

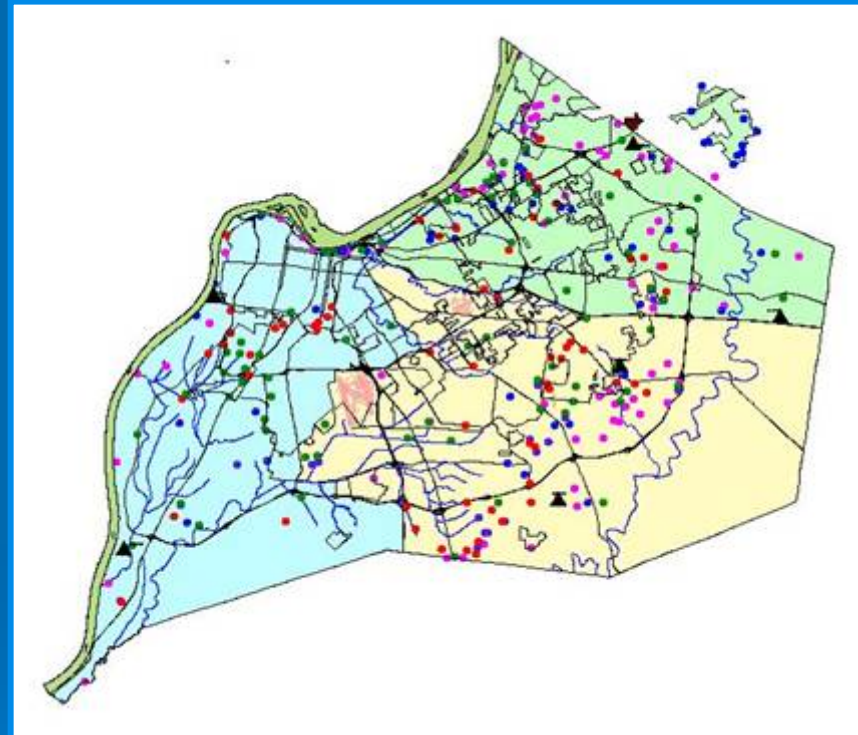


Spring 2007 Public Meetings



Current MSD Facilities

- 6 Regional Wastewater Treatment Facilities
- 17 Small Wastewater Treatment Plants
- 304 Pump Stations
- 3,200 miles of Sewers
- Louisville Green Production Facility
- Ohio River Flood Protection System
 - 16 Flood Pump Stations
 - 29 miles of Floodwall



Sewer Service in Louisville

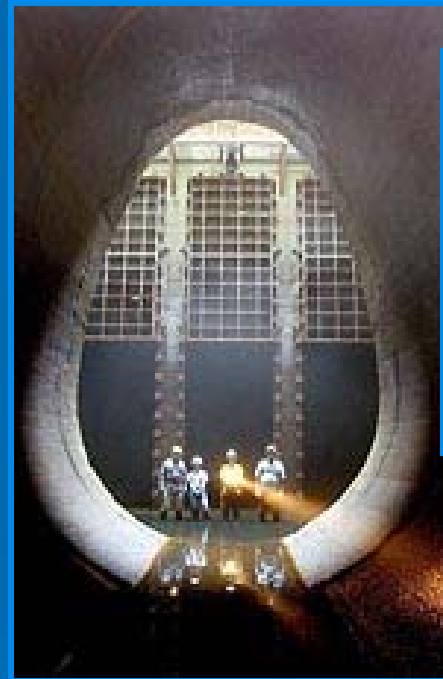
Begins Prior to the Civil War

- **1822** – Typhoid epidemic hits Louisville
- **1823** – Ditch and pond drainage begins
- **1850** – First underground sewers constructed (some still in service)
- **1906** – Commissioners of Sewerage begin constructing combined sewer system for sanitary sewage and storm drainage (most still in service)
- **1906 – 1944** Sewer service extended to Watterson
- **1944** – Commissioners of Sewerage eliminated



