

#### A Chesapeake Bay Reminder

"There is but one entrance by sea into this country, and that is at the mouth of a very goodly bay ... Within is a country that may have the prerogative over the most pleasant places known, for large and pleasant navigable rivers, heaven and earth never agreed better to frame a place for man's habitation ..."

"... the fish were so thicke, we attempted to catch them with frying pans."

Oysters "lay as thick as stones."

Captain John Smith









2018 State of the Bay Health Index



Z			<b>-5</b>	F
0	Phosphorus	19	-9	F
OLLUTI			+2	C
	Water Clarity	16	-4	F
Ь				D



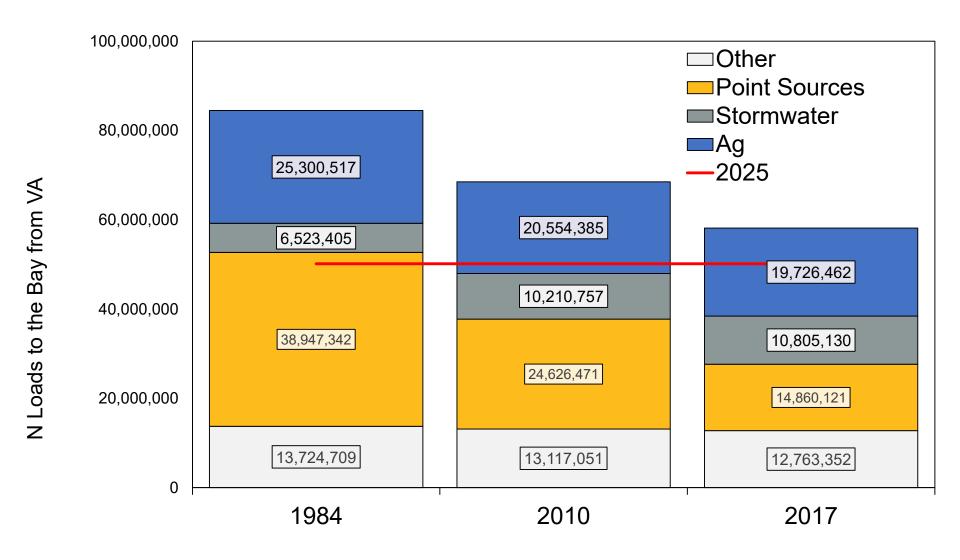
# Chesapeake Bay TMDL & WIPs: Clean Water Blueprint 2010-2025

- Goal: Reduce N, P, S in Bay waterways to achieve WQS
- Time frame: 15 years to 2025
- Reasonable Assurances: States' WIPs 2010, 2012, 2018
- Accountability: 2 year Milestones, evaluate performance,
   2017 Midpoint Assessment: Changes (e.g., Model 6.0)
- Adaptive Management: Programs (fix, accelerate, etc.)
- EPA Backstops



- Chesapeake Bay Preservation Act, erosion & sediment rules
- Wastewater treatment upgrades
  - WQIF & local match
  - Watershed general permit for significant dischargers
- Nutrient & sediment trading
- P-ban for labelled lawn maintenance fertilizer
- Agriculture
  - Virginia Agricultural Cost Share (VACS) Program
  - Resource management plan (ag certainty) program
- Stormwater Management
  - Municipal separate storm sewer system program
  - VSMP programs
  - Stormwater Local Assistance Fund (SLAF), utility programs







#### VIRGINIA'S 2017 MIDPOINT PROGRESS TOWARD POLLUTION REDUCTIONS

By 2017, practices should have been in place to achieve 60 percent of the 2025 pollution reduction goals. Here's a look at how Virginia performed.

Key

		Nitrogen	Phosphorus	Sediment
	Agriculture			
\/Δ	U&S Polluted Runoff <sup>†</sup>			
VIRGINIA	Wastewater & CSO <sup>††</sup>			N/A*
	ALL SOURCES			

#### Key

	Did not aohieve	ske	No contribution from this source sector
	Within 5% of achieving	†	Urban & Suburban
	Aohieved	††	Combined Sewer Outflow



#### NITROGEN

**12 /** (-5 from 2016)

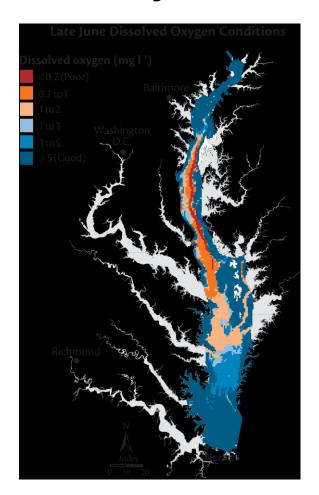
#### PHOSPHORUS

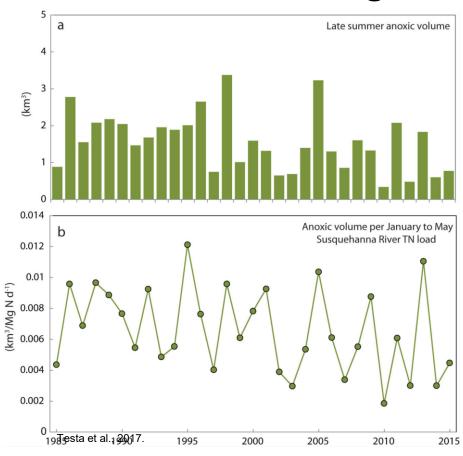
**19 /** (-9 from 2016)



