

RECOVERY, REPAIR, AND RESILIENCY HARVEY SUPPLEMENTAL PROGRAM – STATUS AND WAY AHEAD GALVESTON DISTRICT STAKEHOLDER FORUM

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14 August 2019



US Army Corps
of Engineers®



MISSION / PEOPLE / TEAMWORK



OUTLINE

- USACE 101
- Recap 2017 Hurricane Events
- Bipartisan Budget Act of 2018 Highlights
- USACE Response-Actions
- Southwestern Division Harvey Supplemental Program
- Galveston District Harvey Supplemental Portfolio



Galveston District Stakeholder Forum – USACE 101



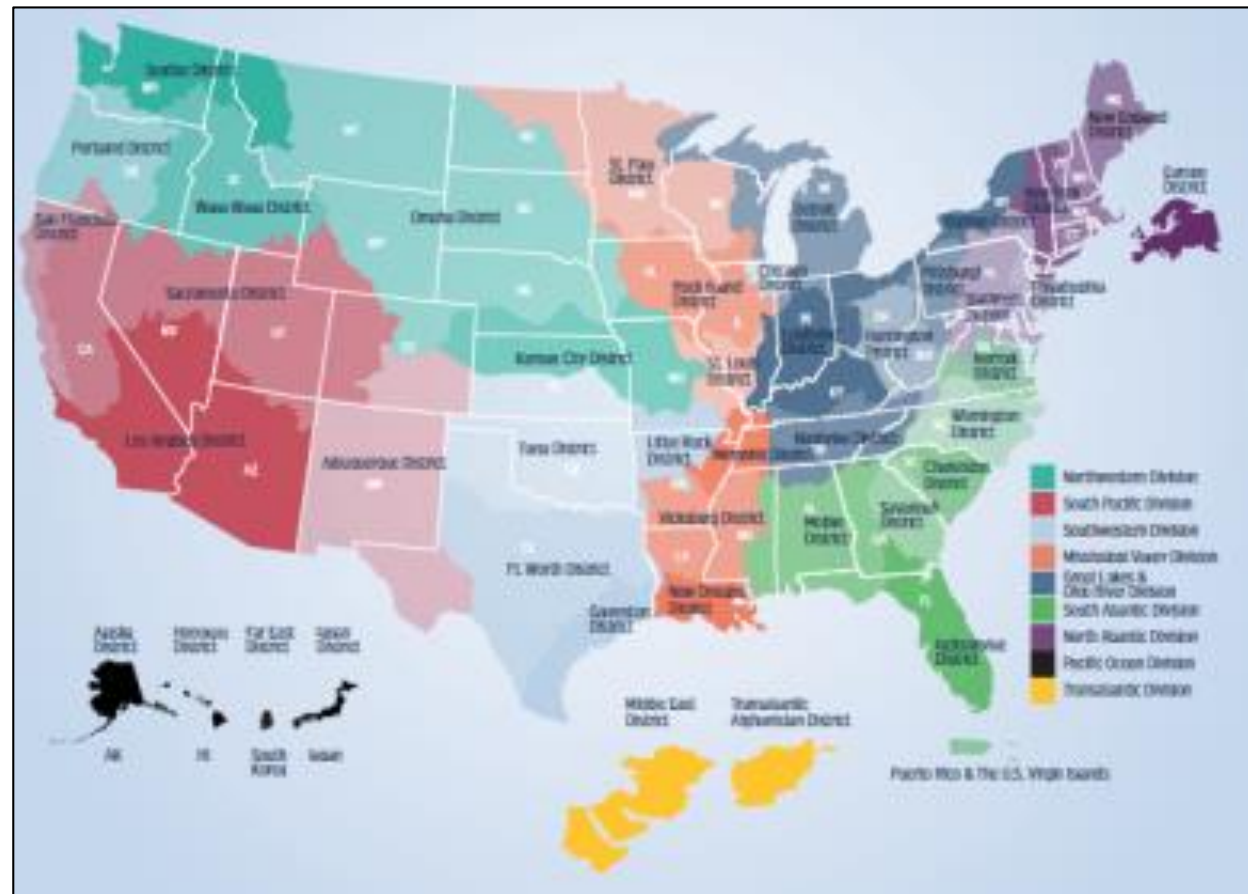
USACE: *BUILDING STRONG OVER 242 YEARS*

USACE Vision

Engineering solutions for the Nation's toughest challenges.

USACE Mission

Deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce risk from disaster.



1 Headquarters

9 Divisions

43 Districts

Southwestern Division – Civil Works Boundaries

SWD is a HIGH PERFORMING ORGANIZATION that reliably delivers QUALITY engineering products and services.



