



HMGP DR-4332-TX-0095

# NORTH CANAL

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BRIEFING TO TTI COMMITTEE

Laura Patiño, Mayor's Office of Recovery


Aug. 6<sup>th</sup> 2020

# FEMA Hazard Mitigation Grant Program

Supports recovery efforts by providing assistance to enact mitigation measures to reduce the loss of life and property

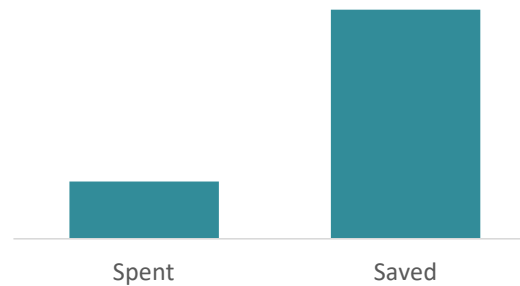
**STATE**  
 **\$1 B\***  
available for Texas

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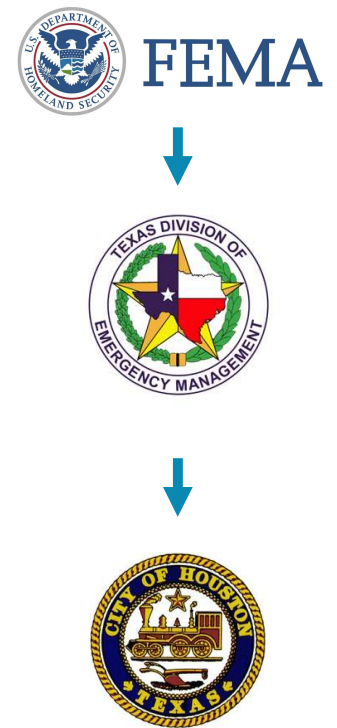
**LOCAL**  
 **\$280 M\***  
Available for Houston

**MATCH**  
**25%** This program requires local governments to match 25% of the total funding.

## MITIGATION SAVES!



Every \$1 spent on mitigation saves \$4 on future disaster losses.

