Environmental Control through the Clean Water Act

Devin Baty, Dominic Coccitti-Smith, Scott Lacasse, Rebekah Lindborg, and Sonya Smith

Green Mountain College

Authors' Note

This paper was prepared for Environmental Law and Policy, ENV 5011 01, taught by Professor C. Brooks.

Environmental Control through the Clean Water Act

I. Statutory Elements and Programs of the Clean Water Act

The Clean Water Act (CWA) "establishes the basic structure for regulating discharges of pollutants into the waters of the United States" (EPA, 2017a). The statue works by regulating point source pollution based on "best available technology" (Plater et al., 2010, p. 523). The EPA, under the CWA, requires permits to be obtained to reduce water pollution and has started pollution control programs (EPA, 2017a). The CWA works under the idea that "all discharges into the nation's waters are unlawful, unless specifically authorized by a permit, which is the act's principal enforcement tool" (Copeland, 2016, p. 2). The CWA uses technology-based effluent limitations (TBEL) to help regulate the level of pollution in waterways and water quality standards to provide water quality baselines depending on the use of the waterway (Copeland, 2016). The TBELs are dependent on the pollution type (Plater et al., 2010). For example, conventional pollutants (e.g. fecal coliform; oil and grease) require Best Conventional Pollutant Control Technology (BCT) effluent limitations whereas non-conventional, non-toxic pollutants (e.g. ammonia, color, etc.) require Best Available Technology Economically Achievable (BAT) effluent limitations (Plater et al., 2010, p. 547). The CWA functions through the implementation and cooperation of multiple titles (or "programs"), enforced and regulated by both federal and state agencies.

The CWA is composed of six titles or "programs," as discussed in our lecture this week. The six titles are: research and related programs (§§1251-1275), grants for construction of treatment works (§§ 1281-1301), standards of enforcement (§ 1311-1330), permits and licenses

(§§ 1341-1346), general provisions (§§ 1361-1377), and state water pollution control revolving funds (§§ 1381-1388)(33 U.S.C. §1251 et seq. 1972).

The "research and related programs" title focuses specifically on the science behind water ecosystems and pollution (33 U.S.C. §1251, 1972). This title allows the implementation of programs that focus on "preventing, reducing, or eliminating the pollution of navigable waters and ground waters" (33. U.S.C. §1252, 1972). This section also encourages interstate cooperation as well as the use of research, investigations, and surveys that focus on the "causes, effects, extent, prevention, reduction, and elimination of pollution" (33 U.S.C. §1254, 1972). Finally, this title introduces the pollution control programs that aim to prevent, reduce, or eliminate pollution of waterways (33 U.S.C. §1252, 1972).

The "grants for construction of treatment works" title focuses specifically on the "development and implementation of waste treatment management plans and practices" (33 U.S.C. §1281, 1972). This title lays out details on waste treatment facility construction, application of technology, and grants for construction. The "standards of enforcement" title focuses on effluent and water quality limitations in regards to standard and guidelines. This section also includes state requirements for reporting of water quality and quality standards as well as enforcement regulations (33 U.S.C. §1311, 1972).

The "permits and licenses" title states that, under the CWA, all agencies conducting an activity that may harm waterways must apply for a permit and licensing (33 U.S.C. §1341, 1972). This title also outlines criteria for ocean discharge and disposal of materials. The "general provisions" subchapter provides information on a variety of topics, including the water pollution control advisory board, citizen lawsuits, labor standards, reporting, and authorities (33 U.S.C.

§1361, 1972). Finally, the "state water pollution control" revolving funds program "is a federal-state partnership that provides communities a permanent, independent source of low-cost financing for a wide range of water quality infrastructure projects" (EPA, 2017b).

All the programs work together with overlapping provisions and regulatory requirements. For example, the permits and licenses title is overarching over all the titles since it lays out the idea that any activity that harms waterways needs to be permitted. This idea is important because other titles, like Title III (standards and enforcement) and Title V (general provisions), both provide information on water quality standards needed and guidelines for reporting, which is important to understand as long as Title IV (permits and licenses) is enacted beforehand. Additionally, Title I (research and related programs), Title II (grants for construction of treatment works), and Title VI (state water pollution control revolving funds) all provide funding, grants, and resources for a variety of needs through federal or state agencies. These titles work together to provide assistance for programs, agencies, etc. that are conducting research or construction that meet the requirements laid out in the other titles regarding standards and regulations.

The federal government, under the CWA and through the EPA, is in charge of permitting, pollution control programs, and "establishment of national standards or effluent limitations" (Copeland, 2016, p. 2). Additionally, under the CWA federal enforcement for these standards can be enacted, although a majority of the enforcement of the CWA is carried out at the state level (Copeland, 2016).

The state is responsible for providing permits for discharge, enforcement of the CWA, and carrying out the standards set by the federal government (33 U.S.C. §1251 et seq., 1972;

Copeland, 2016). The state is also responsible for reporting water quality standards biennially, analyzing pollution levels, and estimating environmental impacts (33 U.S.C. §1315).

The CWA works through the "philosophy of federal-state partnership" (Copeland, 2016, p. 2) where programs and standards are managed by the federal government and the states focus on carrying out these standards and enforcing them (Copeland, 2016). The federal-state partnership is built to "develop comprehensive solutions to prevent, reduce, and eliminate pollution in concert with programs for managing water sources" (33 U.S.C. §1315).

II. Agency Involvement

Several federal agencies and organizations are responsible for implementing various aspects of the Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.) also colloquially known as the Clean Water Act. The following list provides a comprehensive inventory of the federal agencies and their respective roles or functions for the execution of the Clean Water Act in conjunction with the Administrator of the Environmental Protection Agency.