1 Division Headquarters

4 Districts



SOUTHWESTERN DIVISION CIVIL WORKS MISSION AREAS



**Flood Risk
Management**



**Inland
Navigation**



Hydropower



Water Supply



**Navigation
(Ports and
Channels)**



Recreation



**Environmental
Stewardship**





RECAP 2017 HURRICANE EVENTS

- 2017 Landfalls
- Harvey, Irma, Maria Overview
- National Impact



Galveston District Stakeholder Forum – 2017 Severe Weather Recap



The Weather Channel

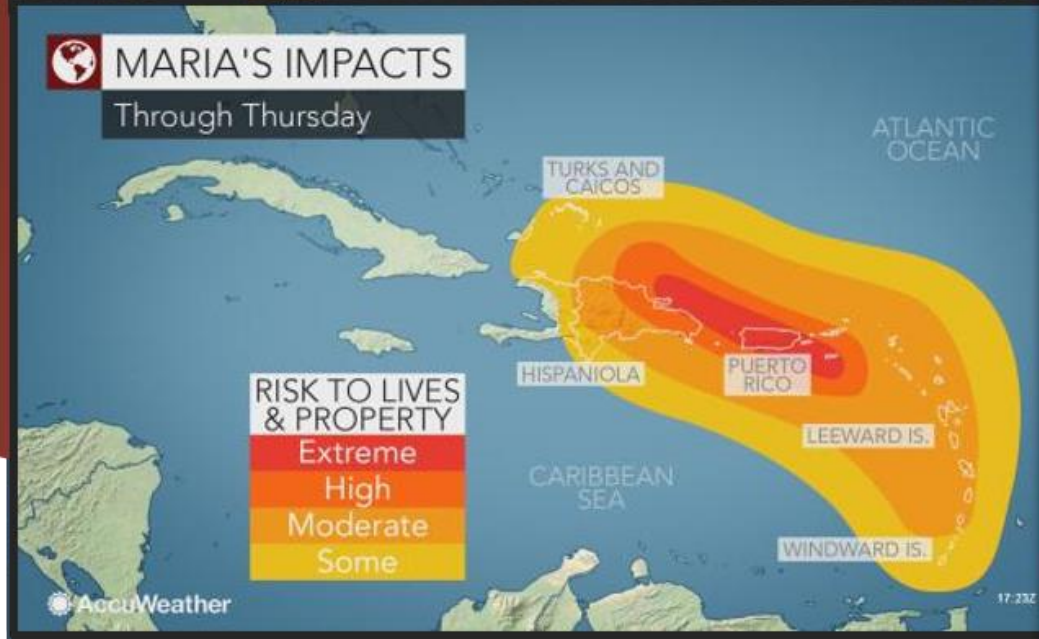


2017 HURRICANES OVERVIEW

HARVEY

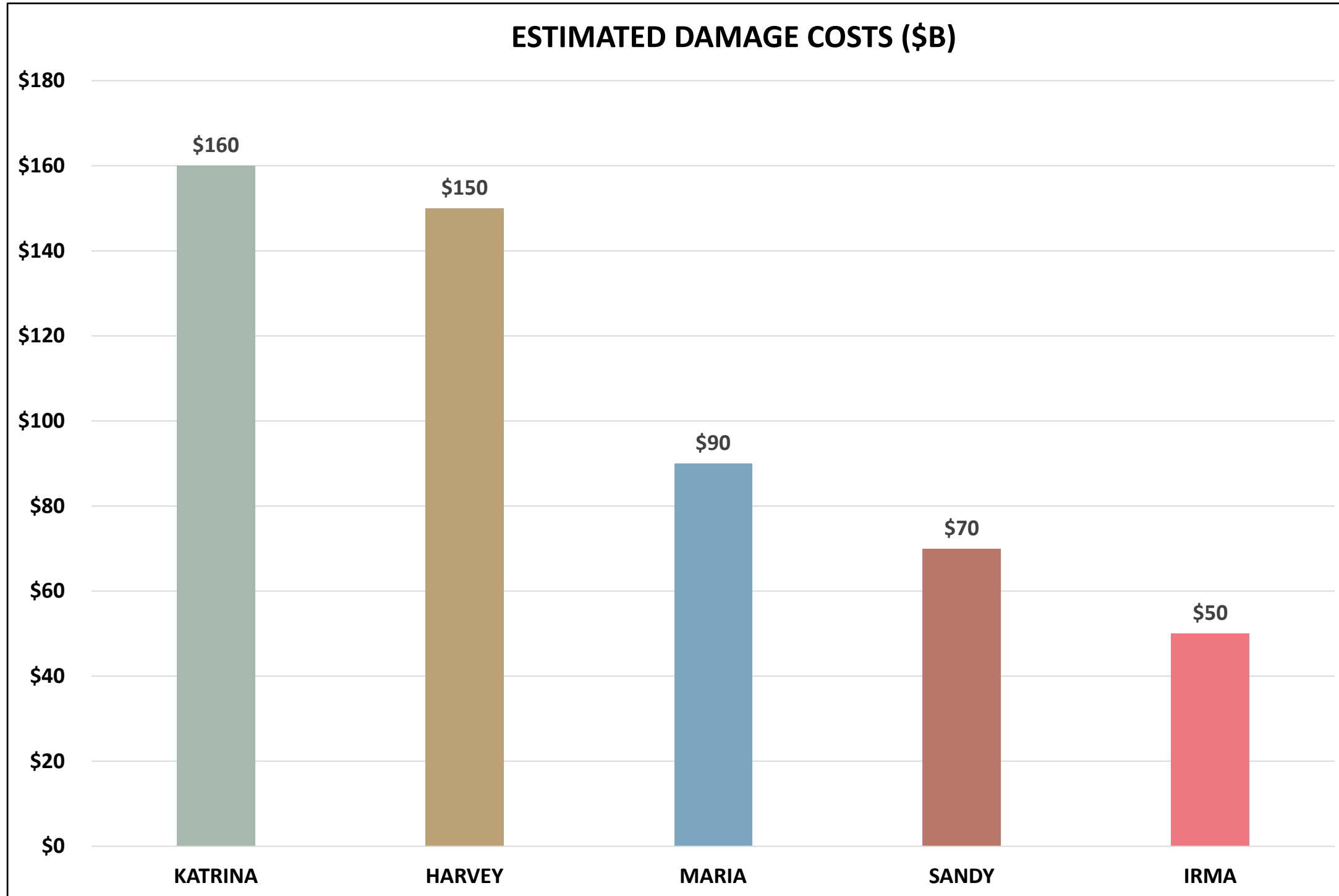
IRMA

MARIA



- SEPT 20
- CAT 4 STORM
- 2,975 DEATHS
- \$94B IN DAMAGE
- IMPACTED 3.4M PEOPLE/ ENTIRE POPULATION OF PUERTO RICO
- LOSS OF ALL ELECTRICITY ON PR
- \$780M LOSS IN AGRICULTURE YIELDS





Three big hurricanes of 2017 – Harvey, Irma, Maria – now 3 of the 5 costliest hurricanes in US history

2017 the costliest hurricane season in U.S. history, even topping the disastrous 2005 season, which included Rita and Wilma in addition to Katrina.

September 2017 was the single-most powerful month ever recorded in the Atlantic in terms of hurricane intensity.

