

Benefits of Protecting Your Community From Sanitary Sewer Overflows



Sanitary Sewer Overflow Control Enhances Community Life

Your community can benefit from EPA's proposed sanitary sewer overflow control requirements – in ways that go far beyond reducing the amount of sewage entering your environment. The sewer system is a hidden resource that contributes to your quality of life and to your community's long-term success. It is there for you every time you empty your kitchen sink, flush a toilet, take a shower, or wash a load of laundry. The overflow control requirements will help protect the sewer system and make sure it is there for you in the future.



A sanitary sewer overflow is an unintentional release of sewage from a collection system before it reaches the treatment plant. The sewage can contaminate groundwater or surface water, causing serious water quality problems and threatening drinking water supplies. It can also back up into basements. Overflows are unhealthy, destructive to public and private property, bad for recreation and tourism, and hard on sanitary sewer and drinking water system equipment. Unfortunately, they are a chronic and growing problem in many parts of the country.

When is your sewer system operating at its best? When you don't smell it, hear it gurgling in your basement, or see it spill onto your public beach! You are paying for this service, either through local taxes or usage fees. Be a smart investor: learn about the sewer overflow control requirements, and support your local sanitation authority in its efforts to implement them.

Keeping sewage in the sewer leads to . . .

Healthier communities that enjoy ...



Cleaner water, with fewer:

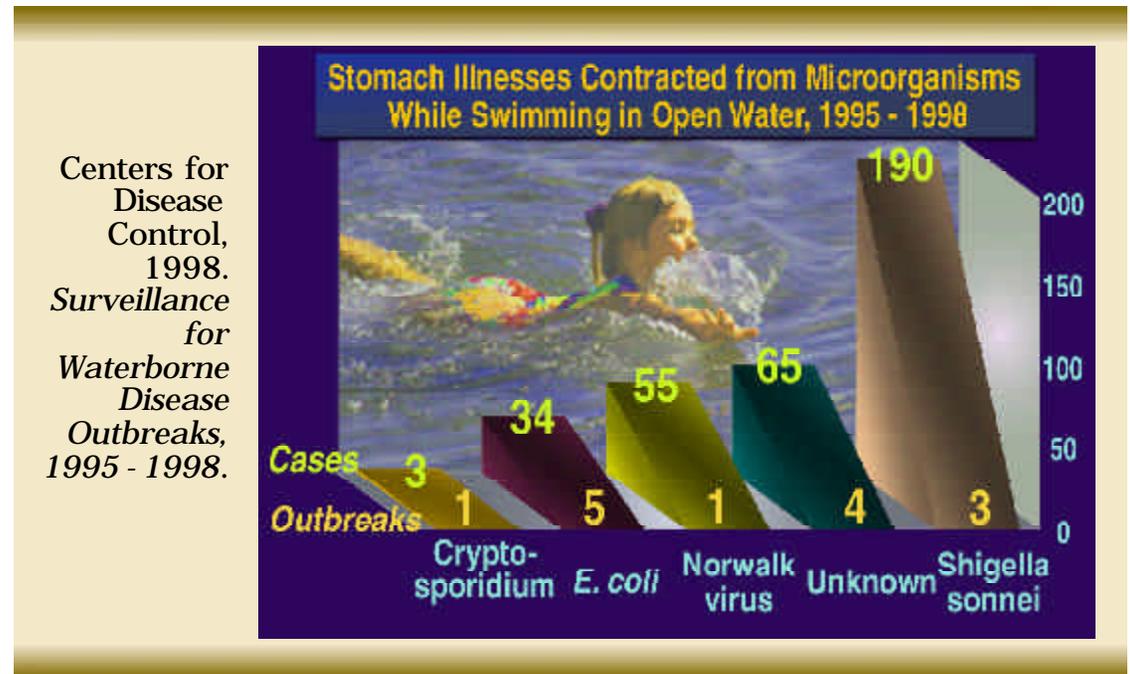
- **Viruses** that can cause stomach flu, upper respiratory infections, ear infections, and other diseases
- **Bacteria** that cause diarrhea, skin rashes, hepatitis, cholera, salmonella, or other diseases
- **Worms and protozoa** that can cause cryptosporidiosis or other diseases

Less exposure to these harmful organisms while:

- Swimming
- Drinking tap water
- Eating locally-caught fish and shellfish

Less danger to children, the elderly, and people with suppressed immune systems who:

- Are more likely to catch sewage-borne diseases than healthy adults
- Are more likely to develop the most serious forms of disease
- Are more likely to spread disease to other people, causing secondary outbreaks



Homeowners who can count on ...



