

Louisville MSD

Program for Public Information

2022 Update





Program for Public Information Plan (PPI) 2022 Plan Update



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1.0 Introduction

This document is the 2022 Update of the Program for Public Information Plan (PPI) that was originally completed for Louisville Metro, KY in 2014. This update includes information about outreach efforts being made in Louisville Metro related to flood and water quality topics. Floodplain and stormwater management is overseen by the Louisville Metropolitan Sewer District (MSD) in Louisville. MSD has been involved in various outreach projects for many years, including outreach for the MS4 (Municipal Separate Storm Sewer System) program, the Community Rating System, and Project WIN (Waterway Improvements Now). Project WIN is in response to the EPA's consent decree for the combined and separate sanitary sewer systems in Louisville Metro.

The PPI committee was originally formed in 2014. This year's annual meeting was held on February 7, 2023 to discuss the 2022 update of the plan. The PPI Committee consists of:

- Lori Rafferty, PE, CFM, Louisville MSD, Floodplain Manager and CRS Administrator
- Jennifer Caummisar-Kern, PE, Louisville MSD Engineer III
- Harold Adams, Louisville MSD Communications
- Amy Rose, Louisville Metro EMA
- Robert English, English Insurance Group
- Mike Fleitz, DM Fleitz Insurance (ANFI™)
- Tim Corrigan, The Rotunda Group
- David Kaelin, Jefferson County Soil and Water Conservation District
- Teena Halbig, Floyds Fork Environmental Association
- Austin Clark, Jefferson County Soil and Water Conservation District

Based on the annual meeting, it was determined that the original target audiences from the 2014 plan will remain the same. The audiences are the general public, residents in the floodplain, repetitive loss properties, builders and remodelers, real estate companies, lending companies, and insurance companies. The PPI committee determined that the priority topics would be the six CRS priority topics, in addition to adding General Preparedness and Basement Flooding as additional topics.

The 2022 PPI Committee recommended MSD:

- Review types of projects completed by CRS Class 1 and 2 communities for potential additional credits
- Review CRS open space credits for critical habitat
- Investigate allowing customers to sign up for emails regarding flood issues
- Coordinate presentations to realtors with those already being done by PPI Group insurance agent
- Investigate the ability to distribute floodplain information at Louisville Metro Planning Commission meetings
- Review restrictions on gas stoves



Table 1 below lists the priority topics. A list of acronyms and glossary of terms is included as Appendix 1.

	Table 1 CRS Priority Topics
	Priority Topics
1.	Know your flood hazard
2.	Insure your property from the flood hazard
3.	Protect people from the hazard
4.	Protect your property from the hazard
5.	Build responsibly
6.	Protect natural floodplain functions
7.	General preparedness
8.	Basement flooding



2.0 Flood Insurance Coverage Assessment

In February 2021, updated floodplain maps were adopted. Table 2 below reflects the impact of the changes to the area of the floodplain and the number of structures in the floodplain.

Table 2 Floodplain Map Change Impacts					
Floodplain	Area of Floodplain	Structures in floodplain			
FEMA SFHA (2006)	26,640.8 Acres	9,054			
FEMA SFHA (2021)	26,027.5 Acres	8,620			
FEMA SFHA Change	-613.3 Acres	-434			

In order to determine the level of flood insurance coverage in Louisville/Jefferson County, available flood insurance policy data was reviewed. Updated flood insurance data for NFIP policies was received from FEMA in October 2022. Flood insurance data was not received for 2019, 2020 and 2021. For this reason, the most recent flood insurance policy data provided by FEMA from 2018 was used for detailed review, along with local GIS information.

Overall, for buildings in the floodplain, the number of properties that carry NFIP flood insurance for building coverage decreased from 2018 to 2022. In 2022, there were 3,162 total policies for Jefferson County with 2,414 (76.3%) in the SFHA. Based on this data, only 38.0% of homes in the SFHA have flood insurance from the NFIP which is a decrease from 43.7% in 2018. Flood insurance coverage of properties in the floodplain by each watershed can be found in Table 2 for both 2018 and 2022.



Table 3 NFIP Flood Insurance Coverage by Watershed For FEMA SFHA								
Watershed	# of Buildings in the Floodplain		# of Buil Flood w/Bu Cove	Iplain	% of Bu	uildings Co	vered	
	2018	2022	2018	2022	2018	2022	% Change	
Cedar Creek	33	36	9	7	27.3%	19.4%	-7.9%	
City/Ohio River	600	524	222	153	37.0%	29.2%	-7.80	
Floyds Fork	194	224	54	60	27.8%	26.8%	-1.0%	
Goose Creek	125	95	40	32	32.0%	33.7%	1.7%	
Harrods Creek	115	132	88	5 <mark>9</mark>	76.5%	44.7%	-31.8%	
Middle Fork Beargrass Creek	177	267	89	107	50.3%	40.1%	-10.2%	
Mill Creek	1,315	1,325	643	377	48.9%	28.5%	-20.4%	
Muddy Fork Beargrass Creek	156	104	61	35	39.1%	33.7%	-5.4%	
Pennsylvania Run	24	56	18	14	75.0%	25.0%	-50.0%	
Pond Creek	3,644	4,489	1420	109 <mark>1</mark>	39.0%	24.3%	-14.7%	
South Fork Beargrass Creek	1,117	1,368	630	479	56.4%	35.0%	-21.4%	
Total	7500	8,620	3274	2,41 <mark>4</mark>	43.7%	28.0%	-15.7%	

The percentage of homes in the floodplain carrying flood insurance was not consistent by watershed, although most watersheds decreased the number of flood insurance policies between 2018 and 2022. The largest negative change was -50.0% in Pennsylvania Run. The only improvement in the percentage of buildings with flood insurance was 1.7% in the Goose Creek watershed.



2.1 Flood Insurance Coverage by Flood Zone

Another way to look at flood insurance coverage is by flood zone. In Louisville, flood zones are categorized by the following designations: A, AE, and X zones. X zones are further broken down to include areas of 0.2% annual chance flood, areas protected by the levee and the 1% annual chance future conditions flood. Using those categories as shown on Louisville's Flood Insurance Rate Maps, Table 4 was created showing flood insurance coverage by flood zone.

Table 4 NFIP Insurance Coverage by Flood Zone								
Flood Zone	Total # of Buildings		Buildings w/ g Coverage % of Buildings Covered					
	2022	2018	2022	2018	2022	% Change		
0.2% Annual Chance Flood Hazard	22,664	27	65	5.0%	0.3%	-4.7%		
1% Future Conditions	1,626	153	108	8.2%	6.6%	-1.6%		
AE Zone	8,475	3016	2,378	48.2%	28.1%	-20.1%		
A Zone	145	258	36	21.0%	24.8%	3.8%		
X Zone	227,798	777	534	0.3%	0.2%	-0.1%		
X Protected by Levee	10,152	94	41	0.3%	0.4%	0.1%		
Total	270,860	4,325	3,162	1.6%	1.2%	-0.4%		

The coverage rate for insurance is highest in Zone AE for both 2018 and 2022, where flood insurance requirements are mandatory with a federally backed mortgage. Mandatory coverage is also required in Zone A, but the coverage rate was only 21.0% in 2018 and 24.8% in 2022. This could be due to the fact that Zone A areas are generally older, established neighborhoods, and therefore are more likely to have homes that no longer carry a mortgage. Zone A mapping is also based on an approximate study, rather than a detailed study, so people may feel like they are less reliable in predicting actual risk, and therefore people are less likely to purchase flood insurance. The largest increase in flood insurance coverage was in Zone A, with an increase of 3.8%. The largest reduction in flood insurance coverage was 20.1% in the AE Flood Hazard Area. The overall percentage of homes with flood insurance reduced by 0.4%.

In areas where flood insurance is not required, coverage rates continue to be much lower. The areas designated as 1% future conditions have the highest rate among the Zone X areas, with 6.6% coverage in 2022. The Zone X protected by levee flood hazard area has the next highest percentage with 0.4% coverage in 2022. The areas with the lowest percentage of coverage are Zone X and 0.2% Annual Chance Flood Hazard, with 0.2% and 0.3%, respectively.



2.2 Flood Insurance Coverage for Repetitive Loss Properties

Repetitive loss property owners have been designated as one of the target audiences; therefore, flood insurance coverage for these properties were also examined. Repetitive loss properties are listed by flood zone in Table 5.