(Source: National Oceanic and Atmospheric Administration (NOAA); 2018)



HURRICANE RESPONSE

- National Overview
- Bipartisan Budget Act 2018 Timeline
- Southwestern Division Program
- Galveston District Portfolios



Galveston District Stakeholder Forum – BBA 2018 National Perspective



BBA 2018 Quick Facts –

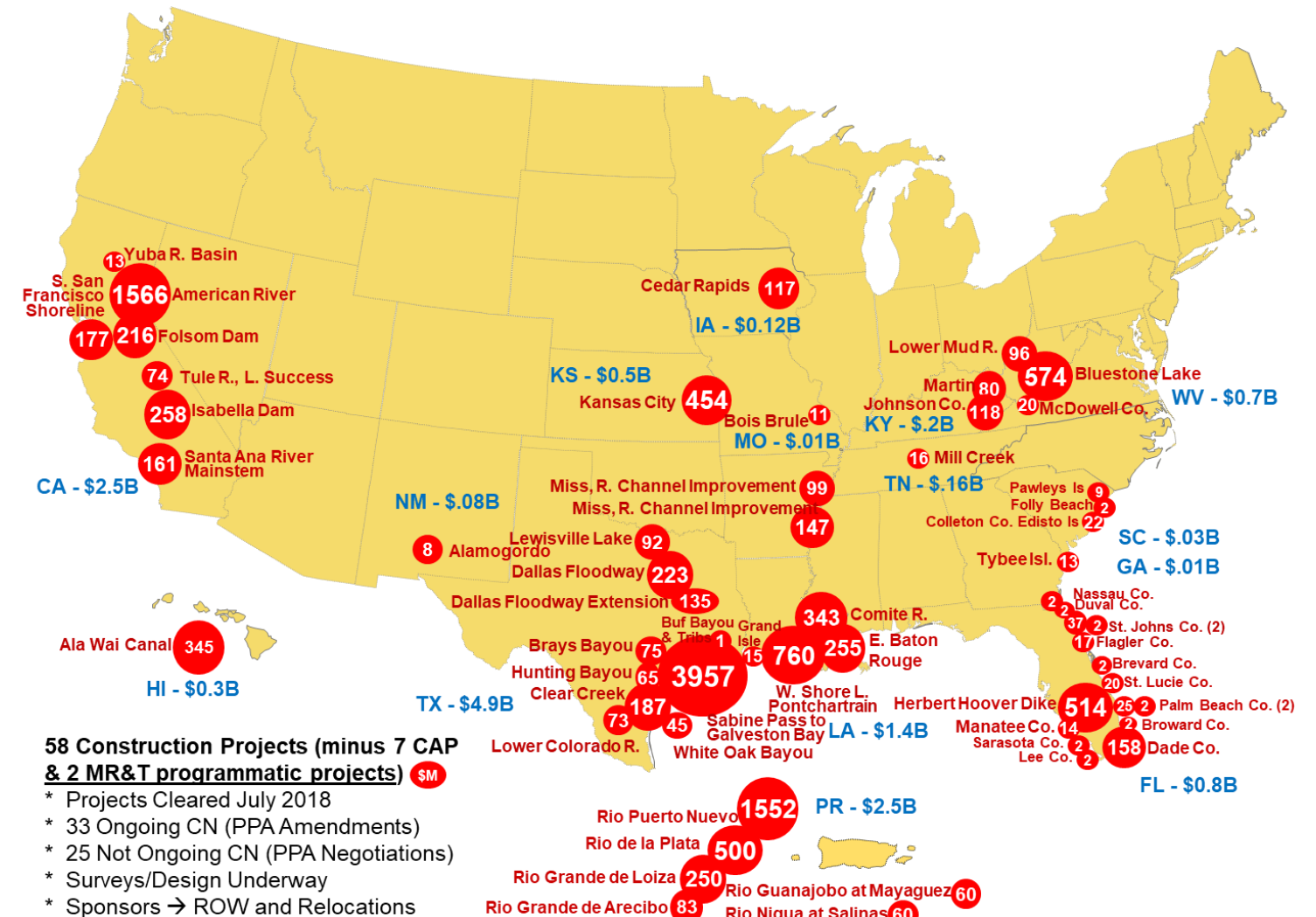
- Enacted 9 FEB 2018
- \$16.5 Billion Dollars
- 58 construction projects (\$15.1B)
- 38 study projects (\$135M)
- 170 Short-term projects (\$1.4B)

