



PHOTO: KEVIN MCCARTHY

The Clean Water Act 101

A primer on federal clean water protections

Passed fifty years ago, the Clean Water Act is the most important tool we have to protect our waters – from the smallest headwaters to the mightiest rivers. The Clean Water Act holds polluters accountable, enhances drinking water quality, protects habitat for fish and other wildlife, and sustains our economy.

Before the Clean Water Act, it was common practice to dump raw sewage into our nation's rivers. Ohio's Cuyahoga River was so polluted with oil and grease that it caught fire more than a dozen times. Waters as large as Lake Erie were so full of industrial pollution, untreated sewage, and farm run-off that they were declared functionally dead. The Potomac River in Washington, D. C. was filled with smelly algal blooms from raw sewage every summer. Rivers throughout New England were so polluted that they actually peeled paint off nearby buildings. Flood-absorbing wetlands were destroyed at an alarming rate – nearly half a million acres were lost annually.

In 1972, after decades of widespread pollution and contamination, Republicans and Democrats united to address this public health and ecological crisis by passing the Clean Water Act to protect our lakes, rivers, streams, wetlands, and bays from pollution and destruction.

For fifty years, this law has brought our waters back to life. It keeps 700 billion pounds of pollutants out of our waters annually, the rate of wetland loss has slowed dramatically, and the number of places that meet clean water goals has doubled. The cost to treat our drinking water is lower because our waters are healthier. As water quality improved, fish and wildlife rebounded in damaged systems across the country. Today, you can even eat fish from the Cuyahoga River.



How the Clean Water Act Protects Clean Water

PHOTO: REG DAVES

The fundamental goal of the Clean Water Act is “to restore and maintain the chemical, physical and biological integrity of the nation’s waters.”

The Clean Water Act ensures communities have the resources they need to protect water supplies, purify drinking water and treat sewage so that America’s waters continue to provide fish and wild-life habitat and allow us to enjoy activities like fishing, swimming and boating.

In order to achieve this overarching objective, the Clean Water Act makes it illegal to intentionally dump pollution from a “point source,” like factories or city sewers, into our nation’s waters without a permit – requiring industry to clean up its act. The law also prevents wetlands from being filled in or paved over to create dry land for development or farming without first getting a federal permit. It requires clean-up plans for water bodies that don’t meet water quality standards, funds important grant programs to help states, territories, and Tribes restore damaged wetlands, and helps communities build and upgrade wastewater infrastructure nationwide.



The 1966 hit “Dirty Water” is still Boston’s unofficial anthem, but the restored Charles River is now one of the city’s main draws — there are even plans in the works for a swimming spot in the river near downtown. Photo: LEONARDO DASILVA

Regulating Pollution Discharges

One of the most important ways the Clean Water Act helps protect our waters is through the Environmental Protection Agency’s *National Pollutant Discharge Elimination System (NPDES)* program, which requires a permit in order to discharge pollution into surface waters from what is called a “point source.” This program – which is administered by many states – sets limits for pollution like sewage, industrial waste, coal ash, and large-scale animal waste, that is discharged through a “point source” like a pipe or a ditch into a water body protected by the law. Importantly, any time a polluter applies for a NPDES permit, there is an opportunity for the public to weigh in. This program is one of the Clean Water Act’s biggest successes -- it is a key reason that many urban watersheds are now healthy enough to provide drinking water, for outdoor recreation or for fish and other wildlife.

Dredge and Fill

Section 404 of the Clean Water Act requires a permit for activities that involve dredged material – such as removing sediment from the bottom of a lake, or filling in a wetland to create new dry land for development. In most states, this program is administered by the Army Corps of Engineers with oversight from the EPA. This program requires developers to demonstrate that steps have been taken to first avoid and then minimize any impacts to wetlands and other waters. Mitigation typically involves the restoration of wetlands of a similar type and quality elsewhere in the basin. Unfortunately, mitigation efforts have been shown to have mixed success, with some failing to create equivalent habitats to those that were lost. Many farming, ranching, and forestry activities are exempt from the Section 404 permit process.

Federal Collaboration with States and Tribes

Section 401 of the Clean Water Act gives states and Tribes the authority to review projects like dams, pipelines, and roads that require a federal permit to ensure these projects comply with state or Tribal law, including water quality standards. This allows states and Tribes to improve projects to reduce impacts to water quality, allow for fish passage, ensure adequate stream flow, preserve fish and recreational access, or otherwise protect local waters. For example, both Arizona and Colorado recently allowed proposed projects to move forward under the condition that increases in pollution from the project would be offset

by cleaning up abandoned mines that were leaching pollutants elsewhere in the watershed.

States and Tribes can also deny a certification – meaning the project cannot go forward. For example, in 2019, the state of Oregon denied a permit application for the Jordan Cove Liquid Natural Gas Project and Pacific Connector Pipeline, due to the harm that construction and operation would have had on salmon and steelhead populations.

