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SUBJECT; LAKE PONTCHARTRAIN AND VICINITY HURRICANE PROJECT

The following is an outline of this presentation:

- I History of the Project
- II Need for the Barrier Plan
- III Undesirable Navigational Aspects
- IV Undesirable Developmental Aspects
- V Undesirable Ecological Aspects
- VI Undesirable Flood Protection Aspects
- VII Summary and Conclusions

I . . . History of the Project

In 1947, a severe hurricane occurred which did extensive damage to the Mississippi Gulf Coast. At this time one area in Orleans Parish and one in Jefferson Parish, then largely undeveloped, were flooded - namely - the area behind New Orleans Airport, now known as Lake ~~Forest~~ and an area in Jefferson Parish between the 17th St. Canal, Veterans Highway and the St. Charles Parish line. The Orleans Levee Board, under the administration of the late Billy Dillon, wanting to see these areas developed without future exposure to flooding, thought it would be a good idea to prevent same by preventing hurricane tides from entering the lake. This course of planning was pursued until 1965 by the Levee Board and the Corps of Engineers when the project was authorized. The project (BARRIER PLAN only) is now obsolete, unpopular and counter-productive. No serious attempts to develop alternate plans have been made or studied, and this is obvious, because all attempts by this writer to obtain SPECIFIC details on a "High Level Plan" have been in vain. This writer has asked for specific details regarding costs, areas to be leveed, heights of levees and their location. This information could not be furnished, so it seems obvious that such studies were never made.

Since 1947, a levee has been built along Hayne Blvd. from Paris Rd. to the Industrial Canal, a levee behind the seawall from the Industrial Canal to the 17th St. Canal and in Jefferson Parish along the lakefront to the St. Charles Parish line. Four (4) serious hurricanes have occurred since this time - namely - Hilda, Flossie, Betsy and Camille. Not only was there no flooding, there was no serious threat. On the other hand, there was extensive flooding from the M.R.G.O. and the Industrial Canal during hurricane Betsy and it will be noted that these areas are outside of the BARRIER PLAN areas.

II . . . Need for the BARRIER PLAN

A review of the history books will show that New Orleans was founded by Bienville in 1715 - 261 years ago. There has never been a hurricane flood from the lake. Every probable path a hurricane could take has been experienced since this time. In 1915, the eye passed over New Orleans, in 1965 Betsy passed just to the West and in 1969 Camille passed just to the East.

II . . . Need for the BARRIER PLAN

In 1915, rain water flooding was experienced because of a failure of the pumping system, but there was no loss of life or property due to lake water intrusion. Most of the damage was due to windstorm.

In order to justify the BARRIER PLAN, a hypothetical hurricane known as the STANDARD PROJECT HURRICANE was "designed". This hurricane would take a path slightly to the West of New Orleans and then turn on a 50 mile radius 90° and pass to the East. It would, on turning 90°, then slow down and retain its strength. A study of hurricanes plotted since 1871 in Technical Paper #55 by the U. S. Dept. of Commerce Weather Bureau, will show that no hurricane has ever turned 90° on a 50 mile radius. Furthermore, hurricanes usually speed up and diminish in intensity when passing the coast line. It would appear an earthquake is more probable than anything close to the STANDARD PROJECT HURRICANE.

During the past years, extensive progress has been made in hurricane seeding. It seems certain that with a little more effort in this direction, hurricane seeding could become a reality. If the BARRIERS were begun tomorrow, it would be approximately ten years before they were completed and hurricane seeding certainly should be perfected by that time - at worst, not much later. This would afford not only flooding protection, but protection against windstorm damage. No evidence or studies have been presented regarding what could happen if a serious hurricane occurred while the BARRIERS were in the process of construction - a period of approximately ten years. It is conceivable that not only would partially completed BARRIERS be destroyed, but could cause extensive flooding and loss of life since the control structures could not be operated.

