

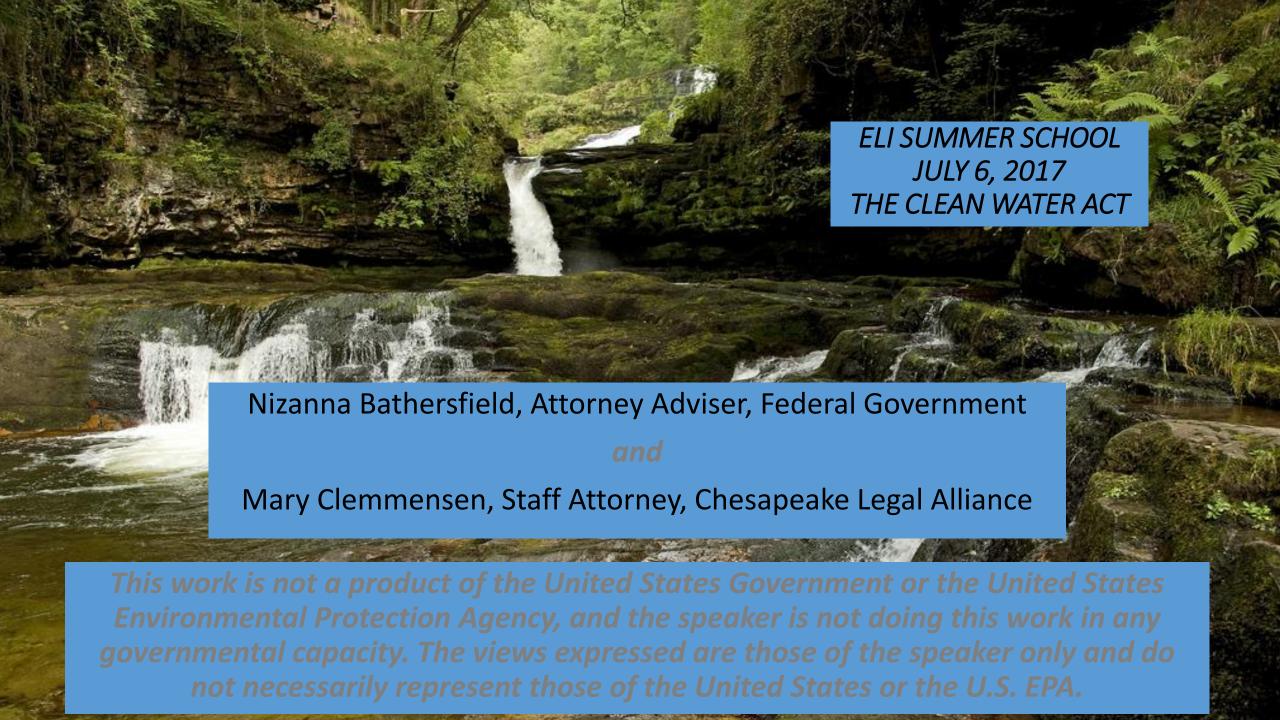
Basics of the Clean Water Act

ELI Summer School 2017



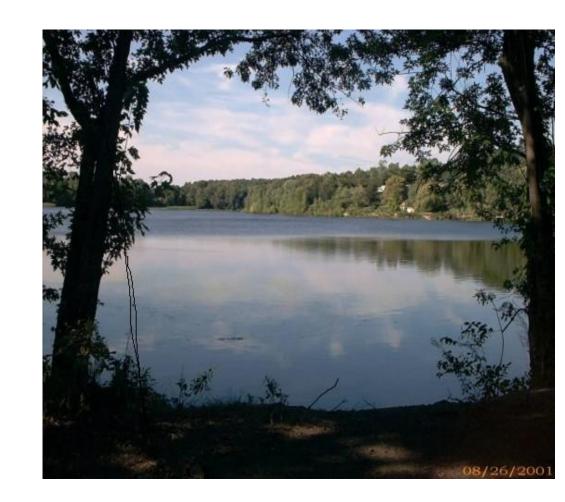
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EARLY STATUTES

- 1899 Rivers and Harbors Act established permit requirements to prevent unauthorized obstruction or alteration of any navigable water of the United States.
- The 1948 Federal Water Pollution
 Control Act (FWPCA) was the first major
 U.S. law to address water pollution.
 - Authorized the Surgeon General, along with other Federal, state and local entities, to prepare comprehensive programs to eliminate or reduce the pollution of interstate waters and tributaries and to improve the sanitary condition of surface and underground waters.