Grant and Loan Programs For Communities

The Clean Water Act's grant and loan programs have helped States and Tribes to improve the water quality. These programs have had a significant impact and are now more important than ever. In too many places, communities can no longer depend on safe drinking water as sewage and polluted runoff, exacerbated by climate change is further stressing these communities aging water infrastructure.

The **Clean Water State Revolving Fund** is a federal-state partnership that provides grants and low-interest loans to help communities upgrade wastewater infrastructure. Communities can pursue a variety of strategies ranging from purchasing land to protect drinking water sources, restoring streambanks to protect against floods, improving failing septic systems, recharging groundwater supplies, reducing stormwater runoff, and helping wastewater treatment facilities become more resilient to climate change.



Low-income and communities of color are more likely to have unsafe drinking water, experience water shutoffs, struggle to afford water bills, and experience impacts of extreme weather on water infrastructure. Too often, federal water infrastructure assistance does not reach these communities. In order to ensure that federal assistance reaches these communities, Congress should increase the amount of SRF funding provided in the form of grants, principal forgiveness, and negative interest loans to allow underserved communities to improve their water infrastructure.

Weiser, Idaho used Clean Water State Revolving Funds to upgrade its wastewater system, improving water quality in the Snake River, helping fish populations and communities. PHOTO: BAKER COUNTY TOURISM

The EPA's **Sewer Overflow and Stormwater Reuse Municipal Grants** program provides funding to help local communities manage sewer overflows and stormwater runoff. During storms, much of the rain or snow in developed areas flows into local rivers, streams, and bays, picking up pollution like oil, fertilizer, pet waste, sediment, or heavy metals along the way. These can contaminate local waterways, cause algae blooms, and harm wildlife.

Threats to Clean Water, and the Clean Water Act



Howard University students cleaning up the Anacostia River Photo: EPA.

Restricting State and Tribal Rights

A regulation finalized under the previous Administration restricted state and Tribal authority under Section 401 of the Clean Water Act, effectively allowing the federal government to override a state or Tribal decision to protect its waters from a harmful project like a mine, a dam, or a pipeline. This rule attempted to dramatically narrow the scope of issues states and Tribes can include as conditions on a permit for dams or infrastructure projects.

Additionally, the rule attempted to limit the amount of time that states and Tribes have to review and understand the impact of a potentially harmful project. Although this rule has been vacated by a federal court, the current administration needs to craft a new Section 401 rule via a formal rulemaking process.

Removing Federal Protections from Streams and Wetlands

The text of the Clean Water Act states that the law protects the “Waters of the United States.” For more than thirty years, the courts and Administrations interpreted this phrase to include essentially all natural water bodies -- streams, wetlands, rivers, lakes and coastal areas -- as well as water supply reservoirs.

But two Supreme Court decisions in the early 2000s threw protections for smaller streams and many wetlands in limbo. The Obama administration finalized a rule in 2015 that aimed to clarify which waters were and were not protected, eliminating the need for the U.S. Army Corps to make individual determinations for each water body in question. However, industries such as construction, chemical manufacturing, oil and gas, large agricultural opera-

tions, and mining fought this rule and have lobbied to have Clean Water Act protections removed from many streams and wetlands.

The most recent effort was a now-rescinded 2020 administrative regulation -- disingenuously titled the “Navigable Waters Protection Rule (NWPR)” -- that removed Clean Water Act protections from roughly half the nation’s wetlands and millions of miles of streams that had long been thought to be protected. While this rule was in effect, the Army Corps of Engineers denied federal protections more than 75 percent of the time.