2018 State of the Bay Indicators

#### The Bay's summer dead zone is decreasing in size









#### DISSOLVED OXYGEN

**42** (+2 from 2016)

## 2016: Record Water Clarity observed in some locations that had not been seen in decades













# HABITAT

			8
Wetlands	42	0	0
Underwater Grasses	25	+1	D
Resource Lands	33	+1	D+



Report Card: Habitat



#### FOREST BUFFERS

**57** (no change from 2016)



2018 State of the Bay Indicators



The Keystone 10 Million Trees Partnership is a collaborative effort of national, regional, state, and local agencies, conservation organizations, outdoors enthusiasts, businesses, and citizens committed to improving Pennsylvania's communities, economy, and ecology.





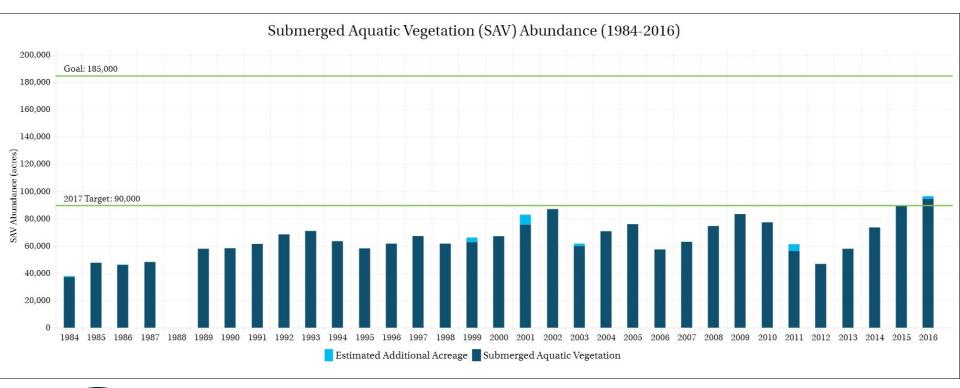
#### WETLANDS

**42** (no change from 2016)





# Submerged Aquatic Vegetation (SAV) is recovering across the Bay





### UNDERWATER GRASSES

25 > (+1 from 2016)



2018 State of the Bay Indicators



#### RESOURCE LANDS

33 D + (+1 from 2016)



2018 State of the Bay Indicators



# **FISHERIES**

			A-
Blue Crabs	55	0	8
Oysters	10	0	F
Shad	10	-1	F



Report Card: Fisheries



#### ROCKFISH

**66 A** – (no change from 2016)



# OYSTERS 10 F (no change from 2016)



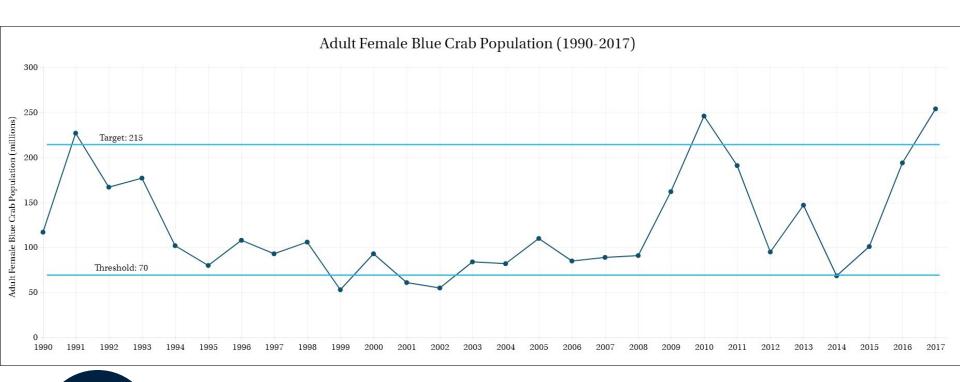


The Chesapeake Oyster Alliance is a multi-year effort designed to spark governmental action, public attention, and funding to accelerate ongoing oyster restoration efforts in the Chesapeake Bay. The ambitious goal of this collaborative effort is to add 10 billion new oysters by 2025 in Virginia and Maryland waters.





#### Blue crab abundance is improving







### BLUE CRABS

**55** (no change from 2016)





SHAD **10** F (-1 from 2016)



