Protecting the Environment

And Your

Shop

How this Environmental stuff began.

The Rivers and Harbors Appropriations Act of 1899.

Preventing dmping of materials that might impede navigation.



The Federal Water Pollution Control Act of 1948.

 The first major law enacted by Congress to address the problems of water pollution in the United States.

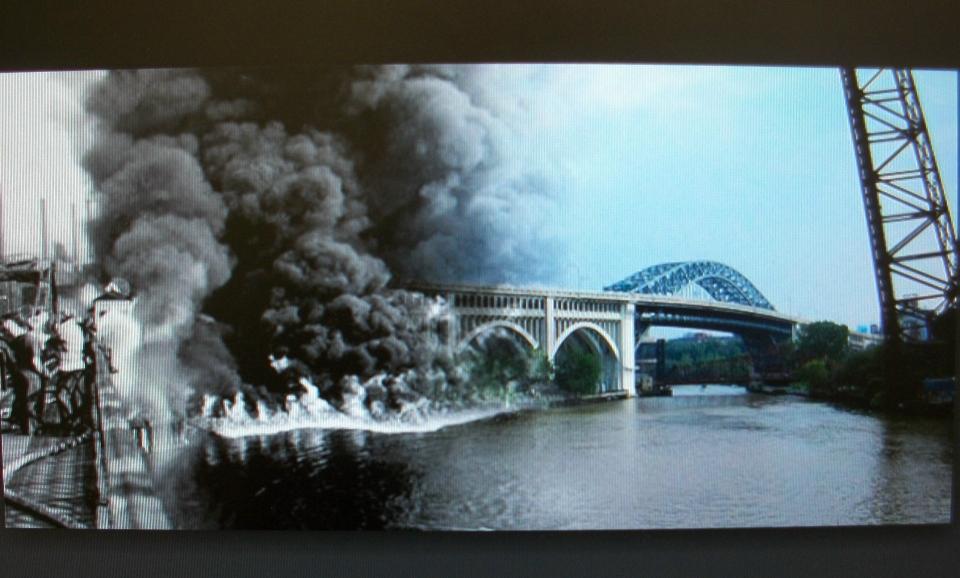
• It was reported in 1945 that over 3,500 communities pumped 2.5 billion tons of raw sewage into streams, lakes, and coastal waters every day.



discharges sewage into Cuyahoga River (1973)

On June 22, in 1969, the Cuyahoga River burst into flames in Cleveland when sparks from a passing train set fire to oil-soaked debris floating on the water's surface.

Photo is from Time Magazine was taken from a 1952 Cleveland's Cuyahoga River



The 1969 Cuyahoga River fire helped spur an avalanche of water pollution control activities:

- The Clean Water Act
- Great Lakes Water Quality Agreement
- The Federal Environmental Protection Agency
- The Ohio Environmental Protection Agency



The Olin Mathieson Alkali Works plant (seen in 1968) producing soda ash and then chlorine bleaching powder in the Appalachian town of Saltville, Va., for decades dumped its calcium chloride effluent into the North Fork of the Holston River which flowed past the plant.

The Federal Water Pollution Control Act was not effective in preventing and abating water pollution.

- Difficult to gain political support for a water pollution proposal.
- Legislators generally considered the control of water bodies a responsibility of the states and viewed federal regulation with suspicion.

The EPA

 Born in the wake of elevated concern about environmental pollution, EPA was established on December 2, 1970 to consolidate in one agency a variety of federal research, monitoring, standardsetting and enforcement activities to ensure environmental protection.

The Clean Water Act

Growing public awareness and concern for controlling water pollution led to sweeping amendments in 1972.

The Clean Water Act (CWA)

- Established the basic structure for regulating pollutant discharges into the waters of the United States.
- Gave EPA the authority to implement pollution control programs.
- The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained.

What is the penalty for violating the Clean Water Act?

Penalty for violating the Clean Water Act

• If a court finds a violation of the CWA due to criminal negligence (e.g., carelessness, inattentiveness), it will impose a fine.

 A minimum of \$2,500 with a maximum of \$25,000 fine per day for the first offence and a maximum fine of \$50,000 per day for the second offence.

EPA changed it's focus to cities.

 City storm water continued to add pollutants into the "waters of the United States"

 States had to adopt the rules and were given the responsibility to enforce the regulations.

The 1987 Water Quality Association expanded the program to cover storm water discharges

Both from municipal separate storm sewer systems (MS4) and industrial sources.

 The National Pollution Discharge Elimination System (NPDES) permits require regulated municipalities to use Best Management Practices to reduce pollutants to the "Maximum Extent Practicable" in their MS4.

The 1990 Phase I regulation

 EPA required medium and large cities or certain counties with populations of 100,000 or more to obtain a NPDES permit to control their stormwater discharges.

The 1999 Phase II regulation

 Required smaller cities to obtain NPDES permit coverage for their stormwater discharges.

The NPDES permit comprised of 6 elements:

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

 According to the 2000 National Water Quality Inventory, approximately 40 percent of the surveyed U.S. water bodies are still impaired by pollution and do not meet water quality standards.

Common Pollutants

- pesticides, fertilizers
- oils, salt, litter
- other debris, and sediment
- Another concern is the possible illicit connections of sanitary sewers, which can result in fecal coliform bacteria and other blood borne pathogens entering the storm sewer system.

Knowing what we know

- Federal saw the need for changes, no power to enforce.
- Passed it over to the state which laid down the rules
- State made requirements for cities
- Cities answers to the state.

Let's head to the shop















SepticTanks

