



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

## Combined Sewer Overflows (CSOs)

### Office of Water Quality

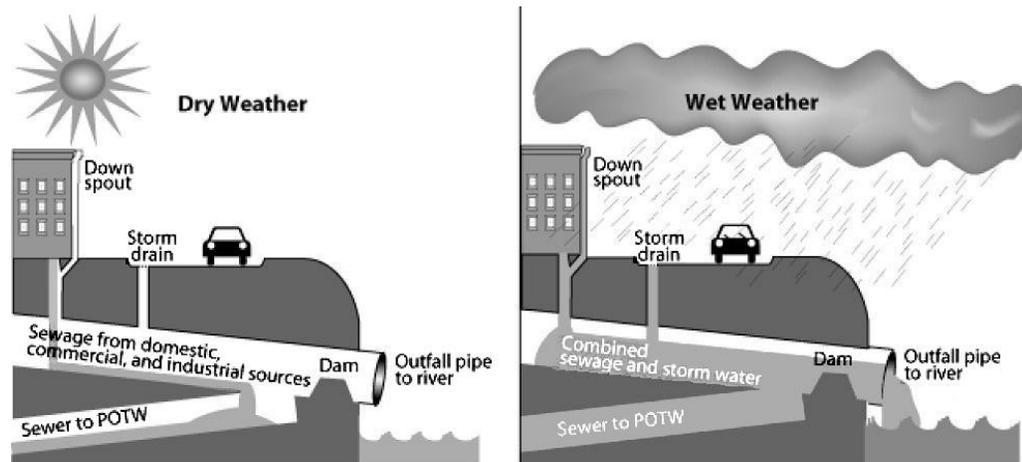
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**Description:**

- A combined sewer system is a type of sewer designed to collect rainwater runoff, domestic sewage and industrial wastewater in the same pipe.
- Combined sewer systems transport all of their wastewater to a treatment plant where it is treated then discharged into a water body.
- During heavy storms or snowmelts, the capacity of the combined sewer system can be exceeded, causing it to overflow.
- This overflow allows the untreated human and industrial waste materials and debris to be discharged directly into nearby streams, rivers and other water bodies without treatment.
- Below is a diagram of how a combined sewer overflow, or CSO, works.

**Environmental Impacts:**

- U.S. Environmental Protection Agency (U.S. EPA) reports that CSOs are a problem for approximately 772 communities nationwide.
- Indiana has 108 communities with CSOs.
- Most of these communities are located in the Northeast and Great Lakes regions.
- Surface waters in these communities can be affected by the overflow of untreated domestic sewage, and storm water runoff.
- CSOs can contain high levels of suspended solids, bacteria, oxygen-demanding organic compounds, and other pollutants.
- The presence of these materials in local water bodies can trigger the exceedance of water quality standards.

**IDEM's Role:**

- The Indiana Department of Environmental Management (IDEM) is responsible for protecting human health and the environment while providing for safe industrial, agricultural, commercial, and governmental operations vital to a prosperous economy.
- In 1989, the U.S. EPA established a national CSO strategy, which was updated in 1994.

- Under the strategy, communities submit plans to reduce CSO discharges to IDEM. IDEM reviews and approves those plans.
- In developing a plan, some communities have chosen to separate formerly combined sewer systems, some have put in separate CSO treatment facilities, some have put in holding tanks to store the CSO flow until it can be put back into the system when the flow has subsided, some have expanded their wastewater treatment plants while some have employed a combination of these options.
- U.S. EPA is also working on consent decree negotiations with several communities separately from IDEM's long-term control plan (LTCP) initiative.
- 106 of the 108 CSO communities are under a legally enforceable requirement to develop a plan to prevent the release of untreated sewage.
- 104 of the CSO communities have approved plans.
- 45 CSO communities have fully implemented plans to address their combined sewer discharges.

**Citizen's Role:**

- Citizen involvement has been and will continue to be a vital component of the effort to reduce the effects of CSOs on Indiana's waterways.
- Within their communities, citizens are encouraged to take part in public meetings about CSOs and review proposed LTCPs.

**More Information:**

- For more Information, contact IDEM's Office of Water Quality at (317) 232-8670 or visit IDEM's Web site at [www.IN.gov/idem/4897.htm](http://www.IN.gov/idem/4897.htm).