

LMNED-PP

Lake Pontchartrain, La. & Vicinity, Hurricane
Protection Project - Revised PMH Parameters

Revised PMH Parameters - Continuation of CMT 2

Ch, Hyd. Br.

Ch, Engrg. Div.

3 Sept 69

Mr. Broussard/kn/430

1. Based on the recent occurrence of Hurricane "Camille" numerous inquiries by local interests indicate the need for the following information:

a. Probable maximum hurricane (PMH) surges for the subject project based on the recently revised PMH parameters.

b. A relationship between the PMH and Hurricane "Camille," parameters, i.e., which of the two hurricanes is more intense?

2. It is requested that the above information be furnished by 3 Nov 69.

3. In addition, it is requested that in the future the Chief of the Planning and Reports Branch and I be advised of any information regarding revisions to the SPH or PMH parameters.

JEROME C. BAEHR
Chief, Engineering Division

LMNED-HT

TO: Chief, Engineering Div. FROM: Chief, Hydraulics Br. 29 Sep 69 CMT 2
Mr. Soileau/esk/369

1. Preliminary Probable Maximum Hurricane (PMH) surges have been determined for the subject project. These surges are based upon the May 7, 1968 revisions to the PMH parameters. We do not expect to receive complete data on hurricane Camille from the Hydrometeorological Branch until about February 1970; therefore, we cannot give final answers until after we receive the ESSA report. Specific surge heights at pertinent locations along the project alignment are given in the inclosed table.

2. We cannot say positively which hurricane is more intense until we receive the isovel patterns from ESSA. Preliminarily however, Camille had a central pressure of 26.85 inches as it traversed 30° latitude and wind speeds in excess of 150 m.p.h. The PMH has a central pressure index of 26.9 inches of mercury and a windspeed of 143 m.p.h. at 30° latitude. Their forward speeds are comparable: 10 to 12 m.p.h. for Camille and 11 knots (12.65 m.p.h.) for the PMH. If the wind speed estimates

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PMH SURGE HEIGHTS*

for Camille are accurate then we can say that Camille is obviously more intense than a PMH of equal size, central pressure and forward speed.

LOCATION	TRACK	FORWARD SPEED KNOTS	HOURS TO SURGE**	SURGE HEIGHT Ft. n.s.l.
W. of Charles Parish	C	5	+2	17.0
1 Incl Jefferson Parish	C	5	+1	15.0
as Orleans Parish Lakeshore	A	4-6	+8	14.0
IHC & along MR-60 to Bayou Dupre	F	11	1-4	19.0
Bayou Dupre to Cecuravon	C	5	2-4	19.0-21.5
Long Point	F	11	+4	20.0

P. A. BECNEL, JR.
Chief, Hydraulics Branch

*Heights are preliminary
**Referenced to landfall

W. of Charles Parish, TRACK C, SURGE = 17.0

Jefferson Parish, TRACK C, SURGE = 15.0

Orleans Parish, TRACK A, SURGE = 14.0

IHC & along MR-60, TRACK F, SURGE = 19.0

Bayou Dupre to Cecuravon, TRACK C, SURGE = 19.0-21.5

Long Point, TRACK F, SURGE = 20.0

TABLE

PMH SURGE HEIGHTS*

LOCATION	TRACK	FORWARD SPEED KNOTS	TIME TO MAX. SURGE** HOURS	SURGE HEIGHT Ft. m.s.l.
W.St. Charles Parish	C	5	+2	17.0
W. Jefferson Parish	C	5	+1	15.0
Orleans Parish Lakeshore	A	4-6	+8	14.0
IHNC & along MR-GO to Bayou Dupre	F	11	1-4	19.0
Bayou Dupre to Caernarvon	C	5	2-4	19.0-21.5
Long Point	F	11	+4	20.0

*Heights are preliminary

**Referenced to landfall

PMH COMPUTATIONS

LAKE PONT

PROJ. IN PLACE

LOCATION	ST. CHARLES TRACK C + 2 HRS 5 KNOTS	SURGE = 16.94
	JEFF PARISH TRACK C + 1 HR 5 KNOTS	= 14.94
	TRACK A + 8 HRS TRAN & ROT 38° CC SEGB	= 13.88
	NEAR N.O. AIRPORT	

NO. PROJ.

TRACK A + 8 HRS TRAN & ROT. 38° CC SEGB	SURGE = 16.38
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GULF

YSCLOSKE RANGE + 4 HRS TRACK C	SURGE = 25.388
TOCA, BELAIR RANGE + 2 HRS TRACK C	= 25.557
VIOLET & VICINITY, MRBO. 11 knots TRACK F	= 19.129
LONG POINT + 4 HRS TRACK F RANGE LB(1)	= 20.056