Reconstitution
#The_Struggle_Is_Real

Briefing Presented by:
Timothy J. White, P.E., PMP
Resident Engineer
Galveston District
Port Arthur Resident Office
Briefing Will Include

- Navigation Mission of the Corps
- Galveston District Navigation Statistics
- Who Is Involved?
- Harvey and Reconstitution
- What You Can Expect
- Port Arthur Resident Office Open House
Provide safe, reliable, efficient and environmentally sustainable waterborne transportation systems (channels, harbors, and waterways) for movement of commerce, national security needs, and recreation.
GALVESTON DISTRICT – NAVIGATION FACTS

- Monitor and maintain over 1,000 miles of navigation channels and waterways
- Dredge ~25 million cubic yards per year
- 10 Major Texas maritime Ports
- Gulf Intracoastal Waterway connects Ports
- Texas Ports and Waterways moved >600M tons of Commercial Cargo during 2015
- 21.8% of Nation’s Tonnage through Texas Ports
- 25.4% of Nation’s Imports through Texas Ports
- 9.5% of Nation’s Tonnage through Port Houston
WHO IS INVOLVED???
GULF COAST JOINT HURRICANE RESPONSE PROTOCOL

Port Coordination Teams (PCTs)
- Led by U.S. Coast Guard
  - USCG – Sector Corpus Christi
  - USCG – Sector Houston-Galveston
  - USCG – MSU Port Arthur
- Coordinates Vessel movements pre- and post-storm
- Sets Port Readiness Conditions; Whiskey, X-ray, Yankee, Zulu, Recovery

Navigation Restoration Team (NRT)
- Led by U.S. Army Corps of Engineers
  - USACE – Galveston District
  - USACE – New Orleans District
  - USACE – Mobile District
- Assesses and verifies Channel Conditions
- Reports Channel Conditions; eHydro
- Advises USCG on Channel Open, Close and/or Restrictions
- Issues Emergency Contracts for ‘Dredging’ & ‘Obstruction Removal’

Sept 26, 2017
GULF COAST JOINT HURRICANE RESPONSE PROTOCOL

Port Coordination Team (PCT)

Facilities

Ports

Shippers

Pilots Associations

Recreational Boaters

Local Law Enforcement
GULF COAST JOINT HURRICANE RESPONSE PROTOCOL

Navigation Restoration Team (NRT)

[Logos of various organizations]
Hurricane Harvey and the Texas Coast

20-22 AUG – Weakened Harvey crosses Yucatan

23 AUG – Harvey regenerates into Tropical Depression/Storm

24-25 AUG – Harvey strengthens into CAT 3 Hurricane

25-26 AUG – Harvey makes landfall in Aransas County as CAT 4 Hurricane

26-27 AUG – Harvey slows to Tropical storm as it meanders through Fort Bend, Brazoria, and Harris Counties

29 AUG – Harvey makes landfall near Cameron, LA

29 AUG – Harvey makes landfall near Cameron, LA

29 AUG – Harvey makes landfall near Cameron, LA

Flooding in Port Arthur, Jefferson County on 31 August

LEGEND
- Tropical Depression (≤ 38 mph)
- Tropical Storm (39 - 73 mph)
- Cat 1 Hurricane (74 - 95 mph)
- Cat 2 Hurricane (96 - 110 mph)
- Cat 3 Hurricane (111 - 129 mph)
- Cat 4 Hurricane (130 - 156 mph)
- Cat 3 Hurricane (≥ 157 mph)
HURRICANE HARVEY

GALVESTON DISTRICT - NAVIGATION CHANNELS

Top 10 Point Rainfall Amounts in Inches

Harvey produced record breaking rainfall totals of 40 to over 50 inches

<table>
<thead>
<tr>
<th>SITE</th>
<th>RAINFALL</th>
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<tr>
<td>Cedar Bayou</td>
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<td>Mary’s Creek</td>
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<td>Clear Creek</td>
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<td>Cheek Canal</td>
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Galveston Historic Rainfall – Sediment Load
Maps on the Corps SWG Website

CONTRACT DREDGES – U.S. ARMY CORPS OF ENGINEERS

Open House at PARO

Friday, April 26, 2019
8:00 AM to 2:00 PM
201 Pleasure Pier Blvd,
Pleasure Island, Port Arthur, Texas

Please stop by and say hi to old friends and meet some newbies.