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U. S. ATTORNEY
NEW ORLEANS, LA.
UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA
NEW ORLEANS DIVISION

SAVE OUR WETLANDS, INC. (SOWL), *
Plaintiff *
versus *
EARLY RUSH, et al., *
Defendants *
* * * * *

REQUEST FOR ADMISSION UNDER RULE 36

Plaintiff Save Our Wetlands, Inc., requests defendant Early Rush, District Engineer, U.S. Army Corps of Engineers, within 30 days after service of this request to make the following admissions for the purpose of this action only and subject to all pertinent objections to admissibility which may be interposed at the trial:

A. That each of the following documents, exhibited with this request, is genuine.

Avail. Pgs.
Ec. Br.
Eng. M.

1. Economic Analysis of Lake Pontchartrain and Vicinity Hurricane Protection Project, prepared 16 May 1974;
2. Sample "Stage-Frequency," "Stage-Damage," "Damage-Probability" graphs for New Orleans Reach B, contained in "Interim Survey Report" for this project, published 21 November, 1962;
3. Land Ownership Analysis for Chalmette Extension, and map of Chalmette area, prepared October, 1969;
4. Letter from Col. Richard Hunt to Greg J. Lannes, Regional Planning Commission, dated 28 January 1974;
5. Letter from Col. E.R. Heiberg to Greg J. Lannes, dated 27 July 1975;
6. Letter from Col. Early Rush to Greg J. Lannes, dated 10 November 1975, with enclosures a.) table of flooding levels, 100-year storm conditions; b.) table of flooding levels, Standard Project Hurricane conditions; c.) map of New Orleans, Jefferson and St. Bernard reaches;
7. Letter from Frederic M. Chatry, Chief, USCE Engineering

Division, to Doug Clifford, assistant to Rep. Edward Booker, dated 22 December 1975;

8. Letter from Col. E.R. Heiberg to Sen. Russel B. Long, dated 18 March 1975;
9. Maps of Maximum Surge Contours for "Standard Project Hurricane," "Moderate Hurricane," and "Observed," prepared April, 1962, and contained in "Interim Survey Report."

B. That each of the following statements is true.

1. According to the most recent Economic Analysis (document no. 1), the total cost of the Hurricane Protection Project is based on an interest rate of 3.125% annually.
2. In November, 1962, the construction cost of the project was estimated at \$64.7 million; as of ^{1971 est. w/o chubnetta} ~~May~~ ^{July} 1974, the construction cost was estimated at \$327 million.
3. The average annual benefits of the project were estimated in November, 1962, at \$52 million; as of May, 1974, these average annual benefits were estimated at \$165 million.
4. For all Economic Analyses for this project, the great majority of benefits accrue from "Flood Damage Prevented, Non-Crop"; this figure represents a computed average of annual benefits over the 100-year lifespan of the project, and as such is adjusted to account for projected future ~~inflation~~ and development within the project area.
5. "Flood Damage Prevented" benefits are determined by combining the calculations a.) level of flooding as a function of probability of occurrence ("Stage-Frequency," document no. 2a); b.) amount of damage as a function of flooding level ("Stage-Damage," document no. 2b); to produce c.) amount of damage as a function of probability of occurrence ("Damage-Probability," document no. 2c).
6. In the current Economic Analysis, projected flood levels that would occur "without project construction" refer to projected flood levels under "pre-authorization" conditions, and have not been adjusted to reflect changes resulting from construction of project works since October, 1965.
7. In the current Economic Analysis, the amount of damage

caused by flooding "without project construction" refers to total projected damage under "pre-authorization" conditions, adjusted to reflect changes in development and land values since October, 1965.

8. A sample "Damage-Probability" graph (document no. 2c) lists average annual damages "without project" as \$602,500; and average annual damages "with project" as "none."
9. According to a table of flooding levels under 100-year storm conditions, prepared by the Corps of Engineers 15 October 1975 (contained in document no. 6), construction of the barrier complexes would effect flood levels in the following New Orleans reaches, to the following extent (comparison of "without barrier-project levees, 100% pump" column with "with barrier-project levees, 100% pump" column):

Reach 1: 2.7 feet	Reach 7: 1.4 feet
Reach 5: 1.7 feet	Reach 8: 4.1 feet
Reach 6: 3.8 feet	Reach 9: 3.1 feet

10. According to the same table, construction of the barriers would have no effect on flooding levels under 100-year storm conditions on the following reaches: New Orleans Reaches 2, 3, 4, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22 and 24; and all reaches in Jefferson Parish.
11. According to the same table, completion of the Chalmette Area Plan would effect flooding levels under 100-year storm conditions in the following St. Bernard Parish reaches, to the following extent (comparison of "without barrier-^{project} levees" column with "~~without~~ barrier-project levees" column):

Reach 1: 3.6 feet
Reach 2: 2.3 feet
Reach 8: 2.3 feet

12. According to the same table, completion of the Chalmette Area Plan would have no effect on flooding levels under 100-year storm conditions on the following reaches: St. Bernard Reaches 3, 4 and 5.
13. Under the proposed Hurricane Protection Plan, project levee heights along the Lake Pontchartrain South Shore are as follows: Jefferson Parish: 10.0 feet; New Orleans

west of the Inner Harbor Navigation Canal: 12.0 feet; Citrus Lakefront: 13.5 feet; New Orleans East Lakefront: 13.5 feet; South Point-to-Gulf Intra-coastal Waterway: 12.5-14.0 feet.

