CMOM

- Effective means to justify money to be spent on sanitary sewer collection systems
- Mechanism for budget support
- Sewer failures cost 10 to 20 times the cost to replace or rehabilitate

The Message is....
“PROTECT PUBLIC HEALTH AND WELFARE”
Find it – Fund it – Fix it

**CONDITION ASSESSMENT**
Sewers
Manholes
Pump Stations

**SCHEDULES**
Rehabilitation
Replacement
Inspection
Cleaning

**FINANCIAL**
CIP
Replacement
Fund
Rate Structure

Photo by Chris Schlutz/MMSD
Where to Find the Problem Areas

- Dry and wet weather manhole inspection to find the source of clear water
- Sewer inspection (closed circuit television CCTV)
- Flow monitoring
- Dye water and smoke testing
- Review sewer inspections to identify lateral connections and illegal sump pump connections
King County, Washington
CMOM Implementation – 1st Steps

- Eliminate manhole covers with pickholes
- Manhole inspections and repairs (can be done by staff)
- Inspect and clean your sewers to determine baseline conditions – typically 5 to 7 year schedule

Shift from “reactive” to proactive maintenance.. i.e. Inspection & Cleaning
What Are Other Communities Doing?

- Milwaukee MSD and satellite communities
  - State of Wisconsin Civil Complaint – required stipulations to implement CMOM Plans and conduct manhole inspections every 5 years. Stipulation requires reporting to MMSD CMOM Program requirements

- Greenwood Metropolitan District (SC)
  - CMOM Based fee used to fund collection system projects “YOUR CMOM $ at WORK Signs”
  - $8/month property fee
  - Public Education

- Phoenix AZ – Valley Wide Fats Oil and Grease Program
“Hidden” Costs

- **Fats, Oil & Grease (FOG)**
  - Cleaning for “Frequently visited areas” (restaurants, schools, homeowners)
  - SSOs
- **Flushables versus non-flushables**
  - Impact on the sewer maintenance
- **Public Education**
- **Private Property**
- **Cross Bores**

Photo provided by (1) Hydromax USA, Florence, Kentucky, Blue Heron Engineering Services, ltd., Dublin, Ohio

Orange County Sanitation District
“What 2 Flush” Campaign
Clear Water Sources:
- Window Wells
- Downspouts
- Foundation Drains
- Laterals

Window wells

Downspouts

Foundation Drains – Internal & External (connected to sanitary sewer)

Sanitary Sewer Lateral

See next slide for detail

Sewer System Analysis

Schematic – Ann Arbor, MI with revisions by Superior Engineering
Private Property

◆ Private property contributes a significant amount of clear water
  – Disconnect downspouts (< $50/each)
  – Illegal sump pump connections
  – Disconnect foundation drains ($2,000 to $20,000)

◆ What other utilities are doing can be found at www.wef.org/privateproperty

◆ Can spend public money on private property “for the good of the public”
CMOM Resources

- **DNR**

- **EPA**

- **Water Environment Federation**
  [www.wef.org](http://www.wef.org)
Questions & Answers

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