EARLY STATUTES (cont'd)

1965 Water Quality Act

- Focused on both navigation and with protecting human health
- Created the Federal Water Pollutant Control Administration
- Focused on developing water quality standards across the nation
- Implementation issues

1970 Refuse Act Permit Program

- Focused on water quality protection
- US Army Corps of Engineers, EPA and the states each had a role in the program
- Struck down by *Kalur v. Resor, Civ. Action No.1331-71,* 335 F. Supp. 1 (US District Ct, December 21, 1971)

1972 FWPCA Amendments

- Established the basic structure for regulating pollutants discharges into the waters of the United States.
- Gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry.
- Maintained existing requirements to set water quality standards for all contaminants in surface waters.
- Made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions.

1977 Clean Water Act

- Clarified that federal facilities are subject to regulation by authorized state NPDES programs
- Added a list of 129 toxic pollutants, applicable to 21 industry categories in Section 307(a)
- Established Pretreatment program delegation
 - Authorized EPA to approve local pretreatment programs
 - Authorized NPDES states could modify programs to include pretreatment oversight

1987 Water Quality Act

- Authorized continuation of the Chesapeake Bay Program, and the establishment of a Chesapeake Bay Program Office.
- Authorized establishment of a Great Lakes National Program Office within EPA and a Great Lakes Research Office within NOAA.
 Established Stormwater permitting requirements [section 402(p)]
- Indian tribes may be considered as "states"
- Authorized the establishment of Federal sludge management program
- Renewed emphasis on surface water toxics control

TECHNOLOGY BASED STANDARDS



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- Authorized under CWA Sections 301, 304, 306 and 307
- Effluent guidelines are designed to address specific industrial categories.
- EPA has promulgated effluent guidelines that address 56 categories—ranging from manufacturing industries such as petroleum refining to service industries such as centralized waste treatment.
- These regulations apply to between 35,000 and 45,000 facilities that discharge directly to the Nation's waters, as well as another 12,000 facilities that discharge into wastewater treatment plants or publicly owned treatment works (POTWs).

National Effluent Guidelines (ELGs)

- Specify the maximum allowable levels of pollutants that may be discharged by facilities
- Limits are based on the performance of specific technologies but do not typically y require the industry to use these technologies; allow the industry to use any effective alternatives to meet the numerical pollutant limits.
 - Generally, each facility within an industrial category or subcategory must comply with the applicable discharge limits — regardless of its location within the country or on a particular water body.
- When developing ELGs, EPA assesses:
- (1) the performance of the best pollution control technologies or pollution prevention practices that are available for an industrial category or subcategory as a whole; and
- (2) the economic achievability of that technology, which can include consideration of costs, benefits, and affordability of achieving the reduction in pollutant discharge.

National ELGs apply to three types of facilities within an industrial category:

- •Existing facilities that discharge directly to surface waters (*direct discharges*) are governed by best practicable technology (BPT), best available technology (BAT), or best conventional pollutant control technology (BCT);
- •Existing facilities that discharge to POTWs (indirect dischargers) are governed by pretreatment standards for existing sources (PSES); and
- •Newly constructed facilities (*new sources*) that discharge to surface waters either directly or indirectly are governed by new source performance standards (NSPS) and pretreatment standards for new sources (PSNS).



