## **Nauticus Buoy Geography**

Welcome to NOAA's Nauticus CBIBS Buoy, located in the lower Chesapeake Bay along the Elizabeth River between Norfolk and Portsmouth, at 36 degrees 50' 40.10" North latitude and 76 degrees 18' 01.74" West longitude. If you are on the observation deck at Nauticus, look across the river to see the buoy, roughly a quarter-mile away, just west of the river's channel and south of the Portsmouth Naval Hospital on Hospital Point.

The Nauticus Buoy sits in 21 feet of water, between the 50-foot-deep channel that is maintained by the U.S. Army Corps of Engineers for naval and commercial shipping and a 16-to 18-foot deep shelf that used to be an oyster reef. This shallow cove was probably fed by a marsh creek years ago. Today, the shoreline is much changed--stabilized with bulkheads and stone riprap, with a dredged basin for a large pleasure-boat marina at the southeast corner. Drydocks and ship repair yards dominate the shoreline directly across the river from the marina, in South Norfolk.

The great natural harbor--formed by Hampton Roads and the deep Elizabeth River--has offered a valuable anchorage for over 400 years. Today the river holds the major part of the Port of Hampton Roads, including Port Norfolk, just downriver of Hospital Point and across from the mouth of Scott's Creek, and the coal piers further north, beyond the mouth of the Lafayette River in Norfolk.

The Elizabeth River also serves as home to the largest group of U.S. Navy facilities on the Atlantic coast. Up river, or south of the buoy, is the Portsmouth Naval Shipyard, which builds and repairs ships up to the size of aircraft carriers. Downriver, beyond the coal piers and just inside the Elizabeth's mouth, is the huge Norfolk Naval Base.

All of this shipping requires many support vessels, from tugboats that dock ships and push fuel barges to Coast Guard vessels maintaining port security. This busy activity contributes to an ever-changing riverscape that is well worth taking the time to watch.