

MSD Odor Mitigation Update

Mayor's Press Conference
July 30, 2024



Mitigation Methods



Carbon Canisters:
odorous air is moved through activated carbon canisters and odors are adsorbed onto the carbon



Biofilters:
odorous air is blown through wood chips to mitigate odor through natural oxidation

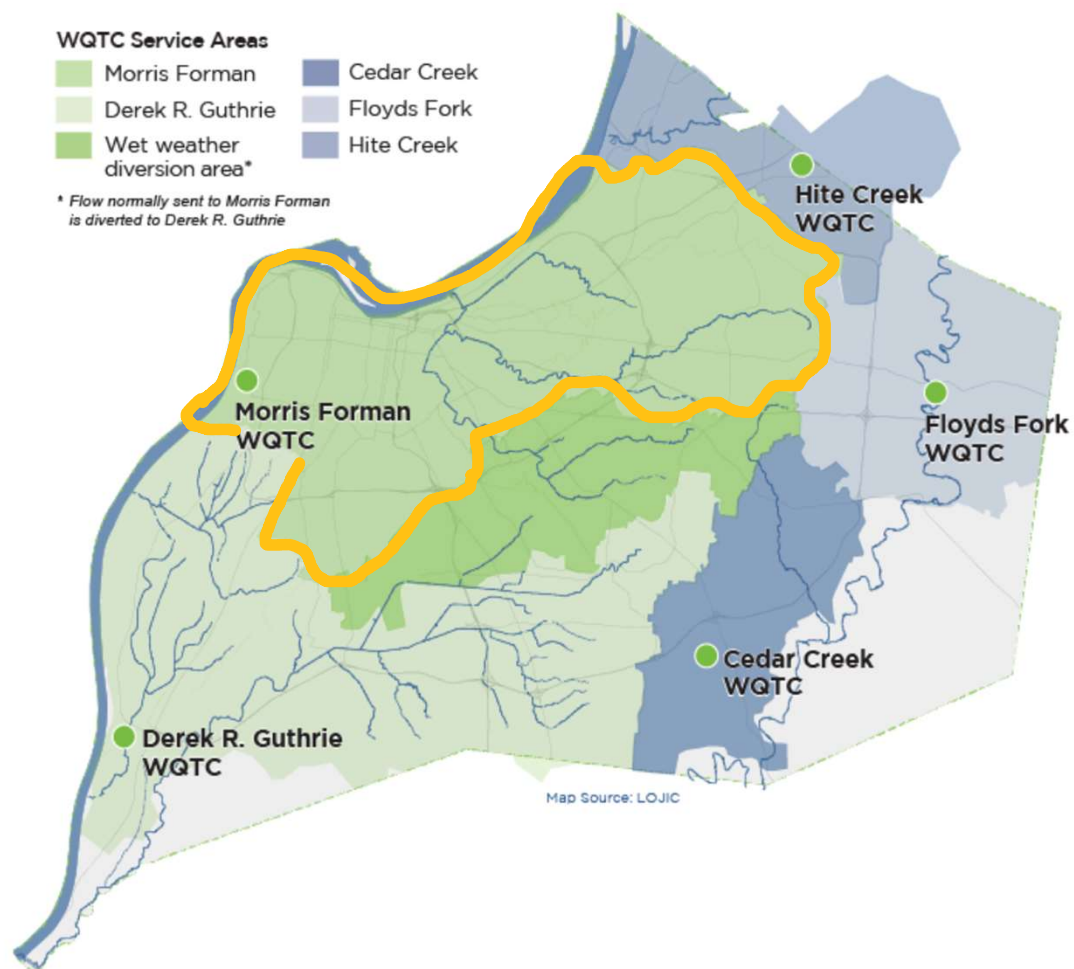


Chemical Treatment:
addition of bioxide at pump stations

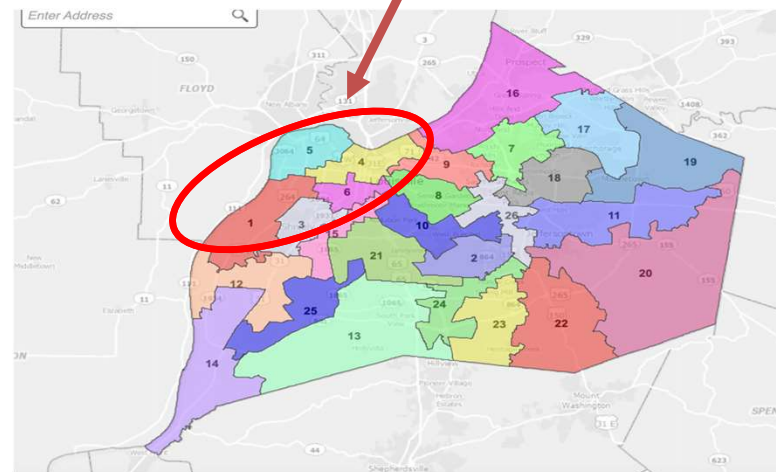


Biological Scrubbers:
odorous air is blown up through a packed bed of media to reduce odors

