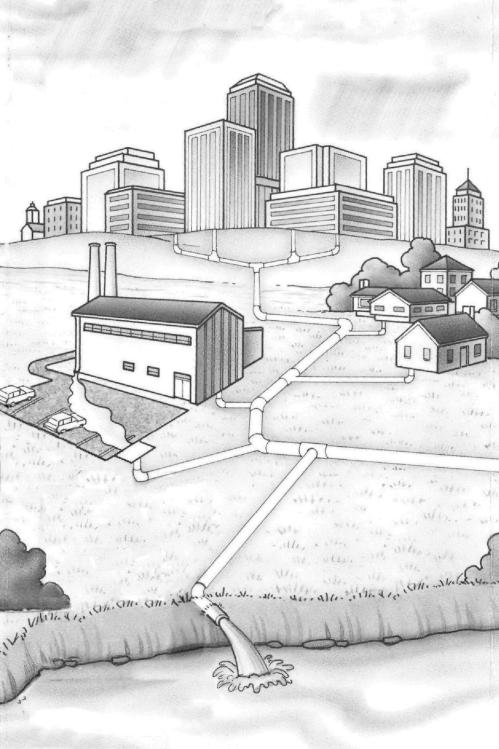
United States Environmental Protection Agency August 1993 832-F-93-003

Office of Water

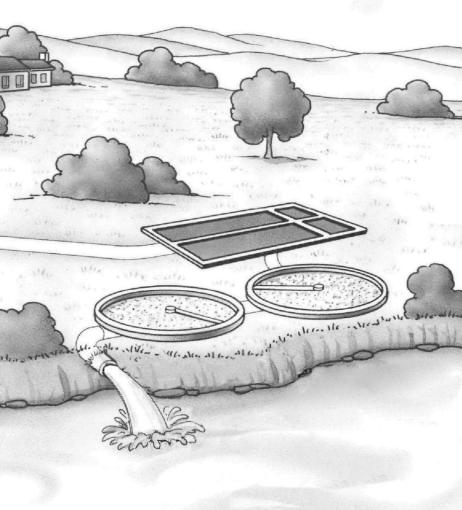
WH547

SEPA Combined Sewer Overflows In Your Community



WHAT IS A COMBINED SEWER OVERFLOW (CSO)?

Some cities collect both rainwater runoff and sanitary wastewater in the same
sewer. These are called "combined
sewers." Sometimes when it rains,
combined sewers do not have enough
capacity to carry all the rainwater and
wastewater or the treatment plant is
not large enough to treat the combined
flow. In these situations, the combined
wastewater overflows untreated into
the nearest body of water—streams,
lakes, rivers, or estuaries, creating a combined sewer overflow (CSO).



CONTROLLING CSOS IS VERY IMPORTANT

CSO controls protect your community's public health and its environment.

For more information on CSO strategy, policy and guidance, you can contact the U.S. EPA Water Management Division in your Region or the National Small Flows Clearinghouse, P.O. Box 6064, Morgantown, West Virginia (Toll Free: 1-800-624-8301).

U.S. EPA Region I (CT, ME, MA, NH, RI, VT) JFK Federal Building Boston, MA 02203 (617) 565-3478

U.S. EPA Region II (NJ, NY, PR, VI) 26 Federal Plaza New York, NY 10278 (212) 264-2513 U.S. EPA Region VI (AR, LA, TX, OK, NM) 1445 Ross Ave., Suite 1200 Dallas, TX 75202-2733 (214) 655-7101

U.S. EPA Region VII (IA, KS, MO, NE) 726 Minnesota Avenue Kansas City, KS 66101 (913) 551-7030

U.S. EPA Region III (DE, MD, PA, VA, WV, DC) 841 Chestnut Building Philadelphia, PA 19107 (215) 597-9410

U.S. EPA Region IV (AL, GA, FL, MS, NC, SC, TN, KY) 345 Courtland St., NE Atlanta, GA 30365 (404) 347-4450

U.S. EPA Region V (IL, IN, OH, MI, MN, WI) 77 W. Jackson Blvd. Chicago, IL 60604 (312) 353-2145 U.S. EPA Region VIII (CO, UT, WY, MT, ND, SD) 999 18th St., Suite 500 Denver, CO 80202 (303) 293-1542

U.S. EPA Region IX (AZ, CA, GU, HI, NV 75 Hawthorne Street San Francisco, CA 94 (415) 744-2125

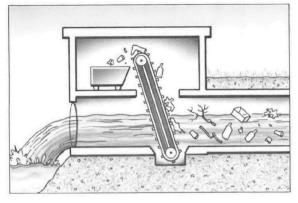
U.S. EPA Region X (AK, ID, OR, WA) 1200 Sixth Avenue Seattle, WA 98101 (206) 553-1793

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HOW ARE CSOS CONTROLLED?

The Clean Water Act requires the U.S. EPA and States to issue permits for controlling discharges from CSOs. The permittees are responsible for implementing a series of minimum CSO controls and, if necessary, developing and implementing a long-term CSO control plan.

