Americans want clean water—surface waters safe for swimming and fishing and supplying our drinking water. Water quality has improved markedly since infamous events such as the Cuyahoga River catching on fire repeatedly prior to the 1972 adoption of the Clean Water Act. But serious threats remain: many waters today are not fit for all of the uses that states have identified for them; every summer brings thousands of beach closings and swimming advisories; and wetlands, streams and other vulnerable waters are destroyed, leaving more areas vulnerable to pollution, flooding and degradation.

I. PRIMARY STATUTES

- **CLEAN WATER ACT**

  Formally titled the Federal Water Pollution Control Act, the Clean Water Act is the result of a complete overhaul of federal water pollution regulation in 1972. It has had two major amendments—in 1977 and 1987—which primarily adjusted the requirements pertaining to permitting for dredged and fill material (1977) and to sources of polluted runoff (1987), but which kept intact the basic requirements of the law.

  At its core, the Act prohibits sending pollutants into waters by requiring specific sites that discharge materials into waters to get a permit to do so. These sites include industrial operations and municipal storm water and sewage systems. In issuing permits, state and federal agencies are supposed to ensure that the best techniques are applied to minimize pollution and that any discharge is consistent with state water quality goals.

  The federal government and states work together to enforce the Act. It is primarily implemented by the Environmental Protection Agency (EPA) at the federal level, although the Army Corps of Engineers issues so-called “dredge and fill” permits. EPA has delegated permitting, standard-setting, and enforcement authority to 46 states, which work subject to EPA oversight and are assisted by federal grants.

  In addition, EPA provides annual grants to states to help fund local water and sewer projects. The money from EPA is put into “state revolving funds,” from which states loan money to their municipalities.

II. MAJOR POSITIVE EFFECTS

  In the 40 years since its passage, the Act has played an important role in cleaning up our nation’s waterways:

  - The percentage of waters not meeting state standards has dropped markedly, despite a significant increase in U.S. population. In 2004 (the most recent comprehensive survey), EPA found that “states reported that about 44% of assessed stream miles, 64% of assessed lake acres, and 30% of assessed bay and estuarine square miles were not clean enough to support uses such as fishing and swimming” compared to more than two-thirds of waters not meeting standards before the law. Some of the remaining pollution is caused by air pollutants that end up getting deposited into the water rather than from discharges into the waters directly.

  - The rate of wetlands loss shrank dramatically, by roughly three-fourths.

  - Sewage treatment plants have been required to upgrade their pollution control equipment, substantially decreasing their impact on waters.

  - Pollution standards for more than 50 industries have prevented the discharge of over 700 billion pounds of pollutants per year into our nation’s waters, according to EPA.
III. MAJOR CONCERNS

Despite the Act’s success, many challenges remain, particularly with regard to unaddressed sources of pollution or water bodies where legal protection is unclear:

- Headwater streams and wetlands currently lack clear protection under the Clean Water Act, despite the fact that they absorb flood waters, filter pollutants from contaminated water, contribute to the drinking water supply of 117 million Americans, support fish and waterfowl, and feed our rivers and lakes.

- Nationwide, EPA estimates that urban stormwater runoff is the primary source of water quality impairment for 13% of all rivers and streams, 18% of all lakes, and 32% of all estuaries. At ocean and Great Lakes beaches in 2011, polluted runoff and stormwater caused or contributed to 10,954 beach closing or swimming advisory days. The Act has not yet been successful at controlling pollution from systems composed of numerous discharge locations.

- Nitrogen and phosphorus pollution from livestock operations, sewage discharges, and other pollution sources bring about harmful algae blooms, nasty slime that can produce harmful toxins and that can rob water bodies of the oxygen that fish and other animals need to live. These pollutants are also causing significant harm in the Chesapeake Bay, Florida, the Great Lakes, the Gulf of Mexico, and in waterways around the nation.

- Mountaintop removal coal mining practices have enormous pollution impacts, burying miles of streams under mining waste and contaminating downstream waterways.

- Waste from large factory farms—also known as concentrated animal feeding operations (“CAFOs”)—fouls water bodies across the U.S. with bacteria, nitrogen and phosphorus, and other harmful pollutants. As a government analysis noted, these facilities generate as much or more waste as whole cities.

PUBLIC OPINION

- In polls over more than two decades, water issues consistently dominate the list of Americans’ top environmental concerns; in April 2012, Gallup noted: “the three water concerns in this year’s poll have ranked as the top three concerns over any other environmental problems nearly every time they have been asked since 1989. Pollution of drinking water has most often been the top concern.”

- More specifically, polls conducted in several key Congressional states and districts to gauge support for efforts to restore Clean Water Act protections to small/ headwater streams and wetlands show strong support for such efforts. For instance, in Ohio and Colorado, 70 percent and 69 percent respectively favored restoring these legal protections, even after hearing arguments for and against the initiative.

- Industrial cooling water intake structures cause adverse environmental impact by pulling large numbers of fish and shellfish or their eggs into a power plant’s or factory’s cooling system.

- NRDC’s annual analysis of beach water quality found that the number of beach closing and advisory days in 2011 reached the third-highest level in the 22-year history of our report, totaling 23,481 days. More than two-thirds of closings and advisories were issued because bacteria levels in beach water were worse than applicable public health standards, potentially indicating that there’s human or animal waste in the water.

IV. UPCOMING ISSUES

EPA has many decisions pending to enhance clean water protections. In the last Congress, the House voted repeatedly on “riders” (policy provisions attached to spending bills) designed to block EPA from moving forward in establishing clean water protections. Matters EPA may address soon include:

- Protecting Headwater Streams and Wetlands: EPA and the Army Corps of Engineers proposed a set of guidelines in April 2011 to clarify which waters are protected by the Clean Water Act, and a final version as well as additional proposed protections may be issued soon.

- Controlling Urban and Suburban Runoff Pollution: EPA is currently developing standards to require runoff controls for certain commercial and residential properties.

- Restoring Treasured Waters: EPA has begun implementing an ambitious cleanup blueprint for nitrogen and phosphorus pollution in the Chesapeake Bay, but has failed to do so elsewhere—denying requests to step in where states have failed, and even backtracking on steps it had taken in Florida to establish standards there.

- Reining In Pollution from Waste Dumping in America’s Waterways: The Obama administration has taken some steps to protect Appalachian communities from the impacts of mountaintop removal coal mining. Even these steps have been mired in litigation and the administration has failed to pursue more comprehensive solutions to this problem.

- Curbing Pollution from Livestock Factories: EPA recently backed off from a modest proposal to simply collect information from these operations.

- Preventing Power Plants from Killing Fish: EPA has proposed regulations for cooling water intake structures, but the rule is far too weak to protect the aquatic environment and businesses that depend on healthy fisheries.