



How to Build Momentum Toward a New Start Study

Reuben Trevino, USACE

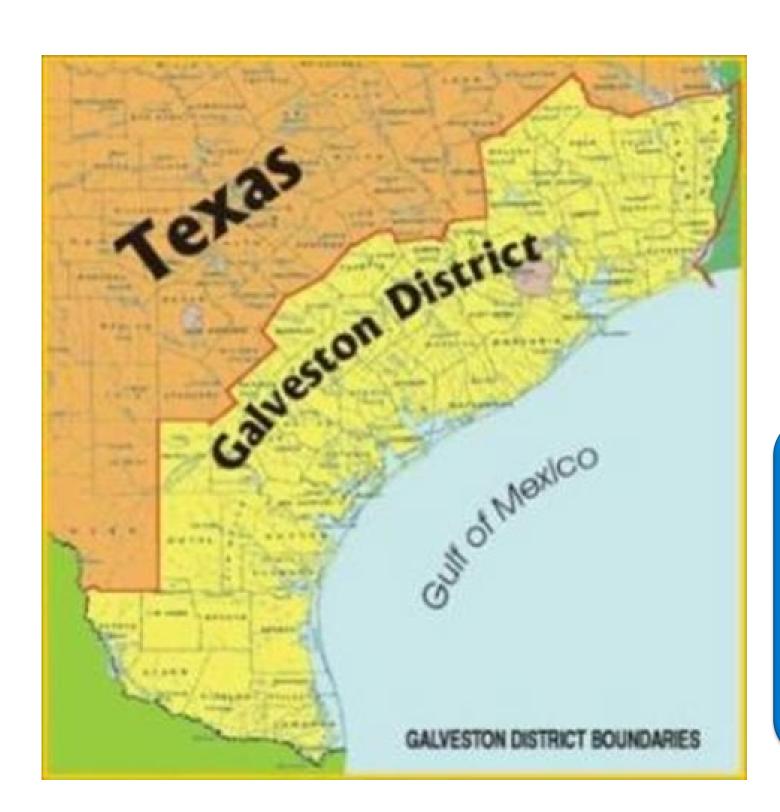
Continuing Authorities Program & Planning Assistance to States

