ANN REILEY JONES, DIRECTOR
FOLKLIFE PROGRAM
NICHOLAS R. SPITZER,
PROGRAM MANAGER

February 20, 1984

11

Colonel Robert C. Lee
District Engineer
Department of the Army
New Orleans District, Corps
of Engineers
P. O. Box 60267
New Orleans, LA 70160

Re: Draft Main Report and Draft Supplement to the Environmental Impact Statement for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project, Reevaluation Study

Dear Colonel Lee:

My staff has reviewed the referenced report, transmitted by your letter of December 16, 1983. We have these comments to offer.

Our review of the document, in particular Section XII, "Cultural Resources" indicates that up this point in time, cultural resources have been adequately considered in the planning process. Concise and accurate synopses are presented concerning past cultural resources studies of the project impact area and of the additional studies which will be needed. There are some points, however, that we would like to bring up regarding standing structures.

Our major concern about standing structures involve possible indirect effects on buildings in Mandeville and on Forts Macomb and Pike. The tentative plan calls for the renovation of the floodwall in Mandeville. That action might have a visual impact on not only the two structures that 11.1 were listed on the National Register of Historic Places when the report was prepared but also the recently-listed Flagstaff and a potential historic district facing the lake. If the barrier plan is chosen, the complexes at Chef Menteur and the Rigolets might have an indirect effect on Fort Macomb and Fort Pike, respectively. Finally, we would like to 11.2 identify three lighthouses on which the potential effect of the project has not been identified. They are the Techfuncte in St. Tammany Parish, Manchac in Tangipahoa Parish and New Canal in Orleans Parish. We have

P. O. BOX 44247 BATON ROUGE, LOUISIANA 70804 (504) 342-6680 AND LINC 421-6680

RESPONSE 11.1: The proposed rehabilitation of the Mandeville Seawall would not have a visual impact on any of the National Register listed or proposed properties. The proposed work consists of repair and renovations of the existing seawall with no significant change in scale, height, or design. The comments regarding Forts Macomb and Pike are noted in the text.

RESPONSE 11.2: The lighthouses and the alternatives' potential effects on them have been included in the text.

evaluated their significance, and the Coast Guard is in the process of nominating them to the Register.

Thank you for the opportunity to review this document. Should you have any questions regarding our comments, do not hesitate to contact my staff in the Divisions of Archaeology and Historic Preservation.

Sincerely,

Robert B. DeBlieux
State Historic Preservation Officer

RBD:PGR/JPK:tb

STATE OF LOUISIANA
OFFICE OF STATE PARKS

DEPARTMENT OF CULTURE, RECREATION AND TOURISM
P.O. DRAWER 1111 • BATON ROUGE, LOUISIANA 70821-1111 (504) 925-3830

(12)

DAVID C. TREEN
Governor

MRS. LAWRENCE H. FOX
Secretary

KIRK CARNEY
Assistant Secretary

February 16, 1984

Mr. Robert C. Lee
Colonel, Corps of Engineers
New Orleans District
P. O. Box 60267
New Orleans, LA 70160

Dear Colonel Lee:

The staff of the Department of Culture, Recreation and Tourism, Office of State Parks, Division of Outdoor Recreation have carefully reviewed the Draft Main Report and Draft Supplement to the Environmental Impact Statement (DSEIS) for the Lake Ponchartrain, Louisiana, and Vicinity Hurricane Protection Project Reevaluation Study along with the appendixes for the Draft Main Report and the DEIS. This letter is to inform you that the proposed plan may impact several U. S. Department of the Interior Land and Water Conservation projects located in the direct path of the New Orleans proposed work. One site is the New Orleans Small Boat Harbor (L&WCF Project 22-00226), located in Orleans Parish on Breakwater Drive. The other sites, which are located in Jefferson Parish, are Jefferson Linear Park (L&WCF Project 22-00317), and Jefferson Linear Park Extension (L&WCF Project 22-00516) which has been designated as a National Recreation Trail as well as the Williams Boulevard Recreation Complex (L&WCF Project 22-00630).

12.1 Identification of actual sites was very difficult in the draft and we request that you more specifically identify impacted recreation sites both descriptively and geographically in the final report.

12.2 Property acquired and or developed with L&WCF monies shall be retained and used for public outdoor recreation, and any property so acquired or developed shall not be wholly or partly converted to other than public outdoor recreation use without the approval of the Secretary, Department of the Interior. Without design modification all of the above referenced sites, with the possible exception of the Small Boat Harbor Project 22-00226, will be lost due to construction. With design modification it appears that only the 10.5 mile National Recreation Trail (L&WCF Projects 22-00317 and 22-00516) will be lost due to construction. Either case constitutes 6(f)(3) conversion and serious consideration should be given to insuring that no adverse impacts effect these projects.

If you have any questions concerning this matter, please contact us.

Sincerely,

Kirk Carney
State Liaison Officer

KC/EMC/rm

c: Robert Kerr, NPS

Offices in the Great Fosters Office Plaza at 666 N. Foster Drive, Baton Rouge

RESPONSE 12.1: Recreation sites are identified on Figure 1, page C-XI-2.

RESPONSE 12.2: Report has been modified accordingly.

DAVID C. TREEN
GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

FRANK P. SIMONEAUX
SECRETARY

13

February 28, 1984

Colonel Robert C. Lee
U. S. Army Corps of Engineers
P. O. Box 60267
New Orleans, LA 70160

RE: C840069 Federal Consistency with the Lake Pontchartrain, Louisiana, and Vincinity Hurricane Protection Project.

Dear Colonel Lee:

Thank you for coordinating the reevaluation of this project with the Coastal Management Division (CMD) of the Department of Natural Resources (DNR). Certainly the City of New Orleans Metropolitan area is in need of improved Hurricane Protection.

Certain aspects of the tentatively selected plan (TSP), however, may not be consistent with the Federally approved Louisiana Coastal Resources Program, (LCRP) to the maximum extent practicable. The main aspects of the TSP which may be inconsistent are summarized below, and the specific guidelines that do not appear to be met by various aspects are appended. Please note that these comments pertain only to the TSP, for which the consistency determination was prepared. If any plan other than the TSP is proposed at a future time, then it would have to be evaluated for consistency.

13.1 1. New Orleans East Alignment: Basically the proposed alignment traverses through a wetland area instead of along the wetland/non-wetland interface. An alternative (Maxant canal alignment) exists, and the future development of this be tract of wetlands has not been determined. If the tract is not developed the wetlands would serve as valuable non-structural flood protection. If the New Orleans East area is determined to be a fastland, this proposed alignment may be consistent. More information should be provided by your office in order to substantiate this area as a fastland.

13.2 2. St. Charles Parish north of Airline Highway: DNR questions how this alignment will affect the 3000 acre area South of Airline Highway. There is also not enough information concerning the exact location of the proposed levee.

P.O. BOX 44396 . BATON ROUGE, LA. 70804 . PHONE 342-4500
NATURAL RESOURCES BUILDING

RESPONSE 13.1: It is our position that the area is a fastland. We are in the process of documenting this fact with DNR.

RESPONSE 13.2: The wetland area south of Airline Highway will not be affected by the levee because existing hydrology will be maintained by culverts in the levee.

13.3 3. Jefferson Parish Lakefront alignment: The basic issue here is the proposed dredge borrow area (-77; NGVD) in Lake Pontchartrain. The borrow hole would cause adverse environmental effects, and alternative sources of clay are available. More information is needed on the necessity to dredge such a deep hole as opposed to a shallower one.

13.4 4. Jefferson Parish and St. Charles Parishes line alignment: There is not enough information to determine the exact location of the levee.

We would like to work with your office to resolve these issues and collaborate on a plan that provides hurricane protection and achieves the goals of balancing conservation and development of coastal uses. Please contact me if you have any questions.

Sincerely,

Frank P. Simoneaux
SECRETARY

Dr. Charles G. Groat

cc: Kelley Taggart
Ann Berger-Blundon

RESPONSE 13.3: See response 13.19 for information about the necessity to dredge a deep hole as opposed to a shallower one.

RESPONSE 13.4: The return levee on the Jefferson/St. Charles Parish line will straddle the existing levee at this location.

New Orleans East Levee Alignment

The alignment of the New Crleans East Levee may be inconsistent with the goals and policies of the Louisiana Coastal Resources Program, and may not be in compliance with the following Coastal Use Guidelines:

13.5 Guideline 1.7 (e): More information is required concerning plans for the 13,000 acres of wetlands to be impacted by the proposed New Orleans East Levee. Information concerning the size, number, and placement of water control structures is needed, as well as a plan of operation for these structures.

13.6 Guideline 1.7 (0): The alignment of the New Orleans East levee may foster secondary impacts by encouraging further future development of wetland areas surrounded by the levee. The decision to place this levee in the proposed location will certainly influence how these areas will be regarded in terms of development and 404 permitting. The alternate Maxent Canal alignment would reduce these impacts to the maximum extent practicable.

Guideline 2.3: Although constructed for the purpose of floods associated with hurricanes, this present alignment will have a significant role in encouraging development of a large tract (approximately 9,773 acres) of a total of 13,000 acres of undeveloped wetlands.

13.7 It may be inconsistent to protect undeveloped wetlands from floods associated with hurricanes unless the levees are constructed for the purpose of developing or otherwise changing the use of the wetland. In order to avoid to the maximum extent practicable levee construction for the purpose of developing or changing the use of a wetland area, the alternate Maxent Canal alignment should be used.

Guideline 2.4: The alignment of the New Orleans East hurricane protection levee surrounds an area of wetlands approximately 9,773 acres in size. More information concerning the alignment of this levee is needed before compliance with this guideline can be determined. This guideline requires

13.8 that hurricane and flood protection levees shall be located at the non-wetland/wetland interface or landward to the maximum extent practicable.

Again the Maxent Canal alignment is viewed as satisfying this guideline to the maximum extent practicable by being closer to the non-wetland/wetland interface by the elimination of the 13,000 acres of wetlands encircled by this levee.

13.9 Guideline 2.6: More information concerning the management of the wetlands to be leveed is needed before a proper evaluation can be made concerning the disruption of hydrology, and the ingress and egress of beneficial nutrients and aquatic organisms. Is there significant interchange of water under present conditions and will the proposed levee alter existing flow patterns?

13.10 Guideline 5.8: No permits have been issued for surface alterations of the New Orleans East area encompassed by the hurricane protection levee. However, the improvement of this levee system may encourage and act as a catalyst for future development. Is the existing levee a validly constructed, and maintained levee?

Guideline 6.1: No evidence is presented that suggests that the existing alignment of the New Orleans East levee fits the criteria listed in this guideline, i.e. a.) on lands five feet or more above sea level, or within fastlands; or b.) on lands which have foundation conditions sufficiently stable to support the use ... More information is required concerning how this area fits the following criteria outlined in the LCRP FTIS Appendix P (p.42) concerning fastland determinations:

13.11

1. Guideline 2.6 clearly states that any future development of hurricane protection levees shall be developed in such a way as to minimize disruption of water flow, beneficial nutrients or aquatic organisms between enclosed wetlands and coastal waters. The enclosed area including wetlands will not be considered a fastland and all activities proposed for such areas shall be subject to all rules, regulations and guidelines of the LCRP to the same extent as required elsewhere in the coastal zone.

   If the pre-existing validly constructed hurricane protection levees prevent a significant interchange of water between the enclosed area and coastal waters, the enclosed area would be considered a "fastland". This "fastland" would not be subject to the permitting procedure of the LCRP, but would still be subject to any other federal, state or parish governmental authority.

2. As noted above, action proposed for wetland areas enclosed by hurricane protection levees are subject to the coastal use permit program. Wetlands behind such levees may be drained and filled when such activities are consistent with all relevant guidelines.

3. Wetlands enclosed by hurricane/flood protection levees permitted under the LCRP in conformance with guideline 2.6 will continue to be biologically productive because they shall be built and maintained to minimize disruptions in the interchange of water, beneficial nutrients and aquatic organisms between the enclosed wetlands and those outside the levee system. The biological productivity of wetlands which are enclosed by existing hurricane and flood protection levees will be judged on a case by case system.

4. Wetlands enclosed by development levees would be eligible for designation as "fastlands" if the enclosed areas meet all the criteria included in the fastland definition provided by Act 361. Many types of activities could require a development levee; these include but are not limited to urban development and agricultural development.

