

**Feb 4, 2020** at 7:39 AM

Re: [Non-DoD Source] Discrepancies Found in the Evaluation of Storm Surge in Areas Outside the HSDRRS (UNCLASSIFIED)  
Thomas Thompson <thomasthompson@yahoo.com>  
To: Agnew, Maxwell E CIV USARMY CEMVN (USA)  
Cc: Boyett, Ricky D Jr CIV USARMY CEMVN (USA), Wingate, Mark R CIV USARMY CEMVN (USA), Ramirez, David A Jr CIV (USA), Clancy@usace.army.mil, Ken.holder@usace.army.mil

**Attachments:**

1. January 28, 2020, APPENDIX D, revised model data
2. March 11, 2019, Evaluation and Findings of the original August 2, 2018, Corps' HSDRRS Evaluation
3. August 2, 2018, Corps' Evaluation of Storm Surge in Areas Outside the Greater New Orleans HSDRRS, obtained by a Freedom of Information Request

Mr. Max Agnew, PE

Thank you for providing APPENDIX D to the original August 2, 2018, Corps' evaluation of storm surge outside the Hurricane and Storm Damage Risk Reduction System (HSDRRS).

The purpose of APPENDIX D was to address issues raised in the March 11, 2019, findings and correct the original SL15-1965 grid that modeled a 14' high levee along the Lake Pontchartrain shoreline that did not exist in 1965 Corps' documents.

The revised, APPENDIX D, SL15-1965 grid model replaced the non-existent 14' high levee, with a 9' high railroad embankment.

It is disingenuous for the Corps to use this railway embankment as a levee, when the same Corps' document, referenced in APPENDIX D, states the embankment lacks structural integrity and would fail during a hurricane.

**This is how the 1962 U. S. Army Engineer District's Report, referenced in APPENDIX D, describes the railroad embankment:**

Page 11 of 1962 report -

*"Citrus and New Orleans East. The New Orleans Airport is fronted by a vertical seawall with an average elevation of 11.5 feet and a length of 2.3 miles. The embankment of the Southern Railway extends along the remainder of the south shore to the east for approximately 11.5 miles with an average elevation of about 9.3 feet. The*

**embankment is a heterogeneous fill composed largely of Cinders, and has been severely damaged on many occasions in the past by relatively minor hurricane tides and waves. This type of embankment will not provide dependable protection against major hurricane tides and waves.**”

Page 42 of 1962 report -

“(h) Citrus. A levee 4.5 miles in length will be constructed lakeward of the existing railroad embankment with a crest elevation of 11 feet and a crown width of 20 feet, as shown on plate 10. Riprap slope protection will be provided on the lakeside slope below elevation 6.5 feet. **Incorporation of the railroad embankment in the protective levee was impracticable because of the heterogeneous nature of the fill** and because of adverse effects on the railroad facilities”

Page 50 of 1962 report -

“Analysis of the Citrus and New Orleans East lakefront protection, which consists of the embankment of the Southern Railway, indicated that **the embankment would fail under severe hurricane conditions and would be overtopped by the less severe storms**”

Page A-26 of 1962 report –

“Citrus and New Orleans East. These areas are protected from the lake by a railroad embankment. **Due to previous damage to the embankment during relatively minor storms, it is assumed that 50 percent of the embankment will fail and erode to an elevation of 5.5 feet by the time the WTL reaches 5.5 feet.** During the early hours of a storm before the WTL reaches 5.5 feet, percentages less than 50 and elevations greater than 5.5 feet but less than existing heights were used depending upon the WTL elevations. Hourly overtopping rates were calculated as described in paragraph A-3g.(b) for existing embankment heights and 5.5 feet. Rates for intermediate heights were interpolated.”

Based upon the Corps’ own evaluation, the railroad embankment does not qualify as a levee and cannot be used in the SL15-1965 grid model. Therefore, the SL15-1965 model must be re-run without the railroad embankment, unless other documentation exists proving the 1965 railroad embankment met Corps of Engineers levee standards.

Your continued interest in ensuring the SL15-1965 grid model reflects the correct 1965 topography is appreciated. I await your response to the use of this embankment as a levee.

Thomas Thompson

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