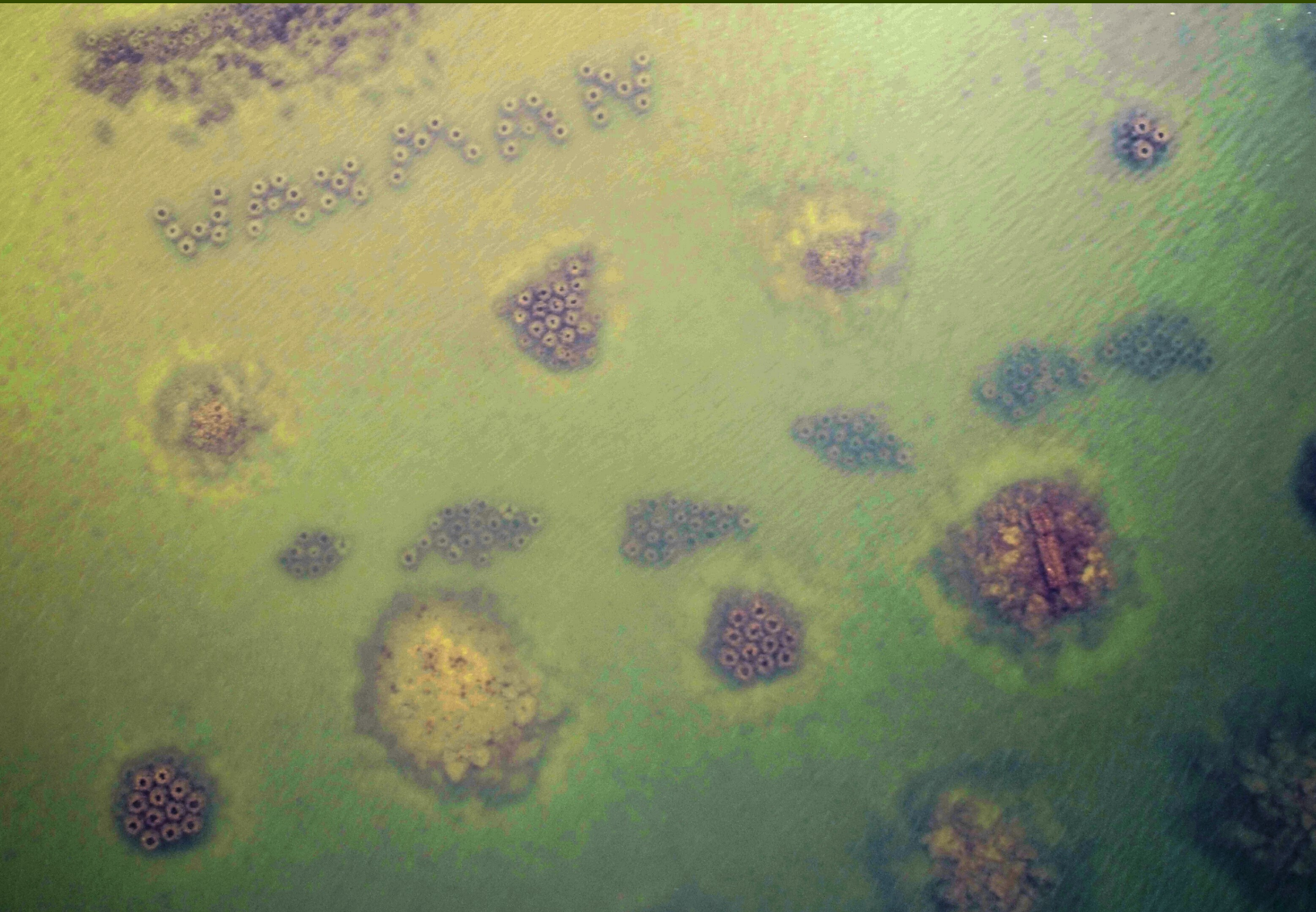




# 2020 Year in Review & Action Plan 2021



Our Mission: To **Protect, Improve,** and **Promote** the sustainability of the St. Mary's River Watershed through the collaborative efforts of economic, agricultural, environmental, social, cultural, and political stakeholders in the community.

# Our 2020 Successes

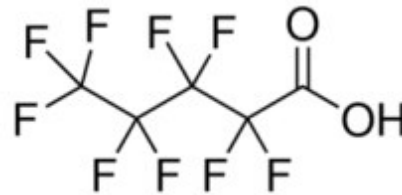
Thanks to members like you, the St. Mary's River Watershed Association was able to maintain our programming, credibility, and effectiveness in 2020, despite the limitations posed by the COVID pandemic. Our successes are your successes because it is you who provide the moral and financial support that make this all possible. Your generosity is greatly appreciated!

