Sewer Overflow Abatement Public Input Meeting

Meeting Topics

Sewer Overflow
Abatement Program
Overview

Butchertown Green Infrastructure Project

Nightingale Pump Station Project in Camp Taylor Area **August 14, 2012**







Sewer Overflow Abatement Plan







Presentation Objectives

- Sewer Overflow Abatement Plan Overview
- Project Completion Progress Report
- How You Can Help!
- Proposed Overflow Abatement Plan Modifications
- Public Input Request





Combined Sewer Overflows



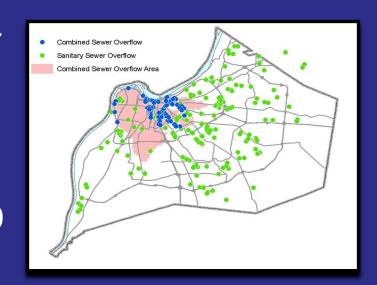
Sanitary Sewer Overflows



2005 Federal Consent Decree Amended in 2009

On CSOs

- ► CSOs allowed in wet weather; must not cause or contribute to stream water quality impairment
- CSOs in dry weather prohibited
- ► Complete program by 2020



On SSOs

- SSOs in dry & wet weather prohibited
- ► Complete program by 2024



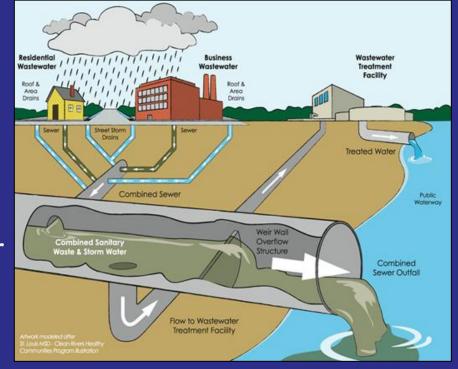


Combined Sewer Overflow

Challenges

- Stormwater sewers & sanitary sewers were built to operate in "combined" pipe
- Wastewater treatment not sized for stormwater
- Groundwater sump pumps & stormwater downspouts connected

