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Chesapeake Bay Developments: Moving the Ball or the Goal Line?

2021 PA Farm Show Agricultural Law Symposium

January 14, 2021

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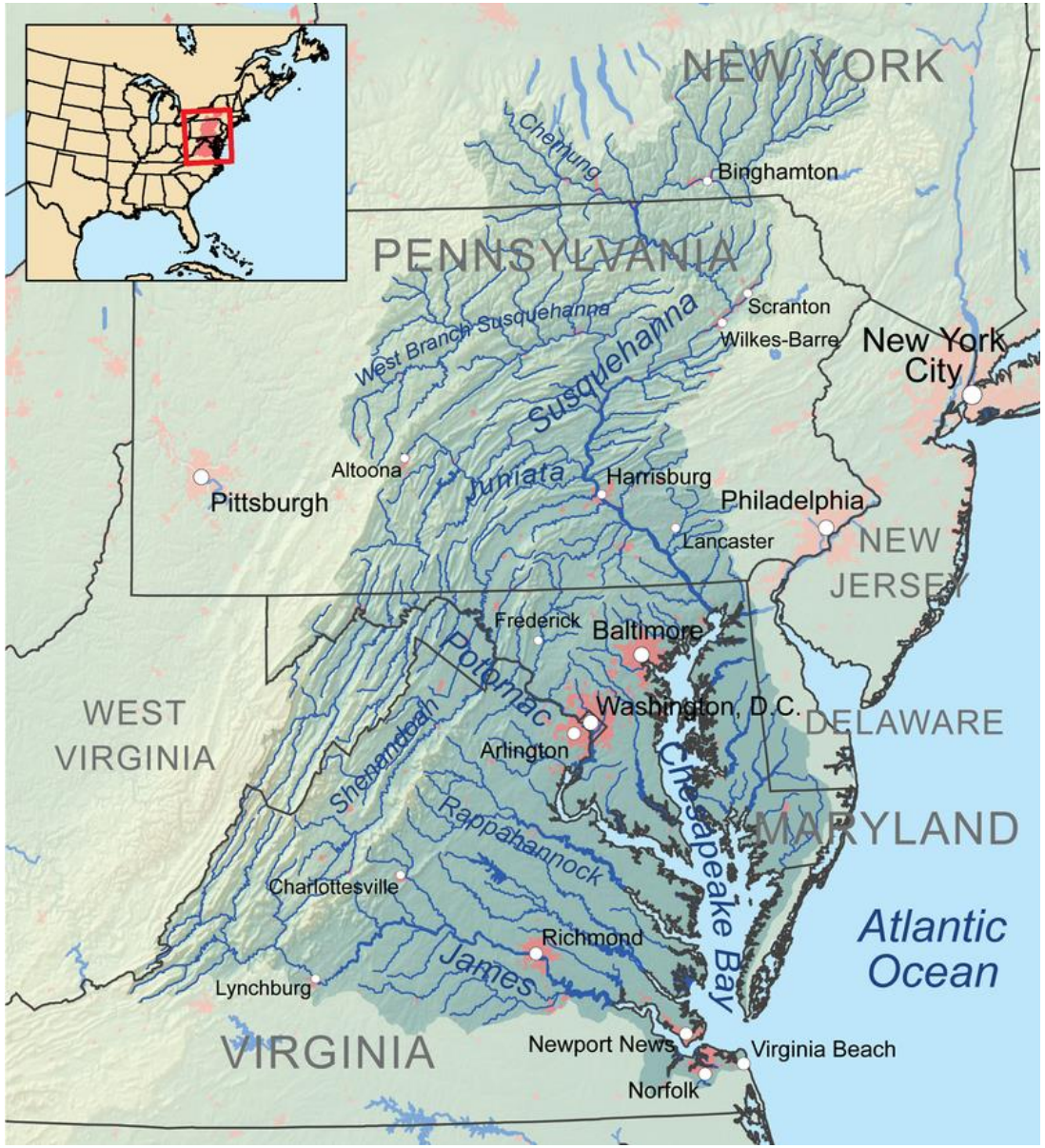
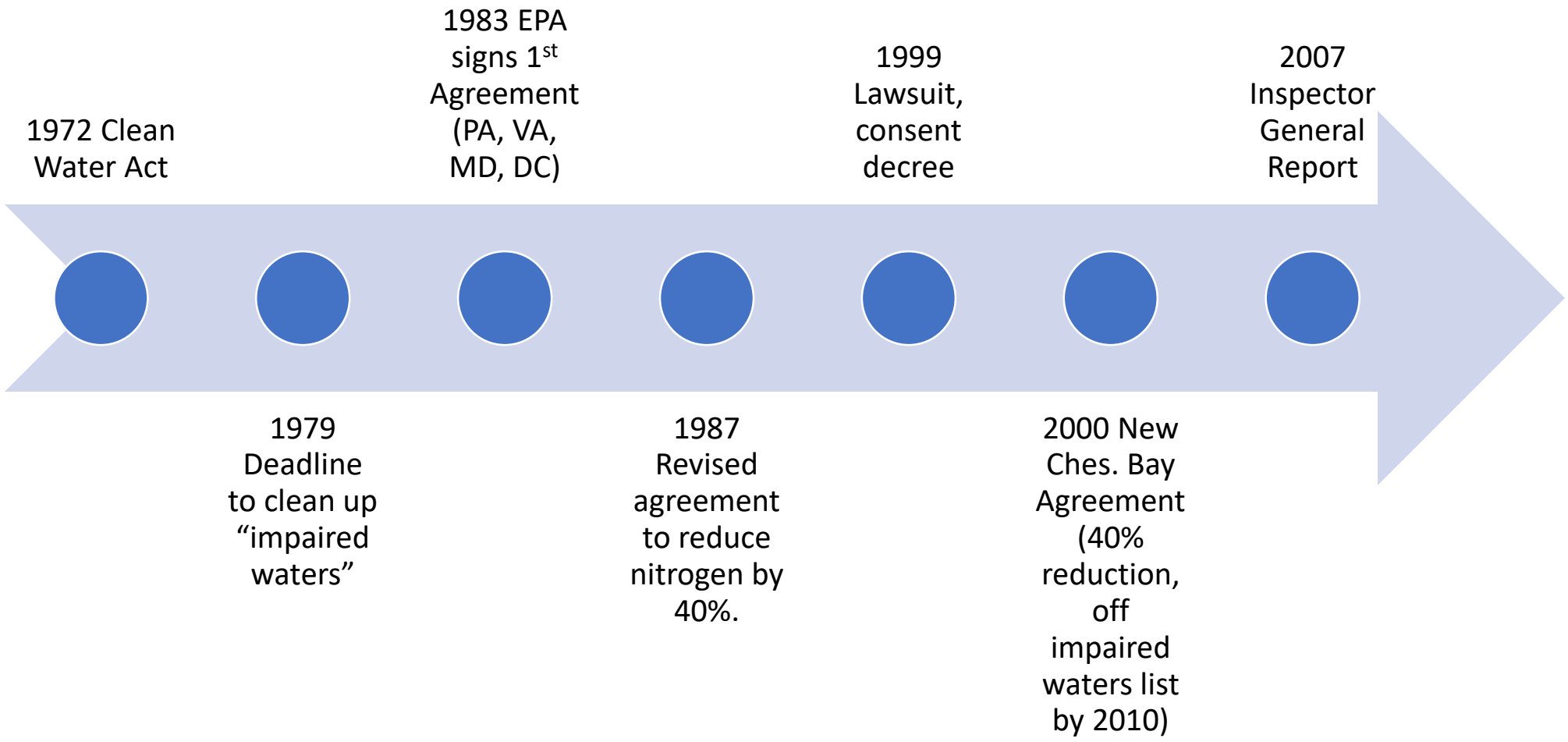
- Asst. Director for Outreach & Engagement, Penn States Institutes of Energy and the Environment
- Affiliate Faculty, Penn State School of International Affairs
- Executive Committee, Chesapeake Bay Scientific & Technical Advisory Committee (STAC)

Work to restore the Chesapeake Bay = significant set of ecosystem restoration “projects” over a long time period

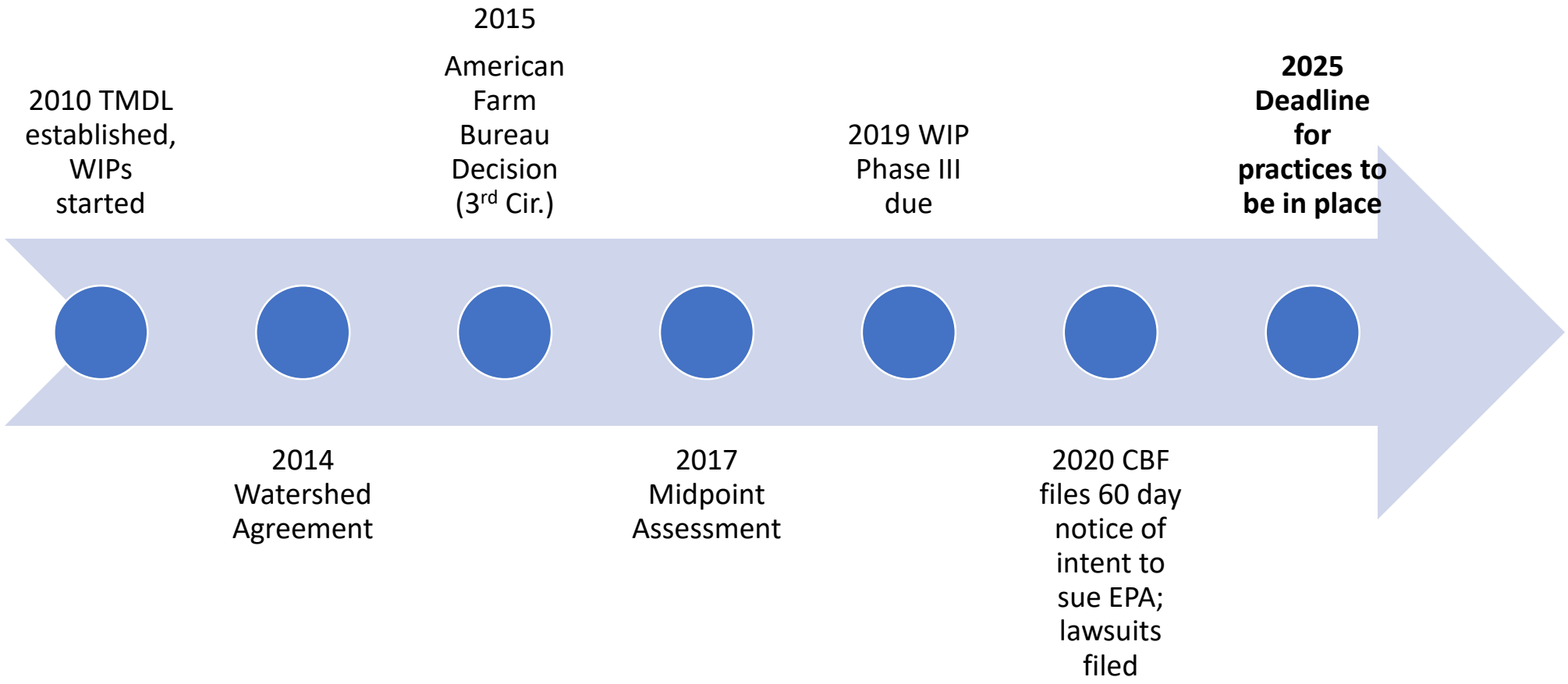


"Chesapeake watershed map" by Kmusser - Own work, Elevation data from SRTM, hydrologic data from the National Hydrography Dataset, urban areas from Vector Map, all other features from the National Atlas.. Licensed under CC BY-SA 3.0 via Wikimedia Commons - http://commons.wikimedia.org/wiki/File:Chesapeakewatershedmap.png#/media/File:Chesapeakewatershedmap.png

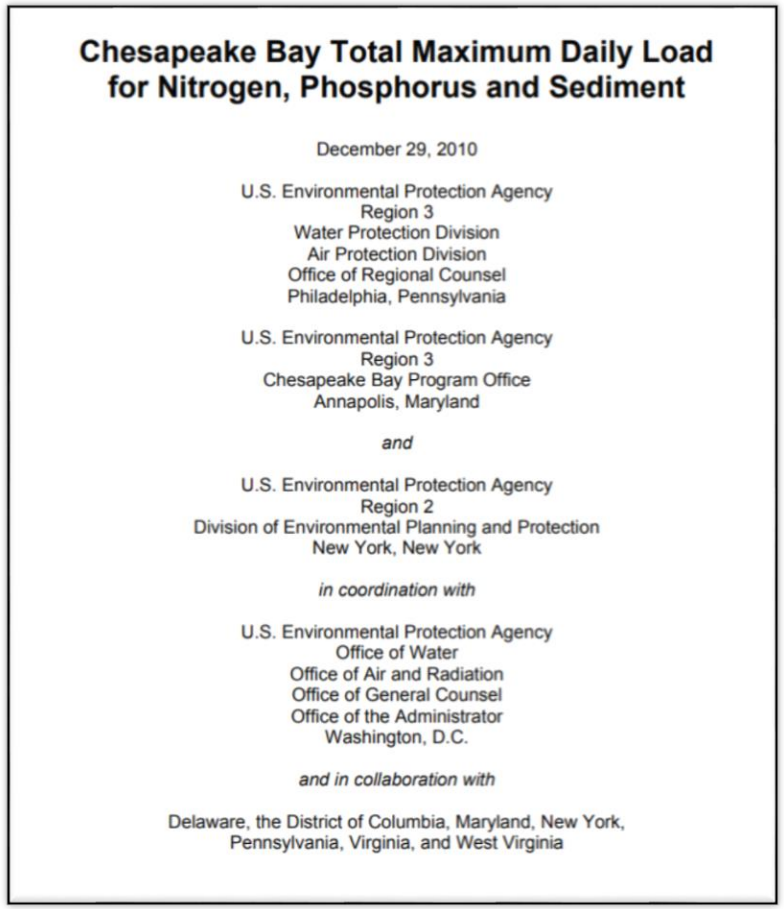
The law & policy on how to address the Chesapeake Bay has evolved over 40+ years



The legal framework has tightened over time



In 2010,the Chesapeake Bay "Total Maximum Daily Load" created the first-in-the-nation regulatory requirements for an entire watershed



Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment

December 29, 2010

U.S. Environmental Protection Agency
Region 3
Water Protection Division
Air Protection Division
Office of Regional Counsel
Philadelphia, Pennsylvania

U.S. Environmental Protection Agency
Region 3
Chesapeake Bay Program Office
Annapolis, Maryland

and

U.S. Environmental Protection Agency
Region 2
Division of Environmental Planning and Protection
New York, New York

in coordination with

U.S. Environmental Protection Agency
Office of Water
Office of Air and Radiation
Office of General Counsel
Office of the Administrator
Washington, D.C.

and in collaboration with

Delaware, the District of Columbia, Maryland, New York, Pennsylvania, Virginia, and West Virginia

→ Legal requirement to reduce nutrients, achieve standards for dissolved oxygen, water clarity, and Chlorophyll A, and meet living resources goals

→ The 2010 TMDL set Bay watershed limits of 185.9 million pounds of nitrogen, 12.5 million pounds of phosphorus and 6.45 billion pounds of sediment per year.