Reuben.Trevino2@usace.army.mil



USACE GALVESTON DISTRICT (SWG): HISTORY AND MISSION



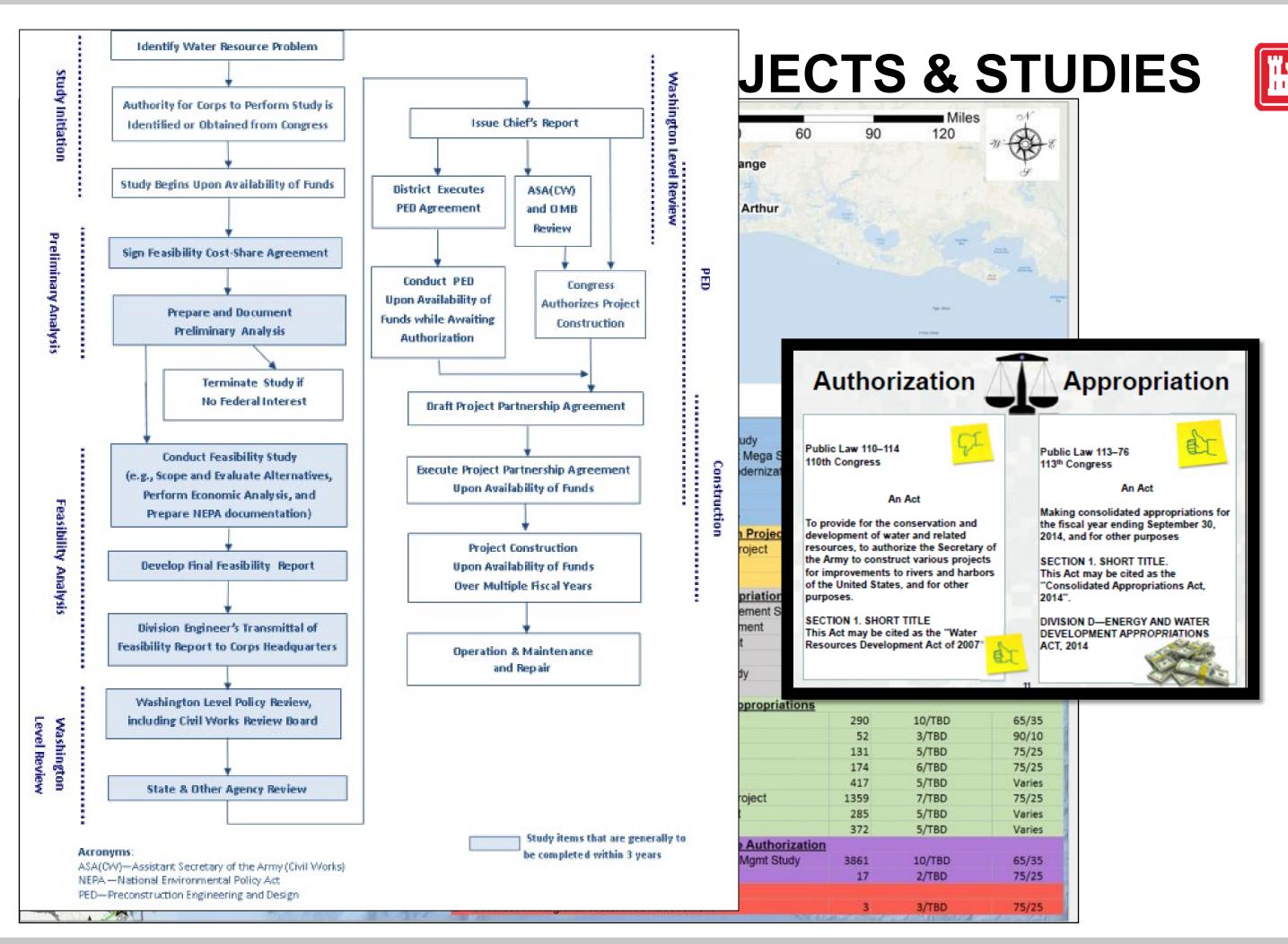


- First engineer district in Texas, established1880
- 50,000 square mile district boundary, ~100+ miles inland
- 16 Congressional districts
- 48 Texas counties, Louisiana parishes
- 18 Coastal counties bays / estuaries
- 9 coastal basins

USACE Central Civil Works missions:

- Navigation (NAV)
- Flood Risk Management (FRM)
- Coastal Storm Risk Management (CSRM)
- Ecosystem Restoration (ER)









Local perception of water resources problem or opportunity

Contact local USACE District Office

Existing Authority to Investigate

No Current Authority to Investigate

Congressional Au hority for Study

Potential Sponsor submits "Letter of Intent" to District

District requests for requests Congress



ocal sponsor





Existing or Continuing Authorities

Construction **Authorities**

Ecosystem Restoration

Sect 206

Sect 1135

Study Authorities

Planning Assistance to States (PAS)

Flood Plain Mgmt Srvcs (FPMŠ)

