



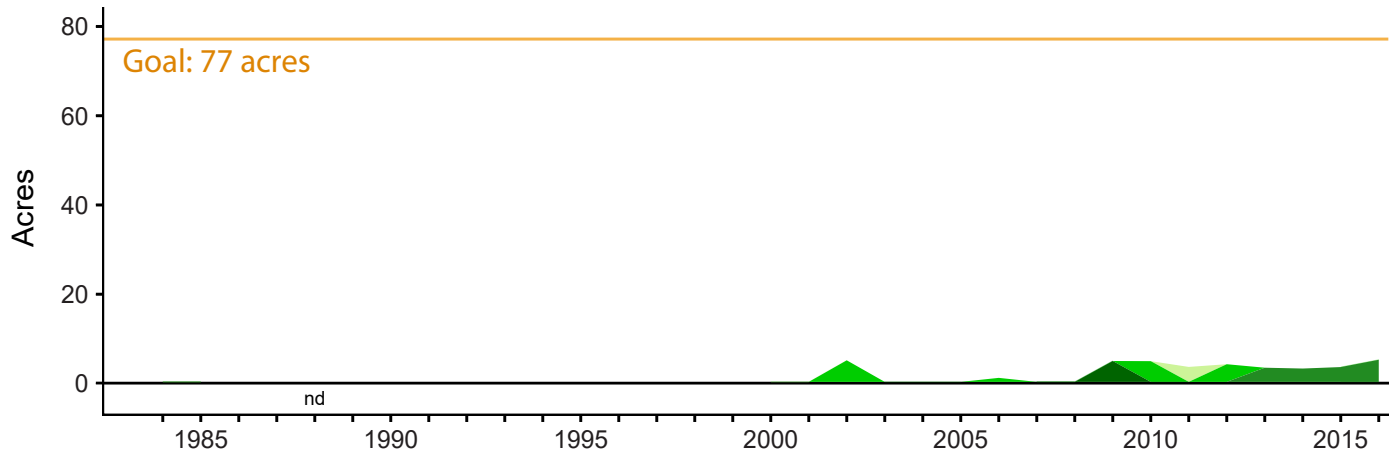
Submerged aquatic vegetation (SAV) is present but sparse in the upper Tangier Sound.

Executive Summary

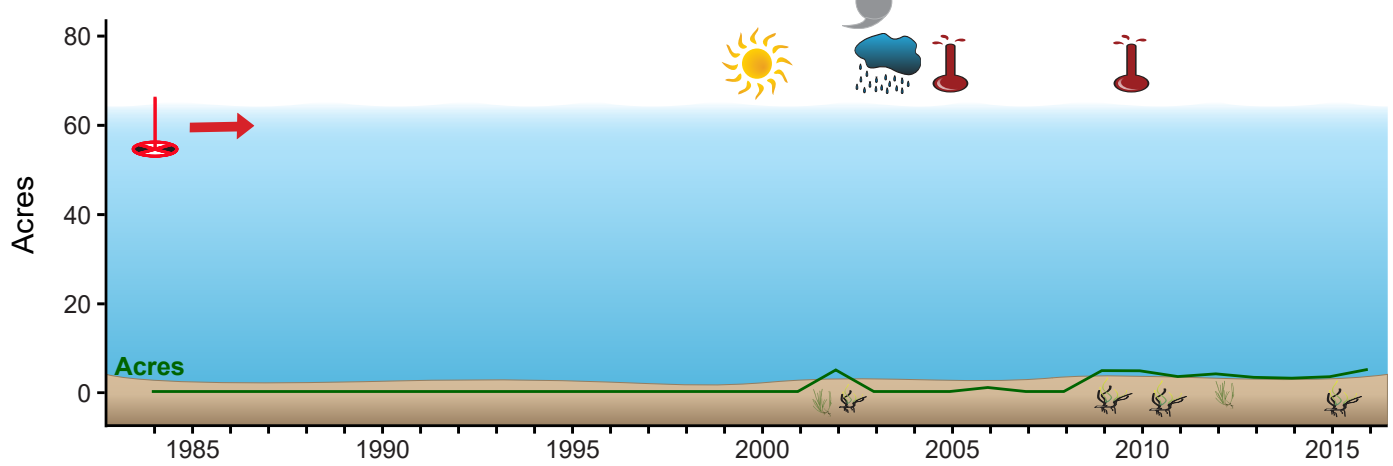
SAV was not mapped in the upper Tangier Sound until 2002 and it has remained sparse throughout the Chesapeake Bay-wide aerial survey. Species present include eelgrass and widgeongrass.

SAV Acres and Density

Density 1-10% 10-40% 40-70% 70-100%



Picturing Change Over Time in the Upper Tangier Sound



Key

	Hurricane Isabel 2003		Heat Events 2005, 2010		Eelgrass
	Drought 1998-2002		Poor Water Clarity		Widgeongrass
	Wet Period 2003-2004		Ongoing Event		

Goal - Potentially Attainable

The SAV goal of 77 acres has never been reached here but is attainable if water quality can be improved.

Historical Coverage

Historical coverage not well known

There are no known historical records for this segment but it's entirely possible eelgrass and widgeongrass were present through the 1960s based on their presence in adjacent segments. Very sparse SAV beds have been reported from this segment only since 2002.

Key Events

Tropical Storm Agnes

Because eelgrass and widgeongrass may have been present in the upper Tangier Sound in the 1960s, we can conclude that if SAV was present at the time Tropical Storm Agnes passed over the Bay in 1972, any remaining traces of it were eradicated with that extreme weather event.

Vulnerability/Resilience

Water clarity

It may be possible for SAV, particularly widgeongrass, to colonize more areas than currently found. This can only occur if improvements in water clarity are made. In the upper reaches where the water is only slightly salty or fresh, it may be possible for freshwater species to become established.

Management Implications

Nutrient and sediment reductions

Managers will need to focus on improving water clarity by reducing both sediment and nutrient pollution, and concentrating restoration efforts in the shallow water habitat of the upper Tangier Sound.

References

Stevenson and Confer 1978; Orth and Moore 1983, 1984; Moore et al. 2000, 2004; Orth et al. 2010a, 2010b, 2017; Patrick and Weller 2015; Lefcheck et al. 2017, 2018

www.vims.edu/bio/sav/SegmentAreaChart.htm (abundance data)

www.vims.edu/bio/sav/maps.html (species information)

www.eyesonthebay.org (Maryland water quality data)