St. Charles Parish Levee Alignment

The proposed St. Charles Parish hurricane protection levee alignment north of Airline Highway (U.S.61) may be inconsistent with the goals and policies of the Louisiana Coastal Resources Program, and may not comply with the following Coastal Use Guidelines:

RESPONSE 13.5: The area has been enclosed by a system of railroad embankments and levees since 1958, prior to authorization of the hurricane protection project. Four gravity drainage structures equipped with flapgates were included in the levee system and provided for flow out of the area only. There is no significant interchange between the leveed area and the surrounding marshes. The structures have been lengthened as the levees were enlarged under the Barrier Plan and positive closures were added to ensure closure during a hurricane event. Under the High Level Plan, the improved levee would have identical drainage structures to maintain the existing pattern of outflow only. The 13,000 acres of wetlands enclosed by this alinement have been cut from tidal exchange for over two decades. The items of local cooperation would require the Orleans Levee Board, as the local sponsor, to maintain and operate all features of the project in accordance with regulations prescribed by the Secretary of the Army, including levees, floodgates and approach channels, drainage structures, drainage ditches or canals, floodwalls, and stoplog structures.

RESPONSE 13.6: We concur that future development could occur but no economic benefits for this potential development have been credited in association with this plan. In addition, any development involving wetlands would be subject to the Section 404 permit process and any impacts incurred would be mitigated if necessary. The New Orleans East lakefront alinement was the preferred alternative because it would provide the same amount of hurricane protection to the developed areas at a lower cost due to better foundation conditions.

RESPONSE 13.7: The levee is not built for the purpose of developing a wetland area. See Response 13.6. In addition, this alinement would provide flood protection for the lower portions of I-10 crossing the eastern New Orleans area. This could be of great importance since this would become the major eastern hurricane evacuation route.

RESPONSE 13.8: While we recognize that the Maxent Canal alinement is at the true wetland/non-wetland interface, we do not consider the alinement practicable since it costs $59 million more than raising the levee along the existing alinement.

RESPONSE 13.9: There are no plans to manage the wetlands in question. There is no significant interchange under present conditions because locally constructed levees enclosed the wetlands over 20 years ago. Increasing the height of these existing levees would not alter the present conditions.

RESPONSE 13.10: The existing levee system is a validly constructed levee built and maintained by the Orleans Levee District. The levee was built in the 1950's prior to passage of the National Environmental Policy Act, Section 404 of the Clean Water Act, and the Louisiana Coastal Resource Program. While large scale permitting has not occurred in the area, several permits have been issued within the levee system and several permit applications are presently being reviewed.

13.12 Guideline 1.7(e): More information is required concerning the management of the wetlands to be impacted by the St. Charles Parish hurricane levee paralleling Airline Highway. A marsh management plan indicating the size, number, and placement of water control structures is needed, as well as a plan of operation for these structures in order to assess any adverse alterations of hydrology.

13.13 Guideline 1.7(L): Cumulative impacts and habitat destruction may increase as a result of the construction of this levee in St. Charles Parish. Therefore, more information concerning the exact placement of the levee in relation to its proximity to Airline Highway is required in order to determine how many acres of wetlands will actually be impacted.

13.14 Guideline 1.7(0): The construction of this levee north of Airline Highway may foster secondary impacts in adjacent wetlands and estuarine areas by encouraging future development of wetlands habitats to the south. The decision to place these levees in the proposed locations will certainly influence how these areas will be regarded in terms of development and coastal use permitting.

13.15 Guideline 2.3: Although constructed for the purpose of floods associated with hurricanes, this present alignment may have a significant role in encouraging development of approximately 3000 acres of undeveloped wetlands south of Airline Highway. More information concerning the use and placement of water control structures, and a detailed marsh management plan for the impounded area are needed before a consistency determination can be made.

13.16 Guideline 2.4: More information concerning the proximity of the St. Charles levee to Airline Highway is needed in order to evaluate its location with regard to the non-wetland/wetland interface or landward to the maximum extent practicable.

13.17 Guideline 2.6: More information concerning the management of the wetlands to be leveed is needed before a proper evaluation can be made concerning the disruption of hydrology and ingress and egress of beneficial nutrients and aquatic organisms. Also, see LCRP FEIS Appendix P (p.42) as previously quoted for the New Orleans East levee alignment with regards to the definition of a hurricane protection levee as opposed to a development levee.

13.18 Guideline 7.6: More information concerning the management and use of the water control structures to be installed are necessary before a proper evaluation can be completed for the St. Charles Parish levee north of Airline Highway. Jefferson Parish Lakefront Reach (High leve Plan)

Jefferson Parish Lakefront Alignment.

The proposed and tentatively selected paln for construction of this reach may be inconsistent, to the maximum extent practicable, with the following Coastal Use Guidelines.

13.19 Guidelines 1.7(d): Construction of a dredge hole 65' deep (see plate A-I-36), or approximately - 77' NGVD, approximately 450' wide at the natural lake bottom, and approximately 5 miles long will significantly alter the natural oxygen concentrations of the waters in that area of the lake. The

Permits for fill and construction along the northern side of the GIWW have been granted in the Almonaster-Michoud area. In addition to this activity, permits for ditching associated with mosquito control have also been issued. Permit applications are presently pending for two large scale projects--New Orleans East Development and the City of New Orleans' "Recovery I" land fill. While we agree that raising the South Point to GIWW levee to high level specifications would increase the potential for development of the inclosed wetlands, these wetlands have been inclosed for approximately 20 years and any filling operations would be regulated under the permit authority of Section 404.

RESPONSE 13.11: It is the position of the New Orleans District that the enclosed wetlands would be considered "fastlands" by the definition you have provided in this guideline. It is preexisting, validly constructed hurricane levee which prevents significant interchange of water between the inclosed wetlands and adjacent coastal waters.

RESPONSE 13.12: It is not our intention to manage the swamp inclosed by the north of Airline alinement. We would retain the existing hydrology by placing in the levee structures of a size equal to the existing culverts under the highway. The exact size of such structures would be designed at a later stage in our planning process. Preliminary design indicates that there would be two structures with eight 60-inch diameter culverts, one structure with five 60-inch diameter culverts, and one structure with two 54-inch diameter

culverts. All culverts would be closed during a hurricane, but would remain open at other times.

RESPONSE 13.13: The St. Charles Parish north of Airline Highway alinement would parallel Airline Highway at a distance of probably no more than 1,500 feet from the roadway embankment. I-wall construction is planned along the alinement to the maximum extent practicable, thus reaching levee width. The specific alinement and levee widths will be determined in the design phase.

RESPONSE 13.14: The north of Airline Highway alinement should not alter the wetlands south of the highway since existing water exchange would be maintained through operable culverts in the levee. Operating procedures would be established for the culverts which would have provisions for closing the culverts only during times of approaching hurricanes. During the remainder of the time, the culverts would be maintained in an open position to convey natural existing flow and exchange. With the incorporation of these design considerations, the wetlands south of Airline Highway will be maintained as they exist and would be governed by the Corps' wetland permit process.

RESPONSE 13.15: See response to 13.12 and 13.14.

RESPONSE 13.16: See response to 13.13.

RESPONSE 13.17: No management of the wetlands south of Airline Highway is presently planned other than to insure that the existing hydrologic character and water exchange as it exists will not be altered by the project. This would be accomplished by establishing operating procedures for the culverts through the north of Airline Highway levee as described in response 13.14.

RESPONSE 13.18: See response to 13.12.

RESPONSE 13.19: We concur that salt water could be trapped in the holes and may in turn produce anoxic conditions in portions of the hole. Based on limited field data obtained from an existing 65-foot borrow site in Lake Pontchartrain, it appears that low dissolved oxygen would possibly occur at depths below 20 feet. Hydraulic analyses of water movements in Lake Pontchartrain, as related to horizontal and vertical displacements in shallow and deep water for typical and extreme tidal occurrences, indicate that there is a greater opportunity for circulation at 20 feet than at 60 feet. In addition, even during extreme conditions (hurricanes), the bottom waters of the 60-foot borrow pit would not mix with adjacent Lake Pontchartrain water due to density gradient difference. The water quality at 20 feet should therefore be similar to that of ambient lake water, while the water quality at 60 feet would be different from ambient lake conditions. The use of shallower borrow pits was also investigated. The most recent soils information indicated that the upper 40 feet of material was not well suited to economical levee building. If

COE has not presented evidence that this hole would not stratify, especially if salt water were to become trapped in the hole, and thereby causing the deeper waters of the hole to become anoxic. More information is needed as to what depth statification would occur, how often, or for what durations. CMD believes that this hole may reasonably be expected to remain stratified continuously under normal lake conditions. If mixing occurred it would at the most be for 2-3 months each year (December - February). These anoxic conditions can be avoided by not dredging the hole, (i.e. obtaining the levee material from an upland source. The anoxic conditions could also be minimize by dredging a shallower hole. ppendix B of your report states that approximately 13.4 million cubic yards of clay material is needed to build the levee, yet the proposed borrow design calls for dredging over 22 million cubic yards (22,250 square ft. x 5 miles). More information is needed as to why it is necessary to dredge below -30 or 40 NGVD to obtain material for the levee. Cross-sectional and grain size analysis of the clay from borings at the dredge site need to be provided to demonstrate the need to dredge the borrow area that deep.

13.19 (cont.)

13.20 Guideline 1.7(e): Adverse alteration of the Lake Bottom has not been reduced to the maximum extend practicable because alternative sources of clay material can be obtained from an upland site. CMD also questions the necessity of the base width of this levee reach (186' wider than any other reaches in the project).

13.21 Guideline 1.7(h): If saline waters entered the dredge borrow area during a storm or other conditions, these waters would seek the bottom of the hole and change detrimentally the salinity of the water in the bottom of the hole. This could have long term affects because saline water would tend to remain in the hole. The Water Pollution Control Division of the Dept. of Environmental Quality has connected salinity problems with the "dead zones" in the lake. Future conditions that might lead to "dead zones" need to be avoided.

13.22 Guideline 1.7(i): The COE does not provide evidence that the dredge borrow area will not detrimentally change littoral and sediment transport processes. The sources of sediment, the mechanisms, time frame, and varying sedimentation rates of filling in the hole need to be documented. This same information needs to be applied to compared with an alternative dredge hole design that a shallower.

13.23 Guideline 1.7(j): Creation of the dredge borrow area could adversely add to the cumulative environmental impacts occurring in Lake Pontchartrain.

13.24 Guideline 1.7(e): The COE provides no evidence that the dredge borrow area will not alter natural circulation patterns in Lake Pontchartrain, see 1.7 i).

13.25 Guideline 1.7(p): The benthic community that presently exists in the 573 acre area of proposed borrow would be adversely altered if not destroyed by the creation of the borrow area. This adverse alter ation could be avoided by not dredging the borrow area, or could be minimize by dredging a shallower hole.

13.26 Guideline 1.7(a): The long term reduction in biological activity resulting from the dredge borrow area can be avoided by not dredging the borrow area,

only this material were used, twice the volume would be required to compensate for incressed water content. This would result in a shallower hole, but a much larger area of lake bottom and associated benthic habitat would be impacted due to the increased volume of dredged material needed. Soil boring logs utilized for estimating dredge depth are available at the New Orleans District and can be reviewed upon request.

RESPONSE 13.20: Alternative sources of borrow from upland sites have been considered and the costs evaluated as indicated on pages 90 to 92 of the main report. The cost evaluation for hauled clay fill revealed that utilizing hauled clay fill would increase construction costs by $120 million. The environmental impacts that would be avoided are not severe enough to justify this expense. Consideration was given to pumping the clay needed for levee construction from the Bonnet Carre' Spillway. The cost of this method was also prohibitive. The cost of pumping over long distances plus the amount of material needed for construction would significantly increase due to the consistency of the clay slurry being pumped. The levee base widths in the Jefferson Parish lakefront are much wider than in other areas due to poor soil and foundation conditions.

RESPONSE 13.21: We concur that denser saline waters would probably invade the deeper portions of the hole and possibly induce poor water quality during portions of the year. However, as noted in response 13.19, because of the depth of the hole, lack of circulation, and

density stratification at these depths, no mixing of the poor quality water with the adjacent lake water is expected.

RESPONSE 13.22: Quantities of sediment transported in Lake Pontchartrain along the south shore are small and limited to the area between the shoreline and the outer limit of the breaker zone. Borrow areas will be located beyond the transport area; it is therefore expected that the borrow area will not interfere with the existing littoral pattern. We expect these borrow areas to fill at approximately the same rate as those created during construction of the Jefferson and Orleans Parish lakefront levees. Recent surveys indicate that the borrow holes excavated in the early 1930's along the New Orleans lakefront have diminished in size from 25 feet deep by 4,000 feet wide to 2 feet deep by 2,000 feet wide. Surveys also indicate that the borrow holes created in 1950 along Jefferson Parish lakefront are now completely filled. This experienced filling rates is expected for the borrow areas created during construction of this project. These experiences indicate that in 50 years these new borrow areas will have returned to a near normal bottom elevation. The same quantities of littoral material are available to fill both deep and shallow holes. To find material suitable for levee construction, we estimate that five times more material would have to be removed from the shallow plan than the deep. Therefore, the shallower holes have the potential to cause more extensive damage to the lake, and require more time to fill completely.