Agency for Toxic Substances and Disease Registry

- Shall submit a report assessing the adverse effects of water pollutants in the Great Lakes System on the health of persons in Great Lakes States and the health of fish, shellfish, and wildlife in the Great Lakes Systems. 33 U.S.C. § 1268(e)(3)(A)

Appalachian Regional Commission (Federal-State Partnership)

- Responsible for mine water pollution control and elimination. 33 U.S.C. § 1257

Bureau of Reclamation (Within the Department of the Interior)

- Responsible for planning or survey of any reservoir including streamflow storage. 33 U.S.C. § 1252(b)(1)

- Determine the need for a value of storage for regulation of streamflow for navigation, saltwater intrusion, recreation, aesthetics, and fish and wildlife. 33 U.S.C. § 1252(b)(2)

Chesapeake Bay Program

- Goal of restoring and protecting the Chesapeake Bay ecosystem and the living resources of the Chesapeake Bay. 33 U.S.C. § 1267

Department of Agriculture

- Conduct and promote continuing comprehensive studies of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, sport and commercial fishing, recreation, water supply, water power. Such studies shall also consider the effect on demographic trends, the exploitation of mineral resources, and fossil fuels, land and industrial development, navigation, flood and erosion control. 33 U.S.C. § 1254(n)(1)
- Along with the EPA Administrator, make grants for research and demonstration projects for preventing, reducing and eliminating pollution from agriculture. 33 U.S.C. § 1255(e)(1)
- Develop a comprehensive program for achieving adequate sanitation services in Alaska. 33 U.S.C. § 1263(e)
- Directed to establish and administer a program for the purpose of installing and maintaining measures to control nonpoint source pollution. 33 U.S.C. § 1288(j)(1)
- Shall provide for the maximum utilization of other Federal laws and programs for the purpose of achieving and maintaining water quality. 33 U.S.C. § 1314(k)

Department of Commerce

- Provide the latest information on populations and projected populations to determine size and capacity of funding grants. 33 U.S.C. § 1284(a)(5)
- Shall establish an oil spill prevention and education program for small vessels. 33 U.S.C. § 1321a

Department of Defense

- Determine the most effective equipment or management practice to reduce the environmental impacts of the discharge from any vessel owned or operated by the Department of Defense. 33 U.S.C. § 1322(a)(13,14)
- Standards and regulations apply to vessels owned and operated unless the Secretary of Defense finds that compliance would not be in the interest of national security. 33 U.S.C. 1322(d)
- Shall require the use of a marine pollution control device onboard a vessel of the Armed Forces in which it is determined that the use of such a device is reasonable and practicable. 33 U.S.C. § 1322(n)(2)(A)
- The Secretary of Defense shall promulgate regulations with respect to a marine pollution control device. 33 U.S.C. § 1321(n)(4)(c)
- It shall be unlawful for any vessel of the Armed Forces subject to the regulations to operate if the vessel is not equipped with any required marine pollution control device. 33 U.S.C. § 1321(n)(8)(A)

Department of Health and Human Services

- Conduct research and survey the harmful effects on health and welfare caused by pollutants. 33 USC § 1254(c)
- Utilize personnel and facilities for safe water and elimination or control of pollution for Alaskan villages. 33 U.S.C. § 1263(b)
- Develop a comprehensive program for achieving adequate sanitation services in Alaska. 33 U.S.C. § 1263(e)

Department of Housing and Urban Development

- Develop a comprehensive program for achieving adequate sanitation services in Alaska. 33 U.S.C. § 1263(e)

Department of the Interior

- Develop a comprehensive program for achieving adequate sanitation services in Alaska. 33 U.S.C. § 1263(e)
- Provide technical assistance for developing an areawide waste treatment program. 33 U.S.C. § 1288(h)(2)(i)(1)
- Complete the National Wetlands Inventory and disseminate information to states as it becomes available to assist in the development of waste treatment programs. 33 U.S.C. § 1288(h)(2)(i)(2)
- Shall provide for the maximum utilization of other Federal laws and programs for the purpose of achieving and maintaining water quality. 33 U.S.C. § 1314(k)

Federal Energy Regulatory Commision

- No license granted for a hydroelectric power plant shall include storage for regulation of streamflow. 33 U.S.C. § 1252(b)(6)

Federal Register

- Shall publish information regarding criteria for water quality accurately reflecting the latest scientific knowledge of all identifiable effects on health and welfare from the presence of pollutants in any body of water, including ground water. 33 U.S.C. § 1314

Government Accountability Office

- The Comptroller General shall have access for audit and examination any books, documents, papers, records that are oertuebet to the grants received. 33 U.S.C. § 1361(d)

Great Lakes Environmental Research Laboratory

- Research and monitor activities which address priority issues and needs relating to the Great Lakes. 33 U.S.C. § 1268(c)(13)(B)(6)

Great Lakes National Program Office

- Attain the goals embodied in the Great Lakes Water Quality Agreement relating to the valuable natural resource as an important source of food, fresh water, recreation, beauty, and enjoyment. 33 U.S.C. § 1268

Lake Champlain Basin Program

- Develop a comprehensive pollution prevention, control, and restoration plan. 33 U.S.C. § 1270

National Aeronautics and Space Administration

- Provide resources for maintaining a water quality surveillance system for the purpose of monitoring the quality of navigable waters. 33 U.S.C. § 1254(a)(5)

National Oceanic and Atmospheric Administration

- Provide resources for maintaining a water quality surveillance system for the purpose of monitoring the quality of navigable waters. 33 U.S.C. § 1254(a)(5)Research, monitor, plan to maintain, enhance, preserve, or rehabilitate the environmental quality and natural resources of the Great Lakes and submit annual report to the administrator of the EPA. 33 U.S.C. § 1268(c)(13)(f)
- Shall conduct a comprehensive national survey of data regarding aquatic sediment quality including information on the quantity, chemical and physical composition, and geographic location of pollutants, including the probable source of such pollutants. 33 U.S.C. § 1271.
- Develop a response plan for the immediate and effective protection, rescue, and rehabilitation of fish and wildlife resources and their habitat that are harmed or that may be jeopardized by a discharge of oil or hazardous substances. 33 U.S.C. § 1321(d)(2)(M)
- Shall coordinate and implement a long-term program of trend assessment monitoring measuring variations in pollutant concentrations, marine ecology, and other physical or biological environmental parameters which may affect estuarine zones. 33 U.S.C. § 1330(j)

National Sea Grant College Program

- Research and monitor activities which address priority issues and needs relating to the Great Lakes. 33 U.S.C. § 1268(c)(13)(B)(6)