to sanitary sewer from private property



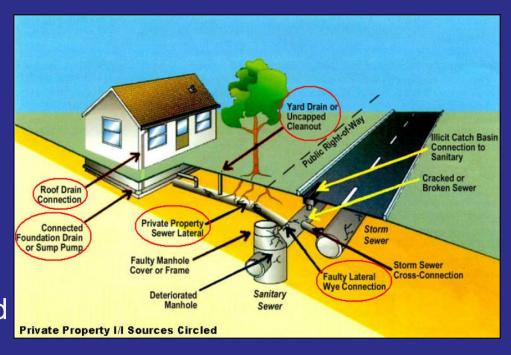




Sanitary Sewer Overflows

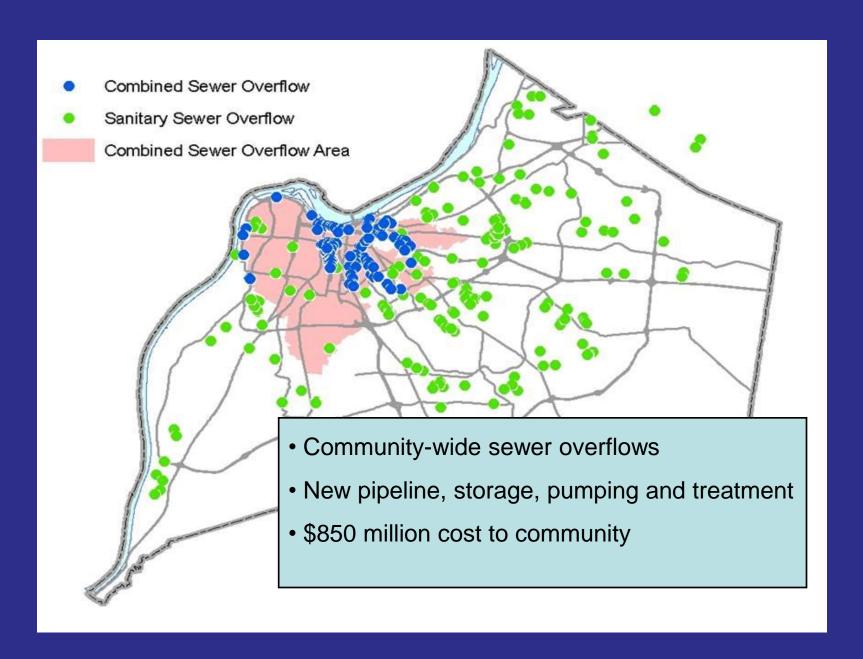
Challenges

- Sanitary sewers have deteriorated over time, allowing clean water entry into public system
- Groundwater sump pumps & stormwater downspouts connected to sanitary sewer from private property make up 50% of extra flow









CSO Projects 2009 Plan

- Gray Infrastructure Projects
 - Sewer separations & modifications
 - Storage basins
 - Replacement and expansion of Nightingale Pump Station
 - 1 High-Rate Wet Weather Treatment Facility
- Green Infrastructure Projects
- Flood Pump Station Projects





SSO Projects 2009 Plan

Gray infrastructure

- Conveyance pipeline projects
- Storage basins
- Pump station upgrades or expansions
- 1 Wastewater treatment expansion
- Source control program
 - Stormwater downspouts
 - Groundwater sump pumps



Smoke testing on public sewer indicates downspout connection

Implementation Progress First Five Years

Gray Infrastructure Projects

- 25% completed
- 20% in design or construction

Green Infrastructure Projects

- 25 completed
- 40 in design or construction
- 30% of program budget committed

I/I Reduction Projects

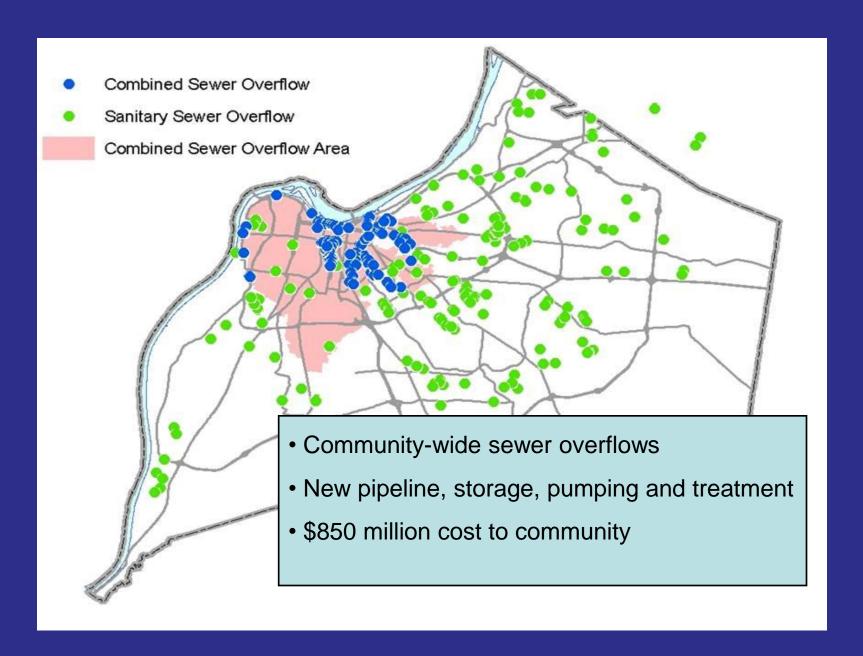
- 9 rehab/replacement projects completed
- 8 rehab/replacement projects in design or construction