Coastal Storm Risk Mgmt

Navigation

Sect 107

Sect 103

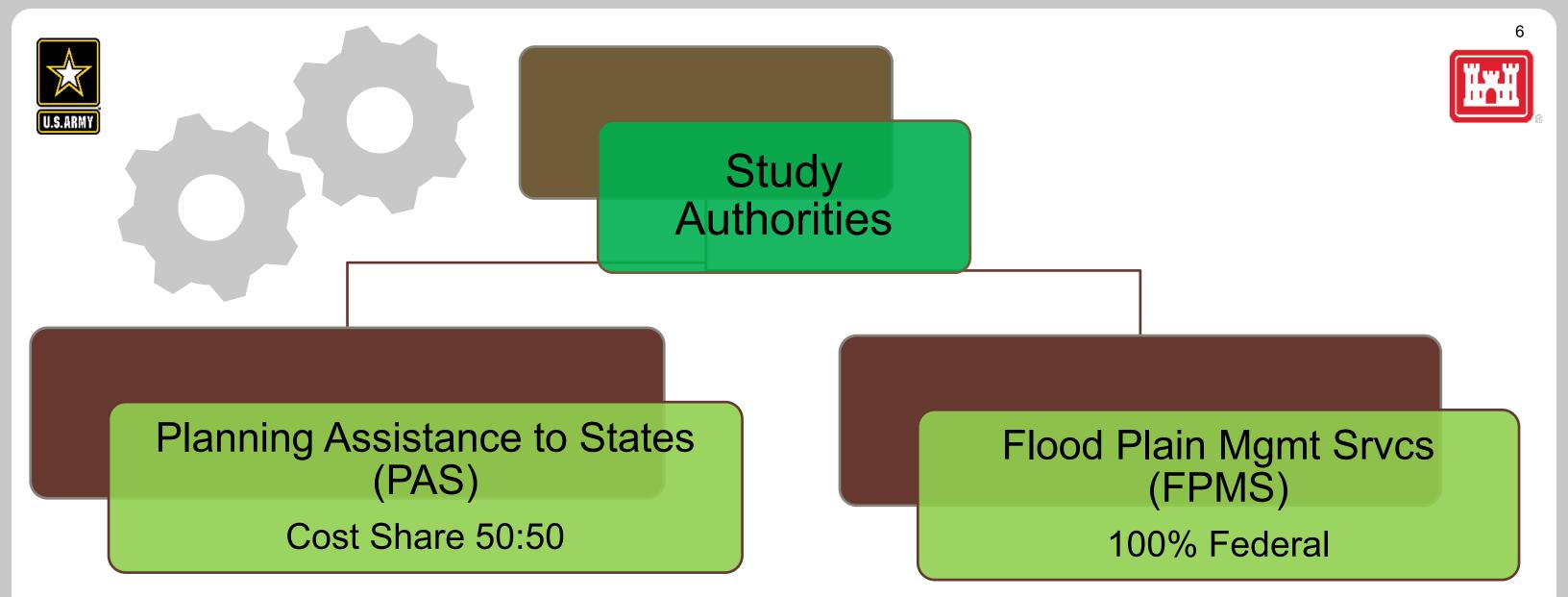
Sect 204

Flood Risk Mgmt

Sect 14

Sect 205

Sect 208



- Water Supply and Demand Studies
- Water Quality Studies
- Environmental Restoration Studies
- Wetlands Evaluation Studies
- Dam Safety/Failure Studies
- Flood Damage Reduction Studies
- Flood Plain Management Studies
- Coastal Zone Management Studies
- Harbor/Port Studies

- Floodplain Delineation/Flood Hazard Eval Studies
- Dam Break Analysis Studies
- Flood Warning/Preparedness Studies
- Regulatory Floodway Studies
- Comprehensive Floodplain Management Studies
- Urbanization Impact Studies
- Storm Water Management Studies
- H&H and Sediment Transport Modeling



Purpose of Continuing Authorities Program (CAP) is to plan and implement projects of limited size, cost, scope, and complexity in an accelerated manner





Navigation Sect 107

Ecosystem Restoration

Sect 111 Sect 206 Sect 1135 Coastal Storm Risk Mgmt

Sect 103

Sect 204

Flood Risk Mgmt

Sect 14

Sect 205

Sect 208

- Requested by the Sponsor
- Do no need Congressional Authorization
- Are not competing with GI for Prioritization

- Quicker to implement
- Limited Scope & Complexity
- Pre-established Federal Cost limits



