Mr. Campbell
For Jup.

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF LOUISIANA

SAVE OUR WETLANDS, INC. ET. AL.

VS.

No. 75-3710

SECTION "A"

EARLY J. RUSH, III. ET. AL.

CIVIL ACTION

ST. TAMMANY POLICE JURY

No. 77-976

gvs.

CIVIL ACTION

CLIFFORD L. ALEXANDER, ET. AL.

(CONSOLIDATED MATTERS)

## ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED that defendants herein, Early Rush, District Engineer, U.S. Army Corps of Engineers, New Orleans/District; Clifford Alexander, Secretary of the Army; Douglas Costle, Administrator of the Environmental Protection Agency; and the Board of Levee Commissioners of the Orleans Levee District, be, and they are hereby, ENJOINED from any further construction of the Chef Menteur Pass, Rigolets, New Orleans East and Chalmette portions of the Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection Project until such time as this Court shall have been satisfied that such defendants have complied in full with Title 42, United States Cod Section 4332 with respect to preparation of an environmental impact statement for such project by means of a revision of the August, 1974 Final Environmental Impact Statement in accord with Department of the Army Regulation 1105-2-507 Paragraph 7a.

The Court reserves the right to modify the injunction orde herein upon proper motion of any party.

New Orleans, Louisiana, this 30th day of December, 1977.

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## SCHWARTZ, J.

This matter is presently before the Court for determination as to whether or not an injunction should issue restraining the United States Army Corps of Engineers from proceeding with certain portions of the Lake Pontchartrain, Louisiana and Vicinit; Hurricane Protection Project, for the reason that the Final Environmental Impact Statement prepared by the Corps in August, 1974 fails to comply with the requirements of Title 43, United States Code, Section 4332. In addition, the Court must determine whether or not certain "local assurances" of financial support for the project received by the federal government from the Board of Levee Commissioners of the Orleans Levee District (hereinafter the Levee Board) are in fact legally sufficient.

Plaintiffs in these consolidated cases are Save Our Wetlands Inc. (SOWL), the Clio Sportmans's League, Raymond Mix, and the St. Tammany Parish Police Jury. Defendants are Early Rush, Distr Engineer, U.S. Army Corps of Engineers, New Orleans District; Cli Alexander, Secretary of the Army; Douglas Costle, Administrator of the Environmental Protection Agency, and the Levee Board through its President, Guy LeMieux.

Although the proposed Lake Pontchartrain hurricane protection project (hereinafter LPHPP) consists of multiple features, those at issue before the Court at this time are limited to the Chalmet and New Orleans East portions of the plan and the proposed barries structures at Chef Menteur Pass and the Rigolets. Other aspects

of the proposed plan nave been dismissed from this proceeding by order of court or stipulation of the parties.

It is clear from the evidence in this case that the Final Environmental Impact Study for the Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection Project prepared by the United States Army Corps of Engineers dated August, 1974 does not comply with the requirements of Title 43 United States Code, Section 433. Which provides in pertinent part:

"The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall ---

- (A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the
   environmental design arts in planning and in decisionmaking which may have an impact on man's environment;
  - (B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by subchapter II of this chapter, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations;
  - (C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on --
    - (i) the environmental impact of the proposed action,
    - (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
    - (iii) alternatives to the proposed action,
    - (iv) the relationship between local shortterm uses of man's environment and the maintenance and enhancement of long-term productivity, and
    - (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Ederal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement

and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of Title 5, and shall accompany the proposal through the existing agency review processes;"

The opinion of this Court that the Final Environmental Impact Statement (FEIS) for the Lake Pontchartrain Hurricane Project is legally deficient in light of the aforementioned statute is based upon the following facts which were proved by a preponderance of the evidence at trial of this matter.