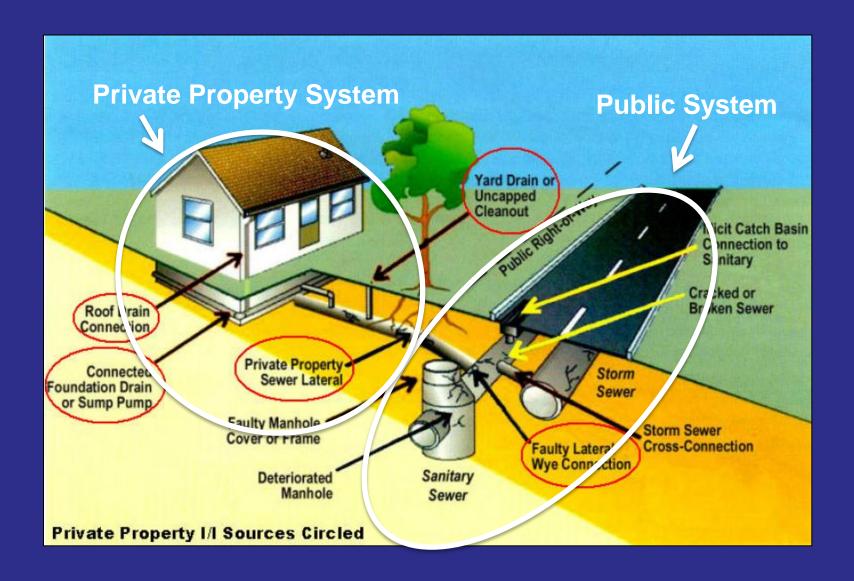
Overall program

- About 25% complete
- About 5% under budget, compared to original IOAP estimates









What You Can Do To Help!!

Fix private sewer laterals that connect buildings to the main sewer "leaky laterals"

Sanitary Sewer Line Replacement Program 587-0603







What You Can Do To Help

Disconnect sump pumps from the sewer system

- Outlet to the ground or

stormwater system

Plumbing Modification Program 587-0603







What You Can Do To Help

 Capture rain from down spouts to use for watering your gardens and landscaping

- Rain barrels
- Rain gardens
- Turn downspouts onto the ground







What You Can Do To Help!!

Conserve water during & right after rain storms

- Only use
 dishwashers &
 washing machines
 if absolutely
 necessary to put
 less water in the
 sewers
- Only run full loads



What You Can Do To Help

Put fats, oils & greases in the trash

NOT down the drain!!!!

