



Lower Brazos River Flood Protection Planning Study

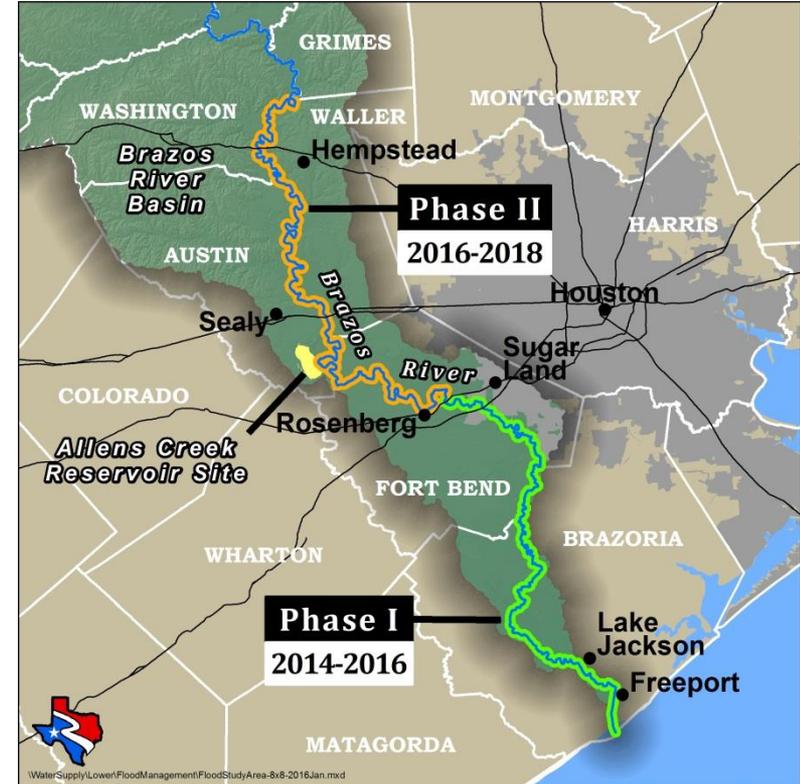
***Presented by
Brad Brunett
Water Services Manager***

Meeting Date: October 30, 2017



Study Background

- **Why?**
 - High growth area with outdated and inconsistent Brazos River floodplain information
- **Who?**
 - Texas Water Development Board, lower basin entities, BRA, & Halff Associates, Inc.
- **What?**
 - New models
 - New estimates of how much water, how fast, and how high
 - New maps
 - Alternatives to reduce/mitigate future damages





Proposed Scope Items to Incorporate Hurricane Harvey

- **Data Collection (Photos, high water marks, gage data, etc.)**
- **Extend the period of record analysis (update statistics used to estimate flood level return frequency)**
- **Process Harvey rainfall data and calibrate the hydrologic and hydraulic models to this event**
- **Refine hydraulic model to address overflow issues in several areas (Oyster Creek, Ditch H, Bessie's Creek, and Jones' Creek)**
- **Update flood level frequency models based on revised calibrations with Harvey**
- **Update economics (damages) with inclusion of Harvey**
- **Document in the final report**



Study Funding

Study Phase	TWDB Grants	¹ Local Contributions	BRA Cash	Total
Original Phases I & II	\$790,017.50	\$643,316.50	\$151,166.00	\$1,584,500.00
Proposed to Add Hurricane Harvey		<u>\$40,000.00</u>	<u>\$70,000.00</u>	<u>\$110,000.00</u>
	\$790,017.50	\$683,316.50	\$221,166.00	\$1,694,500.00

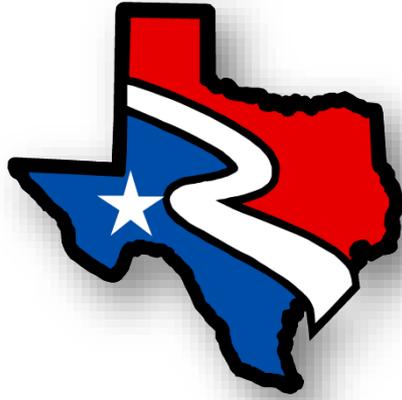
¹ Local area financial participants include Brazoria County, Waller County, Velasco Drainage District, Pecan Grove MUD, Lake Jackson, Sandy Point, Washington County, and Sugar Land



“BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to contribute up to \$70,000 to expand the scope of work of the Lower Brazos River Flood Protection Planning Study to incorporate data and information from Hurricane Harvey into the ongoing study effort; and



BE IT FURTHER RESOLVED that the General Manager/CEO is authorized to negotiate and execute any required amendments to contracts or inter-local agreements with the Texas Water Development Board, Halff Associates, Inc., or local area financial participants that are necessary to facilitate the expanded scope of work.”



Brazos River Authority