- 25% reduction in nitrogen
- 24% reduction in phosphorus
- 20% reduction in sediment

→ "The TMDL is designed to ensure that all pollution control measures needed to fully restore the Bay and its tidal rivers are in place by 2025, with at least 60 percent of the actions completed by 2017"

Implementation responsibility: 6 states + Washington DC through “Watershed Implementation Plans” (WIPs)

	Expectation letter	Submission
Phase I	2009	2010
Phase II	2011	2012
Phase III	2018	2019

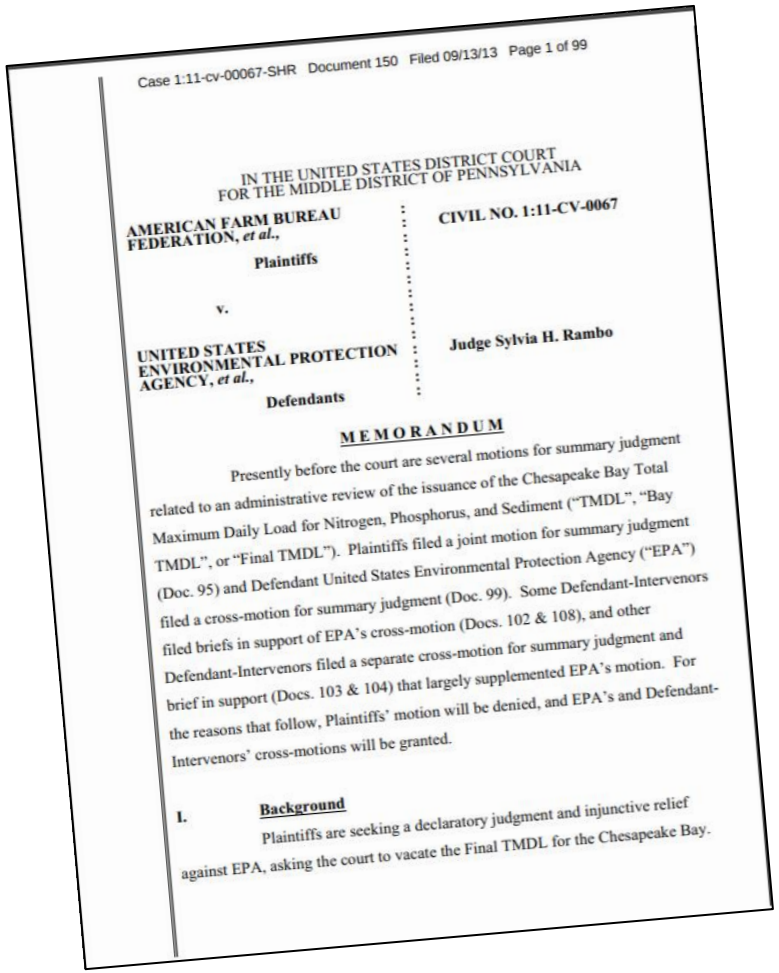
Key Phase III requirement:

“Specify the programmatic and numeric commitments in order to have all practices and controls in place by 2025 to achieve the final Phase III WIP nutrient and sediment planning targets”

Phase III Expectation Fact Sheet

https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-fact-sheet

In late 2010, the American Farm Bureau et al filed a lawsuit in federal court; however, courts upheld the TMDL



Case 1:11-cv-00067-SHR Document 150 Filed 09/13/13 Page 1 of 99

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

AMERICAN FARM BUREAU FEDERATION, *et al.*,
Plaintiffs

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,
Defendants

CIVIL NO. 1:11-CV-0067

Judge Sylvia H. Rambo

MEMORANDUM

Presently before the court are several motions for summary judgment related to an administrative review of the issuance of the Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus, and Sediment ("TMDL", "Bay TMDL", or "Final TMDL"). Plaintiffs filed a joint motion for summary judgment (Doc. 95) and Defendant United States Environmental Protection Agency ("EPA") filed a cross-motion for summary judgment (Doc. 99). Some Defendant-Intervenors filed briefs in support of EPA's cross-motion (Docs. 102 & 108), and other Defendant-Intervenors filed a separate cross-motion for summary judgment and brief in support (Docs. 103 & 104) that largely supplemented EPA's motion. For the reasons that follow, Plaintiffs' motion will be denied, and EPA's and Defendant-Intervenors' cross-motions will be granted.

I. **Background**

Plaintiffs are seeking a declaratory judgment and injunctive relief against EPA, asking the court to vacate the Final TMDL for the Chesapeake Bay.

Procedural history:

- 2013: 99 page decision by Judge Rambo in U.S District Court for Central Pennsylvania upholding EPA's decision
- Appealed to 3rd Circuit Court of Appeals
- 2015: 3rd Circuit upheld case
- 2016: US Supreme Court denied certiorari

Key findings:

- 2010 TMDL represented lawful federalism under the Clean Water Act, particularly given consultation/engagement
- Public comment period was sufficient
- EPA's modeling & use of data was appropriate

In 2014, the Chesapeake Watershed Agreement provided principles, goals & outcomes to accomplish the TMDL and more

WATER QUALITY

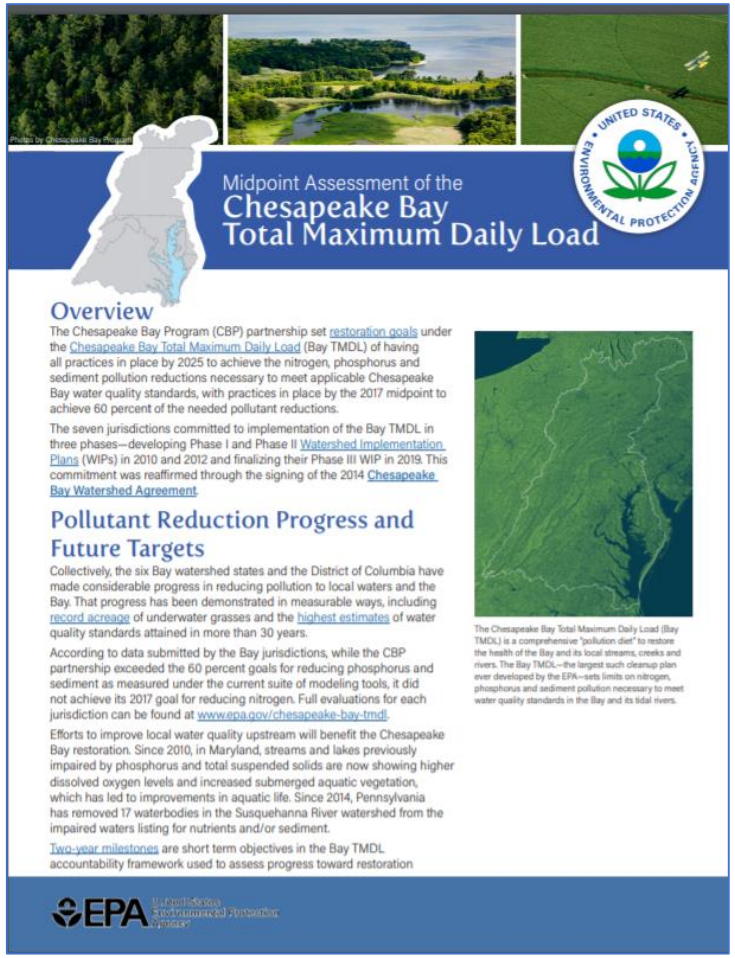
Restoring the Bay's waters is critical to overall watershed restoration because clean water is the foundation for healthy fisheries, habitats and communities across the region. However excess amounts of nitrogen, phosphorus and sediment in the Bay and its tributaries have caused many sections of the Bay to be listed as "impaired" under the Clean Water Act. The Chesapeake Bay Total Maximum Daily Load (TMDL) is driving nutrient and sediment reductions as described in the Watershed Implementation Plans (WIPs), adopted by the states and the District of Columbia, and establishes the foundation for water quality improvements embodied in this Agreement. These plans set nutrient and sediment reduction targets for various sources—stormwater, agriculture, air deposition, wastewater and septic systems.

GOAL: Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health.

7

2017 Watershed Implementation Plans (WIP) Outcome	By 2017, have practices and controls in place that are expected to achieve 60 percent of the nutrient and sediment pollution load reductions necessary to achieve applicable water quality standards compared to 2009 levels.
2025 WIP Outcome	By 2025, have all practices and controls installed to achieve the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll *a* standards as articulated in the Chesapeake Bay TMDL document.
Water Quality Standards Attainment and Monitoring Outcome	Continually improve the capacity to monitor and assess the effects of management actions being undertaken to implement the Bay TMDL and improve water quality. Use the monitoring results to report annually to the public on progress made in attaining established Bay water quality standards and trends in reducing nutrients and sediment in the watershed.

In 2017, the Mid-Point Assessment found progress and the need for more action



Midpoint Assessment of the
Chesapeake Bay
Total Maximum Daily Load

Overview

The Chesapeake Bay Program (CBP) partnership set restoration goals under the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) of having all practices in place by 2025 to achieve the nitrogen, phosphorus and sediment pollution reductions necessary to meet applicable Chesapeake Bay water quality standards, with practices in place by the 2017 midpoint to achieve 60 percent of the needed pollutant reductions.

The seven jurisdictions committed to implementation of the Bay TMDL in three phases—developing Phase I and Phase II Watershed Implementation Plans (WIPs) in 2010 and 2012 and finalizing their Phase III WIP in 2019. This commitment was reaffirmed through the signing of the 2014 Chesapeake Bay Watershed Agreement.

Pollutant Reduction Progress and Future Targets

Collectively, the six Bay watershed states and the District of Columbia have made considerable progress in reducing pollution to local waters and the Bay. That progress has been demonstrated in measurable ways, including record acreage of underwater grasses and the highest estimates of water quality standards attained in more than 30 years.

According to data submitted by the Bay jurisdictions, while the CBP partnership exceeded the 60 percent goals for reducing phosphorus and sediment as measured under the current suite of modeling tools, it did not achieve its 2017 goal for reducing nitrogen. Full evaluations for each jurisdiction can be found at www.epa.gov/chesapeake-bay-tmdl.

Efforts to improve local water quality upstream will benefit the Chesapeake Bay restoration. Since 2010, in Maryland, streams and lakes previously impaired by phosphorus and total suspended solids are now showing higher dissolved oxygen levels and increased submerged aquatic vegetation, which has led to improvements in aquatic life. Since 2014, Pennsylvania has removed 17 waterbodies in the Susquehanna River watershed from the impaired waters listing for nutrients and/or sediment.

Two-year milestones are short term objectives in the Bay TMDL accountability framework used to assess progress toward restoration

The Chesapeake Bay Total Maximum Daily Load (Bay TMDL) is a comprehensive "pollution diet" to restore the health of the Bay and its local streams, creeks and rivers. The Bay TMDL—the largest such cleanup plan ever developed by the EPA—sets limits on nitrogen, phosphorus and sediment pollution necessary to meet water quality standards in the Bay and its tidal rivers.

EPA

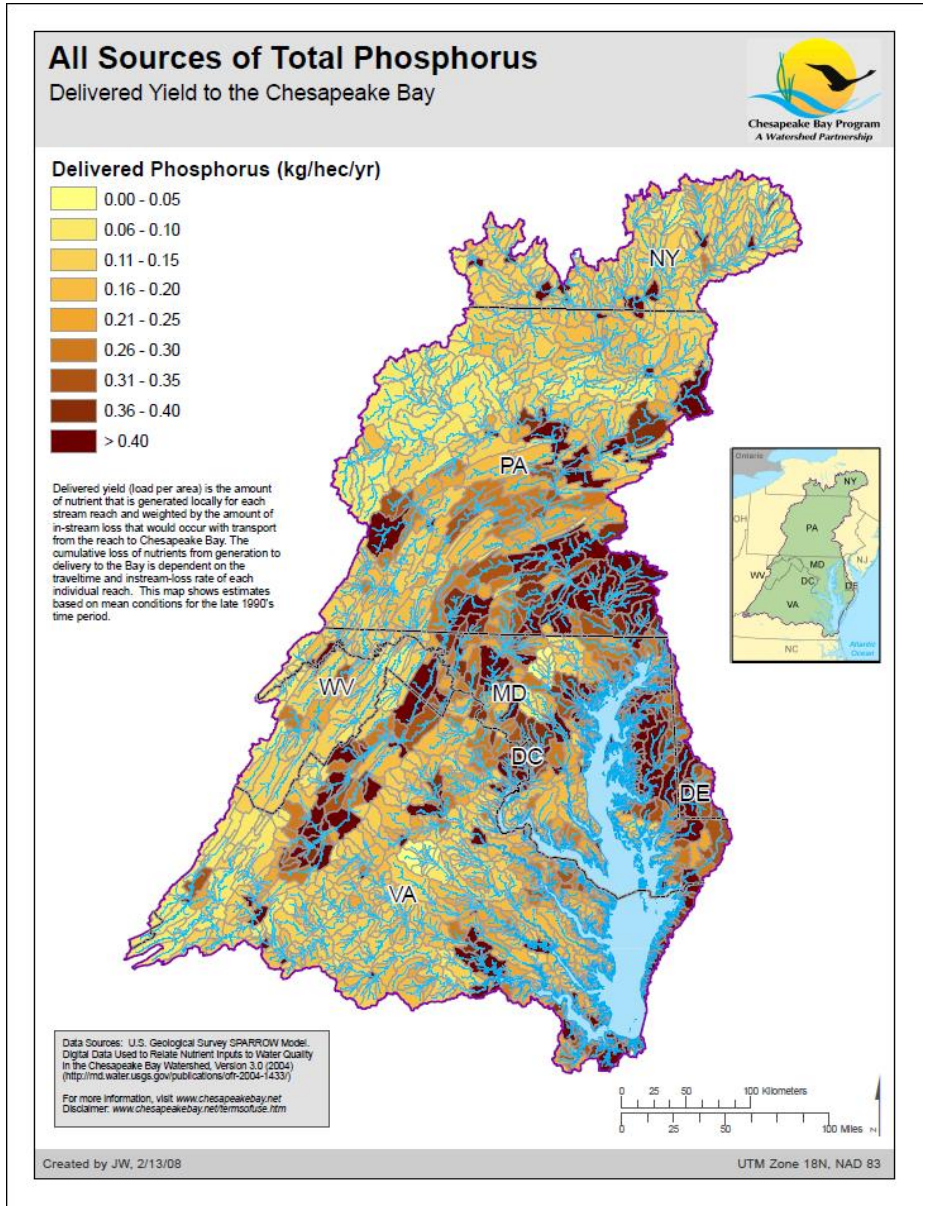
Considerable measurable progress:

- record acreage of underwater grasses
- highest estimates of water quality standards attained in 30 years+

While the 60 percent goals for reducing phosphorus and sediment as measured under the current suite of modeling tools were exceeded, the goal for reducing nitrogen was not met.

