

Partnering to Protect Public Health and Safety – Metro Council Budget Committee Hearing

July 20, 2017



Critical Repair and Reinvestment Plan Background

**Draft for Public Review -
20-Year Comprehensive Facility Plan
MSD's Critical Repair and Reinvestment Initiative
Volume 1 - Programmatic and Integrating Information**




ch2m **HDR** **JACOBS** **STRAND ASSOCIATES**



In Association with:
NAC | K.S. Ware & Associates | RKX | Powers Engineering




December 2016



CRITICAL REPAIR & REINVESTMENT PLAN

Community Conversation

Status Update
June 1, 2017



MSD's Critical Repair & Reinvestment Plan

Addresses Public Health and Safety Risks



Upgrade Ohio River Flood Protection



Reduce Neighborhood Flooding



Minimize Viaduct Flooding



Upgrade Wastewater Treatment Facilities



Prevent Collapsing Sewers



Comply with Consent Decree

MSD infrastructure solutions

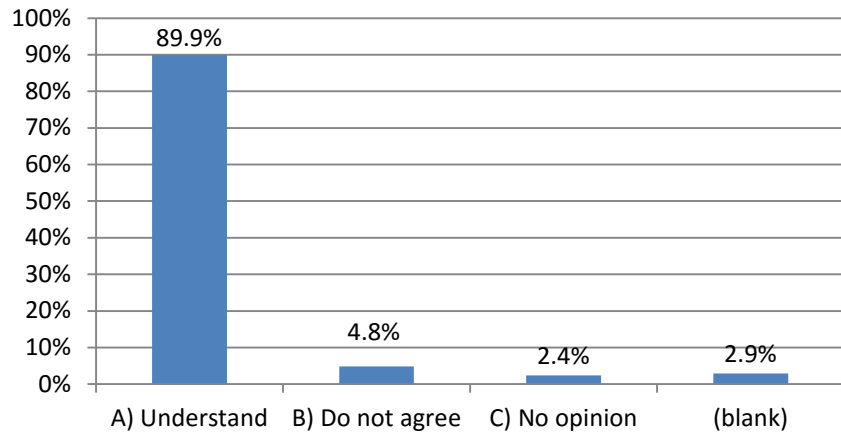
More than two years of analysis and careful planning