Sewer Service in Louisville After Formation of MSD

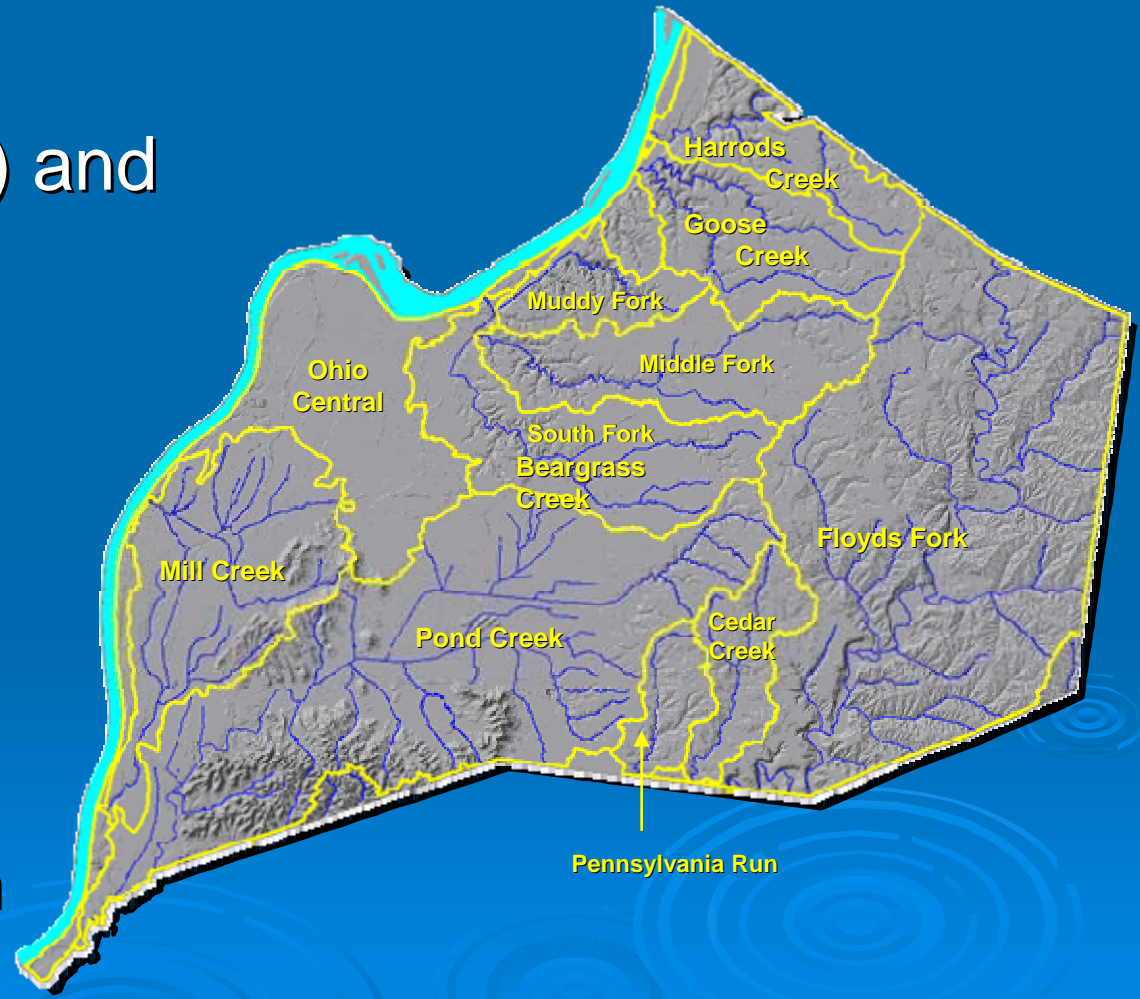
- **1946** – MSD formed by State legislature
- **1958** – Fort Southworth Wastewater Treatment plant (now Morris Forman) begins operation
- **1946 - 1980s** – Building boom outside I-264 results in sewer expansion and treatment plant construction by land development companies
- **1980 – 2000s** – MSD begins service area expansion, elimination of remote treatment plants



Sewer Service in Louisville

Statistics

- 385 square miles (Jefferson County) and parts of Oldham County
- 11 watersheds
- 220,000 customer accounts
- 693,000 people
- Annual operating budget \$90 million



Jefferson County Streams

Face Typical Urban Watershed Challenges

Sewer System Improvements

Targeted at Water Quality Enhancements

- 200+ neglected sewer systems acquired
- 40,000+ septic tanks eliminated
- 200+ of small treatment plants (STPs) eliminated
- 100+ small pump stations eliminated
- \$150+ million CSO and SSO improvements since 1999

**Approximately \$1.4 billion in
Total infrastructure investments**

Jefferson County Streams

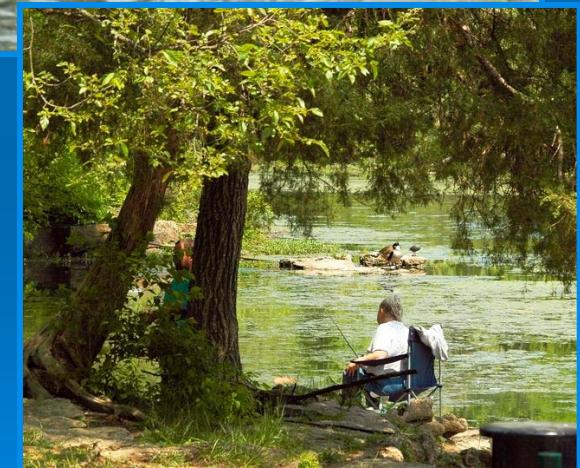
Face Typical Urban Watershed Challenges

The Current Situation...

