

TALBOT
PRESERVATION
ALLIANCE



Protecting Talbot County

www.talbotpreservation.org

Our Mission: To protect the unique environment and heritage of Talbot County—its waterways, farmland and historic small towns

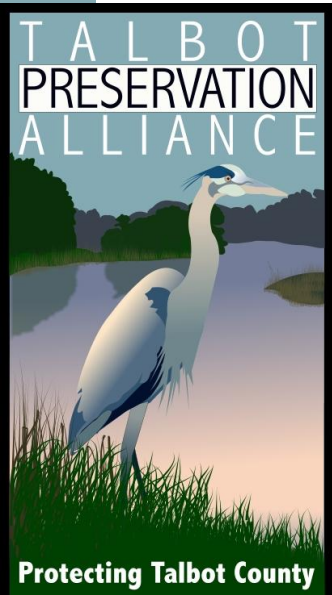
Thank you for your support!

OUR DYING RIVERS

Facts • *Fiction* • FERTILIZER

Why are all of our waterways
impaired?

How you can help save our rivers.





The Clean Water Act of 1972

1. Identify "impaired" waters,
2. Find the reason they are impaired
3. Clean them up

Original Goal for Clean Up

1983



Clean Water Act

Critical Area Law

Chesapeake Bay Program

Chesapeake Bay Foundation Lawsuit

Lawsuit Settled

1972

1982

1987

2008

2010

2011

EPA Provides Chesapeake Bay TMDLs

(Total Maximum Daily Load)

Talbot County Responsible for WIP

(Watershed Implementation Plan)

Total Maximum Daily Load (TMDL)

- ◆ Specific limit for nutrients discharged into the water each year (Lbs/Yr)
- ◆ Required under the federal Clean Water Act
- ◆ Mandated in 1972
- ◆ Established by the Federal Government



Watershed Implementation Plans (WIPs)

- ◆ Each County's plan to cut Nutrients (Nitrogen and Phosphorus) to meet TMDL requirement
- ◆ WIPS required by EPA, via Maryland Department of Environment
- ◆ Talbot County WIP now under development



Dead Zone in Chesapeake Bay Is One of the Worst Ever

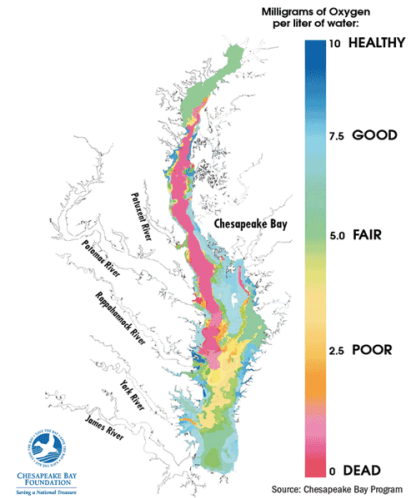
By WAMU 88.5 | Saturday, Aug 13, 2011 |

Scientists say a massive 1,200-square-mile dead zone growing in the Chesapeake Bay may be one of the Bay's five worst ever.

When **nutrient pollution** washes into the Bay – we're talking lawn fertilizer, agricultural manure, sewage output, storm water – it fuels massive algae blooms visible from the air. The algae dies, sinks to the bottom, and bacteria break it down, sucking up all the oxygen from the water. The result – a massive region at the bottom of the Bay where the water smells like rotten eggs and nothing grows.

CHESAPEAKE BAY RECORD DEAD ZONE

AUGUST 2005



Pollution Soars in Eastern Shore River While Falling Elsewhere. Why?



Pollution levels are not heading in the right direction for the largest river on Maryland's Eastern Shore.

A new study by the U.S. Geological Survey of nine major Chesapeake Bay tributaries found that the Choptank River was the only of these big waterways to see large increases in

nitrogen pollution over the last three decades.