	Table 5 NFIP Insurance Coverage for Repetitive Loss Properties								
Flood Zone		titive Loss dings	# of Repetitive Loss Buildings w/ Building Coverage		% of Buildings Covered				
	2018	2022	2018	2022	2018	2022	% Change		
0.2% Annual Chance Flood Hazard	1	1	0	0	0.0%	0.0%	0.0%		
1% Future Conditions	7	4	2	2	28. <mark>6%</mark>	50.0%	21.4%		
AE Zone	292	260	206	159	70. <mark>5</mark> %	61.1%	-9.4%		
A Zone	9	1	8	1	88.9 <mark>%</mark>	100%	11.1%		
X Zone	38	21	8	1	21.1 <mark>%</mark>	4.8%	-16.3%		
X Protected by Levee	0	1	0	0	N/A	0.0%	0%		
Total	347	288	224	163	64.6 <mark>%</mark>	56.6%	-8.0%		

The majority of repetitive loss properties are located in Zone AE. Among repetitive loss properties in Zone AE, the percentage of flood insurance coverage was 70.5% in 2018 and 61.1% in 2022. These percentages are significantly higher than the overall percentage of homes in Zone AE with flood insurance coverage (48.2% in 2018 and 28.1% in 2022), indicating previous flooding events encourage homeowners to carry flood insurance. The percentage of flood insurance policies for repetitive loss buildings reduced by 8.0% from 2018 to 2022.

2.3 Summary

Based on the information above, it is clear that the majority of residents in the Louisville/Jefferson County area do not carry flood insurance on their buildings. Residents continue to be much more likely to purchase insurance if they are in Zone AE or A, where purchase is mandatory with a federally backed mortgage, but even in these areas, less than half of the properties are covered. Residents are most likely to carry flood insurance if they are repetitive loss properties but even for repetitive loss properties, the rate of insured buildings decreased by 8.0% between 2018 and 2022. In Zone X areas, there was a decrease in flood insurance coverage in areas designated as the 0.2% annual chance conditions and the 1% annual chance future conditions with the area of 0.2% annual chance conditions being the area least likely to carry flood insurance. It should be noted that data presented here includes only those policies issued by the National Flood Insurance Program and does not include private flood insurance polies.



3.0 Outreach

Three types of outreach projects have been developed to convey the messages listed in Section 3.0. They are outreach projects (OP), coverage improvement projects (CP), and flood response projects (FRP). The outreach projects and coverage improvement projects are disseminated to the public on a yearly basis. FRP projects are distributed if an area is flooded within the community. In 2022, Louisville did not experience flood events requiring implementation of FRP.

3.1 Outreach Projects (OP)

Outreach projects directed toward the general public align with the 8 CRS priority topics. Table 6 below includes a summary of messages for the general public, their related CRS priority topic number and intended outcomes.

A list of the individual outreach projects completed for this year is included in Appendix 2 & 3 and a review of each of the outreach projects is below. Examples of the projects can be found in Appendix 4.

Table 6 Messages for General Public	
Messages	Outcome
Flood determinations are available online at www.louisvillemsd.org . (1)	Increase in the number of flood determinations requested on MSD's website.
Know the flood hazard. (1)	Increase in the number of flood determinations requested on MSD's website.
You should buy flood insurance. Flood insurance is available anywhere in Jefferson County. (2)	Increase in number of flood insurance policies.
Avoid contact with streams after it rains. (3)	No health impacts related to stream contact.
General flood safety, such as turn around, don't drown, stay out of flooded waters, do not enter a flood basement, turn off main electric switch, water valve, and gas valve before flooding starts. (3)	No injuries or fatalities related to flooding.
Keep debris and trash out of streams and ditches. Keep catch basins clear of debris and leaves. (4)	Reduced number of calls related to stream obstructions.
Store irreplaceable items and valuables in an area safe from flooding. Move vehicles to higher ground. (4)	Less damage to contents and vehicles due to flooding.
Keep water clean: Don't dump in storm drains, they drain to the stream. Do not drain pools directly to streams. Limit use of fertilizers and pesticides. Scoop the poop – keep pet waste from entering waterways. Use a car wash. Do not flush prescription drugs or put down drains (6)	Improved water quality.



Table 6 Messages for General Public	
Messages	Outcome
How streams function, keep streams clean. Maintain stream buffers. Benefits of planting more trees. (6)	Improved water quality.
Improve water quality with green infrastructure. (6)	Increase in green infrastructure construction.
Report broken silt fences, they help keep our streams clean. (6)	Fewer notices of violation issued for Erosion Prevention & Sediment Control Ordinance.
General preparedness: Develop a safety plan in case of evacuation. Assemble supplies in advance, such as first-aid kit, bottled water, battery-powered radio, flashlight, etc. (7)	More families have prepared evacuation plans.
Avoid basement backups: Know where it goes! Some things are not meant to be flushed. Conserve water during heavy rains to avoid overloading sewers. Avoid putting fats, oils, and grease down the drain. MSD's plumbing modification program is available to reduce basement backups. (8)	Reduced number of calls related to sewer backups.

Signs located around Louisville Metro to increase awareness are the first outreach project. These signs are the "Caution: Do Not Enter When Flooded" signs (OP#1), which are strategically placed on roadway sections that are prone to flooding. OP#2 is the "Flood Hazard Area" sign that warns drivers of the height of the base flood elevation in the area. OP#3 is the "Great Flood of 1937 High Water Mark" signs, which show the height of the historic 1937 flood at various locations in Metro Louisville. Green infrastructure signs (OP#4) are outreach signs that explain how green infrastructure works and encourage the public to build green infrastructure on their properties. The final sign types and programs address dumping and littering (OP#5). There are "Dump No Waste - Drains to Stream" signs located on catch basins. These signs let the public know that the catch basins go directly to a stream; therefore dumping waste or any contaminants will affect the streams. Additionally, Louisville Metro Public Works posts "No Dumping" signage throughout the county. Illegal dumping is prohibited by Louisville Metro Ordinance



Example of Great Flood of 1937 High-Water Mark Sign

§51.510. Louisville Metro further discourages littering and dumping through their "Report a Litterer" Program (https://louisvilleky.gov/government/brightside/report-litterer) and Pop-Up Drop-Off Waste Disposal Events (https://louisvilleky.gov/government/public-works/pop-drop-waste-disposal-events). Pop-Up Drop-Off events collect and provide proper disposal of items including electronics, bulk waste, tires, medication and yard waste. Louisville Mayor, Greg Fischer, introduced a program called "Clean Collaborative" in January 2021. This program coordinates stakeholders to maximize cleaning efforts

(https://louisvilleky.gov/government/public-works/clean-collaborative). Stakeholders include: Public Works, Brightside, Downtown Partnership, Louisville Waste Management District. These projects are all considered effective and will be continued in the coming year.



Letters and newsletters are another type of outreach project. MSD sends letters to all properties in the floodplain and repetitive loss properties outside the floodplain each year (OP#6). This letter includes information about flood insurance, how to determine if a property is in the floodplain, and information about the Flood Protection Assistance MSD provides. Also included in this mailing is the MSD Floodplain News newsletter.

Realtors, insurance agents and lenders are targeted groups for outreach. Realtors (OP#7) and insurance agents (OP#9) annually include a story in their online newsletters advertising that MSD provides flood determinations and other flood related information to customers. OP#8 is outreach to lenders. This outreach is a letter mailed to lenders in Louisville Metro including information on how to determine if a property in the floodplain, additional flood risks not included on the FIRM, mandatory insurance purchase requirement, how to find available elevation certificates and how to contact MSD for additional information.

OP#10 is the bill stuffer sent to all MSD customers annually. The bill stuffer included information about flood insurance and how to improve water quality in the local waterways. Bill stuffers are updated each year and will continue to be sent at least annually. MSD continues to advertise annually in at least one major publication. This year MSD placed ads in Business First (OP#11) regarding the stormwater quality, pet waste disposal and staying away from waterways during and after a rain event.



Information about MSD's Plumbing Modification Program (OP#12) is distributed in the Plumbing Modification Program packets. The purpose of the Plumbing Modification Program is to help prevent basement backups.

Displays are another way MSD provides information to the public. MSD's lobby includes displays (OP#13), which include a map of the extents of the historic 1937 flood and a video board that shows videos about various flood and water quality related topics. Displays are also

Parklands of Floyds Fork Display

located at the Parklands of Floyds Fork Visitor Center, the Louisville Nature Center and Louisville Science Center. MSD's lobby also includes a flood information kiosk that includes at least one brochure about each of the eight priority topics (OP#14).

The Army Corps of Engineers built an obelisk at the McAlpine Locks (OP#15) that shows the public the height of various historic river stages.

MSD publishes a quarterly enewsletter called Streamline (OP#16). Over the past year, this newsletter included information about how customers can help improve water quality and prevent basement backups.



Obelisk showing High Water Marks at McAlpine Locks and Dam Visitor Area



Metro Council eNewsletters are OP#17. Multiple Council districts in Louisville released monthly enewsletters that included information about basement backups, general preparedness and keeping catch basins clear. MSD will continue to provide flood-related information to the Metro Council and other groups for their newsletters in the coming year. The newsletters will be continued in the next year.

The City of Anchorage, KY is a small city within MSD's Louisville-Jefferson County service area. Their local newsletter, the "Anchor Age", included an article related to natural function and water quality (OP#18).