RESPONSE 13.23: While the borrow site would add to the cumulative environmental impacts in Lake Pontchartrain, it does not appear that it would contribute to the extent that significant adverse effects would result. The primary impact to the existing lake bottoms is the shell dredging operations. On an annual basis, 54,000 acres of lake bottom representing 13% of the available lake bottom are affected by shell dredging. The additional 573 acres affected by the borrow site would represent only 1% of the presently affected area and would involve the total affected lake bottom by only 0.6%.

RESPONSE 13.24: Circulation patterns in Lake Pontchartrain are very mild with the highest velocities on the order of 0.5 ft/sec. Our calculations indicate that due to the shallowness of the lake, wave periods are small, on the order of 3 sec. under normal conditions to 6 sec. for the standard project hurricane. Wave lengths will not be distorted by construction of the dredged holes, since these holes will deepen only a very small percentage of the lake bottom. Because of the small wave period, circulation in these holes is very small, diminishing to zero at the bottom of the holes. Because circulation into these holes is almost non-existent and the holes occupy only a small percentage of the lake bottom, we estimate that changes in the circulation pattern in this area of the lake will be non-existent.

13.26 (cont.) or it can be substantially reduced by dredging a shallower hole.

Jefferson Parish and St. Charles Parish line alignment:

13.27 More information is needed on the exact location where the proposed levee will diverge from the existing levee to join the Airline Highway alignment. Would this alignment enclose wetlands and if so how many acres? Also, more information is needed concerning the relationship between the proposed levee alignment and the proposed extention of New Orleans International Airport Runway 10 extension.

RESPONSE 13.25: The cost effectiveness of obtaining upland based material was analyzed as noted in response 13.20. The rationale for the resultant deep borrow site rather than a shallow, more extensive site is to reduce the amount of benthic habitat impacted as noted in response 13.19. These impacts may be further reduced as final design of levee sections are formulated. For the purpose of the EIS, these impacts can be considered "worst case" impacts.

RESPONSE 13.26: We concur that the immediate loss of benthic production from the proposed borrow site would cause a reduction in biological activity due to loss or displacement of the resident benthic community. However, the proposed borrow site has only a moderate benthic community and represents only 0.2% of the offshore habitat and 0.1% of the total benthic habitat available in Lake Pontchartrain. Approximately 12% of the fish species in Lake Pontchartrain are benthic feeders; therefore, it appears that the impact on this habitat would not create a significant reduction in biological activity. See EIS para. 6.1.5.5 for further detail.

RESPONSE 13.27: The proposed St. Charles Parish levee alinement utilizes the existing Jefferson-St. Charles Parish line levee to a point approximately 0.5 miles north of the intersection of the parish line and Airline Highway (US Highway 61). From this point, the alinement diverges from the parish line levee and follows a line to encompass only existing development and joins the north of Airline Highway alinement approximately 0.2 miles north of Airline Highway near Almedia. Approval of the runway extension for New Orleans International Airport could result in an adjustment in the proposed alinement to the extent necessary to protect the runway. Therefore, specific details of levee alinement concerning these points would be addressed in the final design, and additional impacts would be addressed at this time.

EDWIN W. EDWARDS
GOVERNOR
WILLIAM C. HULS
SECRETARY

DEPARTMENT OF NATURAL RESOURCES

MICHAEL BOURGEOIS
DEPUTY SECRETARY

June 19, 1984

Colonel Robert C. Lee
U.S. Army Corps of Engineers
P. O. Box 60267
New Orleans, LA 70160

RE: C840069, Consistency Determination
for the Lake Pontchartrain,
Louisiana and Vicinity
Hurricane Protection Project

Dear Colonel Lee:

This is in response to your letter of May 7, 1984 concerning the consistency determination for the Lake Pontchartrain Hurricane Protection project. Based on the information presented, certain aspects of the tentatively selected plan (TSP) remain inconsistent with the Federally approved Louisiana Coastal Resources Program (LCRP), to the maximum extent practicable according to Section 307 (c) (3) (A) of the Coastal Zone Management Act of 1972, as amended. Basically, more information is required before a proper evaluation can be made concerning the New Orleans East alignment and the wetlands enclosed by this levee system.

1. NEW ORLEANS EAST ALIGNMENT

According to the information in your letter, the New Orleans East area has been enclosed since 1958; four gravity drainage structures with flap-gates drain the area but do not allow flow into the area; and no significant interchange between the leveed area and surrounding marshes is presently occurring. A recent field investigation by our staff in conjunction with the USFWS to an area north of the New Orleans Sewage and Waterboard Pumping Station #15 on the Maxent Canal revealed an open culvert approximately 36" in diameter draining the area east of the canal. This raises the possibility of other open culverts in the levee system, and will therefore require further investigation. Perhaps a joint field investigation between members of the Coastal Management staff and the Corp's Planning Division could resolve this matter.

13.28

NATURAL RESOURCES BUILDING . P.O. BOX 44396 . BATON ROUGE, LOUISIANA 70804 . PHONE 342-4500

In addition, we feel that in order for this part of the project to be consistent with the LCRP, three possible avenues exist by which consistency could be achieved.

First, sufficient quantitative documentation should be provided in order to substantiate that: 1) no significant interchange is occurring between the leveed area and the surrounding marshes, and 2) that no ingress and egress of marine organisms is presently occurring. In this manner, Coastal Use Guidelines 6.1 would be satisfied concerning the question of fastlands.

13.28 (cont.)

Another alternative for the New Orleans East area would be to install drop gated culverts in place of the existing flap gated culverts as part of the TSP, thereby reinstating interchange of water, nutrients and organisms to the area. In this way, Coastal Use Guideline 2.6 would be satisfied concerning the design and operation of hurricane and flood protection levee systems to minimize disruptions of hydrology and water interchange.

A third choice, which was discussed in our meeting on March 23, 1984, and was determined to be the most costly, would require using the alternate Maxent Canal alignment. This would satisfy Coastal Use Guideline 2.4 which states that hurricane and flood protection levees shall be located at the non-wetland/wetland interface, or landward to the maximum extent practicable.

2. ST. CHARLES PARISH ALIGNMENT

13.29

The alignment of the St. Charles Parish levee north of Airline highway as described in the TSP is consistent with the LCRP to the maximum extent practical at this time. The Coastal Management Division of the Louisiana Department of Natural Resources (CMD/DNR) reserves the right to review the alignment before actual implementation to insure minimal wetland loss and that the existing hydrology is maintained. Any changes or re-alignment of this levee or of the north-south St. Charles-Jefferson Parish alignment would require a re-evaluation by CMD/DNR for consistency.

3. JEFFERSON PARISH LAKEFRONT ALIGNMENT

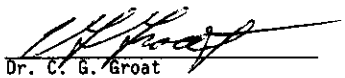
13.30

Based on the discussions held at your office on March 23, 1984 the design of the borrow pits will be such that adverse environmental impacts will be minimized to the maximum extent practicable by continued design improvement. We wish to encourage this effort and look forward to continued coordination and evaluation for consistency of any changes or solutions which your agency may suggest. Certainly experts in Gulf and estuarine cirulation should be consulted before the design is finalized.

We look forward to your response and to working with your office in resolving these issues. If you have any questions please do not hesitate to call me.

Sincerely,

WILLIAM C. HULS

By: 
Dr. C. G. Groat
Assistant to the Secretary

WCH:CGG/se

cc: Ms. Ann Berger-Blundon
Office of Coastal Resources Management, NOAA

Mr. Paul Wolff
U. S. Dept. of Commerce

Mr. Richard J. Hoogland, USNMFS

Mr. Dave Fruge, USFWS

Mr. Andy Mager, NMFS

RESPONSE 13.28: As noted in previous responses (13.8 and 13.9) it is the New Orleans District's opinion that no tidal exchange exists between the wetlands within the existing levee system and the Lake Pontchartrain system. A joint field investigation between members of the Coastal Management and the Corps' Planning Division verified to the satisfaction of the Corps that there is no significant interchange of water and ingress or egress of marine organisms.

RESPONSE 13.29: Noted.

RESPONSE 13.30: We assume that the CMD/DNR considers this feature consistent and we will continue to try to minimize the adverse impacts of the Jefferson Parish borrow pits by design improvement and consultation with experts in circulation.

Robert Graves
SECRETARY

Department of Transportation and Development
OFFICE OF PUBLIC WORKS
P.O. BOX 44155 CAPITOL STATION
BATON ROUGE, LA. 70804

Edwin W. Edwards
GOVERNOR

March 22, 1984

14

Colonel Robert C. Lee
U.S. Army, Corps of Engineers
New Orleans District
P. O. Box 60267
New Orleans, Louisiana 70160

Dear Colonel Lee:

This office has reviewed the Draft Main Report and Draft Supplement to the Environmental Impact Statement (DSEIS) for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project, Reevaluation Study, and offers no objections to the recommended plan.

14.1 The Reevaluation Study document indicates that the recommended plan (high level plan) is more cost effective than the barrier plan and that the barrier plan is no longer being given consideration. The high level plan provides hurricane protection for the currently improved and heavily populated areas but it provides no protection for the Lake Maurepas and north shore areas which gives us some cause for concern. Other efforts should continue in search of feasible means for providing similar protection to these areas.

14.2 Although we have no objections to the high level plan, we do have some concern regarding the many engineering details yet to be resolved especially in the area of recent development along Airline Highway near the proposed runway extension to New Orleans International Airport. As always, this office would like to participate in the planning effort in these areas at such time as planning proceeds.

14.3 Previous efforts by the Pontchartrain Levee District to acquire rights-of-way along the lakefront in St. Charles Parish should be credited towards the local cost sharing in the project. These rights-of-way were acquired by the Levee Board at the request of the U.S. Army, Corps of Engineers, but will not be utilized. It will now be necessary to acquire additional rights-of-way at additional local expense for the new alignment along Airline Highway.

Your consideration of these views will be appreciated.

Yours truly,

Arthur R. Theis

ARTHUR R. THEIS
Chief Engineer

ART:dmr--cb

RESPONSE 14.1: **A feasibility study of hurricane protection for the west shore of Lake Pontchartrain is underway.**

RESPONSE 14.2: **The specific alinement in St. Charles Parish will be determined in the design phase. We will continue to coordinate with your office.**

RESPONSE 14.3: **Concur**

246-4000

The Board of Levee Commissioners

OF THE

Orleans Levee District

SUITE 202 — ADMINISTRATION BUILDING
NEW ORLEANS LAKEFRONT AIRPORT

New Orleans, La.

70126

15

PROTECTING YOU
AND YOUR FAMILY

February 21, 1984

Colonel Robert C. Lee
District Engineer
Department of the Army
New Orleans District
Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160

Attention: Planning Division
Environmental Quality Section

Dear Colonel Lee:

Reference is made to your letter dated December 16, 1983, enclosing the Draft Main Report and Draft Supplement to the Environmental Impact Statement (DSEIS) for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project, Reevaluation Study. Also enclosed were the appendixes for the Draft Main Report and the DSEIS.

We have reviewed the above mentioned documents and agree with your recommendation that the Tentatively Selected Plan provides for the modification of the Lake Pontchartrain, Louisiana, and Vicinity project by eliminating the barrier design concept of the authorized plan and applying the high level design concept.

While we agree with the concept of the high level protection we wish to comment on some of the specifics presented in the reports.

Volume 1

15.1 page 37; last paragraph - "Municipal Yacht Harbor" should be "Orleans Marina"

15.2 page 106; last paragraph - "Municipal Yacht Harbor" should be "Orleans Marina"

RESPONSE 15.1: The paragraph has been modified accordingly.

RESPONSE 15.2: The paragraph has been modified accordingly.

Volume 1 (continued)

15.3 page 125; NEW ORLEANS AREA - The Tentatively Selected Plan between Jefferson Parish Lakefront and the west bank of the Inner Harbor Navigation Canal provides for an earthen levees topped by a floodwall. This is not an acceptable solution since this type of construction would be in conflict with the intended use of the lakefront park areas. We understand, however, that more detailed engineering analysis has proved that an all earthen levee and berm can and will be constructed in this reach.

15.4 It is recommended that the seepage criteria used in developing the berm size be adjusted to consider the actual estimated time that hurricane tides can reasonably be expected to cause a seepage problem. Extensive berms will cause excessive damage to the existing trees in the park areas, however if the berms are needed it is requested that tree replacement in the parks be a project cost.

15.5 page 126; CITRUS - NEW ORLEANS EAST AREA - The Tentatively Selected Plan for the Citrus Lakefront provides for an earthen levee topped by a floodwall with a large berm. We understand, however, that more detailed engineeering analysis has proved that an all earthen levee, even though steeper than normally acceptable, will be considered in this reach.

We are pleased to have been given an opportunity to review these documents and provide our comments.