WATER QUALITY STANDARDS

- Established by Section 303(c) of the CWA
- Requires that state, territories and tribes establish standards
 - These standards must protect public health or welfare, enhance the quality of water and serve the purposes of the Act;
 - To be effective for Clean Water Act purposes, water quality standards must be reviewed and approved by EPA
- Requires states, territories and tribes to review their standards at least every three years

Water Quality Standards Components

A water quality standard consists of **four basic elements**:

- 1. **Designated Uses** of the water body (e.g., recreation, water supply, aquatic life, agriculture),
- 2. Water Quality Criteria to protect designated uses (numeric pollutant concentrations and narrative requirements),
- 3. An Antidegradation Policy to maintain and protect existing uses and high quality waters, and
- 4. **General Policies** addressing implementation issues (e.g., low flows, variances, mixing zones). [At state's discretion]

Designated Uses



- Identified by states, territories and tribes considering the use and value of the water body for public water supply, for protection of fish, shellfish, and wildlife, and for recreational, agricultural, industrial, and navigational purposes.
- Designated uses must include the "fishable/swimmable" goal uses identified in the section 101(a)(2) of the CWA. If a designated use does not include these goal uses, a use attainability analysis (UAA) would have to be conducted.



Water Quality Criteria

- States and authorized Tribes adopt water quality criteria to protect designated uses.
- In adopting criteria, States and Tribes may:
 - adopt the criteria that EPA publishes under §304(a) of the Clean Water Act;
 - modify the §304(a) criteria to reflect site-specific conditions; or
 - adopt criteria based on other scientifically-defensible methods.

Water Quality Criteria (cont'd)

TWO MAIN TYPES

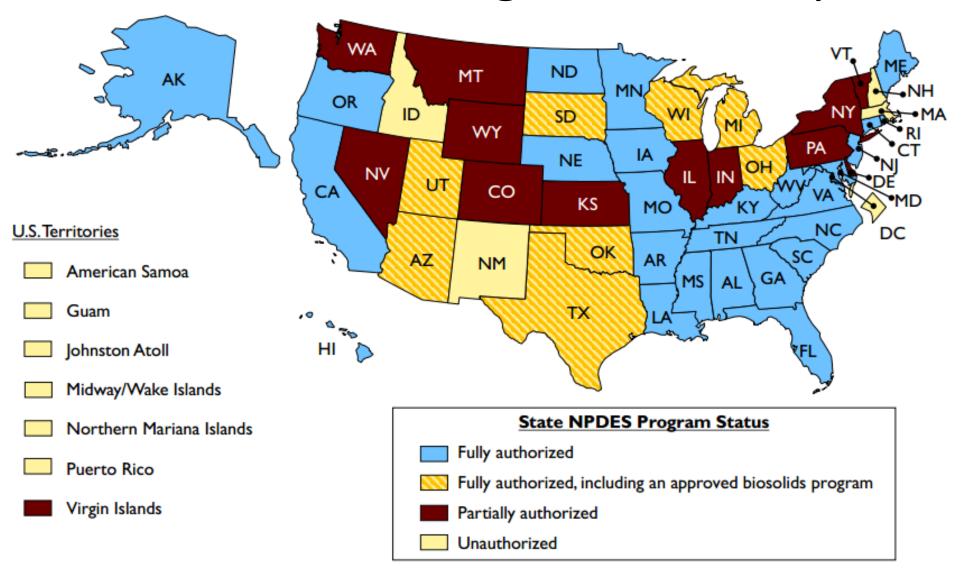
- **Numeric criteria** are quantitative, and address specific concentrations of pollutants or the toxic effects of a mixture of pollutants or the health of a waterbody.
- Narrative criteria are qualitative statements that articulate the water quality goals for a waterbody. May take the form of "free from" statements, e.g., These waters shall be free from floating, suspended and settleable solids in concentrations and combinations that would impair any use assigned to this Class, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.