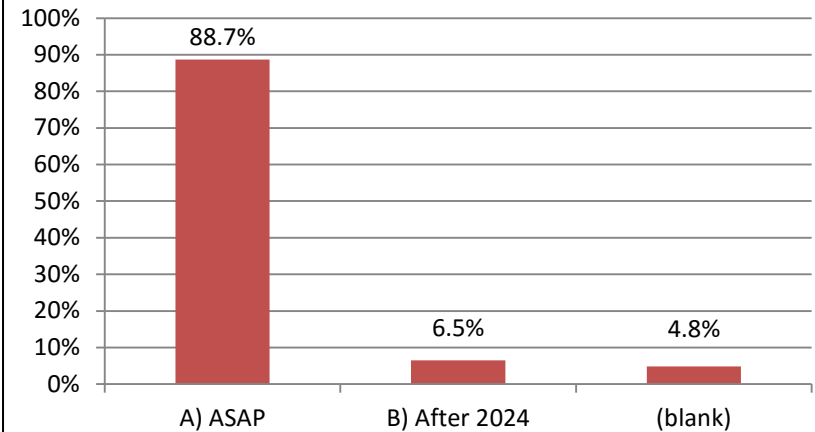
\$4.3 billion

Community Input Form Results

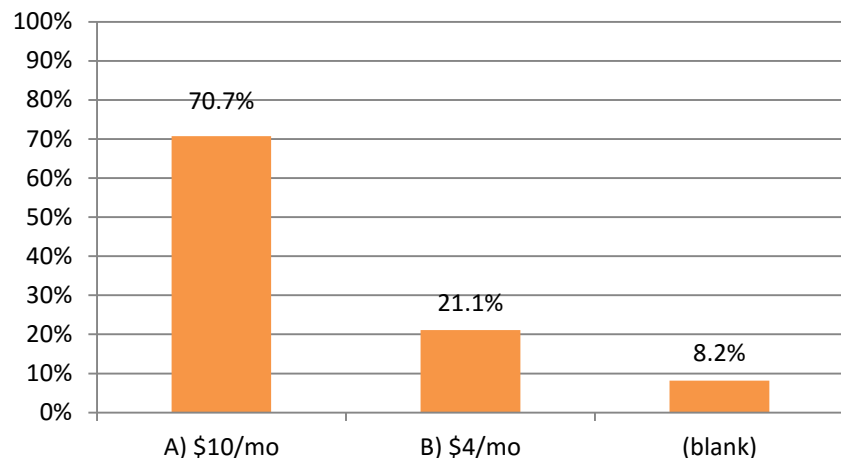
Understanding of Risks



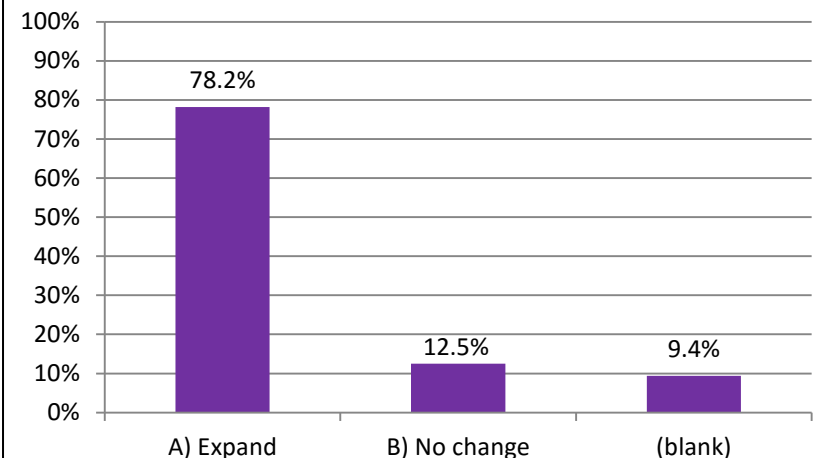
Schedule for Addressing Risks



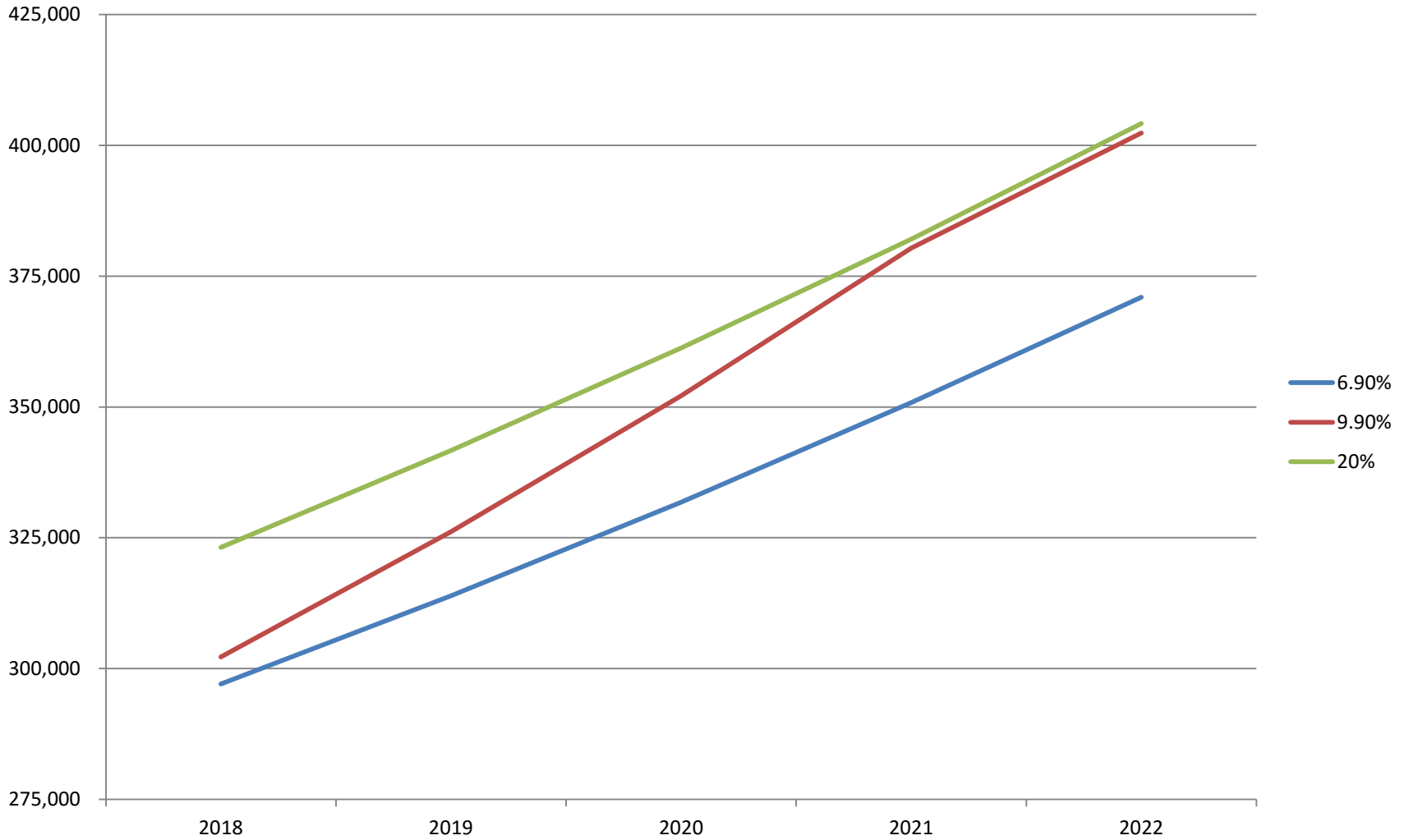
Rate Increase



Expansion of Rate Relief



Revenue per Rate Change



Average Monthly Residential Bill

	Actual	Projected				
	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Rate Increase	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%
Total Bill	\$52.50	\$56.11	\$59.98	\$64.12	\$68.55	\$73.28
Rate Increase	6.9%	9.9%	9.9%	9.9%	9.9%	6.9%
Total Bill	\$52.50	\$57.69	\$63.40	\$69.68	\$76.57	\$81.86
Rate Increase	6.9%	20.0%	6.9%	6.9%	6.9%	6.9%
Total Bill	\$52.50	\$62.99	\$67.34	\$71.98	\$76.95	\$82.26

5 Year Capital Program

Rate	Capital Generated
6.9% @ 5 Years	\$830 Million
9.9% (@ 4 Years +6.9% 1 Year)	+ \$280 Million (Helps Start CRRP)
20% (1 Year) + 6.9% (4 Years)	+ \$360 Million (\$80 Million more than 9.9%)

