The Kill Van Kull is a tidal strait between the Borough of Staten Island, New York City and Bayonne, New Jersey which connects Newark Bay with the Upper New York Bay.

Spanned by the Bayonne Bridge, it is one of the most heavily travelled waterways in the Port and has provided principal access for ocean-going container ships to Port Newark-Elizabeth Marine Terminal, the busiest port facility in the eastern United States, and the New York Container Terminal at Howland Hook.

As part of what is considered to be one of the biggest dredging contracts undertaken in the New York Harbor, the Army Corps completed the last major Kill Van Kull 50 foot deepening contract on September 24, 2011. Since the beginning of this century, dredgers began deepening the Kill Van Kull to a depth of 50 feet along the bottom of the four-mile-long underwater highway that connects to the Arthur Kill Channel, Newark Bay and to the Upper New York Bay. The deepening of the Kill Van Kull is a great achievement that enables navigation to several of the ports in the New York and New Jersey area for the largest ships in the world.