- Challenges are not new or distinct to our community
- Strategies and programs have been in place to improve these conditions
- Stream water quality is improving

United States Environmental Protection Agency (EPA) mandate

- We need to do more
- We need to do it faster than originally planned




Regulatory Enforcement

Louisville's Consent Decree

➤ The Process

- EPA requests information – May 2003
- Kentucky initiates enforcement actions – February 2004
- Consent Decree entered into Federal Court – August 2005

➤ The Result

- Fair Agreement
 - Good for the community and the environment
 - Lots of work for MSD
 - Deadline and Results Oriented
- 

Regulatory Enforcement

A Consent Decree

➤ Civil Penalties

- \$1,000,000 to State of Kentucky

➤ Supplemental Environmental Projects

- \$2,250,000 of non-sewer-related projects or activities within Jefferson County

➤ Estimated Cost for Compliance

- \$800,000,000 in sewer related projects and initiatives
- Rate increases will be needed to fund this effort

Regulatory Enforcement

Louisville's Consent Decree

- Short Term Compliance Schedule
 - September 30, 2007 – Plan to eliminate 4 largest SSOs
 - December 31, 2008 – Plan to abate CSOs and eliminate SSOs
- Long Term Compliance Schedule
 - December 31, 2020 - Combined System
 - December 31, 2024 - Separate System

Regulatory Enforcement

Louisville's Consent Decree



Enhanced program building on the activities previously in place to address sewer overflow issues

Meeting Objectives

- To inform you about significant challenges facing our community relative to clean waterways
 - why do we need it?
 - what will it involve?
 - how are we going to get it done?
- To listen to your ideas and concerns about clean waterways and how it affects you
 - what is important to you relative to clean waterways?
 - what concerns do you have about the condition of our streams and the Ohio River?
 - how important is clean waterways relative to your other priorities and interests?

Clean Waterways

An Essential Amenity

- Jefferson County blessed with abundance of waterways
 - 40 miles of Ohio River
 - 790 miles of tributary streams and channels
- Waterways provide many recreational amenities
 - Fishing
 - Boating
 - Swimming/wading
- Federal regulations have specific goals for these waterways
 - Fishable
 - Swimmable



Jefferson County Streams Face Typical Urban Watershed Challenges

➤ The Challenges – Stormwater Runoff & Sewer Overflows

- Bacterial contamination
- Dissolved oxygen deficits
- High temperatures
- Toxic and non-toxic chemicals

➤ Stormwater Runoff

- Lawn and garden care products
- Grease, oil and metals from cars
- Litter and trash
- Sediment from construction
- Pet and wildlife waste
- Paved stormwater channels
- Loss of waterway riparian vegetation