Morris Forman WQTC

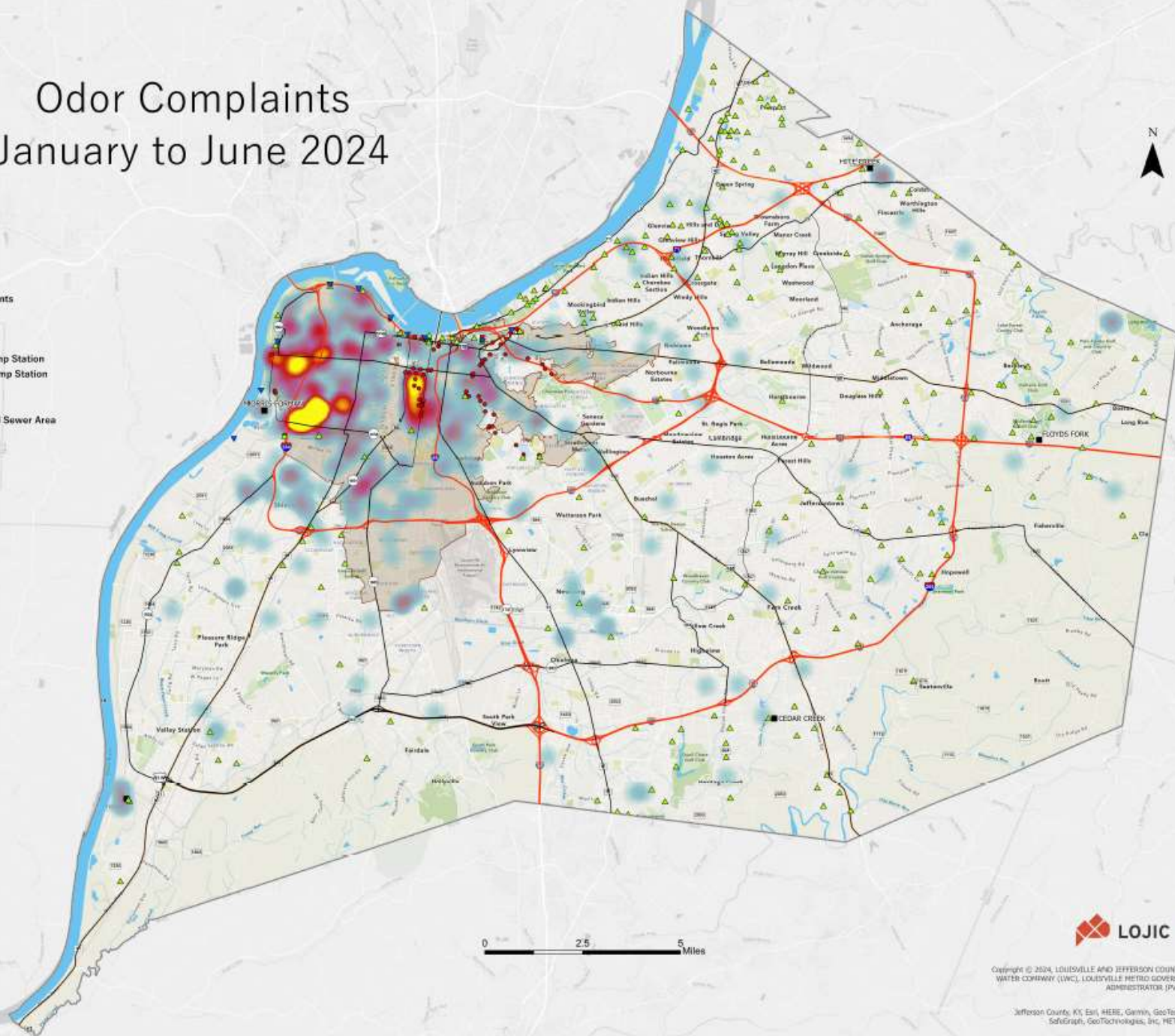


Target Area

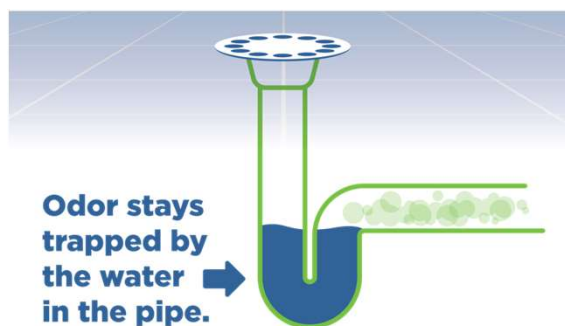


Odor Complaints January to June 2024

Odor Complaints
 Sparse
 Dense
 ▼ Flood Pump Station
 ▲ Sewer Pump Station
 ■ WQTC
 ● CSO
 Combined Sewer Area