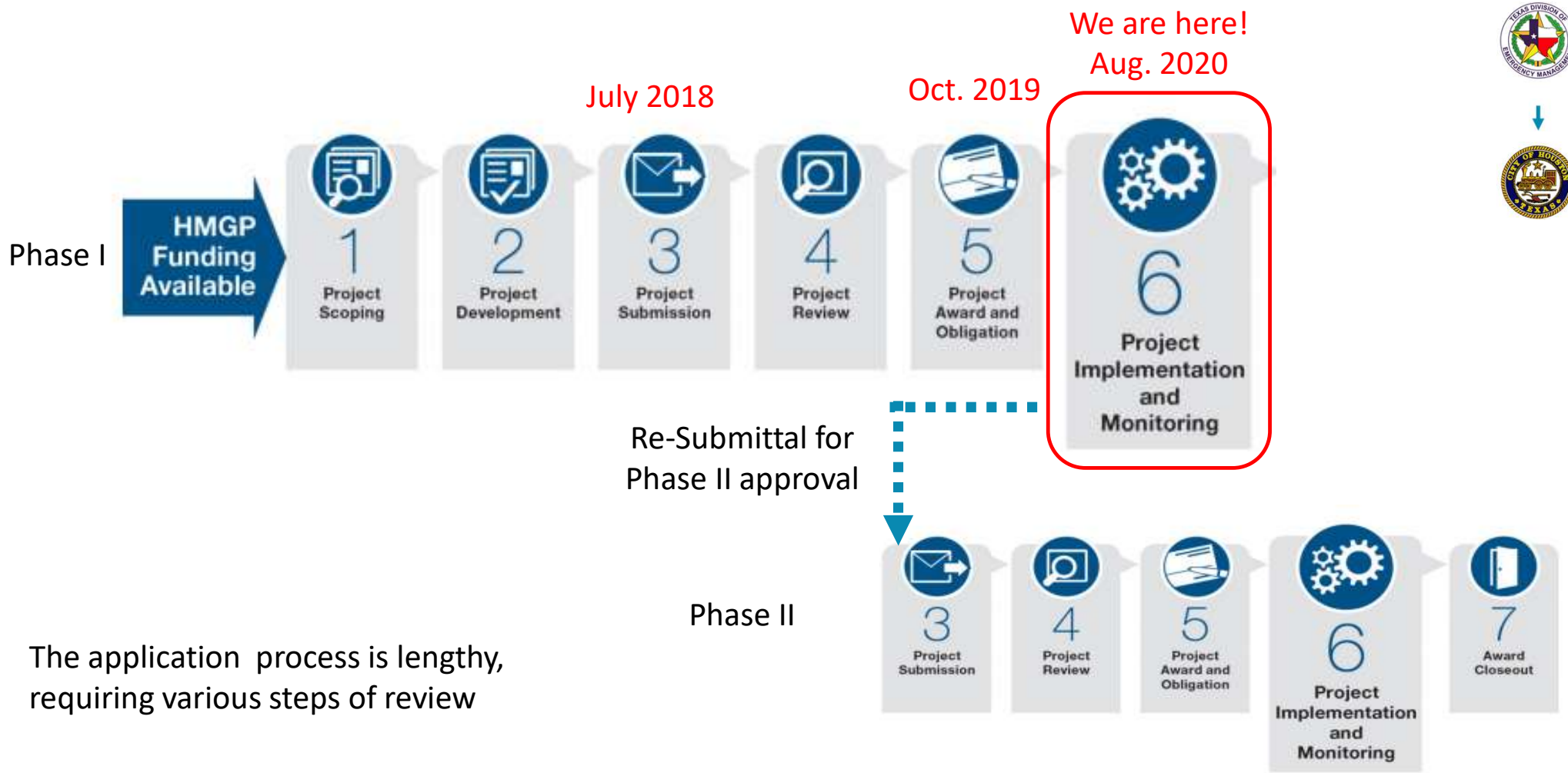


# Submitted HMGP Projects

PROJECT	DISTRICT	WATERSHED	COST ESTIMATE	FEMA COST	LOCAL COST	STATUS
Inwood Golf Course	A, C, B	White Oak	\$47M	\$35M	\$12M	Phase I approved, in design
North Canal	C, H, I	Buffalo, White Oak	\$131M	\$46M	\$85M*	Phase I approved, under procurement
TIRZ 17	G	Buffalo	\$56M	\$26M	\$30M*	Pending approval
Lake Houston Dam	E	San Jacinto	\$47M	\$35M	\$12M	Phase I approved, in design
Total			\$281	\$142	\$139	

\*Local match increased to increase likelihood of award

# HMGP Process



# DR-4332-TX-095 North Canal

## NORTH CANAL

### HAZARD MITIGATION GRANT PROGRAM PROJECT

### BUFFALO AND WHITE OAK BAYOUS

The North Canal project will reduce the risk of flooding to downtown and provide flood damage reduction to upstream areas along White Oak and Buffalo Bayous. The project consists of three components: a high flow diversion channel, an overflow channel, and bridge and channel improvements. The North Canal is at the confluence of White Oak and Buffalo Bayous with the South overflow channel downstream. The bridge and channel improvements provide conveyance capacity to areas along White Oak Bayou, including I-10 west of Downtown Houston.

	Total Cost	Federal Share	Local Share
<b>North Canal</b>	\$131,249,359	\$46,249,359	\$85,000,000
<b>Phase 1:</b> Design, permitting, and environmental	\$7,536,108	\$2,655,557	\$4,880,551
<b>Phase 2:</b> Construction and property acquisition	\$123,713,251	\$43,593,802	\$80,119,449