15.6 As you are aware the Orleans Levee Board commenced interim protection construction along the lakefront in 1979 and we continue at this time to provide interim or permanent protection at specific locations. We, therefore, hereby request that any and all work accomplished by this Board to provide interim or permanent protection be considered as a credit to our share of the Lake Pontchartrain Louisiana and Vicinity Hurricane Protection Project.

It is further recommended that upon approval of the Tentatively Selected Plan, construction by the U.S. Army Corps of Engineers be accelerated and accomplished in the most expeditious manner.

You can be assured that the Orleans Levee Board will do everything in its power to provide adequate supplements to the current assurances as you require in your recommendations.

Yours very truly,

William A. Slatten
President

WAS:EJM:gmb

RESPONSE 15.3: Current in-house high level plan GDM design work supports an all earthen levee design for most of the reach in question. At this time, floodwalls or a combination floodwall/earthen levee, are required only at West End Boulevard, Pontchartrain Beach, American Standard, and Seabrook.

RESPONSE 15.4: The design of the berms presented in the reevaluation report was controlled by stability requirements. During future detailed studies of this area, using additional engineering data, the berms will be designed using stability and seepage analyses considering the hurricane loading time.

RESPONSE 15.5: The existing levee will be enlarged to SPH design standards. Floodwalls will be used only in the reaches where levee construction is impractical.

RESPONSE 15.6: Credit will be given for flood protection work which can be incorporated into the project that was accomplished by the local sponsor after project authorization.

CITY OF NEW ORLEANS

(16)

February 22, 1984

ERNEST N. MORIAL
MAYOR

MEMBERS

PAUL MONTELEPRE
Chairman
PAULETTE J SMITH
Vice-Chair
CHARLES A. CAPLINGER
NELSON J. CHATELAIN
ERNEST COLBERT, JR.
T. WINDLE DYER
H. MORTIMER FAVROT, JR.
MITCHEL LEDET
ALBERT J. SAPUTO

Colonel Robert C. Lee
U. S. Army Corps of Engineers
New Orleans District
P. O. Box 60267
New Orleans, Louisiana 70160

Dear Colonel Lee:

In reference to Draft Main Report and Draft Re-evaluation Study, I am transmitting minutes from the City Planning Commission meeting of February 15, 1984. As you can see, a number of concerns are raised, including attention to landscaping, impact on recreational sites, minimization of floodwalls in favor of earthen levees; importance of outfall canals, particularly the IHNC, and a need for City involvement at a sufficiently early stage in design formulation in order to achieve the most benefit with the least adverse impact. In particular, the City would like to participate in reviewing plans for the section along Pontchartrain Beach prior to final design memorandum.

We have found your staff most cooperative in their efforts to update us on this project, and look for a continued positive rapport as the program moves ahead.

Sincerely,

Robert W. Becker
Executive Director

RWB:HS:br

cc: John Hammond
Gino Carlucci

City Planning Commission / Robert W. Becker / Executive Director / 9th Floor-City Hall, Civic Center / New Orleans, La. 70112

Semi-Monthly Planning Meeting
Wednesday, February 15, 1984

CONSIDERATION - LAKE PONTCHARTRAIN, LOUISIANA, AND VICINITY HURRICANE PROTECTION PROJECT.

Introduction:

In December of 1983, the U.S. Army Corps of Engineers published and distributed the documents entitled "Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project---Reevaluation Study". They have announced February 28, 1984 as the final date to receive comments. The City Planning Commission invited Corps representatives to its February 1, 1984 meeting in order to have a first-hand explanation of the project and its anticipated impacts.

In 1977, the Hurricane Barrier aspect of the project was held up by Judge Charles Schwartz. An environmental analysis was undertaken and the subject documents were the result of that work, spanning six years.

An economic analysis of various options ranging from the barrier plan to the high-level (levee) plan to "no action" was carried out. The high level plan, with levees raised to protect against the Standard Project Hurricane was tentatively selected as the most cost-effective alternative.

A number of parishes in the region share a common interest in the project. The modified portion of the plan consists of seven levee segments, five of which affect the City. To avoid confusion each segment is discussed individually in this report.

Aspects of the Project beyond Orleans Parish Boundaries

For St. Charles Parish, an earth levee at elevation +13.5' to 14' located on the north side of Airline Highway is proposed. It would have no effect on the City and extend from the Bonnet Carre' Spillway to the Jefferson Parish line.

The next levee improvement would consist of raising the existing levee along the Jefferson-St. Charles Parish boundary to an elevation of from 14' at the Lake to 13.5' at the St. Charles Parish levee. Presently, this levee is close to the end of the east-west runway at N.O. International Airport. Extension of the runway westward would require shifting a portion of this levee into St. Charles Parish. If the east/west runway is extended, a ring levee would have to be built to enclose the runway and a portion of the existing levee removed.

The next segment, along the Jefferson Parish lakefront would be substantially widened using hydraulic fill from the Lake. Floodgates would be built across the Causeway lanes.

The Project within Orleans Parish

Along the N. O. Lakefront between Jefferson Parish and the IHNC the existing levee at +16' would be elevated to a final elevation near 18.5 feet at Pontchartrain Boulevard, 18.0 feet at Orleans Outfall Canal and approximately 17.5 feet on most of the remaining length. This would be an all-earthen levee and requires no floodwall atop the levee, based upon soil borings and design criteria. A seepage berm on one side or the other would extend approximately 45 feet from the toe of the levee. The seawall at the marina may have to be raised from its present elevation of 10.5 feet to 11.5 feet for still water, or, ultimately 13.5 feet for final design specifications.

This segment would also call for floodwalls at the American Standard Plan (19.5 feet) and Pontchartrain Beach (14.5 feet) and existing floodwalls at Seabrook (presently measuring from 10.5 to 15.5 feet). Floodgates at Marconi and Pontchartrain Beach allow access to the lakeshore side of the levee system.

East of the Seabrook site, the Corps proposes to raise earthen levees up to 15 feet. A floodwall similar to the access provided for Pontchartrain Beach is being examined for Lincoln Beach. Approximately 1200 feet of I-wall, rising 2.5 feet above the levee to reach a final elevation of 15 feet are required in the vicinity of the Lakefront Airport. A barge berm or other foreshore protection will be required in this segment. A rock dike, for foreshore protection, is planned along the lake side of the remaining Citrus levee. Its final design height of 14 feet is to provide a break against waves.

The next segment is the N.O. East Lakefront segment which is east of Paris Road. The existing +14' earth levee will be widened and increased to +16.5'. Impounded marsh will be removed from the system.

Finally, the earthen levee from SouthPoint to the GIWW will be increased from its current height of +12.5' -14' to +13.5' - 15' and widened.

Levee protection along outfall canals along Lake Pontchartrain is a continuing problem which the Corps has acknowledged. Configuration of these vulnerable sites is still under study. One option being considered for the outfall canals is to shut down the pumps during high lake levels since they are not designed to handle a large volume against such a gradient. Designs of future drainage improvements may incorporate the capacity to continue pumping during hurricane tides.

EVALUATION

In consideration of the propsed project as a viable

alternative for flood protection, the City Planning Commission may wish to endorse the high-level plan as presently interpreted. Provided that the City is involved in technical discussions prior to final design memoranda, the staff believes that concerns of Orleans Parish should be adequately considered.

16.1 It is the staff's contention that such major improvements, costing vast sums should be capable of addressing a multiplicity of needs, and not be limited to the single (albeit overwhelming) priority which is flood protection. The lack of pre-design communication has allowed the Citrus foreshore protection aspect of this project to move beyond further modification; we believe that a more mutually acceptable design, allowing for greater recreational access, for instance, could have been incorprated had the City been consulted in a timely manner. The City Planning Commission should insist on greater involvement during planning of the remainder of New Orleans East reaches.

16.2 The Corps has recommended "butterfly valves" for combined access to waterways and flood protection at the outlets of outfall canals. Once again, consultation with the City should preclude one-dimensional thinking and maximize the benefits of these essential components. In reference to the IHNC, the effect of saltwater intrusion and the linkage to "dead zones" and oxygen-poor stratification at the lake bottom require serious attention to a lock system for the Seabrook area.

16.3 Wherever feasible, it is the staff's opinion that I-walls should not be constructed, in part due to esthetics. Where they may be shown to be essential, funding and design should be included to reduce their visual impact by providing plant screening and surface treatment, texturing, etc. to discourage defacing. The City Parkway and Parks Commission will assist the Corps and/or the Levee Board in recommendations of appropriate plant material. The same esthetic concern is raised for floodgates and floodwalls, such as at Marconi Drive and Pontchartrain Beach respectively. Sufficient setback should be provided such that landscaping or other treatment will be accommodated, reducing their visual impact; also, adequate provision of ingress and egress to the beach area should be provided.

16.4 In reference to the New Orleans Lakefront stretch between Jefferson Parish and the IHNC, the Corps proposes to remove a large though unspecified number of trees to allow for widening of the levee base. This will result in a reduction of recreational access and could affect the area's appearance significantly even if mitigated. Every effort should be made to preserve as many mature trees and as much recreational space as possible. In sections where a significant number of trees would be removed by berm construction, alternatives to a seepage berm (such as a ditch or trench) should be considered seriously in order to preserve existing trees. In the event trees must be removed, the City Planning Commission may wish to recommend mitigation measures such as a tree-replanting ratio and/or a Corps evaluation of the recreational uses acceptable along the

RESPONSE 16.1: We concur that major projects such as this should be closely coordinated with local interests to maximize the benefits to a multiplicity of needs. In the future, coordination with the City Planning Commission through the local sponsor, the Orleans Levee Board, can and will be improved.

RESPONSE 16.2: The High Level plan does not require a lock at Seabrook. The feasibility of the Seabrook lock will have to be reanalyzed solely as a feature of the Mississippi River - Gulf Outlet navigation project.

RESPONSE 16.3: Floodwalls will be used only in the areas where levee construction is impractical. The floodwall exposed surfaces will be given an architectural finish; however, planting will not be allowed within the levee/floodwall rights-of-way because of seepage cut-off requirements. The design of the Pontchartrain Beach Floodwall has been coordinated with the developer and with the Orleans Levee District to provide the necessary number of gated openings.

RESPONSE 16.4: Design alternatives will be investigated during the preparation of detailed designs to minimize the removal of trees and to preserve the existing recreational areas. The removal and replanting of trees will be coordinated with the Orleans Levee District.

levee. These aspects should be a funded part of the entire project due to the intensity of recreational use of this portion of the lakefront.

The City Planning Commission may wish to develop its position and submit recommendations to the Corps prior to the February 28 deadline for comments.

DISCUSSION:

The Associate Planner presented the foregoing report, emphasizing staff's recommendation that recreational/aesthetic concerns be given serious consideration by the Corps in their location and design of Floodwalls, berms and levees. He further emphasized the need for city involvement in technical discussions prior to final design memoranda.

15.5 Mr. Caplinger expressed interest in exploring alternatives to a floodwall along the Pontchartrain Beach section, and suggested that an earthen levee along the south side of Lakeshore Drive may be more aesthetically desirable.

16.6 Mrs. Smith expressed concern about floodwall defacement, (e.g. graffiti) citing the existing condition of the Lincoln Beach Floodwall. Dr. Laska responded that the staff in their report recommended that floodwalls be texturized and/or screened with hardy shrubbery, (eg. Pyracantha, ligustrum) to discourage defacement.

After the discussion the following motion was made by Mr. Ledet and seconded by Mr. Favrot.

MOTION:

Be it moved that the City Planning Commission comments and recommendations in the foregoing report and during the foregoing discussion be approved and forwarded to the Corps for their consideration.

YEAS: Caplinger, Chatelain, Colbert, Favrot, Ledet, Montelepre, Saputo, Smith

NAYS: None

ABSTENTIONS: None

RECUSALS: None

ABSENT: Dyer

RESPONSE 16.5: The alternative for providing an earthen levee on the south side of Lakeshore Drive in the Pontchartrain Beach area was investigated. The sand strata in this area would make large seepage berms or other means of seepage cut-off necessary.

RESPONSE 16.6: The floodwalls will have an architectural finish similar to that of the Orleans Marina Floodwall. Planting, however, cannot be allowed too close to the floodwalls because of seepage cut-off requirements. Planting would also impede proper inspection of the walls.

OFFICERS

KERN A. REESE
Chairman
RICHARD P. KELLEY
Vice Chairman
EMILE E. PRATTINI SR.
Secretary
ROBERT B. EVANS, JR.
Treasurer

MEMBERSHIP

JEFFERSON PARISH
JOSEPH S. YENNI
Parish President
ROBERT B. EVANS, JR.
County Executive
WILLIAM J. WHITE
Mayor, City of Gretna
FLOYD A. SINCLAIR
RONALD G. ZIBILICH

ORLEANS PARISH
ERNEST N. MORIAL
Mayor, City of New Orleans
SIDNEY J. BARTHELEMY
Councilmanat Large
JOSEPH I. GIARRUSSO
Councilmanat Large
KERN A. REESE
RALPH E. THAYER Ph.D

ST. BERNARD PARISH
DAVID S. GORBATY
Police Juror
LOUIS P. MUNSTER
Police Juror
SAMUEL B. NUNEZ
State Senator
THOMAS R. WARNER
EMILE E. PRATTINI SR.