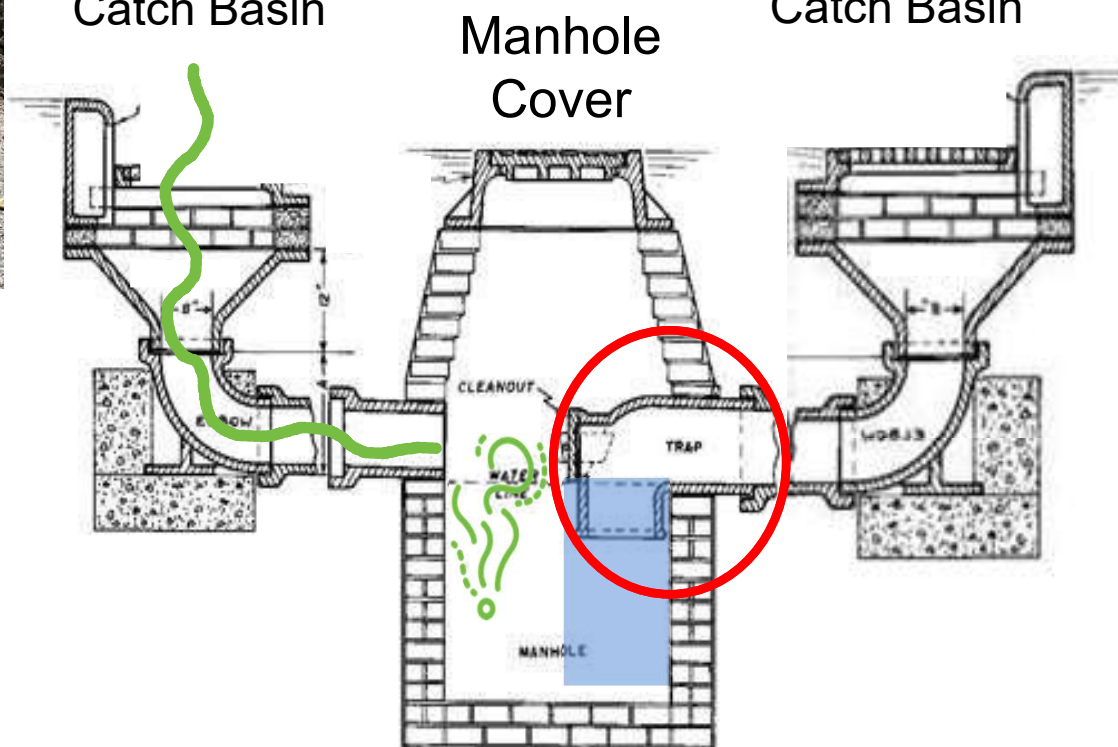


Combined Sewer System

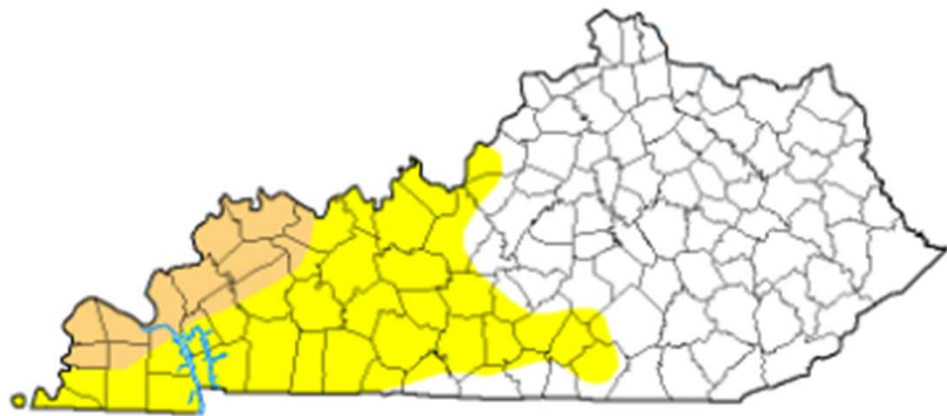


Un-Trapped
Catch Basin

Trapped