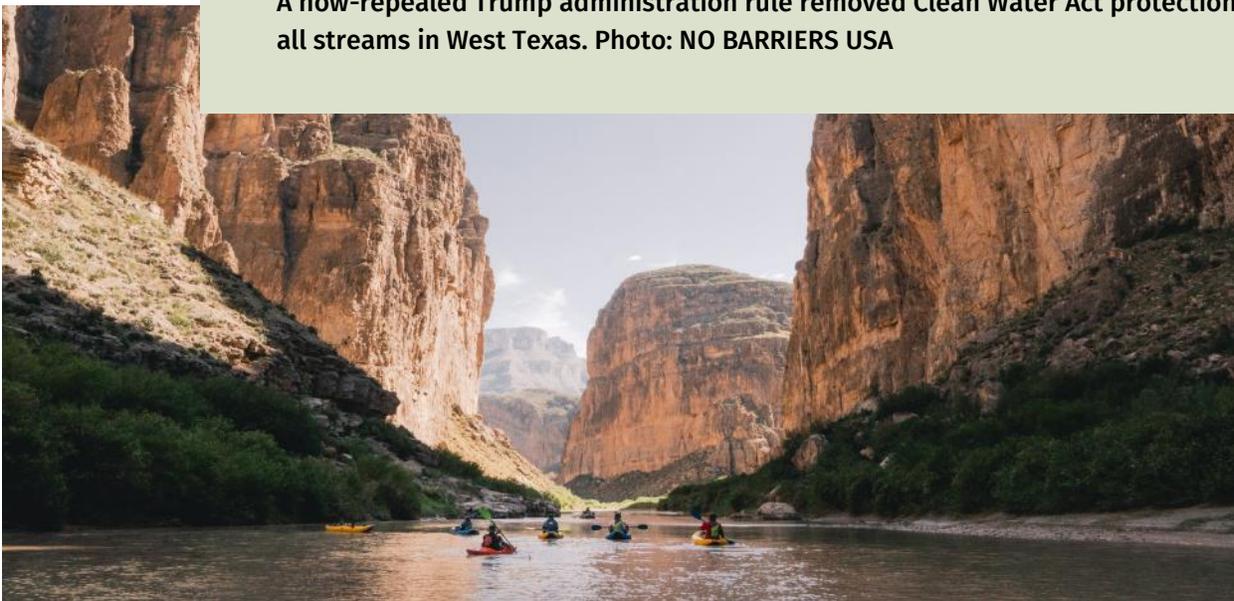
In arid states, such as New Mexico and Arizona, nearly all streams assessed were found to be not protected by the Clean Water Act because they did not flow frequently enough according to the 2020 rule. Streams in the Southwest typically only flow after rainfall, however, these ‘seasonal streams’ are key sources of drinking water for cities.

This regulation would have had devastating impacts on wetlands nationwide. For example, nearly 600 acres of wetlands adjacent to the iconic Okefenokee Swamp -- a National Wildlife Refuge and considered one of the world’s most important wetlands -- were determined to not be protected by the Clean Water Act, clearing the way for a massive mine that would almost certainly affect water quality in the Okefenokee and the two rivers that flow from it. Thankfully, this decision was recently reversed, restoring federal regulatory authority over the wetlands in the proposed mining area.

The rule denied protections for roughly 200 acres of wetlands near the Savannah National Wildlife Refuge in South Carolina. Other wetlands denied protections include seasonal wetlands like prairie potholes that are home to more than half of North American migratory waterfowl and many coastal wetlands that protect communities from hurricanes.

Had this rule remained in place, over time the impacts would have been devastating. Manufacturers would have had free reign to dispose of chemical waste in unprotected streams. Oil spills in these waters would not have been punishable under the Clean Water Act. Industrial hog farms located near unprotected waters would avoid federal enforcement. Real estate developers would not need a permit to build on top of wetlands or to re-route

A now-repealed Trump administration rule removed Clean Water Act protections from nearly all streams in West Texas. Photo: NO BARRIERS USA



streams.

These wetlands, headwaters, and seasonal streams that were left unprotected are collectively important to our quality of life. The streams supply drinking water to millions of Americans and these wetlands protect against storm surge and absorb floodwaters – as much as one million gallons of water per acre – providing us all with natural protection made all the more crucial in the face of climate change. These waters retain and filter pollutants, reducing runoff and erosion that occurs during intense storms. They also provide cool sources of water during hot periods, helping cold water species survive in a warming climate. These natural protections are especially important to disadvantaged communities that have historically been pushed to flood-prone areas or lack sophisticated water treatment plants.

Fortunately, as a result of two court cases brought by six Tribes in Arizona and one brought by the Navajo Nation in New Mexico, the harmful NWPR was struck down in court. As of the publication of this document, the U.S. Army Corps of Engineers has returned to making a case-by-case determination if any individual stream or wetlands is considered to be protected by the law.

The Biden administration has initiated a process to craft a new rule, one that should be both more protective of our waters while creating a clear and predictable framework for industry. It is critical that they move swiftly to develop a clear, science-based, and highly protective replacement rule that helps achieve the foundational goals of the Clean Water Act by ensuring that the Act's protections apply to the full range of the nation's waters: from our critically important headwater and intermittent streams to our largest and most iconic waters. The voices of communities will be critical to ensuring that the Administration works swiftly to develop a lasting rule that achieves the foundational goals of the Clean Water Act and protects our waters for future generations.

Fly fishing in Montana





Where We Are Today

October 2022 marks the 50th anniversary of the Clean Water Act. Upon this historic milestone, we have the opportunity to continue and improve upon the progress made over the past 50 years and to enshrine Clean Water Act protections for all our waters, because the smallest streams eventually become the mightiest rivers. Prioritizing equitable access to clean water and mitigating the impacts of climate change must be key factors in charting a course to ensure the Clean Water Act remains an effective and reliable tool over the next 50 years.

Our way of life – clean water from the tap, a day at the beach, fishing with our families, protections from storms – all depend on a strong Clean Water Act.

To find out more about how to get involved, please visit <https://www.nwf.org/Our-Work/Waters/Clean-Water-Act>.

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