ST. TAMMANY PARISH
BRUCE UNANGST
Parish President
W.A. "PETE" FITZMORRIS
Council Chairman
ERNEST COOPER
Mayor, City of Covington
RICHARD P. KELLEY
MALCOLM T. STEIN SR.

STATE OF LOUISIANA
DEPARTMENT
OF TRANSPORTATION
AND DEVELOPMENT
PAUL J. HARDY
Secretary

JOHN LeBOURGEOIS
Executive Director

REGIONAL
PLANNING
COMMISSION
JEFFERSON • ORLEANS
ST. BERNARD • ST. TAMMANY
PARISHES

February 21, 1984

17

Colonel Robert C. Lee
U. S. Army Corps of Engineers
New Orleans District
P. O. Box 60267
New Orleans, LA 70160

Dear Colonel Lee:

17.1 In reference to the Lake Pontchartrain and Vicinity Hurricane Protection Project, the Regional Planning Commission wishes to inform the Corps of Engineers that it offers no objection to the project as proposed in documents furnished by your office.

Thank you very much for involving local government in this important program.

Sincerely,

REGIONAL PLANNING COMMISSION

Richard P. Kelley

RICHARD P. KELLEY
CHAIRMAN

RPK/ALL/fts

RESPONSE 17.1: No response required.

An Equal Opportunity Employer

(504) 568-6511
SUITE 900
MASONIC TEMPLE BUILDING
333 ST. CHARLES AVENUE
NEW ORLEANS • LOUISIANA 70130

ST. CHARLES PARISH

P.O. BOX 302 • HAHNVILLE, LOUISIANA 70057
783-6246 466-1994

CECIL P. DUFRENE
CHAIRMAN
CLAYTON FAUCHEUX
VICE CHAIRMAN
JOAN W. BECNEL
SECRETARY
COUNCIL
JOEL T. CHAISSON, II
COUNCILMAN AT LARGE DIVISION A
DONALD J. HOGAN
COUNCILMAN AT LARGE DIVISION B
CHRIS A. TREGRE
DISTRICT I
CLAYTON FAUCHEUX
DISTRICT II
CECIL P. DUFRENE
DISTRICT III
PHILIP CORTEZ
DISTRICT IV
LEONCE "Tut" CLEMENT
DISTRICT V
BRUCE RODRIGUE
DISTRICT VI
DON GRIMES
DISTRICT VII

February 23, 1984

U. S. Corps of Engineers
P. O. Box 60267
New Orleans, Louisiana 70160

Gentlemen:

We are transmitting herewith a copy of Resolution No. 2557 adopted by the St. Charles Parish Council at its meeting held Monday, February 20, 1984, supporting the U. S. Army Corps of Engineers "Lake Pontchartrain and Vicinity Hurricane Protection Project, Reevaluation Study, Draft Main Report and Draft Supplement to the Environmental Impact".

A copy of this Resolution is enclosed for your records.

Sincerely,

JOAN BECNEL
COUNCIL SECRETARY

JB/sbl

Enclosure

cc Mr. Cecil P. Dufrene
Rep. Billy Tauzin, United States Congress w/ Encl.
Sen. Ron Landry w/ Enclosure
Rep. Ralph Miller w/ Enclosure
Pontchartrain Levee District w/ Enclosure
Soil Conservation Service w/ Enclosure
Mr. Dave Mekarski w/ Enclosure

A motion was made by Mr. RODRIGUE, seconded by Mr. CLEMENT, to adopt the following resolution:

INTRODUCED BY: KEVIN M. FRILOUX
PARISH PRESIDENT

RESOLUTION NO. 2557

WHEREAS, The U.S. Army Corps of Engineers has released a report entitled "Lake Pontchartrain Louisiana, and Vicinity Hurricane Protection Project, Reevaluation Study, Draft Main Report and Draft Supplement to the Environmental Impact", and;

WHEREAS, The report evaluates sixteen plans for providing hurricane protection to the Greater New Orleans Region, representing a combination of alignments for St. Charles Parish and New Orleans East with barrier or high level protection, and;

WHEREAS, High level plan number ten is proposed as the tentatively selected plan, and;

WHEREAS, This plan includes a North Airline Highway (U.S. 61) levee alignment for providing hurricane protection to the residents of East St. Charles, and;

WHEREAS, This levee alignment is consistent with the Parish's CZM levee alignment adopted by Resolution No. 2234 on May 4, 1981, and;

WHEREAS, The levee as proposed is designed with four gated drainage structures through the levee at locations where there is drainage through Airline Highway. These flow through culverts are said to maintain an exchange of nutrients, water and organisms between the wetlands North and South of Airline Highway, and;

WHEREAS, The plan also calls for mitigation of project impacts which are to be detailed in a mitigation report to be released in the near future, and;

WHEREAS, A Council Committee on hurricane protection met on February 13, 1984 in a public meeting to review the tentatively selected plan, and;

WHEREAS, Local Parish officials expressed severe reservation to acceptance of the plan with the culverts, which may effect future development potential of the wetlands South of the alignment, and;

WHEREAS, The Corps of Engineers does not have the authority under this plan to eliminate the proposed culverts, and;

WHEREAS, Local Parish officials are more concerned with the protection of life and property from the devestating effects of a hurricane, and;

WHEREAS, The St. Charles Parish Council and the St. Charles Parish President are requesting that the U. S. Corps of Engineers consider selecting Dawson Engineers, Inc. to initiate the design of the proposed project.

NOW, THEREFORE, BE IT RESOLVED, THAT THE ST. CHARLES PARISH COUNCIL hereby give there support to the tentatively selected plan as proposed.

18.1 BE IT FURTHER RESOLVED that the Corps include the proposed mitigation plan as a part of the main report and consider funding for implementation of management recommendation for the LaBranche Wetlands, North of the proposed levee alignment

The foregoing resolution having been submitted to a vote, the vote thereon was as follows:

YEAS: CHAISSON, HOGAN, TREGRE, FAUCHEUX, DUFRENE, CORTEZ, CLEMENT, RODRIGUE, GRIMES

NAYS: NONE

ABSENT: NONE

And the Resolution was declared adopted this 20th day of February, 1984, to become effective five (5) days after publication in the official Journal.

COUNCIL CHAIRMAN

SECRETARY

DELIVERED TO PARISH PRESIDENT 2-2-84

APPROVED:

DISAPPROVED:

PARISH PRESIDENT

RETURNED TO SECRETARY ON 2-2-84

AT AM/PM

RECEIVED BY

RESPONSE 18.1: Management of the LaBranche wetlands will be considered in the mitigation study.

ENVIRONMENTAL DEFENSE FUND

March 6, 1984

Colonel Robert C. Lee
District Engineer
U.S. Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, LA 70160

RE: Draft Main Report and Draft Supplement to the Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection Project Environmental Impact Statement

Dear Colonel Lee:

We have received and reviewed the Draft Main Report and Draft Supplement to the Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection Project Environmental Impact Statement. We will provide some general comments on the impact of the proposed project on the resources of the Louisiana Coastal Zone and Lake Pontchartrain followed by a more detailed assessment of the adquacy of the Draft Main Report and Draft Supplement.

1. The Louisiana Coastal Zone --

The Louisiana Coastal Zone is a very productive and unique natural resource which contains an estimated 40% of the nation's coastal wetlands. The region's extensive coastal marshes, wooded swamps, bottomland hardwood forests and barrier islands support an economically valuable fishery and provide critical habitat for numerous species of furbearers, wintering waterfowl and other non-game wildlife species. In recent decades, however, the Louisiana Coastal Zone has experienced an alarming and accelerating rate of land loss due primarily to human activities. Collectively, these activities (i.e., (1) construction of canals and channels; (2) leveeing and jettying of the Mississippi and its tributaries; and (3) land reclamation) have contributed to land loss rates which now exceed 40 square miles per year.

In this context, we therefore strongly oppose any additional Corps projects which will substantially alter or degrade the already severely impacted resources of the Louisiana Coastal Zone. Instead, we believe the Corps, along with other involved state and federal agencies, should implement a well integrated and comprehensive land loss abatement program which will not only control existing coastal

. . . /

444 Park Avenue South New York, New York 10016 ☎ 212 686-4191
OFFICES IN: NEW YORK, NY (NATIONAL HEADQUARTERS); WASHINGTON, DC; BERKELEY, CA; BOULDER, CO
RICHMOND, VA.

uses damaging to the region's resources but will also contribute to the restoration of already deteriorated wetlands. This, in effect, would require that Corps' projects currently under construction or in planning be significantly altered or abandoned altogether, whereas others such as the Lake Pontchartrain Basin Freshwater Diversion Project and regulatory programs designed to control sources of water pollution would need to be expanded. First and foremost, we therefore recommend that the Corps reassess the role of this project as well as others proposed for the region in terms of their overall contribution to such a land loss abatement program. It seems clear, for example, that the water quality and wetland impacts associated with this project are in many respects in direct conflict with the overall intent of the Lake Pontchartrain Basin Freshwater Diversion Project.

2. Lake Pontchartrain --

The proposed Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection Project located in Southeastern Louisiana is primarily intended to improve the existing hurricane protection levee network for the following parishes: Jefferson, Orleans, St. Bernard, St. Charles and St. Tammany. Two major alternative conceptual designs are evaluated in the main report and supplemental EIS. The first would entail the construction of three barrier complexes at the Rigolets, Chef Monteur Pass and Seabrook tidal entrances to Lake Pontchartrain coupled with the creation of an extensive series of new levees. The second major conceptual design would not include barrier complexes but to achieve the same level of hurricane protection (SPH) would require an even larger levee/floodwall construction program.

Either alternative will have substantial and largely unmitigated impacts on the natural resources in and around Lake Pontchartrain. This low salinity estuary serves a vital function as a nursery and feeding ground for marine fish, such as menhaden, while directly supporting an extensive and economically valuable sport and commercial fishery. Commercial fishery yields in 1981, for example, for both Lake Pontchartrain and Borgne totaled 3,351,621 pounds with a dockside value of $3,271,372. This accounts for an estimated 16% of the state's economic returns from commercial fishing. (EIS - 49)

The diverse terrestrial and wetland vegetation communities found within the project area include marshlands, cypress-tupelo swamps, bottomland hardwood forests and submerged grass beds. This is invaluable habitat for furbearers, as well as for large numbers of migratory waterfowl including approximately 500,000 lesser scaup. Moreover, the region supports extensive populations of seabirds, wading birds, and common game birds. (EIA - 49)

The Environmental Defense Fund, while recognizing the need for adequate hurricane-induced flood protection for New Orleans and surrounding environs, will only support a plan which also protects and preserves the unique, extremely diverse and, in many respects, invaluable natural resources of the Lake Pontchartrain region. Such an approach is in everyone's best interest.

. . . /

3. Draft Main Report and Draft Supplement --

Although our review of the Main Report and Draft Supplement did indicate that the Corps had substantially improved their environmental impact analysis, severe deficiencies still remain in the following area: (a) assessment of alternative levee alignments; (b) water quality impact analysis; and (c) mitigation of unavoidable adverse impacts on fisheries and wildlife.

a. Assessment of Alternative Levee Alignments

(1) Barrier v. High Level Plan

The assessment of alternative levee alignments occurred within the framework of one of two major conceptual designs, as discussed earlier. We would like to first and foremost commend the Corps for its decision to select a non-barrier approach as the tentatively selected plan. The use of barriers in the Rigolets, Chef Monteur and the Seabrook tidal entrances to Lake Pontchartrain would severely disrupt the natural hydrologic regime of Lake Pontchartrain. This would have long-term adverse impacts on salinity, populations of most fish species, and the nursery/feeding values of the lake for estuarine dependent marine fish. Specifically, migration or passive transport of fish eggs, larvae and juveniles as well as crabs, shrimp and other macro-organisms would be reduced, thereby diminishing the natural productivity and associated economic value of sport and commercial fisheries throughout the Louisiana Coastal Zone.

In addition, the passes at the Rigolets and Chef Monteur would have significant direct impact on wetlands, channel bottoms, fish and wildlife habitat and water quality as a result of dredging, construction and fill activities. Dr. Cronin, in his report to the Corps of Engineers entitled, "Effects of Flood Control Barriers in Passes of Lake Pontchartrain, Louisiana" estimated that dredging for this component of the project alone would destroy 118 acres of marsh, 68 acres of wetlands and the biota of more than 300 acres of channel bottom. Placement of dredge material on marshland would only further degrade and destroy additional habitat, radically altering the existing environment and burying entire populations of benthic organisms. Lastly, construction activities would significantly degrade water quality by interfering with water circulation, increasing turbidity and releasing chemicals.