Catch Basin



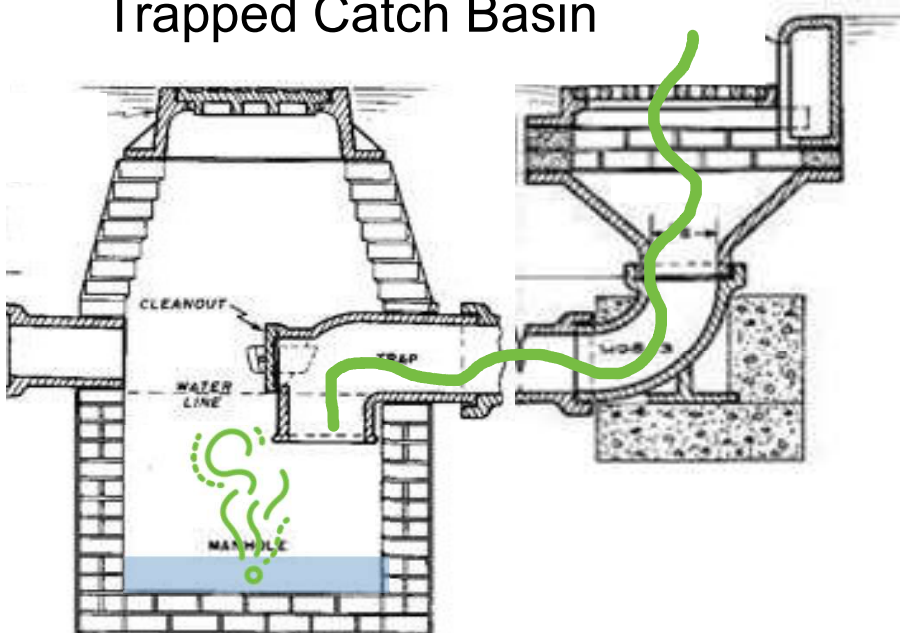
Impact of Dry Weather



Kentucky has experienced drought and dry spells in recent years.