Drainage Response Initiative (DRI) Project Examples



Red Oak Lane -
Newburg



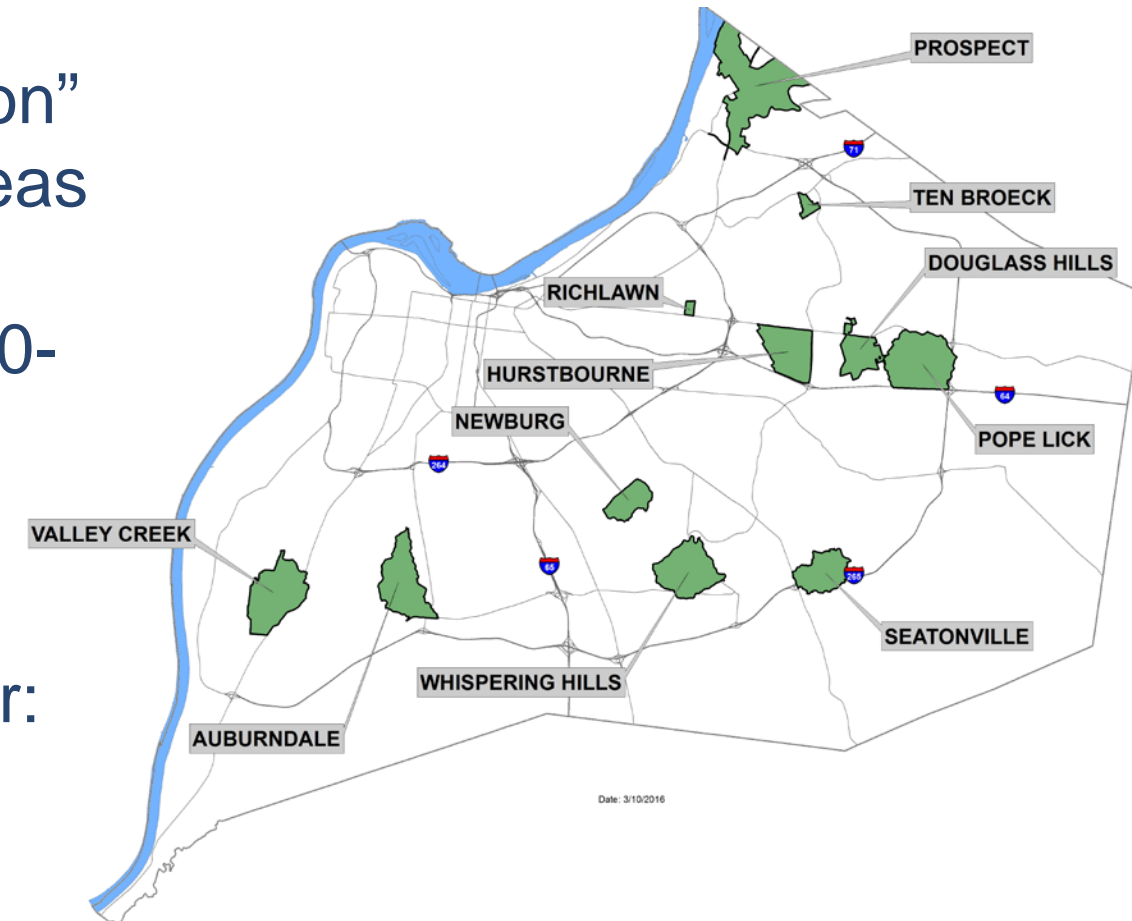
East Pages DRI



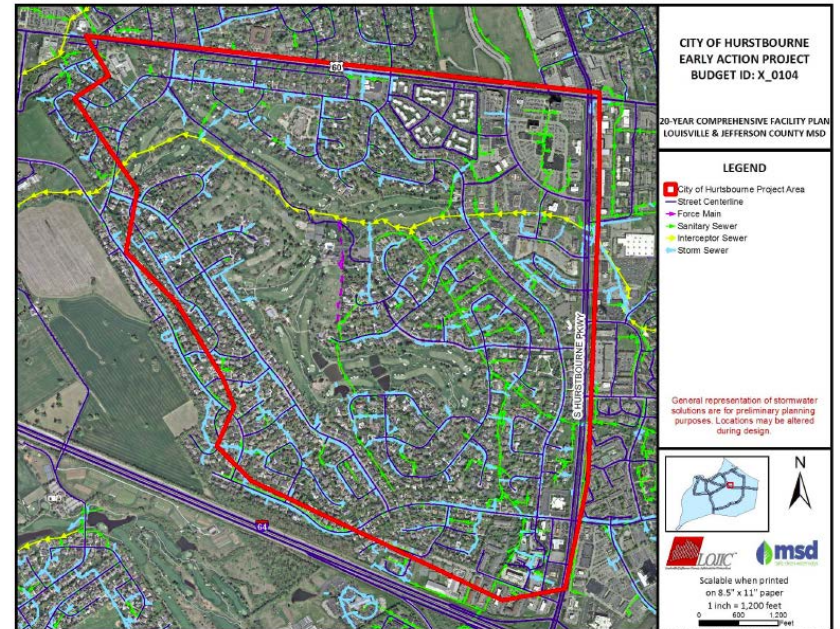
Chesapeake Bay Court DRI

Stormwater Master Plan – Implementing CRRP Recommendations

