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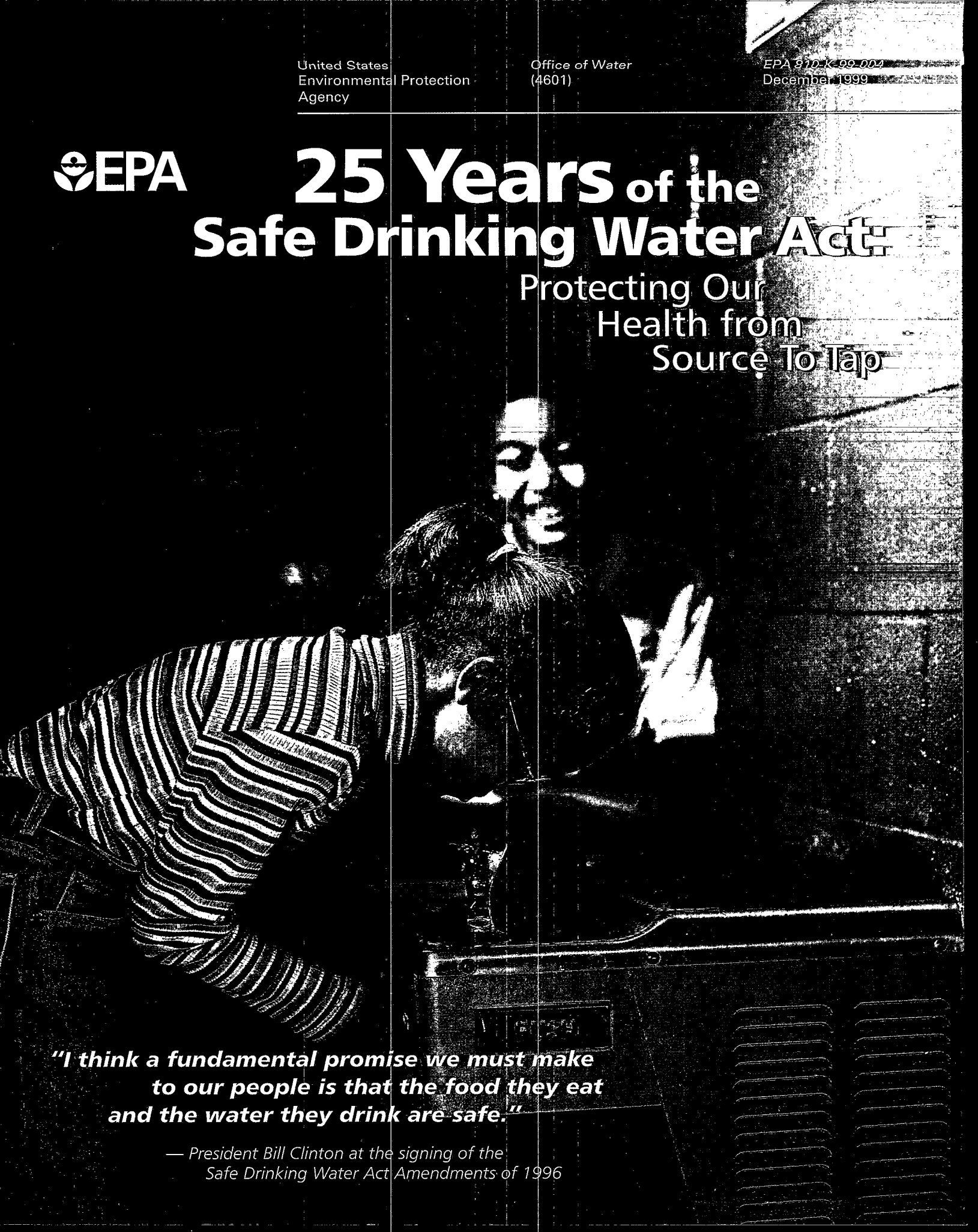
25 Years of the Safe Drinking Water Act:

Protecting Our Health from Source To Tap



"I think a fundamental promise we must make to our people is that the food they eat and the water they drink are safe."

— President Bill Clinton at the signing of the Safe Drinking Water Act Amendments of 1996

THE SAFE DRINKING WATER ACT: 25 YEARS OF PROGRESS

Every day, we turn our faucets to get clean, safe water. We use this water to brush our teeth, to cook our food, and, most importantly, to drink. Enjoying some of the safest drinking water in the world, most of us take the quality of our water for granted. But behind every drop is a strong network of consumers, scientists, regulators, water plant operators, engineers, and public advocacy groups, all working together to ensure the safest possible drinking water. Guiding their efforts is the Safe Drinking Water Act.

