

MMSD Serves:

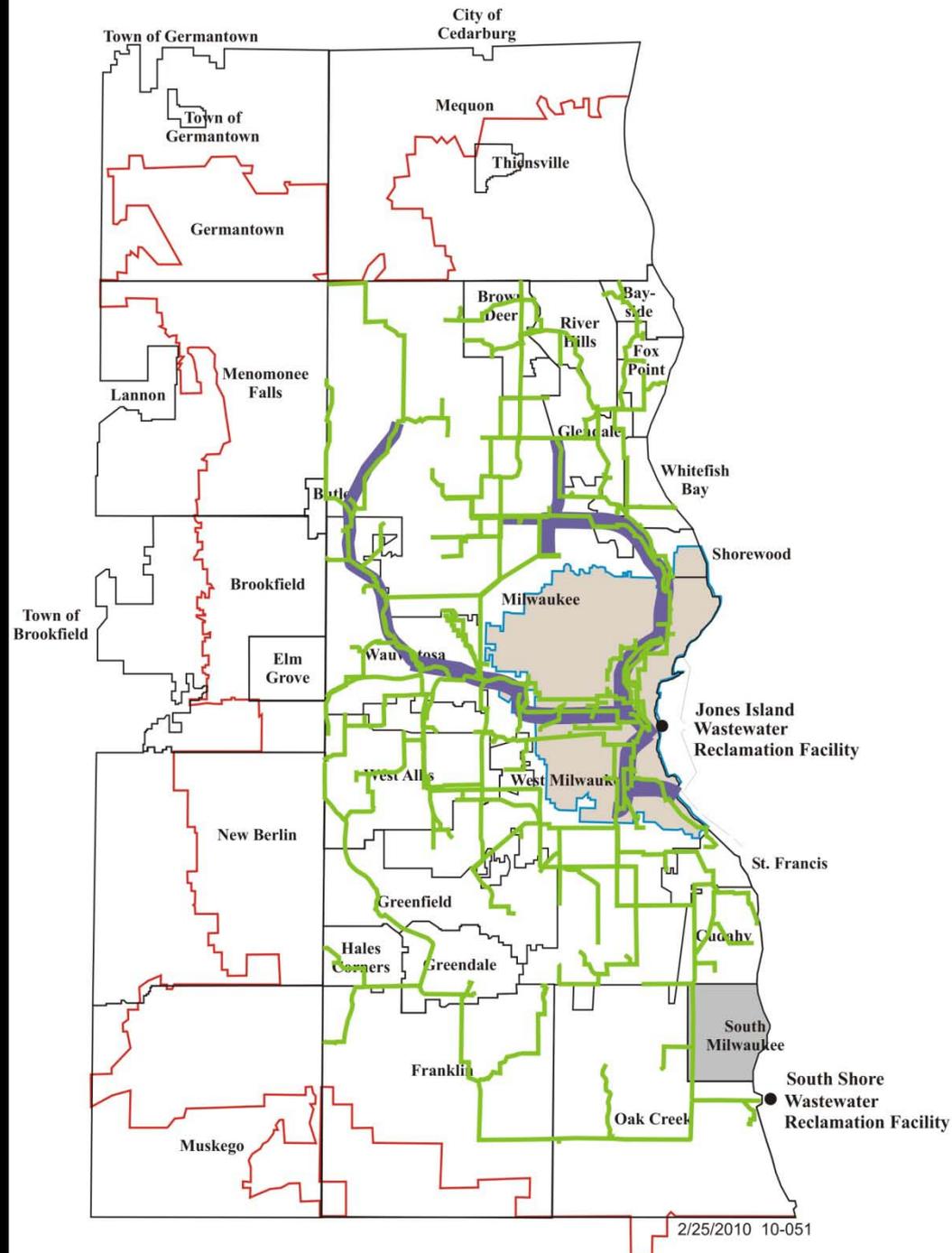
- 1.1 Million Customers
- 28 Municipalities
- 411 Square Miles

