Lower Brazos Flood Protection Planning Study
Draft Report Comments

#	Comment Made By	Date Received	Comment	Response to Comment
1	Steve Rosa, Brazoria County Office of Emergency Management	10/9/18	on page 23, Figure 13, the orientation of the map / Inundation area if off 90 degrees. City of Angleton should be on the right side of this map, and Highway 288 and 36 should be running top to bottom not left and right.	Figure Fixed
2	George Kidwell	10/9/18	Go to Fig 13, pg 23. I believe the map orientation is incorrect. Fig needs to be rotated 90 deg clockwise and N star rotated 90 counter-clockwise,	Figure Fixed
3	George Kidwell	10/9/18	Also noted you did not indicate that the water got over Old Angleton road into Richwood. It maybe the limit of your modeling.	The limit of our mapping was at 288 (Nolan Ryan Expy) therefore analysis was not done at Old Angelton Road.
4	Pamela Hannemann	10/17/18	Pg 6 of the report. Last paragraph on page, 4th line in paragraph, year of Ft. Bend County study says 2099 should be 2009.	Changed to 2009
5	Pamela Hannemann	11/16/18	In the title that on the draft report says Lower Brazos River……. We have been using Lower Brazos Flood Protection Planning Study in earlier documents and presentations. I can't say if at some point River was added but it hasn't been a popular title when looking back at documents.	Change name to remove River on the report and in all appendices
6	Athelstan Sanchez	11/30/18	Page ix - It would be helpful to add the acronym "LJA", which is used as a shortened version of LJA Engineering & Surveying, Inc. in one of the Figures	Added LJA to the acronym list
7	Athelstan Sanchez	11/30/18	Page 6 - There is no legend on Fig 3 to indicate what the colors mean	Legend Added and figure replaced
8	Athelstan Sanchez	11/30/18	Page 14 - The word "confidence" is mis-spelled in the first line of 2nd paragraph of section 6.0	confidence was fixed

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9	Athelstan Sanchez	11/30/18	Appendix E - I tried to use the cross-section numbers to look up the data for Lake Jackson, but the numbers on the lines through Lake Jackson don't seem to appear in the tables at the end. Also the numbers weren't 6 digits through Lake Jackson, so maybe I'm looking at it incorrectly	Updated in the final report
10	Aaron Abel	11/30/18	Page iii Personal should be personnel	change made
11	Aaron Abel	11/30/18	Page 6- Change 2099 to 2009	Changed to 2009
12	Aaron Abel	11/30/18	Page 16 - Gauge is misspelled on line 2	Gauge was spelled correctly
13	Aaron Abel	11/30/18	Page 23 - North arrow is wrong on Figure 13	Figure Fixed
14	Aaron Abel	11/30/18	Page 38 - Fix by channel to say bypass channel	Changed to bypass channel
15	Kalli Clark-Egan (USACE)	12/20/18	On page 24 of the draft report, 1,061 structures were mentioned for potential buyout. Can you easily tell me how many of those structures were in Fort Bend County versus other counties within the watershed?	41 structures are within Fort Bend County
16	Kalli Clark-Egan (USACE)	12/20/18	USACE doesn't look at levees with respect to freeboard. They want the information laid out in height of levees and a risk-based analysis. In your evaluation of freeboard, do you have the levee height information consolidated in a file? I've reached out to the district levee group, but there is only a handful of Federal levees within the county, so my fear is that they won't have all of the needed information readily available.	Regarding the levees, we obtained top of levee elevations from the 2014 LIDAR. We do have a spreadsheet that has the levee elevations at the model cross sections. Below is an exhibit that was generated from the spreadsheet. Would this spreadsheet be helpful?
17	David Ennis (FEMA)	12/28/18	I'm interested in flood depths at the HWY 99 Grand Parkway Bridge for the 10%, 2%, 1%, and 0.2% according to the Brazos River authority / Halff Model, and what assumptions go into it. Can I get a copy of this study? Get the flood depths at that location?	Information is contained within the report. Pam sent email with links to the report.
18	Michael Vielleux (TWDB)	1/14/19	Editorial comment - Page 6 last paragraph, 2099 should be 2009	Changed to 2009

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19	Michael Vielleux (TWDB)	1/14/19	For Tables 2 through 5 it would be beneficial to add an additional column that included the WSEL derived from the USGS Gauge rating curve for the 10%, 2%, and 1% ACEs. For example in Table 2: Hempstead, the WSEL from the current USGS gauge rating curve is 159.72 feet (NAVD88) for a flow of approximately 98,000 cfs (10% ACE) and 163.24 feet for the 1% ACE	Added the USGS Gage Rating Curve water surface elevation to Tables 2-5 in the main report and to appendix E
20	Michael Vielleux (TWDB)	1/14/19	For table D-23 on page D-23 please provide the R2 for the Volume vs. Flow Equations. It would also be beneficial if the same statistic was shown on Figures D-4 and D-5.	R2 added to Table D-23, Figure D4 and D5
21	Michael Vielleux (TWDB)	1/14/19	Section E.3.3 Downstream Boundary Conditions: Please discuss why the tide range was not modeled at the downstream boundary rather than normal flow.	Tidal influence was not used as a boundary condition as the Rosharon gauge did not reflect tidal impacts for the calibration events. Tidal influence may need to be considered for any remapping effort of the effective floodplain in Brazoria County
22	Michael Vielleux (TWDB)	1/14/19	Section E.4.0 Model Calibration and Comparison: Typically Manning's N values decrease with increased flow, however in the discussion on calibration and in Tables E-4, E-5, E-6, E-8 the roughness factors increase with increased flow. This would typically indicate that there is a problem with the boundary conditions. As described in the text, there were issues calibrating the model due to gain/loss of vegetation, scour and sediment deposition. It would also be interesting to see how the model would have reacted to the tide range at the downstream boundary.	Tidal influence was not used as a boundary condition as the Rosharon gauge did not reflect tidal impacts for the calibration events. Tidal influence may need to be considered for any remapping effort of the effective floodplain in Brazoria County
23	Michael Vielleux (TWDB)	1/14/19	Please provide Manning's N values used in the final calibrated model.	Ranges of manning's "n" values have been included in Appendix D