> *"Safe, clean water is the first line of defense in protecting public health, protecting our children and our families, and protecting the basic values that are fundamental to the American quality of life."*
>
> — *Vice President Al Gore*

Signed on December 16, 1974, the Safe Drinking Water Act created the first-ever mandatory national program to protect public health through drinking water safety. Twenty-five years later, the Act has matured into a comprehensive, integrated, and flexible law that is the Safe Drinking Water Act of today — and tomorrow.

THE SAFE DRINKING WATER ACT: PROTECTING OUR HEALTH FROM SOURCE TO TAP

Over the last 25 years, the Safe Drinking Water Act has protected public health by ensuring the delivery of safe water to millions of Americans every day. Safe drinking water is critical to our health, especially children, the elderly, and others who may be more susceptible to the impacts of drinking water contamination. We demand the safest drinking water possible. As new challenges to drinking water safety emerge, we must respond.

The Safe Drinking Water Act of 1974

- *Established a national structure for drinking water protection activities.*
- *Authorized EPA to establish national, enforceable health standards for contaminants in drinking water.*
- *Provided for public water system compliance through a federal-state partnership.*
- *Established public notification to alert customers to water system violations.*
- *Set up procedures to protect underground sources of drinking water.*

In this 25-year journey of providing safe drinking water, strong partnerships have been the key to success. Providing safe, high-quality drinking water is not an easy task, nor is it a job that any single government agency or professional organization can do alone. Public and private partners across the nation work together to identify and implement creative ways to improve the safety of our Nation's drinking water.

Building on 25 years of experience, we have successfully transformed the Safe Drinking Water Act and the national drinking water program into a comprehensive environmental and public health protection effort — an effort that protects our health from source to tap.

Setting Standards to Protect Public Health

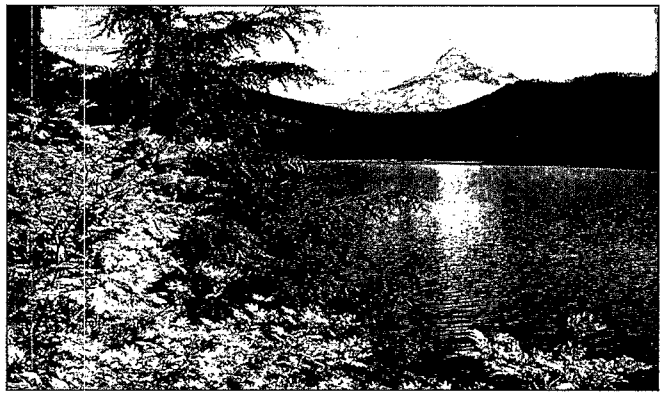
Public health is the primary goal of the Safe Drinking Water Act, achieved by ensuring that public water supplies meet strong, enforceable national standards. The number and pace of contaminant regulation was increased in 1986, including landmark disinfection and filtration requirements for drinking water.

Released by President Clinton in December 1998, new drinking water standards for Cryptosporidium, other disease-causing microbes, and potentially harmful byproducts of the water treatment process were the first standards set under the 1996 Amendments. These new standards will prevent up to 460,000 cases of waterborne illness a year and reduce exposure to disinfection byproducts by 25 percent.

Signed by President Clinton, the 1996 Amendments to the Safe Drinking Water Act created a completely new approach to regulating contaminants in drinking water. Rather than setting standards for a set list or number of contaminants, the Environmental Protection Agency takes a common-sense, cost-effective approach to research and standard setting, focusing on contaminants that pose the greatest risks to human health. In addition, the 1996 Amendments provide important new protections for consumers that may be at greater risk of experiencing adverse health effects from drinking water contaminants, including children and the elderly.

Protecting Our Sources of Drinking Water

It is easy to forget that our drinking water does not just come from a tap, but from rivers, lakes, and underground aquifers. Most of our drinking water is treated before it is drawn from our taps and poured into our glasses to remove unsafe levels of chemicals and disease-causing microbes. This treatment can be expensive, and these costs are often passed on to the consumer. A more comprehensive, common-sense, and cost-effective solution to controlling contaminants in drinking water is to prevent them from reaching our drinking water sources in the first place.



City of Portland, Oregon Bureau of Water Works

Over the years, the Safe Drinking Water Act has established several programs to help protect our water. The 1974 Safe Drinking Water Act protected underground sources of drinking water by regulating underground wells used for disposal, oil and gas production, and mining. The original Act also allowed communities, individuals, and organizations to petition for the protection of aquifers that are the only source of drinking water for their local community. The 1986 Amendments to the Safe Drinking Water Act allowed for states and localities to develop and implement programs to protect their water supply wells.