-EPA 2017 Mid Point Assessment

Monitoring demonstrated that phosphorous runoff was improving in many areas



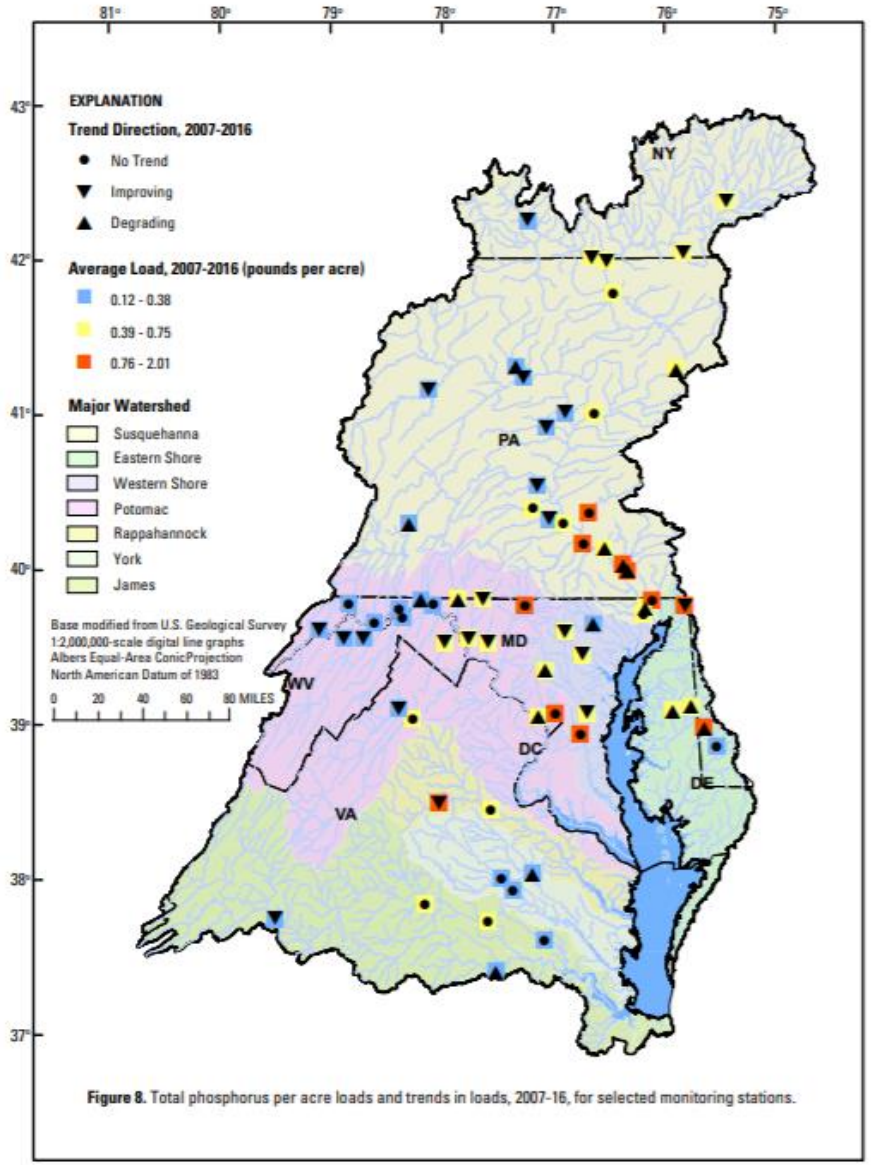
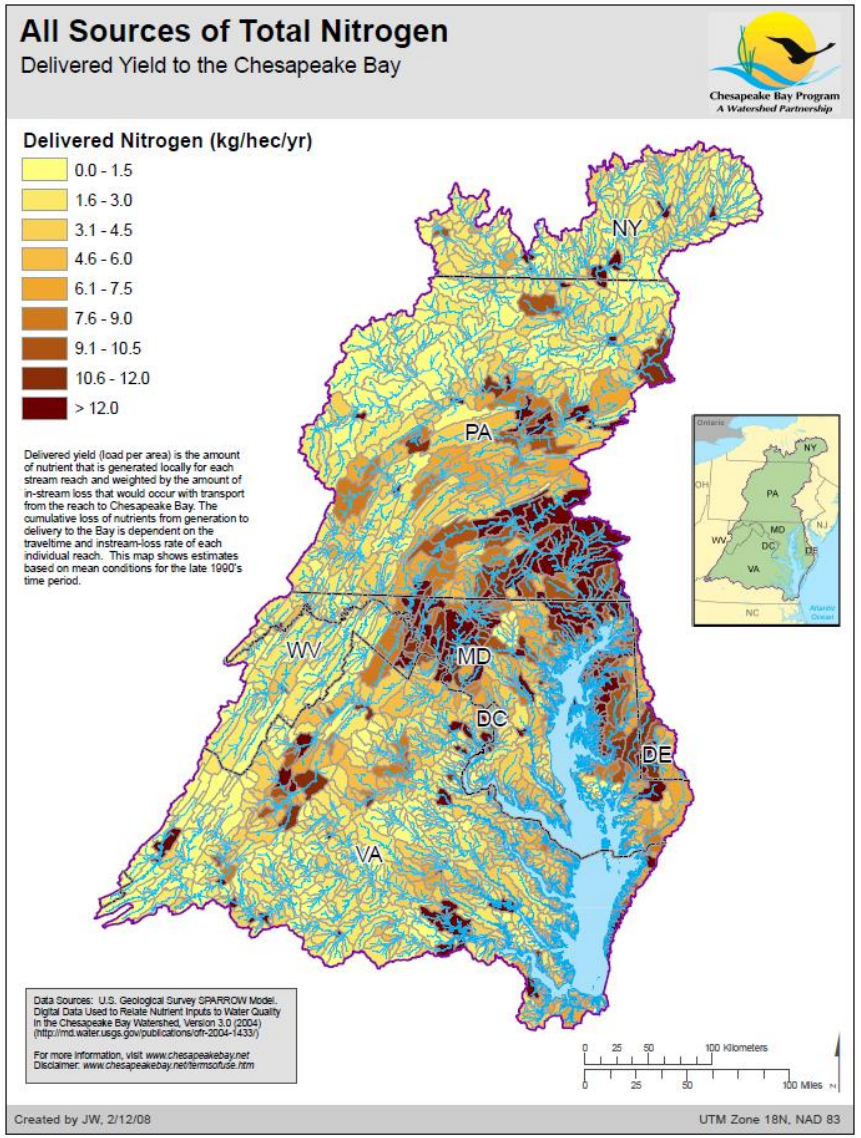


Figure 8. Total phosphorus per acre loads and trends in loads, 2007-16, for selected monitoring stations.

Moyer & Blomquist (2017)

However, monitoring also showed that nitrogen runoff goals not yet met



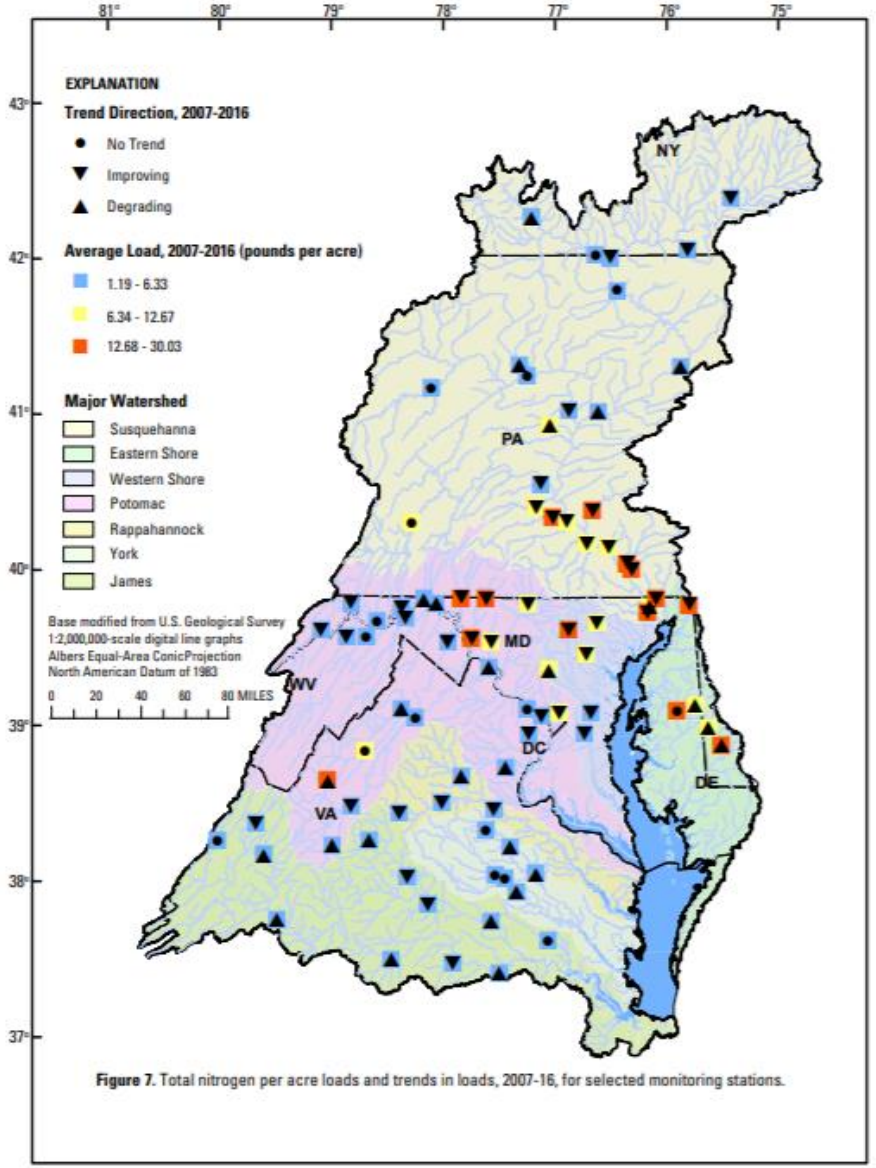


Figure 7. Total nitrogen per acre loads and trends in loads, 2007-16, for selected monitoring stations.

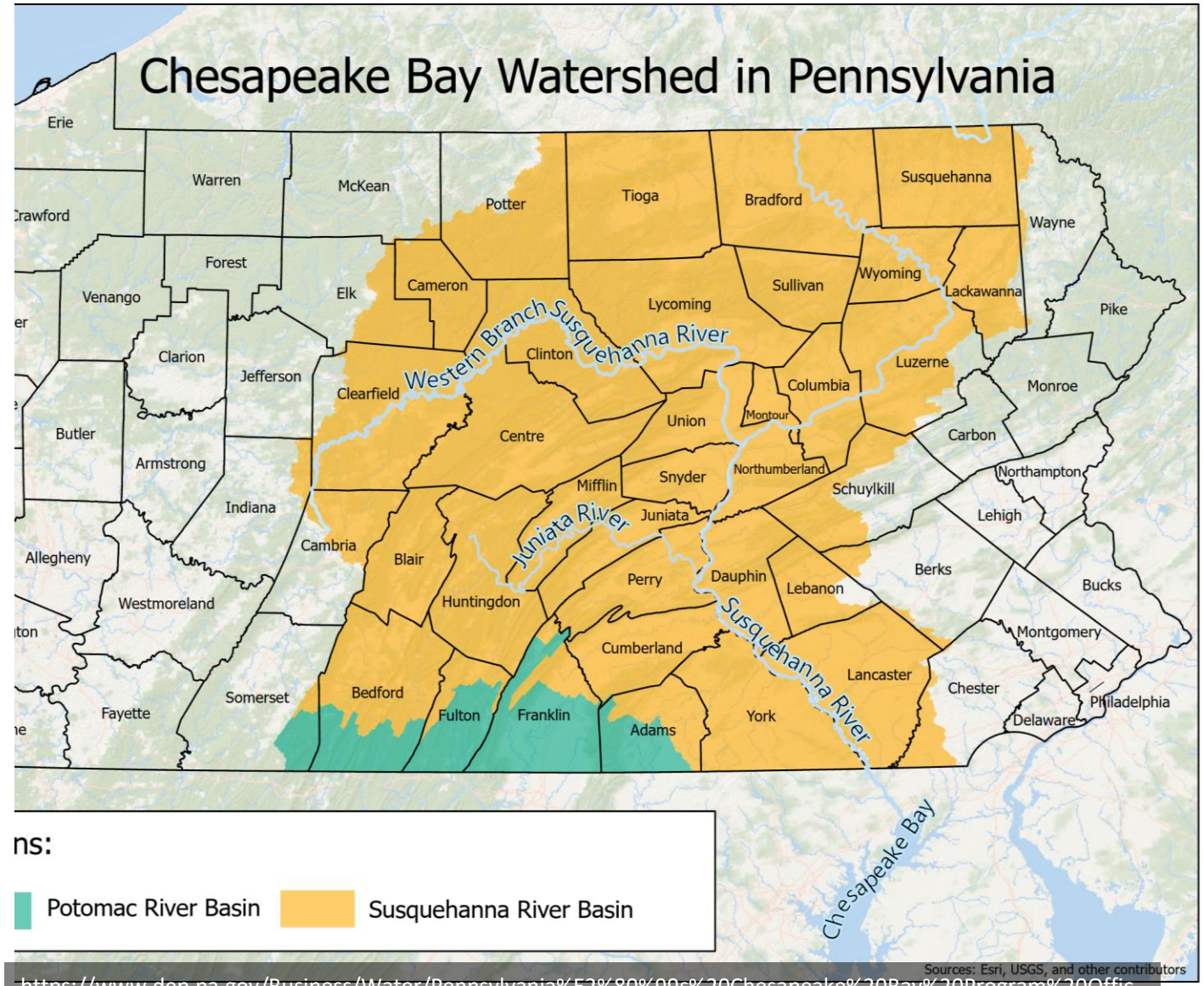
Moyer & Blomquist (2017)