CAP Selection Process



Affordability Analysis

20%

80%

Construction

Construction

New Start

Construction

Studies

Construction

HQ/ASA

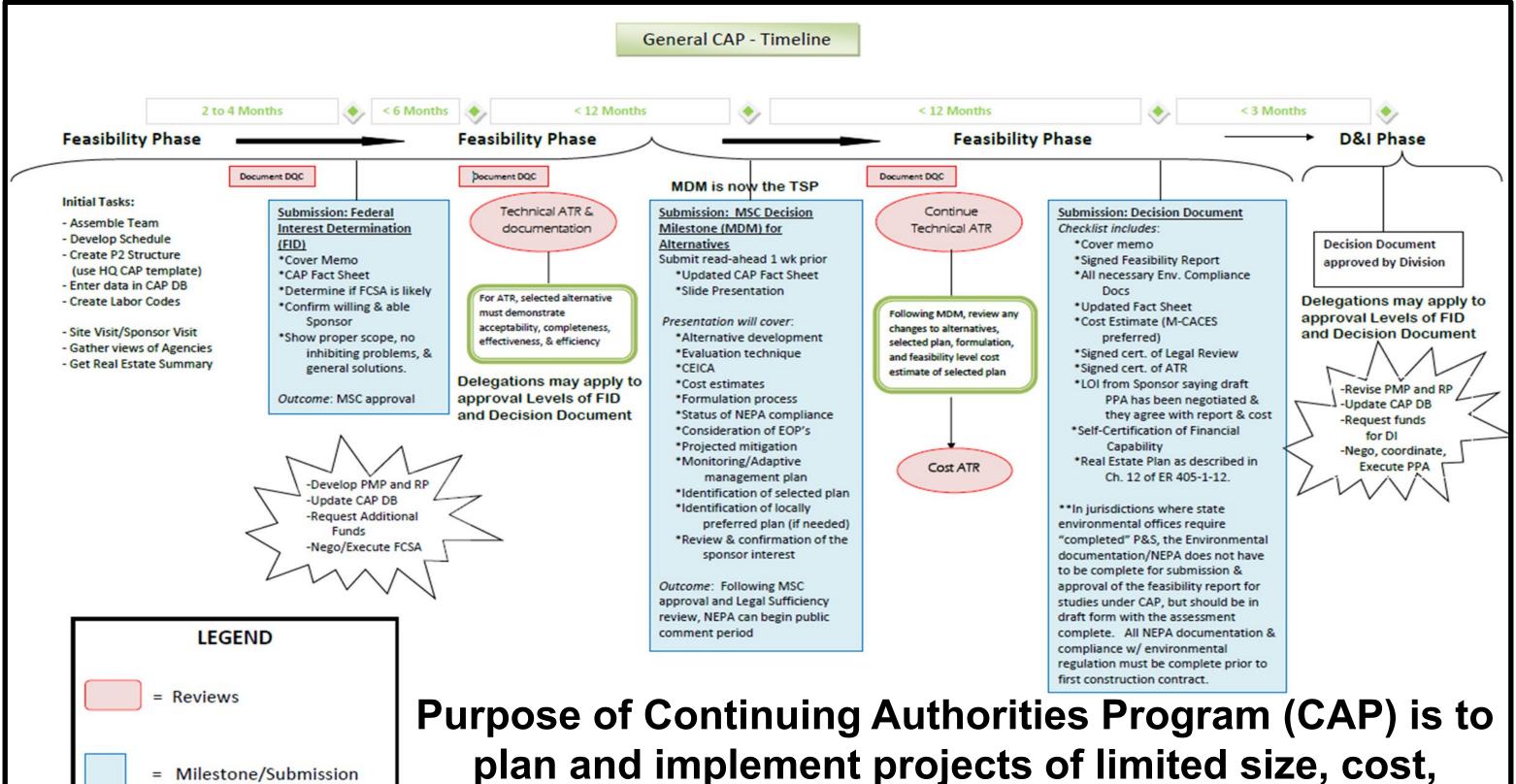
Division

Districts (Feb)