River and stream cleanups (OP#19) are a good way to involve the public in helping with water quality. MSD sponsors two stream cleanups every year. These stream cleanups are the Mayor's Give-A-Day program and the Ohio River Sweep. The Mayor's Give-A-Day program consists of a week of cleanups and other service events around Louisville Metro. MSD encourages employees to participate in cleanups and hosted a trash cleanup along Mill Creek. Due to on-going concerns regarding COVID-19, the annual Ohio River Sweep, which is typically a large river sweep organized by the multi-state Ohio River Valley Water Sanitation Committee (ORANSCO) and locally organized by MSD, was forced to transition to small group collection

efforts instead of the traditional large group. MSD hosted one of these Minor Ohio River Sweeps at Karen Lynch Park.

Multiple smaller clean ups occurred throughout the year including: Guardian Creek Cleanup hosted by Metro Council District 21, Earth Day Shawnee Park River Cleanup, Holy Cross High School Mill Creek Cleanup.

Stream cleanups are effective in encouraging the public to help cleanup streams as well as raising awareness about litter and water quality. MSD will continue to host, attend and promote cleanups in the area.



Ohio River Sweep

In order to educate contractors and homebuilders about erosion prevention and sediment control (EPSC) requirements and to meet the EPSC ordinance, MSD teaches classes for both contractors and homebuilders (OP#20). These classes are administered by Jefferson County Public Schools. This in person class format was transitioned to an online self-paced class as of January 2021, and it is available in both English and Spanish in the hope to educate a larger customer base. During 2022, 37 people took the Home Builder Course and 415 took the Contractor Course. Website link: http://lifelonglearning4u.com/msd/

MSD requires annual inspections of post-construction best management practices and these inspections must be completed by a Qualified Post-Construction inspector. Training and certification are offered online and 115 people completed the course in 2022 (OP#21). Website link: http://oit.louisvillemsd.org

Presentations to interest groups (OP#22) are another type of outreach that is conducted. In the last year, MSD made presentations on various flood and water quality related topics to the Westwood Garden Club, Rambler Garden Club, Ohio Stormwater Conference, Louisville Free Public Library Summer Reading Program Series, Kentucky Stormwater Association, Sprouting Gardeners Club, Kentucky Society of



Professional Engineers and the Kentucky Association of Mitigation Managers. Presentations will continue to be made to school age groups, professional groups and community groups in the next year.

MSD also attends festivals, tree planting events and other shows throughout the community (OP#23). In 2022, MSD hosted a booth at the Kentucky State Fair, Home Garden & Remodeling Show, Waterfront Park 4th of July Celebration, Jeffersontown Gas Light Festival, and Louisville Free Public Library Family STEAM Day and the Ripple Effects Photo Workshop. MSD hosted events including the MSD Field Day for contractors and design professionals. MSD led field trips for several school age groups including Liberty High School and Trinity High School, and Holy Cross High School. MSD staff participated in various tree planting events though out the community including the Southend Beautification Campaign Tree Planting, native tree planting on Beachland Beach Rd, and planting of trees at the MSD Central Maintenance Facility as part of the inaugural Louisville Tree Week. MSD promoted the Arbor Day tree planting at Joe Creason Park.

MSD also supports Louisville Nature Center programs including field trips, day camps, workshops and Scout programs for school age children. MSD will continue to attend these types of events to reach out to the public to educate them on flood and water quality related issues. MSD will also look into attending additional festivals and shows in the future as well continuing to attend those they already support.

Social media platforms are OP#24 and provide an additional way to reach out to the public about flood and water quality related issues. In the last year, posts included topics on knowing the flood hazard, protecting people and property, water quality, and general preparedness. Social media posts will continue to be periodically sent on the priority topics in the next year.

There are several tree planting events and sponsorships available in Louisville (OP#25). MSD, Louisville Grows and Trees Louisville provide free trees or rebate programs to purchase trees. The webpages for these programs outline the reasons trees are important to stormwater quality and flooding.

A MSD press release related to swimming pool draining to limit impact to water quality and erosion is included as OP#26.



3.2 Coverage Improvement Plan

Based on discussions with the PPI committee, the Coverage Improvement Plan Implementation (CPI) outreach projects to increase flood insurance coverage rates in Louisville Metro were reviewed. The projects include at least one project for each of the target areas. The list of proposed projects for the Coverage Improvement Plan is included as Table 5. Appendix 5 includes the CPI Project Worksheet and examples of the projects are included in Appendix 6.

3.2.1 General Public

Most of the coverage improvement plan projects are targeted to the general public since flood insurance coverage is relatively low throughout the county. The projects used to target the general public are council person newsletters, MSD's Streamline newsletter, MSD's website, flood insurance brochures, the Kentucky State Fair, and flood insurance tweets.

The first project directed to the general public are the Metro council newsletters (CPI#1). Louisville/Jefferson County is split into 26 council districts. Each district elects a council person to represent their district. Based on discussions within the PPI committee, the council person newsletters are a good way to reach the community and include the community's elected leadership. Over the past year, several council people included information in their public newsletters that encouraged residents to check their insurance coverage. Next year, MSD will



Flood Insurance Brochures in the MSD Lobby

continue to encourage all council districts to share flood insurance information with their residents.

CPI#2 is the MSD Streamline eNewsletter. In December, MSD included an article to encourage people to protect their property with flood insurance. MSD will plan to include at least one article related to purchasing flood insurance in the Streamline eNewsletter in the next year.

CPI#3 is the MSD website. MSD updates the website on a regular basis and includes new information as it



Booth at the Kentucky State Fair

becomes available. A tab has been set up specifically for flood insurance, which provides the public with information about flood insurance and links to the FloodSmart, FEMA, and the NFIP websites. This website will continue to be reviewed to ensure the information is up to date and helpful to the community.

Flood insurance brochures, CPI#4, continue to be available in the MSD Lobby. MSD will continue to review these flyers and brochures to ensure they are current and useful to the residents of Louisville.

CPI#5 is the Kentucky State Fair which is held annually in August. This event draw 1,000's of



residents from the area every year. Pamphlets advising homebuyers to understand their flood risk and flood insurance requirements prior to purchase were distributed.

CPI#6, Flood Insurance Social Media is the most recent addition to the outreach program. In 2015, MSD created a Twitter and Facebook account as another way to reach out to the public. Since then, MSD has added Instagram and YouTube accounts as well. MSD will continue to use social media to reach out of the public with at least two posts related to flood insurance each year.

3.2.2 Floodplain Residents and Repetitive Loss Properties

One project is planned to specifically reach out to residents in the floodplain and residents of repetitive loss properties. CPI#7 is a flyer about flood insurance that is sent to all properties that are either located in the floodplain or are on the repetitive loss list. This project will be continued in the next year.

3.2.3 Builders and Remodelers

CPI#8 is the Building Industry Association of Greater Louisville/Land Development Committee meeting. This outreach project is directed at builders and remodelers. The Land Development Committee is a group of developers and engineers that typically work on development projects. This group generally meets monthly. For CPI#8, either a presentation will be made to the BIA Land Development Committee or information will be provided to BIA to be included in their eNewsletter. In 2022, MSD information regarding flood insurance was included in the BIA November eNewsletter. MSD plans to give at least one presentation or provide information to be included in at least one eNewsletter that addresses flood insurance in the coming year.

3.2.4 Real Estate, Lending, and Insurance Companies

CPI#9 is a project to make presentations to real estate agents, lenders, and/or insurance companies to increase knowledge about flood insurance. Lori Rafferty gave an in person presentation at the Greater Louisville Homes Real Estate Agency on June 8, 2022 and a virtual presentation was made by MSD on December 6, 2022. Both presentations covered topics including the mandatory flood insurance requirements, Flood Insurance Rate Maps, and Letters of Map Changes. The virtual presentation was promoted through the Greater Louisville Association of Realtors e-newsletter and their Facebook page. These presentations will be continued in the coming year either in person or online.



