

Environmental Law Institute

An independent, non-partisan environmental education and policy research center.

ELI Summer School 2023

Session 3: Basics of the Clean Water Act



ELI Summer School 2023

Join us each Thursday in June & July*

In-Person Sessions of Summer School (held at ELI's office in Washington, DC):

- ~~An Introduction to Careers in Environmental Law & Policy (June 1)~~
- Basics of Land Use and Energy Law (June 22)
- Hazardous Waste and Sites (July 27)

Virtual Sessions of Summer School (held via live Zoom webinar):

- ~~NEPA, ESA, and the Fundamentals of Environmental Law (June 8)~~
- Basics of the Clean Water Act (June 15)
- Basics of the Clean Air Act (July 6)
- Climate Change & Environmental Law (July 13)
- Environmental Justice (July 20)

**Note: There is no session of Summer School on June 29.*



Today's Speakers

Basics of the Clean Water Act

Corinne Bell, Senior Attorney, People & Communities Program, NRDC, Moderator

Camille Pannu, Associate Clinical Professor of Law, Columbia Law School

Peggy Sanner, Virginia Executive Director, Chesapeake Bay Foundation

Basics of the Clean Water Act

Peggy Sanner

Virginia Executive Director
Chesapeake Bay Foundation

June 15, 2023



Background of Clean Water Act: State Responsibility

Old Dominion Land Co. v. Warwick Co., 172 Va. 160 (Va. 1939):

County zoning rules may not prohibit dumping raw or untreated sewage into tidal waters.

Such prohibition would be inconsistent with general laws which said:

- Tidal waters are owned and controlled by the state;
- “Natural office” of streams and sea to carry off impurities and “off-scourings;”
- Landowner may throw refuse into waters absent nuisance, injury to inhabitants’ health.



Background of the Clean Water Act: Early federal efforts

Rivers and Harbors Act of 1899:

- Prohibited refuse depositing to waterways
- Did not directly address pollutants

Federal Water Pollution Control Act of 1948:

- Pollution abatement goal—if economically feasible
- States retained most authority
- Cumbersome enforcement mechanism



By mid-twentieth century . . .

Fish and wildlife

- \$3 million in annual losses to Chesapeake Bay fishing industry.
- Largest recorded fish kill: 26 million in Lake Thonotosassa, FL (1969).

Human health

- Bacteria levels in Hudson River: 170 times the safe limit.
- 30% of USA's drinking water exceeded PHS limits for chemical contaminants.
- An estimated 2/3 of the country's waterways were considered unfit for fishing or swimming.

Crises

- 1969 Fire on Ohio's Cuyahoga River.

Sources: "Clean Water Act: Fast Facts" from Environmental Media Services; "Clean Water Act," U.S. Environmental Protection Agency; "The Clean Water Act: 30 Years of Success in Peril," prepared by the Democratic Staff of the Committee on Transportation and Infrastructure, October 18, 2002.



Smithsonian Magazine



Cleveland Press



Northeast Ohio Regional Sewer District

Cuyahoga River 1969

Federal Water Pollution Control Act of 1972: 33 USC § 1251-1388

Bipartisan Mandate

Congress overrode President Nixon's midnight veto

- House (247-23)
- Senate (52-12)



Congressional Goals

Objective: Restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

1. National goal: Discharge of pollutants eliminated by 1985;
2. Interim goal: *Water quality, which provides for the protection and propagation of fish, shellfish, wildlife, and recreation by July 1, 1983. "Fishable and Swimmable."*

See 40 C.F.R. § 131.2 Purpose.



Congressional Policies

National policy

Discharge of **toxic pollutants prohibited**.

Develop and implement programs for the control of **nonpoint sources of pollution** so goals can be met through the control of **both point and nonpoint sources of pollution**.

Policy of Congress to recognize, preserve, and protect the primary responsibilities and **rights of States** to prevent, reduce, and eliminate pollution.

Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.

CWA Regulatory Framework and WOTUS

Camille Pannu

Associate Clinical Professor of Law

Columbia Law School



The Clean Water Act's Regulatory Framework

- Regulates the discharge of pollutants into the “navigable waters” of the United States, 33 U. S. C. § 1362(7), as well as certain tributaries and wetlands, 33 U.S.C. 1344(g)(1)
- Why the focus on “navigable waters”? Because the U.S. Constitution’s **Commerce Clause** provides Congress with federal authority over the “waters of the United States”
 - “The power to regulate commerce comprehends the control, for that purpose, and to the extent necessary, of all the navigable waters of the United States.”

