



**Sabine Pass to Galveston Bay  
Coastal Storm Risk Management Program**

# **ORANGE COUNTY PROJECT OVERVIEW**



**US Army Corps  
of Engineers®**  
Galveston District

Updated May 2023



## Project Background

Along the Texas coast, vital resources critical to the social, economic, and environmental welfare of the region and the nation are at risk. When hurricanes or tropical storms come ashore in Texas, the immediate fallout and the continued aftermath affects not only the people who live in these coastal counties, but also the entire nation.

To increase the resiliency of the upper Texas coast, the Sabine Pass to Galveston Bay Coastal Storm Risk Management Program (S2G Program) has been established by the U.S. Army Corps of Engineers (USACE) and its non-Federal sponsors to deliver cost-effective and ecologically-sound solutions to reduce risk from coastal storm surge to communities, businesses, and industry in Orange, Jefferson, and Brazoria Counties.

The S2G Program is comprised of three unique projects: improvements to existing hurricane flood protection systems in the Freeport area (the Freeport Project) and the Port Arthur area (the Port Arthur Project), and the construction of a new coastal storm risk management system in Orange County (the Orange County Project).

## Project Overview

The Orange County Project is a partnership of USACE and its non-Federal sponsor, the Gulf Coast Protection District (GCPD). Design and construction costs for the project are shared between these entities (65% Federal / 35% non-Federal), with USACE being responsible for managing design and construction, while the GCPD will operate and maintain the system once completed. Orange County and the Orange County Drainage District will be actively engaged with the GCPD in coordinating the project design.

Currently, Orange County has no large-scale coastal storm risk management system. When coastal storms hit the area, storm surge from the Gulf of Mexico moves north through Sabine Lake and the Sabine River and inundates the low-lying areas of Orange County. The Orange County Project will include a levee/floodwall system within the county to reduce the risk of storm surge and flooding that can impact most of the county, as well as its critical industrial facilities.

Specific components for the Orange County Project currently include the following:

- Approximately 20 miles of new earthen levees
- Approximately 3 miles of new concrete floodwalls

- Approximately 150-200 gravity drainage structures and 14-16 new pump stations, providing interior drainage for areas behind the levee/floodwall
- Approximately 40 closure structures located at road and railroad crossings
- Two navigable sector gates, with adjacent vertical lift gates, at Adams and Cow Bayous
- Restoration of coastal marsh and preservation of wetlands, as mitigation for the ecosystem values lost due to the construction and operation of the project

The map shown on the following page illustrates the current 2023 alignment. This is shown in comparison to the previous alignment included in the 2017 Feasibility Report. The project alignment will continue to be refined over the coming months, along with the design of all project features. Importantly, the GCPD will be responsible for acquiring all lands, easements, and rights of way needed to construct the project, in addition to relocating any utilities and facilities impacted by the project. Furthermore, the project is being designed to reduce the risk of flooding from a coastal storm surge, while not increasing the impacts from local rainfall flood events within Orange County.