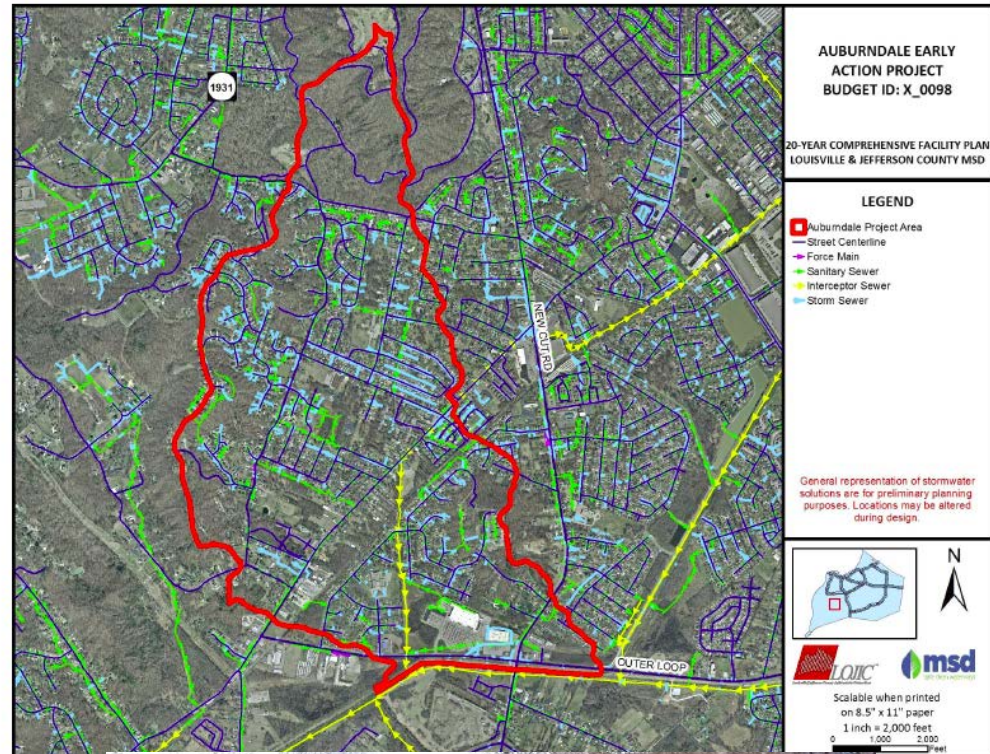
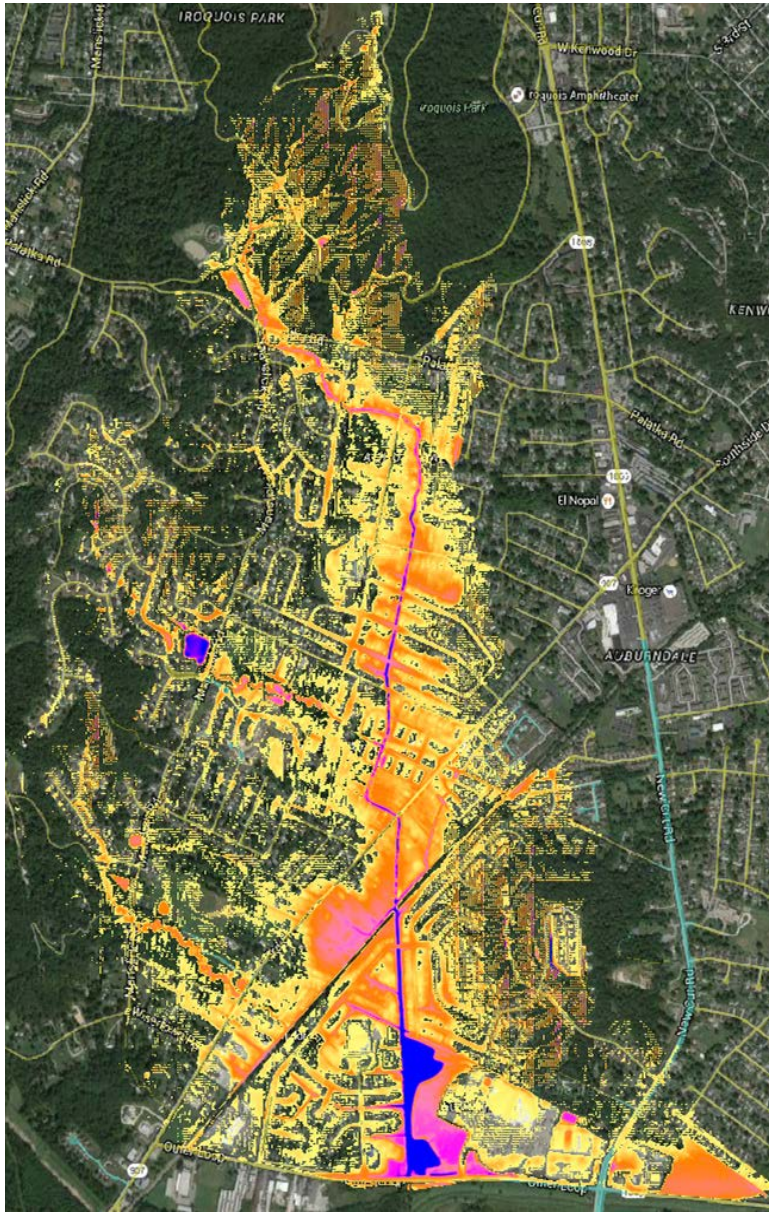
- Develop “early action” solutions for ten areas to meet the climate change projected 10-year storm
- Extrapolate those costs to the entire county, adjusting for:
 - Impervious area
 - Age