United States v. Rands, 389 U.S. 121 (1967).

Clean Water Act: Prescribes Strong Federal Role

§402 NPDES program

- PS technology controls
- Federal standards and administration
- Program Delegation to States, Tribes
 - VA: DEQ, DCR

“Industrial pollution plummeted . . . and municipal loadings, the subject of \$125 billion in public funding for treatment works, dropped by nearly 50% while their populations served were doubling in size.”

Oliver Houck, *The Clean Water Act TMDL Program: Law, Policy and Implementation*, Environmental Law Institute (2d ed. 2002), 13

And Maintains Important State Role

- § 101(b), preserves state responsibilities to reduce pollution, plan land and water use
- § 319 (h), federal grants to states
- § 303 Program
 - § 303(c), states set WQS for all waters
 - § 303(d)
 - States identify, rank impaired waters
 - EPA approves
 - Continuing planning process
 - § 303(e), EPA to approve states' CPP, *provided*
 - All waters, TMDLs, plans for NPS management and “adequate implementation,” etc.

Clean Water Act: Cooperative Federalism

States and the federal government take responsibility for separate but interlocking components of a unified regulatory program.

The federal government may adopt programs of “cooperative federalism that allow[] the States, within limits established by federal minimum standards, to enact and administer their own regulatory programs, structured to meet their own particular needs.”

Hodel v. Virginia Surface Mining & Reclamation Assn., Inc., 452 U.S. 264, 288 (1981)

What is a Point Source?

Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, **from which pollutants are or may be discharged.** This term does not include agricultural storm water discharges and return flows from irrigated agriculture.

CWA § 502.



“Point Source” Continued



“**Point Source**” also includes ditch, channel, conduit, well, discrete fissure, container, rolling stock, vessel or other floating craft.

“**Point Source**” does **not** include agricultural stormwater discharges or return flows from irrigated agriculture.

Industrial Point Source/Stormwater



“Point Source” = Tunnel, Pesticide Spraying...