Sewers

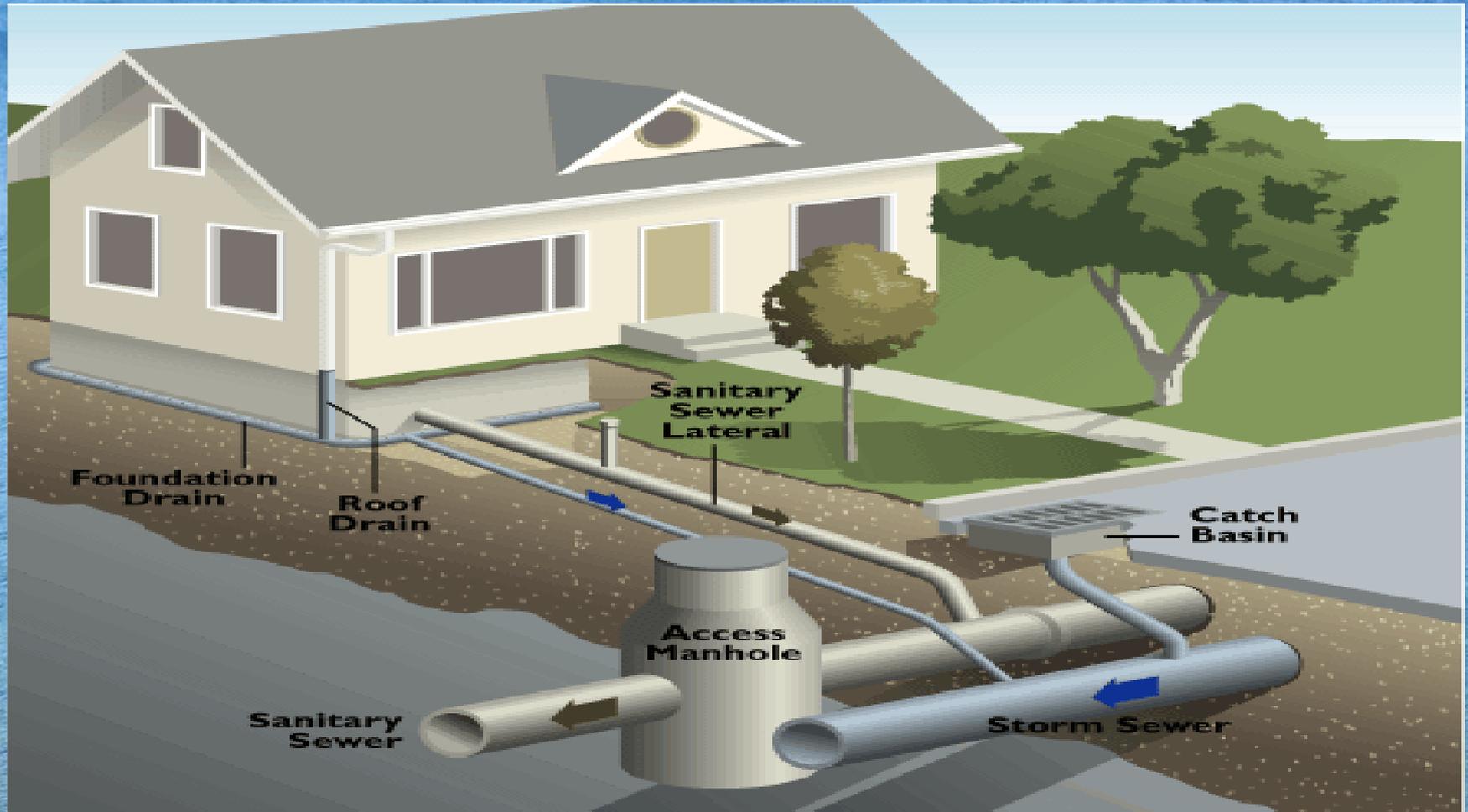
300 Miles
MMSD Sewers

3,000 Miles
Municipality Owned Sewers