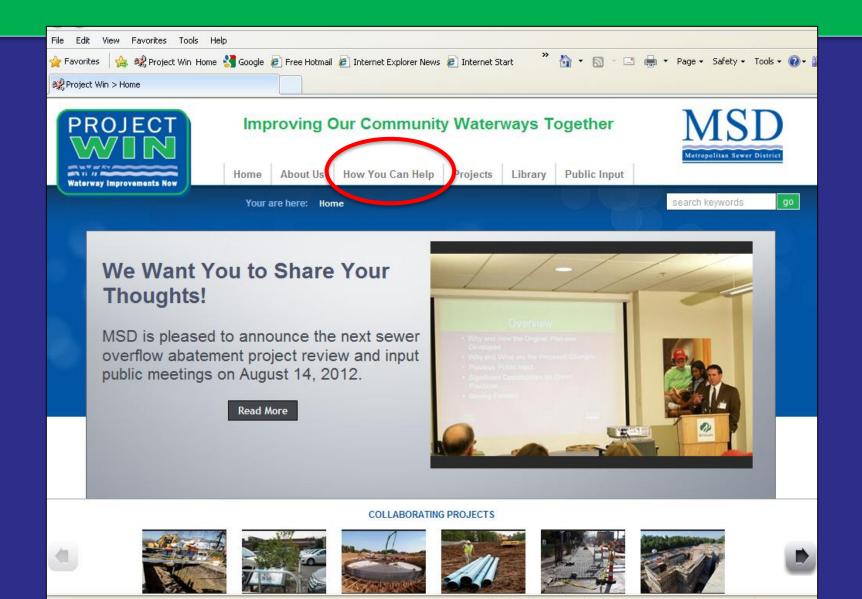


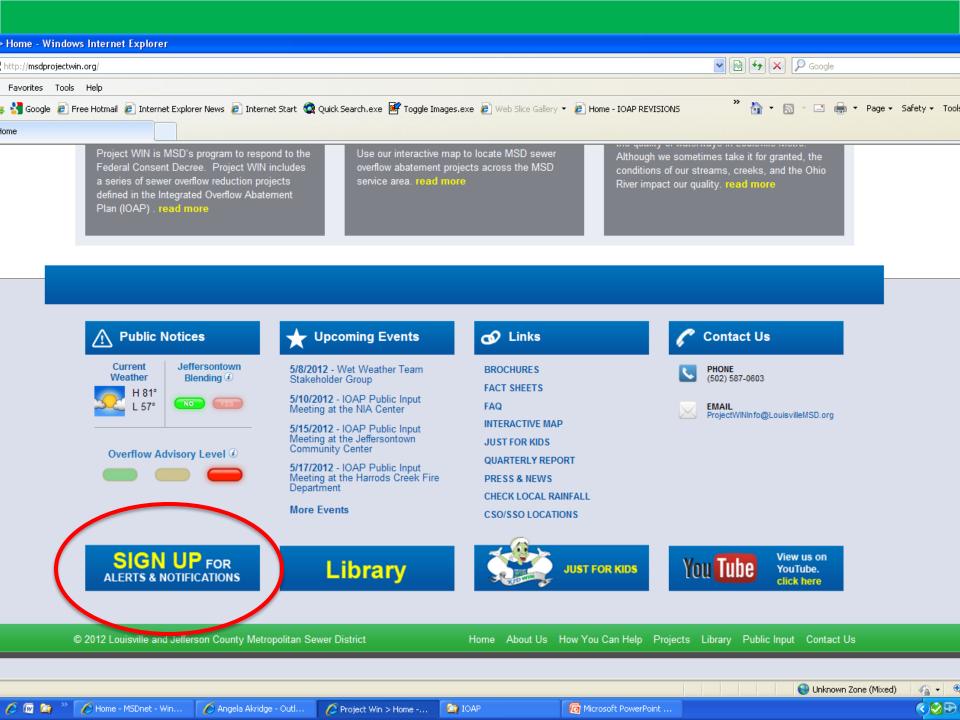
Grease accumulates in pipes



Put hot grease in metal container, let cool, TRASH!