(2) Maxent Canal Alignment

The Main Report and Draft Supplement to the Lake Pontchartrain Louisiana and Vicinity Hurricane Protection Project considered two vastly different levee alignments for the portion of the project directly affecting the Citrus-New Orleans East area. The first alignment would follow the existing alignment around New Orleans East which would incorporate approximately 13,000 acres of sparsely developed wetlands in the SPH levee system. In comparison, the second alternative is the maxent canal alignment which would exclude these wetlands but provide comparable hurricane-induced flood protection for already developed areas.

. . . /

RESPONSE 19.1: It is unclear how impacts associated with the Hurricane Protection Project are in conflict with the Freshwater Diversion Project. The Diversion Project would enhance the 26,000 acres of unprotected wetlands in St. Charles Parish between the lake and Airline Highway. The New Orleans East wetland area is not presently subject to tidal interchange; thus, the Freshwater Diversion Project would have no impact on it. Furthermore, post-1984 construction of the Hurricane Protection Project would only impact on additional 54 acres of marsh.

The Corps' analysis of the alternative levee alignments for the Citrus-New Orleans East area is totally inadequate for several reasons. First, during the December 1977 trial in federal district court contesting the adequacy of the Final Environmental Impact Statement, we presented evidence of some continued tidal exchange between Lake Pontchartrain and/or Lake Borgne and the wetlands of New Orleans East. Second, rehabilitation of the approximately 13,000 acres of wetlands which would be included within the existing alignment is possible such that these wetlands could regain much of their prior value and hence again benefit the Lake Pontchartrain ecosystem and New Orleans metropolitan area. Third, the cost-benefit analysis appears to disregard the lost value for the 13,000-acre wetland which will almost certainly be developed if the existing levee alignment is completed. The Corps asserts that this increased potential for development is of no concern in the evaluation of this porject as it is regulated under the permit authority of Section 404 of the Clean Water Act. Furthermore, the Corps considers the existing levee alignment preferable, in large part, because it does not preclude the use of these wetlands for future development.

19.2

We categorically reject this analysis and its underlying assumptions. As the U.S. Fish and Wildlife Coordinate Act Report submitted to the Corps by the Fish and Wildlife Service (Section XIV of Appendix C) correctly points out, this rationale is "subject to considerable question ..." The report, in fact, concludes that completion of the proposed project along the existing levee alignment as opposed to the Maxent canal would increase the probability that a 404 permit would be issued and the increased security afforded by the levee would likewise offer additional development incentive.

In conclusion, we strongly believe that the loss of this wetland system is, in large measure, attributable to the completion of the existing levee alignment as compared to the Maxent canal. This loss must be incorporated into the project's decision-making process, rather than, as the Corps suggests, evaluated in the context of the 404 permit process. We strongly believe that the Corps should select a non-barrier alternative which includes both the Maxent canal alignment (alternatives 13-16) and a well conceived and designed management plan to restore this once pristine and invaluable wetland resource. Such an approach would be far more consistent than the TSP with the overall objectives of a well designed land loss abatement program. Furthermore, any efforts to restore this once pristine wetland would improve Lake Pontchartrain water quality thereby contributing to important recreational uses for the residents of New Orleans and surrounding areas.

19.3

(3) St. Charles Parish Segment of the Hurricane Protection System

The final major cross-roads in the alternative analysis process is the selection of a levee alignment in the vicinity of St. Charles Parish. EDF is not categorically opposed to a high level plan which incorporates

. . . . /

RESPONSE 19.2: **Flap gates on the existing drainage structures prevent tidal exchange between the lakes and the wetlands. Rehabilitation of the wetlands could increase their value. It is not appropriate to consider the "lost value" of these wetlands, since we are not taking benefits for their development. In addition, the value of the wetland area is not sufficient to justify the additional expense of constructing the Maxent Canal alinement. We will look at the feasibility of restoring tidal exchange to New Orleans East in developing our mitigation plan.**

RESPONSE 19.3: **The Hurricane Protection Project does not directly impact the wetland area. Development in the area will be controlled through the Section 404 permit process, and the cost of mitigation for adverse impacts to the wetlands will be more properly assumed by the developer, not the Federal Government.**

hurricane protection for already developed portions of St. Charles Parish provided it is both essential and will not contribute to the enclosure, alteration or development of existing wetlands.

The Draft Main Report identified a total of four St. Charles Parish alignments with varying degrees of hurricane flood protection and wetland impact. Each alignment presumably could be used in conjunction with a barrier or high level design and the use of the existing levee alignment or Maxent Canal in the vicinity of Citrus-New Orleans East. The analysis of St. Charles Parish alignments, however, was completed under the assumption that both barrier and non-barrier Maxent Canal alignments had already been eliminated from further consideration.

Of the four alternative levee alignments under consideration in St. Charles Parish only one will avoid potentially disruptive enclosure of significant areas of wetlands while still providing what the Corps feels is "adequate protection for existing and future development." (Draft Main Report, p. 76) This alternative which follows a levee alignment South of Airline Highway (Plan 11) was eliminated in the preliminary screening on the basis of cost even though it will substantially reduce associated environmental impacts.

19.4 This analysis, as presented in the Main Report for the high level plan, is clearly inadequate. (p. 80) First, the Corps should document the underlying need for the additional hurricane protection provided by all but the no action alternative. Second, the analysis of Plan 11 is insufficient. The report simply states: "Detailed designs and costs were not developed for Plan 11, the South of Airline Highway alignment, as preliminary analysis indicated this alignment would cost considerably more than Plan 10, the North of Airline Highway alignment and offer no significant advantages. Plan 11 was eliminated from further consideration at the preliminary screening stage." (Vol. 1, p. 80)

19.5 EDF does not consider the potential degradation, loss or development of an additional three to four thousand acres of wetlands under Plan 10 as compared to Plan 11 insignificant. In addition, given the magnitude of the potential but largely unquantified impact on wetlands associated with levee construction, it is imperative that the Corps provide more complete and more substantive economic analyses to support the decision to eliminate Plan 10 from further consideration. Specifically, an analysis of first costs for the two plans indicates that the increase in first costs associated with Plan 11 (20 to 25 percent over Plan 10) will also prevent substantial alteration and development of more than 3,000 acres of wetlands. On a per acre basis, the cost of this alternative is therefore less than $3,000 per acre (i.e., assuming an increase in first costs of $7.4 million and savings of 3,000 acres, the per acre cost = $7.4 million ÷ 3,000 = $2,467/acre). This additional expenditure of funds, based on the diverse and numerous values and functions directly attributable to each acre of wetlands is, in our opinion, completely justified. We therefore strongly

. . . /

RESPONSE 19.4: Additional documentation added on pages 129 to 131. Preliminary cost estimates indicated the south alinement would cost 20 to 25 percent more than the north alinement. Since the environmental imapcts are similar, this was sufficient to eliminate Plan 11 from further consideration.

RESPONSE 19.5: The additional expenditure of funds is not justified because the selected alinement will not reduce the environmental value of the wetland area as explained on page 77 of the Main Report. Therefore, there are no benefits to be gained.

urge the Corps to adopt the no action alternative or, if additional hurricane protection in the region is in fact essential, the South of Airline Highway levee alignment. That will significantly reduce environmental impacts at minimal cost. Such an approach is absolutely essential given the already highly stressed condition of Lake Pontchartrain and surrounding environs.

b. Water Quality Impact Analysis

(1) Short-term

Hydraulic dredging and fill disposal will destroy benthic populations in the immediate vicinity of the dredging operation and increase turbidity. The suspension of dredge sediments in the water column may also contribute to the release of nutrients such as nitrogen and phosphorous as well as potentially toxic levels of metals and organics. Surface and elutriate analyses which were performed to assess the future impact of construction activities on various water quality parameters suggested that concentrations of dissolved nitrogen and phosphorous, general organics and some trace inorganics would increase following construction. (See Talbes 2 and 3, Section VII, p. C-VII 18-20.) In some instances, the elutriate test results violated aquatic life criteria. (C-VII-21; C-VIII-24.)

19.6 The impact of these changes in water quality on several species of aquatic biota in the immediate vicinity of the dredge or fill site may be significant. Appendix C of the Main Report and Draft Environmental Impact Statement indicates, for example, that : (1) primary production will be impaired as a result of increased turbidity and suspended solids; (2) suspension/filter feeders will suffer clogging of the grills which will have adverse impact on feeding, respiratory and excretory functions; (3) bethic organism will be buried; and (4) fish in the vicinity of dredging activities will be exposed to polluted and turbid conditions. In addition to the Corps' proposed efforts to limit the spread of discharged material, it is therefore imperative that the source of these contaminants be controlled and that the amount of fill used in the construction of levees be kept to a minimum. In this context, the Corps along with other federal and state agencies must stringently enforce existing regulatory programs designed to control point and non-point source pollution.

(2) Long-term

The Jefferson Parish lakefront levee system will be built using hydraulic dredge material from Lake Pontchartrain. The construction of the Jefferson lakefront levee will require an estimated 13.6 million cubic yards of in-place clay fill in addition to 10 million cubic yards of fill. (C-IX-7.) This will require dredging to depths of 60 feet or more, creating a 500-foot wide (EIS-70), 9-mile long borrow area next to the proposed levee alignment. Recent research indicates that such dredge holes are typically anaerobic environments with limited water exchange and hence high levels of decaying organic matter and pollutants. As a result, these

. . . /

RESPONSE 19.6: The impacts on aquatic biota would not be significant as summarized in Appendix C on page C-VII-24, paragraph IIIa(4). All of the impacts mentioned in your comment are temporary except the burial of benthos.

areas are devoid of most fish species and recovery may take decades. The Fish and Wildlife Service in recognition of the severity of the problems associated with the creation of such dredge holes has recommended that dredge material for the Jefferson lakefront levee be obtained from an upland site. We strongly support this idea and also concur that should an upland site be deemed infeasible (after a detailed assessment of the issue is complet) a less environmentally damaging approach to the dredging process should be found (Section XIV-U.S. Fish and Wildlife Service Final Coordination Act Report). 19.7

c. Fish and Wildlife Habitat Loss

(1) Greenhouse Effect

The evaluation of impacts of the proposed project will only exacerbate the already severe land loss problem confronting the Louisiana Coastal Zone. Recent estimates of annual wetland loss rates in the Coastal Zone exceed 40 square miles and the rate continues to accelerate. In addition, recent studies undertaken by John Hoffman and others on the Strategic Studies Staff, Office of Policy Analysis, Office of Policy and Resource Management, U.S. EPA indicate that within the next century the Louisiana Coastal Zone as well as other coastal regions may experinece a significant increase in sea level due to carbon dioxide build-up in the earth's atmosphere. The Environmental Defense Fund believes it is imperative that the Corps include an assessment of the potential impact of a global rise in sea level by the year 2100 of as much as 380 cm on the design and functioning of this project. (See attached Figure 1.) It is our opinion that this recent scientific evidence provides further support for a levee alignment which will incorporate only exisiting developed upland area. 19.8

(2) Mitigation Proposal

Although the Draft Supplement to the Environmental Impact Statement includes a discussion of various marsh management mitigation proposals in both St. Bernard and St. Charles Parish, it does not, to our knowledge, make construction of the levee plan contingent upon the adoption of a satisfactory mitigation plan. We therefore request that the Corps adopt mitigation plans which will offset all unavoidable adverse project-related impacts to fish and wildlife prior to implementation of any facet of the existing plan. 19.9

Yours very truly,

David W. Hoskins

David W. Hoskins
Staff Scientist

DWH:grp
Enc.

RESPONSE 19.7: See response to comment 7.41.