Protection from basement flooding that can damage:

- Building foundations
- Floor and wall coverings
- Furniture
- Plumbing, electrical system, and appliances
- Personal property
- Landscaping

More money for community development and improvement, instead of:

- Homeowners and/or sewer authorities paying cleanup and repair costs of between \$700 and \$4,000 per home for damages that are rarely covered by insurance
- Nationwide, communities paying hundreds of millions or even billions of dollars to clean up and repair overflow damage to public sewer infrastructure, roads and other transportation assets, parks and recreation areas, and municipal water supplies
- Court judgments against sewer authorities that lead to expensive individual or class action damage awards and legal fees



// Alice Fisher went away last weekend confident that the \$10,000 she had spent to flood-proof her home...would prevent a repeat of last year's flood [which] ravaged her house. No such luck...Fisher, like hundreds of other residents in Boston's South End, found that once again her home was devastated. The culprit wasn't just rainwater—it was sewage, hundreds of gallons of filthy sludge that poured into some of the most expensive real estate in the city."

The Boston Globe, Sep. 15, 1999. "Holding their breaths; City's sewage-flooded residents brace and ask why."

Waterfront vacationers who look forward to ...



Local beaches that are open and safe for recreation:

- Of the 1.8 billion annual trips made to a public waterfront, about 4.5 million are for swimming or boating
- In 1998, beachgoers faced 7,400 closures and advisories, at least 16% of them due to overflowing sewers that could expose swimmers to disease
- Many overflows go unmonitored and unreported, putting swimmers at unknown risk

Fish and shellfish that are safer to eat and more plentiful because:

- They are not eating harmful bacteria, viruses, and protozoa that can be passed up the food chain to humans
- They are not accumulating sewage-borne metals and toxic contaminants that are harmful to humans
- Their ecosystem is not altered by the excess nutrients and solids in sewage that can lower light levels, increase the water temperature, and favor the growth of harmful algae

Natural Resource Defense Council, 1999.
Testing the Waters: A Guide to Water Quality at Vacation Beaches.



Taxpayers who know their tax dollars really do work ...



To protect one of the largest investments their community has ever made, with:

- Periodic assessment of system function and capacity
- Ongoing maintenance to extend capacity and useful life
- Making needed repairs, upgrades and expansions before failures occur
- Educating business and residential system users on proper disposal of oil and grease, etc.



To lay the foundation for local and regional growth by:

- Providing businesses with needed access to sewer and water services
- Keeping city centers strong and controlling sprawl by offering high-quality sewer, water and other utilities in urban areas to encourage business to stay or return



A \$9 million expansion of the Coudersport, Pennsylvania WWTP eliminated chronic overflows to the Allegheny River and replaced a large number of failing septic systems with new sewer connections. It also helped convince a communications company to build their new operations center in the area rather than move to New York—saving 500 local jobs and netting \$12 million private investment in the community.

Pennsylvania Infrastructure Investment Authority, 2000.
Paul Marchetti, Executive Director

Case Study: Sewer Overflow Control Pays Off for Fayetteville



Fayetteville, Arkansas is a rapidly-growing Ozark Mountain community of 53,000. Reports of numerous overflows from the 110-year-old sewer system began in the late 1980s, with frequent flooding of homes, streets, and parks. In 1992, the city began an eight-year collection system rehabilitation program. At a cost of just under \$50 per resident per year, the sewer overflow control program has so far yielded the following results:

- Backups have been significantly reduced;
- With less rain water and ground water leaking into the collection system, flow to the treatment plant has not increased since 1992, even though flow from new sewer connections increased by 40%;
- Rehabilitated sewer lines provide better system function with more efficient operation and maintenance;
- City staff reduced after-hours emergency responses from two to three each night to fewer than one a month;
- Extensive training helped the sewer authority staff learn to work with developers and homeowners to minimize potential overflow problems through improved siting and design of new buildings;
- Restaurant and food processing facilities responded enthusiastically to a program to reduce line-clogging grease in the system; and
- System capacity is reassessed as each line is rehabilitated, providing vital data for long-term planning.

For More Information



EPA's Office of Water maintains extensive information regarding sanitary sewer overflow control requirements, including fact sheets, responses to frequently asked questions, implementation guidance, and case study examples of communities that are already benefitting from their infrastructure investment. To learn about ways to protect community waterways from sewer overflows and other wet weather impacts, visit our website at:

www.epa.gov/owm/wet.htm

Or contact us by mail at:

U.S. Environmental Protection Agency
Office of Water
1200 Pennsylvania Avenue, NW
Mail Code 4203 (SSO)
Washington, D.C. 20460
(202) 260-7786