Project WIN Website - msdprojectwin.org





Proposed Project Modifications



IOAP Volume 1, Chapter 6.5.3.6 Adaptive Management

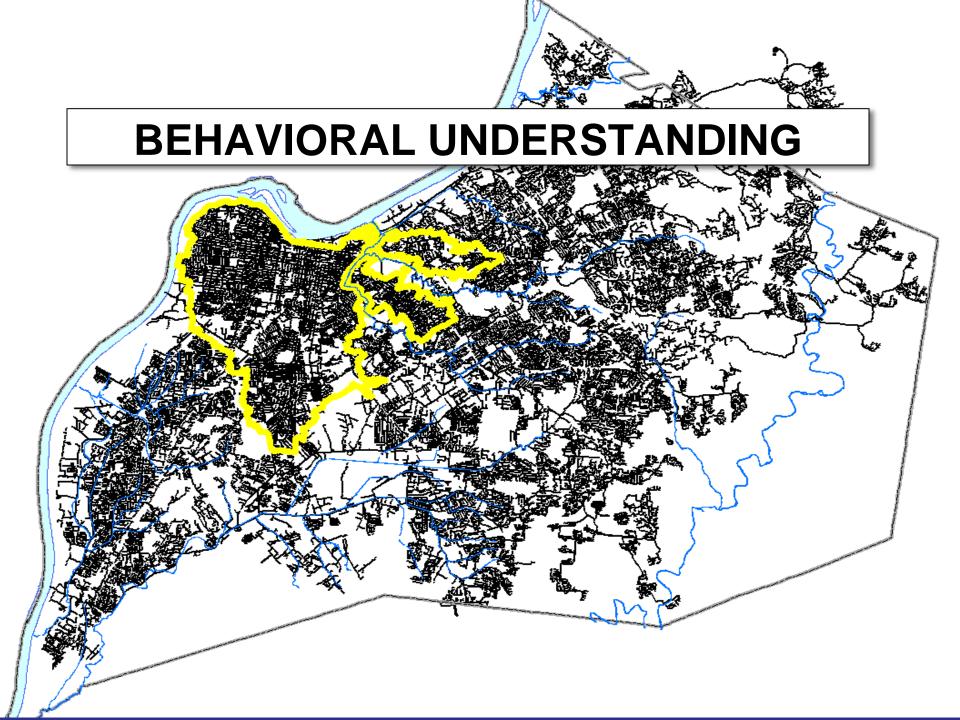
Required Overflow Reduction Targets

- Improve system monitoring
- Re-calibrate & upgrade sewer models
- Run behavioral statistics on overflows
- Review project approaches & sizing
- Negotiate modifications as needed
- Must be based on established community value system

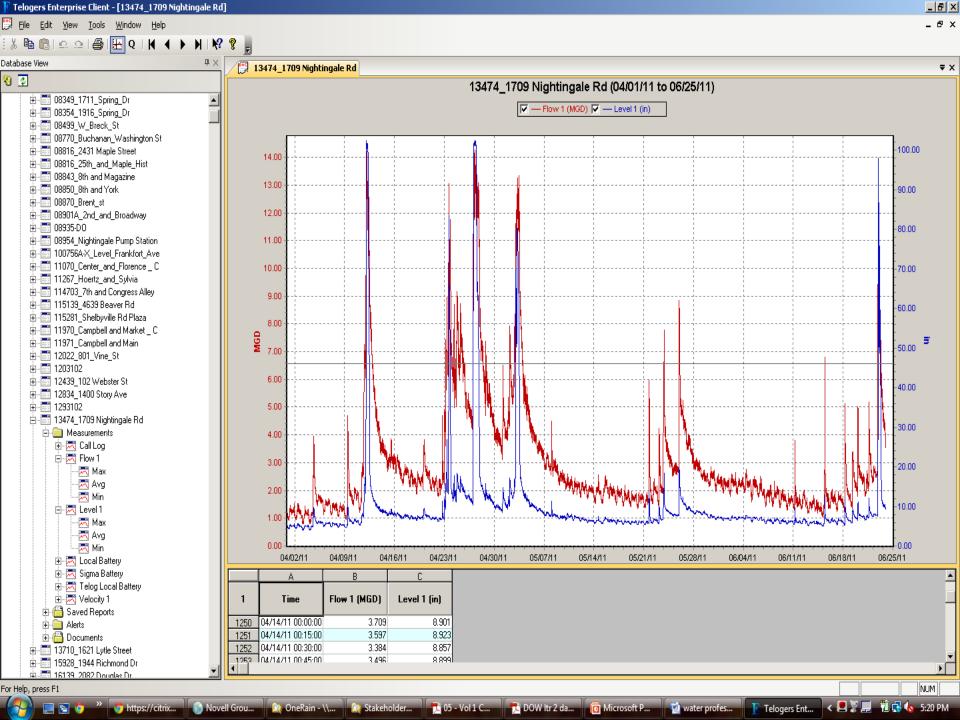
Preliminary Discussions w/ regulators underway











2012 Project Calibration

- Program Costs Remain at \$850 Million
- Several projects grew significantly in size and cost or are new
- Others shrank or were eliminated
- Overall program benefits increased
- Schedule revisions are being proposed