		Table 5 Coverage Improver	ment Plan						
ı	Project Name	Description	Outcome	Assigned	Schedule				
	Target Audience 1. General Public								
CIP#1.	Council Person Newsletters	Include article in council person newsletters or email blasts related to flood insurance.	Increase in flood insurance policies throughout the county	Floodplain Manager	Sent by Dec 31 st				
CIP#2.	MSD Streamline eNewsletter	Article in newsletter about flood insurance	Increase in flood insurance policies throughout the county	Floodplain Manager	Sent by Dec 31 st				
CIP#3.	MSD Website	Maintain flood insurance web page on MSD website.	Increase in flood insurance policies throughout the county	Floodplain Manager	Ongoing				
CIP#4.	Flood Insurance Information @ MSD Office	Brochures and handouts related to flood insurance in kiosk in lobby.	Increase in flood insurance policies throughout the county	Floodplain Manager	Brochures replaced as needed				
CIP#5.	Flood Insurance Information @ Kentucky State Fair	Brochure related to flood insurance available at Kentucky State Fair	Increase in flood insurance policies throughout the county	Floodplain Manager	Summer				
CIP#6.	Flood Insurance Social Media	Use Twitter, Facebook or other social media to engage public about flood insurance	Increase in flood insurance policies throughout the county	Public Relations Specialist	At least 2 posts by Dec 31st				
	Target Aud	ience 2. Floodplain Residents	and Repetitive Loss Pr	operties					
CIP#7.	Flood insurance flyer to floodplain/ repetitive loss properties	Include flood insurance flyer in annual letter to floodplain residents and repetitive loss properties	Increase in flood insurance policies in the floodplain	Floodplain Manager	Sent by Dec 31st				
		Target Audience 3. Builder	s and Remodelers						
CIP#8.	Building Industry Association/Land Development Committee	Include at least one presentation or enewsletter annually related to flood insurance.	Increase knowledge about flood insurance	Floodplain Manager	Meeting by Dec 31 st				
	Target Audience 4. Real Estate, Lending, and Insurance Companies								
CIP#9.	Presentations	Presentations related to flood insurance and floodplain issues	Increase knowledge about flood insurance	Floodplain Manager	At least 2 meetings by Dec 31st				



3.3 Flood Response Preparations (FRP)

In addition to the annual outreach projects and coverage improvement plan projects, the PPI committee also discussed the flood response projects. The flood response projects are listed in Table 6. Appendix 7 includes the FRP Project Worksheet and copies of the FRP projects are included in Appendix 8.

The first FRP project is a letter to flooded properties (FRP#1). A template has been developed and letters will be sent to areas based on known flooding, high water marks, and customer calls. Using this information, flood areas will be determined and addresses will be pulled from the property database using GIS mapping. This project was determined to be effective and will be continued in the event of future flooding.

FRP#2 is door hangers. These door hangers list information about how to apply for a floodplain permit and flood safety information. MSD inspectors will hang the door hangers in flooded areas after a flood occurs. This procedure will also be continued in future flooding events.

After each flood event, MSD will post a story on the main webpage addressing flood issues (FRP#3). This project was determined to be effective and will be continued in the event of future flooding.

FRP#4 through 6 are providing handouts and brochures to customers after flooding events. In addition to the regular handouts available at MSD, four brochures related to flood events will be made available to customers in the event of a flood. These brochures are an Increased Cost of Compliance brochure, a clean-up safety handout, and a handout about the permitting requirements. This project was also considered effective and will be continued in future flooding events.

FRP #7 is a handout with tips for selecting a contractor.

FRP #8 is an MSD press releases regarding flood clean up safety.



	Table 6							
		esponse Preparations F		.				
Project Name FRP#1. Letter to Flooded Properties	Description Letters sent to flooded areas advising residents of flood safety and clean up issues, ways to protect their property, flood insurance availability, and permitting requirements	Outcome Increased awareness of flood safety and clean up issues. Reduction of future flood insurance claims and increase in flood insurance policies.	Assignment Floodplain Manager	Procedure Letters will be sent by the MSD Development Team after flooding has occurred. Addresses will be determined using GIS and known flooding extents.				
FRP#2. Door Hangers	Door hangers listing permitting requirements and flood clean up information	Increase in floodplain permits and reduction in floodplain related "Stop Work Orders." Increased awareness of clean up issues.	MSD Enforcement Inspectors	Door hangers will be distributed by MSD inspectors during flood inspections after flooding has occurred.				
FRP#3. Website Story	Website story on MSD's website (www.louisvillemsd.org) listing flood information for all of the priority topics	Increased awareness of flood related topics, especially safety during a flood, clean up after the flood, and ways to protect property.	Floodplain Manager/IT Department	Floodplain manager will submit story to MSD IT department for inclusion on website.				
FRP#4-7 Handouts	Handouts related to clean up after a flood, permitting requirements, ICC funds, and emergency help will be available at MSD main office	Increased awareness of post-flood related topics, specifically permitting, clean up, ICC funds, and available emergency help. Increase in floodplain permits and reduction in floodplain related "Stop Work Orders."	Floodplain Manger	Handouts will be distributed by the MSD Development Team.				
FRP#8	Handout related to choosing qualified contractors will be available at MSD main office	Increased awareness of post-flood related topics, specifically how to choose a contractor.	Floodplain Manger	Handouts will be distributed by the MSD Development Team.				
FRP#9	Press release giving flood clean up safety tips.	Increase in floodplain permits and reduction in floodplain related "Stop Work Orders." Increased awareness of clean up issues.	MSD Communicatio ns	Press Release to be made and posted on the MSD website.				



4.0 Other Public Information Initiatives

4.1 Map Information Service

MSD provides map information to the public in several ways. The most common method in which MSD provides map information is the MSD flood determination website at https://apps.lojic.org/msdflooddetermination.

Customers enter basic information, such as contact information and the address of the property in question, and MSD will respond with map information within 2 business days. Map information can also be obtained by contacting MSD by phone, by email, or in person through our customer service counter. This service is advertised annually to real estate agents, lenders, and insurance agents, as well as properties in the floodplain and repetitive loss properties. The PPI committee agreed to continue these procedures. The flood determination letter also includes information about whether a home or the property is located in any regulatory floodplain, and if a floodplain permit has been issued for the building in the last 10 years.

The current floodplain maps adopted February 26, 2021 are shown as the current floodplain layer on the www.lojic.org website.

4.2 Hazard Disclosure/Real Estate Agent's Brochure

Based on 201 KAR 11:350, the Seller's Disclosure of Property Conditions form, real estate agents in Louisville are required to disclose whether a property is located in a floodplain. Real estate agents can obtain this information from MSD using the methods described above in the Map Information Service section. Based on discussions with the real estate representative on the PPI committee, MSD will continue to advertise the flood determination service through the Greater Louisville Association of Realtors. MSD will also visit realtor meetings in the area or host meetings online to discuss the hazard disclosure and the real estate agent's brochure. The Greater Louisville Association of Realtors will continue to share the real estate agents brochure through their online newsletter annually. Outreach topics will include how to determine if a home is located in the special flood hazard area and information about flood insurance.

4.3 Flood Protection Website

MSD's website continues to include information on all eight of the priority topics listed in Table 1, which includes the six CRS priority topics, plus two additional topics, General Preparedness and Basement Flooding. Additional information related to outreach projects will be included on the website as applicable. The website is updated regularly to include new and updated information.

4.4 Flood Protection Assistance

Three types of flood protection assistance are provided by MSD, including property protection advice (PPA), advice after a site visit (PPV), and financial assistance advice (FAA). These types of assistance are advertised in the annual mailing to floodplain residents and repetitive loss properties customers. Information about flood protection assistance provided by MSD and information about flood vents has been included in the presentation that is given to realtors at least twice a year.



5.0 Plan Maintenance Procedures

The PPI committee will continue to meet annually to monitor the implementation of the outreach projects and assess whether the desired outcomes were achieved and if any changes should be made. An annual evaluation report will be prepared each year, which will be completed for the CRS annual recertification and copied to Louisville Metro Government.

APPENDIX 1

Acronyms and Glossary of Terms

Acronyms & Glossary of Terms

Acronyms:

BFE – Base Flood Elevation
CRS - Community Rating System
FEMA - Federal Emergency Management Agency
FIRM - Flood Insurance Rate Map
GIS - Geographic Information System
ICC - Increased Cost of Compliance
SFHA - Special Flood Hazard Area

Definitions:

Base Flood: The flood having a 1% chance of being equaled or exceeded in any given year, also known as the "100-year" or "1% chance" flood. The base flood is a statistical concept used to ensure that all properties subject to the NFIP are protected to the same degree against flooding.

Base Flood Elevation: The computed elevation to which floodwater is anticipated to rise during the base flood. Base Flood Elevations (BFEs) are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles.

CRS Coordinator: A local official designated by the Chief Executive Officer of the community to coordinate the community's CRS application and verification.

Flash Flooding: A flood occurring with little or no warning where water levels rise at an extremely fast rate.

Flood: A general and temporary condition of partial of complete inundation of normally dry land areas from either the overflow of inland waters or the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Insurance Rate Map (FIRM): An official map of a community, on which FEMA has delineated both the SFHA's and the risk premium zones applicable to the community. Most FIRM's include detailed floodplain mapping for some or all of a community's floodplains.

Floodplain: Any land area susceptible to being inundated by floodwaters from any source. A FIRM identifies most, but not necessarily all, of a community's floodplain as a SFHA.

Local Regulatory Flood: The flood having a one-percent (1%) likelihood of being equaled or exceeded in any given year based on a fully developed watershed.

Local Regulatory Floodplain: Any stream course or normally dry land area susceptible to being partially or completely inundated by the overflow of water from sources of public water or by the unusual and rapid accumulations or runoff of public surface waters and subject to a local regulatory flood.

Riverine Flooding: Flooding of or produced by a river. Riverine floodplains have readily identifiable channels.