# Orange County Project Overview

\*Not to scale and for illustrative purposes only

— 2017 Feasibility Report Alignment

## 2023 Current Alignment

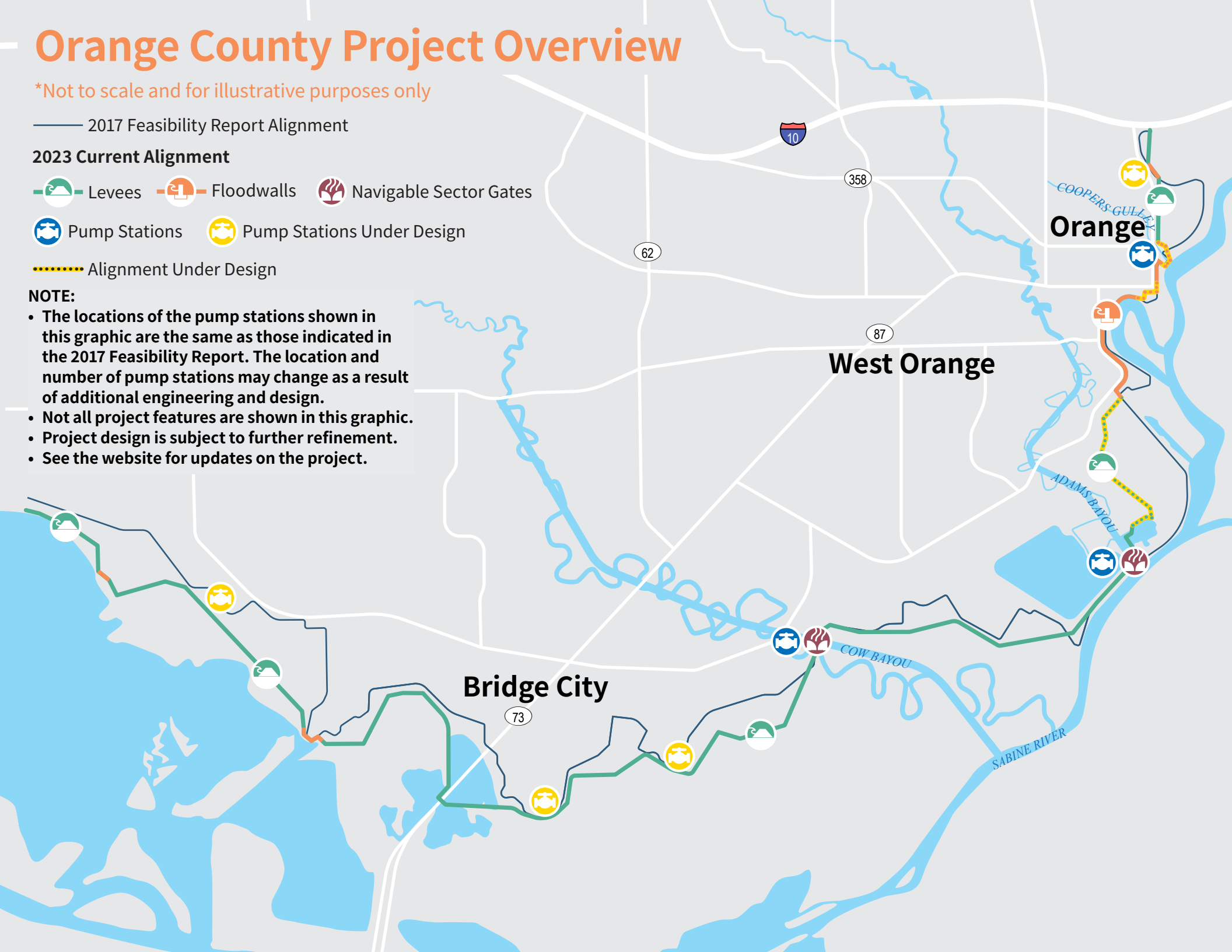
Levees Floodwalls Navigable Sector Gates

Pump Stations Pump Stations Under Design

Alignment Under Design

### NOTE:

- The locations of the pump stations shown in this graphic are the same as those indicated in the 2017 Feasibility Report. The location and number of pump stations may change as a result of additional engineering and design.
- Not all project features are shown in this graphic.
- Project design is subject to further refinement.
- See the website for updates on the project.



## Project Status

The Orange County Project is currently in the Pre-construction Engineering and Design (PED) phase. During this phase, the project alignment is refined, and the design of all project features is finalized. Importantly, as the project is still in development, the alignment location and detailed design of the features presented in this brochure are still subject to change.

Updates on the design of the project can be found on the project's website and StoryMap, both of which can be accessed by scanning the QR codes on the back of this brochure. As design progresses, and the alignment is finalized, further outreach will be performed to actively engage affected residents and stakeholders.

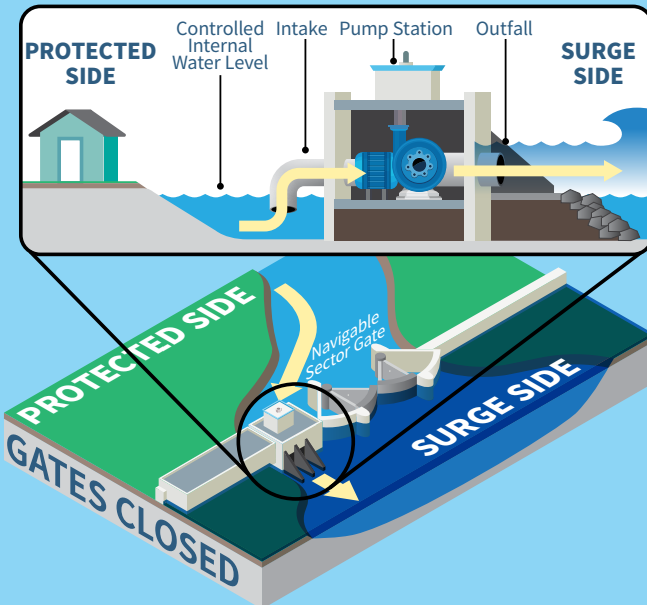
## What to Expect in the Construction Phase

