Public Listening Session



Chicago, Illinois | September 14, 2016

Public Notification for Combined Sewer Overflows in the Great Lakes



Introductions

EPA

- John Wiemhoff, Region 5
- Kevin Weiss, OWM
- Chris Kloss, OWM
- Sylvia Horwitz, OGC
- Jason Hewitt, Region 5

Facilitator

Barry Tonning, Tetra Tech

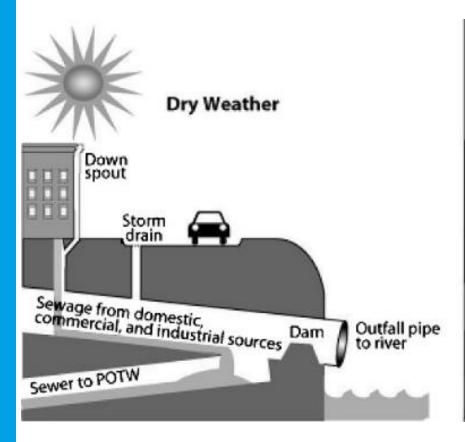
Coordination

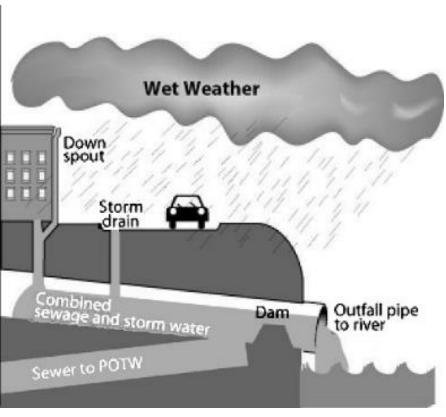
Amber Bixler, Tetra Tech

Key Terms

- CSO Combined Sewer Overflow
- CSS Combined Sewer System
- POTW Publicly Owned Treatment Works
- NPDES National Pollutant Discharge Elimination System (permit program)
- CWA Clean Water Act
- NMC Nine Minimum Controls
- LTCP Long Term Control Plan

Combined sewers





A combined sewer system (CSS) is defined as a wastewater collection system owned by a state or municipality (as defined by the Clean Water Act) that conveys sanitary domestic, commercial and industrial wastewater and stormwater through a single-pipe system to a Publicly-Owned Treatment Works (POTW).

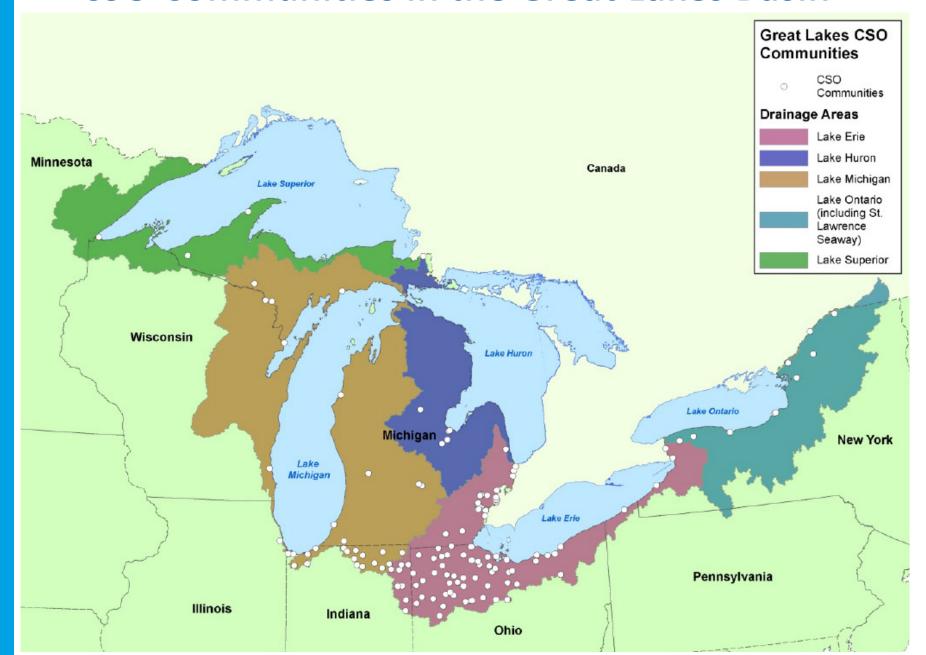
What is a CSO?

- A CSO is the discharge from a combined sewer system at a point prior to the POTW treatment plant.
- CSOs consist of mixtures of domestic sewage, industrial and commercial wastewaters, and storm runoff





CSO Communities in the Great Lakes Basin



Principal pollutants in CSOs

Pollutants of concern in CSOs	Waterbody Uses Affected					
- III C303	Recreation	Drinking water supply	Fish consumption	Shellfish harvesting	Aquatic life support	
Pathogens	•	•	•	•		
Oxygen demanding substances					•	
Sediment (TSS)					•	
Toxics			•	•	•	
Nutrients		•			•	
Floatables	•					

Public health impacts from CSOs

- Primary pathways for human exposure include:
 - Water recreation
 - Contaminated drinking water, and
 - Fish or shellfish consumption





Overview of NPDES Regulations for CSOs

- CSOs are point sources subject to NPDES permit requirements including both technology-based and water quality-based requirements of the CWA.
 - CSOs are not subject to secondary treatment requirements applicable to POTWs
- NPDES permits and enforcement orders shall conform to the 1994 CSO Policy (see 402(q) of the Clean Water Act).