A lot of questions remain re: sediment impacts, particularly related to the Susquehanna River & the Conowingo Dam

To the left: https://prd-wret.s3.us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/styles/side_image/public/thumbnails/image/MODIS%20image%20of%20Chesapeake%20Bay%20area%20after%20Tropical%20Storm%20Lee_2011_09.PNG

Above: https://www.usgs.gov/news/conowingo-dam-above-90-percent-capacity-sediment-storage

The Susquehanna River provides more than 50% of the freshwater inflow in the Chesapeake Bay



https://www.dep.pa.gov/Business/Water/Pennsylvania%E2%80%99s%20Chesapeake%20Bay%20Program%20Office/WIP3/Pages/Phase-III-WIP-(Watershed-Implementation-Plans).aspx

Impact of upstream flows puts the focus on Pennsylvania

Pittsburgh Post-Gazette
post-gazette.com

EPA gives poor marks to Pa. on protecting Chesapeake Bay watershed

March 23, 2015 12:00 AM

Dennis Drenner/The New York Times

Pennsylvania discharges more nitrogen into tributaries of the Chesapeake Bay than any other state.

By Don Hopey / Pittsburgh Post-Gazette

More pollution flowing into Chesapeake Bay than expected

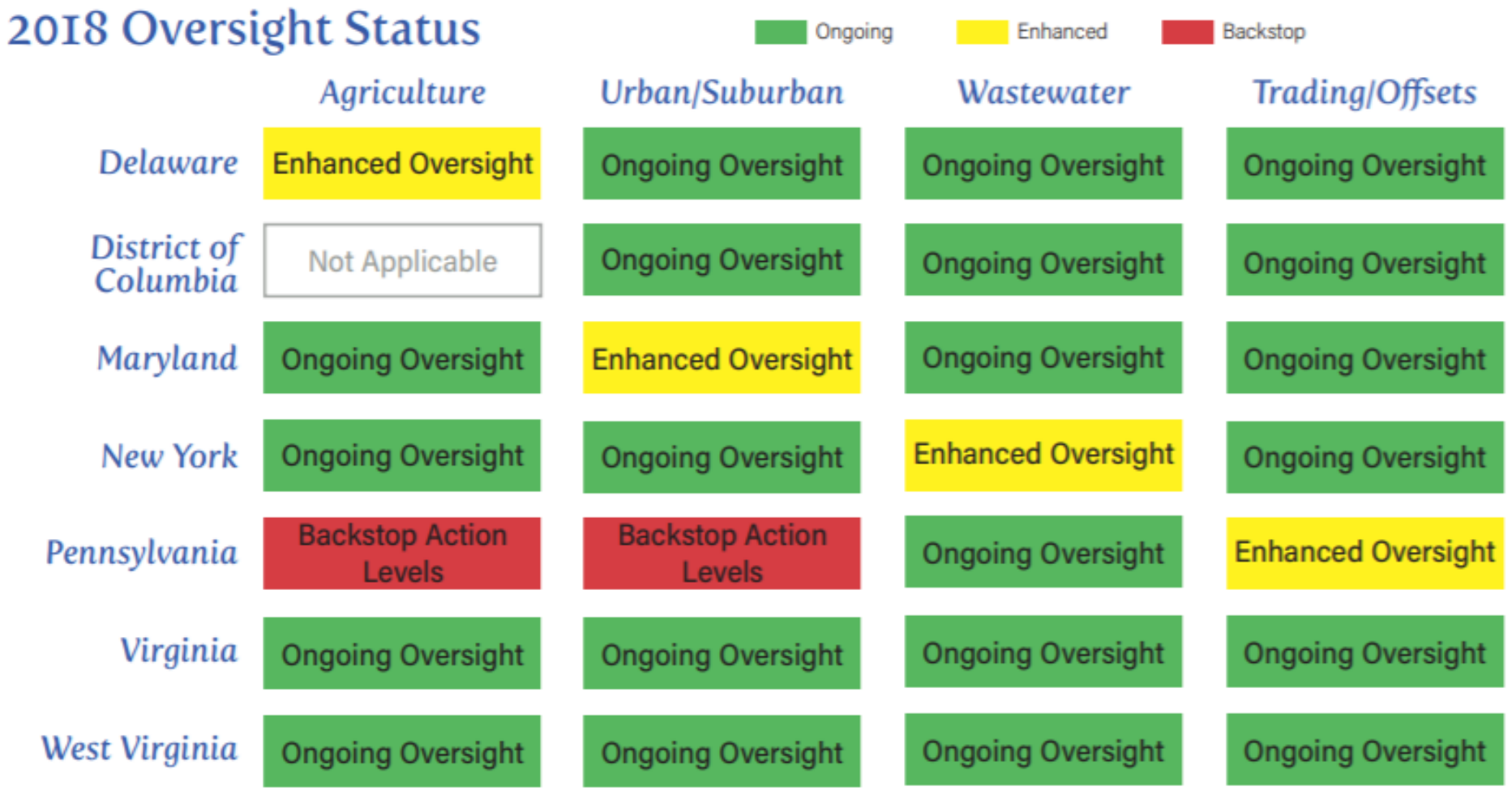
APRIL 21, 2015 | 12:01 AM

BY MARIE CUSICK

AP PHOTO/MORGAN HEIM/ILCP/CHESAPEAKE BAY FOUNDATION

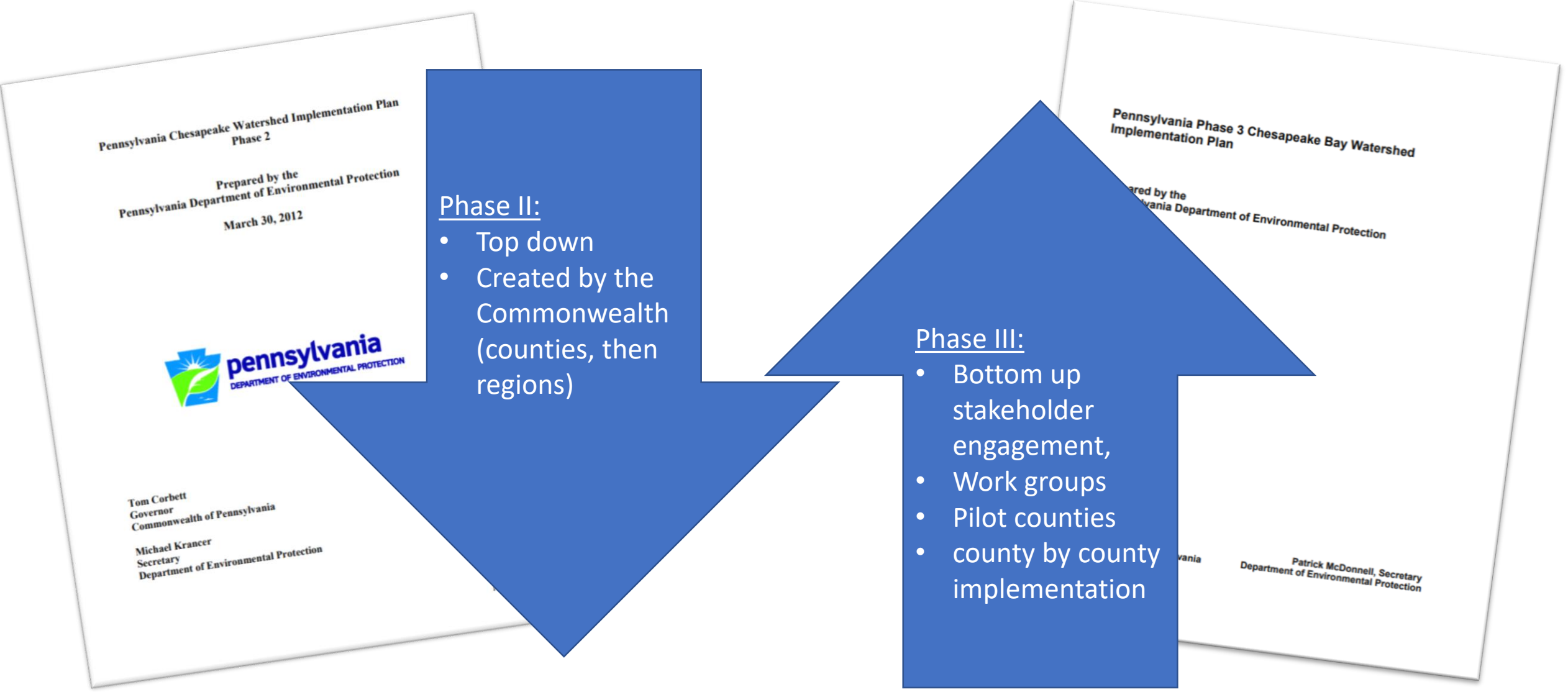
Algae blooms (dark colors) in Yorktown, Virginia in 2010. Torrential rain combined with high temperatures and pollution made for ideal algae bloom conditions.

Concerns over PA sharpened by the Mid Point Assessment



https://www.epa.gov/sites/production/files/2018-07/documents/factsheet-epa-midpoint-assessment-chesapeake-bay-tmdl.pdf

Pennsylvania changed its approach between the Phase II and Phase III Watershed Implementation Plans (WIPs)



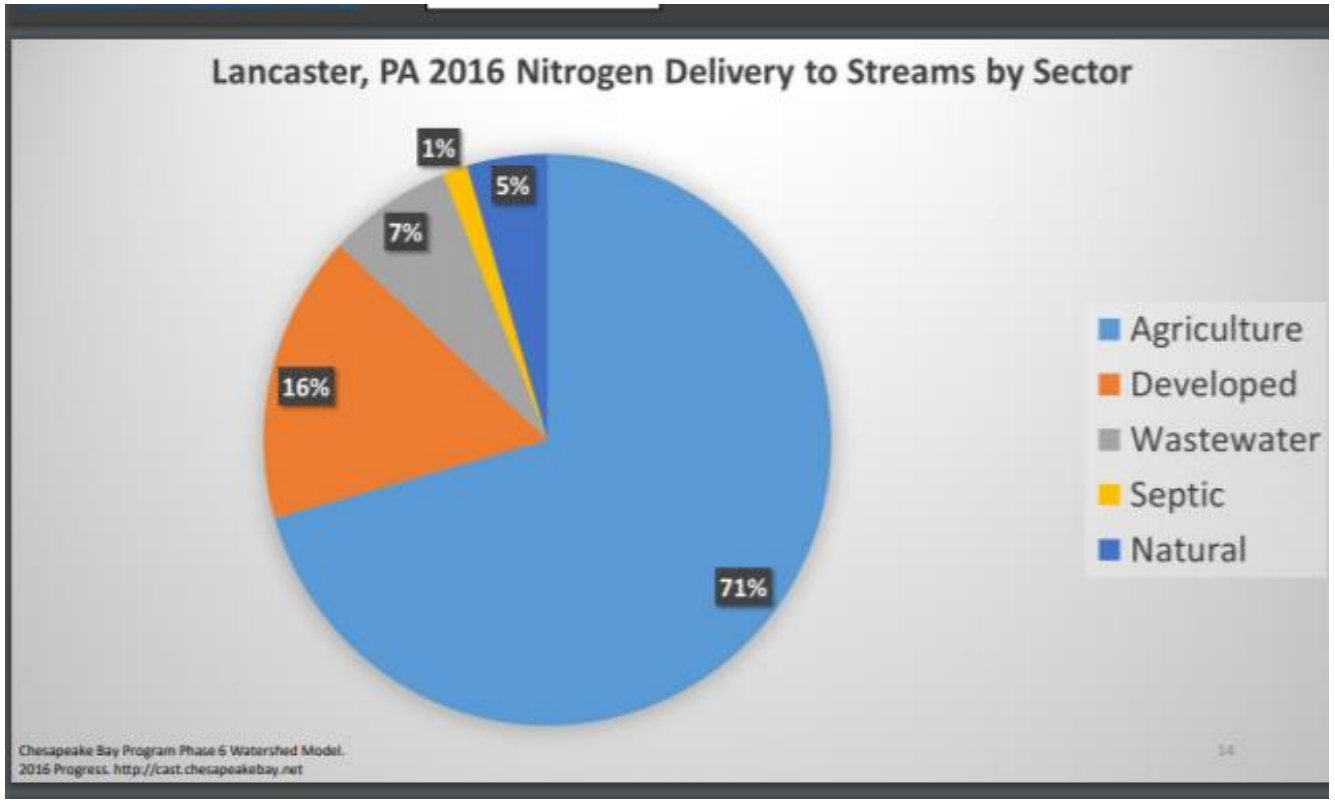
In August 2019, jurisdictions submitted Phase III Watershed Implementation Plans for EPA review; feedback in Dec. 2019

→ Virginia and Maryland plans, <u>if fully funded</u> and implemented, can meet their targets.

→ Pennsylvania's plan underfunded by $250-300 million and falls 25% short of meeting its nitrogen-reduction goal.

