



School of Natural Resources  
University of Missouri

# How the Clean Water Act Works (and Doesn't Work)

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**Environmental Law Institute – 2022 Summer School  
The Basics of the Clean Water Act Program – June 16, 2022**

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# Outline of Presentation

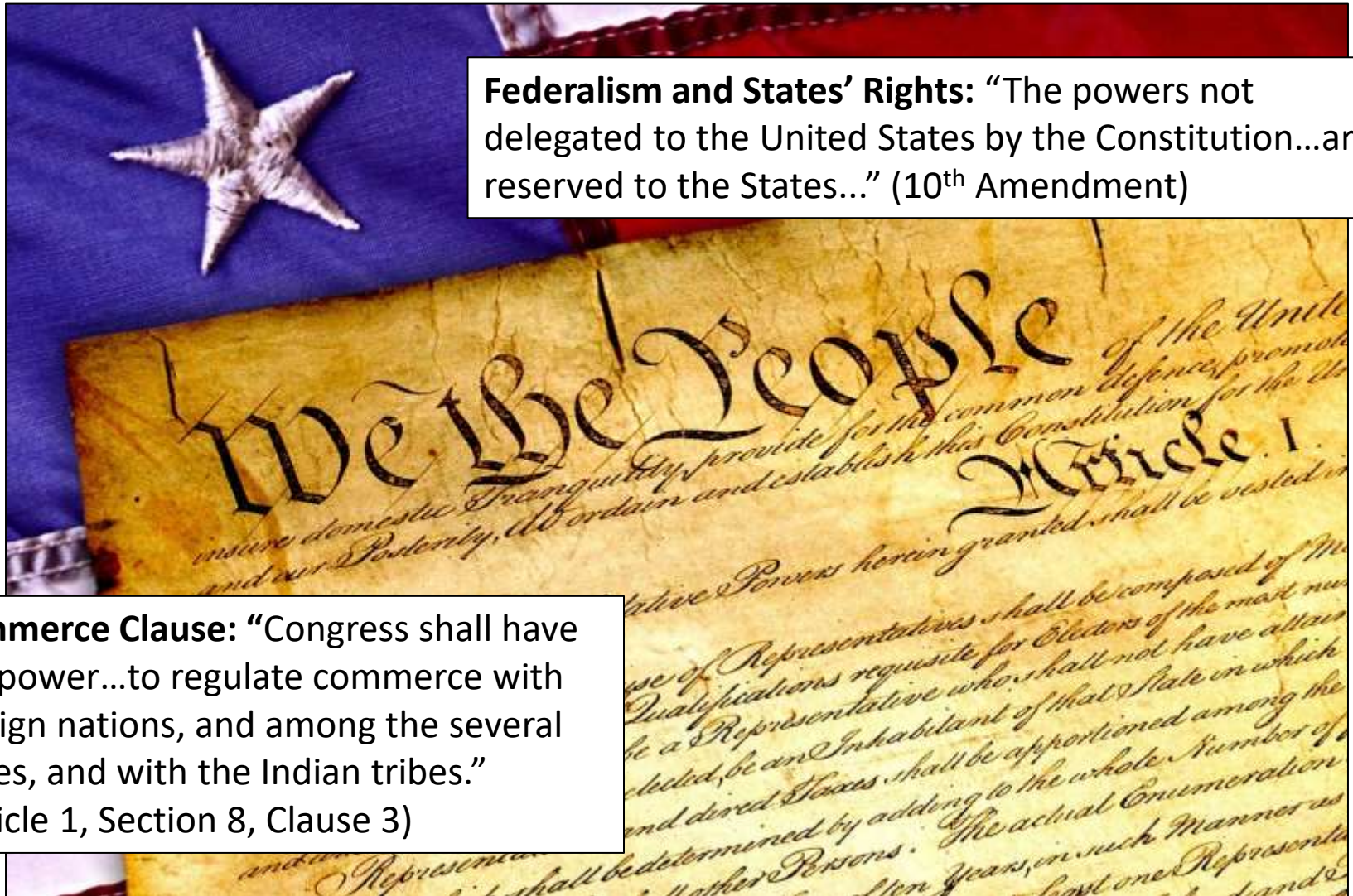
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- History of water quality regulation in the United States
- Clean Water Act 101
- Current issues
  