Investigations National Portfolio



As of 8 Jul 2019

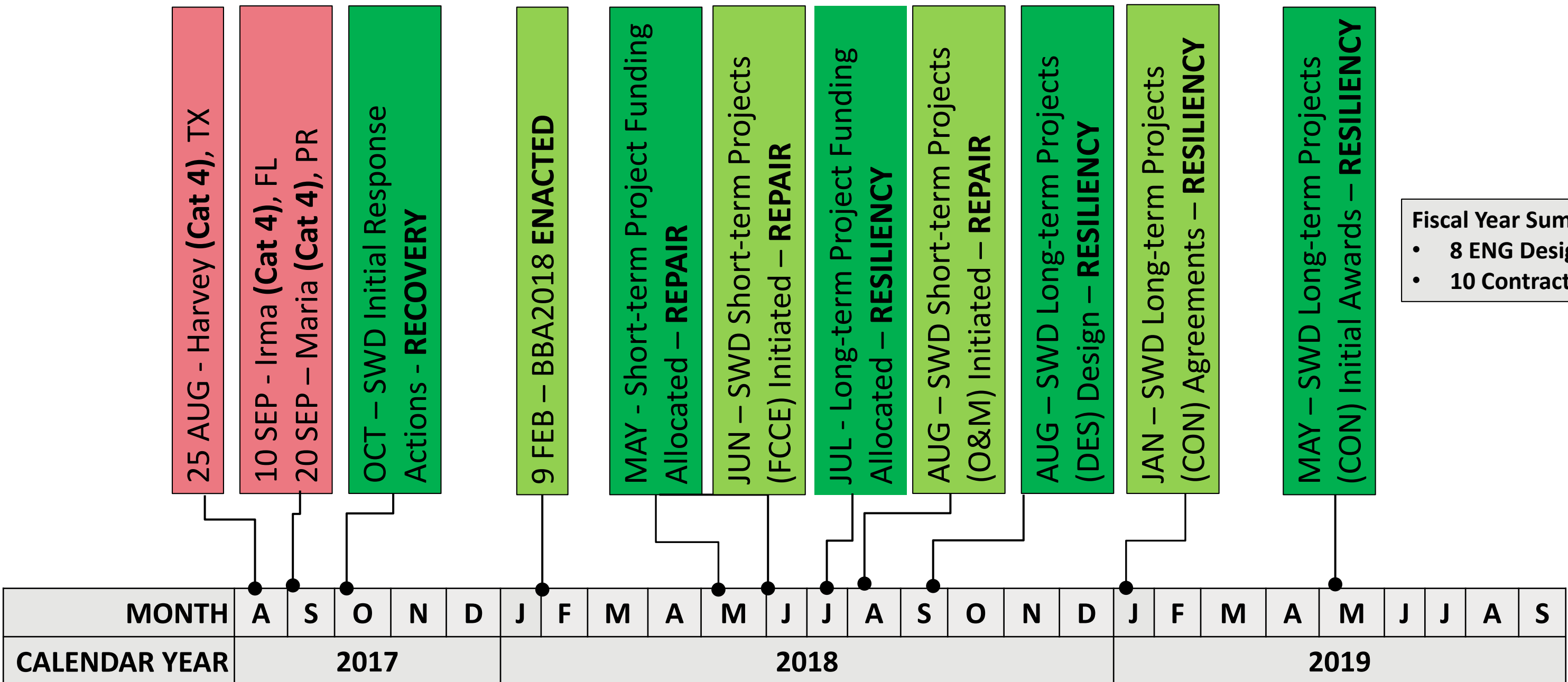
Construction National Portfolio



As of 9 Jul 2019



BBA2018 SWD ACTION TIMELINE



Fiscal Year Summary:

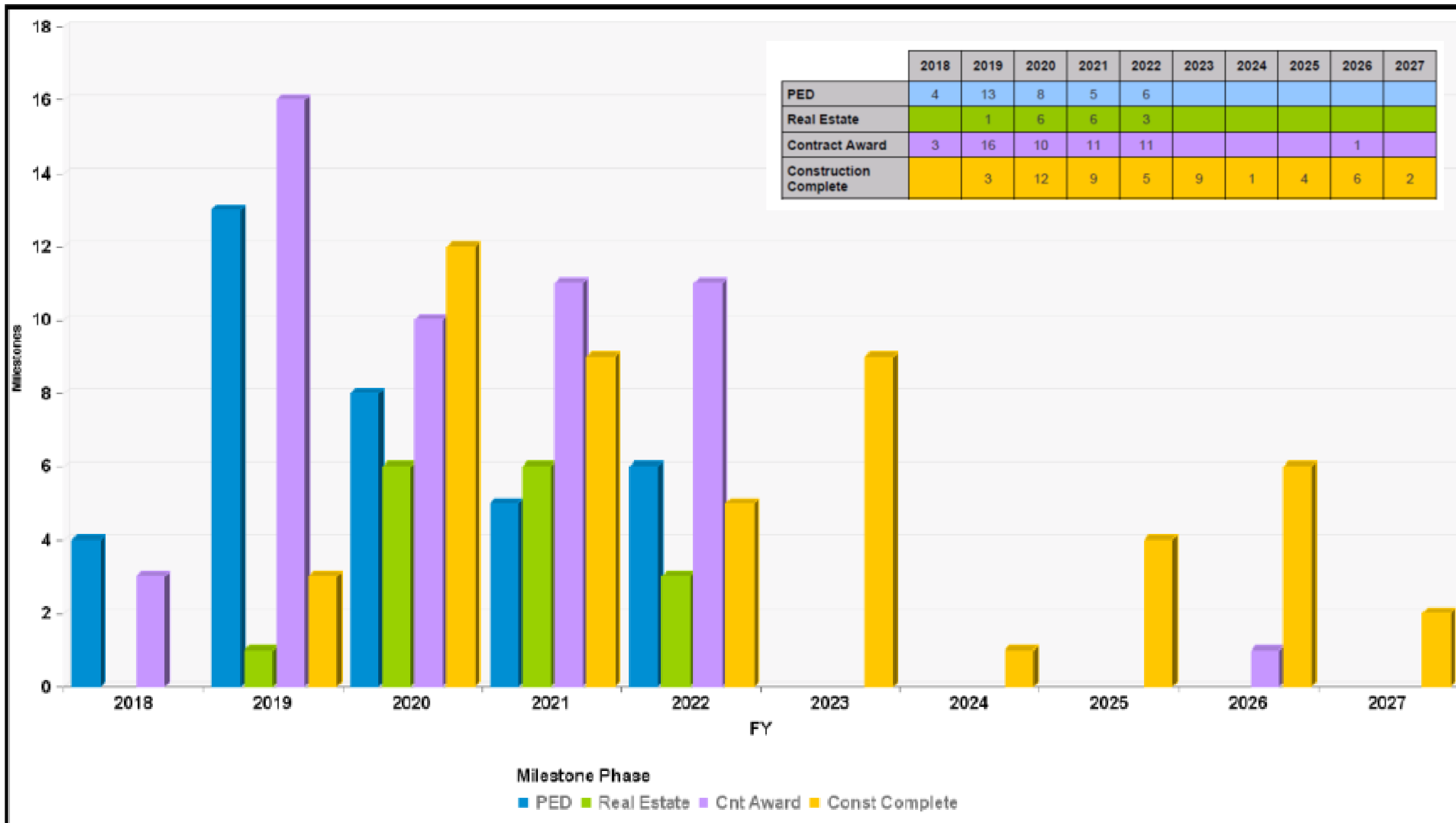
- 8 ENG Design Starts
- 10 Contract Awards