Special Flood Hazard Area, (SFHA): The base floodplain delineated on a FIRM. The SFHA is mapped as a Zone A or Zone AE (see definition). The SFHA may or may not encompass all of a community's flood problems.

Watershed: All the area within a geographic boundary from which water, sediments and other transportable materials, and dissolved materials drain or are carried by water to a common outlet, such as a point on a larger stream, lake or underlying aquifer.

Zone A: Areas shown on the FIRM subject to flooding by the 1-percent-annual-chance flood event. Detailed hydraulic analyses have not been performed and no Base Flood Elevations (BFEs) or flood depths are shown.

Zone AE: Areas shown on the FIRM subject to flooding by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones.

Zone X: Minimal risk areas shown on the FIRM outside the 1-percent and 0.2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones.

Zone X Protected by Levee: Moderate risk areas shown on the FIRM protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones.

0.2% Annual Chance Flood Hazard: Moderate risk areas shown on the FIRM subject to flooding by the 0.2 percent-annual-chance flood event determined by detailed methods.

1% Future Conditions: Moderate risk areas shown on the FIRM subject to flooding by the 1 percent-annual-chance flood event determined by detailed methods and assuming a fully developed watershed.

APPENDIX 2 Outreach Projects Schedule

Appendix 2
Louisville-Jefferson County Outreach Projects

Target Audience	Messages	Outcome	Projects	Assignment	Schedule	Stakeholder
	Flood determinations are available online at www.msdlouky.org. (1)	Increase in the number of flood determinations requested on MSD's website.	Public Presentations	Floodplain Manager	Scheduled as requested	Neighborhood groups, Councilman
			Maintain Flood Determination Page on MSD website	Floodplain Manager/ MSD IT Dept	Maintain as needed	-
			Flood Hazard Area Signs	Public Works	Maintain as needed	-
			Great Flood of 1937 High Water Mark Signs	Public Works	Maintain as needed	-
		Increase in the number of flood	Army Corps of Engineers High Water Mark Obelisk and Sign	Army Corps of Engineers	Maintain as needed	Army Corps of Engineers
	Know the flood hazard. (1)	determinations requested on MSD's website.	Streamline Newsletter	Floodplain Manager	At least one article annually	-
		website.	Floodplain/Repetitive Loss Newsletter	Floodplain Manager	Newsletters sent by December 1	
			MSD Field Day	Floodplain Manger	May	-
			MSD Social Media	Communications Dept	At least one post annually	-
Target Audience 1. General Public		Increase in number of flood insurance policies.	Streamline Newsletter	Floodplain Manager	At least one article annually	-
			Public Presentations	Floodplain Manager	Scheduled as requested	Neighborhood groups, Councilman
	You should buy flood insurance, Flood insurance is available anywhere in Jefferson County. (2)		Maintain Flood Determination Page on MSD website	Floodplain Manager/ MSD IT Dept	Maintain as needed	-
			FEMA Brochures	Floodplain Manger	Brochures replaced as needed	FEMA
			MSD Social Media	Communications Dept	At least one post annually	-
			Bill stuffer	MSD Customer Relations	Bill stuffer sent Aug/Sept	-
	General flood safety, such as turn around, don't		Public Presentations	Floodplain Manager	Scheduled as requested	Neighborhood groups, Councilman
	down, stay out of flooded waters, Do not enter a flooded basement, turn off main electrical switch, water valve, and gas valve before	No injuries or fatalities related to flooding.	Brochure at MSD Main Office	Floodplain Manager	Brochures replaced as needed	-
	flooding starts. (3)		"Caution Do Not Enter When Flooded" signs at low areas on roadways	Public Works	Signs maintained as needed	-
			Maintain flood safety information on MSD website	Floodplain Manager/ MSD IT Dept	Maintain as needed	

Appendix 2
Louisville-Jefferson County Outreach Projects

Target Audience	Messages	Outcome	Projects	Assignment	Schedule	Stakeholder
	General flood safety, such as turn around, don't down, stay out of flooded waters, Do not enter a flooded basement, turn off main electrical	No injuries or fatalities related to	Presentations to school age children	Floodplain Manager	As requested	Jefferson County Public Schools
	switch, water valve, and gas valve before flooding starts. (3)	flooding.	MSD Social Media	Communications Dept	At least one post annually	-
			Magazine/Newspaper Ads	MSD Regulatory Services	Quarterly	-
			Brochure at MSD Main Office	MSD Customer Relations	Brochures replaced as needed	-
	Avoid contact with streams after it rains. (3)	No health impacts related to stream contact.	Overflow Advisory signs	MSD Regulatory Services	Signs maintained as needed	-
			Maintain MSD and Project WIN websites	MSD Regulatory Services	Maintain/Update as needed	-
			MSD Social Media	Communications Dept	At least one post annually	-
		Reduced number of calls related to stream obstructions.	Magazine/Newspaper Ads	MSD Regulatory Services	Quarterly	-
Target Audience 1			Brochure at MSD Main Office	MSD Customer Relations	Brochures replaced as needed	-
Target Audience 1. General Public			No Dumping signs located at streams	Public Works	Signs maintained as needed	-
			Streamline Newsletter	Floodplain Manager	Quarterly	-
	Keep debris and trash out of streams and ditches, Keep catch basins clear of debris and leaves. (4)		Public Presentations	Floodplain Manager	Scheduled as requested	Neighborhood groups, Councilman
			Bill Stuffer	MSD Customer Relations	Bill stuffer sent Aug/Sept	-
			Plumbing Modifications Program Packets	MSD Customer Relations	Upon Request	-
			Maintain MSD and Project WIN websites	MSD Regulatory Services	Maintain/Update as needed	-
			MSD Social Media	Communications Dept	At least one post annually	-
			Streamline Newsletter	MSD Customer Relations	Bill stuffer sent Aug/Sept	-
	Store irreplaceable items and valuables in an area safe from flooding, Move vehicles to higher	Less damage to contents and vehicles due to flooding.	Bill Stuffer	Floodplain Manager	Newsletter sent monthly	-
	ground. (4)		Update MSD Website	Floodplain Manager/ MSD IT Dept	,	-

Appendix 2 Louisville-Jefferson County Outreach Projects

Target Audience	Messages	Outcome	Projects	Assignment	Schedule	Stakeholder
	Get a floodplain permit before you build. (5)	Fewer notices of violation issued for Floodplain Ordinance.	Floodplain/Repetitive Loss Newsletter	Floodplain Manager	Newsletters sent by December 1	-
			"Dump no waste - drains to stream" stenciled on catch basins	MSD Drainage Supervisors	Maintenance as needed	-
			Streamline newsletter	MSD Customer Relations	Newsletter sent quarterly	-
	Keep water clean: Don't dump in storm drains, they drain to the stream. Do not drain pools		Brochure at MSD Main Office	MSD Customer Relations	Brochures replaced as needed	-
]	directly to streams. Limit use of fertilizers and pesticides. Scoop the poop – keep pet waste from	Improved water quality.	Brochure in Plumbing Modification Packets	MSD Customer Relations	As requested	-
	entering waterways. Use a car wash. Do not flush prescription drugs or put down the drain.	impressed states quantys	Maintain MSD and Project WIN websites	MSD Regulatory Services	Maintain/Update as needed	-
	(6),		Public Presentations	MS4 Team/Floodplain Manager	As requested	Neighborhood groups, Councilman
			Presentations to school age children	MS4 Team/Floodplain Manager	As requested	Jefferson County Public & Private Schools
Target Audience 1.			MSD Social Media	Communications Dept	At least one post annually	-
General Public	How streams function, keep streams clean. Maintain stream buffers. Benefits of planting more trees. (6)		Louisville Nature Center offers summer camps, education programs, including scouting programs, a Beargrass Creek watershed exhibit, and a library	Nature Center is open year-round, classes held periodically	Louisville Nature Center	
		Improved water quality.	Parklands of Floyds Park offers science camps, field trips, family programs, interpretive hikes, scout programs, stream cleanups, an outdoor classroom, and a large mural related to Floyds Fork.	Parklands of Floyds Fork	Parklands of Floyds Fork is open year- round, classes held periodically	Parklands of Floyds Fork
			Stream Cleanups	MSD, ORANSCO, Parklands of Floyds Fork, Beargrass Creek Alliance, Floyds Fork Env. Association	Cleanups are held periodically	ORANSCO, Parklands of Floyds Fork, Beargrass Creek Alliance, Floyds Fork Environmental Association
			MSD Social Media	Communications Dept	At least one post annually	-