→ New York's plan does not meet nitrogen reduction goals

EPA's Review of Pennsylvania: Phase III WIP meets numeric targets for P; only 75% for N



https://www.chesapeakebay.net/channel_files/25878/ag_wg_trentacoste_6_19_18.pdf

"Pennsylvania's current planned efforts do not achieve the nitrogen Phase III WIP planning target, nor does the plan explain how or when additional reductions from the remaining County Action Plans will be incorporated into the broader plan to achieve the nitrogen planning target."

https://www.epa.gov/sites/production/files/2019-12/documents/pa.pdf

In January 2020, Chesapeake Bay Program Director said the "TMDL is not enforceable"; huge backlash & questions

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EPA Chesapeake Bay Program director says 2025 pollution targets are not 'enforceable'

By RACHAEL PACELLA
CAPITAL GAZETTE | JAN 03, 2020 | 6:23 PM

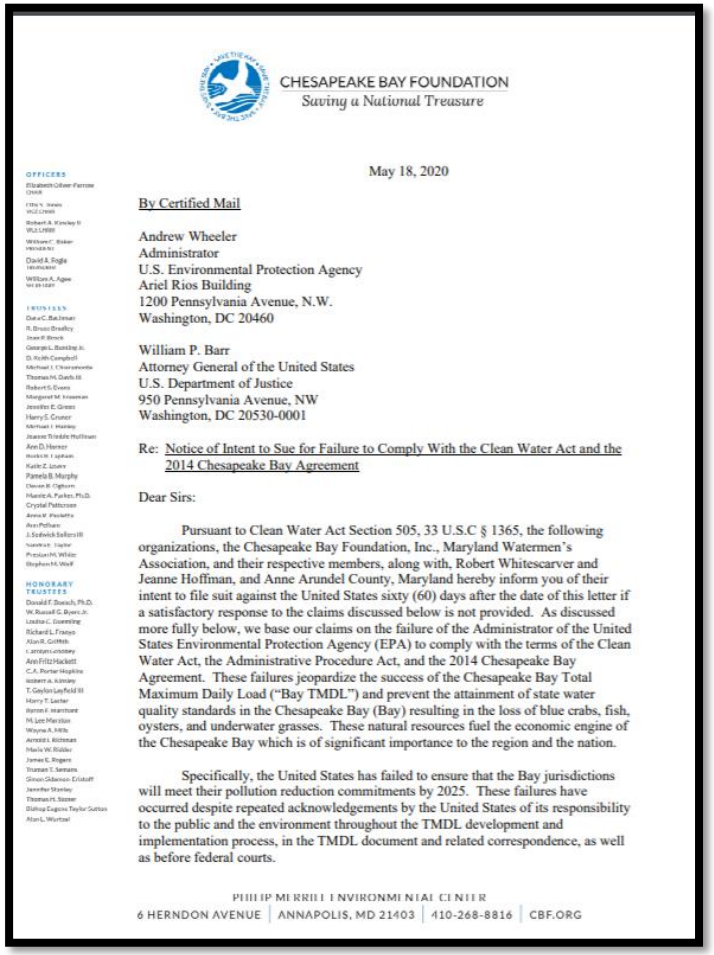
"The head of the EPA's Chesapeake Bay Program stepped back from strict enforcement of 2025 pollution goals for the Chesapeake Bay Friday, calling the technical targets "an aspiration" and not an enforceable deadline.

The comments by program Director Dana Aunkst near the end of a two-day conference in Annapolis sparked criticism from state officials and outrage from several environmental groups who said the comments represent the Trump administration's retreat from the Chesapeake Bay cleanup effort."

https://www.capitalgazette.com/environment/ac-cn-bay-comission-0104-20200103-o5nun6uojbapjecl5dak7p62wa-story.html

Dana Aunkst
Director, Chesapeake Bay Program
U.S. Environmental Protection Agency

In early 2020, other states, NGO sent 60-day notices of intent to sue EPA for failure to meet requirements



CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

May 18, 2020

By Certified Mail

Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

William P. Barr
Attorney General of the United States
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530-0001

Re: Notice of Intent to Sue for Failure to Comply With the Clean Water Act and the 2014 Chesapeake Bay Agreement

Dear Sirs:

Pursuant to Clean Water Act Section 505, 33 U.S.C § 1365, the following organizations, the Chesapeake Bay Foundation, Inc., Maryland Watermen's Association, and their respective members, along with, Robert Whitescarver and Jeanne Hoffman, and Anne Arundel County, Maryland hereby inform you of their intent to file suit against the United States sixty (60) days after the date of this letter if a satisfactory response to the claims discussed below is not provided. As discussed more fully below, we base our claims on the failure of the Administrator of the United States Environmental Protection Agency (EPA) to comply with the terms of the Clean Water Act, the Administrative Procedure Act, and the 2014 Chesapeake Bay Agreement. These failures jeopardize the success of the Chesapeake Bay Total Maximum Daily Load ("Bay TMDL") and prevent the attainment of state water quality standards in the Chesapeake Bay (Bay) resulting in the loss of blue crabs, fish, oysters, and underwater grasses. These natural resources fuel the economic engine of the Chesapeake Bay which is of significant importance to the region and the nation.

Specifically, the United States has failed to ensure that the Bay jurisdictions will meet their pollution reduction commitments by 2025. These failures have occurred despite repeated acknowledgements by the United States of its responsibility to the public and the environment throughout the TMDL development and implementation process, in the TMDL document and related correspondence, as well as before federal courts.

PHILIP MERRILL ENVIRONMENTAL CENTER
6 HERNDON AVENUE | ANNAPOLIS, MD 21403 | 410-268-8816 | CBF.ORG

Two sets of notices:

- Chesapeake Bay Foundation, together with the MD Watermen's Association, Anne Arundel County, and Virginia cattle farmers
- Attorneys General of Maryland, Virginia, Delaware, and the District of Columbia

Issues:

- EPA has failed to ensure the Bay jurisdictions will meet their pollution reduction commitments by the 2025 deadline.
- The agency's failure is a violation of the federal Clean Water Act, the Administrative Procedure Act, and the 2014 Chesapeake Bay Agreement.

https://www.cbf.org/document-library/litigation/cbf-epa-noi-may-18-2020.pdf

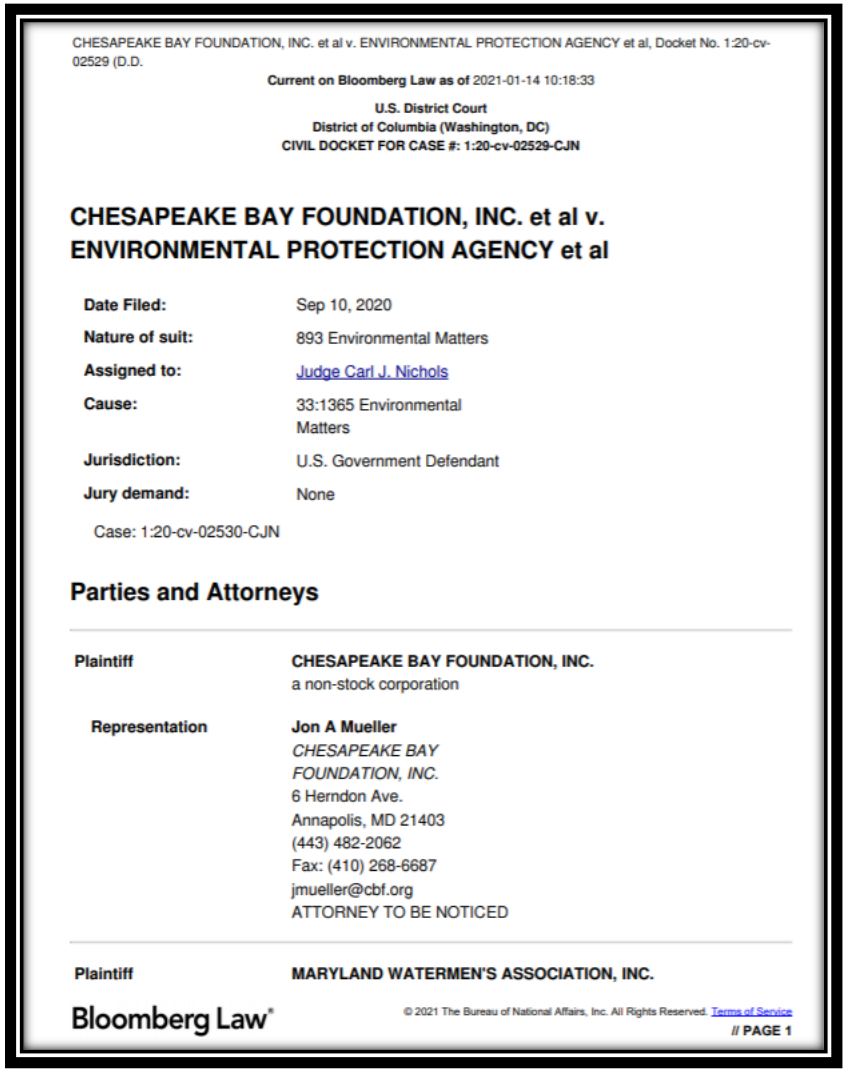
Two sets of lawsuits filed September 10, 2020 in DC District Court; cases pending

Making good on threats issued months ago, three Chesapeake Bay watershed states, the District of Columbia and the Chesapeake Bay Foundation took the U.S. Environmental Protection Agency to court Thursday for its failure to push **Pennsylvania** and **New York** to do more to help clean up the Bay.

In their lawsuit, the attorneys general of Maryland, Virginia, Delaware and the District of Columbia accused the EPA of shirking its responsibility under the Clean Water Act by letting Pennsylvania and New York fall short in reducing their nutrient and sediment pollution fouling the Bay.

https://www.bayjournal.com/news/policy/epa-hit-with-lawsuits-over-chesapeake-bay-cleanup/article_db7ad7e0-f429-11ea-833a-87109c15a521.html

Cases now consolidated; New York intervened but not Pennsylvania; response to motion to dismiss due by April 2021



CHESAPEAKE BAY FOUNDATION, INC. et al v. ENVIRONMENTAL PROTECTION AGENCY et al, Docket No. 1:20-cv-02529 (D.D.

Current on Bloomberg Law as of 2021-01-14 10:18:33

U.S. District Court
District of Columbia (Washington, DC)
CIVIL DOCKET FOR CASE #: 1:20-cv-02529-CJN

CHESAPEAKE BAY FOUNDATION, INC. et al v. ENVIRONMENTAL PROTECTION AGENCY et al

Date Filed:	Sep 10, 2020
Nature of suit:	893 Environmental Matters
Assigned to:	Judge Carl J. Nichols
Cause:	33:1365 Environmental Matters
Jurisdiction:	U.S. Government Defendant
Jury demand:	None

Case: 1:20-cv-02530-CJN

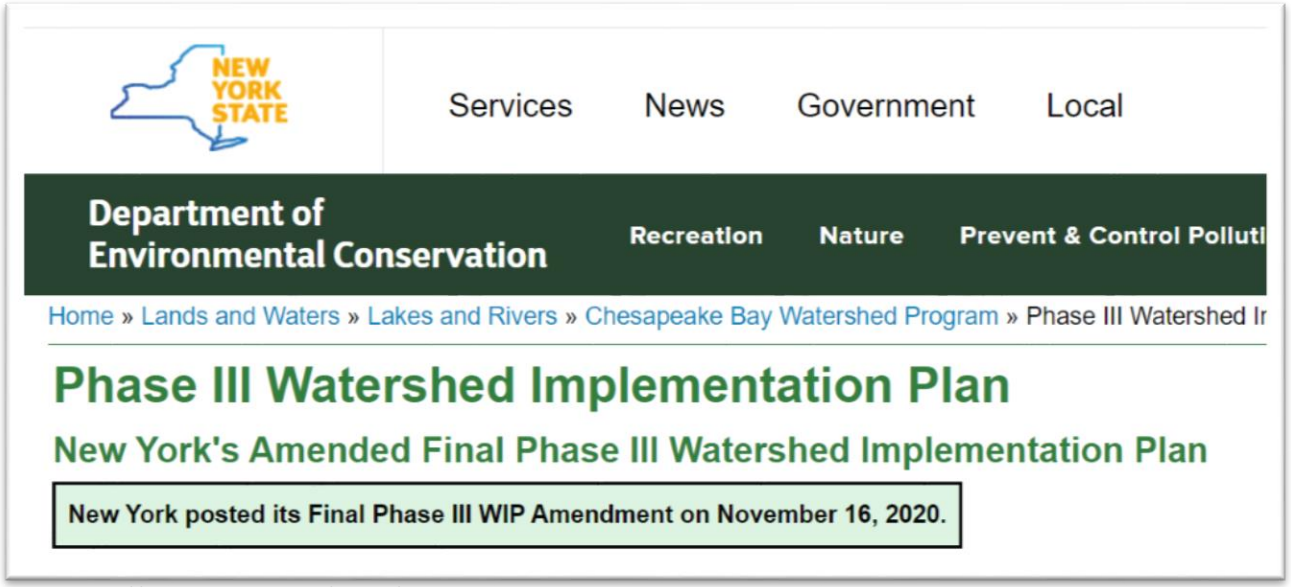
Parties and Attorneys

Plaintiff	**CHESAPEAKE BAY FOUNDATION, INC.** a non-stock corporation
Representation	**Jon A Mueller** *CHESAPEAKE BAY FOUNDATION, INC.* 6 Herndon Ave. Annapolis, MD 21403 (443) 482-2062 Fax: (410) 268-6687 jmueller@cbf.org ATTORNEY TO BE NOTICED
Plaintiff	**MARYLAND WATERMEN'S ASSOCIATION, INC.**

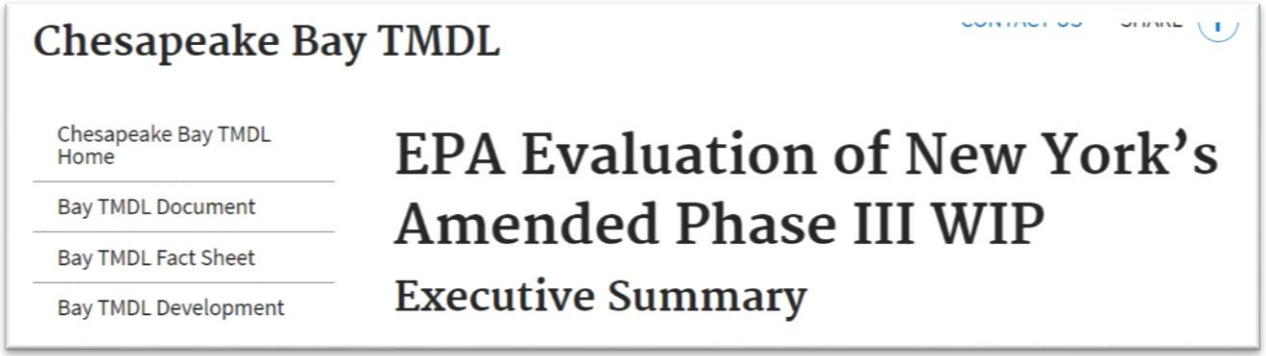
Bloomberg Law

Timeline	Activity
September 2020	Cases filed
October 2020	Notices of appearance
November 2020	NY Motion Intervene
	EPA Motions for Extension of Time to file Administrative Record, Motions to Dismiss (lack of jurisdiction, failure to state a claim). Plaintiffs' response to motion to dismiss due Jan. 12, 2021
	Cases consolidated (lead case 20-2559)
December 2020	Motion to extend deadline to filed certified index granted; all documents due by Feb. 26, 2021; Plaintiff responses to Motion to Dismiss now due by April 12, 2021 (reply by May 12, 2021; any final reply by June 11, 2021)

New York amended its Phase III WIP in Nov. 2020; EPA reviewed and provided its evaluation on Jan. 7, 2021



https://www.dec.ny.gov/lands/112126.html



https://www.epa.gov/chesapeake-bay-tmdl/epa-evaluation-new-yorks-amended-phase-iii-wip

NY Amendments:

- Builds on existing Phase III WIP
- Proposes additional reductions in agriculture based on "extensive coordination"
- Updated wastewater projections and 2025 loads delivered to the Bay
- Listed upgrades already underway for wastewater treatment plants that will help with N reduction

EPA review:

- Areas of strength
  - New projections for wastewater treatment, including trade of P to N
  - Increase funding, tax credits, coordination
  - Strong framework for communication/outreach
- Areas of need:
  - Annual tracking, BMP implementation
  - Detail on stormwater implementation, WWTP

Potential mechanisms for enforcement?