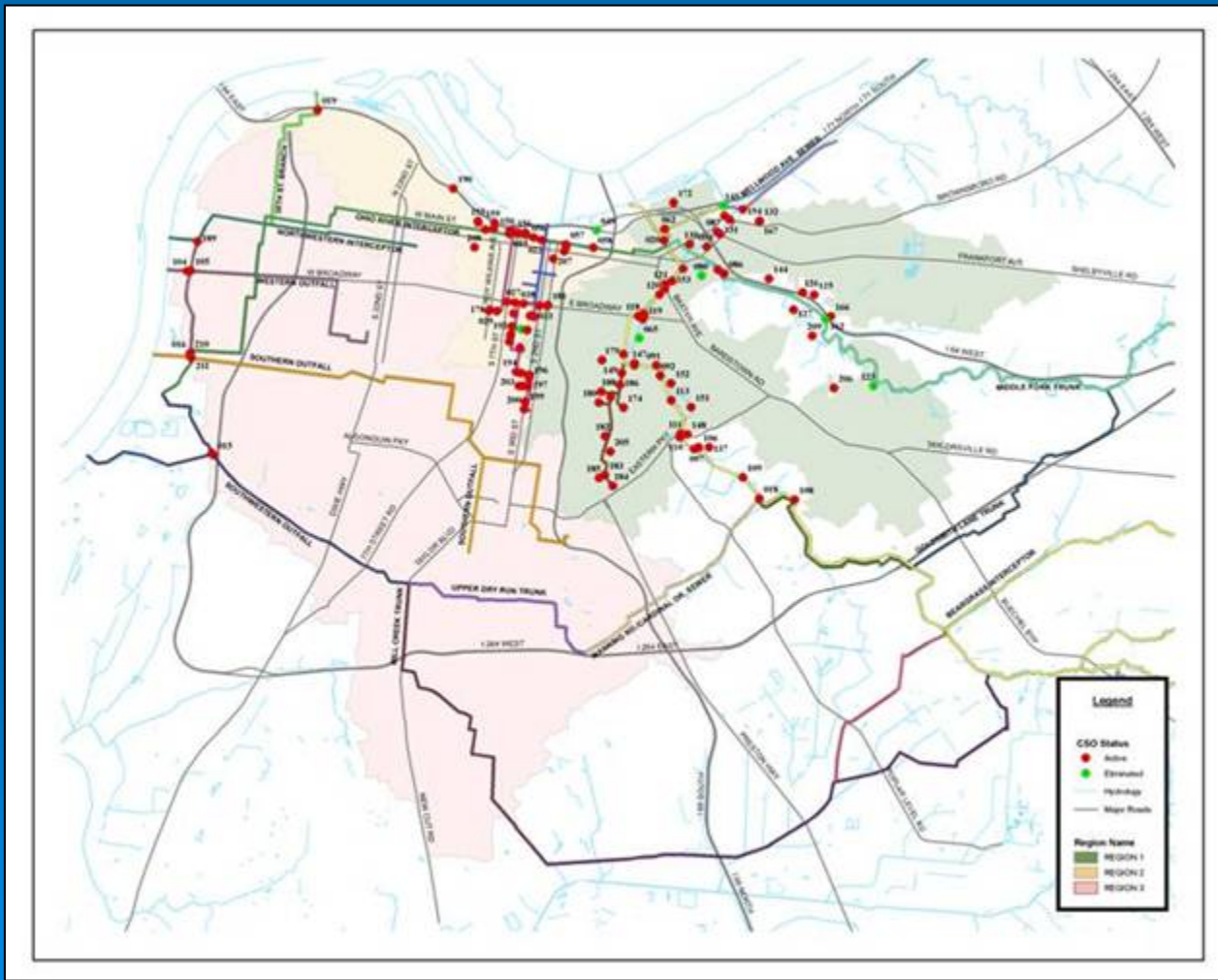
Project **WIN**

MSD's Role

- Wastewater Collection
- Wastewater Treatment

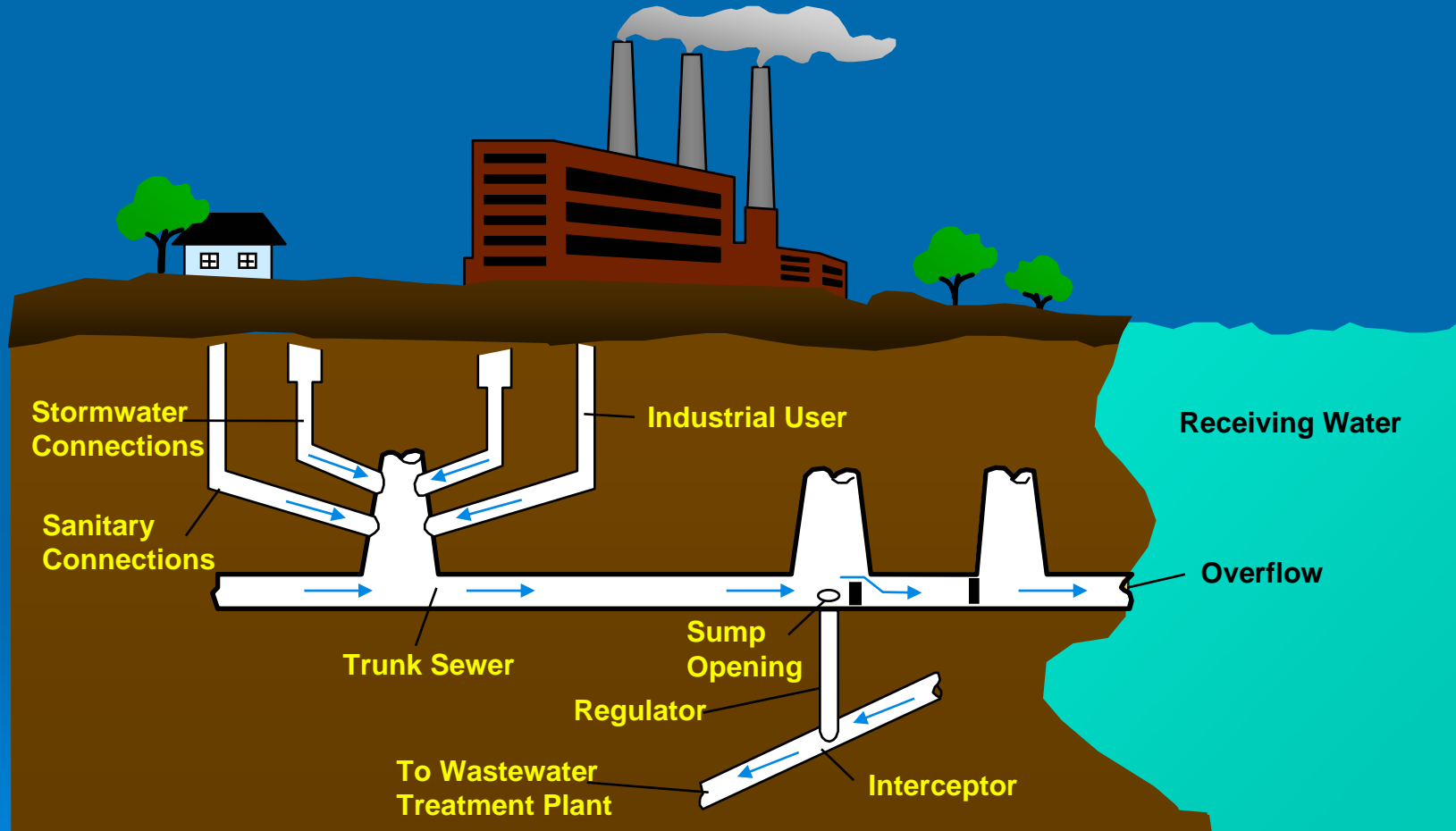


The Combined Sewer System CSO Locations

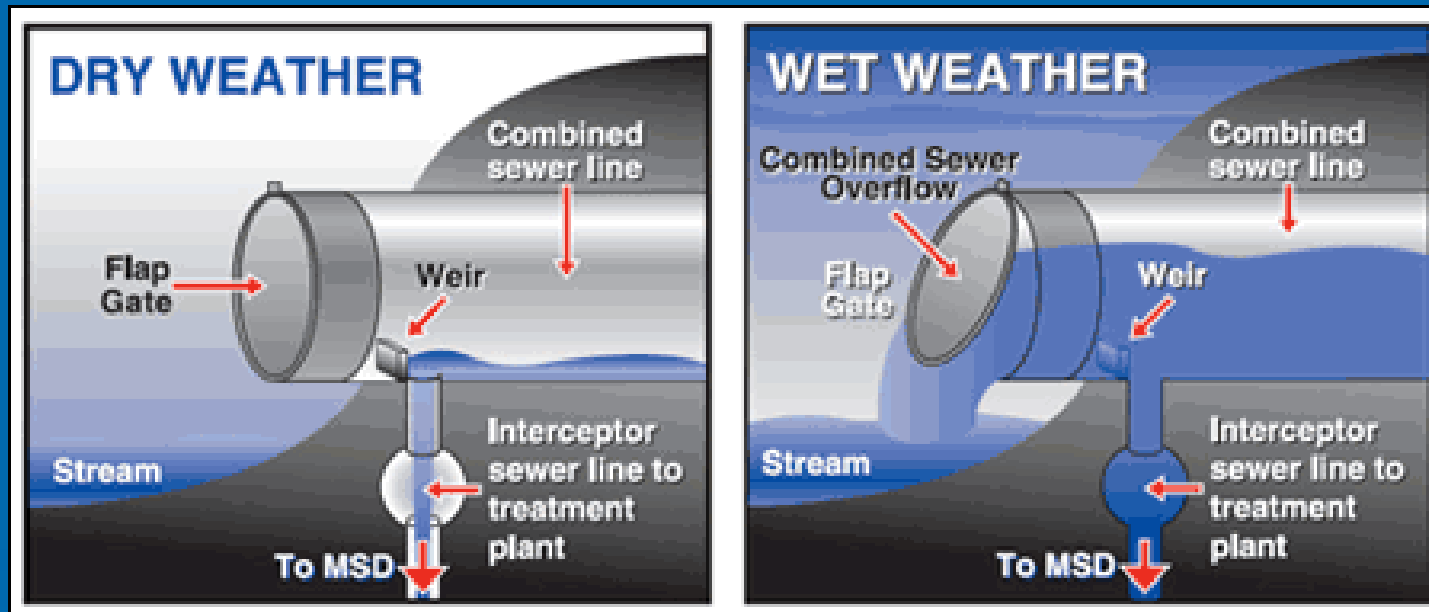


- **112 Active CSOs**
- **10 CSOs Eliminated**

Typical Combined Sewer System Configuration



Typical Combined Sewer System Configuration



What's a CSO?

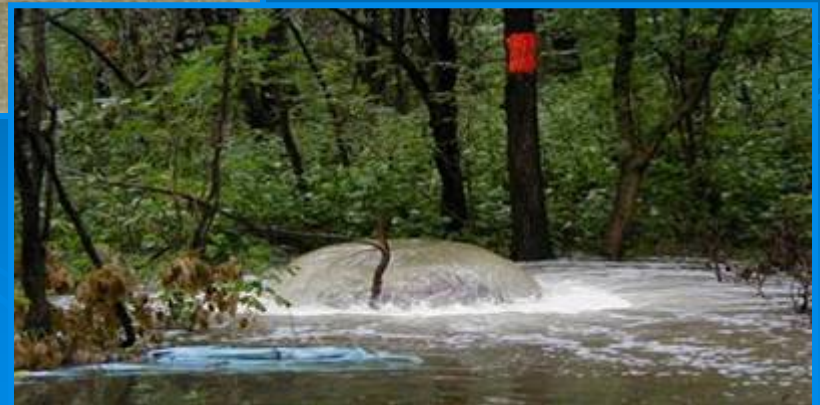
A constructed release point on a pipe that carries both stormwater & wastewater

wet weather = legal, permitted

dry weather = illegal

What About SSO's?

Illegal and Un-permitted Discharges



Louisville's Consent Decree

Potential Capital Improvements

- Backup generator power
- Pump station modifications
- Treatment plant modifications
- Combined sewer separations
- Sewer overflow storage basins
- Solids and floatable control facilities
- Wet weather treatment facilities
- Real Time Control facilities



Community Involvement

Be Reflective of Values & Priorities

Wet Weather Team

- 25 people from across community
- Assist in developing plan for Public Outreach
