DAEN-CWP-C (LMVPD-P, 30 Nov 83) 1st Ind
SUBJECT: Lake Pontchartrain Hurricane Project, LA

HQ, U.S. Army Corps of Engineers, Washington, D.C. 20314 25 APR 1984

TO: Commander, Lower Mississippi Valley Division ATTN: LMVPD-P

1. The draft report has been reviewed by all appropriate OCE elements. Preliminary comments have been discussed with your staff.

2. Basically, we have two concerns with the draft report; both involving project formulation. The first relates to presentation of incremental economic analyses. The second involves an apparent lack of adequate consideration of environmental effects in evaluating alternative plans.

a. With regard to the presentation of incremental economic analyses, the report is not clear that the economics of separable project components, such as the physically separate protection measures in the St. Charles Parish area, have been evaluated. The final report should present the rationale and results of these studies to further support project formulation.

b. With regard to environmental considerations, we believe the final report should be strengthened to reflect the extent to which environmental effects have been considered in evaluating alternatives, to include any significant differences in mitigation requirements which may have been identified. Related to this concern are the recently imposed requirements of EC 1105-2-117 which reflect the request of the Assistant Secretary of the Army (Civil Works) for more substantive support for any mitigation measures which may be recommended.

3. We request that, within imposed constraints of time and resources, you address the above concerns in the final report.

4. We are inclosing our final specific comments to facilitate your efforts. Disposition of the remainder of our preliminary comments should be as discussed between our staffs.

FOR THE COMMANDER:

D J Shanahan

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L. H. BLAKEY
Chief, Planning Division
Directorate of Civil Works

OCE COMMENTS
ON THE
DRAFT REEVALUATION REPORT AND EIS
FOR THE LAKE PONTCHARTRAIN, LA & VICINITY
HURRICANE PROTECTION PROJECT

Main Report

1. Page 18, para. 1. In this discussion of study area limits, different limits are used for the physical study area and those used for environmental analysis (based upon impacts of construction activities). The effects of reducing flooding upon environmental resources in the extreme western end of the study area in the event of a hurricane should be discussed. The absence of such consideration precludes identification of opportunities to enhance or protect these resources. (See EC 1105-2-117).

2. Page 25, para. 2. It is stated in the fourth sentence that diversions of Mississippi River water through the Bonnet Carre' Spillway produced small (1.5') variations; however, the flow at which these variations were observed was not indicated. They should be included to give the reader an indication of the impact of the diversions on Lake Pontchartrain elevations.

3. Page 29, para. 3. It is suggested that the specific types of submerged vegetation be described as is done for the other vegetative associations described in preceding paragraphs. The dominant vegetation species should be described for all the allociations highlighted in this section, much like was done for the cypress-tupelo swamp.

4. Page 29, para. 5. It is stated that two areas within the project area are designated refuges or wildlife management areas, but they are not identified further. The areas should be specifically identified.

5. Page 30, para. 4. The report should be more specific and mention those endangered species for which there is particular concern. Additional information such as the biological opinion, etc. can be referenced for further reading, but the concerns of the District and natural resources agencies should be given here. (See, for example, the discussion on Cultural Resources which follows on page 30 of the Main Report).

6. General Comment on Existing Conditions. Those discussions dealing with botanical and zoological resources could be improved with the use of a cover type/resource map which identifies the location and extent of the resources within the study boundaries with which the District is particularly concerned. An environmental resources location map could deal with the cultural, recreational and endangered species information as well as those botanical and zoological resources of significance. Of particular importance would be the descriptions of the authorized and existing hurricane protection works and how these works relate to the significant natural resources within the study area.

7. Page 47, para. 3. This paragraph does not discuss existing conditions and the likely factors to be influenced with the placement of a regional wastewater treatment facility in the project area with outfalls in the Mississippi River. Further information should be provided, including efforts to comply with the Clean Water Act on the part of parish and state government.

8. Page 48, para 2 & 3. The basis for the declines in marsh and bottomland hardwood habitats is unclear. An explanation as to whether natural succession, development, and/or saltwater encroachment, etc. are the causes of the projected declines should be provided. The report should discuss what type of losses would be incurred to these resources if several hurricanes were to strike the study area and how might the various alternatives prevent these damages? The potential damages inflicted upon other environmental resources, e.g. cultural and recreational, are addressed, but not the botanical and zoological.

9. Page 50, Problems, Needs and Opportunities. A clearer link needs to be established between the narratives presented in the Existing Conditions and Future Without with the discussion in this section. Factors like the projected population increases in the New Orleans metro area, and the declining marsh acreages (shown to attenuate wave and storm surges) are among several factors that will contribute to increased damages and loss-of-life when the next hurricane hits. These factors may then be shown to give rise to the projected needs and opportunities within the study area.