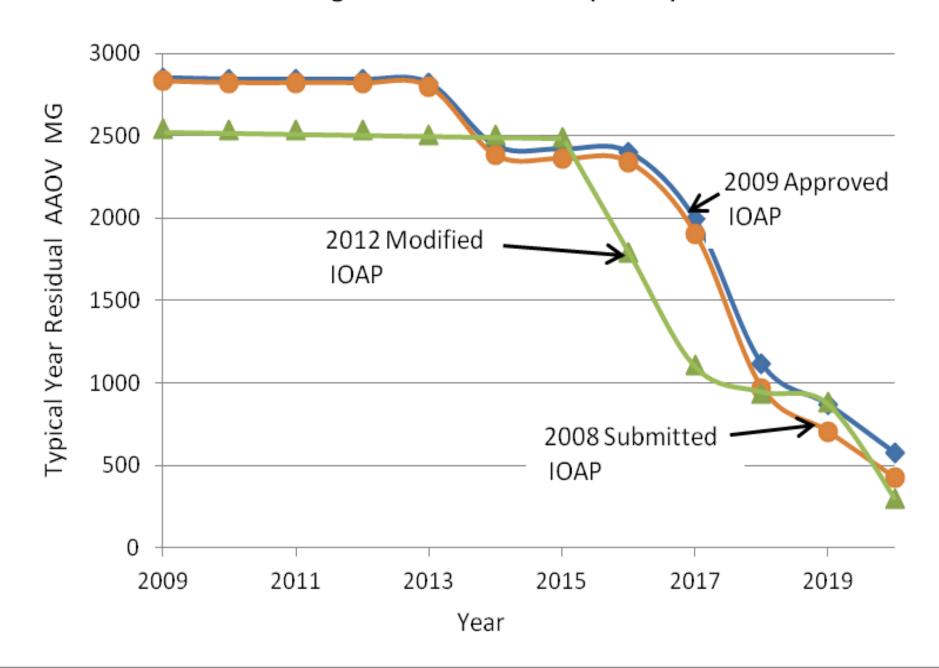
Project Revision Summary

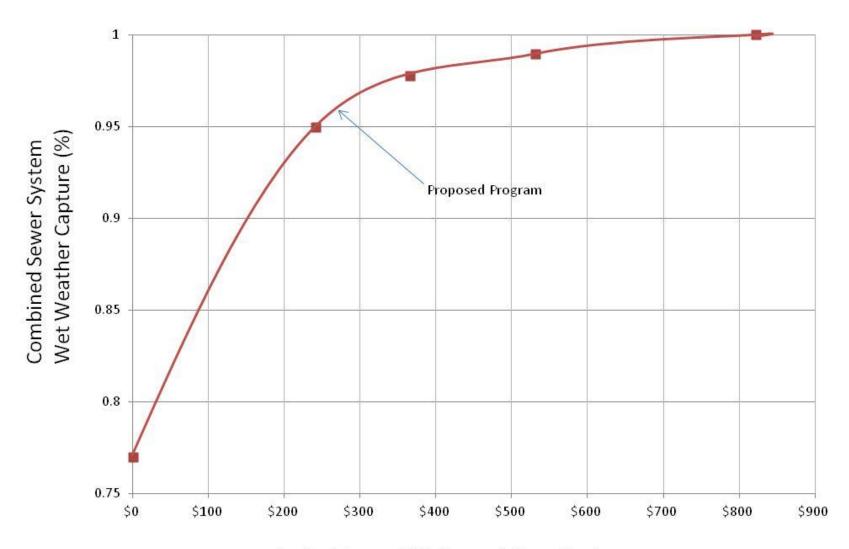
- 7 projects got larger
- 3 projects have higher level of overflow control, 1 lower
- 7 projects got smaller
- 12 projects forward some split from other projects
- 4 projects backward green & size





CSO Annual Average Overflow Volume (AAOV) Reduction





Capital Cost - CSO Control Gray Projects (\$ Millions - 2008 Dollars)

Moving Forward

 Continue discussions with EPA regarding proposed project modifications

 Additional public input on red-line plan markups to occur in Fall 2012





Public Input Sought

Provide comments by September 14, 2012

- Tonight on the comment form
- Tonight on the video
- Via email at commentsIOAP@msdlouky.org
- Via mail:

MSD IOAP Project Comments

Attention: Project WIN Program Manager

700 West Liberty St.

Louisville, KY 40203