Once the design is finalized, construction packages will go out for bid to private contractors. Real estate acquisition will be completed prior to the construction packages being awarded. Three construction contracts are planned, one each for the pump stations and navigable sector gates, levees/floodwalls, and mitigation. The selected contractors will construct the project, with oversight by USACE construction staff. Stakeholders will be notified in advance of anticipated impacts during construction and will be provided regular updates on construction progress. The public can expect to see machines and equipment, construction personnel, work zones, and changes in traffic patterns. Construction activities for these

types of projects typically include, but are not limited to, utility relocations, land clearing, fill/dirt placement, concrete work, construction in open water, and testing of new systems. In addition, USACE and the GCPD are closely coordinating with area industries (e.g. port and petrochemical facilities) and other stakeholders to manage sensitive environmental issues and to minimize disruptions to business operations.

After construction is complete, USACE will conduct final inspections to ensure that the project has been completed as designed. When this is complete, and the project is accepted from the contractor, it will be turned over to the GCPD for operation and maintenance. USACE and the GCPD will maintain a close relationship after construction is complete and work together to monitor the project to ensure it continues to provide its intended benefits.

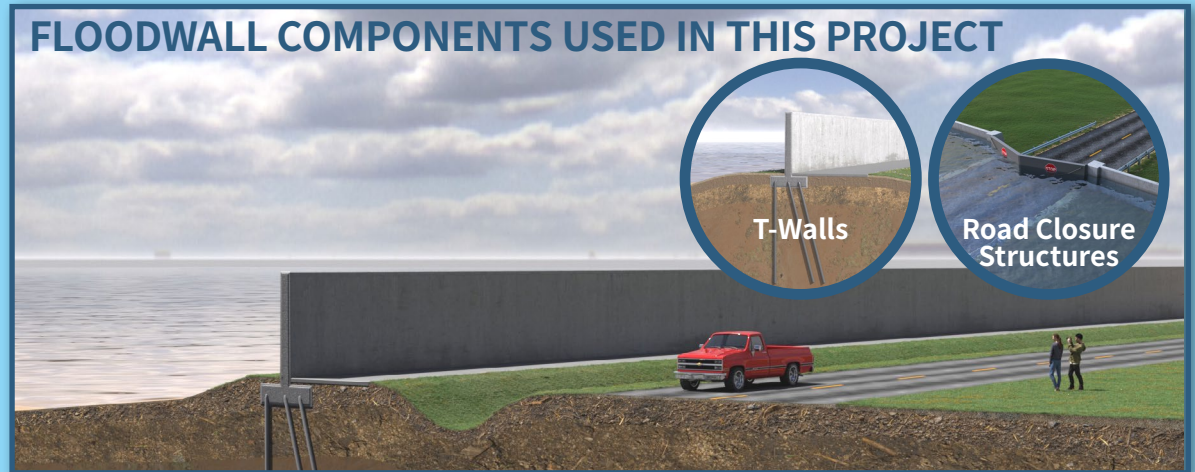
## CONCEPTUAL ILLUSTRATION: CLOSURE STRUCTURE AND PUMPING STATION



## Orange County Project Timeline



## FLOODWALL COMPONENTS USED IN THIS PROJECT



A satellite image of a hurricane, showing a large, swirling cloud system with a distinct eye in the center. The image is in grayscale and occupies the top half of the page.

# We Want to Hear from You!

USACE, in coordination with the Gulf Coast Protection District, Orange County, and the Orange County Drainage District, has begun proactively reaching out to stakeholders in the Orange County area to raise community awareness about the project, answer questions and concerns, and provide information about project construction plans.

**[S2GOrangeCounty@usace.army.mil](mailto:S2GOrangeCounty@usace.army.mil)**

For more information about the Orange County Project, please visit the project resources provided below:

**Project Website**



**Project StoryMap**