- Assist in developing plan for Funding



Community Involvement Be Reflective of Values & Priorities

Public Participation and Outreach

- Informational meetings throughout process
- Public comment forums
- Mailings, newspaper pieces
- Overflow advisory signs along river and streams
- Temporary overflow signs and doorcards
- Project WIN Website

Signs on creeks
and by overflows

Newspaper articles

SUNDAY, APRIL 29, 2007

MSD

OUR WATERWAYS IT'S TIME TO IMPROVE THEM

The past year, 2006, was one of the busiest in MSD's history, and 2007 promises to be even busier. This year MSD is focusing attention on our three core businesses: waste water collection and treatment; stormwater drainage services; and flood protection, with special emphasis on our recent signed Consent Decree to improve local water quality.

SEWER OVERFLOW WARNING

A sewer overflow has occurred in this area. Water containing sewage has been discharged from the sewer and may be on the ground, in drainage ditches or in nearby streams.

You are advised to avoid contact with creeks, streams, drainage ditches and standing water, as they may contain sewage and stormwater runoff contaminants that could make you sick.

If you, your family or your pets come in contact with possibly contaminated water, wash with warm, soapy water, especially before handling food.

For the next 48 hours,
DO NOT SWIM, FISH or WALK
in outdoor waters!

For additional information, call (502) 587-0603 or visit the MSD Web site at www.msdlouky.org to register for automatic e-mail notifications.

MSD
Lentville and Jefferson County
Metropolitan Sewer District

WARNING ADVERTENCIA DURING AND AFTER RAIN EVENTS

The surface water in this area contains runoff contaminants and is subject to sewage overflows. Avoid contact with water, due to increased health risks, during these times. For more information, visit our website or call the telephone number below.

DURANTE Y DESPUES DE LLUVIA

El agua superficial en esta área contiene contaminantes de afluencia y está sujeta a desbordamientos de las alcantarillas. Evite todo contacto con el agua bajo estas circunstancias, debido a riesgos de salud. Para mayor información, visite nuestro sitio web o llame al teléfono que aparece a continuación.

