

# Summary of Other Municipal Private Property I/I Reduction Programs

Andy Lukas, PE

Brown and Caldwell, Milwaukee, WI

# Summary of Other Municipal or District Programs

- 8 examples showing variety of programs
- Most programs driven by need to reduce basement backups and SSO's
- Some programs included in consent orders
- Mix of municipal and districts
- Many other examples and variations

# Definitions of Acronyms

- BB: Basement Backup
- BFP: Back Flow Prevention
- CCTV: Closed-Circuit Television
- CSO: Combined Sewer Overflow
- DD: Downspout Disconnection
- FDD: Foundation Drain Disconnection
- HO: Homeowner
- PPII: Private Property Infiltration and Inflow
- ROW: Right-of-Way
- SSO: Sanitary Sewer Overflow

# General Observations

- All programs reported reduced:
  - Flows
  - SSOs
  - Basement backups
  - Service calls
- Most programs do not include pay for basement backup prevention devices
  - Many programs geared towards reducing basement backups

# Duluth, MN

- **Work performed:** Initially FD disconnect. Now lateral rehab/replacement
- **Cost share:** Initially full cost by City. Now City pays \$2150 for FDD and 80% of lateral work up to \$4000
- **Work:** Initial FDDs by HO (3 quotes). Later City bid out groups of FDDs. Now back to HO responsible but must use approved contractors.
- **Extent of program:** City-wide, but focused in priority areas
- **Incentive:** Homeowner charged \$50/month if inspection refused, \$250/month if required work is refused

# Location: Aberdeen, WA

- **Work performed:** Initially focused on lateral, now focusing on inflow sources
- **Cost sharing details:** HO pays for all work; city offers \$300 incentive; failure to fix issue results in doubling sewer bill
- **Work performance:** HO performs work and applies for credit
- **Extent of program:** 380 properties
- **Other comments:** Smoke testing used to identify inflow sources. Work included in consent decree

# Location: Canton, OH

- **Work performed:** downspout disconnection; backwater preventers
- **Cost sharing details:** HO paid for DD; Utility paid 100% of BFP
- **Work performance:** DD by HO; City pays cost of BFP work, HO has contract w/ City
- **Extent of program:** HO request, must have had 3 BB
- **Other comments:** As required by permit, Canton reports to State annually on SSOs and sewer backups (WIBs), including locations and causes

# Location: Florissant, MO

- **Work performed:** Lateral repairs
- **Cost sharing details:** Lateral insurance program, HO pays \$50 annual fee to participate, opts in through application
- **Work performance:** Performed by City contractor
- **Extent of program:** 11,640 participants
- **Other comments:** Not an I/I reduction program, provides insurance for HO, in case lateral has a failure. Part of a regional initiative by St. Louis MSD.



# Location: MWWSSB – Montgomery, AL

- **Work performed:** Lateral repair and replacement
- **Cost sharing details:** MWWSSB pays for work in public ROW, HO outside ROW
- **Extent of program:** 6,543 laterals
- **Lateral definition:** HO owns entire lateral, but MWWSSB will pay for work on portion in ROW
- **Includes backup prevention:** No
- **Other comments:** MWWSSB actively pursuing problem laterals. Smoke test used to identify issues with lateral and inflow connections. HO shown CCTV evidence of problem. Water service will be shut off if compliance is not achieved.

# Location: Stege SD, CA

- **Work performed:** Lateral repair, BFP installation, private inflow removal
- **Cost sharing details:** HO responsible for all costs
- **Work performance:** HO contracts with Stege SD-approved contractor
- **Extent of program:** 11,700 laterals, approx.
- **Lateral definition:** HO owns lateral from building to main
- **Other comments:** Satellite to EDMUD. Time of sale program. Modifying program to comply with EBMUD CD requiring system-wide private lateral ordinance

# Location: Miami-Dade, FL

- **Program drivers:** Consent Decree, public I/I work didn't resolve wet weather issues
- **Work performed:** Lateral rehabilitation or replacement
- **Cost sharing details:** M-D WASD pays public lateral rehab; HO pays private lateral rehab
- **Work performance:** Started w/TV inspection, then moved to air pressure test used to determine need to correct
- **Extent of program:** 52 of 500 basins were selected for program. 1,200 laterals repaired as of 2007, with 4000 left to repair
- **Lateral definition:** Property line defines ownership transition
- **Other comments:** Initial program was developed as pilot. Results concluded the value in continuing as larger program. Cleanout installed at home to facilitate pressure test.

# Location: Ann Arbor, MI

- **Work performed:** FDD
- **Cost sharing details:** City pays up to \$4100 for core work
- **Work performance:** HO works w/ prequalified contractor, contractor paid by City
- **Extent of program:** 2000 completed
- **Other comments:** Homeowner has 90 days to complete work once identified. 6-8 weeks for If not performed, pays \$100/month surcharge. City also paid for installation of curb drain (for sump discharge). In consent order

# Summary

- Many ways to tackle PPII
- Driven by individual community interests
- Programs we looked at showed reduced SSOs, basement backups, flows
- Contracting models vary
- Variety of cost share models
  - Homeowner pays nothing
  - Homeowner fully responsible
  - Cost sharing
- Rules often financially incentivize owner