

# Ike Dike gates won't allow for large ships to use Houston Ship Channel, study says

Amanda Drane, staff writer

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Early designs for the gates that are part of the U.S. Army Corps of Engineers' Texas Coastal Protection and Restoration project at the mouth of Galveston Bay — the Ike Dike — could keep a new generation of large cargo ships from reaching Port Houston.

The gates, part of a \$34 billion effort to block storm surges from the Gulf of Mexico flowing up the Houston Ship Channel, do not sufficiently accommodate the large ships that will need to navigate the ship channel once the project is complete, according to a new study commissioned by the Greater Houston Port Bureau.

A group of pilots who manage ship channels in Houston and Galveston presented the findings Wednesday during a meeting of the Gulf Coast Protection District, a board formed by Gov. Greg Abbott in 2021 to facilitate flood mitigation projects along the coast.

Ships traversing the channel are getting bigger and bigger, which is why the channel is being widened and deepened in a \$1 billion project. The channel is vital to the industrial and commercial facilities along its banks that generate about \$800 billion in business each year — about 20 percent of the state's gross domestic product — and \$38 billion a year in tax revenue.

"There's a lot of things that would just choke the Port of Houston," port bureau President Capt. William Diehl said.

The project was proposed after Hurricane Ike caused a storm surge that devastated Galveston Island and Bolivar Peninsula in 2008, causing \$30 billion in damage across 26 Texas counties. Once fully constructed, the Army Corps estimates the project will save \$2.2 billion in storm damages every year, though how useful the gates will be when they are completed, perhaps by 2040 — or in the 50 years or longer the structure is expected to operate — is uncertain.

The 22-foot high coastal barrier project was recently approved by the federal government, but the official designs and planning process for the massive project won't begin until Congress appropriates funding.

Key to the project are the seagates that would allow large ships to come and go and conduct their business along the ship channel, which houses 272 chemical plants, refineries, petroleum storage facilities and other industrial facilities. The Houston Ship Channel is the busiest waterway in the world, according to the port bureau.

The bureau's study applied preliminary designs for the gates through simulations that are regularly used by pilots along the ship channel, and "it wasn't a success," Diehl said.

"We feel like publicly we need to be always aware that the Houston Ship Channel is the golden goose," he said. "We need to make sure that it's successful."

Representatives from the Army Corps of Engineers said at the meeting they would take the pilots' concerns into account.

Kelly Burks-Copes, project manager for the Corps, said her team is prepared to change the designs to fit the mission of the project. The gates preliminary design has already changed to include two gates instead of one — an alteration made to allow ships to enter if one gate needs to be closed for repairs.

"The Corps likes challenges. We're up for this," said Burks-Copes. "So we're just kind of waiting for Congress to say go."

[amanda.drane@houstonchronicle.com](mailto:amanda.drane@houstonchronicle.com)