1994 CSO Control Policy

- Provided guidance to permittees and States on planning, designing, and implementing CSO controls
- Imposed a January 1, 1997 deadline for implementation of the nine minimum controls

Permittees with CSOs should:

- Implement the nine minimum controls (NMCs) identified in the Policy
- Develop and implement a CSO long-term control plan (LTCP) that will ultimately result in compliance with the requirements of the Clean Water Act.

Nine Minimum Controls (NMCs)

- Proper operation and regular maintenance programs for the sewer system and the CSOs;
- Maximum use of the collection system for storage;
- Review and modification of pretreatment requirements to assure CSO impacts are minimized;
- Maximize flow to the POTW for treatment;
- Prohibition of CSOs during dry weather;
- Control of solid and floatable materials in CSOs;
- Pollution prevention;
- Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts; and
- Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

LTCP Elements

- Characterization, Monitoring, and Modeling of the Combined Sewer System
- Public Participation
- Consideration of Sensitive Areas
- Evaluation of Alternatives
- Cost/Performance Considerations
- Operational Plan
- Maximization of Treatment at the Existing POTW Treatment Plant
- Implementation Schedule for CSO controls
- Post-Construction Compliance Monitoring Program

Reported CSO Events by State in 2014 Based on Available Data

State	CSO Communities	Communities reporting overflow events		Number of untreated	Number of treated	Total number of
		Full data available	Partial or no data available	CSO events	CSO events	events
New York	13	10	3	376	0	376
Pennsylvania	1	1	0	7	0	7
Ohio	54	49	5	824	27	851
Michigan	46	46	0	273	160	433
Indiana	27	7	20	0	0	0
Illinois	41	41	0	1	0	1
Wisconsin	2	2	0	1	0	1
Totals	184	156	28	1,482	187	1,669

Reported CSO Volume by State in 2014 Based on Available Data

State	CSO Communities	Communities reporting overflow volume		Volume of untreated	Volume of treated	Total volume of
		Full data available	Partial or no data available	CSO events (MG)	CSO events (MG)	cso events (MG)
New York	13	8	5	1,800	0	1,800
Pennsylvania	1	1	0	0.1	0	0.1
Ohio	54	46	8	3,200	400	3,600
Michigan	46	46	0	8,800	25,200	34,000
Indiana	27	27	0	8,100	20	8,120
Illinois	41	41	0	500	0	500
Wisconsin	2	2	0	0.3	0	0.3
Totals	184	171	13	22,000	26,000	46,000

2016 Report to Congress on CSO Discharges in the Great Lakes Basin

 Report summarizes information provided by the States on annual CSO discharge volumes in 2014

State	CSO Communities	CSO Communities Discharging Directly into a Great Lake	CSO Communities Discharging into a River or Lake Leading to a Great Lake
New York	13	1	12
Pennsylvania	1	1	0
Ohio	54	4	50
Michigan	46	0	46
Indiana	27	0	27
Illinois ^a	41	0	41
Wisconsin	2	2	0
Total	184	8	176

Note:

^a Includes the City of Chicago and 40 satellite communities within the Tunnel and Reservoir Plan (TARP) adopted by the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC).

Section 425 of the Consolidated Appropriations Act

- Section 425 requires EPA to work with the Great Lakes states to create public notice requirements for combined sewer overflow discharges to the Great Lakes
- Section 425(b)(2) notice requirements are to address the method of the notice, the contents of the notice, and requirements for public availability of the notice.
- Section 425(b)(3)(A) at a minimum, the contents of the notice are to include the dates and times of the applicable discharge; the volume of the discharge; and a description of any public access areas impacted by the discharge.

Section 425 of the Consolidated Appropriations Act

- Section 425(b)(3)(B) minimum content requirements are to be consistent for all affected States.
- Section 425(b)(4)(A) follow-up notice requirements that provide a description of each applicable discharge; the cause of the discharge; and plans to prevent a reoccurrence of a CSO discharge to the Great Lakes consistent with section 402 of the Clean Water Act or an administrative order or consent decree under the Act.
- Section 425(b)(4)(B) annual publication requirements that list each treatment works from which the Administrator or the affected State receive a follow-up notice.

Section 425 of the Consolidated Appropriations Act

- Section 425(b)(5) requires that the notice and publication requirements described in Section 425 be implemented by not later than December 18, 2017.
 - However, the Administrator of the EPA may extend the implementation deadline for individual communities if the Administrator determines the community needs additional time to comply in order to avoid undue economic hardship.
- Section 425(b)(6) clarifies that "Nothing in this subsection prohibits an affected State from establishing a State notice requirement in the event of a discharge that is more stringent than the requirements described in this subsection."

Key Themes in Public Notification Under Consideration

- Consultation/coordination with local public health departments
- Immediate notification to local public health departments, drinking water utilities and other municipal entities
- Immediate notification to public
- 24-hour notification to State NPDES agency
- Periodic (e.g., annual/quarterly) notification