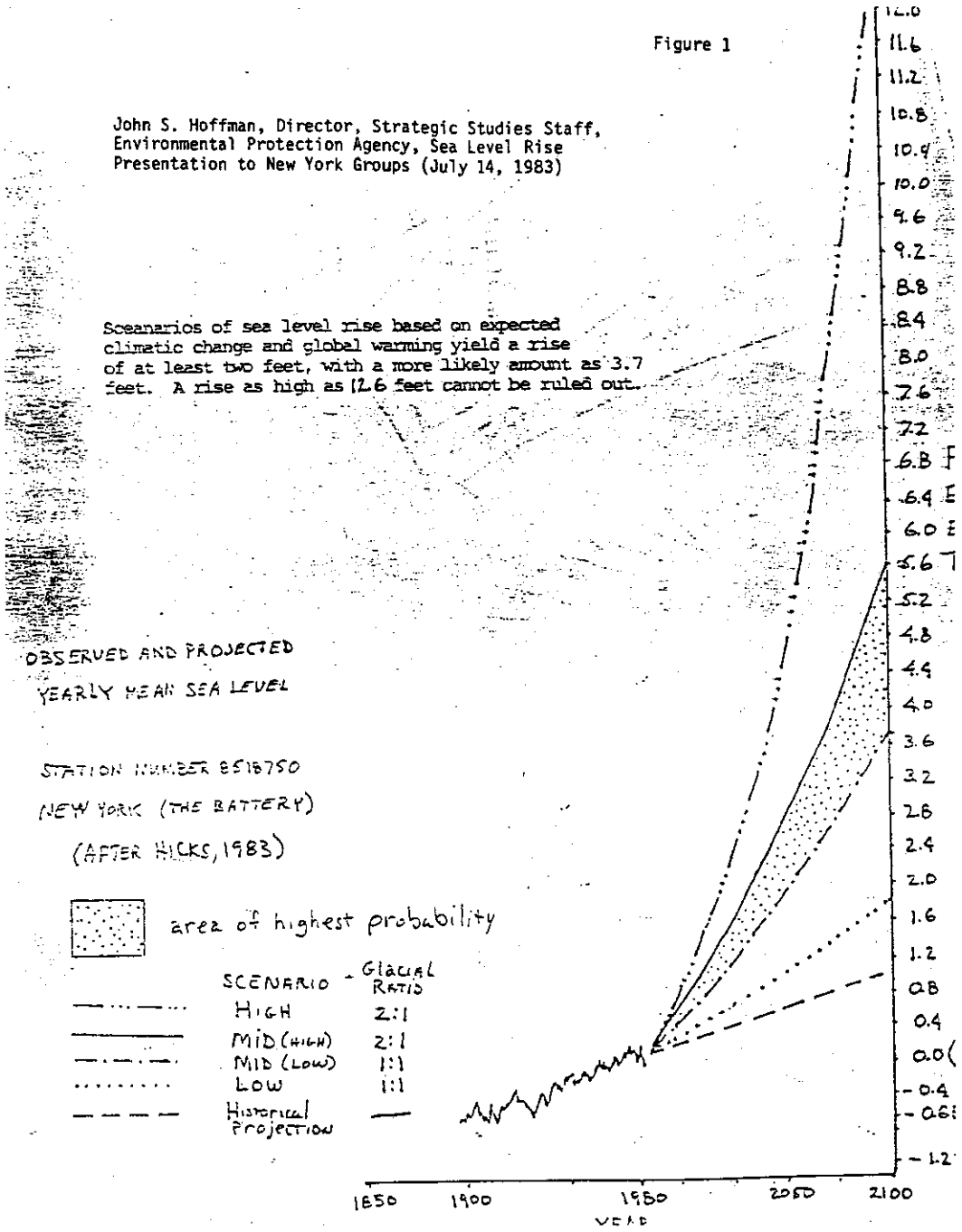
RESPONSE 19.8: The rate of sea level rise over the past 80 years has averaged about 4 inches per century. Given the uncertainty of projections of sea level change, an attempt to accomodate such changes in the design of the project features is unwarranted. We are aware of recent EPA studies which project the possibility of much larger upward changes due to industrialization, development, and population growth. To include allowances in project design for such large changes would represent a very poor use of funds.

RESPONSE 19.9: See response to comment 1.1.

Figure 1

John S. Hoffman, Director, Strategic Studies Staff, Environmental Protection Agency, Sea Level Rise Presentation to New York Groups (July 14, 1983)

Sceanarios of sea level rise based on expected climatic change and global warming yield a rise of at least two feet, with a more likely amount as 3.7 feet. A rise as high as 12.6 feet cannot be ruled out.



League of Women Voters of Louisiana

850 North 5th Street • Apt. 103 • Baton Rouge, Louisiana 70802 • (504) 344-3326

February 27, 1984

20

To: Colonel Robert C. Lee, Corps of Engineers
District Engineer
P. O. Box 60267
New Orleans, LA 70160

From: League of Women Voters of Louisiana
Bette Bornside, President
Charlotte Fremaux, Natural Resources Chair

Re: Draft Main Report and Draft Supplement to the Environmental Impact Statement (DSEIS) for the Lake Pontchartrain, Lousiana, and Vicinity Hurricane Protection Project, Reevaluation Study.

Attention Planning Division
Environmental Quality Section

Dear Colonel Lee:

The League of Women Voters of Louisiana appreciates this opportunity to review the Draft Main Report , the DSEIS and related appendixes, for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project, Reevaluation Study as titled above.

There are a number of questions concerning the project which have been raised. Of particular significance are the following items:

20.1 • the loss of productive marsh areas in eastern New Orleans and St. Charles Parish

20.2 • the dredging of borrow sites opposite Jefferson Parish in Lake Pontchartrain

20.3 • construction problems affecting water quality in all areas of the project

20.4 • possible encouragement of development on unsuitable soils

Undoubtedly the whole issue of flood protection is one of deep concern in this area. We believe that it would be in the best interest of many who raise such questions as we have to be addressed at a public review. At a public hearing there is opportunity for for clarification and examination of data that is important in decision making.

Thank you for your consideration.

Sincerely,
Charlotte Fremaux
Charlotte Fremaux, Natural Resources Chair

RESPONSE 20.1: Very little loss of productive marsh areas in New Orleans East and St. Charles Parish is attributable to this project. Only 54 acres of marsh and 213 acres of swamp would be lost in these areas due to implementation of the High Level Plan. Past construction has destroyed approximately 1,400 acres of marsh. Mitigation for these losses will be studied in the Mitigation Plan. As described in paragraphs 4.2.3 and 4.2.8, the High Level Plan would not impact the enclosed wetlands in New Orleans East or St. Charles Parish.

RESPONSE 20.2: See response to comment 7.41.

RESPONSE 20.3: As discussed in paragraphs 6.1.4.4 to 6.1.4.8, water quality impacts of the high level plan are not significant except for the anoxic conditions in the borrow holes in the lake. As discussed above, we are investigating methods of reducing such impacts.

RESPONSE 20.4: No development was assumed to occur in wetland areas. Future development will be regulated in wetland areas by the Corps' Section 404 permit process and in all areas by local zoning regulations and building codes.

Louisiana Wildlife Federation, Inc.

P.O. BOX 16089 LSU
BATON ROUGE, LOUISIANA 70893
504 355-1871

21

March 1, 1984

Colonel Robert C. Lee
District Engineer
New Orleans District
Corps of Engineers
P. O. Box 60267
New Orleans, Louisiana 70160

Re: Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection Project

Dear Colonel Lee:

Thank you for granting our request for a public hearing on the Draft Main Report and Supplement to the Environmental Impact Statement for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project. We feel it was a wise decision. Please indulge us another request by accepting for the record the Federation's comments on the Tentatively Selected Plan (TSP) for the hurricane protection project. They are several days late due to severe demands on time required by planning efforts for the Federation's 45th annual convention to be held March 9-11 in Monroe, Louisiana.

The Louisiana Wildlife Federation is the largest citizen conservation organization in the state with approximately 80 affiliate sportsmens clubs and 7,000 members throughout Louisiana. Over 3,000 of these members and 25 affiliates are domiciled within or immediately adjacent to the project area. The Federation has had a long-standing interest in the fish and wildlife resources of the Pontchartrain Basin. The proposed hurricane protection project has the potential to cause substantial degradation to the Lake's ecosystem if ample consideration is not given to resource protection in project design and construction.

We believe the Corps has made the correct decision in opting for the High Level Plan over the barrier plan. The Barrier Plan was much too risky, in our opinion, in terms of engineering feasibility, safety and ecosystem preservation. We feel that the High Level Plan, though also damaging to the environment, is more predictable in its effects and therefore, measures to lessen the adverse impacts can be more precisely determined.

Our comments in response to the previous solicitation of public comment on this project by your agency in October of 1981 emphasized our concern over the potential for the project to mislead citizens into the belief that, once constructed, the project will sufficiently protect them from any hurricane that would hit the

21.1 area. As we stressed then, and reiterate now, the only way to be safe from a hurricane is to get out of its way. We urge the Corps to include and emphasize development restrictions in high risk areas and evacuation contingencies as an integral part of this hurricane protection plan. Anything less is irresponsible and an invitation to disaster.

21.2 After thoroughly reviewing the Draft Supplement to the EIS for the TSP, we are concerned primarily with 3 issues. First of all, the levee proposed for St. Charles Parish will encourage development of several thousand acres of wetlands. If the citizens of St. Charles Parish wish that such a levee be constructed, it is our recommendation that the levee be aligned immediately adjacent to Airline Highway (U.S. 61) and that culverts or other kinds of water exchange devices be built into the levee to insure adequate drainage and nutrient transport through the levee.

21.3 The TSP calls for pumping fill from the bottom of Lake Pontchartrain to build the Jefferson Parish levee. Implementation of this plan would create several miles of deep trenches offshore from Jefferson Parish. Lake Pontchartrain, as you know, is already beleaguered by pollution and other degradations and abuses. These trenches would further degrade the Lake at a time when efforts are finally beginning to improve the Lake. We recommend that the Corps select an alternative that will avoid the creation of deep trenches in Lake Pontchartrain. Perhaps levee design might be streamlined to require less fill while still providing adequate protection, and a combination of hauled and pumped fill could be used so as to minimize disruption and degradation of lake bottom. If no alternatives to the proposed trenches can be found, a thorough evaluation of the impact that the holes will have on fisheries habitat should be made so that adequate mitigation can be proposed to offset the damages.

21.4 On page 31 of the EIS mitigation is discussed, however no specific mitigation plan is offered even though a cost figure for mitigation is given on page 124 of the Main Report. We object to the implementation of this project unless a fully defined and adequate mitigation plan is developed and simultaneously funded and implemented. You may want to consider the reestablishment of tidal exchange to the wetlands of New Orleans East and the preservation of the wetlands in that area as potential mitigation for this project.

That concludes the Federation's comments on the hurricane levee project proposal. Thank you for the opportunity to participate in the development of the final report.

Sincerely,

Randy P. Lanctot
Executive Director

cc: Senator Russell Long
Senator J. Bennett Johnston
Representative Lindy Boggs
Representative W.J. "Billy" Tauzin
Representative Bob Livingston

RESPONSE 21.1: Development restrictions are imposed through the Federal Flood Insurance Program. The area has designated hurricane evacuation routes.

RESPONSE 21.2: The levee will be north of Airline Highway with culverts as described.

RESPONSE 21.3: See response 7.41. Once the size of the trenches is finalized and impacts evaluated, mitigation will be studied.

RESPONSE 21.4: See response 1.1. Restoration of tidal exchange in New Orleans East is one of the mitigation features which will be considered.

Orleans Audubon Society

A CHAPTER OF THE NATIONAL AUDUBON SOCIETY

February 28, 1984

22

Colonel Robert C. Lee,
District Engineer
Corps of Engineers, New Orleans District
P.O. Box 60267
New Orleans, LA 70160

Attention: Planning Division
Environmental Quality Section

Dear Colonel Lee:

The Orleans Audubon Society notes the receipt of a copy of the Draft Main Report and Draft Supplement to the Environmental Impact Statement (DSEIS) for the Lake Pontchartrain, Louisiana, and the Vicinity Hurricane Protection Project, Reevaluation Study, Vols. 1 and 11.

These documents have been under review by the Conservation Committee. It has been agreed that a number of questions have been raised that are of sufficient complexity and importance to warrant review at a public hearing at which time exchange of information can be of benefit to various interests involved.

22.1 The Orleans Audubon Society is deeply concerned about the effects of this project on the water quality of Lake Pontchartrain, the levees in the eastern part of New Orelans and the continued reduction of marsh acreage. We believe that the opportunity to review these aspects of the project as well as others in an open meeting will be most beneficial.

Sincerely,
Vivian Newman
Vivian Newman, President
Orleans Audubon Society

2418 Magazine Street
Apt C
New Orleans, LA 70130

RESPONSE 22.1: See responses 20.1 and 20.3.

February 25, 1984

Col. Robert E. Lee
District Engineer
Corps of Engineers
New Orleans District

23

Dear Col. Lee

23.1 I fully support the new hurricane protection alignment along US 61 in St. Charles Parish. I do feel that the part of the levee that parallel's US 61 should begin immediately North of the canal along the highway. The state already owns the canal and some land North of it. This also is the alignment selected by the St. Charles Parish Council. Please carefully consider the costs on this project as there seems to be opportunities for cost savings that will greatly benefit local government.

23.2 A public hearing should be held on this project because of its impact on Lakes Pontchartrain & Borne. This will help people understand the project and give the opportunity for grass root support of the project. People need to feel that this alignment is for legitimate storm protection.