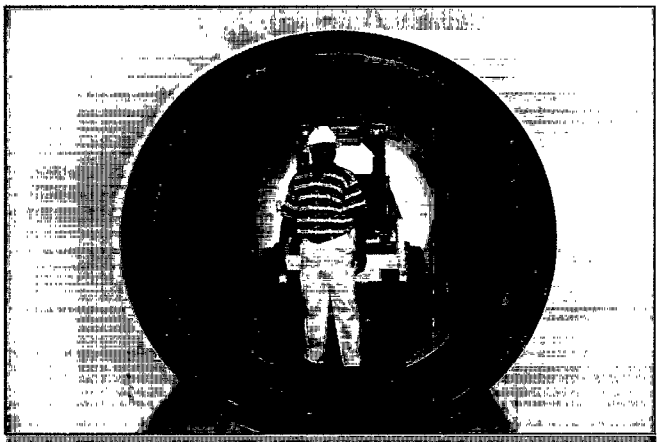
Most recently, the 1996 Amendments to the Safe Drinking Water Act have sparked new efforts to assess and protect rivers, lakes, and streams. For the first-time, states are required to conduct comprehensive source water assessments for all public water systems. Each assessment will define source waters to be protected, identify sources of contamination, and provide officials and consumers the information they need to protect their water. The 1996 Amendments also provide new sources of funding for these efforts, including loans for land acquisition and conservation easements.

The 1986 Amendments

- *Required disinfection for all water systems.*
- *Expanded the number of regulated contaminants and increased the pace of contaminant regulation.*
- *Required filtration of all surface water supplies, unless strict criteria are met.*
- *Established a monitoring program for unregulated contaminants.*

Ensuring Our Drinking Water Infrastructure

To continue to ensure safe drinking water for 250 million Americans, and to expand service to those still in need of access to safe drinking water, communities need to make significant investments in drinking water system installation, upgrades, and replacement. According to EPA's 1997 Drinking Water Needs Survey, drinking water systems need to invest a minimum of $138.4 billion over a 20-year period to continue providing safe drinking water to their customers. If public water systems cannot obtain affordable financing, these infrastructure needs may well go unmet.



Photograph Courtesy of Washington Suburban Sanitary Commission

The Clinton/Gore Administration has provided over $2.7 billion to the states to capitalize their Drinking Water State Revolving Funds, and roughly $800 million more will be made available in 2000.

A loan fund was established under the 1996 Amendments for just this purpose — to help fulfill communities' drinking water infrastructure financing needs. This Clinton/Gore Administration program — known as the Drinking Water State Revolving Fund — provides sizable capitalization grants to the states to set up state revolving loan funds. In turn, these loan funds provide affordable financial assistance to communities in the form of low- and no-interest loans for drinking water projects that help them meet the national safe drinking water standards.

Improving the Public's Access to Information

Americans have the right to know what is in their drinking water and that it is safe. Providing people with access to information allows them to make informed decisions about their health and the health of their families. It also helps to engage the public and make them active participants in drinking water protection

and safety efforts. Today, more than ever before, the public is demanding to have information about the safety of drinking water before turning on the tap.

Since 1974, the Safe Drinking Water Act has provided the public with critical drinking water information. Traditionally, information about drinking water was only sent to customers during special alerts, when drinking water contamination exceeded legal limits. Based on Clinton/Gore Administration proposals, the 1996 Amendments to the Act are making more information available to the public than ever before. Through annual water quality reports, Americans now have access to information about local water quality, contaminants, water sources, and whether their water poses a risk to human health. Sent directly to consumers' homes in their water utility bills in most cases, these "consumer confidence reports" are an important public information tool, educating the public so that they can actively participate in decisions about their drinking water.

Official White House Photograph

DRINKING WATER FIRSTS:
The 1996 Amendments established a more comprehensive approach to public health protection.

For the first time:

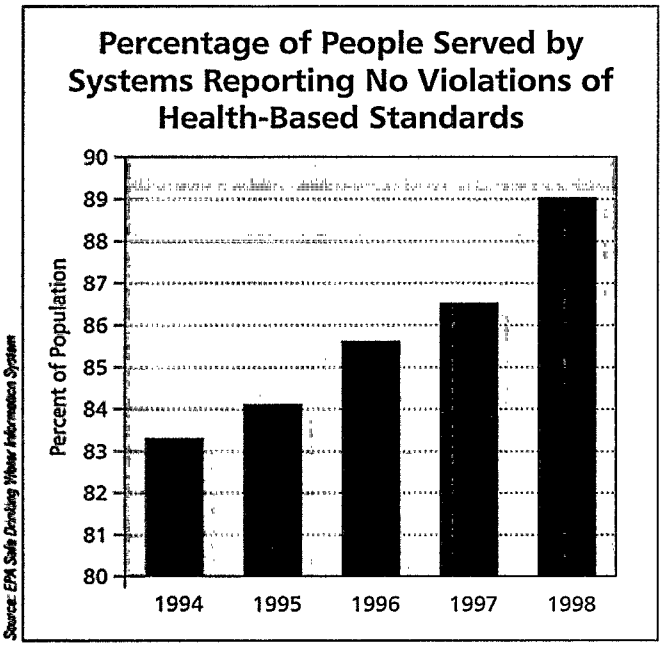
- *A federal-state partnership provides low and no interest loans to water systems to upgrade their facilities and ensure compliance with drinking water standards. These state revolving loan funds also provide funding for source water protection.*
- *Fifty-five thousand water systems must provide customers annual reports about the source of their water supply, contaminant levels detected in their water, and the health effects of contaminants detected above the established safety limit.*
- *States will be examining all drinking water sources to identify contaminant threats and determine susceptibility to contamination, allowing water suppliers, local governments, and citizens to design source water protection measures.*
- *Cost-effective, risk-based standards combined with increased research are resulting in drinking water regulations focused on the greatest threats to human health.*