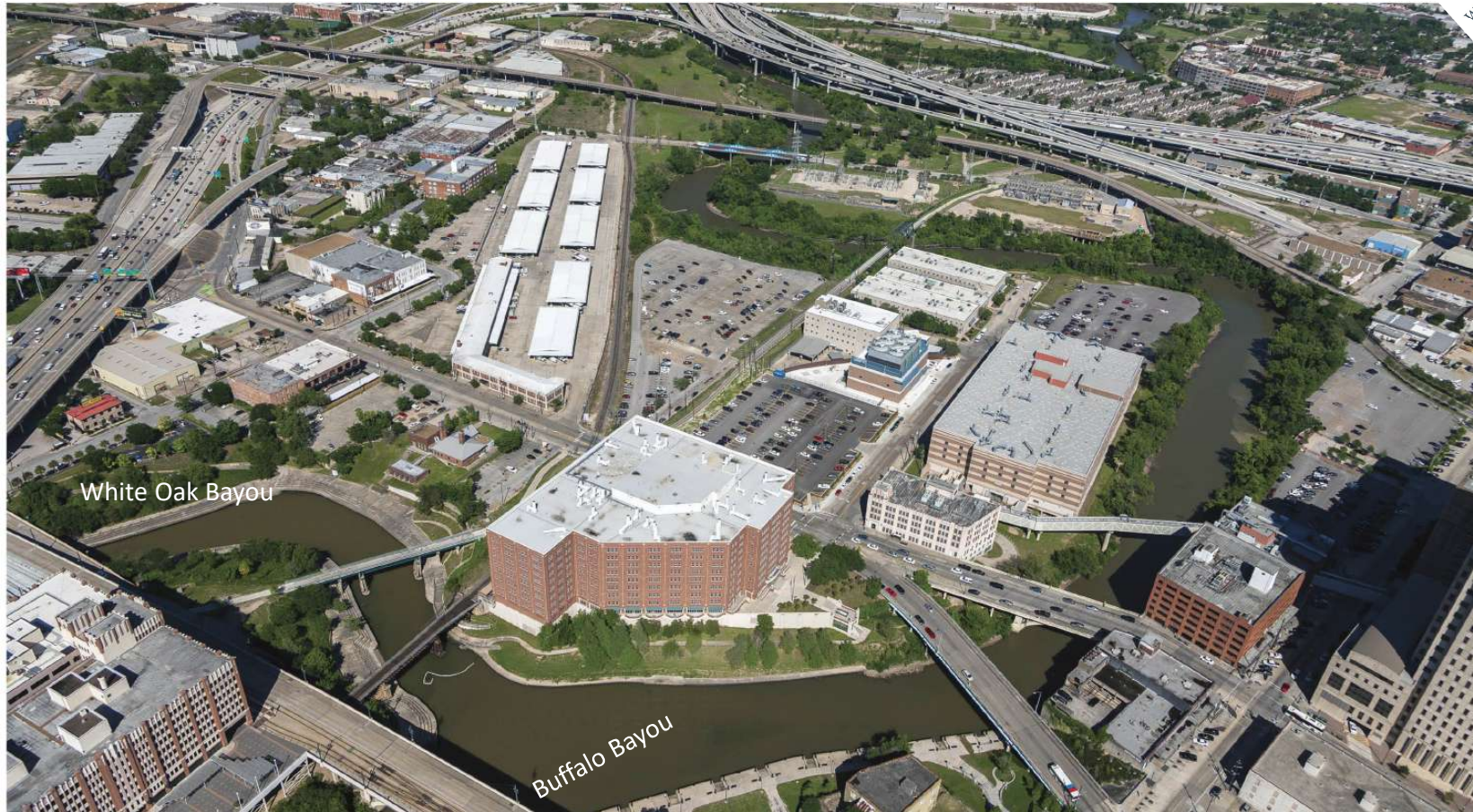
Project Partners / Steering Committee: HARRIS COUNTY FLOOD CONTROL DISTRICT  
MEMORIAL HEIGHTS REDEVELOPMENT AUTHORITY  
TEXAS DEPARTMENT OF TRANSPORTATION

# Vicinity Map



	<p>TBPE FIRM NO. F-3924 www.tetra-tech.com 700 N. SAINT MARY'S STREET, STE. 300 SAN ANTONIO, TEXAS 78265 PH 210.293.7500</p>		<p>CITY OF HOUSTON 901 Bagby Street Houston, TX 77002</p>	<p>CITY OF HOUSTON - HOUSTON RECOVERY PROGRAM T04 <b>HURRICANE HARVEY DAMAGE ASSESSMENT - RESILIENCE PROJECT</b> <b>NORTH CANAL - SITE LOCATION MAP</b> NAD 1983 STATE PLANE TEXAS SOUTH CENTRAL FIPS 4204 FT</p>	<p>EXHIBIT <b>1</b></p>
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# Current Downtown Development



North Canal  
Proposed  
Alignment

# Potential Downtown Components

South Canal  
Alignment





# Yale & Heights Components

Yale & Heights  
Bridges

Channel  
Improvements



# Design Project Components

## Bridge and Channel Improvements

- Low profile decking on Yale Street and Heights Boulevard bridges
- Demolition of abandoned railway bridge
- White Oak Channel improvements at Heights and at I-10

## North Canal Diversion

- Channel diversion
- Relocation of METRO transit facility
- Property acquisition
- Railroad considerations
- Flowage easement for downstream areas
- Buffalo Bayou Partnership package coordination

## South Canal In-Line Detention

- In line detention area
- Connection to overflow detention basin, performed by TXDOT as part of NHHIP

Environmental/Regulatory Permitting Activities  
Hydraulics & Hydrology Analysis

# Next Steps

- ❑ Finalize procurement process
- ❑ Initiate Phase I – Design and Permitting
  - Critical path: ROW acquisition, flowage easement determination, environmental/regulatory permitting
- ❑ Work with state and federal agencies to expedite design and permitting phase
- ❑ Re-submit Phase II application for construction approval
- ❑ Align with additional partners on parallel path ensure overall amenity vision is achieved for the area

# Questions?



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