## Monitoring Spatfall and Water Quality

- ⇒ 2020 marked our third year studying oyster recruitment throughout the tidal St. Mary's.
- ⇒ Spatfall was best this year, especially in the waters north of Priest Point. High spat mortality occurred at Long Point, likely a result of the persistent August algae bloom.
- ⇒ Spatfall is highest in areas where oyster density is high, such as the sanctuary.
- ⇒ Information on spatfall helps watermen decide how they might enhance the public wild harvest, and adds to the body of science on larval drift.
- ⇒ This study is contracted by the Department of Natural Resources to our partner, St. Mary's College of Maryland.



## SMRWA Tests Oysters for PFAS Chemical



Perfluoropentanoic Acid (PFPeA) detected in St. Mary's River oysters—at a concentration level of 1.1 ng/g.

- ⇒ Concern over “forever chemicals” was heightened at a March 4 public meeting hosted by the Navy. Fire fighting foams used on Base are the primary source.
- ⇒ PFAS are long chain fluorinated compounds that persist in the environment and accumulate in our bodies. Health impacts such as infant birth weight, cancer, thyroid disruption, and depressed immune response are associated with PFAS in our bodies.
- ⇒ The EPA does not regulate PFAS compounds; many states are rushing to fill this void.
- ⇒ SMRWA launched a PFAS pilot study to test waters and oysters in the St. Mary's River and Breton Bay.
- ⇒ On their website, Maryland Department of the Environment stated that levels of PFAS detected in St. Mary's oysters is not a health concern.
- ⇒ Health effects from trace amounts of PFAS chemicals is an emerging science.



## Future Bay Leaders + Summer Interns

- ⇒ Due to the pandemic, we kept our summer team small and worked outside, used face coverings, and distanced at all times.
- ⇒ Each intern learned skills applicable to life situations as well as gained experience in a field directed toward their future professions. Each gained knowledge on how to be a successful advocate for the Bay.



- ⇒ Interns deployed 323 reef balls on our five-acre oyster reef project site, made an additional 273 balls for deployment in 2021, and planted 100,000 oysters in Breton Bay.



## Oyster Restoration in St. Mary's River

- ⇒ Maryland is restoring oysters in five tributaries including the St. Mary's River.
- ⇒ Wild oysters were harvested from the St. Mary's sanctuary (photo above) to use as brood stock at the state hatcheries.
- ⇒ COVID restrictions halted state-led restoration activities for the year except for a one-acre area seeded with 385,000 year-old spat grown by the Association.
- ⇒ Of the hundred-plus millions of larvae produce by our brood stock, just 8 million larvae were returned to our river through our shore side oyster nursery and subsequent planting.



## Persistent August Algae Bloom

- ⇒ Too much rain caused a huge algae bloom lasting three weeks in August.
- ⇒ Sadly, about 100 fish died in Horseshoe Bend due to lack of oxygen from the algae bloom.



# Top Challenges for 2021

## Finding Safe Ways to Engage Youth

- ⇒ 2021 will likely begin with continued COVID precautions and ongoing restrictions in schools. We have proposed in-school field trips to engage students out-of-doors making reef balls in school parking lots. Students will learn about Chesapeake Bay health and the importance of oysters in the ecosystem.

## Working with Our Local Watermen

- ⇒ We will continue the study of spat recruitment in the St. Mary's River and provide useful data and recommendations for enhancing the local wild harvest.
- ⇒ We will continue to assist homeowners installing rain gardens, under dock oyster reefs, and greening their lifestyles.

## Informing the Public on PFAS

- ⇒ We will publish a guide to PFAS in St. Mary's on our website providing the public with information on how they can reduce their exposure to these toxic chemicals.
- ⇒ We will continue to assist the public in testing their drinking water. We will advocate for federal regulations and state advisories on the health impacts from PFAS in food—particularly in seafood.

## Oyster Restoration & MGO

- ⇒ Our MGO program will continue to support more than 160 volunteers hosting 600 oyster cages at about 100 piers along the St. Mary's River.
- ⇒ We will continue to support the Breton Bay and St. Clements Bay MGO programs through our formal partnership with Friends of St. Clements Bay.

## Sharing Our St. Mary's River

- ⇒ Recreation on the St. Mary's River is a safe alternative to land-based activities during the pandemic.
- ⇒ Access to the river is free at St. Mary's College of Maryland (kayaks & paddleboards) and at the Piney Point county boat ramp. Access is also available for a fee at Dennis Point Marina. Let's all get out and have fun!

Thank you for your support and dedication as a member of the St. Mary's River Watershed Association.

COVER PHOTO: A bird's eye view of part of the five-acre oyster reef restoration project where there are over 1000 reef balls installed in mounds and planted with oysters. Photo courtesy of the University of Maryland UAS Test Site in California, Maryland.