Appendix 2 Louisville-Jefferson County Outreach Projects

Target Audience	Messages	Outcome	Projects	Assignment	Schedule	Stakeholder
			Green infrastructure signage	MS4 Coordinator	Signs maintained as needed	-
	Improve water quality with green infrastructure		Public Presentations	MS4 Coordinator	As requested	Neighborhood groups, Councilman
		Increase in green infrastructure	Streamline Newsletter	MSD Customer Relations	Newsletter sent quarterly	-
	(6)	construction.	MSD website	MS4 Coordinator	Maintain/Update as needed	-
			Home Garden & Remodeling Show	MS4 Coordinator	February 27th - March 1st	-
			MSD Social Media	Communications Dept	At least one post annually	-
			Streamline Newsletter	Floodplain Manager	Newsletter sent quarterly	-
	General preparedness: Develop a safety plan in case of evacuation. Assemble supplies in advance, such as first-aid kit, bottled water, battery-powered radio, etc. (7)		Public Presentations	Floodplain Manager	As requested	Neighborhood groups, Councilman
Target Audience 1. General Public		More families have prepared evacuation plans.	Brochure at MSD Main Office	Floodplain Manager	Brochures replaced as needed	-
			MSD website	Floodplain Manager	Maintain as needed	-
			MSD Social Media	Communications Dept	At least one post annually	-
			Magazine/Newspaper Ads	MSD Customer Relations	At least 6 ads annually	-
	Avoid basement backups: Know where it goes! Some things are not meant to be flushed.		Brochure at MSD Main Office	MSD Customer Relations	Brochures replaced as needed	-
	Conserve water during heavy rains to avoid overloading sewers. Avoid putting fats, oils, and	Reduced number of calls related to sewer	Streamline Newsletter	Floodplain Manager	Newsletter sent monthly	-
	grease down the drain. MSD's plumbing modification program is available to reduce	backups.	Brochure in Plumbing Modification Packets	MSD Customer Relations	As requested	-
	basement backups. (8)		MSD website	Floodplain Manager	Maintain/Update as needed	-
			MSD Social Media	Communications Dept	At least one post annually	-

Appendix 2 Louisville-Jefferson County Outreach Projects

Target Audience	Messages	Fewer flood insurance claims. Fewer notices of violation issued for Floodplain Ordinance. Fewer notices of violation issued for Floodplain Ordinance. Better preparedness.	Projects	Assignment	Schedule	Stakeholder
	Your property is at risk for flooding. (1)		Letter to floodplain/rep loss residents	Floodplain Manager	Letters sent by December 1	-
Target Audience 2. Floodplain Residents and Repetitive Loss Properties Get a f Know t Inve cont ins Check f Target Audience 3. Builders and Remodelers Use a sedim	You need flood insurance. (2)		Letter to floodplain/rep loss residents	Floodplain Manager	Letters sent by December 1	-
	Renters can buy flood insurance for contents. (2)		Metro Council eNewsletters or social media posts	Floodplain Manager	At least one post annually	Louisville Metro Council
	When a flood threatens, know when to evacuate. (3)	Fewer water rescues.	Letter to floodplain/rep loss residents	Floodplain Manager	Letters sent by December 1	-
	Replace flooded furnaces, water heaters and air conditioners with elevated ones. (4)	Fewer flood insurance claims.	Letter to floodplain/rep loss residents	Floodplain Manager	Letters sent by December 1	-
	Get a floodplain permit before you build. (5)		Letter to floodplain/rep loss residents	Floodplain Manager	Letters sent by December 1	-
	Know the substantial damage/improvement rules. (5)		Letter to floodplain/rep loss residents	Floodplain Manager	Letters sent by December 1	-
	Inventory and photograph your home's contents and put important papers and insurance policies in a safe place. (7)	Better preparedness.	Letter to floodplain/rep loss residents	Floodplain Manager	Letters sent by December 1	-
	Check for floodplain issues prior to beginning	Increase in the number of flood determinations requested on MSD's	BIA Meeting or Newsletter	Floodplain Manager	Summer	Building Industry Association (BIA)
	construction or remodeling. (1)	website.	Construction Field Day	Floodplain Manager	February	-
	Follow Floodplain Ordinance requirements. (5)	Fewer notices of violation issued for	BIA Meeting or Newsletter	Floodplain Manager	Summer	Building Industry Association (BIA)
	Tollow Hoodplain Ordinance requirements. (3)	Floodplain Ordinance.	Construction Field Day	Floodplain Manager	February	-
	Use appropriate erosion prevention and sediment control (EPSC) measures during	Fewer notices of violation issued for Erosion Prevention & Sediment Control	MSD EPSC Certification Classes	Enforcement Supervisor	Classes offered online	Jefferson County Public & Private Schools
	construction. (6)	ordinance.	Construction Field Day	Enforcement Supervisor	February	-
	EPSC certification classes are available for	Larger attendance at EPSC certification	Jefferson County Continuing Education Classes Website	Enforcement Supervisor	Maintain as needed	Jefferson County Public & Private Schools
	homebuilders and contractors. (6)	classes.	Construction Field Day	Enforcement Supervisor	February	-

Appendix 2 Louisville-Jefferson County Outreach Projects

Target Audience Messages Outcome		Projects	Assignment	Schedule	Stakeholder	
t	Online flood determinations can be done for the MLS form when listing a home (directed at	Increase in the number of flood determinations requested on MSD's	Electronic newsletter	Floodplain Manager	Newsletter sent by December 1	Greater Louisville Association of Realtors (GLAR)
	Realtors) (1)	website.	Realtor presentations	Floodplain Manager	As requested	Local realtors, such as Semonin and REMAX
	Online flood determinations can be done for the Standard Flood Hazard Determination Form (directed at Lenders) (1)	Increase in the number of flood determinations requested on MSD's website.	Electronic newsletter/Letter	Floodplain Manager	Newsletter or Letter sent by December 1	Mortgage brokers listed in the Kentucky Department of Financial Institutions Web Database
Target Audience 4.	Online flood determinations can be done for information for insurance policies (directed at Insurers) (1)	Increase in the number of flood determinations requested on MSD's website.	Electronic newsletter	Floodplain Manager	Newsletter sent by December 1	Big I Kentucky
Real Estate, Lending, and Insurance Companies	Elevation Certificates are available from MSD, map information and base flood elevations can	Increase in number of elevation certificate requests.	Electronic newsletter	Floodplain Manager	Newsletter sent by October 1	Greater Louisville Association of Realtors (GLAR)
Companies	be determined by MSD. (1)	certificate requests.	Presentations	Floodplain Manager	As requested	Local realtors, such as Semonin and REMAX
	Flood insurance is available anywhere in Jefferson County. (2)	Increased number of flood insurance policies.	Electronic newsletter	Floodplain Manager	Newsletter sent by December 1	Greater Louisville Association of Realtors (GLAR)
	Jenerson County. (2)	policies.	Presentations	Floodplain Manager	As requested	Local realtors, such as Semonin and REMAX
	Flood insurance is required if the structure is in the floodplain and there is a federally backed	Increased number of flood insurance policies.	Electronic newsletter	Floodplain Manager	Newsletter sent by December 1	Greater Louisville Association of Realtors (GLAR)
	mortgage. (2)	ponoics.	Presentations	Floodplain Manager	As requested	Local realtors, such as Semonin and REMAX