Early Action Plan Projects - Hurstbourne



Early Action Plan Projects - Auburndale



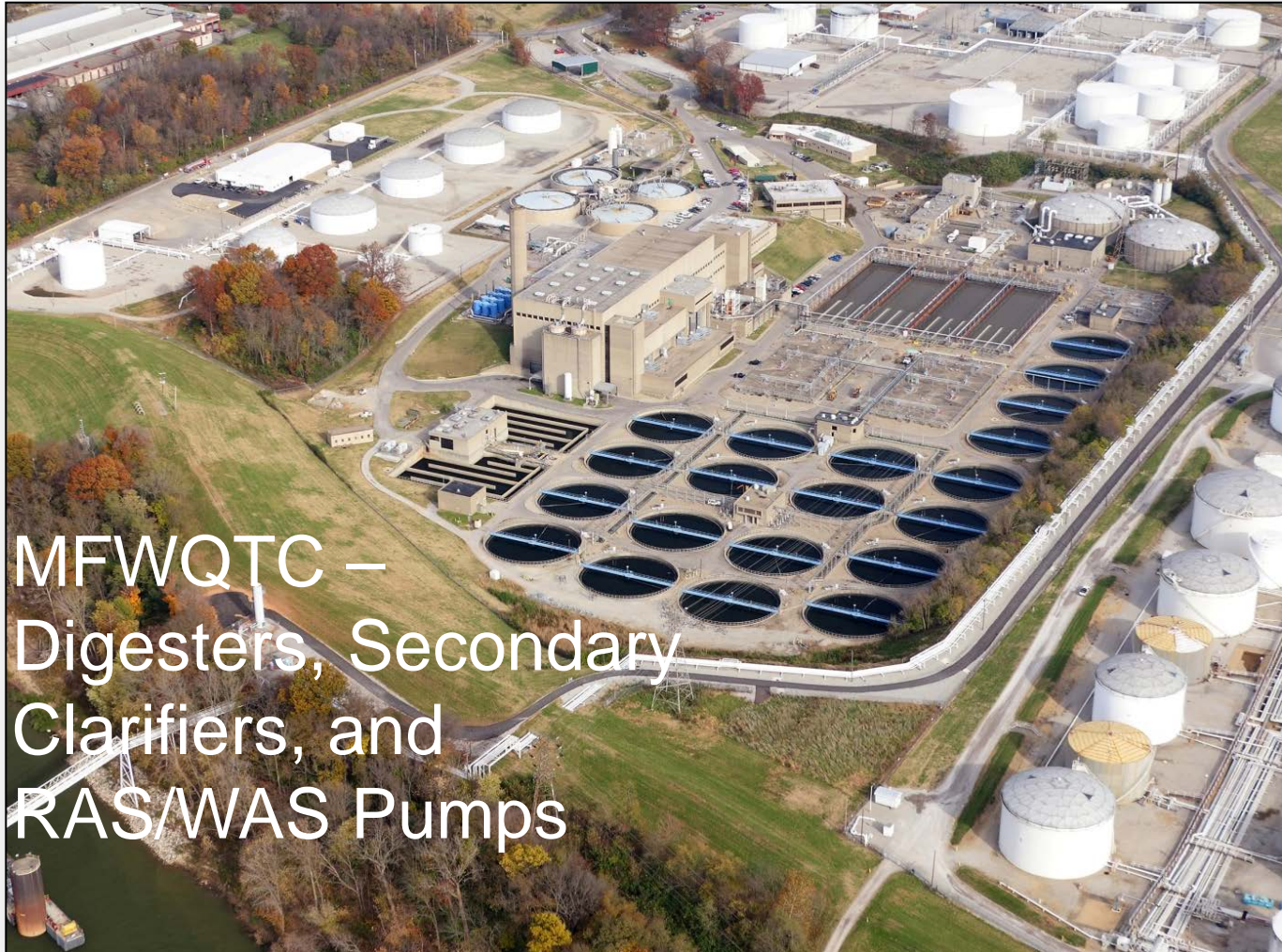
Paddy's Run Flood Pumping Station



- Constructed in 1953
- Protects 35,000 of our Friends and Neighbors

Part of the larger system that protects **\$23.8 billion** in property

Wastewater – Morris Forman WQTC



MFWQTC –
Digesters, Secondary
Clarifiers, and
RAS/WAS Pumps

(WRAP) Wastewater Rate Assistance Program

Need help with your MSD bill?

MSD offers a 30 percent rate reduction for wastewater charges to qualified low-income customers.

To qualify for MSD's Wastewater Rate Assistance Program (WRAP) you must be a Louisville MSD customer with a household income that falls within 130 percent of the Federal Poverty Guidelines, see chart (right).

The program is administered through Louisville Metro Department of Community Services.

Make an appointment to apply

You must make an appointment to apply in person at one of these Louisville Metro Department of Community Services locations.

• Urban Government Center

610 Barret Avenue, Room 127
Louisville, KY 40204
502.574.1157
Monday through Thursday, 8 AM to 4 PM

• Newburg Community Center

4810 Exeter Avenue
Louisville, KY 40218
502.574.1270
Monday through Thursday, 8 AM to 4 PM

• Southwest Government Center

7219 Dixie Highway
Louisville, KY 40272
502.574.1272
Monday through Thursday, 8 AM to 4 PM

Appointment by phone

Call 502.991.8391, or one of the centers listed above.

Appointment online

www.louisvilleky.caschedule.com

WRAP applicants must fall within 130 percent of Federal Poverty Guidelines— as shown below	
Number of Household Members	Gross Monthly Income
1	\$1,287
2	\$1,736
3	\$2,184
4	\$2,633
5	\$3,081
6	\$3,530
7	\$3,980
8	\$4,430
Each Additional Person	Add \$451

A credit for 30 percent will be applied to your wastewater bill upon verification of eligibility by the Department of Community Services for WRAP. Upon approval for WRAP, the discount will become effective on the next billing date from Louisville Water Company, and stay in affect for 24 months. Customers must reapply for another two year period before the initial 24 months expires.



24/7/365
502.587.0603 · CustomerRelations@LouisvilleMSD.org

[f](https://www.facebook.com/LouisvilleMSD) [i](https://www.instagram.com/LouisvilleMSD) LouisvilleMSD

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(502.000) 06-2017

Application Form

Louisville MSD Wastewater Rate Assistance Program

Head of Household Information

Name (Head of Household) SSN

Street Address Zip

Phone (area code)

Email

Date of Birth

Additional Household Member Information

Name(s)	SSN(s)	Date(s) of Birth	18 Years or Older

Louisville MSD Information

Name as printed on your MSD bill

MSD Account Number

Income/Household Information

Name	Gross Monthly Income	Income Source	Verified By

Signature

Head of Household Date

Staff Date

I certify that the information on this application is correct and that I have been notified of my appeal rights. I understand that the receipt of assistance from this program through misrepresentation is punishable by fine or imprisonment. I give permission to allow the agency or its funding source to verify the provided information.

QUESTIONS?