Because over half of the Orleans - Jefferson levee system is out of the BARRIER area and these areas, as shown by history are much more vulnerable than the Lake Pontchartrain lakefront, this writer can see no reason why the lakefront cannot be adequately protected by levees and/or a breakwater.

The areas north of the lake do not need levees or BARRIER protection. There is no history of hurricane flooding here; the people do not want it, and the building codes are being updated to insure that future construction will be sufficiently high.

The fact that the BARRIER PLAN is unpopular can readily be seen because the voters have three (3) times rejected its funding at the polls. On March 5, 1974, the people of Orleans Parish voted a three mill tax (after having 3 times previously rejected a 2½ mill tax) with the assurance of the Orleans Levee Board that the BARRIERS would not be built with that money.

III . . Undesirable Navigational Aspects

The Lake Pontchartrain area is just beginning to experience an upsurge in shipbuilding, waterfront industrial development and recreational boating. It is proposed at the Rigolets to put a 110' lock between two 150' clearance bridges. It is proposed to put a 13.2' sill in an area with over 30' of water. In the future these areas could be dredged to give deep water navigation; this would forever prevent such a happening.

Maritime interests have repeatedly protested building a waterway smaller than those which presently exist. Every waterway built (Panama Canal, Suez Canal, N. Y. State Barge Canal, etc., etc.) has become restrictive over the years. It is unthinkable to build a waterway smaller than presently exists! All efforts to have the locks made a reasonable size (150' x 30' x 1200' Rigolets, 150' x 30' x 800' at Chef Menteur, 97' x 40' x 1200' at Seabrook) have fallen on deaf ears.

This writer, at a previous discussion, asked if it would be in order to get statutory guarantees that the locks would be open as stated by the Corps of Engineers and vessels would not have to stop and file lock reports. The answer was, "Certainly not". It is obvious that these statements are untrue and after the level of the lake rises (see V and VI), the locks will be in continuous operation and the flood gate at Chef Menteur will be permanently closed. This will prevent sailboats from entering or leaving the lake and make it so undesirable for pleasure boats that they will either not be purchased by residents of the area, or will be moved to other areas. A severe loss of jobs, economic benefits and stagnation will result. Incidentally, these facts were never considered in the fictitious cost-benefit study made by the Corps of Engineers.

The lock at Seabrook will present a hazard to tows having to wait for locking when heavy weather exists. There have been no costs or detailed plans presented to the public concerning a sheltered, bulkheaded forebay area of sufficient size to accommodate waiting tows - nor is there any place for tows to wait inside of the Industrial Canal for locking into the lake. The presence of locks at Seabrook would be a potential for a maritime catastrophe. If it is desired to prevent the swift current at the Southern Railroad Bridge, this can be very easily accomplished by replacing the land fills with an open trestle and maintaining a uniform cross-sectional area of the canal.

IV . . Undesirable Developmental Aspects

The principal reason for the development of the lakefront and north shore areas of the lake is the use of the lake - industrial, shipbuilding, fishing, recreational boating, swimming, etc. Raising the everyday level of the lake, the imposition of locks with their delays and restrictive potential would certainly have a severe adverse effect on future development of marinas, waterfront real estate, fishing, etc.

V . . Undesirable Ecological Aspects

It is believed that an exchange of marine life through the control structures would be impeded. It will be noted that future dredging permits will not permit future borrow-pit canals from being dug deeper than the lake. But at the Rigolets, which is over 100' deep at its entrance to Lake Pontchartrain, there will be a control structure with a 30' sill on one side and a 12' depth on the other side.

The beneficial effect of salt water from the M.R.G.O. to the lake will be choked by a 30' x 50' control structure at Seabrook which even now, with its present restriction, is approximately 5400 sq. ft.