MSD (502) 587-0603
www.msdlouky.org SIGN/SEÑAL MSD0025

Door cards

Project **WIN**

What You Can Do To Help!!

- Learn about Project WIN
- Provide input into program development
- Support the community-wide program over the next 17 years

Find more information
on our website at

www.msdlouky.org/projectwin/



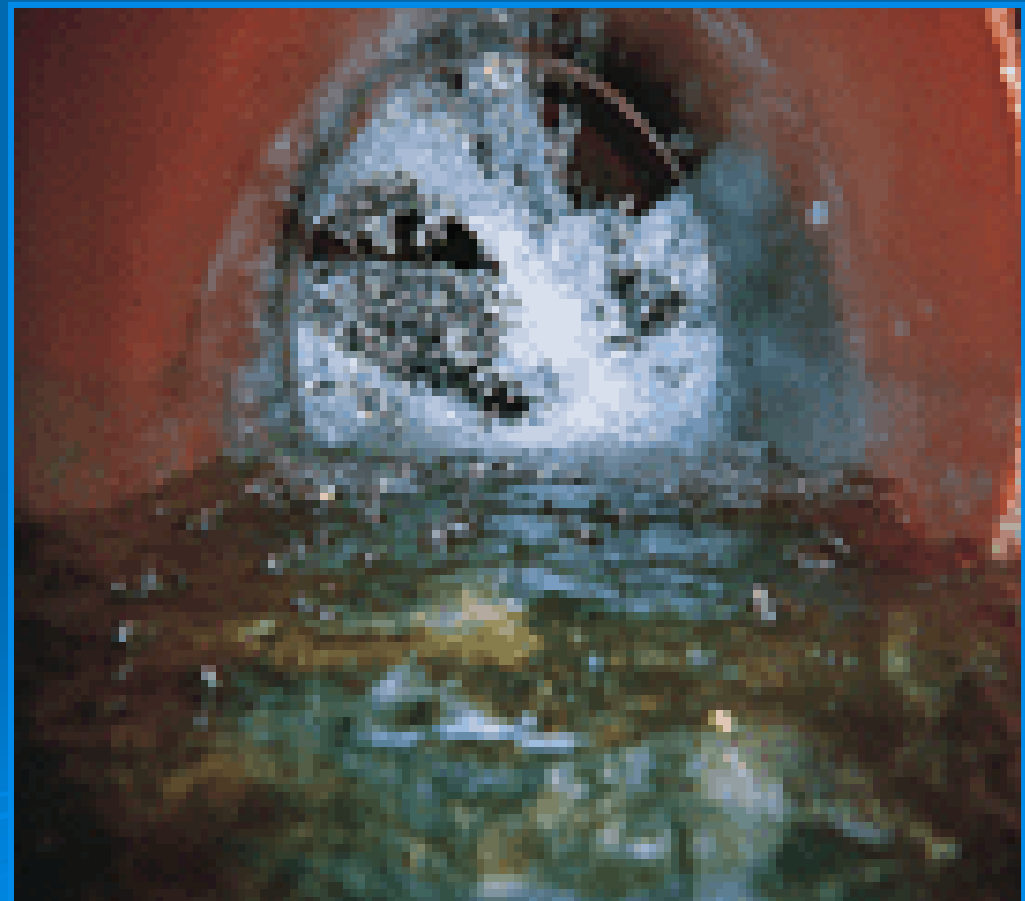
Click on
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Project **WIN**

What You Can Do To Help!!

Fix private sewer laterals that connect buildings to the main sewer

“leaky laterals”



Project **WIN**

What You Can Do To Help!!

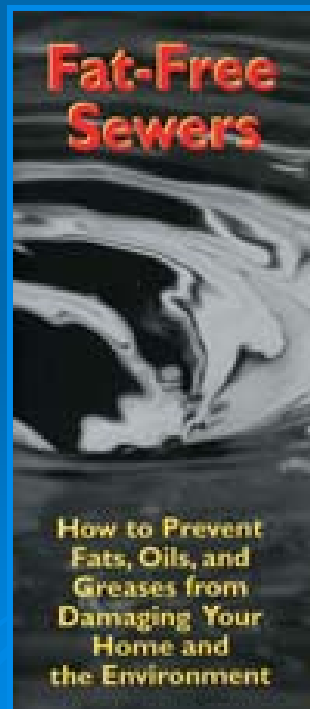
Dispose of grease properly

➔ Do not dump it down the drain!!!!