National Study Commission

- Shall make a full and complete investigation of all of the technological aspects of achieving, and all aspects of the total economic, social, and environmental effects of achieving or not achieving, the effluent limitations and goals set out in § 1311(b)(2). 33 U.S.C. § 1325

Secretary of the Army

- Conduct and promote continuing comprehensive studies of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, sport and commercial fishing, recreation, water supply, water power. Such studies shall also consider the effect on demographic trends, the exploitation of mineral resources, and fossil fuels, land and industrial development, navigation, flood and erosion control. 33 U.S.C. § 1254(n)(1)
- Assistant Secretary of the Army for Civil works shall develop and implement management plans for every Great Lake confined disposal facility. 33 U.S.C. § 1268(c)(11)(A)
- Shall provide for the maximum utilization of other Federal laws and programs for the purpose of achieving and maintaining water quality. 33 U.S.C. § 1314(k)
- May assess a class I or a class II civil penalty if any person is found to have violated any permit condition. 33 U.S.C. § 1319(g)

Secretary of State

- Whenever the EPA administrator has reason to believe that pollution is occurring which endangers the health or welfare of persons in a foreign country, and the

Secretary of State requests to abate such pollution, he shall give formal notification. 33 U.S.C. § 1320

Soil Conservation Service

- Research, monitor, plan to maintain, enhance, preserve, or rehabilitate the environmental quality and natural resources of the Great Lakes and submit an annual report to the administrator of the EPA. 33 U.S.C. § 1268(c)(13)(f)
- Directed to establish and administer a program for the purpose of installing and maintaining measures to control nonpoint source pollution. 33 U.S.C. § 1288(j)(1)

United States Army Corps of Engineers

- Responsible for planning or survey of any reservoir including streamflow storage. 33 U.S.C. § 1252(b)(1)
- Determine the need for a value of storage for regulation of streamflow for navigation, saltwater intrusion, recreation, aesthetics, and fish and wildlife. 33 U.S.C. § 1252(b)(2)
- Design and develop wastewater management program for the rehabilitation and environmental repair of Lake Erie and sources around Lake Erie. 33 U.S.C § 1258(d)(1)
- Research, monitor, plan to maintain, enhance, preserve, or rehabilitate the environmental quality and natural resources of the Great Lakes and submit an annual report to the administrator of the EPA. 33 U.S.C. § 1268(c)(13)(f)
- Provide technical assistance in developing and operating areawide waste treatment. 33 U.S.C. § 1288(h)

- Authorized to construct, operate, and maintain spoil disposal facilities. 33 U.S.C. § 1293a(a)
- Authorized to extend to all navigable waters, connecting channels, tributary streams, a comprehensive program of research, study, and experimentation relating to dredged spoil. 33 U.S.C. § 1293a(i)
- Shall conduct a study of materials disposed of in contained spoil disposal facilities for the purpose of determining whether or not toxic pollutants are present and determining concentration levels of such pollutants. 33 U.S.C. § 1293a(k)(1,2)
- Authorized to permit the use of spoil disposal areas. 33 U.S.C. 1341(c)
- Ensure that no permit will be issued if any of the navigable waters would be substantially impaired. 33 U.S.C. §1342(b)(6)

United States Coast Guard (United States Department of Homeland Security)

- Provide resources for maintaining a water quality surveillance system for the purpose of monitoring the quality of navigable waters. 33 U.S.C. § 1254(a)(5)
- Oil pollution control studies including engagement in research, experiments, publish technical information. 33 U.S.C. § 1254(i)
- Research, study, and experiment on vessel equipment Solid waste disposal including human body waste. 33 U.S.C. § 1254(j)
- Research, monitor, plan to maintain, enhance, preserve, or rehabilitate the environmental quality and natural resources of the Great Lakes and submit an annual report to the administrator of the EPA. 33 U.S.C. § 1268(c)(13)(f)

- May assess civil penalties to any owner, operator, or person in charge of any vessel, onshore facility, or offshore facility form which oil or a hazardous substance has been discharged. 33 U.S.C. § 1321(b)(6)
- Shall establish a National Response Unit for any oil or hazardous discharge. 33 U.S.C. § 1321(j)
- Insure that no permit will be issued if any of the navigable waters would be substantially impaired. 33 U.S.C. §1342(b)(6)

United State District Court and Court of Appeals

- Any person against whom a civil penalty is assessed may obtain a review from the court. 33 U.S.C. 1319(g)(8)
- The district courts of the United States shall have jurisdiction to grant any relief relating to oil and hazardous discharges. 33 U.S.C. § 1321(e)(2)
- Authorized to issue subpoenas for attendance and testimony of witnesses and the production of relevant papers, books, documents, for purposes of obtaining information. 33 U.S.C. § 1369

United States Fish and Wildlife Service

- Research, monitor, plan to maintain, enhance, preserve, or rehabilitate the environmental quality and natural resources of the Great Lakes and submit an annual report to the administrator of the EPA. 33 U.S.C. § 1268(c)(13)(f)
- Provide technical assistance for developing an areawide waste treatment program. 33 U.S.C. § 1288(h)(2)(i)(1)

- Develop a response plan for the immediate and effective protection, rescue, and rehabilitation of fish and wildlife resources and their habitat that are harmed or that may be jeopardized by a discharge of oil or hazardous substances. 33 U.S.C. § 1321(d)(2)(M)
- Shall submit comments pertaining to dredged or fill materials. 33 U.S.C. § 1344(g,h)

United States Geological Survey

- Provide resources for maintaining a water quality surveillance system for the purpose of monitoring the quality of navigable waters. 33 U.S.C. § 1254(a)(5)

Several offices at the federal level offer various support to the Administrator of the EPA. According to the EPA (2017c), the Office of Policy (OP) is the primary policy arm of the EPA to support priorities and enhance decision-making by providing multidisciplinary analytic skills, management support, and expertise in the areas of: regulatory policy and management, environmental economic, strategic environmental management, sustainable communities, and climate adaption. The Office of Administration and Resources Management (OARM) supports the EPA through human resources management, acquisition activities, grants management, and facilities/assets management and protection. The Office of Air and Radiation (OAR) is responsible for policies and regulations controlling air pollution and radiation exposure as well as administering the Clean Air Act and the Atomic Energy Act. The Office of Chemical Safety and Pollution Prevention (OCSPP) is tasked with minimizing risks from pesticides and toxic chemicals and is responsible for implementing Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug and Cosmetic Act (FFDCA), the Toxic Substances Control