CWA Section 402: NPDES Permits Program



- Section 402 prohibits the discharge of pollutants by point sources into waters of the United States without an NPDES Permit.
- NPDES permit limits, terms and conditions must ensure the protection of water quality in the receiving waterbody.
- States, tribes and territories can be authorized to administer their own NPDES programs.
- Most states are authorized to run the NPDES permit program.
- EPA provides oversight for these authorized states.
- Approved programs can be withdrawn if certain criteria are met.

State NPDES Program Authority



What is a Pollutant? 40 CFR 122.2

- Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water
- Does not include sewage from vessels or injected wastes



What is a Point Source? 40 CFR 122.2



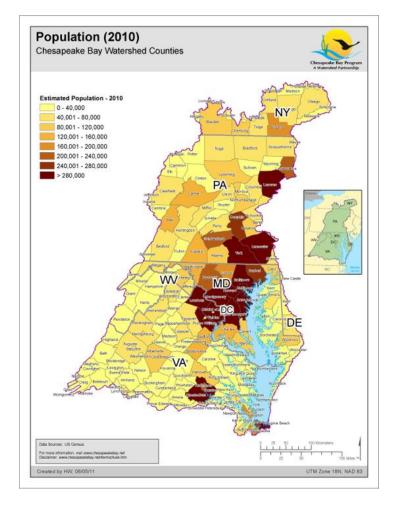
- Any discernible, confined, and discrete conveyance, including but not limited to:
 - any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged
- Does not include return flows from irrigated agriculture or agricultural storm water runoff

Chesapeake Bay Case Study – Using the CWA to Clean up a Watershed



Chesapeake Bay Case Study – Using the CWA to Clean up a Watershed





Why Does the Chesapeake Bay Matter?

- Largest Estuary in North America
- Watershed covers 64,000 square miles and includes parts of New York, Pennsylvania, Delaware, Maryland, DC, Virginia and West Virginia
- Total Bay shoreline is 11,684 miles (longer than San Diego to Seattle)

Why Does the Chesapeake Bay Matter?

Major environmental, recreational and economic resource







The Bay and its Watershed are Impaired

- Primary pollutants of concern:
 - Nitrogen
 - Phosphorous
 - Sediment
- Primary sources of pollution:
 - Agriculture
 - Urban and suburban run-off
 - Wastewater treatment facilities and septic systems
 - Atmospheric deposition





What is a Total Maximum Daily Load (TMDL)?

- A "pollution diet" maximum amount of pollution a body of water can receive and still meet state water quality standards.
- CWA section 303 water quality based regulation
 - establish designated uses for a waterbody
 - establish water quality standards that will support those uses
 - Identify waters that are not meeting water quality standards – "impaired waters list"
 - Develop a cleanup plan that allocates pollutant loads to all point and non-point sources

The Bay TMDL

- Issued on December 29, 2010
- Developed through a cooperative effort among EPA, the Bay states and Washington, DC
- Combination of 92 smaller TMDLs; largest and most complex TMDL ever created
- Allocates pollutant loads among Bay jurisdictions
 - 185.9 million pounds per year of nitrogen (25% reduction)
 - 12.5 million pounds per year of phosphorous (24% reduction)
 - 6.45 billion pounds per year of sediment (20% reduction)
- Bay Jurisdictions develop "Watershed Implementation Plans" to meet their allocations
- EPA requires "reasonable assurances" that reductions will be met

Bay TMDL – Key Take-Away Points

- The Bay TMDL is legal upheld as a reasonable exercise of EPA's authority by PA district court and 3rd Cir.; Supreme Court denied cert. in 2016
- Implementing the TMDL is a massive and complex undertaking
- The cleanup is making progress but the reductions to this point have come primarily from wastewater treatment facilities
- Open question: does the Bay TMDL process provide a road map for future cleanups in other watersheds?

CWA Section 404

 A permit is required before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., permit is required for certain farming and forestry activities).

 Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects.



CWA Section 404 (Cont'd)

- No discharge of dredged or fill material may be permitted if:
 - (1) a practicable alternative exists that is less damaging to the aquatic environment, or
 - (2) the nation's waters would be significantly degraded.