Catskill Mtn Trout Unlimited v. City of New York



National Cotton Council v. EPA

“Point Source” = Coal Loading Conveyor



Alaska Community Action on Toxics v. Aurora Energy Services, 9th Circuit, 2014

Construction Stormwater



Concentrated Animal Feeding Operations



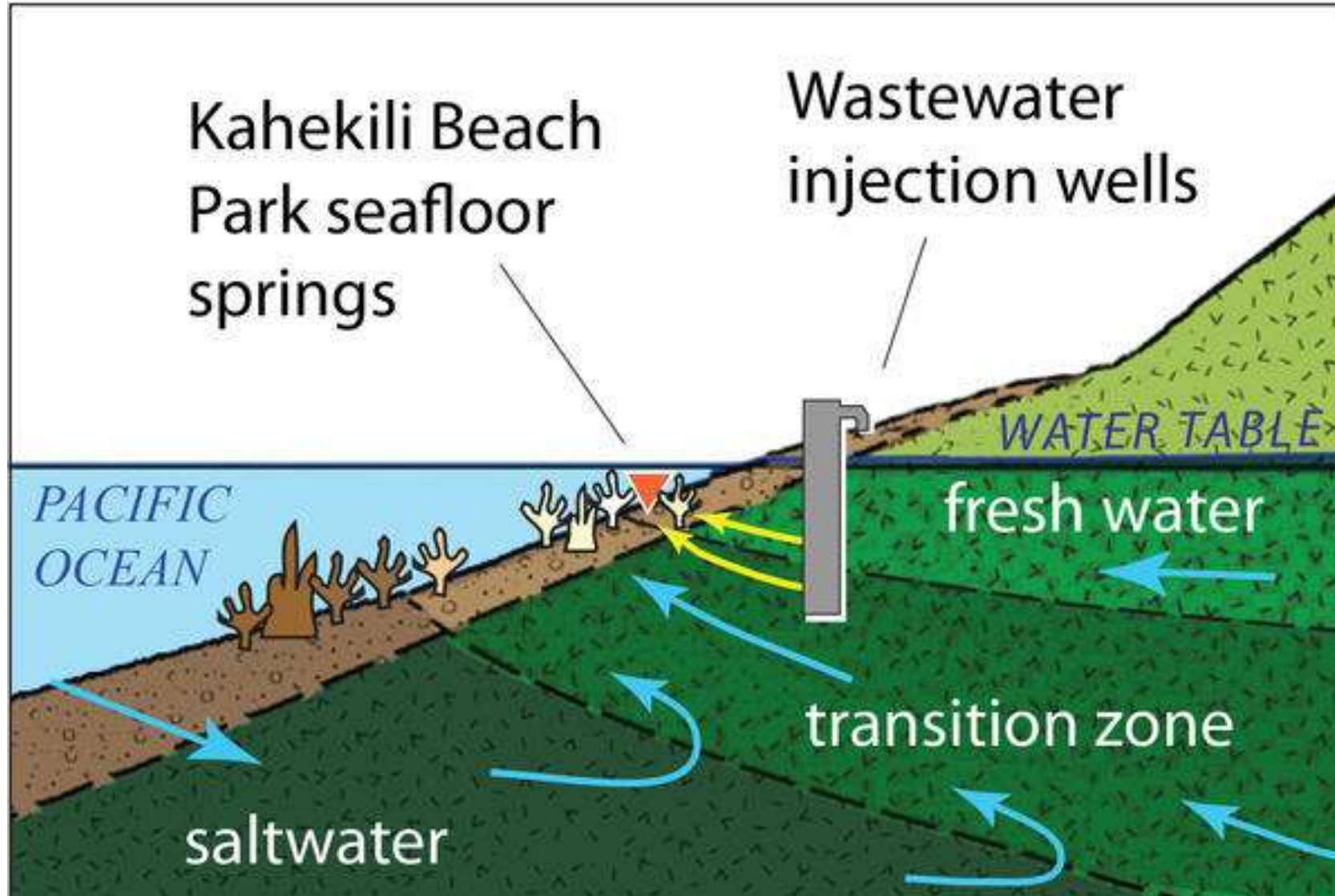
Waterkeeper Alliance V. EPA, 2nd Circuit, 40 C.F.R. § 122.23

Discharges to Groundwater



County of Maui v. Hawaii Wildlife Fund, SCT 2020

Functional Equivalent of a Point Source



Discharge to Surface Water Coal Ash Ponds



Prairie Rivers Network v. Dynegy Midwest Generation, 7th Circuit.

Nonpoint Source Discharges

NPS - Any source of water pollution that does not meet the legal definition of "point source."

- Runoff from agricultural operations (except CAFOs)
- Most stormwater runoff (except municipal separate storm sewer systems)

"[I]t is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable to goals of [the Act] to be met through the control of both point and nonpoint sources of pollution."

33 U.S.C. 1251(a)(7)

Issues in Nonpoint Source Pollution Control

Federal government encourages states to implement programs through oversight, financial incentives—but CWA provides no explicit authority.

- CWA § 319 (h), federal grants to states

State efforts lag

- Special issues in agriculture
 - Largely voluntary (e.g., cost-share programs)
 - Focused on practices, not outcomes
 - Rare efforts to mandate practices
- Problems in unregulated stormwater control

