

Annapolis Buoy Geography

Welcome to the Annapolis buoy, anchored in 18' of water at 38 degrees 58' 00" North latitude, 76 degrees 26' 40" West longitude, just outside Greenbury Point and the mouth of the Severn River. This buoy's anchor lies in mud, just off the hard, sand and shell sediment of the Greenbury Point Shoal. This location puts the Annapolis buoy right at the transition point from the Severn to the open waters of the Chesapeake Bay.

Located about 15 miles south of the Chesapeake Bay Interpretive Buoy just off the mouth of the Patapsco River, the Annapolis Buoy should reflect the influences of both the Severn and the Chesapeake in its readings of water conditions. Understand first that the open Bay here is actually the tidal Susquehanna River, carrying all of the rainwater that runs off the big river's huge watershed in Maryland, central Pennsylvania, and south-central New York. Thus it dominates conditions in the water around this buoy, though the 13-mile-long Severn does have smaller effects.

After heavy rains in the Susquehanna Valley -- especially including tropical storms -- the water here can turn nearly fresh (0-3 PSUs), but in dry years, the salinity will go to 16-18 PSUs, over half the saltiness of sea water. More normally, the salinity in the spring will be 8-10 PSUs, and in the fall, 12-14 PSUs. If you visit the CBIBS website, www.buoybay.noaa.gov, you can use the Graphing Tool to look at 30-day trends in salinity and correlate them with rainfall, both local and further north.

Over many years, Bay creatures have adapted to this salinity regime. Three that it suits very well are rockfish (striped bass), white perch, and blue crabs. In fact, if you are out on the water around this buoy during crabbing season, you may see quite a number of watermen's buoys marking crab pots along the outer edge of the Greenbury Point shoal just north of this buoy.

The view from this buoy would be at once familiar and very strange for Capt. Smith and his crew if they returned today. Wooded Greenbury Point looks much as it did 400 years ago, except for its rip-rapped shoreline and the three tall towers remaining from a now-obsolete Navy communications system. Across the Severn, however, Annapolis Harbor and the Naval Academy would shock them, as would the heavy boat traffic. They would also note the cloudiness of the water and the lack of underwater grass beds on the shoal around the point. He and his men might well ask what they could do to help restore the health and former riches of these waters.