Average Monthly Residential Bill with WRAP

AVG. RESIDENTIAL RATE							
		2016	2017	2018	2019	2020	2021
Rate Increase		6.9%	9.9%	9.9%	9.9%	9.9%	6.9%
Wastewater		\$43.84	\$48.18	\$52.95	\$58.19	\$63.95	\$68.37
Drainage		8.66	9.52	10.46	11.50	12.63	13.50
Total Bill		\$52.50	\$57.70	\$63.41	\$69.69	\$76.59	\$81.87

WITH RATE ASSISTANCE			10% WRAP	20% WRAP	30% WRAP	30% WRAP	30% WRAP
Rate Increase		6.9%	9.9%	9.9%	9.9%	9.9%	6.9%
Wastewater		\$43.84	\$43.36	\$42.36	\$40.73	\$44.77	\$47.86
Drainage		8.66	9.52	10.46	11.50	12.63	13.50
Total Bill		\$52.50	\$52.88	\$52.82	\$52.23	\$57.40	\$61.36

FY18-FY20 Reduction in CRRP Wastewater Projects	ENG CIP Baseline	ENG CIP ~\$10/mo in FY18	Baseline vs. ~\$10/mo in FY18	ENG CIP ~\$5/mo in FY18	Baseline vs. ~\$5/mo in FY18
CMOM					
CCWQTC FORCEMAIN EXTENSION	\$177,000	\$177,000	N/A	\$0	-\$177,000
CCWQTC SAND FILTER REPLACEMENT	\$4,500,000	\$4,500,000	N/A	\$2,000,000	-\$2,500,000
COLLECTION SYSTEM SPARE PUMP INVENTORY	\$3,000,000	\$3,000,000	N/A	\$2,500,000	-\$500,000
FY18-FY22 OPERATIONS RENEWAL & REPLACEMENT	\$18,300,000	\$18,300,000	N/A	\$15,300,000	-\$3,000,000
FY19 CMOM PM ASSIST	\$225,000	\$187,500	-\$37,500	\$187,500	-\$37,500
FY19 PMP	\$2,000,000	\$2,000,000	N/A	\$1,500,000	-\$500,000
HCWQTC SOLIDS EXPANSION	\$6,800,000	\$6,800,000	N/A	\$800,000	-\$6,000,000
HITE CREEK WQTC EXPANSION	\$19,553,703	\$17,553,703	-\$2,000,000	\$3,623,703	-\$15,930,000
LEA ANN WAY PUMP STATION ELIMINATION	\$8,000,000	\$6,000,000	-\$2,000,000	\$0	-\$8,000,000
MF COLLECTION SYSTEM BAFFLES	\$624,000	\$400,000	-\$224,000	\$400,000	-\$224,000
MFWQTC SERVICE AREA MH AND ARV FLOODPROOFING FOR 100 YR STORM	\$136,000	\$136,000	N/A	\$0	-\$136,000
MFWQTC SERVICE AREA PS FLOODPROOF FOR 100 YR STORM	\$328,000	\$248,000	-\$80,000	\$0	-\$328,000
NIGHTINGALE REHAB	\$4,200,000	\$4,200,000	N/A	\$3,500,000	-\$700,000
Development					
FLOYDS FORK ZONE B SEWERS	\$7,900,000	\$7,900,000	N/A	\$4,000,000	-\$3,900,000
FLOYDS FORK ZONE C SEWERS	\$4,000,000	\$4,000,000	N/A	\$1,000,000	-\$3,000,000
KTC GREENWOOD RD ASSESSMENT	\$525,000	\$0	-\$525,000	\$0	-\$525,000
NMC					
MFWQTC DIGESTER LIDS & MIXERS	\$4,500,000	\$4,500,000	N/A	\$500,000	-\$4,000,000
MFWQTC EQUIPMENT RENEWAL AND REPLACEMENT IN YEAR 5	\$25,500,000	\$15,000,000	-\$10,500,000	\$7,000,000	-\$18,500,000
MFWQTC SEC CLARIFIERS & RAS/WAS PUMPING	\$6,500,000	\$5,500,000	-\$1,000,000	\$5,000,000	-\$1,500,000
MFWQTC SEDIMENTATION BASIN REHAB INCLUDI	\$12,500,000	\$8,500,000	-\$4,000,000	\$2,500,000	-\$10,000,000