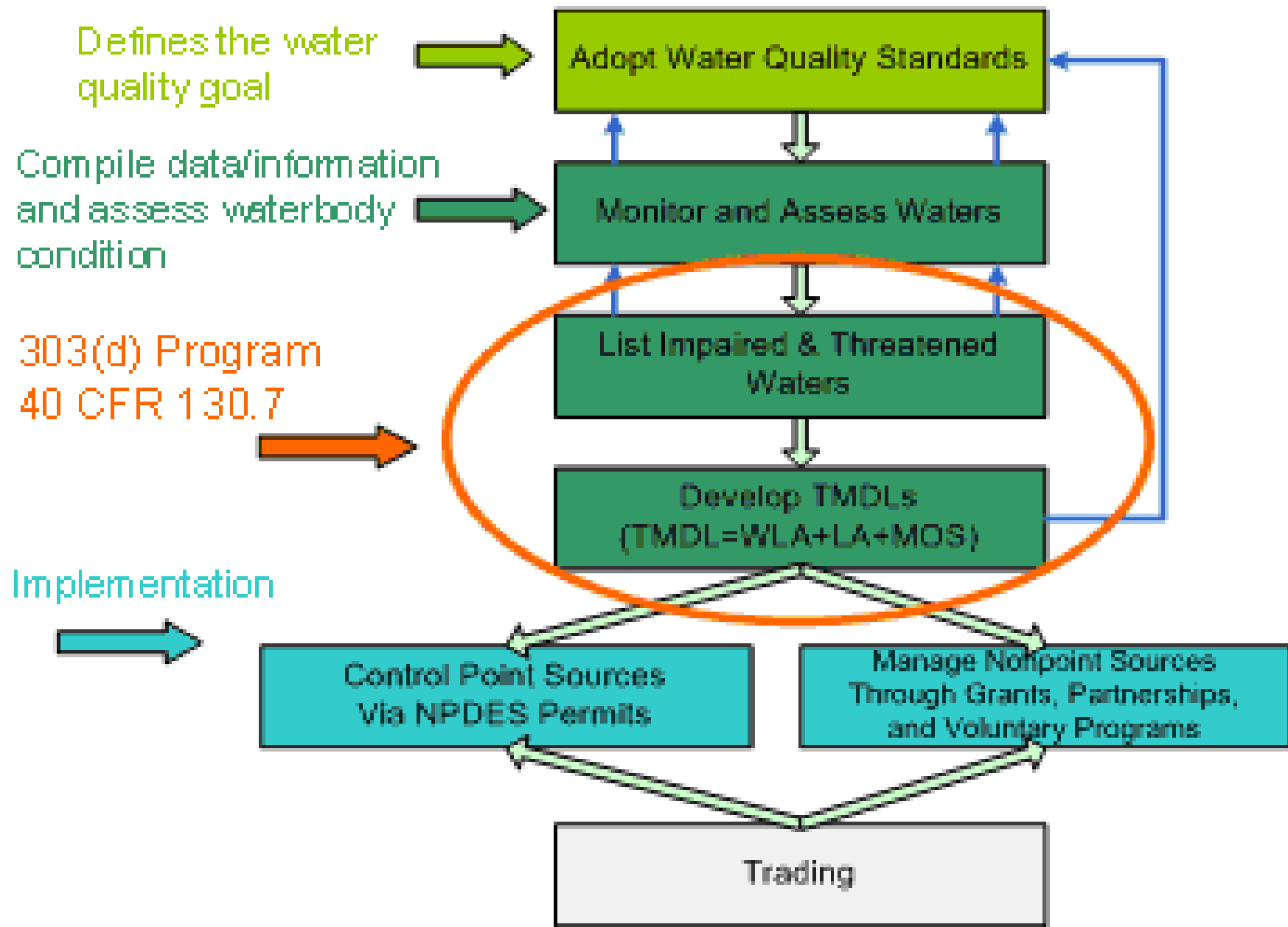
Total Maximum Daily Loads (TMDLs)

States identify all impaired waterbodies. (CWA § 303(d)).

- EPA must approve this list or create a new list.

TMDL to be created for each pollutant in impaired waterbodies.

- Identify the maximum amount of a pollutant that can be added to a waterbody in order to meet WQS.
- Includes all sources: PS, NPS, and margin of error.
 - WLA for point sources, enforceable terms in NPDES permits.
 - LA for nonpoint sources, guide state laws.



Local/Regional TMDLs

- May address single stream or stream segment
 - Slow development
 - Implementation/deadline issues
- Chesapeake Bay TMDL
 - State WIPs: “reasonable assurances”
 - 2-year goals/milestones: accountability
 - Deadlines: 60% by 2017 and 100% by 2025
 - Consequences for failure?
 - Success? Yes and no