Put grease in metal container



Pickup brochure



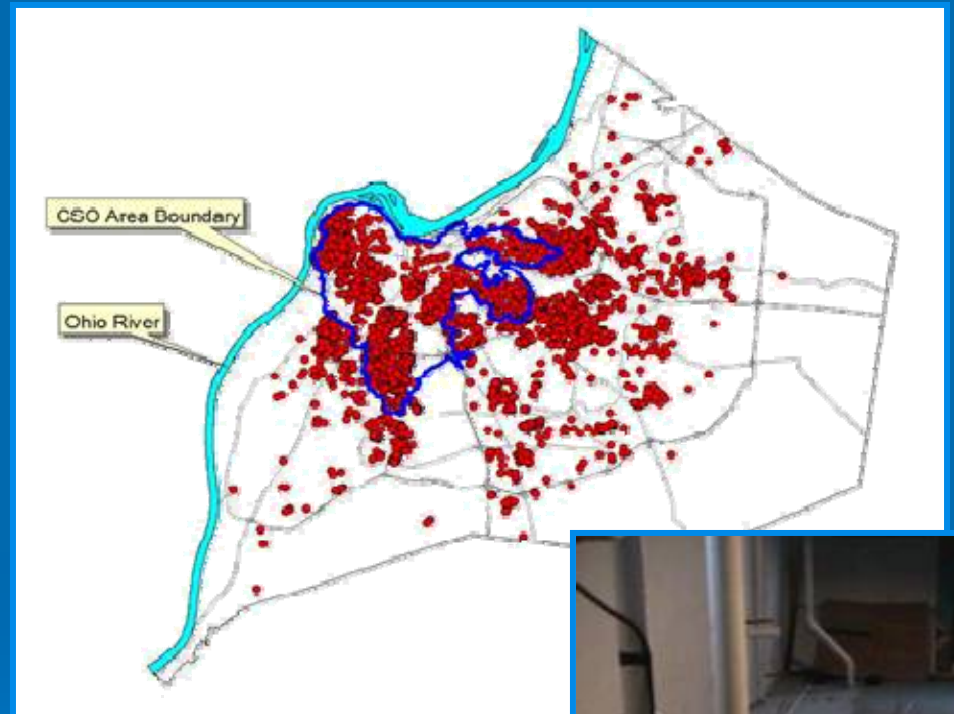
Grease accumulates in pipes



Project **WIN**

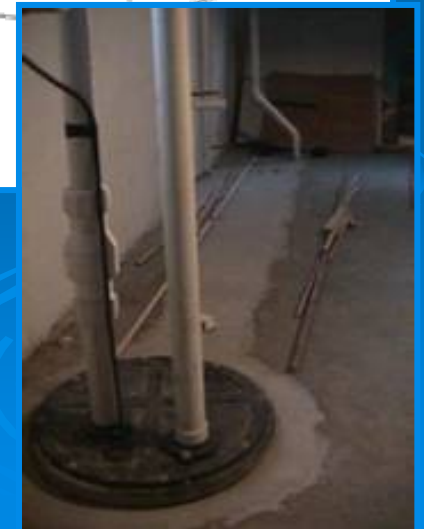
What You Can Do To Help!!

Disconnect sump pumps and downspouts from the sewer system



Plumbing Modification Program

587-0603



Project **WIN**

What You Can Do To Help!!

- Capture rain to use for watering your gardens and landscaping
 - Rain barrels
 - Rain gardens
- Plant trees and native vegetation



Project **WIN**

What You Can Do To Help!!

- Participate in “Clean Sweeps” and litter control programs
- Put trash in designated receptacles
- Dispose of yard wastes properly




Project **WIN**

What You Can Do To Help!!

Conserve water during and after rain storms

- Only use dishwashers and washing machines if absolutely necessary during these times to put less water in the sewers

Reduce flow to drainage system

- Wash automobiles on grassy areas instead of the pavement
 - Don't water the lawn or garden prior to rain events
- 

Project **WIN**

What You Can Do To Help!!

Complete the Survey
and leave it with us

PUBLIC MEETING ATTENDEE COMMENTS
Spring 2007

Name: _____ Zip Code

Address (Optional): _____

Daytime Phone (Optional): _____

E-mail (Optional): _____

Comments/Questions

How do you and your family currently use the Ohio River and local area streams? How often?

What concerns do you have about the state of our streams and river?

How important to you is clean streams and river water, compared to other priorities in life?

Other comments, concerns, or questions:

QUESTIONS