(1) Targeting federal enforcement and compliance assurance in the watershed;
(2) Directing Chesapeake Bay funding to identified priorities;
(3) Establishing finer scale waste load and load allocations through a Pennsylvania state-specific proposed amendment to the Chesapeake Bay TMDL;
(4) Requiring additional reductions of loading from point sources through a Pennsylvania state-specific proposed amendment to the Chesapeake Bay TMDL; and
(5) Initiating a process to propose promulgating nitrogen and phosphorous numeric water quality standards for Pennsylvania applicable to streams and rivers in the Chesapeake Bay Watershed.

April 2017 Phase III WIP Expectations for PA: https://www.epa.gov/sites/production/files/2017-05/documents/final_pennsylvania_phase_iii_wip_expectations_4_27_17_508.pdf

Some of which have been tried prior to now…

U.S. ENVIRONMENTAL PROTECTION AGENCY

EPA leans on Amish farmers in Pennsylvania

By TIM WHEELER
JUN 09, 2010 AT 11:28 AM

MONDAY, AUGUST 8, 2016

PA's Chesapeake Bay Reboot Strategy To Improve Water Quality May Need Kick-Start

By Timothy B. Wheeler,
Chesapeake Bay Journal

The Wolf administration's plan to "reboot" Pennsylvania's badly lagging Chesapeake Bay cleanup efforts could be in need of its own

Another case to watch: *VA Assoc. of Municipal Wastewater Assoc. v. Virginia Department of Environmental Quality*

Lawsuit filed against Virginia DEQ:

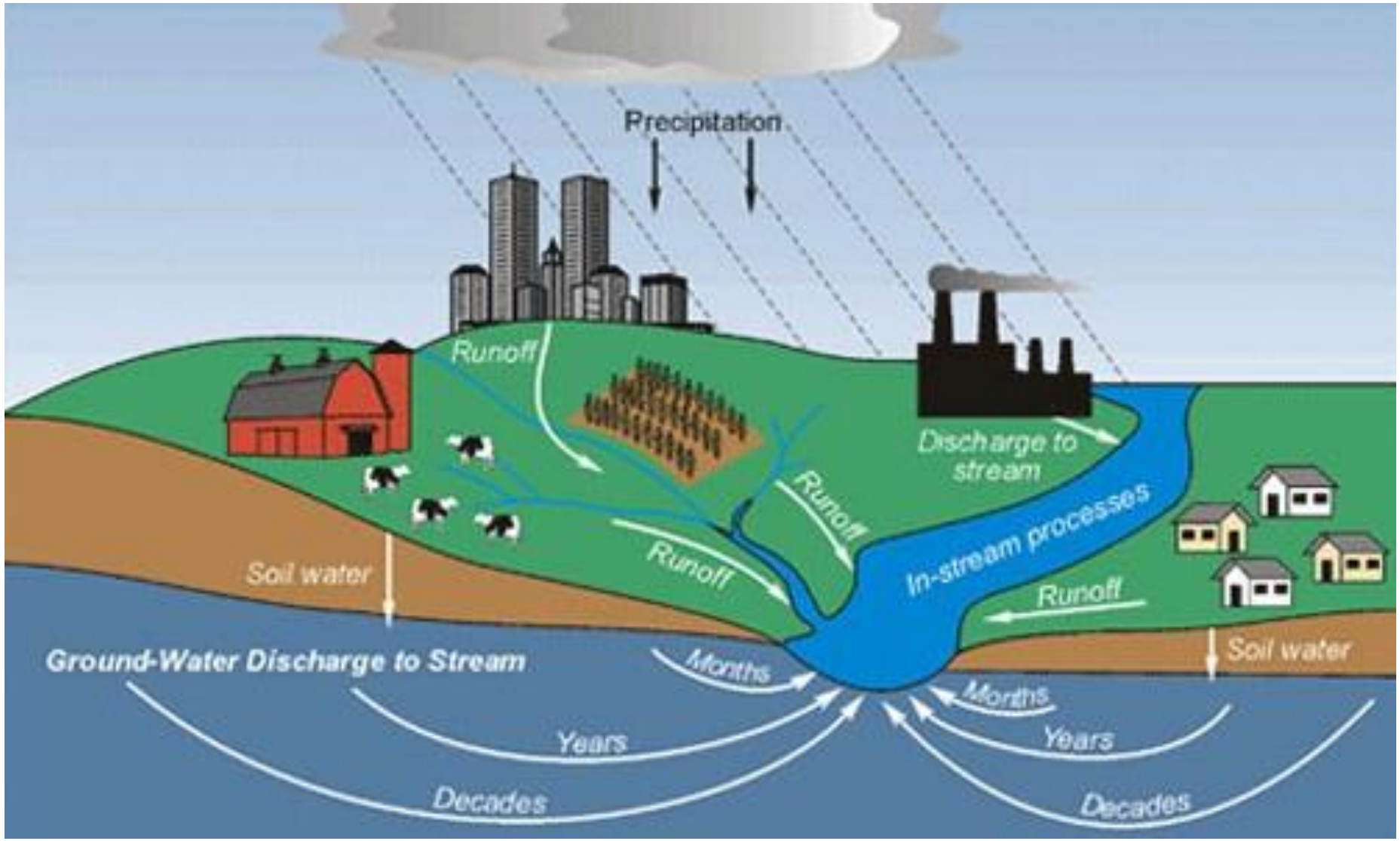
- Plaintiffs: VA Association of Municipal Wastewater Assoc.
- Intervenors: Chesapeake Bay Foundation

Issues:

- VA's WIPIII should be invalidated
- Provision requiring wastewater treatment plants to upgrade their facilities should be stricken

https://www.cbf.org/how-we-save-the-bay/in-the-courtroom/active-cases.html

While the challenges facing PA are significant, they also present an opportunity



http://www.chesapeakebay.net/issues/issue/groundwater

PA has the most impaired streams or stream segments in the U.S.

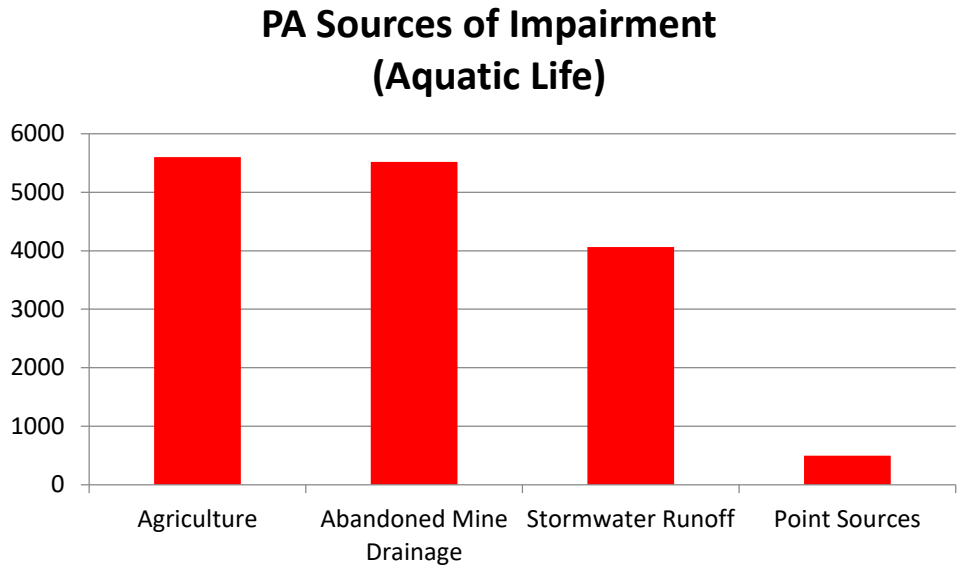
Impaired Waters Listed By State

Description of this table

State Name	Number of Waters on 303(d) List
Alabama	283
Alaska	35
American Samoa	45
Arizona	91
Arkansas	225
California	1,021
Colorado	244
Connecticut	461
Delaware	101
District Of Columbia	36
Florida	2,292
Georgia	242
Guam	47
Hawaii	298
Idaho	741
Illinois	1,057
Indiana	1,836
Iowa	480
Kansas	1,372
Kentucky	1,433
Louisiana	236
Maine	114
Maryland	184
Massachusetts	720
Michigan	2,352
Minnesota	1,144
Mississippi	229
Missouri	257
Montana	480
N. Mariana Islands	24
Nebraska	342
Nevada	215
New Hampshire	1,449
New Jersey	716
New Mexico	209
New York	1,543
North Carolina	1,130
North Dakota	201
Ohio	267
Oklahoma	657
Oregon	1,397
Pennsylvania	6,957
Puerto Rico	231
Rhode Island	120
South Carolina	961
South Dakota	166
Tennessee	1,012
Texas	719
Utah	156
Vermont	104
Virgin Islands	87
Virginia	1,523
Washington	2,420
West Virginia	1,097
Wisconsin	593
Wyoming	107

Total: 42,459 impaired waters

There are various sources of impairment; big ones include ag and urban stormwater runoff



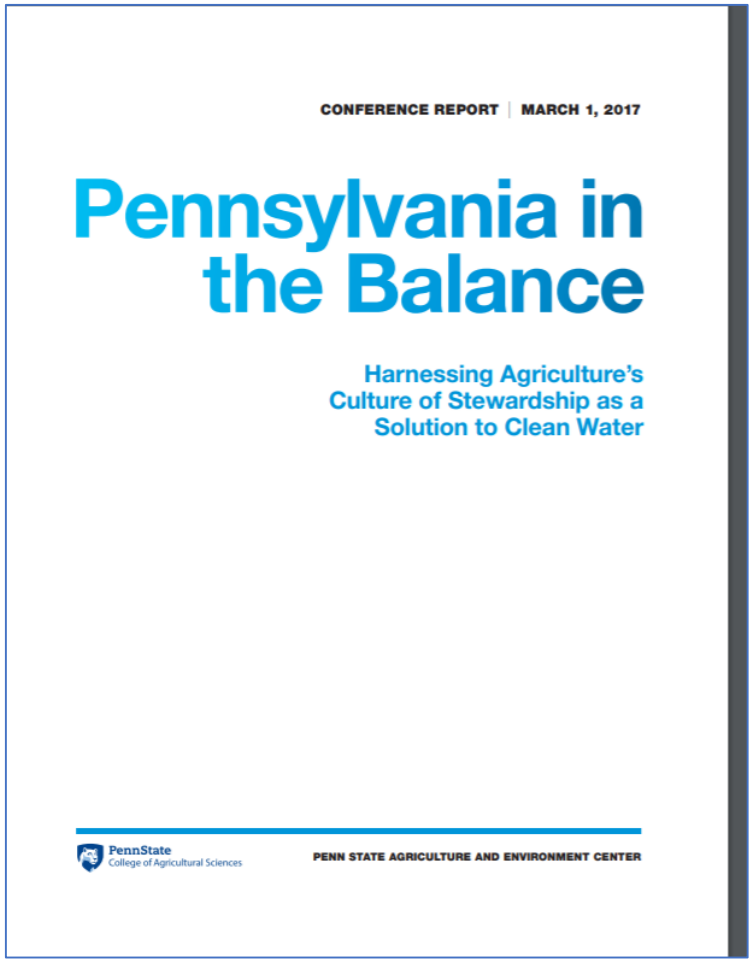
In March 2016, the “Pennsylvania in the Balance” Conference brought 100+ stakeholders together to discuss water quality and agriculture: soil health a key focus

This conference feels like “we” can all try to pull together to make things better for the watershed and the Bay. It’s real lonely feeling that ag is in this alone, and to blame for what has happened.