Nitrogen up in Choptank watershed stardem.com

Story Commenting

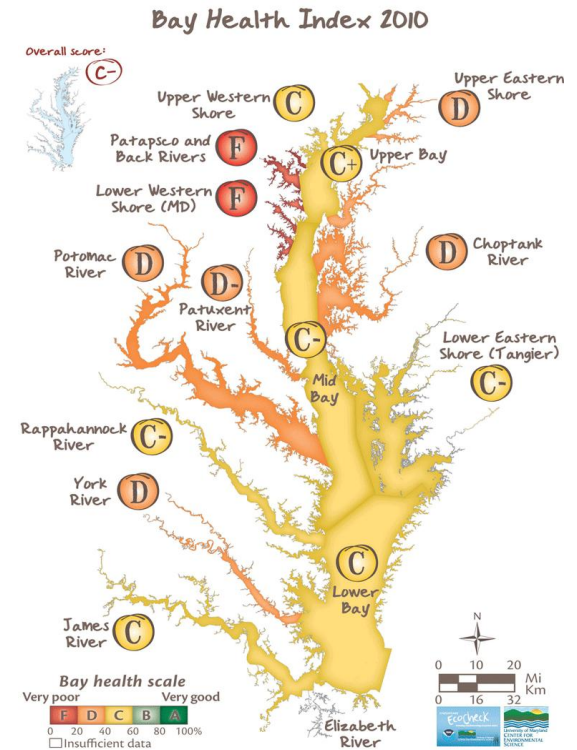
Share Print Font Size: - +

Posted: Wednesday, September 22, 2010 1:00 am | Updated: 9:29 am, Wed Sep 22, 2010.

By KELLEY L. ALLEN Staff Writer | 0 comments

GREENSBORO A study released last Wednesday shows that nitrogen levels in the Choptank watershed increased 53 percent from 1978 to 2008.

The U.S. Geological Survey is studying the amount of nutrient pollution that enters the Chesapeake Bay each year, and the results will help policymakers determine steps for pollution reduction.





Nutrients (Nitrogen and Phosphorus) Effect on Our Rivers



Letter to the Editor

Save the Bay! Enough

Star Democrat, The (Easton, MD) - Wednesday, August 24, 2011

I came to the Eastern Shore 32 years ago and have continuously heard the constant drone of Save the Bay. There have been many folks in Congress and the Bay hasn't been saved. Lots and lots of money has been spent with the usual lack of results.

I do not claim to have an education in marine biology; however, I do know this. We bought a boat in 1979 and crabbed for 28 years in the Choptank River. When we started, we could see the bottom and watch every crab come up on the line. When we made our last trip four years ago, what was on our line became evident when the object broke the water. We could see nothing!