Act (ToSCA), and the Pollution Prevention Act. The Office of the Chief Financial Officer (OCFO) formulates and manages the EPA's budget and performance. The Office of Enforcement and Compliance Assurance (OECA) activities target pollution problems through civil and criminal enforcement. The Office of Environmental Information (OEI) manages information in order to support the EPA's goal of protecting human welfare and the environment. The Office of General Counsel (OGC) provides legal support for implementing environmental laws including the Clean Air Act and the Clean Water Act. The Office of International and Tribal Affairs (OITA) works across EPA's programs to address bilateral, regional, and global environmental challenges through foreign policy. The Office of Land and Emergency Management (OLEM) provides policy and response for hazardous waste disposals while also encouraging new technologies for contaminated groundwater. The Office of Research and Development (ORD) is responsible for maintaining scientific research and technology to promote environmental health. The Office of Water (OW) implements the Clean Water Act and the Safe Drinking Water Act. The OW is responsible for safe drinking water, the restoration and maintenance of aquatic ecosystems found in oceans, watersheds, and wetlands, while supporting economic and recreational activities.

In addition to the federal offices, the EPA maintains ten regional offices which are charged with the execution and fulfillment of the goals laid out by the Administrator of the EPA and elaborated upon in the Clean Water Act (Environmental Protection Agency, 2017c). The Great Lakes National Program Office works closely with Canada to implement the Great Lakes Water Quality Agreement. Several state agencies are also involved in the management and protection of the nation's waters. For example, in the State of Michigan, the Department of Environmental Quality maintains the MiWater program which is responsible for issuing permits,

including NPDES permits, and ensuring compliance (Michigan Department of Environmental Quality, 2018). The Great Lakes Water Authority is responsible for water and sewer services for Southeast Michigan (Great Lakes Water Authority, 2018). Within the Michigan Department of Natural Resources, the Waterways Commission is responsible for the acquisition, development, and maintenance of harbors and certain dams (Michigan Department of Natural Resources, 2018). The Great Lakes Restoration Initiative, in conjunction with federal agencies, addresses cleaning up Great Lakes Areas of Concern, preventing and controlling invasive species, reducing nutrient runoff that contributes to harmful/nuisance algal blooms, and restoring habitat to protect native species (Great Lakes Restoration Initiative, n.d.).

IIIa. State-Level Agencies

The Department of Environmental Quality (DEQ) is designated as the regulatory agency responsible for enforcing the Montana Environmental Quality Act, which includes water quality regulation (Mohr, 2015). Water quality issues are addressed by the Water Quality Division within the DEQ. The DEQ operates under the guidance of the Board of Environmental Review (Board) (Mohr, 2015). Seven private citizens appointed by the governor make up the board. Section 208, of the Clean Water Act, authorizes state and local governments to plan and manage water quality (Mohr, 2015). Other agencies that are involved are the Montana Department of Natural Resources and Conservation, Montana Watershed Coordination Council, and the Montana Source Water Protection Program. The Clean Water Act authorizes the Environmental Protection Agencies to treat Tribes in a similar manner as states. Montana water quality laws do not apply to tribal reservations (Mohr, 2015). At the moment, any implementation of water quality standards

on tribal land is a blend of federal and state and depend largely on tribal cooperation as well as the type of water use, source, and the region of the state (Mohr, 2015).

The DEQ is very active within Montana. They collect information regarding water pollution prevention and control, conducts research, actively consults and cooperates with Wyoming, and develops maximum pollutant loads (Mohr, 2015). It is also the primary agency that enforces water quality laws. The Board adopts administrative rules, holds hearings, and assesses administrative penalties for water quality violations (Mohr, 2015). The general supervision over all public water supply systems in the state falls to the Board (Mohr, 2015). The DNRC is largely involved in the monitoring of the state's water qualities, developing the State Water Plan, water quality education, conservation and sustainability of the state's water resources (Programs, 2018). The Montana Watershed Coordination Council works to unite watershed communities across the state and is actively involved in local clean-up initiatives, data-gathering, and ecosystem research projects (Take a Look, 2018).

IIIb. Interstate Implementation

My bioregion contains a large portion of Montana and extends into Wyoming. Both the Montana and Wyoming Constitutions declare water as the property of the state. Although Wyoming is more limited by the amount that streamflows can be depleted because of the interstate water compacts that it has established with other states, court decrees, and even an international treaty (Hansen and Nicholson, 2015). The two states are bound by the Yellowstone River Compact that was ratified in 1950. The purpose of the compact was to provide an "equitable division and apportionment of the waters of the Yellowstone River and its tributaries," (Montana Code, 2017). This implementation has caused conflict. In *Montana v.*

Wyoming the state of Montana sued the state of Wyoming in 2007, for violating the Yellowstone River Compact. Montana alleged that Wyoming had implemented post-1950 appropriations, such as, new irrigation acreage, new storage facilities, pumping additional groundwater, and increasing consumption that were interfering with Montana's pre-1950 rights (Montana Code, 2017). The U.S Supreme Court ruled that Wyoming's appropriations were within the scope of the original appropriative right. The more efficient irrigation systems are "considered permissible under the Compact as long as the water conserved by those systems is used to irrigate the same acreage watered in 1950,"(Montana Code, 2017). This means that Wyoming did not violate the Compact by allowing its citizens to use more efficient irrigation systems on farmland as long as that farmland existed when the compact was signed regardless if it meant less water flowing downstream to Montana (Montana Code, 2017).

IIIc. State-Level Implementation Regimes

Florida

In Florida, the Florida Department of Environmental Protection (FDEP) is responsible for managing water quality standards throughout the state- as well as air and land management (FDEP, 2018a). Within the FDEP, the Division of Environmental Assessment and Restoration focuses on monitoring water quality, recognizing areas of pollution, and developing programs to solve pollution problems (FDEP, 2018b). The Florida Coastal Office is also involved with monitoring and managing coastal uplands and submerged lands (FDEP, 2018b).