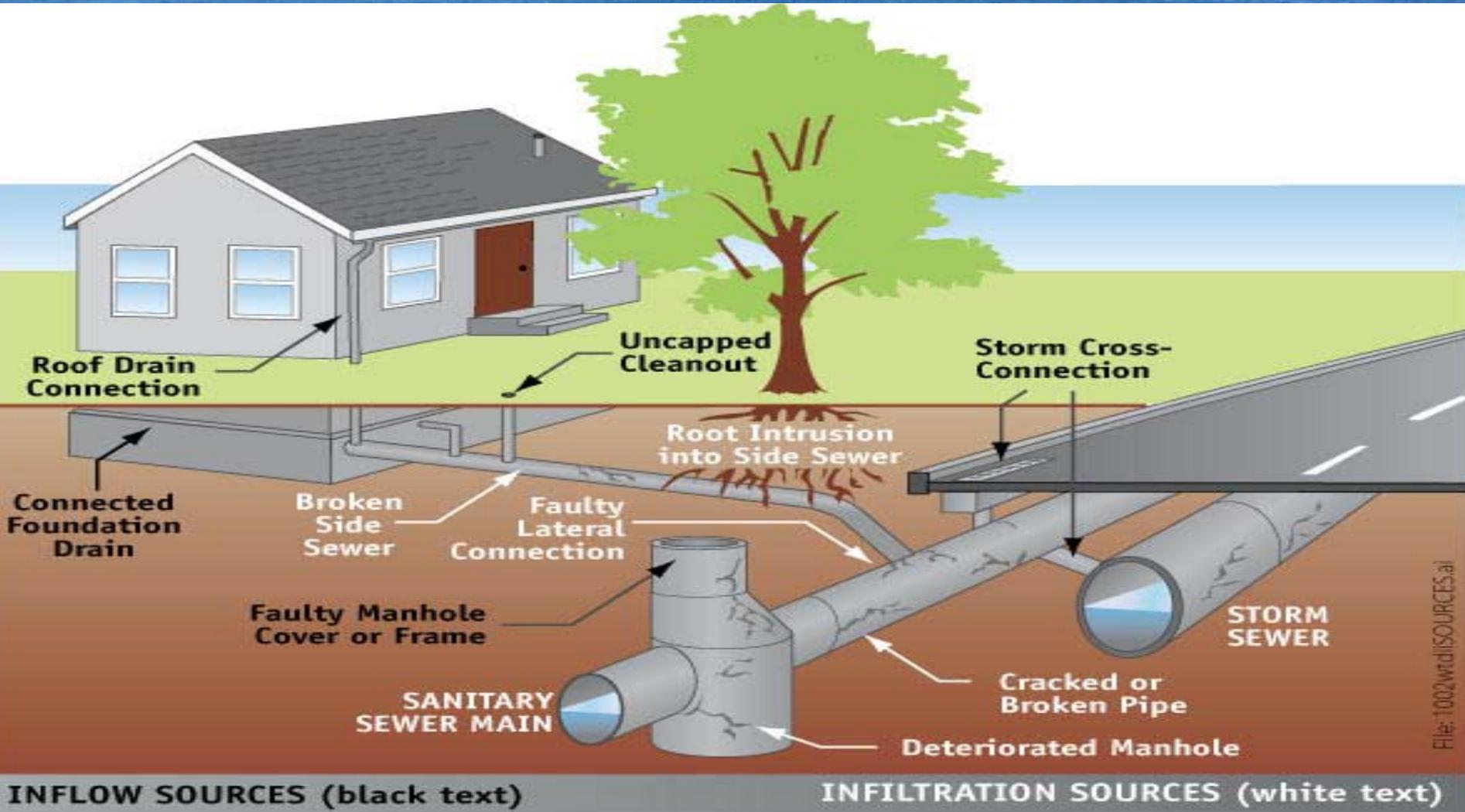
3,000 Miles
Private Laterals



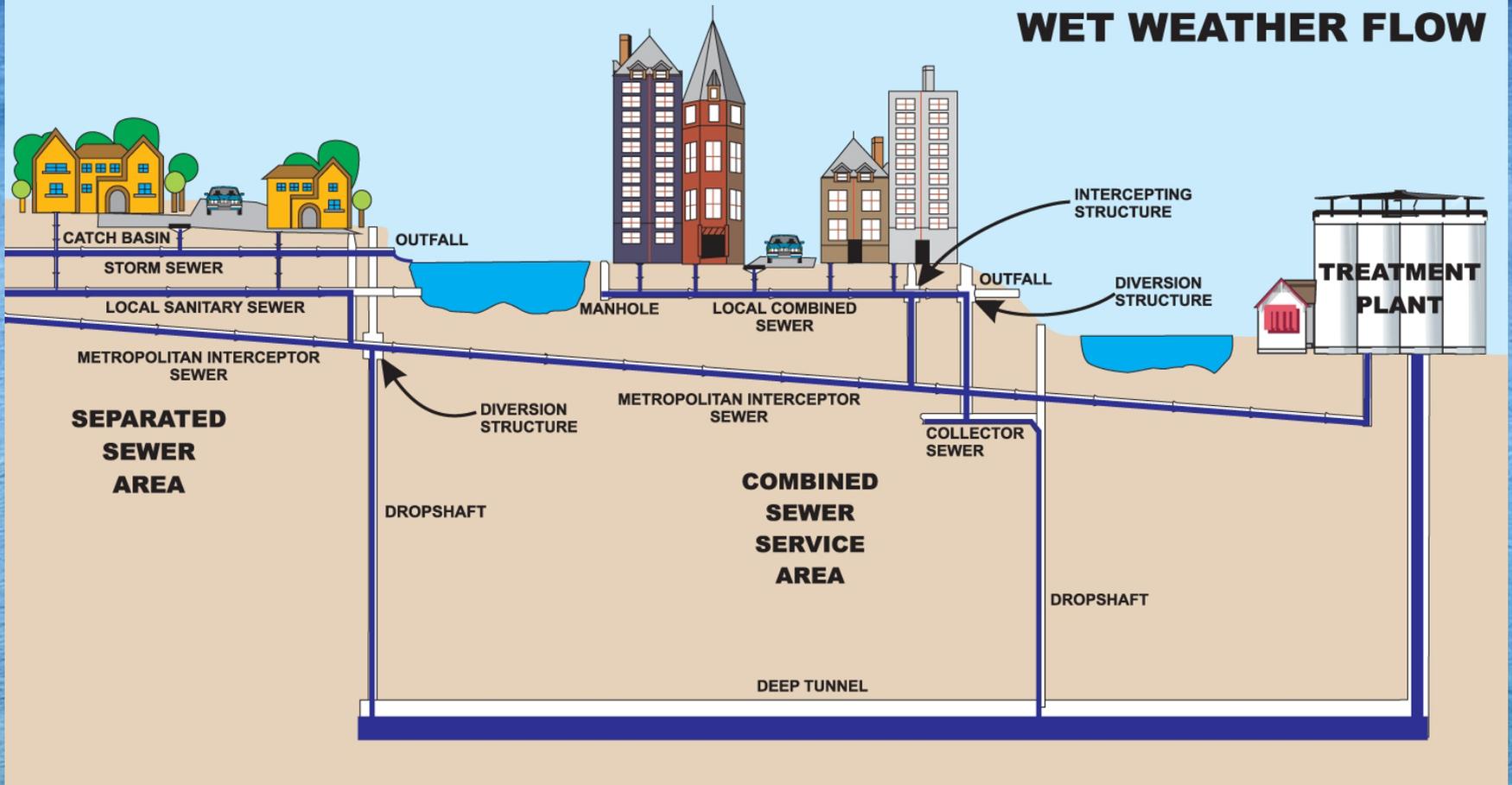
Building Sewer Connections



Faulty Sanitary Building Lateral Showing Inflow and Infiltration (I/I)