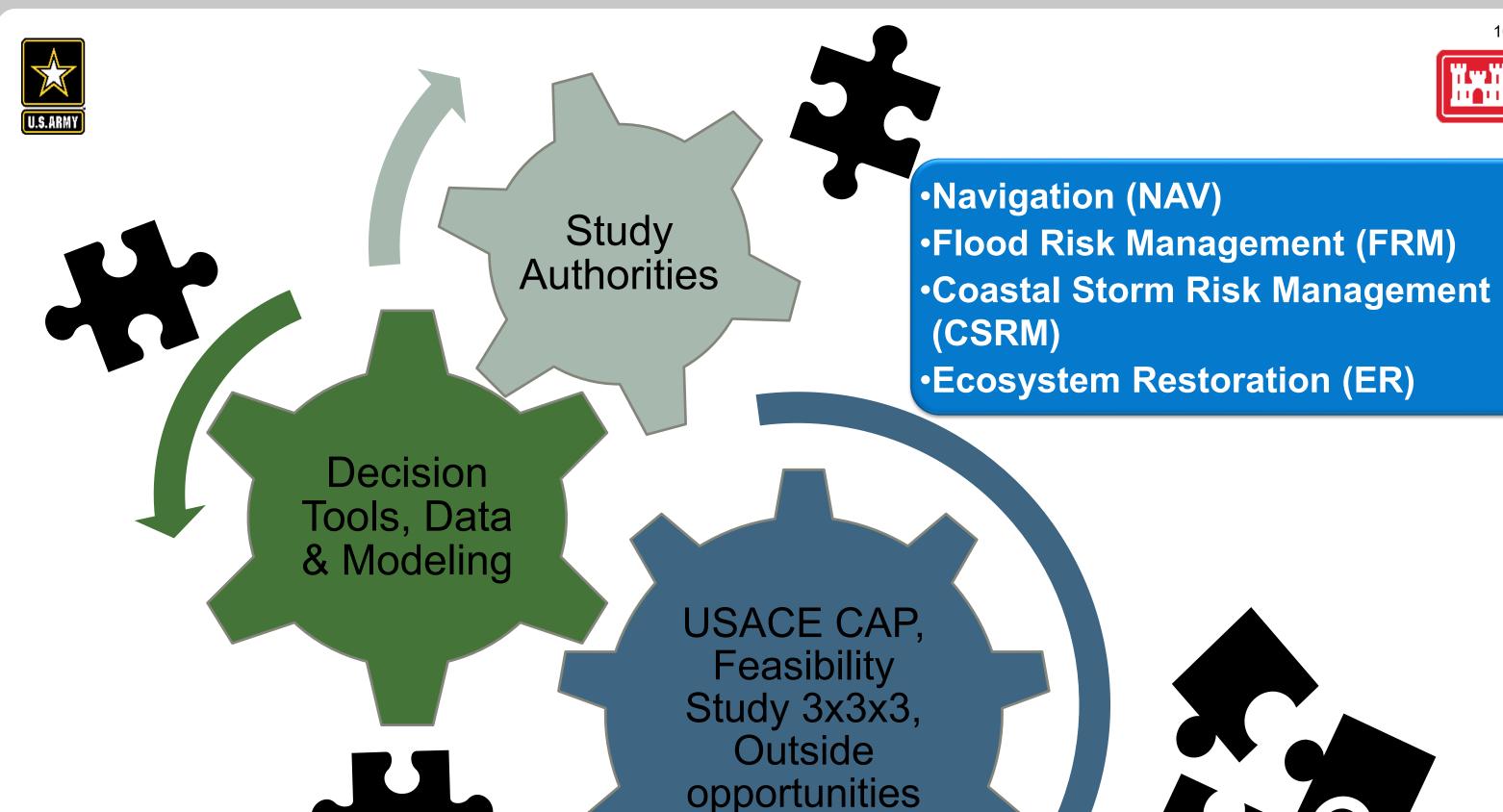


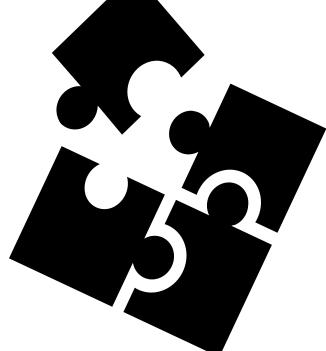






scope, and complexity in an accelerated manner



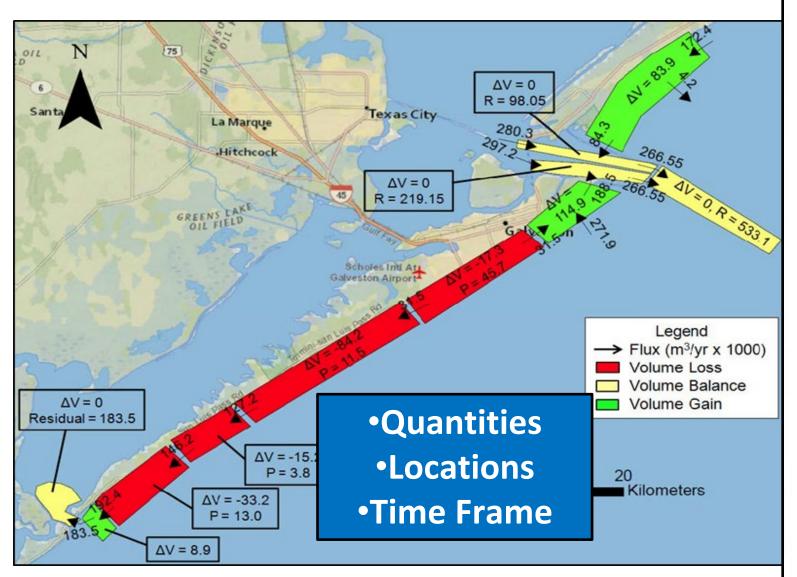




COASTAL STORM RISK MANAGEMENT ON

HHH

GALVESTON ISLAND



Guiding Principles:

- 1. Retain sediment in the system utilizing Regional Sediment Management (RSM) concepts
- 2. Defend what has been built, continual maintenance
- 3. Seek opportunities to conduct large scale nourishment projects





COASTAL STORM RISK MANAGEMENT ON



GALVESTON ISLAND

Construction Activities:

- 5 beach projects
- ~2.5 mill CY's of sand back on beaches
- Leveraged city financial resources with state and federal support

Additional Studies:

- Backpassing Technology to reduce price of sand.
- Structural Solution to mitigate erosion at end of the Seawall.
 Conceptual design to be finalized and constructed through <u>FEMA</u> <u>HZM Project.</u>