According to the FEIS at page I-3, paragraph 7 through page I paragraph 17, the barrier structures at Chef Menteur Pass and the Rigolets will be designed as follows:

- (7) The Chef Menteur Pass Complex consists of a gated control structure, a navigation structure, related channels, earthen closures at the Gulf Intracoastal Waterway (GIWW) and the Chef Menteur Pass and adjoining barrier levees. Additionally, a small segment of the GIWW will be realined southward of its existing location.
- (8) The gated control structure and channel will be constructed west of the Chef Menteur Pass and south of the present GIWW. The gated control structure will be 400 feet wide with a sill elevation of -25 feet. Eight gate openings 46 feet wide will provide 9,200 square feet of opening below elevation 0. The openings will be closed by lowering the two gate sections in each of the eight gate bays by means of a gantry crane. These gate sections will be stored in each gate bay. In the stored position, the bottom of the gates will be at elevation 3 feet. The approach channels will flare at a 12.50 angle horizontally from the 400-foot width at the structure to a width of 700 feet. From this point a constant channel width of 700 feet will be maintained. The channel bottom will slope 1 on 10 from the structure to a depth of 40 feet from which point a constant channel depth of 40 feet will be maintained. A closure dam will be located in the present Chef Menteur Pass channel and at two locations along the existing GIWW.
- (9) The Chef Menteur Pass navigation canal will run from west of the bake Borgne opening of the existing channel to the Chef Menteur Pass channel near the L&N Railroad bridge. The approach channel will be 125 feet wide. The navigation structure will be 84 feet wide with the sill at -16 mean low gulf (m.l.g.). Sector gates will be used because of reverse head conditions and so the structure can be converted to a lock in the future if needed. The structure will consist of a concrete gate bay on timber pilings, flanked by floodwalls. The top of the gate bay and floodwalls will be at elevation 14.0 feet.

- (10) Also included in the Chef Menteur Pass Complex is the relocation of the GIWW to the south of its existing location. Barrier levees will be constructed to adjoin the Chef Menteur Pass Complex structures to each other and to the US Highway 90 embankment which also serve as portions of the barrier levee. The protection levee will be at an elevation of 14.0 feet adjacent to and in between the structures and will be at an elevation of 9.0 feet at other locations. This elevation of 9 feet will allow flood surge overtopping for a short period during a hurricane, but this overtopping will not significantly affect the water elevation of Lake Pontchartrai and affect the function of the barrier system.
- (11) The Rigolets Complex will be located south of the US Highway 90 bridge. It will consist of a gated control structure and a closure dam in the present Rigolets channel, a navigation channel and lock east of th natural channel, and adjoining barrier levees.
- (12) The gated portion of the control structure will be 800 feet long and 50 feet wide with a sill depth of -30 feet. There will be 16 gate bays each 46 feet wide. Each bay will have three vertical lift steel gates which will be raised and lowered by an overhead gantry crane.
- (13) The approach channel to the control structure will have an 800-foot bottom width and a depth of -30 feet at the structure sill. On the gulf side, the channel will slope downward from the structure along a l on 10 slope to a depth of -35 feet and remain level for a distant of 100 feet, thence slope upward along a l on 10 slope to a depth of -30 feet and continue at this elevation for 2,90 feet, thence slope upward on a l on 10 slope to the existing channel bottom. On the Lake side, the channel bottom will slope downward from the structure along a l on 10 slope to a depth of -35 feet and remain level for a distance of 100 feet, thence slope upward on a l on 10 slope to a depth of -30 feet and continue at this elevation for 2,300 feet, thence slope upward on a l on 10 slope to the existing channel bottom. The channel sides will slope l on 3 from the bottom of the channel to the surface of the ground.
- (14) The closure dam will be located adjacent to the east and west sides of the control structure. It will consist of a western embankment 710 feet long and an easter embankment 3,965 feet long. The crest elevation will be at 14.0 feet.
- (15) A navigation canal and lock will be constructed ea of the closure dam. The lock will be 110 feet wide with 80 feet usable chamber length. The lock will be provided with sector gates with sill elevation at -14.0 feet (-13.2 feet m.l.g.).
- (16) The proposed levee network south of the Rigolets consists of 2.4 miles of highway levee and 0.4 mile of connecting levee. The levee system will utilize the existing embankment of US Highway 90, where its grade is equal or greater than 9 feet which is some 3.3 miles west of the existing bridge crossing at The Rigolets. From this point, going east, the levee will be constructed on the southern side and parallel to the existing highway embankment and will terminate at the intersection of the connecting levee

between the highway embankment and the closure dam. The controlling elevation of the levee system is 9.0 feet.