- Conference Participant

The result? A lot of good thoughts on meeting both water quality and ensuring healthy & productive farms

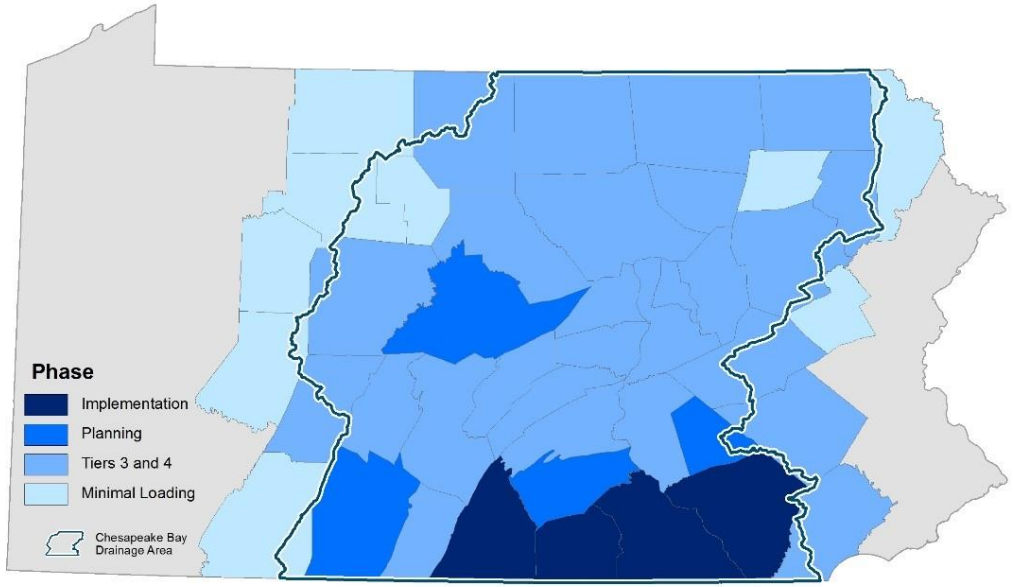
https://twitter.com/agsciences/status/705529878414761984



http://files.dep.state.pa.us/Water/ChesapeakeBayOffice/Ag%20page/(2)%20PA%20in%20the%20Balance%20Full%20Report.pdf

A focus on stakeholder engagement has been built into the PA Department of Environmental Protection's WIP III approach. Will local action lead to effective implementation?

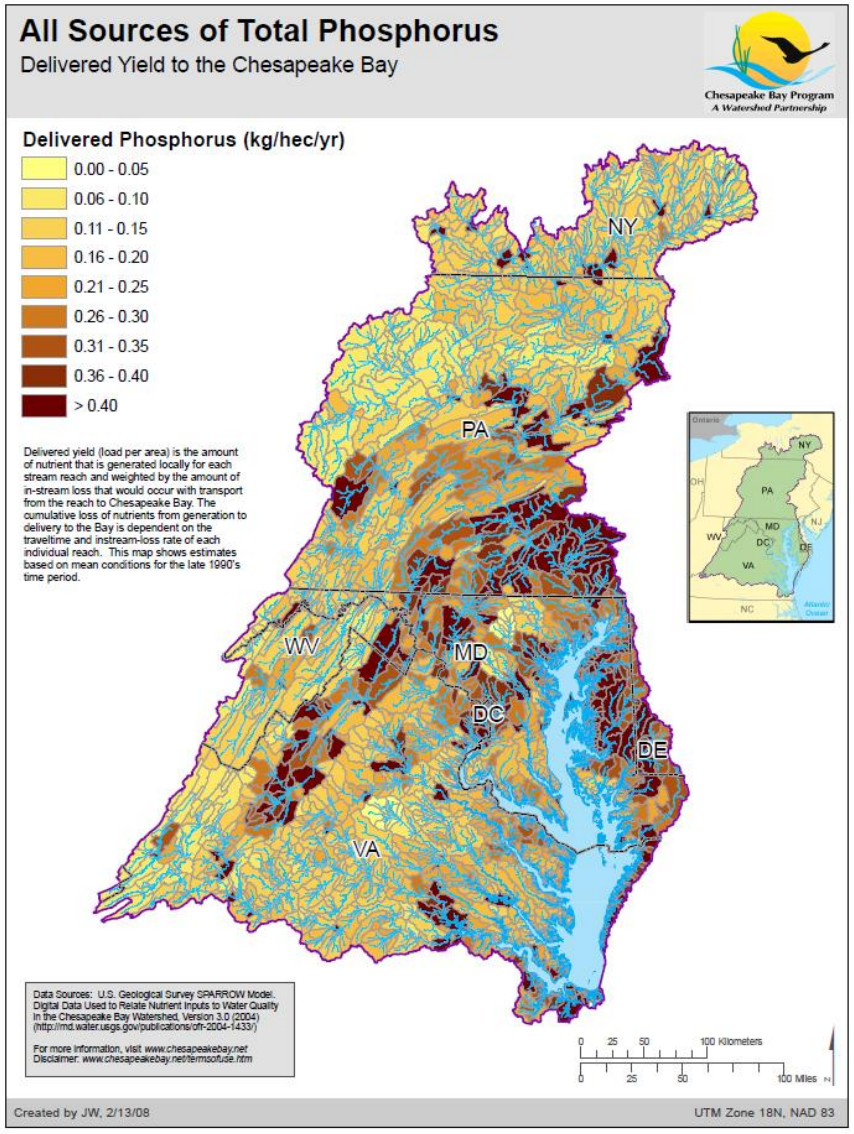
Clean water:
Great for PA
Good for the Bay

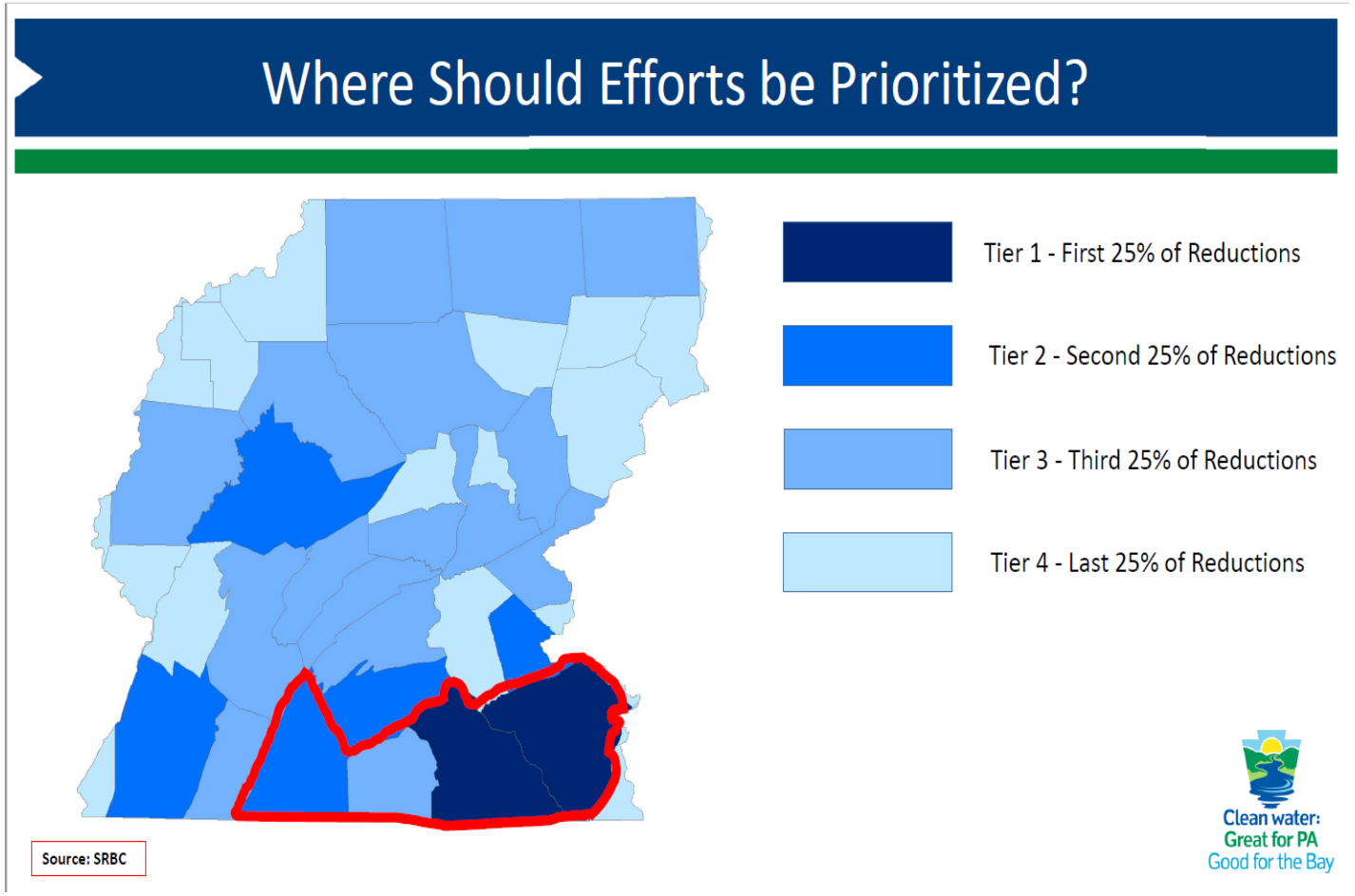


<u>Potential local priorities + co-benefits:</u>

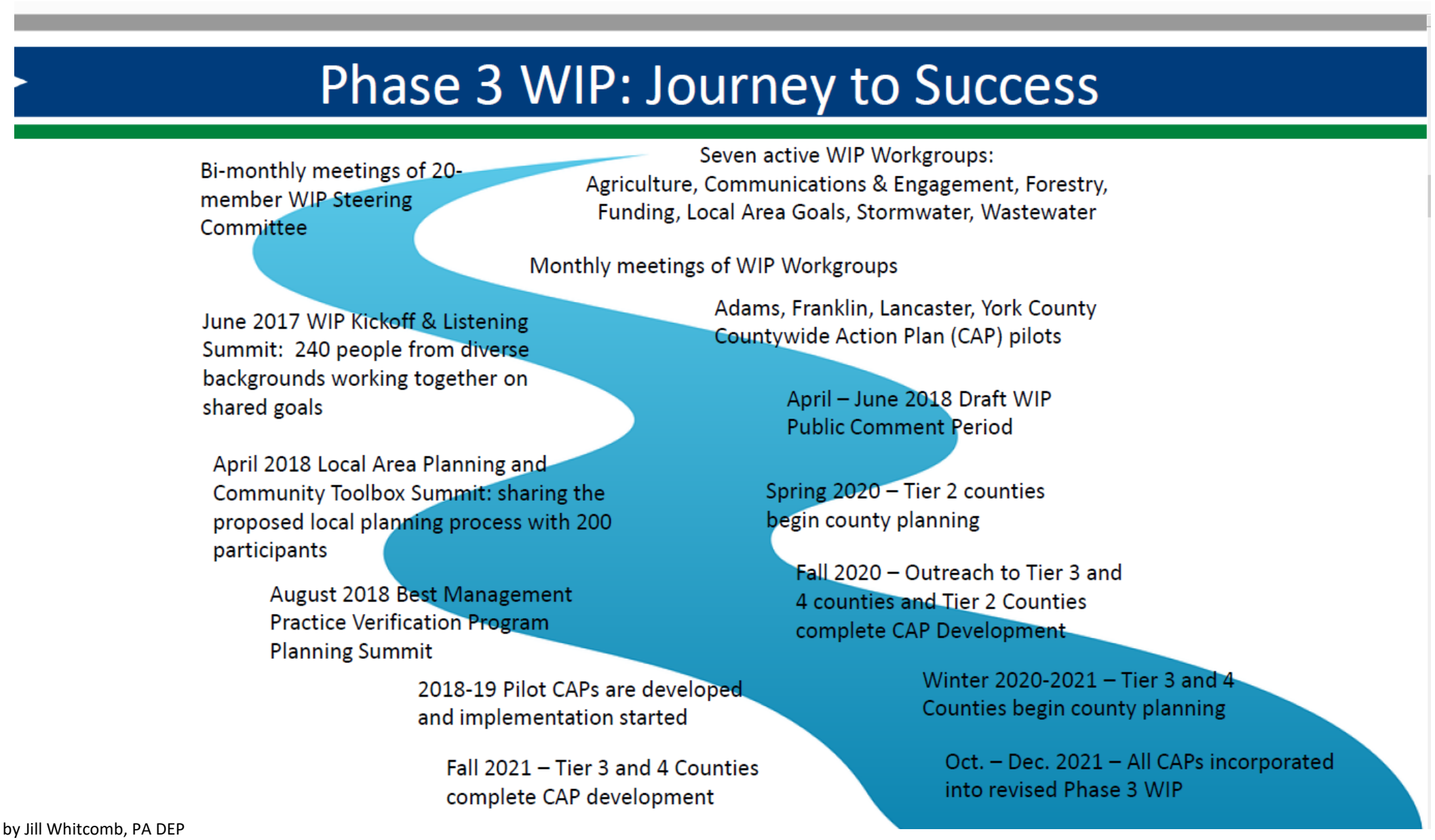
- Clean drinking water
- Food and beverage production by farmers
- Public health
- Less erosion and flooding, reducing the expense of related repairs
  Property value protection
- Outdoor experiences such as fishing, boating, and swimming
- Income from recreation and tourism businesses
- Habitat for fish, insects, birds, animals

PA is also using a tiered approach to prioritize its efforts and reinforce local action at a county level



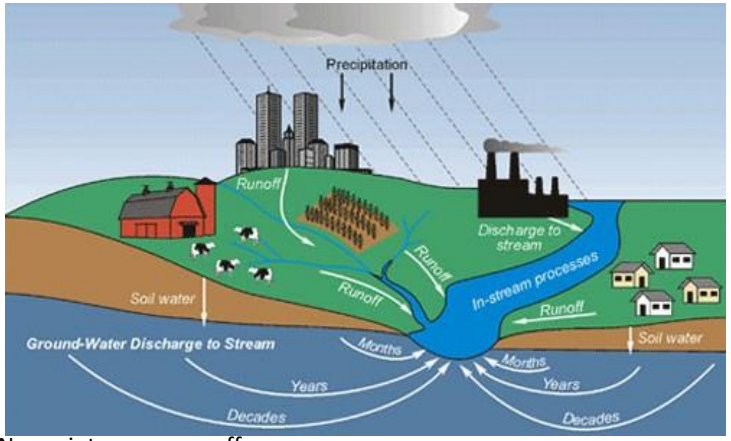


PA remains focused on implementation

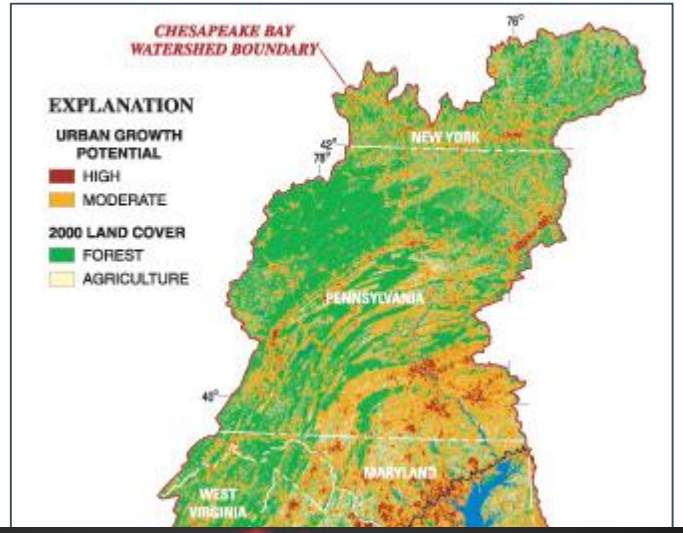


Slide provided by Jill Whitcomb, PA DEP
Update to Conservation Commission, Oct. 2020