With a combined sewer system designed to be self-cleaning, less water flowing through the system contributes to increased odor.

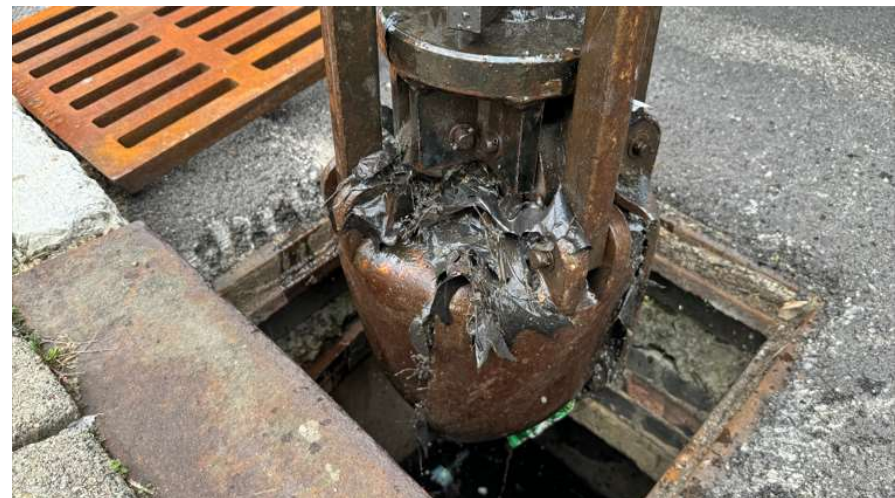
Trapped Catch Basin



For instance, even trapped catch basins can experience odor during extreme periods of dry weather.

Odor Mitigation Response

- Clean, flush and deodorize Catch Basins
- Flush Sewer Lines
- Replace missing or damaged Catch Basin Plugs
- Adjust Chemical Feeds at Pump Stations and Treatment Facilities
- Louisville Water Hydrant Flushing
- Adding Water to Trapped Catch Basins