(17) The levee network north of The Rigolets consists of 0.2 mile of levee between the closure dam and navigation lock and 1.8 miles of levee extending north of the lock to US Nighway 90 at Apple Pie Ridge.

In section 3 of the FEIS, "The Probable Impact of the Propaction on the Environment," it is indicated that model testing of the plan was carried out at the United States Army Engineer Waterways Experiment Station which indicated among other thing: "that the effects of the proposed hurricane surge control strutures in Chef Menteur and Rigolets passes on both salinities and tidal heights would be negligible." The FEIS indicates the impact on marine life in the Lake would not be deleterious and that the loss of marsh area resulting from construction of levin some wetlands areas and subsequent urbanization would not a tensively decrease the secondary productivity of the lake.

In summary the FEIS presents a detailed plan for hurrical protection which, upon reading of the FEIS, appears to closely approximate natural conditions in the areas and accordingly halittle adverse impact on the area environment. Unfortunately testimony at trial reveals that the picture of the project pain the FEIS was not in fact a tested conclusion but a hope by persons planning the project that it could in fact be construed as to meet the environmental objectives set out in the FEI More crucially, the FEIS fails absolutely to aver in any way questions which the Corps had at the time of the FEIS as to the possible adverse effects of the project as planned.

The model studies referred to in the 1974 FEIS were done in 1962 at the Waterways Experiment Station (WES) in Vicksbu However, these tests were not made on a model of the project described in the FEIS. Instead the model utilized the original design proposed for the barrier structures (Plan 1) which place such structures in man-made land cuts. Subsequently, but preto the issuance of the FEIS, the design plan was modified so

Jace the barrier structures in the natural passes as set out to PEIS (Plan 2). The effect of the change in the placement to barrier structures considerably modified the effect on sarrier structures on the waters of the passes. However, the that the model studies relied upon were based upon a signantly different plan is not disclosed in the FEIS.

In 1973 the Corps, through Jerome C. Baehr, Chief, Engineering sion, New Orleans Division, requested further model studies. document requesting such studies (Exhibit P30) under date of per 5, 1973, Mr. Baehr indicated that:

During preparation of the detailed design memorandum , the contracting Architect-Engineer, the Architect-Engineer's representative expressed concern that the hydraulic regime may have changed significantly because their gradually varied flow hydraulic studies indicated a significant reduction in discharge, on the order of  $\beta 0$ to 40 percent, would occur after installation of the barrier Subsequent hydraulic studies by the New Orleans structures. District indicated that this was the case, although the magnitude of the head losses and discharges through the relocated structure were dependent on the hydraulic para-meters assumed to apply to the structure. A review of results of the undistorted scale model tests, conducted at WES in connection with the Hydraulic Model Investigation entitled "Effects on Lake Pontchartrain, La. of Hurricane Surge Control Structures and Mississippi River-Gulf Outlet Cannel," dated November 1963, indicated that head losses were significantly smaller for the originally designed structure than the analytical computations indicated for the same discharges in the relocated and redesigned structure. Additional analytical computations were made substituting the originally designed structure in the new location and computing losses for the same discharges. The head losses were less than those for the redesigned structure but still significantly greater than the 1:100 undistorted scale model tests indicated they would be."

Baehr concluded that:

"In view of the far-reaching and adverse consequences which might result if an inadequate hurricane control structure is constructed under this project, it is imperative that an adequate hydraulic design be determined to safeguard the environment of Lakes Pontchartrain and Borgne. The engineering and design on the structure is in an advanced phase but only a limited amount of additional work can be accomplished prior to the resolution of this problem. Therefore, it is requested that authority be granted the New Orleans District and Waterways Experiment Station to construct and test a hydraulic model of the Rigolets control structure and closure dam. Funds are available under the project."

