

A MANAGEMENT PLAN FOR THE ST. MARY'S RIVER OYSTER RESTORATION AND FISHERY

Prepared by the St. Mary's River Watershed Association

NOVEMBER 1, 2016

MISSION STATEMENT

To protect the shellfish sanctuary as currently designated, to promote the sustainability of a thriving oyster population that provides sufficient ecological services to delist the St. Mary's River from the EPA's 303d list of impaired rivers, to continue to support ongoing research and restoration, and to support a well-managed fishery downstream of the sanctuary including both aquaculture and open harvest.

GOALS AND OBJECTIVES

- Protect and restore the shellfish sanctuary at its current boundaries and size of 1304 acres.
 1. Designate the St. Mary's River oyster sanctuary for restoration using federal dollars as one of five tributary sanctuaries to be restored by 2025 under the Bay TMDL requirements.
 2. Continue to support NGO- and institutionally-led restoration and research projects where complementary with federal and state restoration activities.
 3. Terminate the aquaculture permitting program within the sanctuary in order to maximize the restoration acreage available to the federal and state restoration activities.
 4. Grandfather existing aquaculture leases that conform to current regulatory requirements and terminate any that fail to adhere to their operational plan or state regulation.
- Increase opportunities for aquaculture within the St. Mary's River downriver from the sanctuary.
 1. Beginning in 2017, designate thirty acres each year of unproductive bottom conducive to aquaculture for aquaculture.
 2. Permit only Maryland residents and businesses to operate these lease areas.

JUSTIFICATION

Maryland's sanctuaries were expanded from 8% to 24% of productive bottom in 2010. The newest sanctuary areas established were specifically targeted to:ⁱ

- Facilitate development of natural disease resistance – the long-term strategy for restoring oysters;
- Protect about half of the Bay's most productive oyster grounds ("best bars") as determined by an analysis of Fall Survey data compiled from 1996 to 2007;
- Have high restoration potential based on water quality and other factors;
- Provide essential natural ecological functions that can not be obtained on a harvest bar;
- Serve as reservoirs of reproductive capacity, generating larvae to populate other areas, including public shellfish fishery areas;
- Provide a broad geographic distribution across all salinity zones;
- Increase our ability to protect these important areas from poaching.

Investment has happened in the St. Mary's River before and since the sanctuary was designated on October 1, 2010. An enormous amount of **human resources and dollars have been invested in restoring this river** and St. Mary's College of Maryland utilizes this sanctuary as a research opportunity for professionals and students.

- More than \$3 million in federal and state dollars were invested in water quality data collection and assessment through the ten-year St. Mary's River Project 1998-2007.
- In 2009, the St. Mary's River joined the Marylanders Grow Oyster program and has planted year-old spat in five locations within the St. Mary's River oyster sanctuary.
- In 2012, the St. Mary's River Watershed Association, in partnership with Leonardtown Rotary and St. Mary's College of Maryland, began a five-year restoration project on 5 acres adjacent to the college waterfront. This innovative project seeks to create reefs of concrete that mimic the historic oyster reefs of the early 1600s. Thirty eight reefs are installed to within one foot of mean low water—some of these reefs over six feet in height. Varying treatments and spat plantings support ongoing research by students and professionals. To date more than 1000 volunteers have contributed labor, over 35 million spat have been planted, and more than \$254,000 has been spent creating this vibrant habitat. What was a 95% barren mud bottom in 2011 is now a thriving diverse habitat with indisputable ecological and reproductive benefits.
- The St. Mary's River Watershed Restoration Action Strategy (2012-1016)ⁱⁱ calls for the restoration of oysters and the protection of sanctuaries in order to achieve significant gains in water quality so the St. Mary's River can be de-listed under section 303(d) of the Clean Water Act.

Ecological gains are quite apparent and development of **disease resistance** is encouraging.

- Evidence suggests that oysters are living longer within the sanctuary and may have developed some resistance to Dermo. Recruitment of these survivors to down river locations spreads disease resistance and increases biomass throughout the river system.
- Excellent spat strikes every year since 2012 indicates that the biomass of adult oysters has increased significantly and bars are populated with multi-class oysters.
- Significant recruitment into the lower river is supported by a seven-fold increase in the public harvest from 2009 to 2015. The sanctuary area is less than 15% of the river's total area.
- Water clarity has increased significantly with residents publically commenting and commending the sanctuary and restoration work. For the first time in more than two decades clarity readings exceeded three meters in October 2014 (2.9 meters in October 2015).
- Recreational fishing for white perch, bluefish, and rockfish has improved greatly in the upper half of the river over the past four years.

Opening the sanctuary to oyster harvesting would destroy much of what has been accomplished to date and severely restrict research opportunities.

ⁱ Maryland Department of Natural Resources web site "Sanctuaries—Current Maryland Oyster sanctuaries; <http://dnr2.maryland.gov/fisheries/Pages/oysters/sanctuaries.aspx> (accessed November 1, 2016).

ⁱⁱ St. Mary's River Watershed Restoration and Action Strategy (2016) and St. Mary's River Watershed Plan (2012), St. Mary's River Watershed Association and the Center for Watershed Protection: <http://www.smrwa.org/wras.html> (accessed November 1, 2016).