Southwestern Division Harvey Supplemental Program – Execution Timeline



SWD Harvey Supplemental Construction Workload FY Outlook

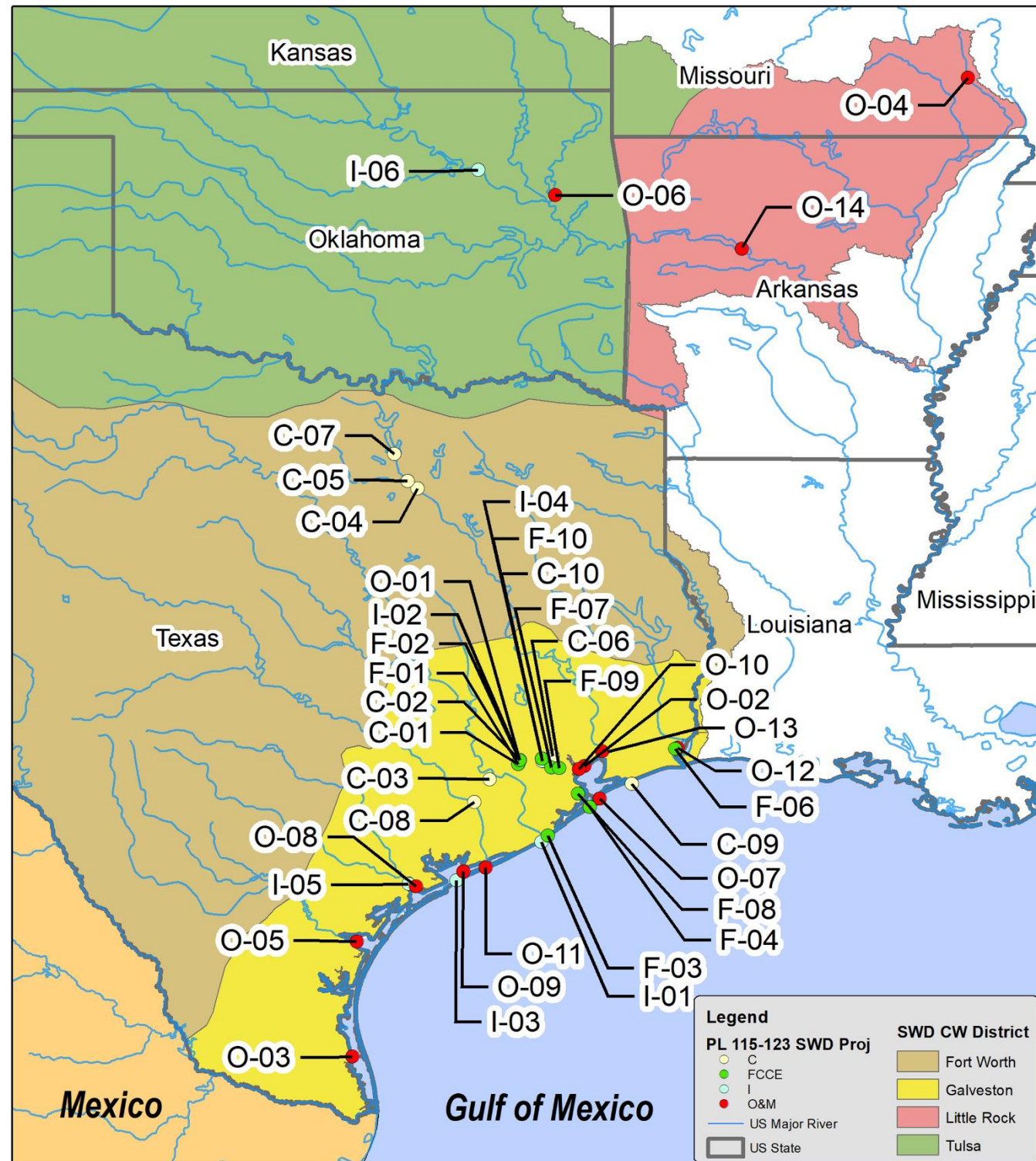




Bipartisan Budget Act of 2018 (Public Law 115-123) Construction, Investigation, O&M, and FCCE Accounts



Harvey Supplemental Program = \$5.082B



- I**
 - Long Term Disaster Resiliency Investment Plan (LDRIP) Investigations (I) Account
 - \$20,604,000
- C**
 - Construction (C) Account
 - \$4,854,172,000
- O**
 - Operations and Maintenance (O&M) Account
 - \$153,555,000
- F**
 - Flood Control and Coastal Emergencies (FCCE) Account
 - \$51,889,000



Southwestern Division Harvey Supplemental Program – Overview



Quick Facts

SWD HARVEY SUPPLEMENTAL PROGRAM
 CWE Total: \$5,080,230,000
 Forty (40) Projects
 Allocated: \$195,078,222
 Obligated: \$104,494,403

Schedule:
 100% FEAS studies complete NLT 2021
 7 CON projects complete NLT 2024
 5 CON projects complete beyond 2024

Operations & Maintenance Portfolio:
 Fourteen (14) Projects
 CWE Total: \$153,555,000

Flood Control and Coastal Emergencies Portfolio:
 Eight (8) Projects
 CWE Total: \$51,889,000

Investigations Portfolio:
 Six (6) Projects
 Five (5) FEAS Studies
 One (1) Watershed Assessment
 CWE Total: \$20,604,000

