About the Proposed Galveston Ring Barrier
The proposed coastal barrier system along the upper Texas coast is comprised of multiple lines of defense from storm surge. Each proposed structure will work together to provide the most flood protection possible.

During Hurricane Ike, the most severe flooding came from the bayside. In order to protect this area, a ring barrier is suggested. The current proposal envisions a system of flood walls, highway and railroad gates, and a 2,400-foot crossing of Offatts Bayou with surge gates for navigation and environmental flow. The proposed ring barrier would encompass the Harborview Drive, or “Fish Village,” neighborhood on the far east end of Galveston, consisting of a two-foot flood wall on top of the existing piers adjacent to the Strand Historical District on the north side of the island, continue west on Harborside Drive, wrap around Offatts Bayou to 103rd Street, and connect to high ground at the west end of the Seawall. The proposed ring barrier alignment extends to the west end of the Seawall to reduce risk to critical infrastructure (e.g. Scholes International Airport) and to avoid separating communities as much as possible. Near the west end of the seawall the ring barrier would tie into a gulf-side 19-mile beach and dune system that would extend west to a tie-in point at the San Luis Pass Bridge. San Luis Pass will not have a closure structure.

Because Galveston Island currently operates on a gravity drainage system, the plan would add a forced drainage system consisting of approximately six new pump stations to move water off the island. The pump stations would address storm surge flooding as well as current flooding.

Please note that this proposed measure is currently the subject of ongoing coordination with Galveston Island stakeholders and may be further refined during the next phase of the study.

Misconception: The proposed Galveston Ring Barrier would create a “bathtub effect” in Galveston city proper, trapping water within the barrier on the island and creating a severe flooding threat.

Any features proposed by the study are not permitted to worsen any existing conditions (i.e. the risk of flooding from a rain event cannot be increased with the implementation of the proposed ring barrier). Pump stations would be implemented to expedite the release of water back into Galveston Bay and the Study team is working with the City of Galveston to determine potential solutions for the City’s drainage system.
The proposed ring barrier consists of the following components:

- 10 miles of floodwall
- 32 two-lane road closures
- 3 four-lane road closures
- 4 railroad closures
- 0.87 miles combi-wall at Offatts Bayou
- 1,383 feet of environmental circulation gates
- 6 pump stations
- 16 drainage structures
- 9 access gates
- 2 navigation gates

Legend

- Orange: Floodwall
- Red: Combi Wall
- Pink: Levee
- Solid black: Existing Seawall
- Light blue: Navigation Gate
- Light green: Circulation Gate
- Green: Transportation Access
- Black circle: Pump Station

*As of October 22, 2019. Subject to change pending public input.*

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More information is available online at: coastalstudy.texas.gov