Florida does have diverse implementation strategies, and this stems from the unique ecosystem that Florida has as compared to other states. For example, "Florida is the only state in the continental United States with extensive shallow coral reef formations near its

coasts" (FDEP, 2018c). Therefore, through the FDEP, Florida has its own Statewide Ecosystem Assessment of Coastal and Aquatic Resources and a Coral Reef Conservation Program, which focuses on monitoring coral reefs and conducting research to understand impacts of pollution and other anthropogenic pressures (FDEP, 2018d).

Additionally, Florida deals with an ever-pressing issue of toxic algal blooms in Lake Okeechobee that occur because of agricultural runoff into these waterways (Heisler et al., 2008). Therefore, the state of Florida is broken up into five different Water Management Districts with four core missions: "(1) water supply, (2) water quality, (3) flood protection and floodplain management, and (4) natural systems" (FDEP, 2018e). The use of five different water management districts allows implementation of various projects throughout the state of Florida, depending on the needs of the district. For example, Lake Okeechobee is located in the South Florida water management district and that area may require even more frequent water quality testing and research to help reduce toxic algal blooms.

Florida also has the ability to implement these different regimens not only because of some of the unique pollution problems the state has (e.g. toxic algal blooms) but also due to the settlement received from the Deepwater Horizon Oil spill. Florida received $3.25 billion in the Deepwater Horizon Settlement to help fund many of the aforementioned projects (FDEP, 2018b). Therefore, while the FDEP is overall responsible for the water quality standards and implementation of these various projects, each project has specific goals to meet depending on the Water Management District and the source of the funding received. Funding can come from the Deepwater Horizon Settlement or from the Division of Water Restoration Assistance, which provides financial assistance for water quality improvement projects as well (FDEP, 2018b).

Though similar to other implementation regimes from other states in our group, Florida is unique as it has diverse water habitats (e.g. Everglade wetlands, uplands, springs, lakes, oceans, etc.) that all require different strategies for improving water quality, are in unique Water Management Districts, and receive funding from different sources.

Ohio

The Ohio EPA, and more specifically its Division of Surface Water, is tasked with implementing the Clean Water Act in the state, and thus is responsible for restoring and maintaining the state's 25,000 miles of streams and rivers, 5,000 lakes, ponds, and reservoirs, and 236 miles of Lake Erie shoreline (Division of Surface Water, n.d.).

Tools at the Division of Surface Water's disposal include:

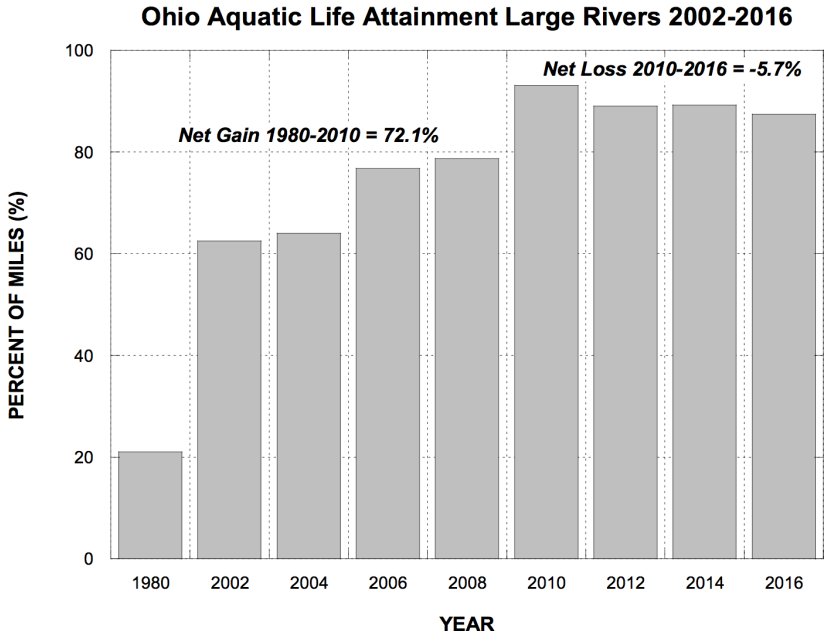
- NPDES permits - Ohio regulates more than 4,000 facilities, including municipal and industrial wastewater and stormwater dischargers.
- Permits-to-Install (PTI) - Ohio issues more than 2,000 PTS annually for new construction and the expansion of existing wastewater facilities and their connected sewers.
- Indirect Discharge Permits - A permit required of facilities discharging industrial waste into Publicly Owned Waste Treatment Works (POTW) so that pretreatment programs can be established where the POTW is not designed to treat the contaminants (the administration of pretreatment programs can be delegated to local governments).
- Water Quality Certifications - Issued for the discharge of dredge and fill material to waters of the state.

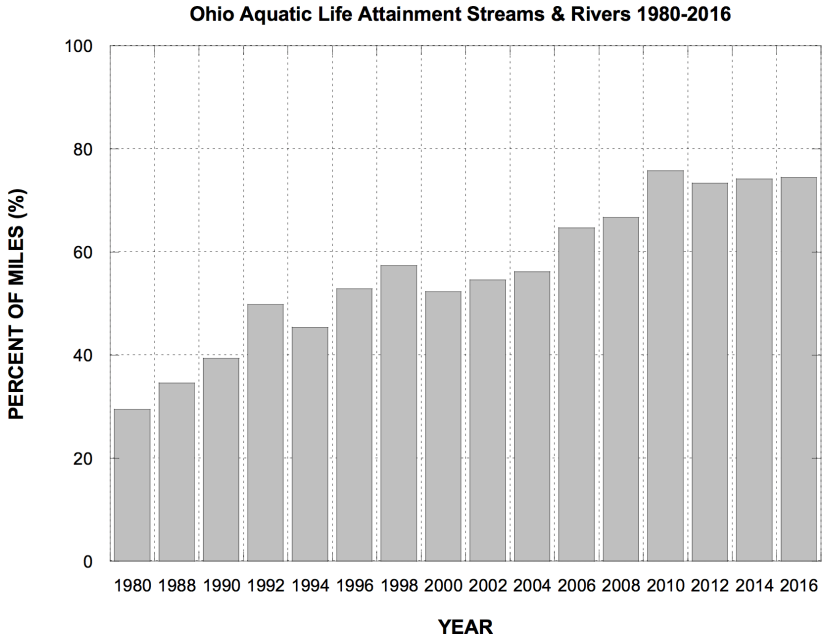
- Testing/Certification - Operators of water and wastewater treatment facilities need to demonstrate "baseline proficiency in various aspects of drinking water treatment and distribution and wastewater collection and treatment."
- Inspections of regulated facilities to ensure compliance with permit limits.
- Biological and chemical monitoring of water quality in Ohio's lakes and streams.

