

Municipal Satellite Collection System General Permit and Sanitary Sewer Overflows

Water Quality Partnership Presentation

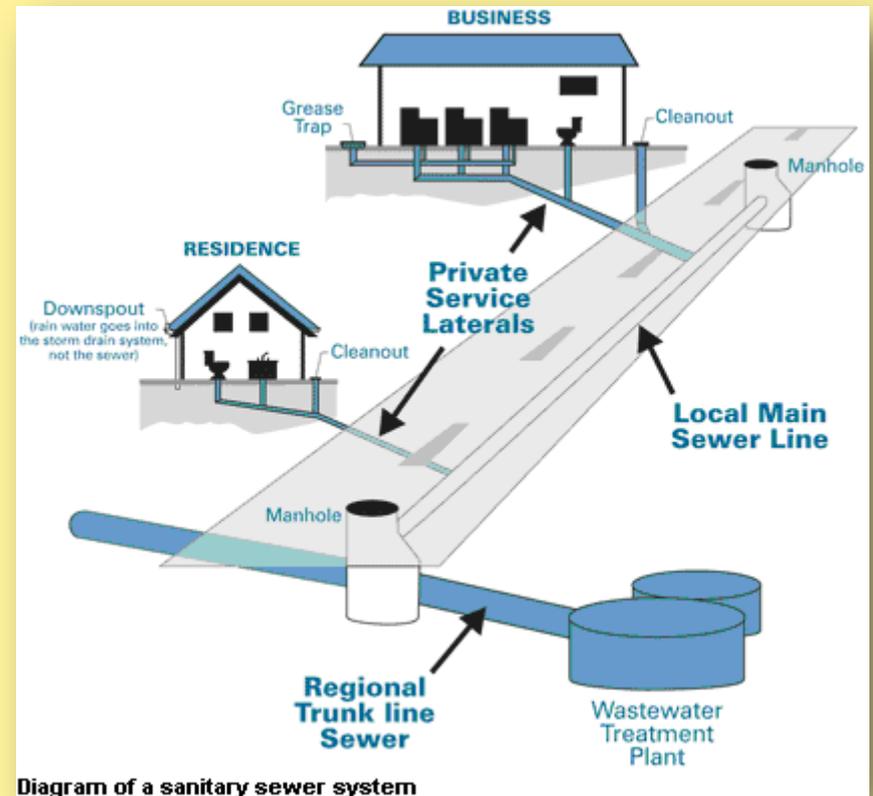
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Sanitary Sewer System

- Definition
- Separate or Combined
- Satellite Systems
- Permitting of Collection Systems



Satellite Sewer Entities by Region

Ecology Region	Approx. Number of Satellite Entities
Central	10
Eastern	4
Northwest	62 (primarily in King County)
Southwest	29