APPENDIX 3

Outreach Projects Worksheet

Community Name: Louisville/Jefferson County

State: Kentucky

CID: 210120

					Activity 330 - O	utreach Projec	ts									
		Α				Topics (Covered				В	С	(A x B x C)	PPI	STK	Total
	Outreach Project (OP)	Points per topic	1. Know Hazard	2. Insure Property	3. Protect People	4. Protect Property	5. Building Responsibly	6. Natural Function	7. General Preparedness	8. Basement Flooding/ Sewer Backups	# of Flood- related Topics		OP = Points per Project			cOP = OP + PPI + STK
	Signs	•								· ·			ļ. , , , , , , , , , , , , , , , , , , ,			
OP#1	Caution Do Not Enter When Flooded (14 signs)	2	1		1						2	5	20	8		28
OP#2	Flood Hazard Area (4 signs)	2	1		1						2	4	16	6.4		22.4
OP#3	Great Flood of 1937 High Water Mark (23 signs)	2	1								1	5	10	4		14
OP#4	Green Infrastructure (7 signs)	2						1			1	5	10	4	3	17
	Dumping and Litter				1						ļ					
	Dump No Waste - Drains to Stream on Catch Basins	2						1			1	1	2	0.8	0.6	3.4
	No Dumping Signs	2						1			1	1	2	0.8	0.6	3.4
05,,,	Louisville Metro: Report a Litterer Program	2						1			1	1	2	0.8	0.6	3.4
OP#5	Louisville Metro Free Drop off at Meriwether Waste Reduction Center	2						1			1	1	2	0.8	0.6	3.4
	Louisville Metro Pop-Up Drop-Off Events	2						1			1	1	2	0.8	0.6	3.4
	Louisville Metro Clean Collaborative	2						1			1	1	2	0.8	0.6	3.4
	Letters/Newsletters								!		•		J			-
OP#6	Floodplain/Repetitive Loss Letters & Floodplain News	6	1	1	1	1	1	1	1	1	8	1	48	19.2		67.2
OP#7	Annual newsletter to Realtors (November 2022)	6	1	1							2	1	12	4.8	3.6	20.4
OP#8	Annual mailing to Lenders (November 2022)	6	1	1							2	1	12	4.8		16.8
OP#9	Annual newsletter to Insurance Agents (February 2023)	6	1	1							2	1	12	4.8	3.6	20.4
	Bill Stuffer				<u>'</u>						•					
001140	General outreach including information about flood insurance,															
OP#10	basement backups and water quality (Aug/Sept 2022)	2		1						1	2	1	4	1.6	'	5.6
	Magazine/Newspaper Ads											•	•			
	Business First															
	Making a Difference, stormwater (February 2022)	2						1			1	1	2	0.8	0.6	3.4
	Making a Difference, stormwater (March 2022)	2						1			1	1	2	0.8	0.6	3.4
OP#11	Making a Difference, pet waste (April 2022)	2						1			1	1	2	0.8	0.6	3.4
OP#II	Making a Difference, pet waste (June 2022)	2						1			1	1	2	0.8	0.6	3.4
	Making a Difference, stormwater (July 2022)	2						1			1	1	2	0.8	0.6	3.4
	Making a Difference, pet waste (September 2022)	2						1			1	1	2	0.8	0.6	3.4
	Making a Difference, avoid waterways (October 2022)	2			1						1	1	2	0.8	0.6	3.4
	Brochures/Displays															
OP#12	Plumbing Modification Packets	2								1	1	1	2	0.8		2.8
	MSD Lobby Video and Historic Flood Map	2	1								1	1	2	0.8		2.8
1 (10#131	Louisville Science Center	2						1			1	1	2	0.8	0.6	3.4
05#13	Parklands of Floyds Fork Display	2						1			1	1	2	0.8	0.6	3.4
	Louisville Nature Center Display	2						1			1	1	2	0.8	0.6	3.4
	Flood Information Kiosk in MSD Lobby: Homeowner's Guide to													-		
	Retrofitting	2			1	1	1				3	1	6	2.4		8.4
	Flood Information Kiosk in MSD Lobby: FEMA Fact Sheet	2	1	1	1	1			1		5	1	10	4		14
	Flood Information Kiosk in MSD Lobby: Turn Around Don't Drown!	2	1		1						2	1	4	1.6		5.6
	Flood Information Kiosk in MSD Lobby: Know Your Flood Risk When															
	Buying a Home	2	1	1	1	1			1		5	1	10	4	<u> </u>	14
	Flood Information Kiosk in MSD Lobby: Your Family Disaster Plan	2	1	1	1	1			1		5	1	10	4		14

Community Name: Louisville/Jefferson County

State: Kentucky

CID.	210120
UID.	210120

					Activity 330 - C	Outreach Projec	ts									
		Α				Topics (Covered				В	С	(A x B x C)	PPI	STK	Total
	Outreach Project (OP)	Points per topic	1. Know Hazard	2. Insure Property	3. Protect People	4. Protect Property	5. Building Responsibly	6. Natural Function	7. General Preparedness	8. Basement Flooding/ Sewer Backups	# of Flood- related Topics		OP = Points per Project		OP x 0.3	cOP = OP + PPI + STK
OP#15	Army Corps of Engineers High Water Mark	2	1								1	1	2	0.8	0.6	3.4
	Newsletters		'		'				'		•				-	
OP#16	StreamLine Newsletter (September 2022)	2						1		1	2	1	4	1.6		5.6
	Metro Council District 15 eNewsletter (11/03/2022)	2				1					1	1	2	0.8	0.24	3.04
	Metro Council District 5 eNewsletter (11/10/2022)	2				1					1	2	4	1.6	0.48	6.08
	Metro Council District 10 eNewsletter (11/11/2022)	2								1	1	1	2	0.8	0.24	3.04
OP#17	Metro Council District 10 eNewsletter (11/23/2022)	2								1	1	1	2	0.8	0.24	3.04
	Metro Council District 10 eNewsletter (12/16/2022)	2								1	1	1	2	0.8	0.24	3.04
	Metro Council District 24 eNewsletter (12/22/2022)	2							1		1	2	4	1.6	0.48	6.08
	Metro Council District 10 eNewsletter (12/23/2022)	2								1	1	1	2	0.8	0.24	3.04
OP#18	Anchorage Age Newsletter (March 2022)	2						1			1	1	2	0.8	0.24	3.04
OP#10	Anchorage Age Newsletter (June 2022)	2						1			1	1	2	0.8	0.24	3.04
	River/Creek Cleanups		•		-				-		•					
	Metro Council District 21 and MSD															
	Clean Up at Wilderness Park (March 26, 2022)	2						1			1	1	2	0.8		2.8
	Mayor's Give-A-Day program: MSD sponsored Mill Creek trash cleanup														'	
	for employees (April 16, 2022)	2						1			1	1	2	0.8		2.8
	River City Paddle Sports Earth Day Ohio River Cleanup														'	
OP#19	(04/22/2023)	2						1			1	1	2	0.8	0.6	3.4
	Holy Cross High School Mill Creek Cleanup														'	
	(09/21/2022)	2						1			1	1	2	0.8	0.6	3.4
	Mini Ohio River Sweep/Beargrass Creek	_											_		'	
	(10/15/2022)	2						1			1	1	2	0.8	0.6	3.4
	Mill Creek Trash Cleanup	2						_					2		'	
	(11/05/2022)	2	<u> </u>					1			1	1	2	0.8		2.8
	MSD EPSC Classes - Administered and advertised by Jefferson County Pub	olic Schoo	DIS T		1 1		I		1 1		1	Г				
00#30	Home Builders Class - discusses proper EPSC controls related	2						1			1	37	74	20.0	22.2	125 0
OP#20		2						1			1	3/	74	29.6	22.2	125.8
	EPSC Contractor Class - discusses proper EPSC controls for general	2						1			1	415	020	222	240	
00,134	construction projects MSD Qualified Post-Construction Inspector Training	2 2						1			1	415 115	830 230	332	249 69	1411
OP#21	viso Quainied Post-Construction Inspector Training		[1			1	112	230	92	69	391

Community Name: Louisville/Jefferson County

State: Kentucky
CID: 210120

					Activity 330 - C	outreach Projec	cts						210120			
		Α				Topics	Covered				В	С	(A x B x C)	PPI	STK	Total
	Outreach Project (OP)	Points per topic	1. Know Hazard	2. Insure Property	3. Protect People	4. Protect Property	5. Building Responsibly	6. Natural Function	7. General Preparedness	8. Basement Flooding/ Sewer Backups	# of Flood- related Topics		OP = Points per Project		OP x 0.3	cOP = OP + PPI + STK
	Presentations															
	Meetings with Interest Groups										_					
	MSD clAIRity Public Meeting															
	(01/11/2022 and 04/12/2022)	2				1					1	3	6	2.4		8.4
	Westwood Garden Club															
	(01/27/2022)	2						1			1	1	2	0.8		2.8
	Rain Garden Workshop															
	(03/01/2022)	2						1			1	1	2	0.8	0.6	3.4
	Ohio Stormwater Conference: Green Infrastructure In Lieu Fee															
	(05/12/2022)	2						1			1	1	2	0.8		2.8
OP#22	Louisville Free Public Library Summer Reading Program	_						_					_			
	(6/7/2022, 6/16/2022, 6/29/2022)	2						1			1	3	6	2.4		8.4
	Rain Barrel Workshop	2						4					_	0.0	0.24	204
	(06/23/2022)	2						1			1	1	2	0.8	0.24	3.04
	Kentucky Stormwater Association Annual Conference: MS4 Water	,						1			1	1	2	0.8		2.8
	Quality Monitoring Program (07/13/2022)	2						1			1	1	2	0.8		2.8
	Sprouting Gardeners Club Presentation (07/28/2022)	2						1			1	1	2	0.8		2.8
	Kentucky Society of Professional Engineers: MSD Watershed Planning							1						0.0		2.0
	(09/21/2022)	2	1					1			2	1	4	1.6		5.6
	Kentucky Association of Mitigation Managers: Prioritizing Flood Risk		1					<u> </u>					7	1.0		3.0
	(09/23/2022)	2	1		1 1	1					3	1	6	2.4	0.72	9.12
	(00) 20) 2022		1		1	<u> </u>							J	۷.٦	0.72	1 3.12