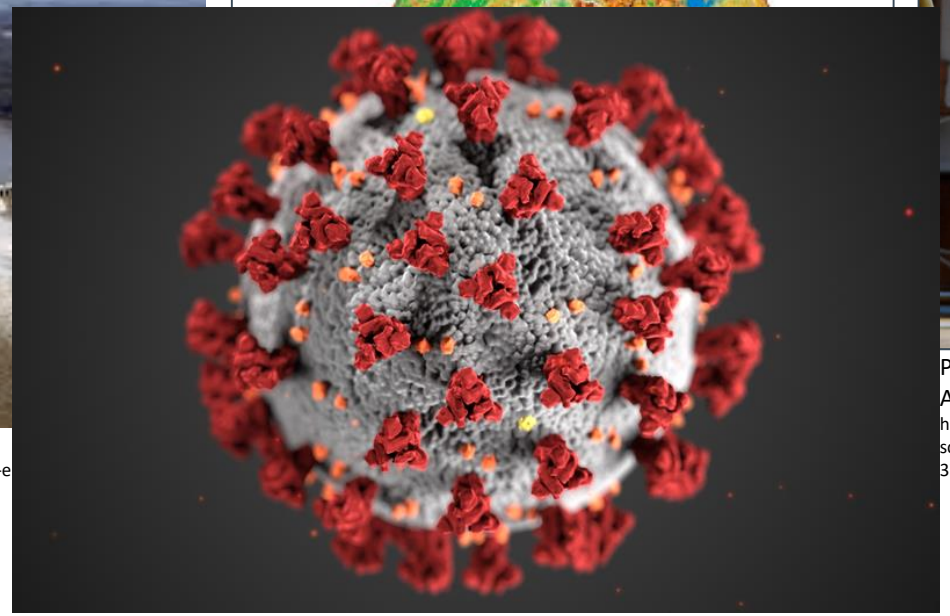
Challenges going forward: nonpoint source runoff, climate change; land use; environmental justice; COVID-19



Nonpoint source runoff
https://va.water.usgs.gov/online_pubs/WRIR/99-4238/99-4238.html



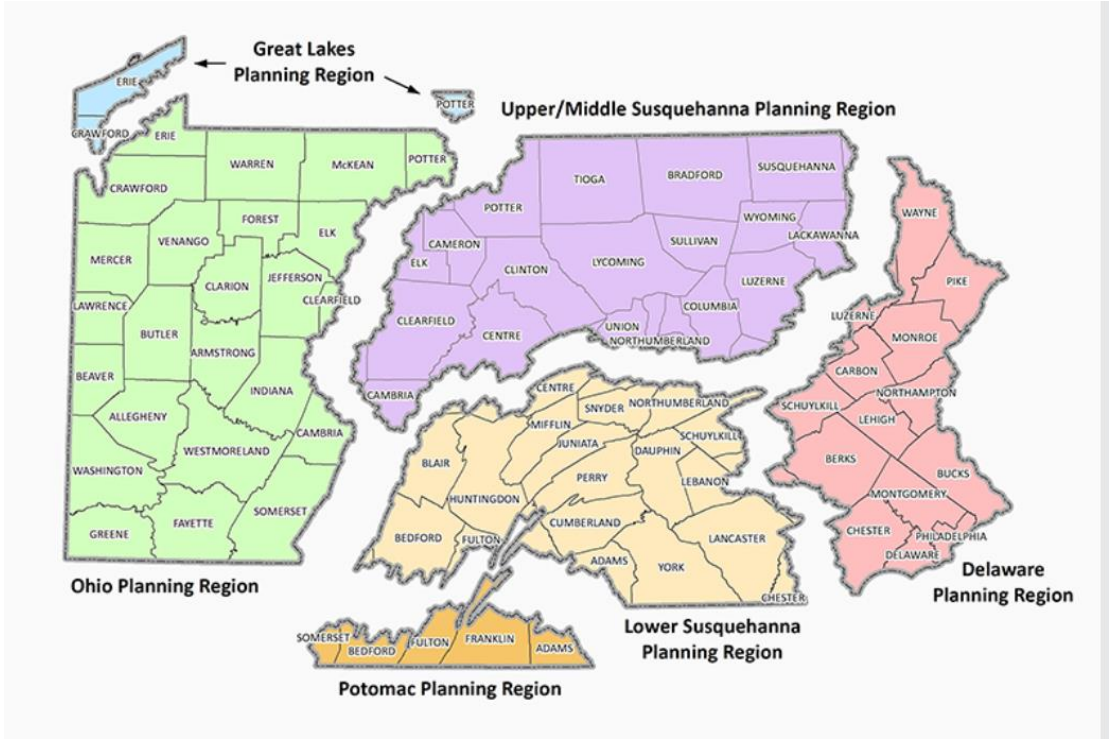
Conowingo Dam, Susquehanna River, Maryland
https://www.delmarvanow.com/story/news/2019/10/29/conowingo-dam-legal-battle-e



Patuxent Riverkeeper Fred Tutman attends a rally in Annapolis, in 2010. Matt Rath / Chesapeake Bay Program
https://www.bayjournal.com/news/people/chesapeake-restoration-under-scrutiny-for-lack-of-diversity/article_4054be30-cab1-11ea-906c-370e2458b13a.html

Another opportunity comes from state and regional watershed planning activities

DEP



https://www.dep.pa.gov/Business/Water/PlanningConservation/StateWaterPlan/Pages/default.aspx

SRBC | SUSQUEHANNA RIVER BASIN COMMISSION
NY ▪ PA ▪ MD ▪ USA

Home › Our Work › Programs › Planning & Operations › Comprehensive Plan

Comprehensive Plan

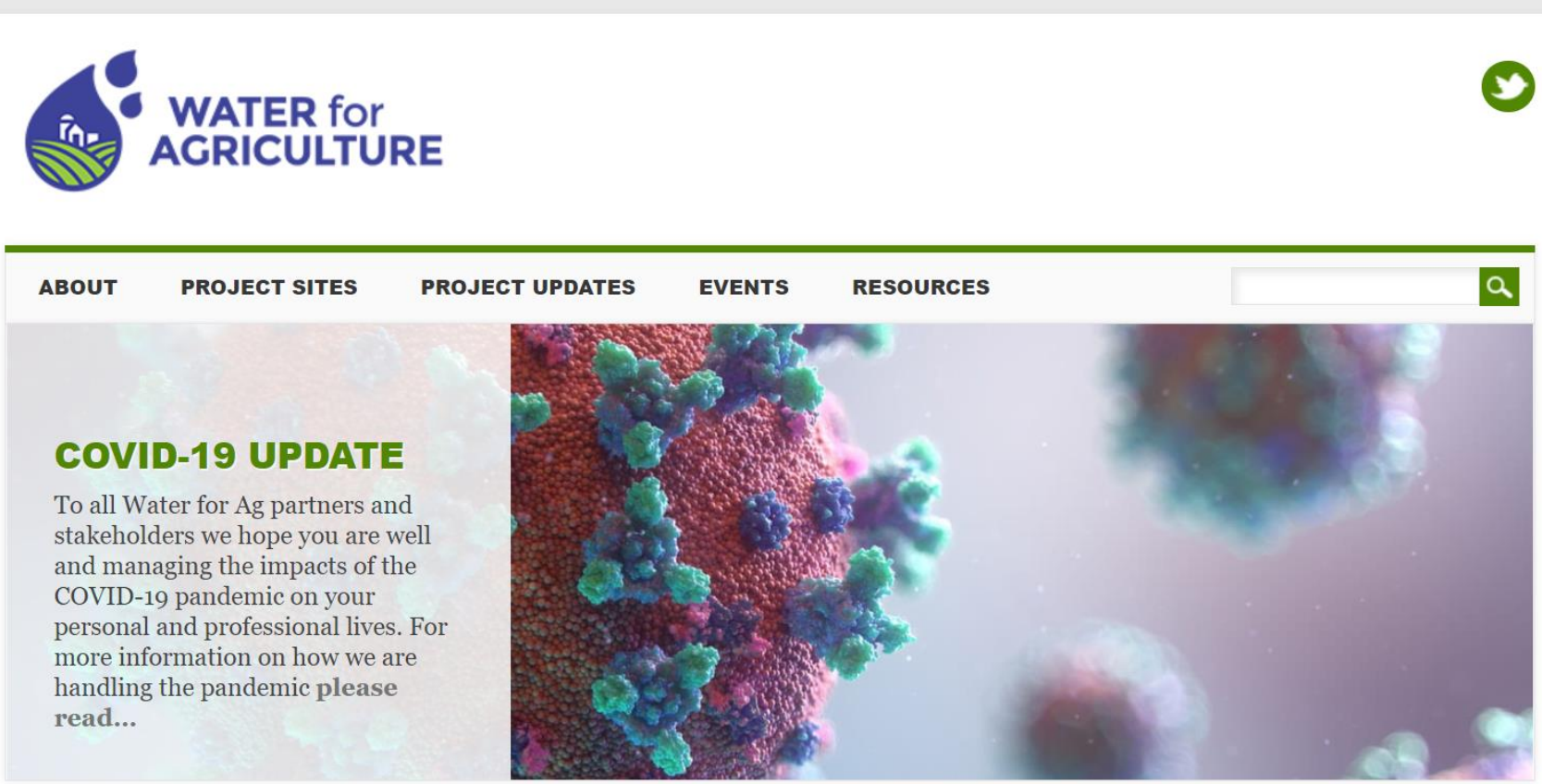
The Commission's *Comprehensive Plan for the Water Resources of the Susquehanna River Basin* – updated and adopted in December 2013, with amendments to follow each year - provides a framework for the Commission to manage and develop the Basin's water resources and serves as a guide for all Commission programs and activities. The Plan is also a resource for the Commission's member jurisdictions, water resource managers, private sector interests and others in the Basin. The Plan calls for a five-year update to help ensure the Plan is current and of long-term value and usefulness. The Commission is currently developing an updated Plan that will become effective in 2021, which marks the halfway point in the 100-year Susquehanna River Basin Compact.

On September 18, 2020, the Plan was amended by adding (1) the projects approved by the Commission from July 2019 through June 2020 and (2) the annual Water Resources Program (Fiscal Years 2019 - 2021; June 2020 Update). The current Plan and it's appendices can be found at the links below.

- Updated 2013 Comprehensive Plan
- Appendix 1: Susquehanna River Basin Compact
- Appendix 2: Projects, Plans & Other Actions
- Appendix 3: Water Resources Program

To view and download maps used in the Plan and other Commission projects and programs, visit Susquehanna Atlas.

Research projects also create opportunities for local engagement: Water for Ag as an example in Mifflin & Potter/Tioga Counties



Opportunity to engage with key stakeholders on critical water/ag issues- people want to work together to find solutions!

https://water4ag.psu.edu/




And there is a need to engage very locally…

- Maintenance→ engagement!
- Integrated opportunities for restoration/habitat
- Financing
- A chance to get outside (can we scale this up?)

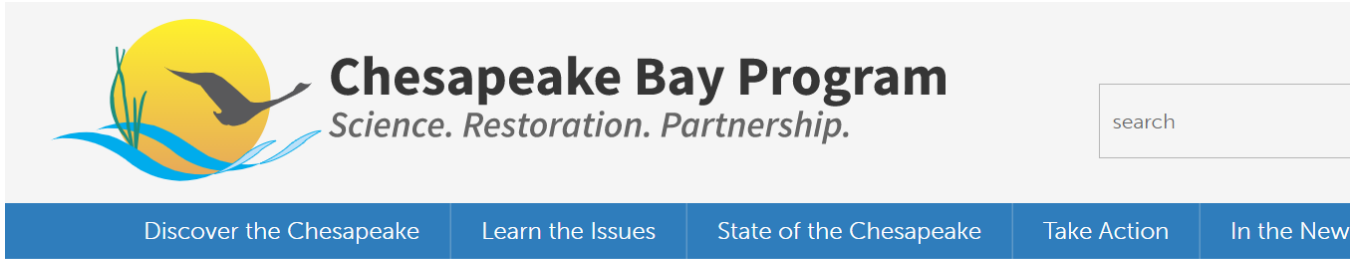
Back to the Conowingo Dam…

Conowingo Dam, Susquehanna River, Maryland

https://www.delmarvanow.com/story/news/2019/10/29/conowingo-dam-legal-battle-ends-200-m-settlement-bay-restoration/2496079001/

The Conowingo WIP: draft Plan out for review now, comments due by Jan. 21, 2021

Conowingo Dam, Susquehanna River, Maryland
https://www.delmarvanow.com/story/news/2019/10/29/conowingo-dam-legal-battle-ends-200-m-settlement-bay-restoration/2496079001/



https://www.chesapeakebay.net/who/group/conowingo_watershed_implementation_plan_steering_committee

<u>Draft Conowingo WIP (CWIP) released in Oct., extensive public engagement:</u>

- Focused on N
- Relies on cooperative multi-jurisdictional approach to identify locations for implementation
- Lays out financing strategy (including meeting goals for co-benefits)
- Identifies opportunities underway or for further exploration (market mechanisms like nutrient trading, using in-water practices, implementing other cost effective BMPs)

So where are we?

Questions/discussion?

Lara Fowler, Penn State

lbf10@psu.edu