██████████,

Denton



OUR DYING RIVERS

Facts

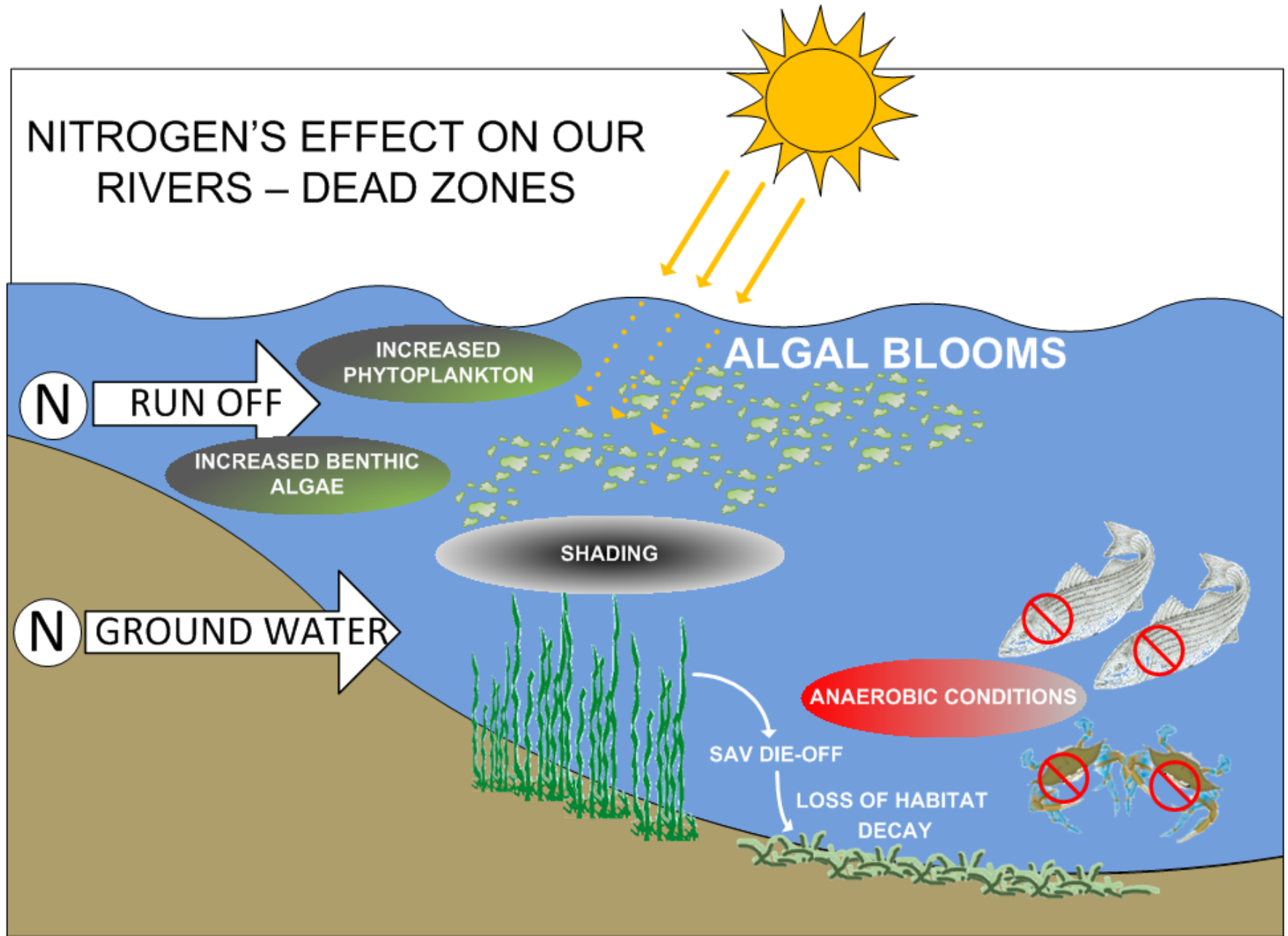


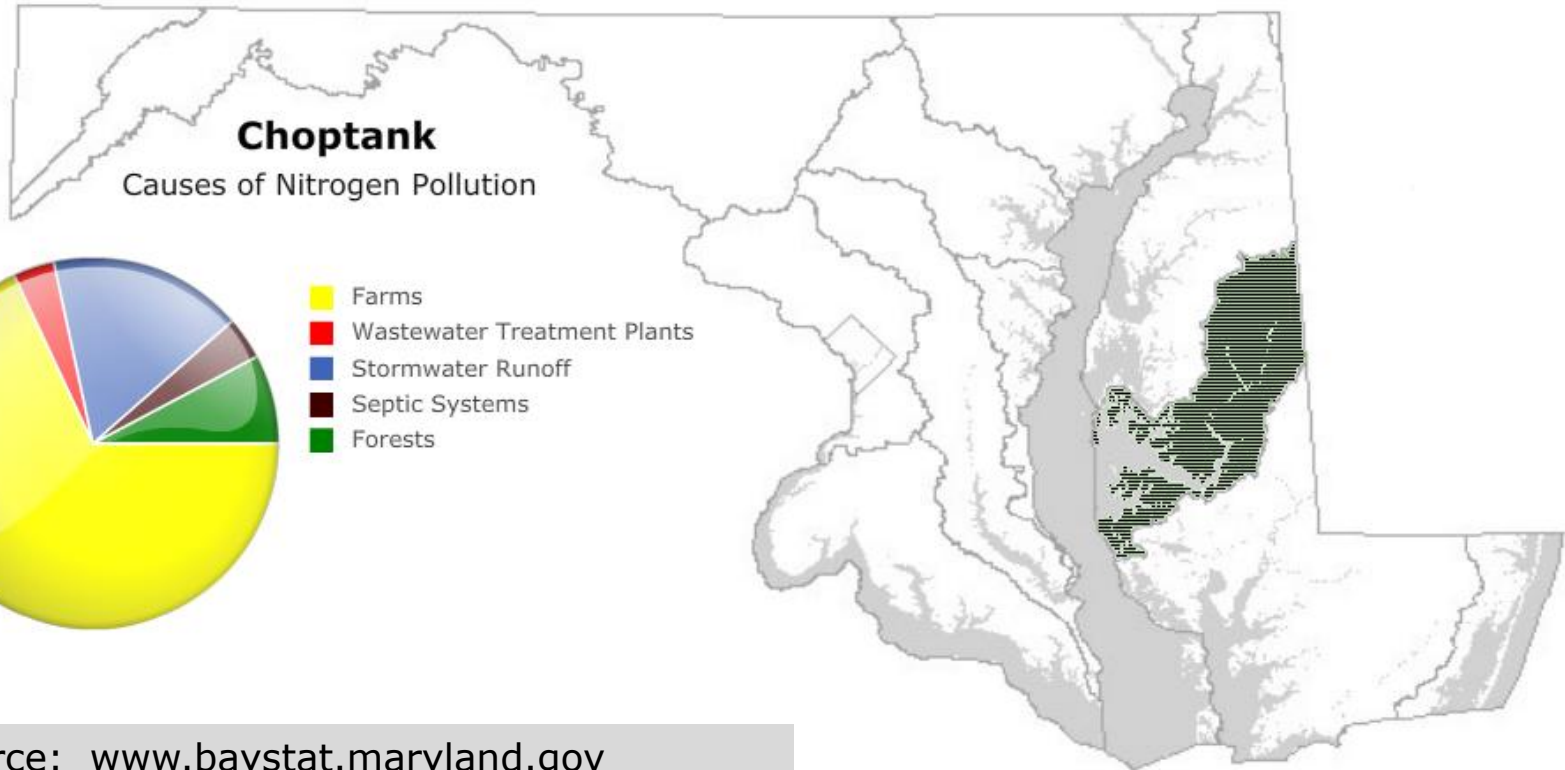
Why is Nitrogen a problem?

- ◆ EPA has identified Nitrogen as a major cause of our dying rivers
- ◆ EPA has set a limit (TMDL) for Nitrogen entering Talbot County rivers