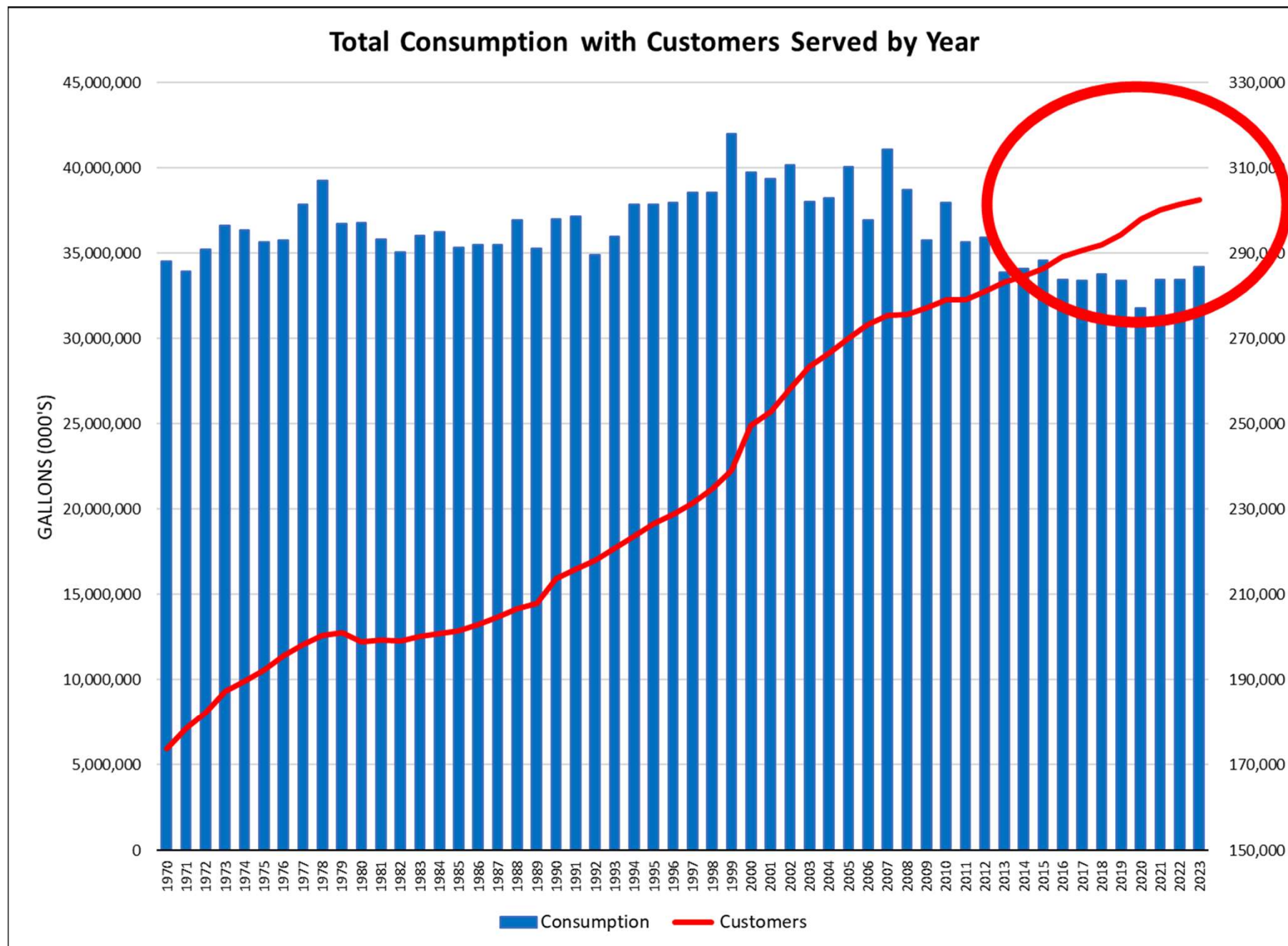


Morris Forman WQTC

- \$255 million project underway
- Will replace biosolids processing facility with a state-of-the-art system



Water Consumption Decreasing



2 inches of
rain produces

2 billion
gallons
of water
over the
community

VS.