Construction Portfolio:
 Twelve (12) Projects
 CWE Total: \$4,854,172,000

Short-term Portfolio Overview

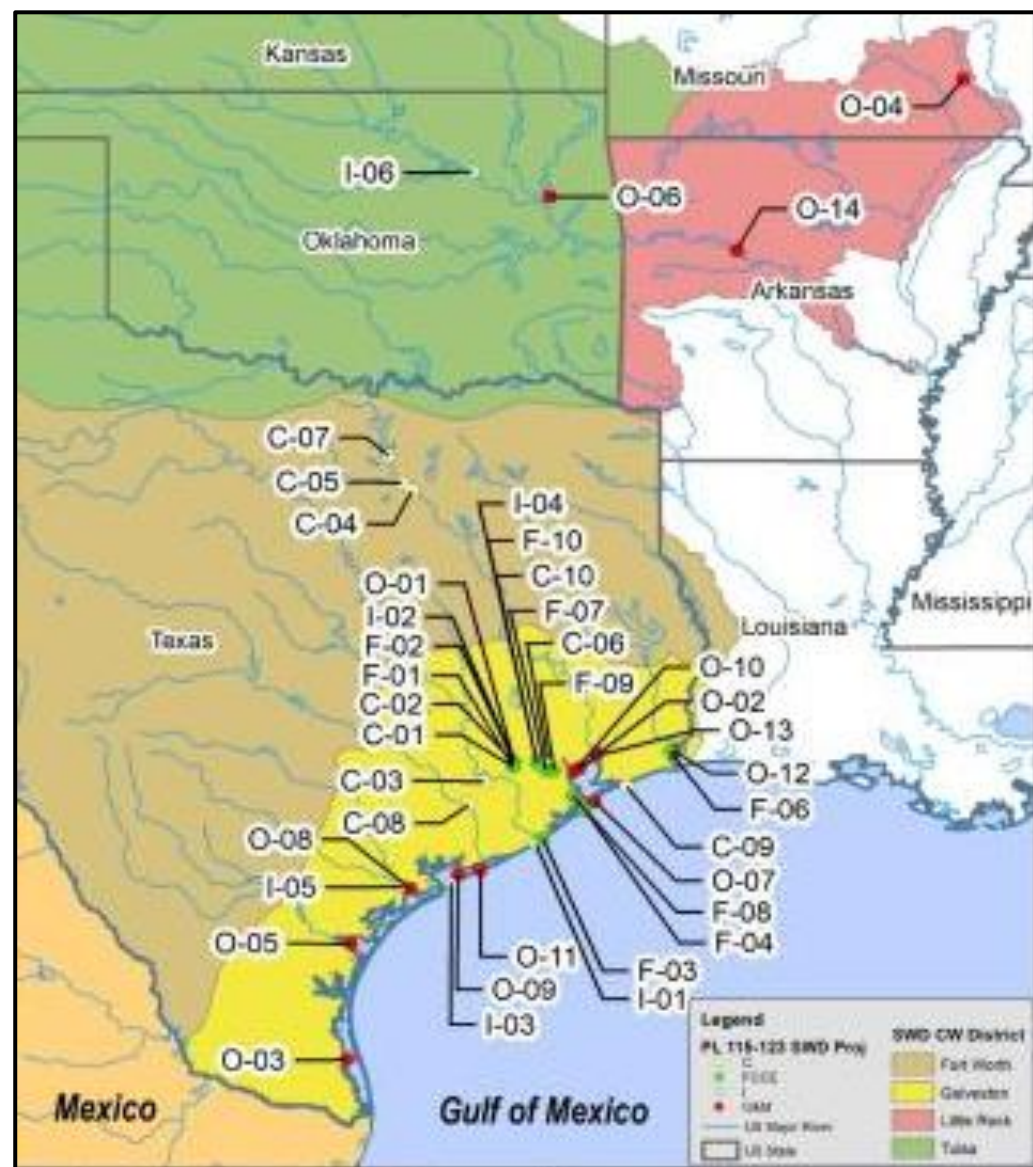
Map Key	District	Operations & Maintenance Portfolio (O)	CWE (\$1000)
O-01	SWG	Buffalo Bayou and Tributaries, TX (3 elements)	\$10,545
O-02	SWG	Cedar Bayou, TX	\$3,500
O-03	SWG	Channel to Port Mansfield, TX (2 elements)	\$17,000
O-04	SWL	Clearwater Lake, MO	\$2,700
O-05	SWG	Corpus Christi Ship Channel, TX (2 elements)	\$32,500
O-06	SWT	Fort Gibson Lake, OK	\$900
O-07	SWG	Galveston Harbor and Channel, TX	\$7,000
O-08	SWG	GIWW, Channel to Victoria, TX	\$2,500
O-09	SWG	Gulf Intracoastal Waterway, TX (2 elements)	\$26,000
O-10	SWG	Houston Ship Channel, TX (4 elements)	\$30,000
O-11	SWG	Mouth of the Colorado, TX	\$6,000
O-12	SWG	Sabine-Neches Waterway, TX	\$9,000
O-13	SWG	Wallisville Lake, TX (2 elements)	\$2,675
O-14	SWL	McClellan-Kerr Arkansas River Nav Sys (MKARNS) AR	\$3,235

Map Key	District	Flood Control and Coastal Emergencies Portfolio (F)	CWE (\$1000)
F-01	SWG	Brays Bayou, TX	\$2,700
F-03	SWG	Freeport Hurricane Protection Levee, TX	\$8,300
F-06	SWG	Port Arthur & Vicinity, TX	\$3,900
F-07	SWG	Sims Bayou, Houston, TX	\$1,000
F-08	SWG	Texas City Hurricane Flood Protection Levee, TX (A/B)	\$32,789
F-09	SWG	Vince Bayou, TX	\$400
F-10	SWG	White Oak Bayou, TX	\$2,800

Long-term Portfolio Overview

Map Key	District	Investigations Portfolio (I)	CWE (\$1,000)
I-01	SWG	Brazos River, Fort Bend County, TX	\$3,000
I-02	SWG	Buffalo Bayou and Tributaries Resiliency Study, TX	\$6,000
I-03	SWG	Coastal Texas Protection and Restoration Study, TX	\$3,604
I-04	SWG	Houston Regional Watershed Assessment, TX	\$3,000
I-05	SWF	Guadalupe and San Antonio River Basins, TX	\$2,000
I-06	SWT	Tulsa West Tulsa Levees, OK	\$3,000

Map Key	District	Construction Portfolio (C)	CWE (\$1,000)
C-01	SWG	Brays Bayou, TX (14 Elements)	\$75,000
C-02	SWG	Buffalo Bayou and Tributaries, TX (\$141,549)	\$1,454
C-03	SWG	Clear Creek, TX (4 Elements)	\$187,174
C-04	SWF	Dallas Floodway Extension, TX (2 Elements)	\$135,250
C-05	SWF	Dallas Floodway, TX (8 Elements)	\$222,911
C-06	SWG	Hunting Bayou, TX (4 Elements)	\$65,000
C-07	SWF	Lewisville Dam, TX (3 Elements)	\$91,959
C-08	SWG	Lower Colorado River Phase 1 (Wharton), TX (3 Elements)	\$73,290
C-09A	SWG	Sabine Pass to Galveston Bay, TX (Orange)	\$2,363,524
C-09B	SWG	Sabine Pass to Galveston Bay, TX (Freeport)	\$711,733
C-09C	SWG	Sabine Pass to Galveston Bay, TX (Port Arthur)	\$881,877
C-10	SWG	White Oak Bayou, TX (4 Elements)	\$45,000



