



Excerpts on the Clean Water Act

The History of the Clean Water Act

From: <http://www.nrdc.org/water/pollution/hcwa.asp>

Highly successful in protecting our nation's waters, this landmark law itself needs to be defended -- and strengthened.

Perhaps no environmental challenge has stirred Americans to act as have the pollution and degradation of our nation's waterways. Rivers, waterfalls, and crystalline mountain lakes were among the first natural features to be sentimentalized by early 19th century American writers and painters. From Longfellow's Song of Hiawatha to Huckleberry Finn to the vistas of the Hudson River School or Winslow Homer, our culture abounds with expressions of this singularly strong attachment.

In the 1960s the burgeoning environmental movement found ready examples of the vulnerability of America's waters. In Cleveland, the Cuyahoga River burst into flames, so polluted was it with chemicals and industrial wastes; historic Boston harbor was a veritable cesspool. A 1969 oil spill off scenic Santa Barbara, California proved an especially telegenic disaster, with oil-soaked seals and pelicans and miles of hideously fouled beaches. These and other incidents were disturbing to many Americans and brought calls for immediate reforms.

The Clean Water Act is Born

The federal government responded with the 1972 passage of the Federal Water Pollution Control Act, more commonly known as the Clean Water Act (CWA), whose mission was to "restore and maintain the chemical, physical, and biological integrity of the nation's waters". The Clean Water Act established as a national priority the ending of the discharge of pollutants into waterways. Virtually every city in the U.S. was required to build and operate a wastewater treatment plant, with the newly formed Environmental Protection Agency (EPA) providing most of the funding and technical assistance. In addition, each state had to adopt water quality standards, design plans for limiting industrial and municipal discharges, and act to protect wetlands.

Billions of dollars were spent building the treatment plants, toxic flows were reduced, fish kills declined, and rivers and lakes began to revive. The 1987 Water Quality Act reaffirmed and strengthened the Clean Water Act, focusing on stricter regulation of toxic chemicals from industry, acid rain, and water pollution from diffuse sources such as agricultural runoff, sewage overflows during storms, and runoff from city streets. It required states to devise programs to deal with the problem.



The Clean Water Act's commitment to water quality has largely paid off in reduced pollution levels, although many problems remain. High concentrations of lead in drinking water plague some cities, while "nonpoint source" pollution such as agricultural runoff, sewage overflows during storms, and runoff from city streets has proven difficult to effectively address, let alone curtail. Whenever it rains heavily, sewage systems can become overloaded and dump raw or partially treated sewage into lakes, rivers and oceans.

In addition, street runoff, which contains high levels of toxic and disease causing pollutants, is usually washed directly into nearby waters without any treatment whatsoever. A recent EPA survey found that half of America's waterways are still damaged or threatened by water pollution, much of it from this polluted runoff. Instead of focusing solely on the places where runoff enters waterbodies, EPA is presently seeking watershed wide solutions to the problem, bringing together cities and rural communities on a regional basis.

The Clean Water Act and TMDL

From: <http://www.montanariveraction.org/clean.water.act.html>

The goal of the federal Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

There are four specific objectives within this general goal:

1. Restore water quality to provide for the protection and propagation of fish, shellfish, and wildlife and provide for recreation in and on the water by July 1983
2. Eliminate the discharge of pollutants into the nation's waters by 1985
3. Eliminate the discharge of toxic pollutants in toxic amounts
4. Develop and implement programs for the control of non-point source pollution

Water pollution is traced to two general areas of origin: point sources and non-point sources. Point sources are specific physical sources such as a pollution outflow pipe. Non-point sources are broad area sources such as a plowed field, a logged and roaded forest, or a mining waste heap. The CWA applies different regulatory controls for point and non-point sources.

"Technology-based" effluent (liquid waste) standards stipulate certain levels of pollution control and treatment technologies for specific point source pollution-generating activities. A second set of controls establishes water quality-based standards for non-point sources as explained below.



Legal authority for the CWA follows a specific path. Congress passed the CWA, authorizing the Environmental Protection Agency (EPA) to set federal water quality regulations, then maintain primary oversight through their regional offices of the individual state's implementation of the regulations on a local level. If state programs are not consistent with federal minimum requirements, the EPA has the right to intervene. Citizen participation is equally important throughout this chain of command.

TMDL is a convenient acronym for "total maximum daily load" and is a process for setting procedures or programs to clean up waterways where water quality falls below minimum levels set by use classifications. TMDL sets limits on point and non-point source pollution-loading in lakes and stream segments that do not meet, or are not expected to meet, state water quality standards.

