

Submerged Aquatic Vegetation

SEAGRASS

Seagrass is an important habitat feature of bays and estuaries. Seagrasses provide shelter and serve as nursery areas essential to many estuarine-dependent fish and invertebrates. Five species of seagrasses are found in Sarasota Bay: shoal grass, turtle grass, manatee grass, widgeon grass, and star grass. Seagrass growth in the Bay depends on clear water in order for light, essential for plant life, to reach the Bay floor where grasses grow.

Sarasota Bay seagrasses are mapped every two years using aerial photography by the Southwest Florida Water Management District. This photography is used to estimate the location and amount of seagrasses present throughout the estuary. The photography is also used to distinguish two specific types of seagrass distribution: patchy seagrass (less than 75-percent coverage) and continuous seagrass (greater than 75-percent coverage). A minimum of 25-percent coverage is required for mapping a patchy seagrass bed.

Seagrasses have been mapped roughly every two years since 1988. In addition, a set of aerial photographs taken in 1950 has been used to calculate historical seagrass coverage. From this series of maps, temporal trends in seagrass cover and distribution have been evaluated to understand how this important habitat type has changed over time.



Bay scallops – Argopecten irradians – can be found living in healthy seagrass meadows along the west coast of Florida.

- They are a popular recreational fishery north of Sarasota Bay
- Their populations serve as an important barometer of water quality
- They filter large amounts of seawater
- Their populations lend themselves to restoration techniques
- Their populations have shown signs of recovery in Sarasota Bay since 2008

Between 1950 and 1988, seagrass coverage decreased 15 percent mainly as a result of poor water clarity and physical disturbances. Since 1988, the Bay has gained 3,991 acres of seagrass and today has 24 percent more seagrass than 1950.

The overall increase in seagrass cover and the infilling of numerous patchy seagrass beds strongly suggest that water quality has improved in the Bay. Trends in seagrass acreage vary among embayments, suggesting differences in water quality from one part of the Bay to another. The SBEP and its partners are working to understand the complex relationships between water quality and seagrass response throughout the Bay.



SEAGRASS TARGETS

The SBEP has established targets for seagrass acreage for each of the bay segments based on historic and current seagrass trends in Sarasota Bay. These targets will guide the program as it develops water quality targets aimed at preserving seagrasses at desired target levels. The targets set for each segment were the average of 2004 and 2006 for the 1950 seagrass level. Water quality targets have been established to meet seagrass targets.

Seagrass Cover (in acres)			
Bay Segment	1950 (Historical)	2008 (Most Recent)	Seagrass Target
Palma Sola	1,031	1,164	1,031
Sarasota Bay	7,269	9,996	7,269
Roberts Bay	283	299	348
Little Sarasota Bay	883	837	702
Blackburn Bay	273	345	447
Total	9,739	12,641	9,797