



Liquefied Natural Gas (LNG) Vessel FAQs

LNG Vessels - By the Numbers

- ***How many LNG vessels will be transiting the channel?***

The construction of the entire Rio Grande LNG (RGLNG) terminal will occur over a number of years. Four LNG vessels per week are expected to arrive at the terminal once it begins operations.

- ***What is the size of an LNG vessel?***

An LNG vessel is roughly the same length as a typical tanker vessel - approximately 975 feet in length. The beam of a typical LNG vessel is 150 feet. The draft is 39 feet.

- ***What is the typical speed of LNG vessels in the Brownsville Ship Channel (BSC)?***

The current speed limit for any vessel in the BSC is 8 knots. An LNG vessel will typically travel at a speed of 6-7 knots.

LNG Vessels - Transiting the Channel

- ***What protocols will LNG vessels follow in the BSC?***

All ship traffic, including LNG vessels, are required to follow strict procedures, or "rules of the road" established internationally and overseen by the U.S. Coast Guard (USCG).

The current practice for all MV (Motor Vessel) Class vessels in the BSC, is that, under pilot order, tugs assist them to safely navigate the Channel. LNG vessels coming to NextDecade's RGLNG terminal will be treated exactly the same but will have dedicated tugs. Certified pilots from the local Brazos Santiagos Pilots will assist in guiding LNG vessels to the berth. Although three tugs are required to maneuver LNG vessels, NextDecade will permanently contract four tugs to ensure redundancy.

The Brazos Santiago Pilots, as well as experienced tug captains, participated in LNG vessel simulations at the Marine Institute of Technology and Graduate Studies (MITAGS) to get virtual experience in safely piloting LNG vessels to NextDecade's RGLNG terminal. We will continue to use this simulator in the future to train pilots and tug captains.

Use of the Channel Alongside LNG Vessels

- ***Will there be a buffer or exclusion zone around LNG vessels while in the BSC?***

Currently, USCG Corpus Christi (they are also responsible for the safety and security of the BSC) does not have a requirement for an exclusion zone in the BSC, both while the ship is in transit and while at the berth. That said, all vessels in the BSC are required to follow strict procedures, or "rules of the road," established internationally and overseen locally by the USCG.

- ***How will other vessel traffic in the BSC transit the channel?***

- Deep draft ship traffic - There will be no changes to the existing practice, which is that no two-way traffic is allowed for MV Class vessels in the BSC. Therefore, when an LNG vessel is in the BSC, deep draft traffic (vessels requiring the depth of the dredged channel) will be restricted to whichever direction that vessel is traveling. The same rule applies to the LNG vessel if another MV Class is already in the BSC.
- Shallower draft ship traffic - Vessels with a shallower draft may, at the pilot's discretion, pass in either direction as long as they do not interfere with the safe navigation of the LNG vessel.

Security and Safety

- ***How is the safety of the public near the channel addressed?***

The USCG is responsible for the safety and security of all aspects of the LNG vessel movement. During the permitting period for the RGLNG terminal, a Waterway Suitability Assessment study was conducted and completed by NextDecade. The study, which followed strict federal guidelines, assessed both the practical and safety aspects of an LNG vessel using the channel and loading at the terminal. The study was submitted to the USCG who were satisfied that LNG vessels can operate safely in the channel.

LNG Vessels - Water Quality and Management

- ***Will water quality in the BSC be impacted by LNG vessel activity at the RGLNG terminal?***

The handling of ballast water (water that balances a cargo vessel during loading and unloading) on all ships is highly regulated. That same regulation and rigor applies to handling of ballast water on LNG vessels.

Given the relatively small volume of water discharged by LNG vessels when loading at the RGLNG terminal compared to the total water within the BSC, and the very limited temperature difference between that water and the ambient water temperature in the Channel, any impacts on water temperature in the Channel during the LNG loading process will be temporary and extremely minor.

Brazos Island Harbor Channel Improvement Project

- ***How deep is the BSC?***

The BSC's current depth is 52 feet.

- ***What is the Brazos Island Harbor Channel Improvement project?***

In 2016, the Brownsville Navigation District (BND) officially received from the U.S. Congress, authorization for the Brazos Island Harbor Channel Improvement project. The BND serves as the non-federal sponsor of the project. The Brazos Island Harbor Channel Improvement Project includes the deepening of the channel from 42 to 52 feet. In 2026, the project marked completion.

- ***What is NextDecade's role in the Brazos Island Harbor Channel Improvement Project?***

In 2019, NextDecade agreed to privately fund a significant portion of the Brazos Island Harbor Channel Improvement project, which included deepening from the entrance, jetty, and main channels to the western end of the RGLNG property, as well as the development of two-ship berths and a turning basin for the RGLNG facility. NextDecade also funded the widening of the Channel bend close to the entrance of the BSC to improve navigational safety. These improvements benefit existing port of Brownsville tenants and enhance future development of the Port.