The Division of Surface Water partners with the US EPA, local governments as in the case of the Indirect Discharge Permits, the Ohio Department of Natural Resources for the implementation of programs that involve nonpoint sources of pollution and wetlands, and the Ohio Lake Erie Phosphorus Task Force which was recently reconvened to address algal blooms in the lake's western basin (Division of Surface Water, n.d.).

The Division of Surface Water has made tremendous progress in the past three and a half decades in terms of the total percentage of large river miles that meet the fishable and swimmable standard, as shown in the chart below. This progress is largely attributed to the restoration of areas that were previously impacted by point sources that fell under NPDES permitting rules. Though there has been a "rising tide lifts all boats" effect that can be seen in the similar, though less dramatic trend in the total miles of streams and rivers in the state attaining the fishable and swimmable standard, the belief is that small streams are influenced more by nonpoint sources that don't fall under NPDES permitting, thus, while there remains a significant gap in water quality between large and small rivers, permit-based restoration efforts under the CWA may have peaked in the state. In fact, Ohio rivers appear to have regressed slightly since 2010, with explanations ranging from the current deregulatory climate, population growth and

urbanization, aging infrastructure (particularly POTWs), pharmaceuticals, and new generation pesticides (Yoder, 2017).





IV. Statutory Goals of the Clean Water Act

33 U.S. Code §1251(a), states that the objective of the Clean Water Act (CWA) "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." To achieve this objective the CWA declares that:

1. it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;

2. it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;

3. it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited;

4. it is the national policy that Federal financial assistance be provided to construct publicly owned waste treatment works;

5. it is the national policy that area-wide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State;

6. it is the national policy that a major research and demonstration effort be made to develop the technology necessary to eliminate the discharge of pollutants into the navigable waters, waters of the contiguous zone, and the oceans; and

7. it 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 the goals of this chapter to be met through the control of both point and nonpoint sources of pollution

Zero discharge as mandated by subsection 1 is not enforceable; it is the "interim standards" of subsection 2 that is regulated and enforced by the Environmental Protection

Agency's (EPA) administrator through the use of technology-based effluent limitations (TBELs) that are promulgated for specific industry and pollutants under national pollutant discharge elimination system (NPDES) permits that are required for all individual point source dischargers of pollutants (Plater, et al., 2010).

High-level technology controls are applied to point source discharges to limit the quantity of conventional and toxic pollutants that enter the Nation's waters. The effluent numeric limitations for each industry are located under CFR 40 Subchapter N. The CWA also uses water quality standards that set limits on ambient levels of pollutants, which are found under CFR 40 Subchapter D Section 129. In the case of Hawaii, the State operates the NPDES program, through the Department of Health's Clean Water Branch (CWB), and defers to Subchapter D for effluent limitations but applies the ambient pollutant levels to specific classes of waters defined in HAR §11-54. The level of effluent control, under CWA 33 U.S. Code, is administered by the EPA based upon the review of many factors found at https://www.epa.gov/eg/learn-about-effluent-guidelines#BPT

Levels of Control

National regulations for industrial wastewater discharges set technology-based numeric limitations for specific pollutants at several levels of control: **BPT**, **BAT**, **BCT**, **NSPS**, **PSNS** or **PSES**. Each of these terms is defined below. Effluent limitations are based on performance of specific technologies, but the regulations do not require use of a specific control technology.

Type of Sites Regulated	BPT	BCT	BAT	NSPS	PSES	PSNS
Existing Direct Dischargers	•	•	•			
New Direct Dischargers				•		
Existing Indirect Dischargers					•	
New Indirect Dischargers						•

Pollutants Regulated	BPT	BCT	BAT	NSPS	PSES	PSNS
Priority Pollutants	•		•	•	•	•
Conventional Pollutants	•	•		•		
Nonconventional Pollutants	•		•	•	•	•

BPT

The CWA is open to innovation and even provides honorary regulations in the form of the Voluntary Advanced Technology Program (VATIP) that provides an additional two years to comply "if a company submits a viable plan for developing and implementing innovative control technology. The EPA, authorized by the CWA §501(e), also offers an awards program under CFR 40 Subchapter D §105 that provides "official recognition to industrial organizations and political subdivisions of States which during the preceding year demonstrated an outstanding technological achievement or an innovative process, method or device in their water treatment and pollution abatement programs." However, Plater et al. stated, "it is clear, in general, EPA and state administration of technology-based standard-setting systems discourage technological innovation" (p. 533).

V. Applicable Cases

***Headwaters, Inc., v. Talent Irrigation District*, 243 F.3d 526 (9th Cir. 2001)**

The use and application of pesticides are generally regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) 7 U.S.C. §136 et seq. (1996), which also requires their registration with the EPA. FIFRA tasks the EPA with determining that a pesticide "will perform its intended function without unreasonable adverse effects on the environment; and...when used in accordance with widespread and commonly recognized practice it will not generally cause unreasonable adverse effects on the environment." The operative word in each half of the quoted section of the statute is unreasonable, demonstrating that adverse effects are assumed when products designed to be toxic are discharged into the environment.

Though the Clean Water Act (33 U.S.C. 1251 et seq.) specifies no exemptions for pesticides from the National Pollutant Discharge Elimination System, and pesticides are often discharged directly into "waters of the United States" from vehicles and aircraft, which have been held to be point sources under the CWA, the EPA has been averse to enforcing NPDES permit requirements for pesticides (Coplan, 2014). This is an environmentally troubling decision on the part of the EPA for at least two reasons, 1.) water quality is of a higher concern to the CWA than FIFRA, and 2.) there is no citizen suit provision under FIFRA.