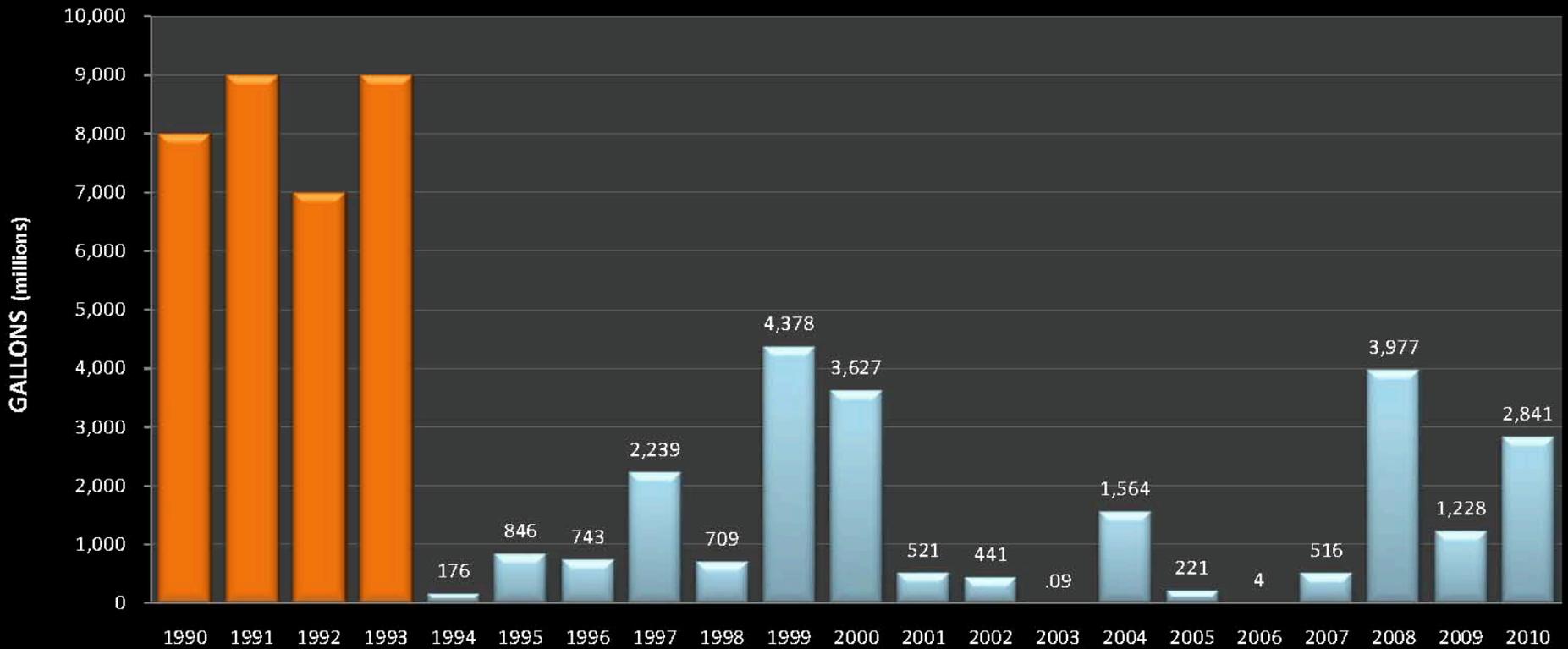


WET WEATHER FLOW



And it is working!

MMSD OVERFLOW VOLUMES



Where does the water come from?

- 64% from separate sewer area *
 - Of this volume, approximately 80% comes from private laterals (based on results of studies by Wauwatosa and Milwaukee)
- 36% from combined sewer area *

* Source: page 15, MMSD Audit Committee Report, 2004

What do we need to do in the future?

- Reduce basement backups
- Reduce overflow volumes

What's allowed?

- Foundation drains from structures built prior to 1954 draining to sanitary sewer system are allowed
- Combined Sewers are allowed

Overflows

- Separate sewer overflows are illegal (unless to protect public health and safety)
- Combined sewer overflows are allowed up 6 times per year

What can we do to reduce overflows?

- Partial separation of the combined sewer system that can be performed in an environmentally and economical fashion
- Reduce clear water entering the separate sewer system
- Improved storm water management

What can we do to reduce basement backups?

- Improve storm sewer system
- Reduce clear water entering the sanitary sewer system

Conceptual Private Property Inflow and Infiltration

- 10 year \$151 million expenditure
- Eligible expenditures for reimbursement
 - Foundation drain disconnection
 - Lateral replacement/rehabilitation
 - Downspout disconnection
 - Stormwater improvements that reduce inflows to basements

Questions yet to be Answered

- What are the endpoints of a private lateral?
- Is there a local municipal match required?
- What percent of the work is actual work versus study development?
- Is the private property owner expected to pay anything?
- Are local alternatives that do not impact private property eligible for reimbursement?
- How do we assure municipalities that there will be future funding available?
- What happens to the allocated dollars if a municipality finishes its I/I work early?