The studies requested by the Bachr report were undertaken by Corps. They were ongoing at the time of the issuance of the FEIS

and were not completed until 1976. However, neither their existence nor the underlying problem giving rise to them are even suggested in any place in the FEIS.

It is further clear from the testimony that the Corps did not, as required by 42 U.S.C. \$4332, actually utilize an interdisciplinary approach to the formulation of the impact statemer. The Corps relied upon consultation with one hydrology/marine biology expert, Dr. Gordon Gunter. The totality of the Corps' submission of the matter to Dr. Gunter was by means of perhaps few as one conversation with Dr. Gunter in which he was asked: a structure altering neither salinity nor volume more than 10% would have adverse effect on the lake and the marine life in it Given this hypothet, Dr. Gunter concluded that the project would not be harmful or have significant effect. Dr. Gunter was never requested to submit a written report and accordingly did not. was not requested to review the EIS in either its draft or its final form.

Glen Muntz of the Corps of Engineers was a coordinator for the EIS. During the formulation of the EIS he expressed this superiors that he had reservation about statements in the I to the effect that the barriers at the Chef and the Rigolets would not affect certain environmental characteristics of the area, it being Mr. Muntz's opinion that at that stage the statement should more properly have been "should not" rather than "vonot" affect.

However, such reservation is not hinted in the FEIS and in fact at page III-3, paragraph 5, language of Dr. Muntz was in : altered by the framers of the EIS. Dr. Muntz indicated that "c ganisms which utilize detritus will decrease in numbers...". not suggest that, as the FEIS states, "... but this loss will a be extensive."

Although the FEIS refers to many engineering studies, it contadequately reflect a cross-section of the related disciplin

In many cases information relied upon by the Corps to support conclusions was not even obtained in written form.

Section 4332 requires that there be consultation by the drafting agency with other agencies with special expertise in area addressed or some jurisdiction over it. In the instant the Corps should have consulted closely with the U.S. Fish an Wildlife Service. The testimony reveals that although there communication with that agency, it was infrequent and unprodu

of cost-benefit analysis of the plan. Certain economic benef. were assigned to the plan resulting from the conclusion that construction of levees in certain marsh areas would allow urbation in those areas. However, many of these areas have been a nated as wetlands subject to considerable limitation as to usa This considerable decrease in the possibility of urbanization not reflected in the economic benefits assigned to the plan. Corps economist requested that the matter be restudied, howeves such restudy has not come about.

Finally, in light of the problems of which the Corps was aware with respect to the possibility of significantly decreas tidal flow through the structures as planned, there is inadequevidence of the exploration and evaluation of alternative plan as required.

over the defendant Board of Levee Commissioners of the Orleans Levee District which entity is a partner with the Federal Government in the hurricane protection project at issue herein. Named Individual Members of the San Antonio Conservation Society vs.

The Texas Highway Department, 446 F.2d 1013 (5th Cir. 1971).

The Court is of the opinion that the evidence adduced in connection with the giving by the Levee Board of "local assurar regarding its capability to perform was not sufficient to the contemplated by Section 221 of Public Law 91-611 (42 U.S.C 1962d-5b). While the Court does not determine hereby whether

or not the Levee Board can subsequently comply with the aforementioned statute, further documentation of the record is not
required at this time as such issue is not necessary (in light
the reasons previously stated) to the Court's issuance of an
injunction in this case.

The Corps urges that as of December, 1977, design changes to the proposed barriers have been devised which will approxima the environmental conditions set out in the FEIS. While the Court is of the opinion that any agency has not only the right but the duty to continually revise and improve its plans, such revision subject to the FEIS in this case does not cure the def in that document.