Proposed activities are regulated through a permit review process.

- States can be authorized to administer the 404 program.
 - Only two states have been approved to run the 404 program: MI and NJ.

404 Permits

- An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Army Corps of Engineers, which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines, regulations promulgated by EPA.
- For discharges that will have only minimal adverse effects, a general permit may be suitable.
- General permits are issued on a nationwide, regional, or State basis for particular categories of activities.
- The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met.
 - For example, minor road activities, utility line backfill, and bedding are activities that can be considered for a general permit.

Waters of the United States

- Both CWA 402 and 404 programs regulate discharges into waters of the United States
- Waters of the United States defined in 40 C.F.R. 122.2. Includes:
 - All waters which are subject to the ebb and flow of the tide;
 - Interstate "wetlands";
 - Interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, and
 - The territorial sea

Waters of the United States Does **NOT** Include

 Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.



Waters of the United States Does **NOT** Include

- **Ground water**, including ground water drained through subsurface drainage systems, identified as not a water of the United states
- Discharges affecting ground water might be regulated as NPDES discharges if there is a direct hydrological connection to surface water
- Ground water might be considered "water of the state"





Supreme Court Cases: Impacts on Definition

- Two Supreme Court cases have led to confusion about which waters are protected under the CWA
 - SWANCC v. U.S. Army COE (2001)
 - Rapanos v. United States (2006)
- As a result, EPA and U.S. Army Corps of Engineers promulgated the final Clean Water Rule on May 26, 2015
 - Updated the definition of "Waters of the United States" to clarify
- This Rule is currently under litigation and subject to new rulemakings by EPA and Army Corps

Overview of 2015 Clean Water Rule

- Defines "waters of the United States"
- Specifies waters that are <u>not</u> waters of the United States, even where they otherwise meet certain terms in the definition
- Defines specific terms (e.g., tributary) that are used in analyses to determine whether a water body is a water of the United States
- http://www2.epa.gov/cleanwaterrule/clean-water-rule-documents-related-clean-water-rule

The Clean Water Rule Litigation

- Threshold Question: Should judicial review of the Rule occur in district court under the APA (28 USC 1331) or in circuit court on petition for review under the CWA's judicial review provision (33 USC 1369(b)(1))?
- 22 Petitions for Review filed in Circuit Courts
 - Consolidated in 6th Circuit Court of Appeals
 - October 2015: Rule was stayed on 10/9/15; prior rule currently in effect
 - o February 2016: 6th circuit ruled on 2/22/16 that it has exclusive jurisdiction
 - April 2016: Opposing states and industry groups petition the Sixth Circuit for en banc review (which it declined in April 2016)
 - Sixth Circuit heard substantive briefing until January 25, 2017 when the Court of Appeal granted a motion to hold in abeyance the litigation over the Final Rule until the US Supreme Court reaches a decision regarding jurisdiction
- 18 District Court Complaints filed
 - 4 complaints dismissed; 14 active cases
 - o 7 motions for preliminary injunction; 1 granted (D. N. Dak.)
 - o all stayed except D. N. Dak.
 - U.S. motion to consolidate all complaints denied 10/13/15
- 11th Circuit Court Appeals
 - Appeal from S.D. Ga. decision finding no jurisdiction
 - o February 2016: stayed cases until 6th Circuit renders decision
- January 2017: Supreme Court grants petition for certiorari on the jurisdictional question and issues stay on the rule (National Association of Manufacturers v. Department of Defense)
 - The case is scheduled for October 2017 term

Clean Water Rule – 2017 Proposed Rulemaking

- **February 28, 2017** <u>Executive Order</u> requiring EPA and Army Corps to "review" the Waters of the United States Rule and issue a proposed rulemaking "rescinding or revising" it to be consistent with both economic growth and Justice Scalia's plurality opinion in *Rapanos v. United States*
- March 6, 2017 EPA and Army publish <u>Notice of Intent</u> to review the rule, and provide advanced notice of future proposed rulemaking
- June 27, 2017 EPA and Army release <u>pre-publication proposed rule</u> to repeal Clean Water Rule regulation
 - Not yet published in the Federal Register. FR publication triggers comment period.