- Questions, comments, and discussion are welcome during the Q&A period



# **History of Water Quality Regulation in the United States**

# The U.S. Constitution

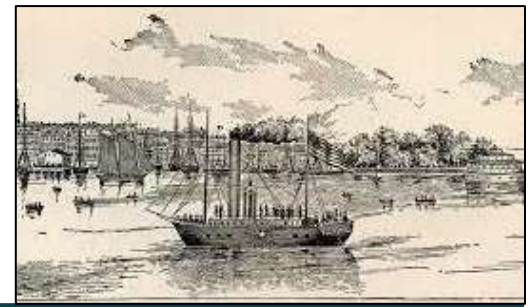


**Federalism and States' Rights:** "The powers not delegated to the United States by the Constitution...are reserved to the States..." (10<sup>th</sup> Amendment)

**Commerce Clause:** "Congress shall have the power...to regulate commerce with foreign nations, and among the several states, and with the Indian tribes."  
(Article 1, Section 8, Clause 3)

# Navigability and the Commerce Clause

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- *Gibbons v. Ogden*, 22 U.S. 1 (1824): Because “goods and services in interstate commerce are transported or performed by vessel,” only Congress can “regulate waterbodies where vessels may travel.”
- *Gilman v. City of Philadelphia*, 70 U.S. 713 (1865): “Congress has powers to keep [navigable waters] open and free from any obstruction to their navigation.”
- *Daniel Ball*, 77 U.S. 557 (1871): “The rivers that must be regarded as navigable rivers in law are those which are navigable-in-fact in their ordinary condition...using customary modes of travel on water.”

# Early Legislation

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- The Rivers and Harbors Act of 1899
  - Made it illegal to dump refuse into navigable waters without a permit from U.S. Army Corps of Engineers
- Federal Water Pollution Control Act of 1948
  - Empowered U.S. Surgeon General to investigate and seek to enjoin interstate water pollution – but only with consent of state where pollution originated
- Water Quality Act of 1965
  - Required states to identify intended uses of navigable waters within their borders and set corresponding water quality standards



# The Summer of '69...

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# Clean Water Act 101

# The Clean Water Act of 1972

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- Make all navigable waters safe for swimming and fishing
- Eliminate all pollution discharges to navigable waters by 1985 (!)

# Federal Agencies Involved

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- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers

# Two Key Functions

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- Protect ambient water quality
- Provide grants and low-interest loans to municipal wastewater utilities
- Distinguish from Safe Drinking Water Act
  - Set minimum standards for water that comes out of the tap of public water systems (not private wells)
  - Regulate subsurface injections to protect groundwater quality
  - Provide grants and low-interest loans to municipal drinking water utilities

# CWA Approach to Protecting Ambient Water Quality

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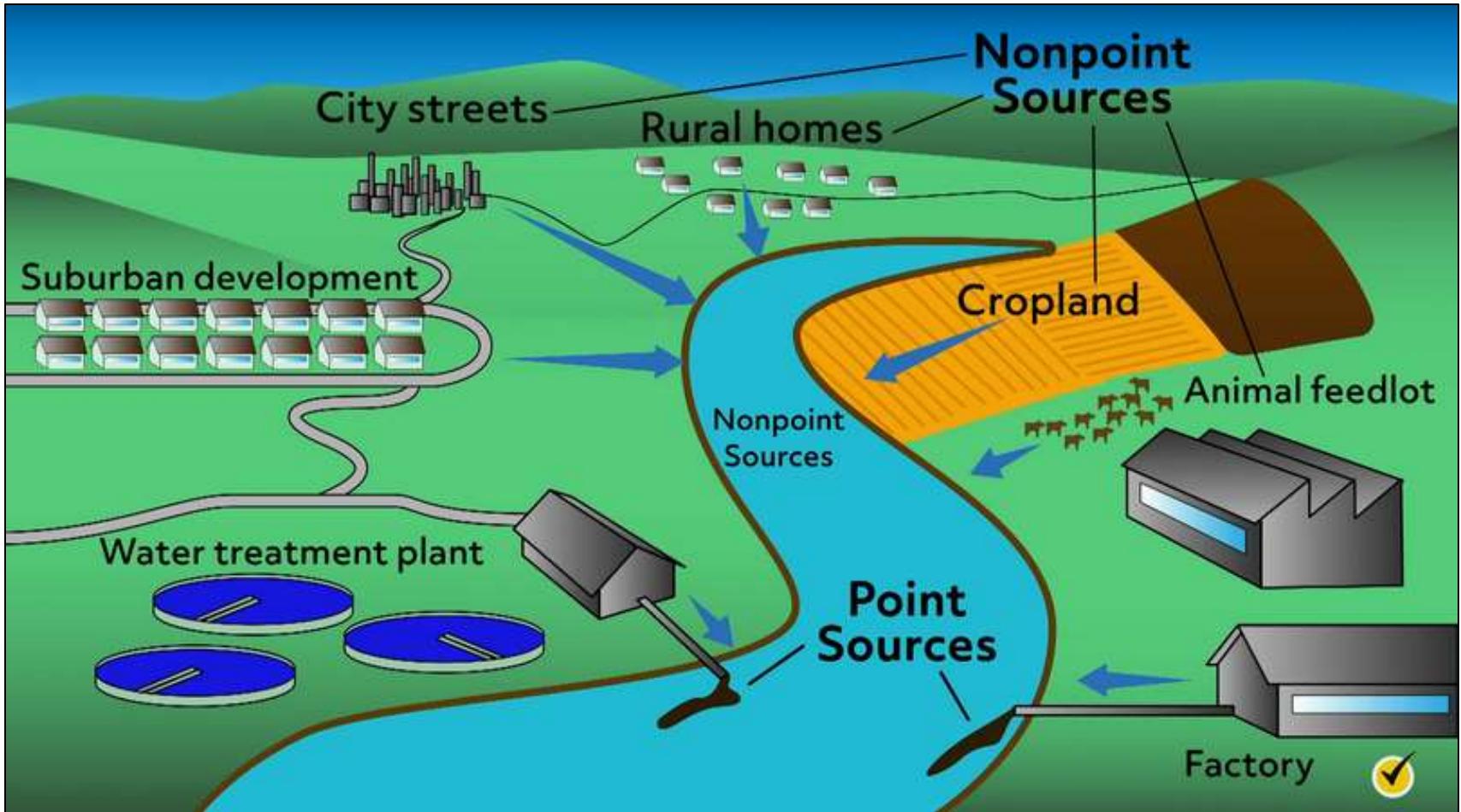
- Step 1: Determine “Designated Uses” for all navigable waterbodies
- Step 2: Set “Water Quality Criteria” to meet those Designated Uses
- Step 3: Control pollution through “Anti-Degradation Measures” such as permitting and Enforcement