In 1998, the nonprofit conservation groups Headwaters, Inc., and Oregon Natural Resources Council Action brought a citizen suit against the Talent Irrigation District under the Clean Water Act, alleging Talent violated the act when it discharged the aquatic herbicide Magnacide H into the irrigation canals it managed without having obtained an NPDES permit. Magnacide H is toxic to fish and wildlife. Following a 1996 Talent Irrigation District discharge of the chemical into the Talent Canal which subsequently leaked into Bear Creek due to a

mechanical failure, more than 92,000 juvenile steelhead trout were killed. The same chemical was also responsible for a fish kill in Bear Creek in 1983.

Talent argued that no NPDES permit was required because Magnacide H is registered under FIFRA and bore an EPA-approved label that made no mention of a permit being required for the chemicals' use. The court held:

> The CWA and FIFRA have different, although complementary, purposes. The CWA's objective "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," 33 U.S.C. S 1251(a), and to that end the statute requires an NPDES permit before any pollutant can be discharged into navigable waters from a point source. See 33 U.S.C. S 1342(1). FIFRA's objective is to protect human health and the environment from harm from pesticides, and to that end, the statute establishes a nationally uniform pesticide labeling system requiring the registration of all pesticides and herbicides sold in the United States and requiring users to comply with the national label. See 7 U.S.C.S 136a, 136j(a) (2) (G).

Further, that "[w]hen two statutes are capable of co-existence, it is the duty of the courts . . . to regard each as effective." Resource Invs., Inc. v. U.S. Army Corps of Eng'rs, 151 F.3d 1162, 1165 (9th Cir. 1998).

In order to establish a violation of the NPDES permit requirements under the CWA, the plaintiffs must demonstrate that the defendants 1) discharged 2) a pollutant 3) from a point source 4) into navigable waters/waters of the United States. Talent largely conceded their discharge, though there was some contention over whether or not the canals they managed would

constitute waters of the United States if they could establish a protocol that would prevent future leaks into streams like Bear Creek. The court held that:

> [p]ollutants need not reach interstate bodies of water immediately or continuously in order to inflict serious environmental damage . . . [I]t makes no difference that a stream was or was not at the time of the spill discharging water continuously into a river navigable in the traditional sense. Rather, as long as the tributary would flow into the navigable body [under certain conditions], it is capable of spreading environmental damage and is thus a "water of the United States" under the Act.

On the question of whether or not Magnacide H constituted a pollutant, Talent argued that because the agent was deliberately discharged for the beneficial purpose of killing weeds, it was not a pollutant, which the CWA narrowly defined as “chemical wastes,” and not merely “chemicals.” However, Hudson River Fishermen's Ass'n v. City of New York, 751 F.Supp. 1088, 1101-02 (S.D.N.Y.1990), aff'd, 940 F.2d 649 (2d Cir.1991) established chemical residues are pollutants even if the chemical was initially discharged for a beneficial purpose.

The Ninth Circuit held that Talent Irrigation District did discharge a pollutant from a point source into navigable waters, and that the presence of an EPA-approved label under FIFRA did not eliminate the need for an NPDES permit since the pesticide was discharged into waters of the United States, making Talent’s discharge of Magnacide H a violation of the CWA.

The Ninth Circuit’s interpretation opened the door for a system where FIFRA’s labeling would establish the general impacts of a pesticide, but the CWA’s NPDES permits would address the local impacts, provide for local monitoring, and allow citizen enforcement suits.

***State of Florida et al. v. EPA & Army Corps of Engineers,* 2015**

One case regarding the Clean Water Act (CWA) in Florida was a bipartisan lawsuit against the Environmental Protection Agency's (EPA) use of the rule "Clean Water Rule: Definitions of Waters of the United States" (Salisbury, 2015). This lawsuit was presented by multiple states, including Georgia, West Virginia, Alabama, Florida, Kansas, Kentucky, South Carolina, Utah, and Wisconsin (*State of Florida et al. v. EPA & Army Corps of Engineers,* 2015). However, I will focus on the main complaints cited in the lawsuit regarding my bioregion within Florida. The EPA, under the CWA, has adopted a new CWA rule that eliminates the right of the state to govern its own waters (Salisbury, 2015). According to Salisbury (2015):

> The rule broadens the definition of Waters of the United States to include intrastate waters such as minor creeks, roadside ditches, ponds, some wetlands, short-lived streams or any other area where water may flow once every 100 years; these bodies of water have long been the domain of state authority pursuant to the Clean Water Act (n.p.).

The change in this definition, according to Hatter (2015), would mean that nearly all of Florida's waters would be subject to federal jurisdiction through the CWA since the state is nearly one big wetland. While I was able to find the filed lawsuit, I was not able to find the court case itself so I will focus on the grievances presented in the lawsuit and review potential implications of various outcomes.

The plaintiffs argued that the adoption of the Clean Water Rule: Definitions of Waters of the United States (80 Fed. Reg. 37,053–37,127) "violates the Clean Water Act, the Administrative Procedure Act, and the Constitution" by "usurp[ing] the State's primary responsibility for the management, protection, and care of intrastate waters and lands" (*State of Florida et al. v. EPA & Army Corps of Engineers,* 2015, p. 3). Under the CWA, federal agencies

have jurisdiction over navigable waters whereas states have jurisdiction over non-navigable waters and intrastate waters (33 U.S.C. §1251 et seq., 1972). This new Rule would give federal jurisdiction over non-navigable and intrastate waters. The plaintiffs argued that this change "impairs the States' ability to protect their resources in accordance with local needs, imposes significant costs on States, businesses and citizens, and introduces grievous uncertainty into land use and water management" (*State of Florida et al. v. EPA & Army Corps of Engineers,* 2015, p. 34).