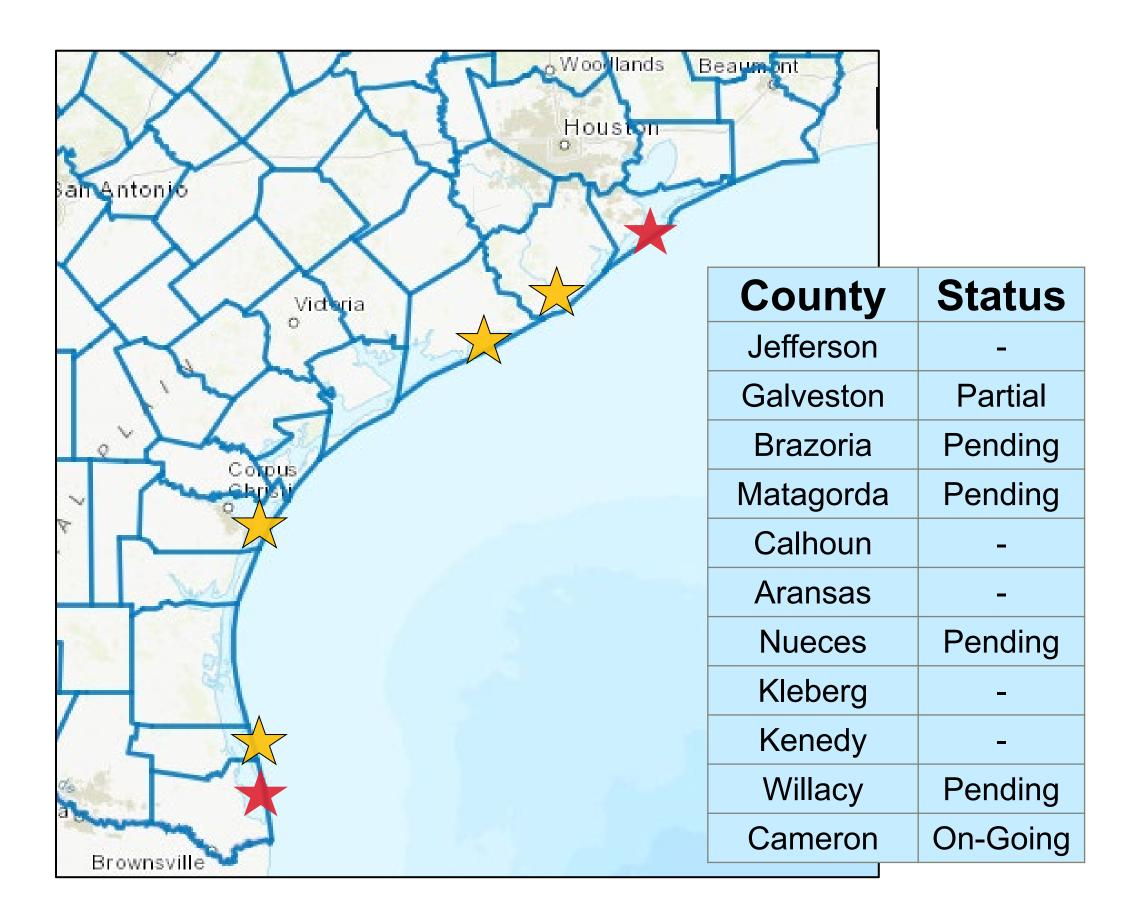
CAP Sect 204 to address West End erosion in Feasibility phase.





