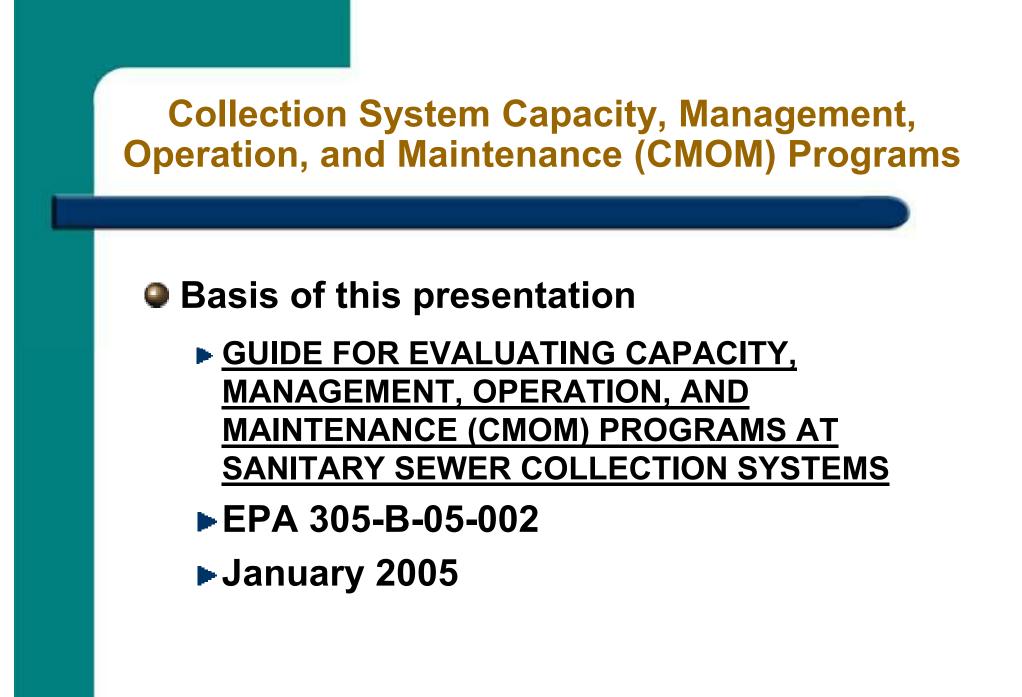
Collection System Capacity, Management, Operation, and Maintenance Programs

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Collection System Management

- Organizational Structure
- Training
- Internal Communication
- Customer Service
- Management Information Systems
- SSO Notification Program
- Legal Authority

Collection System Operation

- Budgeting
- Monitoring
- Hydrogen Sulfide Monitoring and Control
- Safety
- Emergency Preparedness and Response
- Modeling
- Mapping
- New Construction
- Pump Stations

Equipment and Collection System Maintenance

- Maintenance Budgeting
- Planned and Unplanned Maintenance
- Sewer Cleaning
- Parts and Equipment Inventory

Sewer System Capacity Evaluation -

- Testing and Inspection
- Flow Monitoring
- Sewer System Testing
- Sewer System Inspection

Sewer System Rehabilitation

Elimination of SSOs

- Reduce I/I
- I/I Reduction Strategy: Move from lowest to highest \$/gallon of I/I eliminated, in project scheduling ("pick the easiest fruit first")

Typical Documents to Review; Table Example, by one Permittee

Capacity	Management	Operations	Maintenance
 Information relating to system capacity Performance data POTW Flow Records Capital improvement projects (CIP) plan (including funding and planned improvements) Collection system master plan Infiltration/Inflow studies 	 Organization chart(s) and chain of communication for reporting SSOs Program goals Staffing plans, crew assignments and schedules Job descriptions Sewer Use Ordinance, Grease Control Ordinance Legal authority establishing control of system equipment and its maintenance O&M budget with cost centers for wastewater collection Recent annual report if available Management Policies and Procedures Information systems Training plan Training and certification records Public education materials Procurement process Policy and procedures for trenching, confined space, lockout tagout, PPE CMOM program audits 	 Detailed maps/schematics of the collection system and pump stations O&M manuals Inspection strategy, forms, and records SSO reports detailing location, receiving water, volume, cause, start and stop date and time, system component, corrective action, and actions to mitigate impacts Safety manual Emergency response plan/SOP (awareness, notification, training, and emergency response) SCADA and other alarm system information Materials management program Vehicle management Overall map of system showing facilities such as pump stations, treatment plants, major gravity Odor and corrosion control strategy Root control program Sampling procedures 	 Routine reports regarding system O&M activities Work order management system Maintenance tasks and frequencies Replacement parts inventory Performance measures for inspection, cleaning, repair, rehabilitation sewers, and force mains Preventive maintenance cleaning strategy Problem diagnosis records Repair, rehabilitation, replacement strategy for pipes and pump stations Record of citizen complaints and emergencies (normal hours and after hours) Notifications to public health agencies, NPDES authority, and other entities

EPA Web Pages; SSO and CMOM

General Web Page on SSO and CMOM (show page): http://cfpub.epa.gov/npdes/sso/featuredinfo.cfm

CMOM Self Assessment Checklist (show page): http://www.epa.gov/npdes/pubs/cmomselfreview.pdf

Guide for Evaluation Capacity, Management, and Operation, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems (show page):

http://www.epa.gov/npdes/pubs/cmom_guide_for_collect ion_systems.pdf



Thanks for your attention