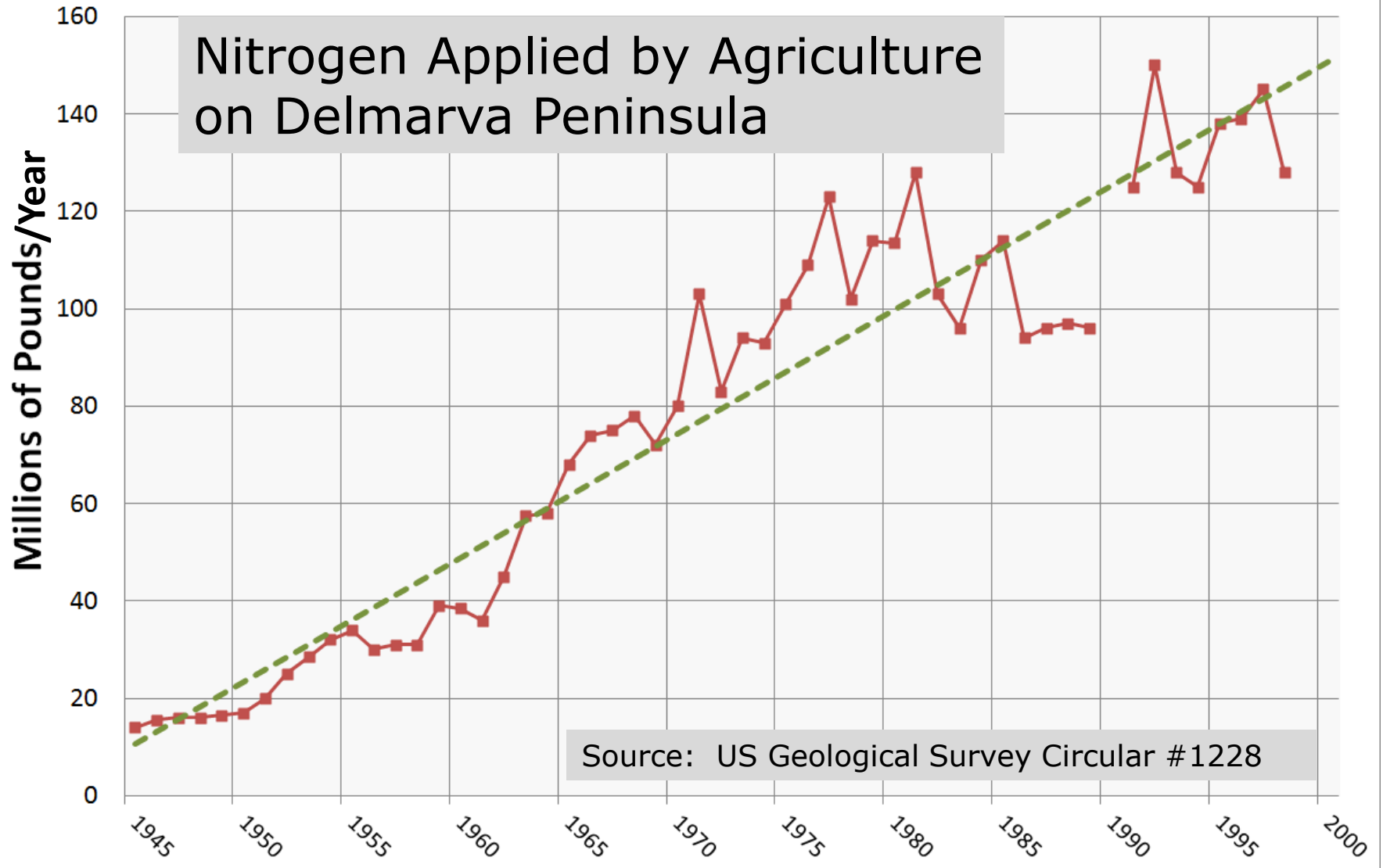
NITROGEN'S EFFECT ON OUR RIVERS – DEAD ZONES





68% of total Nitrogen in the Choptank Watershed comes from agriculture - 2,400,000 lbs per year