# CWA Cooperative Federalism

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- Federal, state, and tribal governments work together
- States can apply for “Delegated Authority” to implement one or more of the steps
- Tribes can apply for “Treatment as State Status” to implement one or more of the steps
- State or tribal Water Quality Criteria must be at least as strict as the federal minimum criteria specified by EPA

# Point v. Nonpoint Source Pollution





# Point Source Controls

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- CWA § 402
- National Pollution Discharge Elimination System (NPDES) permit required for point source discharge to navigable water
  - For industrial polluters, numerical limitations for pollutants
  - For municipal waste water treatment plants, level of treatment technology required (primary, secondary, or tertiary)
- Quite effective at controlling point source pollution

# Nonpoint Source [Sort of] Controls

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- Biggest threat to water quality in U.S. today
- CWA § 208: Areawide Waste Treatment Management Plan
  - Defunded in 1980s; not relevant today
- CWA § 303(d): Total Maximum Daily Load Plan
  - For “Impaired Waterbodies” = consistently fail to meet water quality standards
  - Holistic look at all sources of pollution, point and nonpoint
  - Point: strict NPDES requirements
  - Nonpoint: focus on voluntary landowner adoption of Best Management Practices to reduce run-off

# Nonpoint Source [Sort of] Controls

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- CWA § 319: Nonpoint Source Management Programs
  - Gives grants to states that make and implement plans for controlling nonpoint source pollution
  - States can choose whether to take a regulatory or voluntary approach
- CWA approach to controlling nonpoint source pollution relies on voluntary actions and has not been very effective
  - Industry influence
  - Harder problem to solve

# Dredge and Fill Permitting

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- CWA § 404: permit from U.S. Army Corps of Engineers required for discharge of dredged or fill materials into navigable waters
- Applicant must mitigate impacts, or where impacts cannot be avoided, do compensatory mitigation



# Current Issues

# Recent Litigation and Rulemaking

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- What is a “navigable water”?
- What is a “point source”? (And should it really matter?)

# What Is a “Navigable Water”?

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- Better scientific understanding of hydrological systems → U.S. Supreme Court has increasingly broadened its interpretation of “navigable water”
- Navigation is not the only touchstone of interstate commerce
- Unending litigation creates uncertainty for EPA/ACE, state agencies, developers, farmers, engineers, environmental advocates, and so forth
- Need for a durable regulatory definition based on current science

# What Is a “Point Source”?

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- *County of Maui, Hawaii v. Hawaii Wildlife Fund*, 140 S. Ct. 1462 (2020): When a nonpoint discharge is the “functional equivalent” of a point source discharge, it must be regulated as a point source under CWA § 402
- What is a “functional equivalent”?
- Why does this matter so much? Should it matter at all?



# Contact Information

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