ACHIEVING SUCCESS: SAFER DRINKING WATER FOR MILLIONS OF AMERICANS

The Safe Drinking Water Act means safer drinking water for millions of Americans. Now, more than ever before, people can take comfort in the quality of their drinking water and the fact that their health and the health of their families is being protected. Under the Safe Drinking Water Act, EPA has set standards for 90 contaminants and established monitoring, reporting, public notification, and source water assessment requirements for thousands of public water systems. Despite increasing requirements, more drinking water systems are meeting all health-based

standards than ever before. As of 1998, 89 percent of the population was being served by community water systems reporting no health standard violations — over a 17 million person increase since 1993.

Even more importantly, we have created a successful and effective safe drinking water network — a proven partnership among federal, state, and local governments; drinking water utilities, system operators, and engineers; scientists and health care providers; community groups; and the public. The professionalism of water system operators has significantly increased, meeting the challenges and complexities of new contamination threats. And with the increased availability of information, the public has become a more informed and active partner in drinking water issues.



ACTIONS FOR THE FUTURE: SAFE DRINKING WATER IN THE 21ST CENTURY

Today, thanks to the tremendous progress that we have made under the Safe Drinking Water Act, the overwhelming majority of Americans can be confident about the water they drink. As new challenges emerge — including a growing population and increased development, aging infrastructure, and the discovery of new sources of contamination — we must be ever more vigilant in maintaining and improving the safety of our Nation's drinking water.

The 1996 Safe Drinking Water Act amendments addressed some of the most glaring public health threats; added important new tools and capabilities; narrowed the gap on critical funding needs at the local, state, and federal levels; recognized and addressed some of the most pressing problems of small systems; and expanded public information and involvement opportunities. There is still more to be done.

While technology improves, knowledge increases, and tools and resources continue to expand, new threats to public health still continue to arise. Increasing development, if not properly managed, may threaten sources of drinking water. An expanding and aging population will require added protections to address special health concerns. The need for high-quality research on health effects and treatment technologies persists. Accurate drinking water information should be more readily available to the public.

As we enter the new century, we must continue to identify and respond to hazards that threaten our water supply and our health through:

- *New Public Health Protections:* We must continue to develop common-sense, cost-effective drinking water standards and revise regulations to ensure that the public's health is protected in all circumstances.

- *Better Treatment and Delivery Systems:* We must address infrastructure needs, including costs of replacement, and ensure that water systems have the capacity to meet the challenges of public health protection in the 21st century.

- *Enhanced Public Access to Information:* Building on the required water quality and the capabilities of the Internet, we must increase public access to accurate, real-time drinking water quality and compliance information.

- *Improved Source Water Protection:* We must better integrate local economic development and land use with environmental and drinking water protection efforts. Urban sprawl and population growth are putting increased demands on drinking water supplies in terms of both quantity and contamination threats.

- *Increased Research:* We must engage in a public-private partnership on research that will answer the most pressing public health issues and prepare for emerging contaminant threats; develop better, cheaper, and faster analytical methods to improve our ability to identify health threats; and create more effective and flexible water treatment methods.

The American people set the bar of expectations very high that their drinking water should be among the cleanest and safest in the world. The partnerships that have worked so well to bring us safe drinking water this past quarter century give us reason for great optimism that we can continue to meet and even exceed these expectations in the next century.

United States Environmental Protection Agency Photo

"Clean drinking water is a cornerstone of public health. Our job today and tomorrow is to make certain every American community has safe, clean water to drink at all times."

— EPA Administrator Carol M. Browner

For more information on the Safe Drinking Water Act and its implementation, please call EPA's Safe Drinking Water Hotline at 1-800-426-4791. You can also visit the EPA Office of Ground Water and Drinking Water web site at www.epa.gov/safewater. For information on your local drinking water, call your local water system or visit www.epa.gov/safewater/dwinfo.htm.

Cover Photo: United States Environmental Protection Agency