ATP Committee Meeting

September 18, 2013

Agenda

- Review Compliance Metrics, Short Term
 Program and Long Term Program
- Review schedule for balance of sessions

ATP Sub-Committee

- Catherine O'Connor- MWRD
- Bill Sheriff- MWRD
- Fred Vogt- Rolling Meadows
- Sean Dorsey Mount Prospect/Northwest Municipal Conference
- Al Hollenbeck- RJN Group
- Chris King- Robinson Engineering/South Suburban Mayors/Manager

Compliance Metrics

- 1) Outcome Based Metrics
 - Reduction/Elimination of basement backups under design storm conditions
 - Reduction/Elimination of wet weather SSOs under design storm conditions
 - Establish CMOM service level goals
- 2) Flow Based Metrics
 - Reduction in peak wet weather to average dry weather flow ratio under design storm conditions
 - Reduction in wet weather flow volume from separate sewer areas
 - MWRD should provide existing interceptor sewer capacity and an updated cost-effectiveness analysis for transport and treatment costs
- ATP Task: Development of quantified metrics for the Short Term Program consistent with current baseline data to be gathered.

Short Term Program

1) Public Sector Condition Assessment/Rehabilitation

- Manhole Inspection, Smoke Testing, Dye Flooding, TV Inspection
 - Investigation of all separate sewers with initial prioritization on areas with reported overflows and/or basement backups, areas upstream of reported overflows/backups, or recent flow monitoring/lift station data.
 - Minimum of 50% of the system to be investigated without documentation of recent prior investigation or recent flow monitoring data documenting the peaking factor.
 - Areas with prior investigation documentation will be excluded from the Condition Assessment requirement
 - Procedure standards for manhole, smoke, dye and TC inspections
 - Utilization of NAASCO Defect Coding Standards (MACP, PACP)
- ATP Task: Condition Assessment completed within <u>5 years</u>
- ATP Task: Areas with documented peak flows less than <u>5:1</u> peaking factor will be excluded from the Condition Assessment requirement

Short Term Program

- Flow Monitoring
 - Wet season monitoring to prioritize areas for Condition Assessment based on peak flow to dry weather flow ratios. Do not need to flow monitor the design storm to prioritize areas, can use relative response to a monitored storm of less intensity than the design storm
 - Procedures standards for flow monitoring
- Rehabilitation
 - Rehabilitation of all "High Priority" defects in manholes, mainline sewer and cross-connections with storm sewers/ditches
 - "High Priority" could include all direct/indirect connections of storm sewer to sanitary sewer, mainline defects rated 4 or 5 under NAASCO Coding Standards, manholes with defects rated 4 or 5 under NAASCO Coding Standards
- ATP Task: "High Priority" rehabilitation completed within <u>3 years</u> of identification
- ATP Task: Private sector downspout disconnections within <u>6 months</u> of identification

Short Term Program

- 2) Private Sector Investigation/Rehabilitation
 - Develop Community Specific Strategy for implementation under the Long Term O&M Program
 - MWRD to develop a "Template" for local communities with ATP input
 - Plan submittal to MWRD for review/approval
- ATP Task: Plan submittal to MWRD within <u>5 years</u>
- 3) Develop Long Term O&M Plan
 - Develop Community Specific Strategy
 - MWRD to develop a "Template" for local communities with ATP input
 - Plan submittal to MWRD for review/approval
- ATP Task: Plan submittal to MWRD within <u>5 years</u>

Long Term Program

Flexibility for individual community issues subject to minimum requirements for all systems, generally following USEPA CMOM requirements for sanitary sewer systems

1) GIS Mapping

- Update sewer atlas and migrate to GIS platform
- Incorporate all condition inspection data into GIS
- Track locations/frequency/causes of sanitary sewer overflows/basement backups on GIS
- MWRD to evaluate providing assistance on software or implementation

2) Asset Management/CMMS

- Computerized Maintenance Management System (CMMS) for work order processing, preventative and emergency, customer service request tracking
- MWRD to evaluate providing assistance on software or implementation

Long Term Program

3) Proactive Program

- Categorize dry weather overflows by cause (collapsed pipe, deposition, roots, FOG, etc.)
 - Conduct a continuous proactive maintenance program on a prioritized basis in accordance with overflow causes and locations and critical sewer criteria
- Establish list of critical sewers based on Risk Based Criteria (large diameter, pipe material, rear yard, highway crossings, age, under streams/creeks/rivers, etc.)
- Implement annual rehabilitation program
 - Incorporate local community annual CIP plan
- Flow monitoring of post-rehabilitation flows

Long Term Program

4) Emergency/Reactive Program

- Systematic response to wet weather and dry weather SSOs and basement backups
 - Reporting requirements to be discussed at subsequent ATP meeting

5) Public Sector Rehabilitation

- Annual program based on initial investigations (Short Term Program) plus re-inspections conducted as part of the Long Term Program
 - Defects not rehabilitated earlier plus additional defects discovered in the ongoing Long Term Program

Long Term Plan

- 6) Private Sector Investigation/Rehabilitation
 - Right of Inspection to be required as part of all local community sewer ordinances
 - To be determined by the local sewer owner
 - Areas of system subject to inspection
 - Years to complete inspection
 - Time allowed for disconnection
 - Re-inspection program
 - Prior documented investigations/disconnections will not require inspection
 - Cost-effectiveness of disconnecting foundation drains
- ATP Task: Establish subcommittee during Short Term implementation process to develop a consensus plan
 - Property transfer ordinance
 - Requirements for service lateral rehabilitation/replacement for teardowns/major renovation

Long Term Plan

- 7) Annual Commitment to System Maintenance and Rehabilitation
 - Reporting requirements to be discussed at subsequent ATP meeting

Follow-up Tasks

- 2013
 - Standards for Manhole Inspection, Smoke Testing, Dye Flooding and Television Inspection, Flow Monitoring
 - Refinement of definition of "High Priority" Defects
 - Refinement of maximum allowable Peaking Factor to eliminate area from Condition Assessment

Follow-up Tasks

- 2014-2019
 - Outcome Based and Flow Based Metrics
 - Selection of Design Storm
 - CMOM Service Levels
 - Transport and Treatment Cost Effectiveness Analysis
 - Interceptor capacity analysis
 - Private Sector Plan Template
 - Long Term O & M Plan Template
 - GIS/CMMS Assistance
 - Private Property Program- Transfer ordinance, service lateral rehabilitation on tear down or major renovation

Draft Ordinance Sections

- September 18: Compliance Metrics, Short Term Plan and Long Term Plan
- October 16: Minimum requirements, annual reporting, funding possibilities
- November 20: System Analysis and Enforcement
- December 18: Finalize, feedback and comments
- January: Present to Board of Commissioners

Next Meeting

- October 16, 2013
- 1:00PM