14. Under the alternate "high level" plan, levee heights necessary to provide the same degree and extent of protection are as follows: Jefferson Parish: 16.0 feet; New Orleans, west of IHNC: 17.5 feet; Citrus Lakefront: 18.5 feet; New Orleans East Lakefront: 18.0 feet; South Point-to-GIWW: 15.0-17.5 feet..
15. Under the Hurricane Protection Plan, certain project works would be constructed which would not be constructed under the "high level" alternate; these works, and their respective costs, are as follows: Chef Menteur complex: \$41.9 million (as of July, 1975); Rigolets complex: \$63.9 million; Capitalized cost of operation and maintenance of ^{Rigolets} locks: \$8.8 million.
16. Under the Hurricane Protection Plan, certain project works would be constructed, portions of which would have to be improved or augmented under the "high level" alternate; these works, and their respective costs as of July, 1975, are as follows: Jefferson Parish levees: \$1.3 million; New Orleans levees, west of IHNC: \$27.7 million; Citrus levees: \$33.2 million; New Orleans East levees: \$41.5 million.
17. ^{The} A "Standard Project Hurricane," which is the design storm for the Hurricane Protection Project, is defined as a hurricane with central pressure of 27.6^{27.36} inches, sustained ^(5 min) winds of 100 mph extending 30 miles from the center, and maximum winds of ¹¹⁰ 150 mph; its return period is 200 years.
18. Still water elevations for shoreline sections of Lake Pontchartrain under a Standard Project Hurricane were calculated using "critical path" trajectories; the path critical to the South Shore has the following characteristics: storm approaches New Orleans area from the South or Southeast with a forward speed of 8 knots; south of New Orleans the storm curves eastward and slows to a

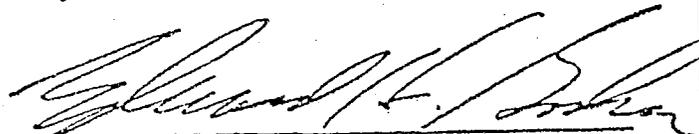
the city, and over Lake Borgne, with a speed of 8 knots.

19. Still water elevations along the South Shore of Lake Pontchartrain for a Standard Project Hurricane following a path critical to the South Shore are: without barriers: 11.5 feet; with barriers: 8.7 feet.
20. A design "Moderate Hurricane" is defined as a hurricane with central pressure of 28.3 inches, and sustained winds of 83 mph; it has a return period of approximately 25 years.
21. Still water elevations in Lake Pontchartrain corresponding to a "Moderate Hurricane" following critical paths are: Causeway at Mid-Lake: 6.0 feet; South Shore at West End: 8.2 feet; North Shore at Mandeville: 9.9 feet.
22. The highest still water elevations observed and confirmed in Lake Pontchartrain, in historical hurricanes, are: Causeway at Mid-Lake: ~~5.6~~^{5.5} feet, during Hurricane "Betsy": South Shore at West End: 7.6 feet, during Hurricane "Betsy": North Shore at Mandeville: 7.7 feet, during the Hurricane of 29 September, 1915.
23. Hurricane "Betsy" was characterized by: central pressure of ^{27.74}28.0 inches, and sustained winds of ^{106 knots}105 mph; the Hurricane of 29 September 1915 was characterized by: central pressure of 28.1 inches and sustained winds of 99 mph.
24. Since 1893, the Lake Pontchartrain area has had 13 hurricane occurrences in which major damage resulted. Of these hurricanes, five were of a strength equal to or greater than a design "Moderate Hurricane":
- 1.) 27 Sept.-5 Oct., 1893
 - 2.) 5-24 Aug., 1915
 - 3.) 22 Sept.-2 Oct., 1915
 - 4.) 27 Aug.-10 Sept., 1965 ("Betsy")
 - 5.) 14-18 Aug., 1969 ("Camille")

none of these five hurricanes resulted in still water heights in Lake Pontchartrain corresponding to those of a design "Moderate Hurricane."

25. Under natural conditions, the average maximum daily velocity through the Rigolets Pass is approximately 2.5 feet per second.

26. With the project in place, the average maximum daily velocity of water through the Rigolets Control Structure will be approximately 10 feet per second; water velocities through the structure will be less than 2.5 feet per second for approximately three hours out of every 24 hours.
27. With the project in place, there will be a net reduction of 75% in the cross-sectional area of the Rigolets and Chef Menteur Passes; there will be a net reduction of 15% in the total amount of tidal interchange through the Rigolets and Chef Menteur Passes.
28. The Corps of Engineers has determined that the New Orleans East area, east of Paris Road, would be developed even in the absence of the levee construction included in the Hurricane Protection Project.
29. As of October, 1975, the projected flooding levels ^{in H. M. S. L.} for the New Orleans East area under 100-year storm conditions are as follows: Reach 22: 5.0 feet; Reach 23: 5.0 feet; Reach 24: 5.0 feet; Reach 25: 6.5 feet.
30. In the Chalmette area, "Land Intensification" benefits will arise in the following areas from construction of the Chalmette Extension: Reach 1 (listed as "Reach 2" in the October 1969 land ownership analysis): 3,032 acres; Reach 2 (listed as "Reach E" in the October 1969 land ownership analysis): 6,310 acres; the southern segment of Reach 8 (listed as "Reach 1" in the October 1969 land ownership analysis): 8,556 acres.
31. In the Chalmette area, "Land Intensification" benefits will arise in Reach 8, above the Chalmette Extension, from construction of the Chalmette backlevee; a land ownership analysis has not been undertaken for this area, exclusive of lands in the Chalmette Extension segment.
32. A land ownership analysis has not been undertaken for the New Orleans East area, east of Paris Road.



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