Clean Water Rule – 2017 Proposed Rulemaking

Proposed Two Step Process

- 1. EPA and Army plan to recodify the regulation that was in place prior to issuance of the Clean Water Rule and that is being implemented now under the U.S. Court of Appeals for the Sixth Circuit's stay of that rule.
 - Once a final rule rescinding the Clean Water Rule takes effect, courts may dismiss challenges to the Clean Water Rule as moot.
- 1. EPA and Army plan to propose a new definition that would replace the approach in the 2015 Clean Water Rule, taking into consideration the principles that Justice Scalia outlined in the *Rapanos* plurality opinion.

Clean Water Rule – Key Take-Away Points

- Defining the scope of the Clean Water Act is legally complex and politically controversial
 - Supreme Court will hear case term October 2017
 - Rulemaking EPA and Corps working to resend and replace
 - In the meantime, the EPA and the Corps will continue to rely on pre-2015 regulations, agency guidance documents and their interpretations of Supreme Court precedent to determine the scope of federal jurisdiction under the Clean Water Act.
- The existing lack of clarity poses challenges for landowners, regulated industries, regulatory agencies, and citizen enforcers
- The Supreme Court is likely to weigh-in again on definition

CWA Section 311



- Established the Oil Pollution Prevention program in 1973.
- Sets forth requirements for prevention of, preparedness for, and response to oil discharges at specific non-transportation-related facilities.
- Goal is to prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil
- Requires regulated facilities to develop and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans and establishes procedures, methods, and equipment requirements

Oil Pollution Act of 1990

- Amended the CWA, and provided new requirements for contingency planning by government and industry under the National Oil and Hazardous Substances Pollution Contingency Plan.
- Increased the penalties and other consequences of a discharge into waters.
 - Civil judicial penalties of up to \$25,000 per day of violation or \$1,000 per barrel or unit discharged, or in the event of gross negligence or willfulness, \$3,000 per barrel or unit.
- Required some oil storage facilities to prepare Facility Response Plans. On July 1, 1994, EPA finalized regulations directing facility owners or operators to prepare and submit these plans for responding to a worst-case discharge of oil.

CWA LIABILITY AND PENALTIES



- The CWA is a strict liability statute; there is no requirement to prove intent or causation.
- Under CWA Section 309 EPA can issue administrative orders against violators, and seek civil or criminal penalties.
- States that are authorized by EPA to administer the NPDES program must have authority to enforce permit requirements under their respective state laws.
- Administrative Penalties: Up to \$10,000 per day for each violation
- Civil Judicial Penalties: Up to \$25,000 per day for each violation

CWA Section 309(c): Criminal Penalties

- For negligence, the minimum fine for a first time offence is \$2,500, with a maximum of \$25,000 fine per day of violation and a violator may receive up to a year in jail or both. If a violation occurs after a person's first conviction, a maximum fine of \$50,000 per day may be issued, and imprisonment of not more than 2 years.
- For knowing violations, first time violators are subject to a minimum fine of \$5,000 per day of violation or imprisonment of not more than 3 years or both. If a violation occurs after a person's first conviction, a fine of not more than \$100,000 per day of violation and/or imprisonment of not more than 6 years.
- For a knowing endangerment violation, a penalty of up to \$250,000 may be issued and/or an individual may receive up to 15 years in prison. An organization would face up to \$1,000,000 in penalties.

Public Participation

- The CWA provides for public participation in the permit issuance process
 - Provides for notice and comment and opportunity to request a hearing
 - Authorizes judicial review of *federally* issued permits under Section 509
- It also allows for citizen suits under Section 505, which provides:

Except as provided in subsection (b) of this section and section 309(g)(6), any citizen can commence a civil action on his own behalf...



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