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FY18-FY20 Reduction in CRRP Stormwater Projects	ENG CIP Baseline	ENG CIP ~\$10/mo in FY18	Baseline vs. ~\$10/mo in FY18	ENG CIP ~\$5/mo in FY18	Baseline vs. ~\$5/mo in FY18
Drainage					
AUBURNDALE EARLY ACTION PROJECT	\$12,600,000	\$4,200,000	-\$8,400,000	\$1,800,000	-\$10,800,000
CITY OF HURSTBOURNE EARLY ACTION PROJECT	\$6,000,000	\$3,000,000	-\$3,000,000	\$0	-\$6,000,000
MASTER PLAN IMPLEMENTATION	\$6,000,000	\$5,000,000	-\$1,000,000	\$0	-\$6,000,000
NEWBURG EARLY ACTION PROJECT	\$10,250,000	\$3,000,000	-\$7,250,000	\$0	-\$10,250,000
POPE LICK EARLY ACTION PROJECT	\$6,100,000	\$1,220,000	-\$4,880,000	\$0	-\$6,100,000
PROSPECT EARLY ACTION PROJECT	\$6,000,000	\$1,500,000	-\$4,500,000	\$1,500,000	-\$4,500,000
SEATONVILLE EARLY ACTION PROJECT	\$3,400,000	\$3,400,000	N/A	\$0	-\$3,400,000
STORMWATER MASTER PLAN	\$4,000,000	\$4,000,000	N/A	\$2,000,000	-\$2,000,000
TEN BROECK EARLY ACTION PROJECT	\$1,000,000	\$0	-\$1,000,000	\$0	-\$1,000,000
VALLEY CREEK EARLY ACTION PROJECT	\$5,540,000	\$3,000,000	-\$2,540,000	\$0	-\$5,540,000
VIA11 E BRANDEIS AVE & BROOK VIADUCT FLOOD RELIEF	\$28,043,000	\$2,000,000	-\$26,043,000	\$2,000,000	-\$26,043,000
VIA16 3RD & EASTERN PKY VIADUCT FLOOD RELIEF	\$5,808,000	\$0	-\$5,808,000	\$0	-\$5,808,000
WHISPERING HILLS EARLY ACTION PROJECT	\$2,560,000	\$2,560,000	N/A	\$0	-\$2,560,000
Floodplain Management					
FLOOD RESPONSE-BUYOUTS MITIGATION&GRANTS	\$12,000,000	\$10,000,000	-\$2,000,000	\$4,000,000	-\$8,000,000
Ohio River Flood Protection					
10TH STREET FLOOD PUMPING STATION TO LOS 5 - IMPROVEMENTS / GENERATOR	\$1,035,000	\$0	-\$1,035,000	\$0	-\$1,035,000
17TH STREET FLOOD PUMPING STATION TO LOS 5 - IMPROVEMENTS / GENERATOR	\$2,525,000	\$2,525,000	N/A	\$0	-\$2,525,000
34TH STREET FLOOD PUMPING STATION TO LOS 5 - IMPROVEMENTS / GENERATOR	\$2,000,000	\$0	-\$2,000,000	\$0	-\$2,000,000
5TH STREET FLOOD PUMPING STATION TO LOS 5 - IMPROVEMENTS / GENERATOR	\$820,000	\$0	-\$820,000	\$0	-\$820,000
ALLOCATION - ANNUAL FLOOD PUMPING STATIONS EQUIPMENT RENEWAL AND REPLACEMENT	\$3,000,000	\$3,000,000	N/A	\$2,500,000	-\$500,000
FLOODWAL & LEVEE RISK ASSESSMENT	\$750,000	\$0	-\$750,000	\$0	-\$750,000
LEVEE & FLOODWALL REPAIR & RENEWAL LIGHT	\$1,875,000	\$1,500,000	-\$375,000	\$1,500,000	-\$375,000
PADDYS RUN FPS FULL REHAB	\$31,575,000	\$8,000,000	-\$23,575,000	\$2,000,000	-\$29,575,000
ROBERT J. STARKEY FLOOD PUMPING STATION TO LOS 5 - IMPROVEMENTS / GENERATOR	\$4,360,000	\$2,180,000	-\$2,180,000	\$0	-\$4,360,000
WESTERN PARKWAY FLOOD PUMPING STATION TO LOS 5 - IMPROVEMENTS	\$11,648,000	\$4,648,000	-\$7,000,000	\$4,648,000	-\$7,000,000
WESTERN PARKWAY FPS - RELIABILITY IMPROVEMENTS (EVALUATION REPAIRS)	\$3,334,000	\$3,334,000	N/A	\$2,000,000	-\$1,334,000

FY18-FY20 Reduction in CRRP Support Systems Projects	ENG CIP Baseline	ENG CIP ~\$10/mo in FY18	Baseline vs. ~\$10/mo in FY18	ENG CIP ~\$5/mo in FY18	Baseline vs. ~\$5/mo in FY18
Capital Equipment					
FY18 VEHICLES & EQUIPMENT	\$3,500,000	\$3,500,000	N/A	\$2,500,000	-\$1,000,000
FY19 VEHICLES & EQUIPMENT	\$3,500,000	\$3,500,000	N/A	\$1,500,000	-\$2,000,000
FY20 VEHICLES & EQUIPMENT	\$3,500,000	\$3,500,000	N/A	\$3,000,000	-\$500,000
SYSTEMS AUTOMATION	\$1,200,000	\$750,000	-\$450,000	\$750,000	-\$450,000
Facilities					
LOUISVILLE GREEN MAJOR MAINTENANCE	\$3,000,000	\$3,000,000	N/A	\$2,000,000	-\$1,000,000
OTHER FACILITIES REPAIRS	\$2,500,000	\$2,500,000	N/A	\$2,000,000	-\$500,000
ROOF REPLACEMENTS	\$3,230,458	\$3,204,950	-\$25,508	\$3,204,950	-\$25,508

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Capital Spend per Rate Change