10. Page 53. Under "Management Measures" the report states that, other than flood-forecasting and the national flood insurance program, there are no practicable nonstructural measures for improving hurricane protection to the study area. The report should explain what other nonstructural measures were considered such as emergency evacuation.

11. Page 57, para. 2 & 3. The discussion giving the reasoning for selecting the smallest barrier structure for preliminary plan formulation appears illogical given the admitted importance of allowing the opening to be as large as practical to permit adequate exchange of biological and chemical constituents. Additional explanation should be provided.

12. Page 73, para. 1 & 2. The first paragraph assumes that for initial screening, all preliminary plans were determined to be economically justified, would have net adverse environmental impacts and net positive social impacts. The criteria used to screen the plans should be explained.

13. Page 79. First paragraph indicates that St. Charles portion of the Barrier Plan is separately (incrementally) justified. To support the identification of the NED plan, the rationale for the selection of separable portions (such as St. Charles) of the plan and the incremental analysis process should be included in project formulation.

14. Page 81. The previous comment applies also to the High Level Plan. (The footnote to Table 16 should be restructured so as to parallel the footnote to Table 15.)

15. Page 86, para. 1. It is not clear from the narrative why, in this instance, I-wall levee construction with barge berm is less expensive than I-wall levee without barge berm, particularly since in each instance where this construction technique was considered for other alternatives the I-wall levee with barge berm was more expensive. This apparent inconsistency should be cleared up.

16. Page 110, para. 3. In the discussion of the habitat created by the borrow pits consideration should be given to (1) the shallow nature of Lake Pontchartrain and (2) the fact that its circulation is controlled, in large measure, by the wind which when combined could reduce the potential anoxic conditions predicted for these pits. Additionally, in this discussion of impact to the biological resources, the riprapping of levee berms would provide habitat for benthic organisms displaced via dredging and berm construction, albeit of differing species composition; thus lessening the impact described.

17. Page 122, Sensitivity Analysis. P&G indicates the planner should display an assessment of the risks and uncertainty believed to characterize the benefits and costs of alternative plans considered. This section deals with the design storms and the economic aspects; however, the environmental aspects are neither included nor referenced. For example, the sensitivity of plan selection (including mitigation) to the uncertainty of protecting the future without-the-project conditions for environmental resources should be described.

18. Page 124, para. 1. It is stated in this paragraph that fish and wildlife losses would be mitigated by various methods of marsh management and erosion protection. This appears to be the first mention of any mitigation features. The P&G requires that the protection of the nation's environment is to be provided by mitigation of adverse effects for each alternative plan. The marsh management and erosion protection activities should be described for the alternative plans selected for evaluation and their contribution to alleviating the identified losses presented. The two sentences regarding mitigation are grossly inadequate and the mitigation costs developed do not appear in the summary of costs (Table 25). The specifics of fish and wildlife mitigation alternatives and any mitigation features recommended as a part of the Tentatively Selected Plan must be presented in detail in (or referenced in) the final reevaluation report or a separate decision document as appropriate.

Draft EIS

1. Page EIS-23, para. 4.2.10. Although fish and wildlife management may not be a specifically authorized project purpose, our planning regulations (ER 1105-2-50, Chapter 2) state that "it is Corps policy to enhance and mitigate fish and wildlife resource including habitat and uses thereof to maximize total resource values." Given the fact that this issue is also an unresolved issue as identified on page EIS-9, paragraph 1.4.3. it would be prudent to further investigate this issue.

2. Page EIS-31, para. 4.4.2.3-4.4.2.5. While concepts presented in this discussion of mitigation are good, several points are suggested for consideration regarding the final report and EIS or a separate mitigation document as appropriate:

a. The tentative locations of these proposed management units should be provided. Consideration should be given to including the New Orleans' East Area.

b. The costs outlined should be further broken down such that an incremental analysis could be conducted in accordance with EC 1105-2-117.

c. This discussion should attempt to deal with both monetary and non-monetary gains and losses as per the guidance contained in the EC 1105-2-117.

d. The determination of resources to be compensated should be based upon the identification of significant resources impacted over the period of analysis as required in ER 1105-2-30, Appendix A and ER 1105-2-50, Appendix A.

3. General Comment. In view of the fact that the draft guidance on incremental analysis for mitigation alternatives was recently distributed, CWP-P as the proponent for this guidance will provide any technical support required by the District to bring the mitigation aspects of the subject report into compliance with EC 1105-2-117.

Robbins/ea/5835

LMVPD-G (LMVPD-P 30 Nov 84) 2d Ind
SUBJECT: Lake Pontchartrain Hurricane Project, LA

Campbell
PD-C

DA, Lower Mississippi Valley Division, Corps of Engineers, Vicksburg, MS 39180
1 May 84

TO: Commander, New Orleans District, ATTN: LMNPD-F

Referred for action.

Caldwell
PD-A

FOR THE COMMANDER:

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FRED H. BAYLEY III
Chief, Planning Division

Bayley