The lake at present is considerably higher than Gulf Mean Sea Level, the Corps of Engineers gauges show approximately a 2' average; statements by Corps officials put it at a lesser figure, but it is agreed that the lake is considerably higher than the Gulf. This results from the natural cross-sectional restriction at the passes, holding in the lake: 1) Rain run-off, 2) Pumping drainage from Orleans and Jefferson parishes, 3) run-off from artesian wells and 4) Underground springs and fissures in the lake bottom and tributaries. It is proposed to reduce the cross-sectional area of the passes by approximately 75%. This will certainly raise the level of the lake considerable, causing the following adverse effects: 1) Existing docks and bulkheads will be too low, 2) Roads in St. Tammany Parish, which flood even now, will be worse off and who will pay to raise all these roads? 3) In the event of a hurricane, the gates will be closed on a much higher lake than presently exists, 4) The lake will become fresh and this will inhibit or destroy existing marine life, 5) The Duckweed, which choked up the yacht harbor and other areas when the Bonnet Carre' Spillway was opened in 1973, would present an expensive and constant problem in the lake and its tributaries.

VI . . Flood Protection Aspects

The BARRIER PLAN is counter-productive. (It was obsolete when it was first conceived.) The levees along the Orleans-Jefferson Parish lakefront had not been built nor the M.R.G.O. been dug. Any excuse for the BARRIER PLAN has been dispelled because of the foregoing. Additionally, the Bonnet Carre' Spillway could not be used. The jeopardy to New Orleans from the Mississippi River is much greater than from the lake. When the Spillway was opened in 1973 (which would almost certainly occur during the spring when heavy rains fall and strong SE winds are present) it introduced an additional 18" of water - the highest ever experienced where I live - even higher than during Betsy and Camille. With 75% of the Rigolets eliminated, a recurrence of 1973 would either flood out St. Tammany Parish or the Spillway could not be opened and much more serious flooding would occur in New Orleans from the river.

In the M.R.G.O. and Industrial Canals, the additional restriction at Seabrook in the event of a recurrence of a Betsy-type hurricane would raise the water to dangerous levels. Even if the flood walls were not overtopped, moored ships, barges, tugs, fuel tankers, etc. would surely be blown into the flood walls and flood the city. The solution to this problem is to keep the water level low in the Industrial Canal by allowing it to escape into the lake which can easily accept it. The same SE winds which blow the water up the canal will be blowing it away from the South shore of the lake. Therefore, by removing the restriction that the Southern Railroad bridge presents and not imposing any additional restrictions, this problem can be solved.

VIII . . . Summary and Conclusion

This writer cannot accept statements that a High Level Plan is more costly. Such statements have never been supported by figures. It is inconceivable that raising approximately 30 miles of lakefront and outfall canal levees approximately 2' to 3' (if this is necessary) can cost the \$350,000,000.00 that the barriers will cost. Certainly approximately 160,000 lineal ft. of sheet piling can be driven for somewhere in the neighborhood of \$300.00 per ft. or approximately \$50,000,000.00. Again, if it is contemplated to levee the North shore areas of the lake, this is unnecessary and the people have emphatically rejected any such proposals. It is believed that raising a levee 2' to 3' with sheet piling and terracing with nonstructural earth would be less offensive. The lakefront levee already blocks the view residents have of the lake, so another 2' to 3' can't hurt anything. The other levees would be in undeveloped areas. It is doubtful if these levees will have to be raised, however, since the highest flood tide ever recorded in the lake is 7.6' and the existing levees are approximately +12.5'.

This writer wants to make clear that he does not oppose the Lake Pontchartrain and Vicinity Hurricane Project or meaningful flood protection. But, the BARRIER PLAN is so bad, from every standpoint, except creating a few temporary jobs, that it should be eliminated from the Project.

It is requested that funding for this project be stopped until: 1) An impartial investigation be made of the BARRIER PLAN, 2) A public hearing be held and a study made on: a) Navigational requirements for the future, b) Ecological considerations, c) Industrial and waterfront residential prospects for the area all of which would be restricted and retarded by the BARRIER PLAN.