

**MWRD Welcomes**

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**The Advisory Technical Panel**

**and**

**Distinguished Speakers**

MWRD LASMA Visitor Center  
May 16, 2012

**MWRDGC**

# Private Sector I/I Sources

## Infiltration and Inflow Removal Work

May 16, 2012

MWRD LASMA Visitor Center

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Supervising Civil Engineer

*MWRDGC*

# Private Sector I/I Sources

## Significance

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Sanitation District No. 1 of Northern Kentucky  
Inflow and Infiltration From Private Property

Section 2–Sources of Infiltration and Inflow

Many communities around the country have implemented programs aimed at reducing I/I from private property. Strand’s review of the referenced data indicates that I/I from private property as a percentage of total I/I in sewer systems ranges from 20 percent to 80 percent. Table 2.01-1 shows estimated values from five communities.

Community	Percentage of I/I from Private Sources
Lower Paxton Township, PA	60%
Lynchburg, VA	20%
Houston, TX	80%
Columbus, OH	55%
Washington Suburban Sanitary Commission	43%

Table 2.01-1 Estimated I/I Associated with Private Sources

# **Private Sector I/I Sources**

## **Significance**

- **It is widely reported that the majority of I/I enters a sewer system through private sector sources**
- **It is also believed that the portion of private sector I/I is greater in older systems and in local collection/regional treatment facility scenarios**
- **Previous round of rehab under 1986 Sewer Summit Agreement resulted in attention to public sector sewer system but rising wet weather flows call for additional attention to private sector**
- **Annual Summary Reports indicate significant deficiencies in private sector inspections**

# Private Sector I/I Sources

## Challenges

- **Absence of threat of enforcement action**  
Regulators (USEPA, IEPA, MWRD, etc.)  
Penalties
- **Perception that property owners resent inspections**
- **Lack of/lukewarm political backing**
- **Limited direct benefit to the community itself, where regional treatment agencies accept flow**
- **With multiple connections to a regional conveyance facility, identifying and targeting an area for I/I reduction is challenging**
- **Funding**
- **Encouraging property owner participation**

# Private Sector I/I Sources

## Encouraging Signs

- Increasing acknowledgment in the published studies and by public works directors that private sector I/I control is vital to obtaining any meaningful overall results
- Some agencies have come up with cost-sharing programs
- We know at least one municipality had a property inspection program with five-year cycle
- A few agencies have implemented ordinances for effective private sector inspections
- There have been inquiries for sample ordinances
- Encouraging feed back received in response to MWRD outreach effort (2010 workshops)

# Next Meeting

July 18, 2012

## Tentative Topics

- **Lessons from ICAP – a look at past 20 years**  
Al Berkner, P.E., Sewer System Evaluation, Inc.
- **Downers Grove Sanitary District's I/I Control Programs**  
Nicholas J. Menninga, General Manager – DGSD
- **Village of Palatine's Basement Protection Program**  
Michael Danecki, P.E., Village Engineer – Village of Palatine
- **Conference Call with IEPA Officials – funding**