Tampa Bay Seagrasses Meet - and Exceed - Recovery Goal

More than 5,000 new acres of bay’s benchmark habitat observed; total now equals 1950s amounts

The lofty goal of restoring Tampa Bay seagrasses to levels not seen since 1950 has not only been achieved, but surpassed!

Survey results released this week show the growth of more than 5,000 acres of new grasses from 2012-2104. Tampa Bay now harbors 40,295 acres of seagrass, outstripping the goal of 38,000 acres baywide, set in 1995 by the Tampa Bay Estuary Program (TBEP).

“This is a remarkable achievement, made even more so when you consider that the bay region has grown by more than 1 million people in the last 15 years,” said TBEP Director Holly Greening. “This kind of environmental recovery is a living testament to the collective efforts of all of us working together — the cities and counties, the private sector and the citizens who treasure the bay.”

Seagrass gains were documented in every bay segment, including a 47% increase, (3,273 acres) since 2012 in Old Tampa Bay, where seagrass recovery and water quality have been lagging behind other bay areas. Old Tampa Bay encompasses the waters from the Gandy Bridge north to Oldsmar and east to Tampa.

More than 525 acres, a 36% increase over 2012 results, was observed in Hillsborough Bay, traditionally the most heavily impacted part of the bay. Hillsborough Bay surrounds downtown Tampa, including the iconic Bayshore Boulevard, and its busy industrial port.

The gains mirror similar trends in water quality. Tampa Bay met all water clarity targets in 2014, for the third year in a row. Water quality is now as good as it was in 1950, and the bay supports as many seagrasses as it did then.

The seagrass data was collected by scientists with the Southwest Florida Water Management District’s Surface Water Improvement and Management (SWIM) Program. They assess seagrass coverage in the bay approximately every two years, using a combination of maps produced from aerial photographs followed by ground-truthing to verify accuracy. The aerial photographs are taken in winter months when the water is clearer. Results of this comprehensive effort have been used to track trends in seagrass extent in Florida estuaries since 1988.

Kris Kaufman, who heads the seagrass mapping program for the water management district’s SWIM program, said the hefty increases likely reflect several years of growth and expansion. “In some of the areas, the beds finally expanded enough for us to actually see and map them aerially.”
Although the new estimates include many “ephemeral” beds that come and go from one sampling period to another, they also show expansion and merger of smaller beds into larger, cohesive units in many places – including a formerly bare area near Feather Sound known as “The Hump” that has been a special focus of research. Robust expansion occurred in many other parts of Old Tampa Bay where grasses have not been documented in previous surveys.

The changes are real,” Kaufman said. “But we’re not done. We want a few more years of mapping to make sure we maintain these increases.”

Seagrasses grow in shallow waters generally less than 6 feet deep in Tampa Bay. Unlike marsh grasses, seagrasses grow on the bay bottom and spend all or part of the time completely submerged under water. They are a critical barometer of the bay’s health because they require relatively clean water to flourish. Seagrasses are natural “fish factories,” sheltering and supporting a variety of juvenile fish, shrimp, crabs, marine worms and other bay creatures. Spotted sea trout, sea horses and bay scallops are among the most well-known residents of the grass beds.

The Estuary Program’s seagrass recovery strategy relies on controlling nitrogen loadings to the bay to maintain sufficient water clarity for seagrasses to grow. The Tampa Bay Nitrogen Management Consortium – an alliance of local governments and key industries bordering the bay – has collectively invested more than $500 million in projects to reduce nitrogen pollution since the 1990s. And several communities have adopted strict limits on the amount and type of fertilizer that can be applied to lawns to prevent summer rains from washing fertilizer residues into the bay.

A recent economic study has shown that 1 in 5 jobs in the communities surrounding the bay are dependent on its good health.

Greening cautioned against becoming complacent about our success and slowing bay restoration and protection efforts. With growth accelerating, “it will be a challenge to sustain this momentum and these types of gains in the coming years.”

“But,” she added, “We should definitely pause for a moment, as a community, to savor what is truly a major milestone in a decades-long effort to restore our bay.”

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