The National Clean Water Act requires each state to:

- ❖ Identify water bodies that are water quality limited (as assembled in the 303(d) list)
- ❖ Prioritize and target water bodies for TMDL's
- ❖ Develop TMDL plans to attain and maintain water quality standards for all water quality limited waters

Clean Water Act

From: <http://www.nwf.org/watersheds/cwa.html>

In 1972, Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." It is the national goal of the Clean Water Act that all of our waters should be safe for fishing and swimming. To date, only 66% of our waters meet this goal. To achieve this goal, Congress understood that a variety of programs would be necessary to attack the many types of pollution entering our waters. In an effort to get the public involved, the Clean Water Act **provides citizens the power** to make a difference through the use of **TMDLs**. A lot of **success in cleaning Nation's water** is credited to the Clean Water Act, but we still have room for improvement.

Pollutants enter the water by one of two avenues:

- ❖ **point sources** - sources with an identifiable, concentrated discharge point, including large industrial sources and sewage treatment plants, and
- ❖ **polluted runoff** - runoff after storms or irrigation containing pesticides, manure, fertilizers, oil and gas, and other types of pollution from farms, ranches, streets and parking lots, suburban lawns, and other large area sources.



INDUSTRIAL POINT SOURCES

Setting permissible amounts of pollution

The Clean Water Act has established a federal/state partnership to control the discharge of pollutants from large point sources through a four step process.

1. The EPA develops national guidelines for the control of industrial pollution discharges that are based on the "Available Technology" (BAT) that is economically achievable. These national standards regulate and apply to entire industrial categories.
2. States, NOT EPA, determine and designate the desired beneficial uses for waterways in their state and establish the water quality standards necessary to make the waterbody clean enough for the designated use. Designated uses include fishing, swimming, boating, wildlife habitat, agriculture, and industry.
3. Sewage treatment plants must meet basic levels of treatment called "treatment" which use biological processes to transform disease-causing organisms into harmless matter. The federal government has provided billions of dollars in grants and loans to state and local governments to construct sewage treatment plants that can meet this standard.
4. All industrial and sewage treatment plants must obtain a permit that specifies the type and amount of pollutants they may discharge. These permits specify industry-wide technology standards, state water quality standards, and sewage treatment standards that apply to that source. They are reviewed and renewed every five years to account for improvements in technology. States run this type of permitting program in 39 states. It is this permitting system that holds dischargers accountable. The federal government, the state governments, and citizens can sue sources that violate their permits.

Antidegradation

To ensure that waters that are safe for fishing and swimming stay that way, new sources of pollution are carefully reviewed to ensure they will not degrade the waterbody. Pristine waters, such as headwaters in our National Parks or wilderness areas can be designated by states to receive special protection.

URBAN STORMWATER

Urban stormwater is a significant source of water pollution. Under current law, cities with a population of 100,000 and heavy industries must have stormwater discharge permits that establish minimum requirements for preventing stormwater pollution. These permits are pollution control plans, rather than specific numerical limits for each pollutant. However, dischargers are held accountable for complying with their requirements. Smaller cities do not have to take any action for another six years.



POLLUTED RUNOFF

Polluted runoff from agriculture, forestry, mining and other sources is the largest remaining source of water pollution. Under current law, states are required to plan and utilize cost-effective "management practices" by landowners at the earliest practical date. Requirements for individual landowners who cause pollution are weak and unenforceable.

COASTAL PROTECTIONS

Since 1990, polluted runoff has been regulated in coastal areas. State water quality and coastal zone management agencies are required to develop and implement coastal polluted runoff control programs. These state programs are to apply "management practices" that can be economically achieved to new and existing sources of polluted runoff.

WETLANDS

Section 404 of the Clean Water Act is the principal federal regulatory program protecting our remaining wetlands resources. Under Section 404, the U.S. Army Corps of Engineers administers a permitting program for the discharge of dredged and fill materials into the waters of the United States, including wetlands. Permit applicants are encouraged to avoid, minimize and then mitigate the effects of their projects on wetlands.

The EPA helps set standards, comments on permit applications, and has veto authority, which it rarely uses. In determining permit restrictions, the relative significance of the wetlands functions and values affected, and the availability of alternatives sites are considered. Normal ongoing farming operations are exempt from section 404. The vast majority of permit requests are granted in a timely fashion.

CONCENTRATED ANIMAL FEEDING OPERATIONS

One source of water pollution that is becoming increasingly significant is the growth of large feedlots and factory farms. These "concentrated animal feeding operations" are responsible for phosphorus, pathogens and nutrients from animal waste seeping into surface and ground water.

Currently the EPA regulates these operations as point sources, but enforcement has been lax.