	Project Started
	Project Complete



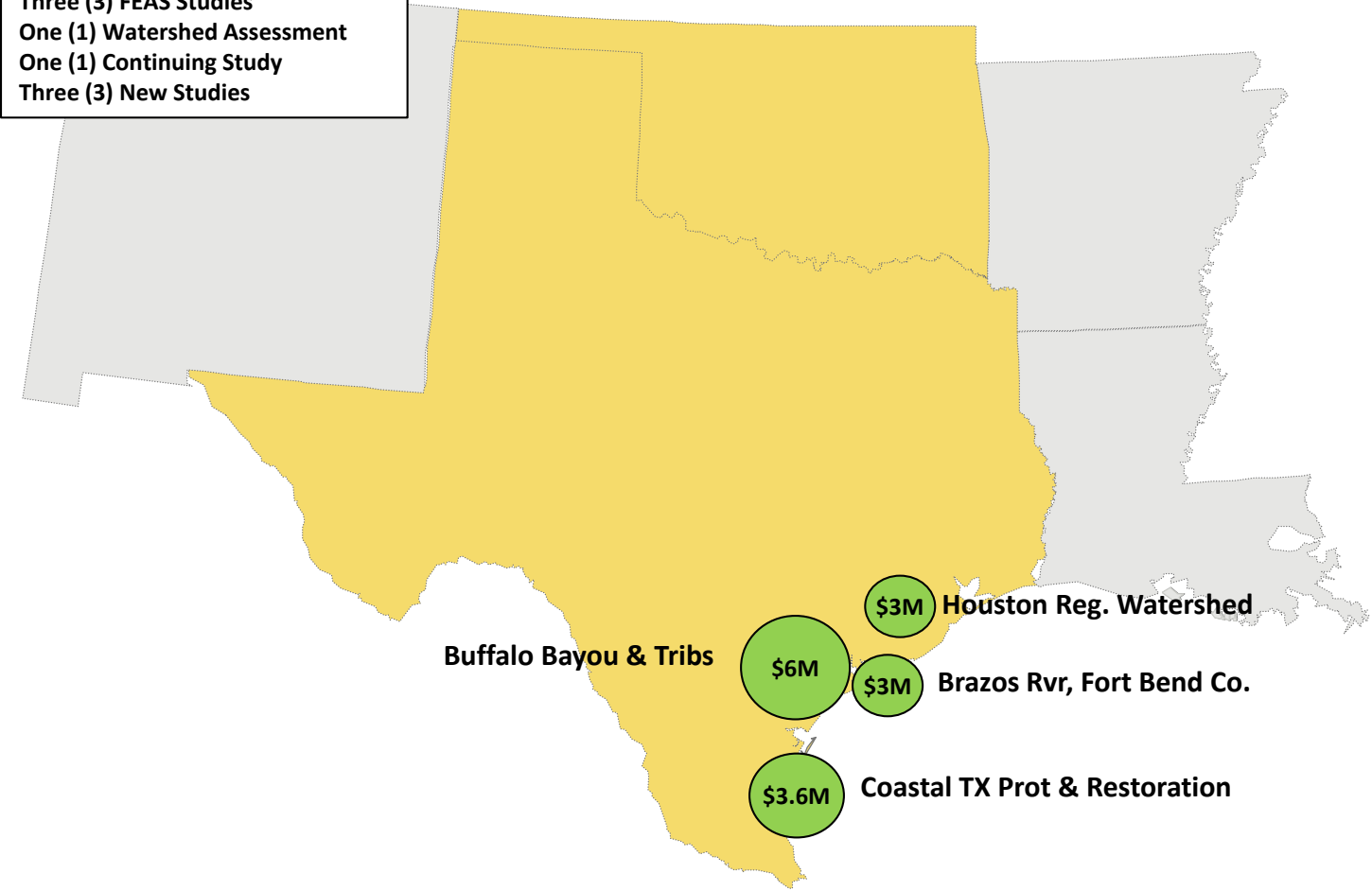
Southwestern Division Harvey Supplemental Program – Galveston District



SWG Investigations Portfolio Summary

SWG Portfolio Makeup:
 Four (4) Projects
 Three (3) FEAS Studies
 One (1) Watershed Assessment
 One (1) Continuing Study
 Three (3) New Studies

TOTAL BUDGET
\$15M



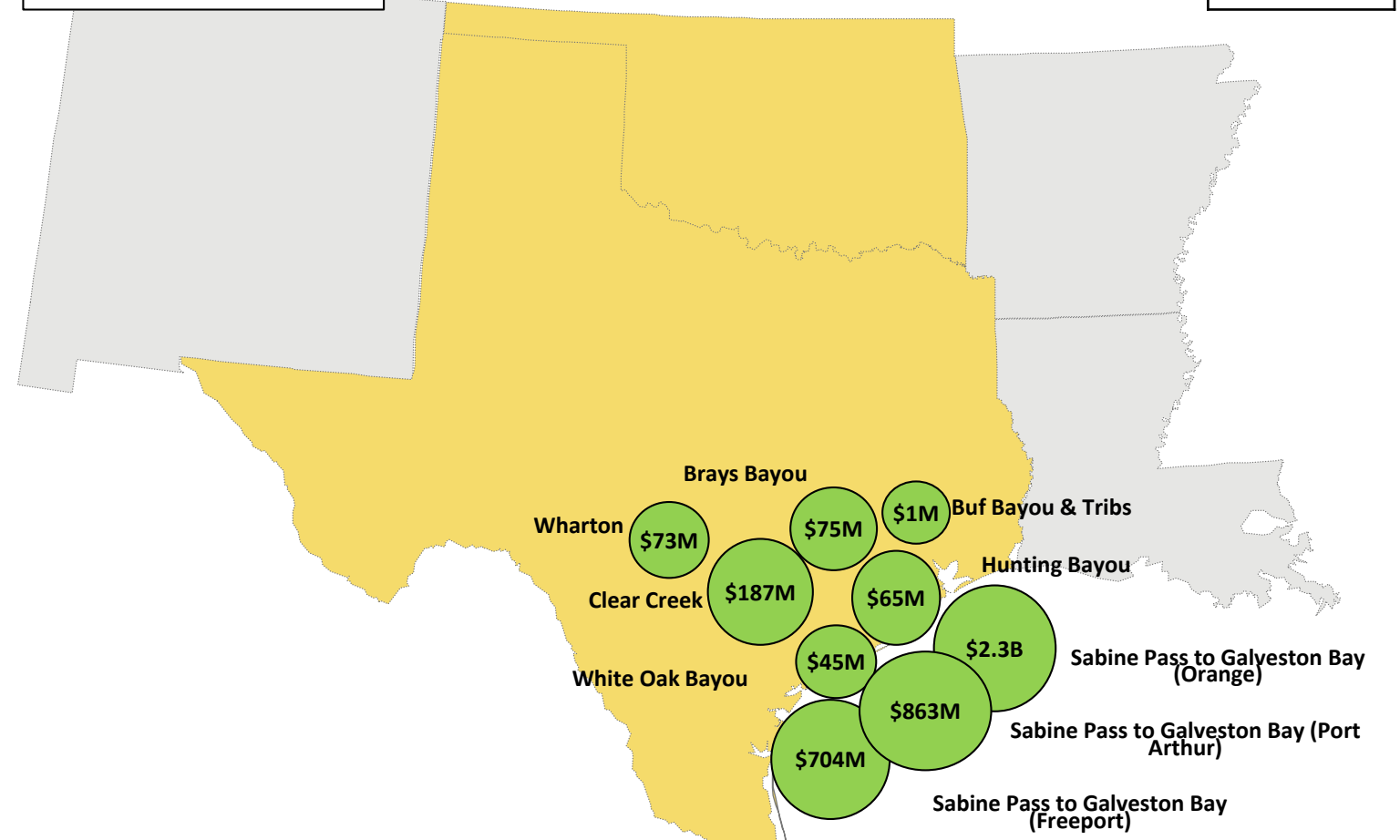
Brazos River, Fort Bend County, TX	OCT-21
Buffalo Bayou and Tributaries Resiliency Study, TX	OCT-21
Coastal Texas Protection and Restoration Study, TX	JUL-21
Houston Regional Watershed Assessment, TX	JUN-21