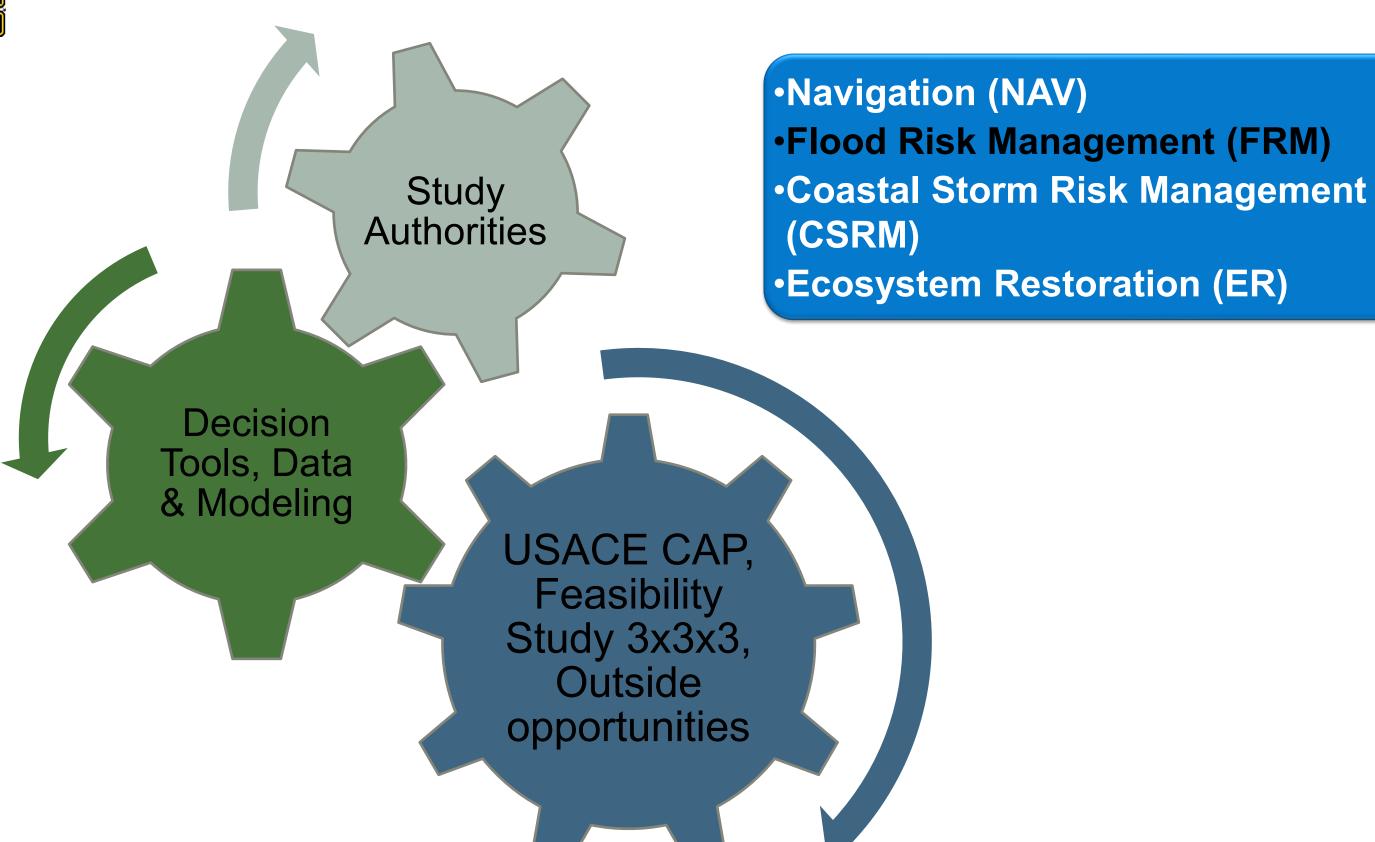
TEXAS SEDIMENT MGMT. PLAN'S

















PAS & **FPMS** LOWER CLEAR CREEK & DICKINSON BAYOU WATERSHED STUDY Pasadena

Flooding Models as part of larger watershed effort

Compound

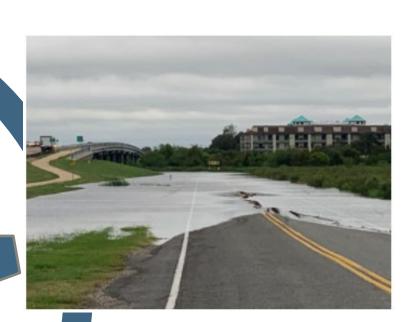
PAS Flood Damage Study by improving existing model

Feasibility Study

CAP Sect 205 \$15 mill bypass \$10 mill detention basin

Types projects being evaluated:

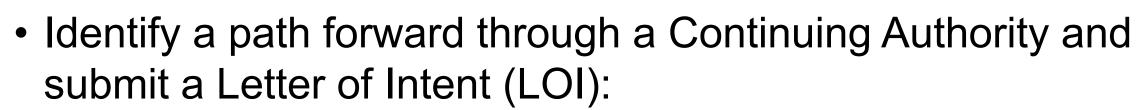
- **Detention basins**
 - New
 - Extensions of existing
- **Bypass Channels**
- **Tunnels**
- Channel widening
- Diversion pipes





Next Steps:

- Reach out & Setup a conference call or site visit
 - Reuben.Trevino2@usace.army.mil
 - 409-926-1329



- PAS is available year-round depending on funding availability
- CAP requests will be submitted for FY 23 consideration next Spring
 - Navigation (NAV)
 - Flood Risk Management (FRM)
 - Coastal Storm Risk Management (CSRM)
 - Ecosystem Restoration (ER)