Nitrogen Applied by Agriculture on Delmarva Peninsula



Source: US Geological Survey Circular #1228






OUR DYING RIVERS

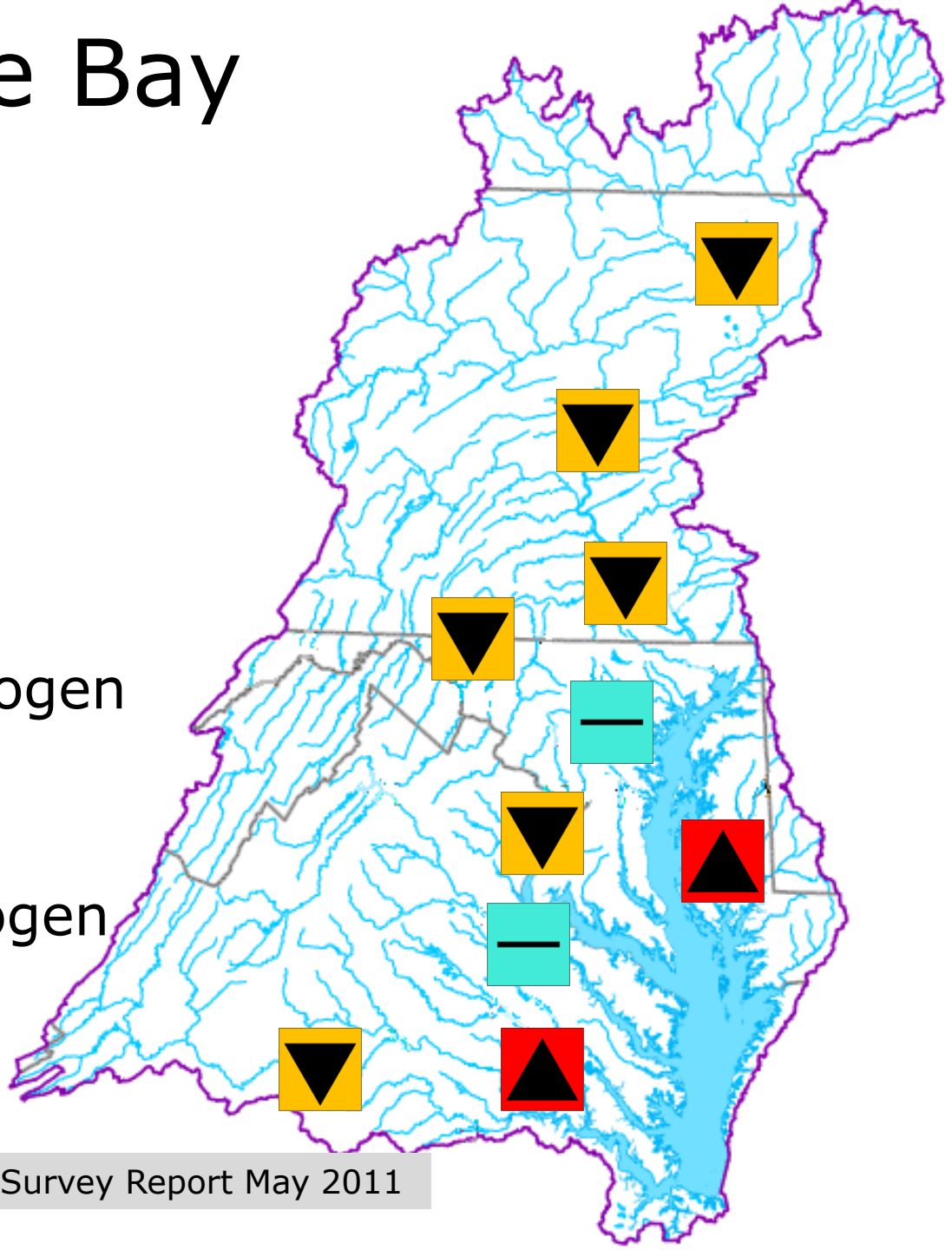
Fiction



Chesapeake Bay Watershed

Nitrogen Trend 1985-2009

-  Decreasing Nitrogen
-  No Change
-  Increasing Nitrogen



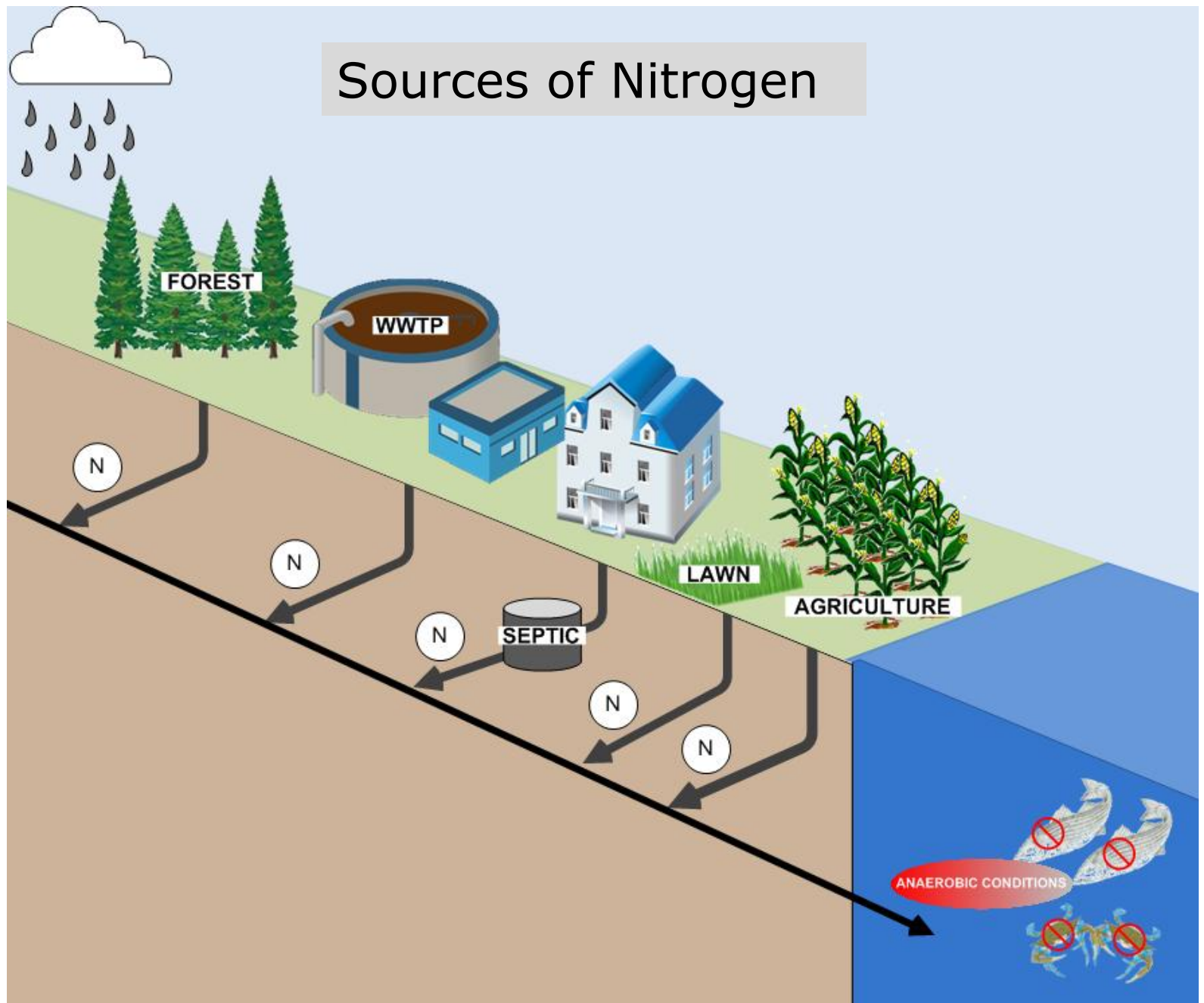
Source: US Geological Survey Report May 2011

OUR DYING RIVERS

FERTILIZER



Sources of Nitrogen



Nitrogen Inputs into Talbot County Rivers

Nitrogen (Millions of Lbs/Yr)

1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0

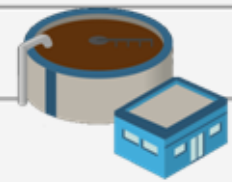
Forest

WWTPs

Septic

Lawns

Row Crop



**IT'S THE
FERTILIZER!**



How did we get here?