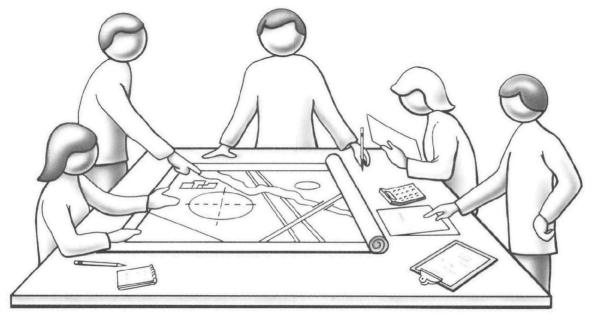
The minimum CSO controls basically require communities to (1) fully utilize the existing capacity of wastewater collection and treatment systems through changes in operational practices, (2) prevent pollutants from entering the combined sewers, and (3) install simple devices to remove solids and floatable materials from the CSOs. In some communities, the minimum controls may be adequate to achieve water quality standards.



Install bar screens at CSO locations.



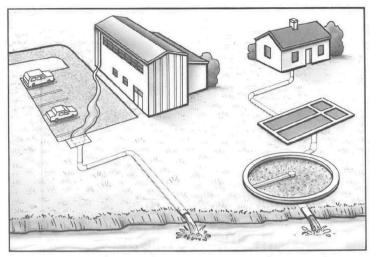
Change operational practices.



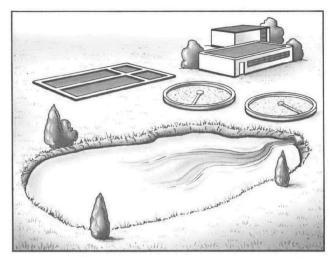
When the CSOs are causing serious water pollution, communities will need to take additional actions. They will need to develop and implement long-term CSO control plans.

These control plans require the identification, evaluation, and implementation of various CSO control strategies to achieve water quality standards by the communities. The U.S. EPA, State environmental agencies, water quality groups, and communities should work together to complete the long-term CSO control plans.

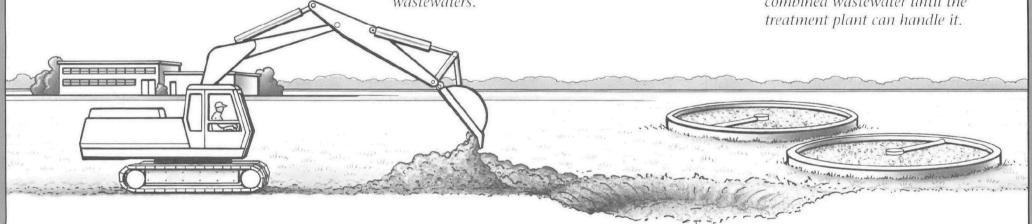
LONG-TERM CSO PLANS MAY INCLUDE CONTROLS LIKE:



Separating storm waters from sanitary wastewaters.



Using basins or tunnels to store the combined wastewater until the treatment plant can handle it.



HOW EXPENSIVE ARE CSO CONTROL MEASURES?

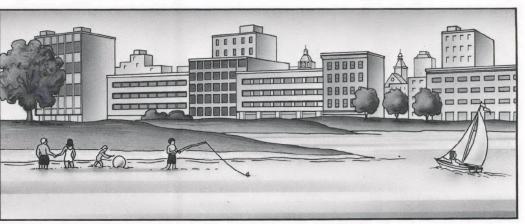
The costs of CSO controls may be high in some communities, but low in others. The severity and frequency of the CSOs plus the local water quality standards will determine the types of CSO controls and their costs.

Even though the actual CSO control costs are unknown for many communities, the U.S. EPA and State agencies will work with the CSO communities to find economically achievable solutions that will improve public health and create a safer environment for everyone.

WHERE ARE THE CSOS?

Combined sewers serve about 43,000,000 people in an estimated 1,100 communities. Most of the CSO communities are located in the Northeast and Great Lakes regions. More than three-quarters of the communities are located in only 11 states.

HOW CSOS AFFECT YOU AND YOUR COMMUNITY



Community control of CSOs is essential to preserving the public health and the ecological balance of our streams, rivers, lakes, and oceans.

During dry weather, combined sewers carry the community's wastewaters to the treatment facilities. When it rains, however, and CSOs occur, your health and environment may be threatened by the untreated wastewater that is discharged from the combined sewers to your community's rivers, lakes, streams, oceans, estuaries, and wetlands.

The main pollutants in CSOs are untreated human and industrial wastes, toxic materials like oil and pesticides, and floating debris washed into the sewer system. These pollutants can affect your health when you swim in CSO-polluted water or when you eat fish or shellfish contaminated by the CSOs.

The pollutants in CSOs can cause a variety of diseases, ranging from dysentery to hepatitis. CSO pollutants are not just a human health concern. They can damage the environment for fish, shellfish, and other aquatic life.

