

By

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If you read about the loss of over 75% of the seagrass habitat in Mobile Bay, the Mobile-Tensaw Delta and the Mississippi Sound, you might have started wondering why we've lost that much seagrass. When we see a change that big, it's hard to not immediately start to thinking about what's causing that kind of change: stormwater runoff, nutrient inputs, etc. That's important and it's how scientists start to form hypotheses to test, to determine what, if anything, should be done. What sometimes gets forgotten is thinking about *why* we all should care.

In the report, prepared by Barry A. Vittor and Associates for the Mobile Bay National Estuary Program (MBNEP) and the Alabama Department of Conservation and Natural Resources State Lands Division (ADCNR-SLD), it's very clear that seagrass (also called submerged aquatic vegetation, or SAV) has decreased dramatically in our local waters, observed by comparing historical photographs to aerial surveys done in 2002, 2008 and 2009. While there have been some locations where seagrass has increased (mostly southern Baldwin County locations) and there is always some ebb and flow to seagrass spread and decline, overall there has been a strong decline in seagrass. As MBNEP program scientist Dr. Amy Hunter explains, "Thriving SAV beds are the hallmark of a healthy estuarine ecosystem. While we can't draw any definite conclusions from this latest mapping report about why SAV is declining in the Bay, we can certainly start asking important questions about why water quality is declining."

Take a step back though from why the seagrass is declining and ask why you should care. First, it's useful to know that there are several species of seagrass in our waters, including (from high to low salinity waters) turtle grass, manatee grass, tape grass, widgeon grass and shoal grass. These can be found in patches to extensive beds. Regardless of species, all these seagrasses provide important functions.

- 1) These plants, like their counterparts on land, produce oxygen, which is as important to marine life as it is to us;
- 2) They also, importantly, provide food and habitat for all sorts of other organisms, including nursery habitat for the blue crab and a number of commercially and recreationally important finfish;
- 3) Seagrasses can also help protect shorelines from erosion by absorbing wave energy;
- 4) By taking up nutrients such as nitrogen, these plants can help absorb excess nutrients that can lead to algal blooms and poor water quality; and
- 5) Finally, seagrasses are relatively sensitive to decreases in water quality, depending on light being able to get to them through the water, meaning that they can serve as a 'canary in a coalmine' for estuaries.

Considering all the 'jobs' that seagrasses have, it's worth taking another, or maybe your first, look at the report and thinking about what it means to you and our coastal ecosystem.

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