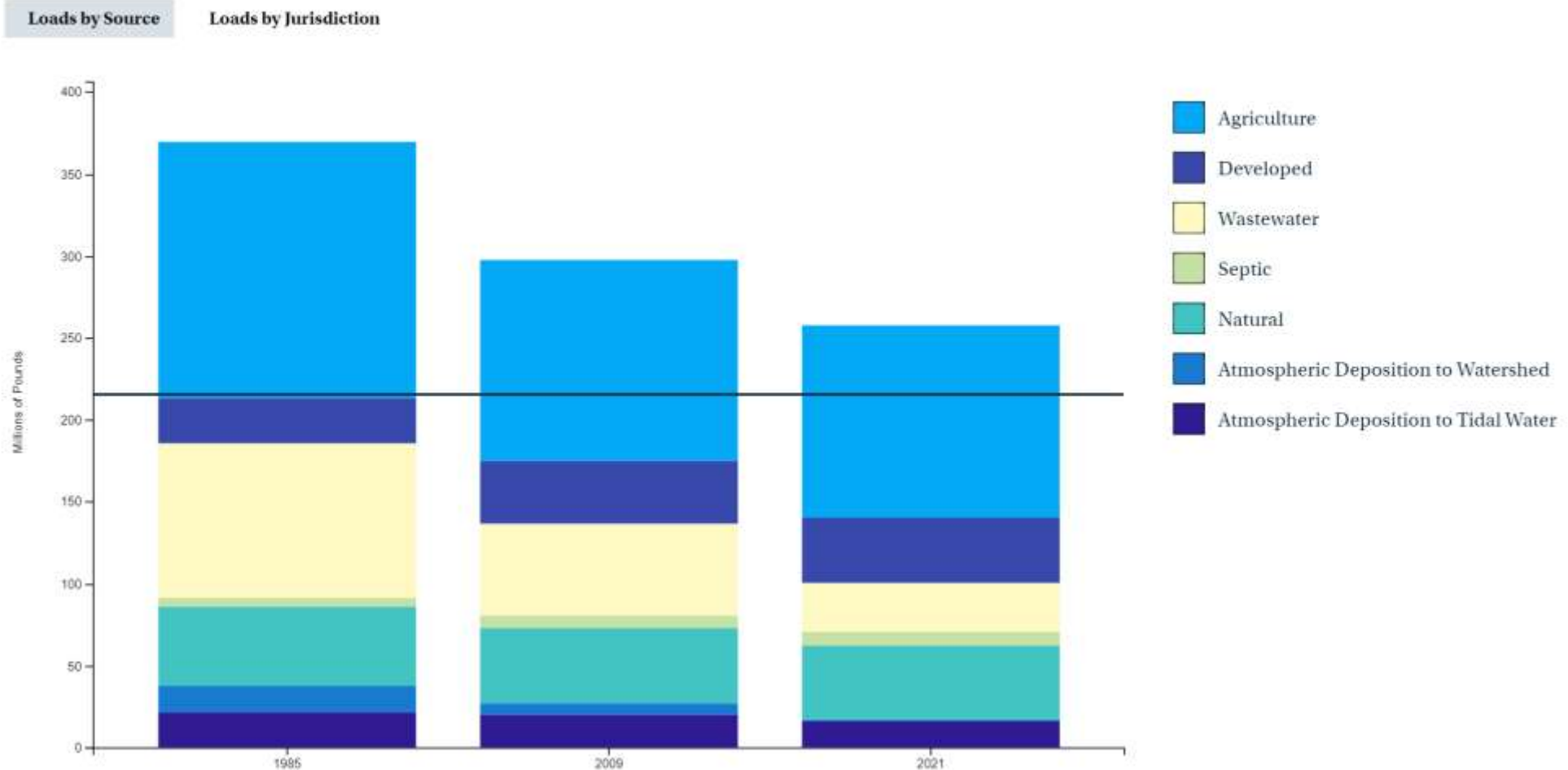
Am. Farm Bureau Fed., et al. v. EPA, et al.

- Legal Challenge: 21 states! Rejected.
- Trial court: Chesapeake Bay TMDL is within EPA's Clean Water Act authority, is not arbitrary or capricious, and the public was appropriately given notice.
- Three-judge appeals court: Agreed.
- U.S. Supreme Court: Declined to review.