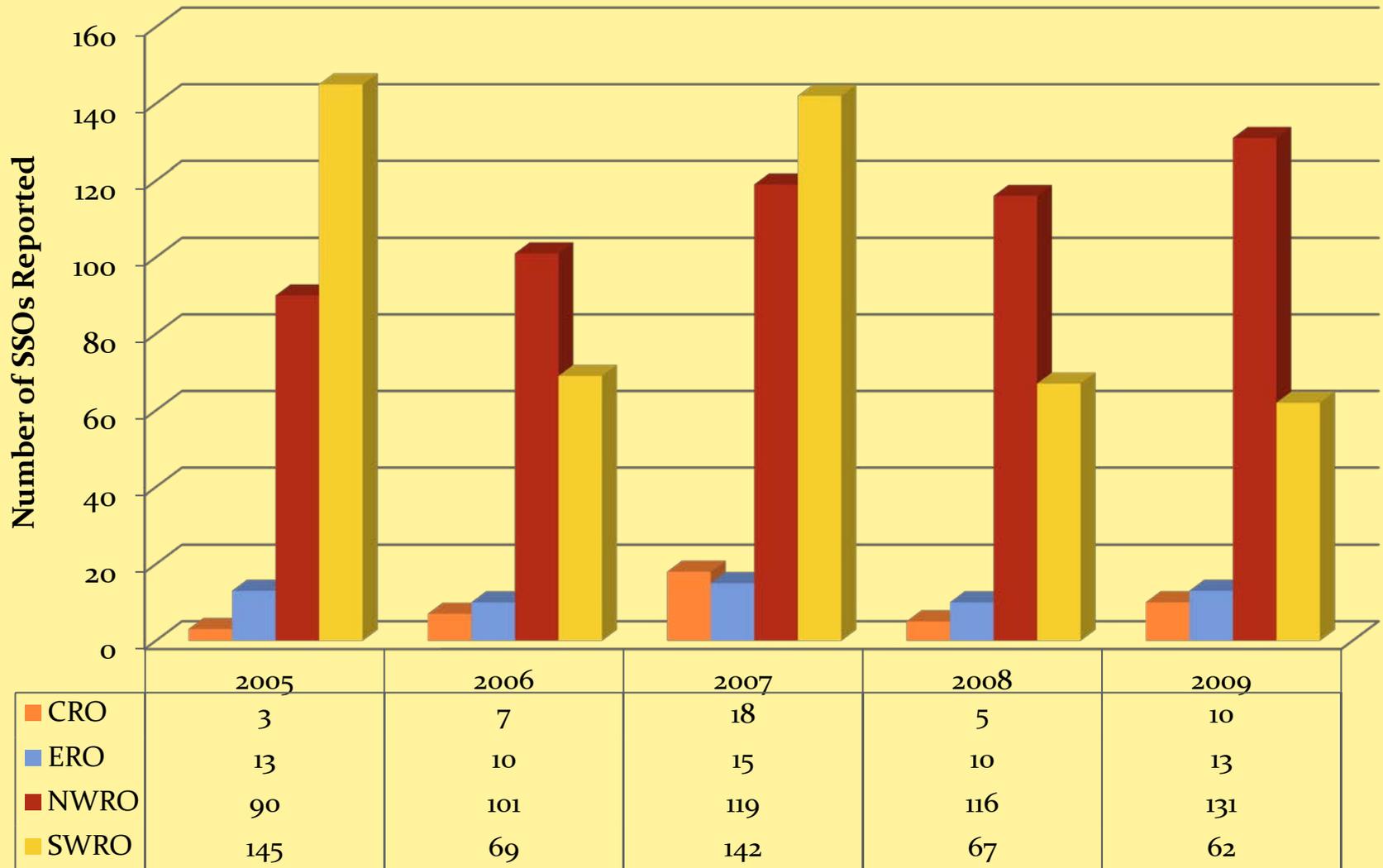


Sanitary Sewer Overflows

- Definition
- Major causes of SSOs
- Adverse Effects
- Impacts from Satellite systems on Regional Facilities
- EPA Estimates 23,000 – 75,000 events per year; 3-10 Billion Gallons per year
- WA State: Average of 230 reported SSOs per year
- In WA, no legal mandate for reporting SSOs from satellite systems



SSOs by Region



National Regulatory History Concerning SSOs

- Clean Water Act: Prohibition of Pollutant discharge to surface waters unless authorized under an NPDES permit.
- SSO discharges to water bodies from satellite systems prohibited under CWA. No permit for satellites.
- In 1999, EPA began work on federal standards to regulate sewage collection systems. CMOM proposed regulation in 2001, but not finalized. May 2010 EPA published Notice on possible SSO rule.
- Currently, 4 states have either a permit or order to address collection systems.

WA State Regulatory Approaches Concerning SSOs

- Ecology does not generally regulate satellite sewer entities as part of a POTW's NPDES permit.
- Ecology interfaces with Satellite Communities via two mechanisms:
 - Comprehensive Sewer Plan reviews
 - Environmental Report Tracking System (ERTS) Reports
- Limitations of Comp. Sewer Plan Reviews and [WAC 173-240-050](#)
- POTW permit fees subsidize Satellite Comprehensive Sewer Plan reviews.

WA State Regulatory Approaches Concerning SSOs (continued)

- Ecology sent letters to Satellite Systems requesting that SSOs be reported via ERTS.
- Inaccurate picture of SSO problem on regional and statewide basis. Reporting is inconsistent from Satellite System operators.
- ERTS reporting and Comp Sewer Plan reviews do not provide an effective SSO prevention program.

Ecology's Enforcement Approach to SSOs

- Variable and most likely inconsistent among regions.
- Factors include:
 - Magnitude of discharge
 - Impacts to Waters of State
 - History of similar problems
 - Staff availability
- Currently, enforcement is limited violations of RCW 90.48

RCW 90.48.080

Discharge of polluting matter in waters prohibited.

It shall be unlawful for any person to throw, drain, run, or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters according to the determination of the department, as provided for in this chapter.

Benefits of a Satellite Permit/Order

- Reduces SSO pollution in waters of State.
- Decreases Public Health Threats.
- Protects public and private property.
- Reduces economic impacts to shellfish beds and fisheries.
- Requires entities to allocate resources to proactively to prevent or reduce SSOs.
- Prolongs the useful life of an entities SSS by providing better Operation and Maintenance.
- Reduces impacts on regional systems from satellite SSS.
- Provides a more equitable approach to permit fees.

Benefits of a Satellite Permit/Order (continued)

- Ensures uniform reporting of SSO events and better data to assess magnitude of the problem and a metric to gauge the efficacy of the program.
- Provides a more consistent enforcement approach.
- Provide for revenue source to help support required satellite sewer system-related work.
- Depending on type of permit or order, it makes it possible for all stakeholders to be fully informed regarding an entities performance.

Roadblocks to Permitting

- Limited state resources to develop and implement the permit or order.
- Possible opposition to a new permit by satellite communities.