23.3 I feel that any mitigation involved with this project should be directed to St. Charles Parish. The problems with shoreline erosion strongly support & warrant it. There does not seem to be as much of mitigation involved with this project as needed. The wetlands North of this alignment have been under severe stress for many years because of the many projects that have impacted on them. Landfills have been a constant problem and no amount of protection directed at wetlands have remedied this problem.

23.4 It would seem to be in the best interests of St. Charles Parish residents that this project move along as rapidly as possible. I would also ask that careful consideration be given to all development of all land South of this alignment as soon as possible. The Corps can assist the Parish by carefully balancing this as a growth line with lands North of the levee being preserved and land South of the levee slated for development. This would seem consistant with the goal of the coastal zone program in our state that offers a balance between conservation & development.

Yours truly,

M L Cambre

M.L. Cambre

RESPONSE 23.1: During the preparation of the General Design Memorandum, a levee alinement as close as practicable to the canal on the north side of Airline Highway will be selected.

RESPONSE 23.2: A public meeting was held on April 12, 1984.

RESPONSE 23.3: During plan formulation for mitigation, we will consider shoreline protection in St. Charles Parish. However, it should be noted that only 13% of the wetland damages occurred in St. Charles Parish, 20% in St. Bernard Parish, and 67% in Orleans Parish. Thus, it is unlikely that all mitigation would occur in St. Charles Parish.

RESPONSE 23.4: Development in the area south of Airline Highway requires a Section 404 permit from the Corps of Engineers. Decisions on these permits are made on a case by case basis and are based on the overall public interest.

February 27, 1984

(24)

Col. Robert Lee, District Engineer
U.S. Army Corps of Engineer
P. O. Box 60267
New Orleans, LA 70160

In Re: Lake Ponchartrain Hurricane Protection Project

Dear Col. Lee:

I am submitting the enclosed comments on the draft main report and draft supplement to the environmental impact statement on the Lake Ponchartrain Hurricane Protection Project. I am currently a second year law student at Tulane University and am involved in research on this proposal. On the basis of this research I concur with and commend the Corps' tentative selection of the High Level Plan; by comparison it appears to be much less costly and significantly less damaging to the environment than the Barrier Plan. This said, however, under current federal law and policy the selected plan continues to present serious environmental and legal problems.

1. New Orleans East

Over objections of environmental groups and resource-oriented state and federal agencies, the Corps plans to enclose a 13,000 acre wetland area in New Orleans East within the hurricane protection system. This plan will open up a vast area of marshland to potential urbanization. The Corps' analysis of benefits attributable to the National Economic Development (NED) Account asserts on the one hand that the development pattern of the New Orleans metropolitan area "suggests little evidence" of either intensification or location benefits associated with the hurricane protection project. The statement also indicates that the New Orleans East area wetlands are not needed to absorb the growth of New Orleans within the next 50 years. On the other hand, the statment admits in other parts that--given the selected levee location--urban development of the enclosed area is inevitable, and perhaps even desirable. The Corps can not have it both ways.

24.1

The contention that development of this area is contingent upon §404 permit issuance and not subject to the hurricane protection system analysis is flawed. The Fish and Wildlife Service points out that current state and federal regulatory definitions and policies may exempt this area from the need for a permit. Further if a permit is required, the completion of the proposed levee would greatly increase the likelihood of the issuance of such a permit and provide much incentive for development. Indeed, the development could not conceivably take

24.2

RESPONSE 24.1: No benefits for future development in the New Orleans East wetland areas were included in the analysis. Sufficient acreage exists to absorb projected development without the use of these area. Development in the wetland area would be regulated by the Section 404 permit program administered by the U. S. Army Corps of Engineers.

RESPONSE 24.2: We are not aware of any pending legislation that would exempt this area from the Section 404 permit process. The leveed area may be exempt from the state coastal permit process; however, it will be subject to the Section 404 permit process as long as it remains wetlands.

place without the levee. In short, the levee and the permitted development within it go hand in hand. As a matter of logic, and law, they should be considered together in the same statement.

24.3 Compliance with Executive Order 11990, Protection of Wetlands, requires federal agencies to avoid construction in wetlands unless 1) there is no practicable alternative, and 2) the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. The Maxent Canal Levee appears to be an acceptable, practicable alternative. By adopting this less damaging alignment, or by purchasing real estate easments in the expanded area, the Corps could avoid faciliting development of these wetlands pursuant to this national policy. The cost differential cited as the decisive reason for discarding the Maxent Canal alternative should be re-evaluated. Possible reductions in cost could be achieved by re-routing the northern end of the aligment. In any event, the additional costs of construction must be balanced against the costs of developing this wetland area, a qualification which does not appear in the EIS. Instead, the EIS states that "failure to provide adequate hurricane protection could discourage further economic growth in some of the undeveloped areas (EIS-44), and that "if hurricane protection is not provided, land use densities will probably increase in the more protected areas of the project." (EIS-47) In essence, both statements admit that if protection is not provided development will be discouraged. Conversely, if the protection is provided development will be encouraged. The report also states that the Maxent Canal alternative would preclude development of the area, but that "future national or local policies may make such development desirable." (EIS-24) A more appropriate statement would be that the Executive Order dictates the opposite choice.

2. St. Charles Parish

24.4 The Corps has selected the north of Airline Highway alignment. The discarded south of Airline Highway alternative would avoid enclosing 3,000 acres of wetlands in the protected area. The report assures that culverts in the proposed north levee, analogous to the existing culverts in Airline Highway, would maintain the existing hydrology of the area. However, inclusion of this area within protection could eventually lead to development, as discussed above regarding New Orleans East. Indeed, it is hard to think of another rationale for not selcting the south-of-the-highway alternative. If costs are the concern, these costs must again be balanced against the requirements of the relevant Executive Orders.

3. Jefferson Parish

The proposal to dredge material from Lake Ponchartrain to build the Jefferson Parish lakefornt levee would result in a

RESPONSE 24.3: The Maxent Canal alinement is neither acceptable nor practicable from an economic standpoint. The value of the wetlands is not sufficient to economically justify construction of the Maxent Canal alinement. The costs of developing the wetlands is not considered, because no benefits are taken for such development.

RESPONSE 24.4: The higher cost of the south alinement, with no additional benefits, provides sufficient rationale for selecting the north alinement. The additional expenditure of funds is not justified because the selected alinement will not reduce the environmental value of the wetland area. Therefore, there are no benefits to be gained.

24.5 substantial and unquantifiable adverse environmental impact. The weight of information concerning the biological implications of dredge holes indicates that an accumulation of pollutants and an eventual anoxic dead zone will result. Aquatic production surrounding the area will decrease significantly. These impacts can be significantly reduced by bringing in levee material from an upland area such as the Bonnet Carre Spillway, as proposed for other levee features. This alternative needs fuller exploration.

4. Mitigation

24.6 The requirements of the Fish and Wildlife Coordination Act, 16 U.S.C. ss 661-666c, and NEPA are that the planning goal of a federal project should go beyond the stated project purpose to include mititgation measures that will offset project-induced losses to fish and wildlife resources. A detailed mitigation plan should be completed, concurrently with a recommended plan, to compensate for all past and future project damages, and should be implemented simultaneously with construction of all proposed project fetaures. Mitigation is only briefly mentioned in the Corps' report; essentially the subject is deferred. A specific and complete mitigation plan must become a feature of the final EIS on the Hurricane Protection Project. The plan should be in accord with the FWS Habitat Evaluation Procedure, and should include, among others, the following measures:

24.7 a) Adoption of the Maxent Canal alternative or the acquisition of assessments to prevent development in the New Orleans East area, as, for example, in the Atchafalaya Floodway;

24.8 b) Modification of existing water control structures along the South Point to the GIWW levee segment. This would allow water and estuarine organism movement through the levee system, thereby revitalizing the marsh and restoring nursery use by estuarine dependent fish and shellfish.

24.9 c) Specific measures to restore and replace the loss of Jefferson Parish's 10.5 mile National Recreation Trail. The report states in this regard that "the Lake Ponchartrain shoreline is unique in itself and the activities which are intensely pursued in its vicinity are indicative of the current demand for water oriented outdoor recreation in highly urbanized areas."

24.10 d) Assurance that the St. Bernard Parish facet of the originally proposed mitigation plan will be implemented by state and/or private interests and development of substitute federal mitigation features at the earliest possible date for concurrent implementation with other project features.

24.11 e) Details of the plan proposing shoreline protection and improved management for erosion of the 1,600 acres of marsh and shallow open water habitat in St. Charles Parish.

RESPONSE 24.5: See response to comments 2.1 and 7.41. Also, the impacts are neither substantial nor unquantifiable. As discussed in para 6.1.4.1, the dredge holes would impact less than 0.1 percent of the lake bottoms. Aquatic production surrounding the holes should not decrease as discussed in paragraph 6.1.4.5.

RESPONSE 24.6: See response to comment 1.1.

RESPONSE 24.7: Selection of the Maxent Canal alinement has been shown to be unjustified. Acquisition of easements can be considered in the mitigation plan study.

RESPONSE 24.8: See discussion of restoration of tidal exchange in paragraph 4.2.10 and response to comment 24.7.

RESPONSE 24.9: Report has been modified accordingly.

RESPONSE 24.10: See response to comment 1.1.

RESPONSE 24.11: See response to comment 24.10.

5. Public Hearing

24.12 The Corps' decision that the 1981 public hearing was a sufficient public forum for the expression of concerns regarding the 1983 report and draft supplement must be reconsidered. A public hearing must be held because additional issues have arisen that were not subject to public scrutiny in 1981. At that time the St. Charles Parish levee segment had been indefinitely deferred and the newly proposed Airline Highway alignment did not exist. Further, a $654 million proposal that avoids any specific proposal for mitigation must be subject to complete public review.

Thank you for your consideration of these comments. I am optimistic that the responsive flexibility that the Corps has exhibited thorughout this project will result in the optimum plan for flood protection and resource protection in the New Orleans area.

Respectfully submitted,

Moira Ford

Moira Ford

MF/rsr

RESPONSE 24.12: A public hearing was held on April 12, 1984.

February 26, 1984

(25)

Dear Col. Robert Lee,

25.1 In regard to your recently released draft Main Report and draft supplement to the EIS for the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection Project, may we recommend a Public Hearing be held in connection with your present plans.

The last hearing was November 1981. Much has been proposed and plans changed since that time with no public imput.

Sincerely,

Juanita Grimes

Juanita Grimes
Sierra Club

c/c Honorable Billy Tauzin
Washington, D. C. 20515

RESPONSE 25.1: **A public hearing was held on April 12, 1984.**

23 FEB 1983

26

Colonel Robert Lee, District Engineer
US Army Corps of Engineers
POB 60267
New Orleans, La. 70160

February 22, 1984

Dear Colonel Lee;

Re: Lake Pontchartrain, La. and Vicinity Hurricane Protection Project

I'd like to see the Corps have a public hearing on this project. Some of the alignment plans for this levee system around the lake are questionable:

26.1 1) In N.O. East, a 13,000 acre tract of wetlands will be lost when an alternative alignment is available.

26.2 2) In St. Charles Parish, care should be taken not to lose the wetlands south of Airline Highway.

26.3 3) The Corps' dredging proposal along the Jefferson Parish Shoreline will create deep dead holes in the lake bottom. Clay could be hauled in instead.

26.4 4) The plan does not contain specific mitigation proposals.

26.5 5) A public hearing to examine these possibilities is highly desirable. The lake is in a deplorable state largely be cause of past work by the US Army Corps of Engineers of which you are presently District Engineer (MRGO, Intracoastal Canal, flood projects on all sides of the lake, permits to development on all sides of the lake).

Sincerely,

Michael Halle

Michael Halle
520 Esplanade Avenue
New Orleans, La. 70116

cc: Lindy Boggs

RESPONSE 26.1: The 13,000 acres of wetlands have been leveed since the mid-1950's. Any possible development will be considered via the Section 404 permit process.

RESPONSE 26.2: See responses 19.4 and 19.5.

RESPONSE 26.3: See responses 2.1 and 7.41.

RESPONSE 26.4: See response 1.1.

RESPONSE 26.5: A public hearing was held on April 12, 1984.

GEODATA INC.

(27)

February 27, 1984

United States Army Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana 70160

Chief Engineer:

27.1 I urgently request a public hearing be held on the proposed "Hurricane Protection Project" for Lake Pontchartrain and vacinity.

Sincerely,

A. H. Rack

AHR/ep

A. H. RACK
16 MARINERS COVE, NORTH
NEW ORLEANS, LA 70124

MAILING ADDRESS: P.O. BOX 19102 • NEW ORLEANS, LA. 70119
OFFICE: 4330 DUMAINE ST.• NEW ORLEANS, LOUISIANA 70119 • *PHONE:* 504 488-2611

RESPONSE 27.1: A public hearing was held on April 12, 1984.