Bi-Partisan Political Cowardice and Denial:

“Most of our pollution is caused by migrations from coal fired plants in Ohio”

“We can only have a statewide cure, because our problems come from the Susquehanna and other Western Shore rivers and wastewater plants”

“Our efforts are succeeding, and the Choptank River actually is improving”



Contradictory Programs and Regulations - Federal

USDA: Promotes and Subsidizes corn production

Vs.

EPA: Reduce negative environmental impact from corn
production

Congress:

\$18M “Study” on sources of algae



Contradictory Programs and Regulations - State

Buffers

New Residential: 200 Ft

Agricultural Fields: 25 Ft

Existing Residential: 10 – 15 Ft “fertilizer” buffer



“Nibbling” Around the Edges

Oyster bags

Tree planting

“Soft” Shorelines

Storm water retrofit



We can save our
rivers.



STOP

Fertilizing Your Lawn

MAINTAIN

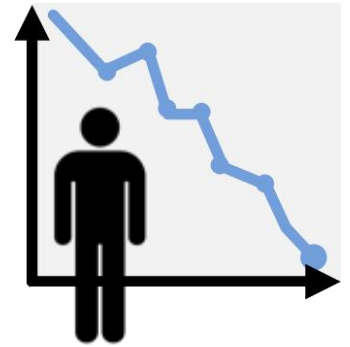
Your Septic System

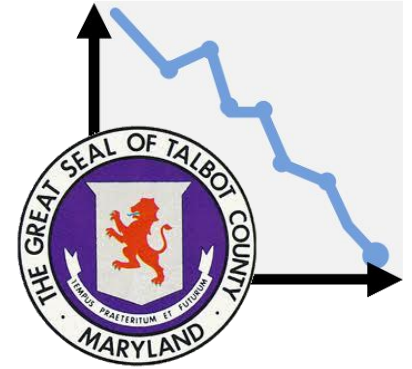
CHOOSE

Diversified Local Agriculture

PARTICIPATE

County WIP Development





BUFFERS

Mandate 60ft agricultural Buffer

Improve agricultural/roadside ditch buffers

BAN LAWN FERTILIZER

Lobby to amend state law

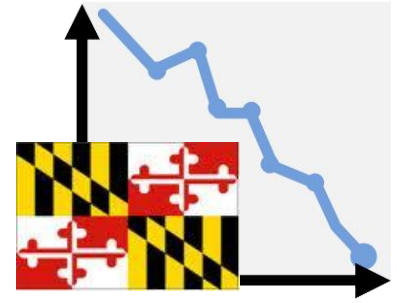
INCENTIVES

Maintenance of septic systems

EXTEND SEWER LINES

For failing septics on existing lots





COVER CROPS

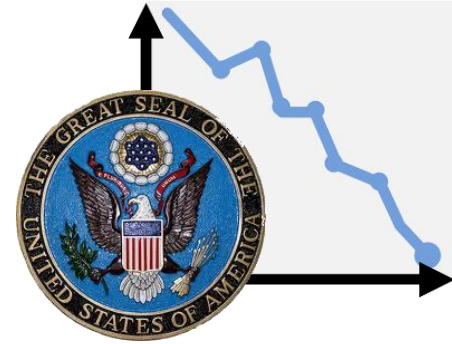
Mandate Traditional Cover Crops

AMEND COUNTER-PRODUCTIVE REGULATIONS

200 Ft Vegetative Buffer

Permit County fertilizer regulation





Federal Farm Policy

Re-direct agricultural subsidies
from corn agriculture to less
polluting forms of agriculture



Facts

Talbot County rivers are not improving

Fiction

The nitrogen comes from somewhere else

FERTILIZER

It's the Fertilizer!