Survey of Existing State Satellite Permits and EPA Actions

- WI, SC, NC – permits
- CA – order
- OH – never finalized
- EPA – Draft Permit and Fact Sheet. EPA expects to propose a policy that would address SSOs.

Wisconsin

- General Permit
- 7 Special Conditions
- Focuses on Monitoring and Reporting only
- Deficiencies include:
 - No concrete measures to prevent, reduce, or eliminate SSOs
 - Doesn't address major causes of SSOs
 - Fats, Oils and Grease (FOG)
 - Tree root intrusion
 - Inflow and Infiltration (I/I)
 - No capacity assurance plan

South Carolina

- Developed specific rule for the “Operation and Maintenance of Satellite Sewer Systems”.
- Rule allows for the O&M requirements of a SSS to be established in a general permit.
- 8 General requirements for proper O&M of satellites
 1. Properly manage, operate and maintain all parts of the SSS.
 2. Provide adequate capacity to convey base and peak flows for all of system. If capital improvements are necessary to meet this standard, a short and long-term schedule of improvements must be developed.
 3. Implement O&M plan within 6 months of coverage.
 4. Maintain adequate inventory of spare parts and equipment.
 5. Maintain 24-hour contact phone number.
 6. Keep O&M records for 3 years to document compliance.
 7. Comply with permit conditions.
 8. Provide info to SC Dept. of health and Environment Control when requested.
- Immediate notification and 5-day written report of SSOs.
- No specific details regarding permit requirements.

North Carolina

- NC House Bill 1160 requires the development and implementation of permit program for municipal sewage collection systems.
- Adopted rule resulted in permit shell for collection system permits.
- NC issues individual permits.
- Proposed requirements of permit shell include:
 - Capital improvement plan
 - Assessment of cleaning needs and plan to implement
 - Reporting and recordkeeping
 - Comprehensive sewer mapping and
 - Pump station requirements

Ohio

- Completed draft permit and fact sheet, but did not finalize.
- Draft special conditions include reporting and monitoring as well as CMOM elements.
- Doesn't appear that Ohio went through the rule-making process.

California

- May 2006, CA State Water Board adopted a Statewide Sanitary Sewer Order to address SSOs.
- 1st State in Nation to implement program focused on regulating sewage collection systems via an order.
- Any public entity that owns or operates a SSS of 1 mile or greater in length that conveys WW to POTW must apply for coverage under the order.
- Monitoring & Reporting Plan and Sewer System Management Plan (SSMP).
- Elements of SSMP include:
 1. O&M Plan
 2. Overflow Emergency Response Plan
 3. FOG Control Plan
 4. System Evaluation and capacity assurance Plan
 5. Effectiveness Assessment

California (Continued)

- Initially, “Enrollees” must complete a collection system questionnaire.
- SSOs must be reported electronically on a monthly basis via SSO database.
- Initially, CA staff focused on enrollment, developing the database and outreach efforts.
 1. Web-based user’s guide to submit data to database
 2. Technical support telephone line
 3. Training course developed for SSO database reporting and Sanitary Sewer Management Plans

California (Continued)

- As of May 2008, CA had 1,086 enrollees under order.
- CA staff estimates increased annual average cost per person to be \$29 or \$6 per month per household.
- In terms of sanitary sewer order support, CA provided 3 FTEs with 1 FTE dedicated to IT for maintaining and enhancing the database.

EPA

- In 2001, EPA withdrew the Notice of Proposed Rulemaking for the SSO rule from the Federal Register.
- In 2005, EPA published a guidance document which contained most of SSO rule and CMOM provisions.
- In August 2007, EPA developed model NPDES permit language and draft fact sheet but did not finalize process.
- On May 26, 2010, EPA submitted a SSO notice for the Federal Register.

Possible Elements of a General Permit for WA State

- Coverage of about 105 entities.
- Satellites only. But could include POTWs who convey a portion of their flows to another collection systems for conveyance and treatment.
- Go beyond monitoring requirements.
- Address major causes of SSOs
- Phased Approach
 - SSO monitoring and reporting
 - Development and Implementation of a sanitary sewer management plan
- Non-Compliance & Enforcement
 - Prohibition on SSOs to waterbodies
 - Enforcement discretion vs. affirmative defense

Legal Basis for Permit

- Most States with Satellite Sewer permit program developed *specific* laws and rules to address SSS O&M requirements.
- CA chose an Order in lieu of General Permit. (Some SSOs discharge to ground. *Potential* to reach waters not enough.)
- For WA state, it appears that [WAC 173-226-050](#) provides the legal basis for developing a general statewide permit for satellite systems.

Recommendations & Next Steps

- Permit or Order recommended over rulemaking process.
- Water Quality Program Management Team to decide on Permit or Order and nature and extent of permit. Allocation of resources and funds.
- Possible to delay until EPA decides on SSO rule development in Spring/Summer 2011.