The purpose, among other things, of an environmental impact study is to allow interested parties adequate and accurate information by which to assess the merits and demerits of a proposed plan. It must and should reflect any concerns which the planniagency has about the project as well as the advantages of it.

It is clear that the EIS in this case was based upon a deswhich had not been adequately tested and contains data which ostensibly pertains to such design which was in fact the result contains of another significantly different placement of the bar

For the foregoing reasons it is the opinion of the Court that plaintiffs herein have demonstrated that they, and in fact all persons in this area, will be irreparably harmed if the barrier project based upon the August, 1974 FEIS is allowed to continue. As the Chalmette and New Orleans East portions of such project are not separable parts of such plan, they too should be enjoined pending revision of the impact statement to conform with the statutory dictates.

Accordingly, it is ordered that defendants herein be enjoing from further construction of the barrier structures and associate structures at Chef Menteur Pass and the Rigolets, and the New C East and Chalmette portions of the Lake Pontchartrain Murricane Protection Plan until such time as they shall have complied with Department of the Army Regulation No. 1105-2-507 Paragraph 7a with regard to revision of the environmental impact statement regarding this project.

The foregoing opinion should in no way be construed as precluding the Lake Pontchartrain project as proposed or reflecting its advisability in any manner. The Court's opinion is limited strictly to the finding that the environmental impact statement of August, 1974 for this project was legally inadequate. Upon compliance with the law with regard to the impact statement this injunction will be dissolved and any hurricane plan thus proper presented will be allowed to proceed.

New Orleans, Louisiana, this 30th day of December, 1977.

UNITED STATES DISTRICT JUDGE

I Most comply in full with Title 47, use 4372 by means of a revision of Avgust 74 tils in accordains

DOA Regulation 1105-2-507 para 7a:

Elled clearly Cailed to comply with the requirements of NEPA: e.g. Cailed to discuss alternatives or Pailed to discuss the environmental impacts of the proposed action, or if there has been a major change in the plane of development or method of aperation of the proposed action, a remark or method of aperation of the proposed action, a remark environmental statement (draft and Cind) must be prepared and Ciled with CEQ. The 98 and 30 day weiting periods of CEQ quidelines Section 1500-11.

(b) (38 T. 2. 2055 Q) will apply. Revised draft and Pinal environmental statements will be an accordance with paragraph 12d."

Sec 1500.11 (D): To the maximum extent practicable no administrative action subject to section 102(2)(c) is to be Laken sooner than hinter (90) days after a draft environmental statement has been circulated for comment, surashed to the Council and, except where advance public disclosure will result in significantly increased costs of procurement to the Government, made available to the public pursuant to the Government, made available to the public pursuant to the fixed gradelines, selther should such administrative action be taken sooner than a thirty of (30) days after the sinal text of an environmental statement (Logether with

comments) has been made available to the Council, commenting agencies, and the public ... the minimum.

Thirty (30) day period and the ninety (90) day period may you concurrently to the extent that they overlap ...

Para 12d - "In order to comply with Section

1500.11 (a) CEQ Guidelines, (3878 2055) reporting officers

will furnish live copies of all draft, revised draft, and

draft supplemental environmental statements directly

to CEQ (Appendix C) and privide 10 copies to higher

outhorists, (five for appropriate staff elements in oce

and five for Division Engineers) at the time coordination

with agencies, groups and individuals on the project

1:st is initiated. Twenty copies of the final, raised

final, and final supplemental environmental statements

will be transmitted to higher authority (15 for

appropriate etaff elements in oce and five for

Division Engineers) for firther processing to CEQ.1."

i	962 - Original Plan - Model Studies
	963 - Rat on model studies
	973- Original Plan modified (barrier structures redesignal)
	and relocated)
	1974- Final EIS - Modified Plan grogosod - impects of eviginal
	plem driscussed
	976- Model studies on modified plan completed
	IS bessed on design not adequately both
4	No intendisciplinary approach
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The South of the South	nadequate consultation with other agenties (vis. 4 and ser)
4.6	Thange in land use bonelite questioned
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