

Implementation of MWRD's New Infiltration and Inflow Control Program

Advisory Technical Panel

September 9, 2014



Developments since January 8, 2014 meeting

- ATP Subcommittee and MWRD staff prepared and revised draft ordinance language and TGM content
- MWRD Board adopted Article 8 of WMO on July 10, 2014
- MWRD Board authorized CBBEL to assist with development of TGM Chapter 8; RJN assists
- Organization and adding to content of TGM



Overview of MWRD's new I/I Control Program

- Goals
 - Maintain infrastructure to prevent SSOs and BBs
 - Comply with MWRD's NPDES permits
 - Minimize extraneous flows to MWRD's treatment plants
- Short Term Requirements
 - Complete in five years
 - Conduct prioritized condition assessment of the high risk sanitary sewers
 - Begin development of Capital Improvement Program
 - Begin addressing high priority deficiencies within three years of identification
 - Disconnect cross connections within one year of identification
 - · Includes downspouts connected to sanitary sewer
 - · Repair uncovered or broken cleanout caps within one year of identification
 - Develop Private Sector Program
 - Develop Long Term O&M Program
 - Submit annual reports



After completing Short Term Requirements

- Implement Long Term O&M Program (LTOMP)
 - Includes CIP
 - Includes funding mechanism
- Implement Private Sector Program as part of LTOMP
- Submit annual reports



Condition Assessment Prioritization

- Satellite system owners must perform condition assessment of all the high risk public sanitary sewers
- Determine the extent of high risk public sanitary sewers in the first year
- Types of areas where high risk public sanitary sewers may be found
- Condition Assessment Prioritization form
- 10% of system must be assessed over first five years of IICP



Condition Assessment Prioritization

- Credit may be given for assessment of high risk sewers performed within previous five years
- NASSCO coding and standards
- Condition assessment activities page 10 of draft TGM
- Alternative condition assessment coding and documentation methods
- Document location of private property I/I sources identified



High Priority Deficiencies

- Defects that allow significant amounts of I/I into the system
- Defects that could result in sewer collapse or blockage
- Defects with NASSCO Grade of 4 or 5
- Illegal connections



Addressing High Priority Deficiencies

- Within one year of identification
 - Disconnect downspouts
 - Disconnect direct and indirect cross connections
 - Repair/replace cleanout caps, where needed
- Within three years of identification
 - Begin repair of high priority deficiencies in public sector sewer system
 - Basis for Capital Improvement Program (CIP)
- Other High Priority Deficiencies on private property
 - May be addressed under a long term program as part of PSP
 - Document locations
- Status of High Priority Deficiencies form



Private Sector Program

- Components
 - Staffing
 - Local authority
 - Inspections of private property
 - Non-compliance correction
 - Long-term program to address high-cost sources
 - Ultimately, satellite entities are to use discretion to determine the extent to which removal of high-flow, high-cost private I/I sources must occur, in conjunction with any other sewer system improvements, to achieve the IICP goals.
 - Enforcement
 - Funding
 - Public information



Long Term Operation and Maintenance Program

- Required Elements
 - Pages 24-34 of draft TGM
- Recommended Features
 - Use of computerized maintenance management system (CMMS)
 - Use of GIS
 - Flow metering to pinpoint nature of problems and help determine solutions



Long Term Operation and Maintenance Program – Notes on Requirements

- Sewer System Capacity Evaluations (page 31)
 - Triggered by new development or dry weather capacity problems
- Sewer System Inspection/Condition Assessment
 - Continues after the Short Term Program
- Sewer System Rehabilitation
 - Update CIP as projects are completed
 - Add projects to CIP that address issues found during subsequent/ongoing sewer condition assessment
 - Track completed improvements on sewer map



Schedule

- September October
 - Prepare supporting information and content for TGM
- November
 - Finalize reporting forms and directions for completing them
- December
 - Format TGM, put forms in e-friendly format, develop brochure
- January
 - Hold training sessions for satellite agencies
- Future ATP Meetings: Tentatively October 28 and November 25



Questions?