Louisville Water's daily
customer consumption



150 million
gallons
of drinking
water

Catch Basin Replacement Program



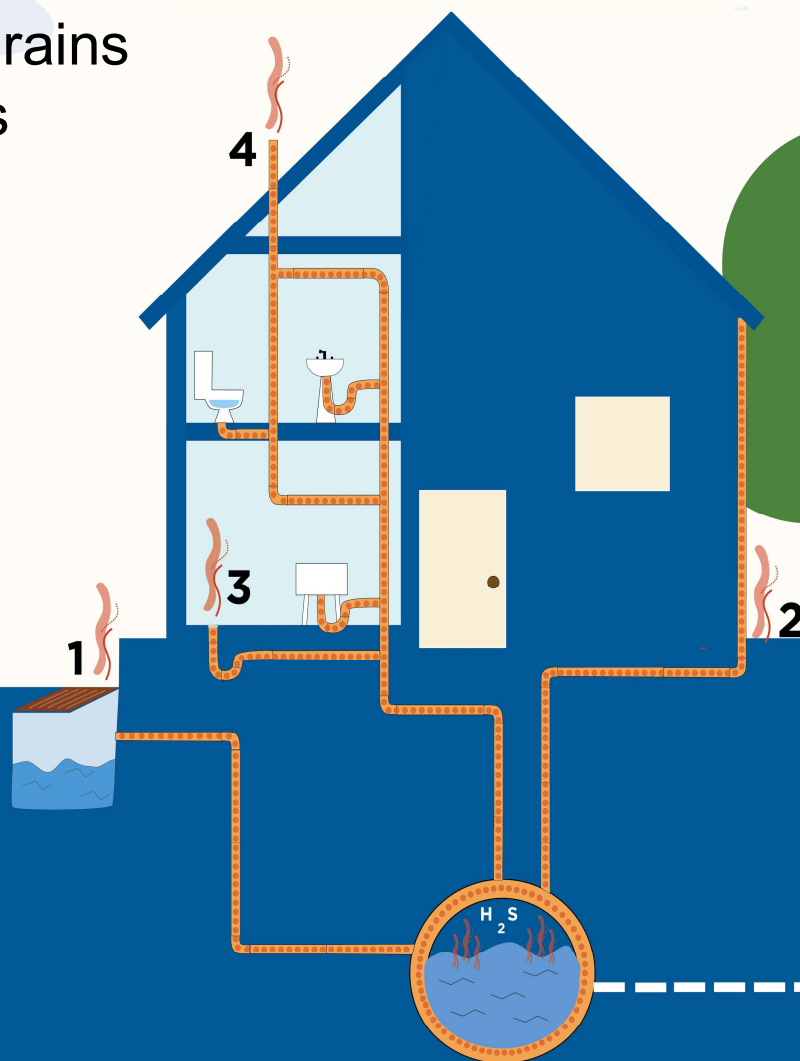
A series of construction projects are complete, under construction, or in the bidding process for 422 catch basin replacements covering five neighborhoods by the end of 2025.

Catch Basin Replacement Program

Neighborhood	Phase	Budget	# of Catch Basins	Timing
Park DuValle	Phase 1 Phase 2	\$160,593 \$213,000	12 catch basins 6 catch basins	Complete Complete
California	Phase 1 Phase 2 Phase 3 (Maple St.)	\$262,821 \$734,000 \$325,000	15 catch basins 40 catch basins 20 catch basins	Complete Estimated completion: October 2024 Bids projected for August 2024
Shawnee	Phase 1-2 Phase 3 Phase 4-6	\$400,000 \$1.3M \$1M	202 total catch basins	Estimated completion: May 1, 2025
Chickasaw	Inspection complete	TBD	73 catch basins identified for replacement	Bid documents in development
Taylor Berry	Inspection complete	TBD	54 catch basins identified for replacement	Bid projection - September 2024
Russell	Inspection complete	TBD	747 catch basins identified for replacement	Will be programmed in future capital improvement budgets in phases

Potential Sewer Odor Pathways

1. Catch Basins
2. Downspouts
3. Basement Drains
4. Sewer Vents



Communications to Date



- Post cards sent to customers in high odor areas informing of cIAIRity Meetings
- Odor Season letter sent to customers in high odor areas announcing “Odor Season”
- 2 of the 5 scheduled cIAIRity meetings held
 - **April 23:** MSD Central Maintenance Facility
 - **June 26:** Western Public Library
- Metro Council/Community Meetings
 - District 5 Metro Council Meeting on May 30
 - Old Louisville Neighborhood Council – District 6
 - Bishop’s Table (Gospel Missionary Baptist Church)

Up-Coming Community Meetings

Tuesday, August 27

Shawnee Library
3912 W. Broadway
6:00 - 7:00 p.m.

Tuesday, October 15

MSD Central Maintenance Facility
3050 Commerce Center Place
6:00 - 7:00 p.m.

Tuesday, October 24

Norton Healthcare Goodwill Opportunity Center
2820 W. Broadway
1:00 - 2:00 p.m.



Questions