

NOAA Chesapeake Bay Interpretive Buoy System Norfolk/Elizabeth River Buoy: Summer Seasonal

The location of NOAA's Nauticus CBIBS buoy in the Elizabeth River receives water from multiple sources: fresh water from the Dismal Swamp, the James River, and creeks in the Norfolk/Portsmouth/ Chesapeake metropolitan area, plus salt water flowing in from the Atlantic through Hampton Roads. If rainfall is low, the Elizabeth can be very salty.

If you'd like to see good graphic representations of the Elizabeth's water quality features and the way they affect each other, you can visit www.buoybay.noaa.gov and create your own graphs. This is a great feature for anyone who wants to understand how the Bay and its rivers "work."

Most of the finfish and shellfish here in summer can adapt to moderate salinity changes. The fish that feed around the river's restored oyster reefs include members of the drum family like puppy drum (young red drum), Atlantic croakers, Norfolk spot, speckled trout, and rockfish (striped bass).

As summer settles into the Elizabeth River, young rockfish, croakers, spot, menhaden, silversides, and bay anchovies spread out around the channel edges and on the restored oyster reefs in both the main river and tributaries like the Lafayette. Some of them become food for larger adult fish, especially rockfish, drum, trout, and bluefish.

Blue crabs, mud crabs, sand shrimp, barnacles, and marine worms prosper on the reefs. The rough surfaces of those reefs, elevated four to six feet above the bottom, create turbulence that helps to oxygenate the water around them and to concentrate forage for predator fish.

The oyster reefs, by the way, are a joint restoration project of the Virginia Marine Resources Commission, area schools, citizen volunteers, the Chesapeake Bay Foundation, and Nauticus. You can see an example of oyster restoration at Nauticus when you visit.