Modeled Nitrogen Loads to the Chesapeake Bay (1985-2021) ◀

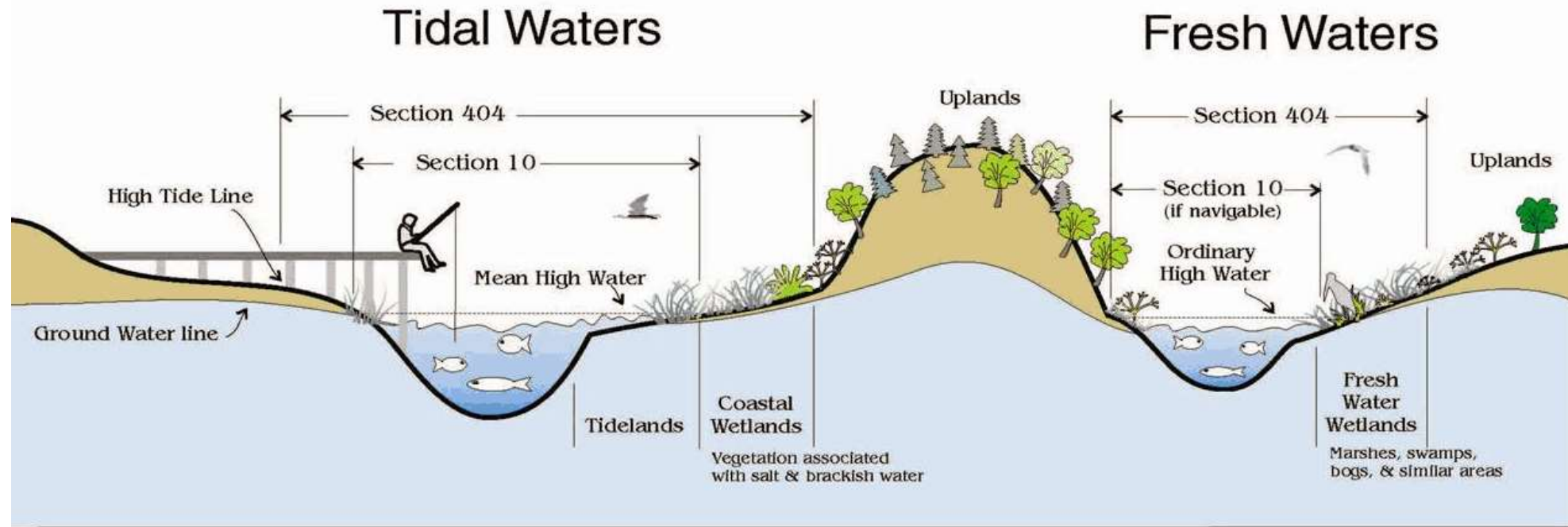
Loads simulated using CAST19 and jurisdiction-reported data on wastewater discharges. *The natural sector includes, in part, forests and wetlands which are preferable land use types with the lowest loading rates among sources.

[VIEW CHART](#) [VIEW TABLE](#)



What are “waters of the United States” (WOTUS)?

CORPS OF ENGINEERS REGULATORY JURISDICTION



Typical examples
of regulated activities

Section 103
Ocean Disposal
of Dredged Material

Ocean discharges of
dredged material

Section 404
Discharge of Dredged or Fill Material
(all waters of the U.S.)

All filling activities, utility lines, outfall structures,
road crossings, beach nourishment, riprap,
jetties, some excavation activities, etc.

Section 10
All Structures and Work
(navigable waters)

Dredging, marinas, piers, wharves,
floats, intake / outtake pipes,
pilings, bulkheads, ramps, fills,
overhead transmission lines, etc.

Is this a river?



Is this a river?



Is this a creek?



Is this a stream?



State Protection of Wetlands post-*Sackett*: Virginia example

- **State waters:** “all waters, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.”
- **Wetlands:** “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Swamps, marshes, bogs and similar areas.”

Virginia Water Protection (Wetlands) Permits

Required to:

- Excavate or discharge wastes or noxious substances into state waters.
- Alter physical, chemical, or biological properties of state waters.
- Drain, alter, or degrade wetland acreage or functions.
- Fill or dump.
- Permanent flooding or impounding.

Permit must:

- Not cause or contribute to a significant impairment of state waters or fish and wildlife.
- Avoid and minimize wetland impacts to the MEP
- Require compensation to achieve **no net loss of existing** wetland acreage and functions.

Sackett is a significant threat

In Virginia, even with a comprehensive program:

- Confusion regarding need for, and source of, permits.
- Need for adequate resources at state regulatory agency.
- Early calls to weaken or roll state rules back to federal limits.

In many other states, consequences may be severe.



Climate Change Presents New Challenges to Clean Water Act Goals

- Sea Level Rise
 - Threatens tidal wetlands
 - Increased storm and sunny weather flooding
- Precipitation: Velocity, Amount, Timing
 - Increased runoff
- Increased Temperatures
 - WQS attainment
- Aquatic Environments
 - Loss of key species (e.g., eelgrass)
- Land Cover
 - Headwater stream effects
- More