(Current Schedule)

SWG Construction Portfolio Summary

SWG Portfolio Makeup:
 Nine (9) Projects
 Three (3) Ongoing Construction
 Six (6) New Start Construction

TOTAL BUDGET
\$4.4B



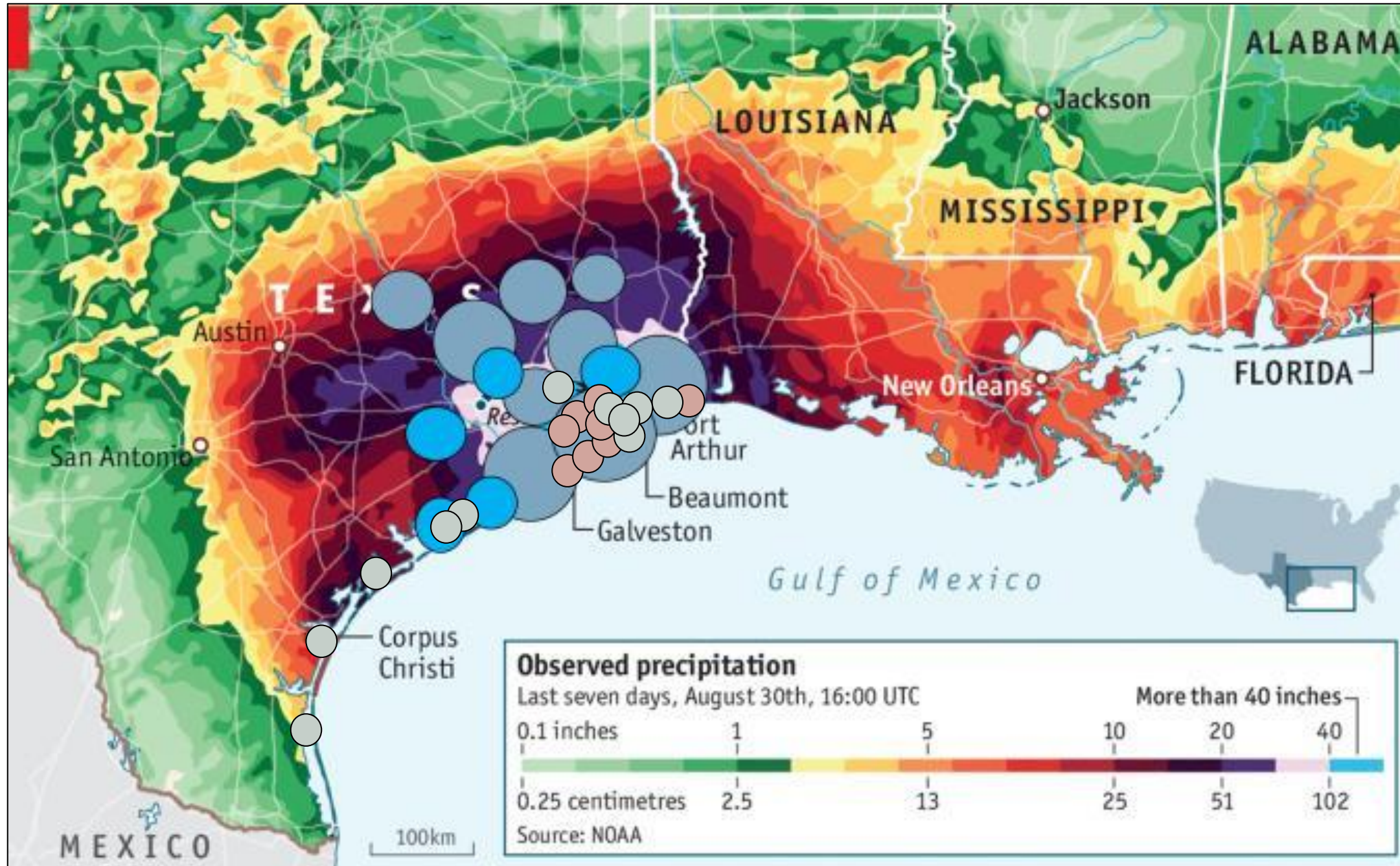
Project	2022	2023	2024	2025	2026	2027
White Oak Bayou, TX (211f)	FEB-22					
Brays Bayou, TX (211f)	APR-22					
Hunting Bayou, TX (211f)	APR-22					
Lower Colorado River Phase 1 (Wharton), TX	JUL-22					
Clear Creek, TX (10)				MAR-25		
Sabine Pass to Galveston Bay, TX (Freeport)				OCT-25		
Sabine Pass to Galveston Bay, TX (Port Arthur)					SEP-26	
Sabine Pass to Galveston Bay, TX (Orange)						MAY-27

(Current Schedule)

Buffalo Bayou & Tribes – Completion APR-20 (CW450)



Southwestern Division Harvey Supplemental Program – Galveston District Project Portfolio



- Nine (9) Construction Projects
- Five (5) Feasibility Studies
- Eight (8) FCCE Projects
- Eleven (11) O&M Projects

\$4.7B worth of storm risk reduction investment



CLOSING