A shift in the definition of waters of the United States does take many of the States' authority away and puts enormous pressure on the federal government to regulate water quality standards throughout diverse and disparate states. Additionally, this idea does impede many of the rights of states given by the CWA for regulatory authority on water quality. The CWA grants the States' ability to enforce the CWA, provide permitting for discharge, and regulate the water quality standards set by the federal government (33 U.S.C. §1251 et seq., 1972). If the Court rules in favor of the plaintiffs, the authority of states given by the CWA will remain intact and unchanged since it will ensure the rights of the States to regulate intrastate and non-navigable waters. However, if the Court rules in favor of the defendants, then the rights given to states by the CWA will be altered and it will change the interpretation of the CWA, giving federal authority over much of US waterways. For Florida, given the new rule, this ruling would be impactful since much of the state is wetlands and agricultural lands (Salisbury, 2015). Regulation and quality standard reporting would be under the authority of the federal government for a majority of intrastate waters, not just navigable waters as previously stated in the CWA. However, it is possible that the impacts will not be negative. For example, Palombo (2015)

argued, “Rather than creating any new permitting requirements, especially for farmers, the Clean Water Rule will provide greater clarity and certainty and does not add any economic burdens” (n.p.). If the ruling favors the defendants, it is likely that the impacts/effects will be different on the individual states involved in the lawsuit given their topography and geography.

References

Copeland, C. (2016). *Clean water act: A summary of the law.* Retrieved March 24, 2018, from https://fas.org/sgp/crs/misc/RL30030.pdf

Coplan, K. (2014). Colorado Natural Resources, Energy & Environmental Law Review, 25(1). Retrieved March 24, 2018, from https://www.colorado.edu/law/sites/default/files/Coplan Citizen Litigants Citizen Regulators 25.1.pdf

Division of Surface Water. (n.d.). Retrieved March 25, 2018, from http://www.epa.ohio.gov/dsw/SurfaceWater.aspx

Environmental Protection Agency. (2017a). *Summary of the clean water act: 33 U.S.C. §1251 et seq. (1972)*. Retrieved from https://www.epa.gov/laws-regulations/summary-clean-water-act

Environmental Protection Agency. (2017b). *Clean water state revolving fund (CWSRF).* Retrieved from https://www.epa.gov/cwsrf

Environmental Protection Agency. (2017c). *About EPA*. Retrieved from https://www.epa.gov/aboutepa

Federal Insecticide, Fungicide, and Rodenticide Act 7 U.S.C. §136 et seq. (1996).

Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq. (1972).

Florida Department of Environmental Protection. (2018a). *About DEP*. Retrieved March 25, 2018, from https://floridadep.gov/about-dep

Florida Department of Environmental Protection. (2018b). *Water topics*. Retrieved March 25, 2018, from https://floridadep.gov/water-topics

Florida Department of Environmental Protection. (2018c). *Florida's coral reefs*. Retrieved March 25, 2018, from https://floridadep.gov/fco/fco/content/floridas-coral-reefs

Florida Department of Environmental Protection. (2018d). *Coral Reef Conservation Program*. Retrieved March 25, 2018, from https://floridadep.gov/fco/coral

Florida Department of Environmental Protection. (2018e). *Water management districts*. Retrieved March 25, 2018, from https://floridadep.gov/water-policy/water-policy/content/water-management-districts

Great Lakes Restoration Initiative. (n.d.). *Great Lakes Restoration Initiative - home*. Retrieved from https://www.glri.us/

Great Lakes Water Authority. (2018). *GLWA recaps successful 1st year*. Retrieved from http://www.glwater.org/

Hansen, K., & Nicholson, C. (2015, November). *Wyoming's water: Resources & management.* University of Wyoming. Retrieved March 23, 2018, from http://www.wyoextension.org/publications/html/B1272/

Hatter, L. (2015). Florida joins lawsuit against EPA over Clean Water Act expansion. *WFSU News*. Retrieved March, 24, 2018, from http://news.wfsu.org/post/florida-joins-lawsuit-against-epa-over-clean-water-act-expansion

Heisler, J., Gilbert, P.M., Burkhodler, J.M., Anderson, D.M., Cochlan, W., Dennison, … Suddleson, M. (2008). Eutrophication and harmful algal blooms: A scientific consensus. *Harmful Algae, 8*, 3-13.

Michigan Department of Environmental Quality. (2018). *MiWaters*. Retrieved from http://www.michigan.gov/deq/0,4561,7-135-3313_72753---,00.html

Michigan Department of Natural Resources. (2018). *Waterways Commission*. Retrieved from http://www.michigan.gov/dnr/0,4570,7-350-79137_79763_79917---,00.html

Mohr, J. (2015). *A guide to Montana water quality regulation*. Montana Legislative Environmental Policy Office. Retrieved March 22, 2018, from http://leg.mt.gov/content/Publications/Environmental/2015-water-quality-guide-final.pdf

Montana Code Annotated 2017. (n.d.). Retrieved March 25, 2018, from http://leg.mt.gov/bills/mca/title_0850/chapter_0200/part_0010/section_0010/0850-0200-0010-0010.html

Palombo, J. (2015). *Florida AG joins multi-state lawsuit against EPA's 'Clean Water Rule'.* Retrieved March 24, 2018, from http://news.wjct.org/post/florida-ag-joins-multi-state-lawsuit-against-epas-clean-water-rule

Plater, Z., Abrams, R., Graham, R., Heinzerling, L., Wirth, D., & Hall, N. (2010). Environmental law and policy: nature, law, and society (4th ed.). New York, NY: Aspen.

Programs, Projects, and Studies. (n.d.). Retrieved March 23, 2018, from http://dnrc.mt.gov/divisions/water/management/programs-projects-and-studies

Salisbury, S. (2015). *Florida joins lawsuit against EPA's Clean Water Rule.* Retrieved March 24, 2018, from http://protectingyourpocket.blog.palmbeachpost.com/2015/06/30/florida-joins-lawsuit-against-epas-clean-water-rule/

State of Florida *et al.* v. Environmental Protection Agency and Army Corps of Engineers, U.S. 2015. [http://myfloridalegal.com/webfiles.nsf/WF/KMAN-9XYL5A/$file/WOTUS.pdf]

Take a look at our resources! (n.d.). Retrieved March 25, 2018, from https://mtwatersheds.org/app/

Yoder, C. (2017, November 29). A Retrospective on the Clean Water Act in Ohio: Is Today As Good As It Gets? Retrieved March 25, 2018, from https://midwestbiodiversityinst.org/publications/articles/a-retrospective-on-the-clean-water-act-in-ohio-is-today-as-good-as-it-gets