Community Name: Louisville/Jefferson County

State: Kentucky
CID: 210120

					Activity 330 - O	utroach Projec	ctc					CID.	210120			
		l A			Activity 330 - U		Covered				В	С	(A x B x C)	PPI	STK	Total
		A			1	Topics	l				- 6		(AXBXC)	PPI	3 IK	Total
				0		4	_	0	7	8. Dagamant						
		Points	1.	2. Insure	3.	4. Protect	5. Building	6. Natural	7. General	Basement Flooding/	# of Flood-					cOP = OP
		per	Know Hazard	Property	Protect People	Property	Responsibly	Function	Preparedness	Sewer	related	# of Times	OP = Points	OP x	OP x	+ PPI +
	Outreach Project (OP)	topic					, ,			Backups	Topics		per Project		0.3	STK
	Festivals/Field Days/Shows	<u>'</u>								·	•		,			
	Liberty High School Field Trip to Floyds Fork															T
	(03/02/2022)	2						1			1	1	2	0.8		2.8
	Southend Beautification Campaign Tree Planting							_				_		0.0		
	(April 8, 2022)	2						1			1	1	2	0.8		2.8
	Beachland Beach Rd Tree Planting							_				_	_	0.0		
	(04/15/2022)	2						1			1	1	2	0.8		2.8
	Tree Fest Arbor Day Celebration							_				_	_	0.0		
	(04/16/2022)	2						1			1	1	2	0.8	0.6	3.4
	Ripple Effects Workshop										-	_		0.0		
	(05/09/2022)	2						1			1	1	2	0.8		2.8
	MSD Field Day											_		0.0		
	(05/11/2022)	2	1 1					1			2	1	4	1.6		5.6
	MSD Booth at Louisville Home Garden & Remodeling Show		_					_			_	_				
	(05/20/2022-05/22/2022)	2	1 1	1				1			3	3	18	7.2		25.2
OP#23	Waterfront Park 4th of July		_					_								
	(07/04/2022)	2						1			1	1	2	0.8		2.8
	Jefferson Town Gas Light Event							_					_			
	(09/17/2022)	2						1			1	1	2	0.8		2.8
	Louisville Free Public Library Family STEAM Day							_				_				
	(09/24/2022)	2						1			1	1	2	0.8	0.6	3.4
	Tree Week Tree Plantings															
	(10/08/2022-10/16/2022)	2						1			1	1	2	0.8		2.8
	Trinity High School Field Trip															
	(10/18/2022-10/19/2022)	2						1			1	2	4	1.6		5.6
	Holy Cross High School															
	(10/21/2022)	2	1					1			2	1	4	1.6		5.6
	Louisville Nature Center: Field Trips, Scout Programs & Workshops	2						1			1	774	1548	619.2	464.4	2631.6
	Louisville Nature Center: Pre-School Age Programs	2						1			1	42	84	33.6		
	Louisville Nature Center: Day Camps	2						1			1	205	410	164	123	697
	Social Media Posts				1			_								
	MSD Twitter Messages	1			4	1		13	1 1	3	22	1	22	8.8		30.8
	MSD Facebook Messages	1			5	4		14	1	6	30	1	30	12		42
OP#24	Metro Council Facebook Messages	1		1		7		7-7		U	1	1	1	0.4	0.3	1.7
				T		1		2					<u> </u>		0.3	_
	MSD Instagram Massages	1				1		3	1	2	6	1	0	2.4		8.4
	MSD Instagram Messages	1			3	2		8	1	3	17	1	17	6.8		23.8
	Tree Planting Programs	1 -	 				 				<u> </u>		_		1	T
OP#25	Louisville MSD Urban Reforestation	2						1			1	1	2	0.8		2.8
-	Louisville Grows	2						1			1	1	2	0.8	0.24	3.04
	Trees Louisville	2						1			1	1	2	0.8	0.24	3.04
					i I			_	i l		1 4	1 4	_		1 0 24	1 204
OP#26	Press Release: Pool Draining Tips	2						1			1	1	2	0.8	0.24	3.04
OP#26	Press Release: Pool Draining Tips	2						1			1	Total Points	3602 200		981.4 50	

APPENDIX 4

Examples of Outreach Projects

OP#1

"Caution: Do Not Enter When Flooded"



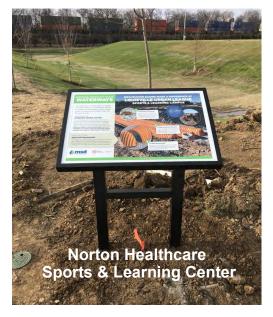
OP#2



OP#3"Great Flood of 1937 High Water Mark"



Green Infrastructure Demonstration Projects Signage











OP#5"Dump No Waste – Drains to Stream"



OP#5
"No Dumping"

OP#5Louisville Metro: Report a Litterer Program



At the Waste Reduction Center, Louisville/Jefferson County residents can dispose of tires, household bulky waste such as metals, appliances, <u>electronics</u>, tree limbs and stumps up to three feet in diameter, unbagged yard waste, construction debris, and furniture. (Fees may apply.) The Waste Reduction Center is located at 636 Meriwether Avenue, but the

ENTRANCE IS ON BLAND STREET.



Up to three household bulky items per day may be dropped off at no charge. Bulky loads or drop-offs exceeding three items will be charged according to the fee schedule - CASH ONLY.

Examples of single items

- Up to 4 passenger tires*
- One appliance
- One large household item such as mattress/box spring, sofa or chair

*No more than 4 tires will be accepted for free drop-off at one time regardless of the number of other items



Free recycling and large item disposal event!

ITEMS MUST BE SEPARATED INTO CATEGORIES FOR EASY OFF-LOADING.

ACCEPTED





ELECTRONICS Limit 3



METAL & APPLIANCES
No refrigerators or items
containing coolant



HOUSEHOLD RECYCLABLES Paper, plastic, metal, glass



PRESCRIPTION MEDICATION DISPOSAL



YARD WASTE
Less than 2 inch diameter
and 4 feet long; bundled or in
containers or paper bags.
Wooden pallets also accepted



ON-SITE PAPER SHREDDING



PASSENGER TIRES

NOT ACCEPTED

- · Garbage or loose debris
- · Concrete, bricks, rocks
- Construction materials
- Items containing coolant
- Pain
- Batteries
- · Light bulbs
- · Hazardous waste
- Boats or hot tubs
- Tree trunks
- · Items from businesses
 - Trailers exceeding 10 feet

Dumping and Litter: Louisville Metro Clean Collaborative



In December 2020, Mayor Fischer's administration presented Metro Council a plan called the "Clean Collaborative" to improve the community's cleanliness. Metro Council approved funding for the effort in January 2021. The collaborative brings together stakeholders from across Louisville Metro to coordinate and maximize cleaning efforts. These stakeholders include:

- Louisville Metro Public Works & Assets, which has worked on many cleanliness efforts such as urban and suburban street sweeping, litter hotspot cleanings, homeless camp cleanings, and more.
- Brightside and their volunteer community cleanups and anti-litter messaging.
- Louisville Downtown Partnership, which assists in maintaining the cleanliness in the downtown area.
- Louisville Metro Codes & Regulations and their Vacant Lots Department.
- Louisville Waste Management District, which annually receives \$380,000 in grant funding which helps by providing extra litter collection along the interstates during the winter, inmate litter collection programs, supplies for litter cleanup events, and anti-litter education through Brightside.

Floodplain Letter



Phone 502 540.6000 LausvilleMSD.org

700 West Liberty Street | Louisville, KY 40203-1911

December 19, 2022

Current Owner Name Current Owner Address 1 City, State Zip

RE: Property Address, LOUISVILLE, KY

Dear Resident:

You are receiving this letter because all or a portion of your property is in a mapped flood hazard area based on current floodplain mapping. MSD is sending this letter to let you know of the potential for flooding and that flood insurance is available for all Jefferson County residents to purchase. Check with your insurance agent to determine the right amount of flood coverage needed.

If you have a mortgage from a federally regulated or insured lender and the building(s) on this property are within the high-risk flood area, by Federal law, your lender must require flood insurance. Flood insurance is available through the National Flood Insurance Program, Contact your insurance agent to learn about rating options and

Even if you do not have a mortgage, we recommend that you purchase flood insurance to reduce flooding's potential financial Impact. Most homeowners insurance does not cover flood damage. When just one inch of water in a home can cost more than \$25,000 in damage, flood insurance can be the difference between recovery and financial difficulty.

If you would like to check the current floodplain status of the main building on your property, you can go to MSD's website to use our online floodplain map determination at https://apps.lojic.org/msdflooddetermination/. Visit https://louisvillemsd.org/floodplain for information about flood safety, insurance, permitting, flood history, and other flood-related topics. If you would like to see the floodplain maps, go to www.lojic.org/lojic-online, enter your address in the search box, select Layers on the right side, and check the Floodplain tab.

MSD staff can answer questions you might have about flood protection measures that can help prevent damage to your home by phone or by scheduling a site visit. Measures to protect a property from flood damage include retrofitting, grading a yard, correcting local drainage problems, and emergency measures, such as moving furniture and sandbagging. According to your flooding source, we can provide you with floodproofing advice on steps you can take to protect your home from flooding. Staff can also evaluate and discuss drainage problems on your property and determine if any financial assistance may be available. For example, if your flooding problem is basement backups from the sewer, MSD offers the Plumbing Modification Program, a free program designed to reduce basement backups. You can learn more about the Plumbing Modification Program by calling MSD's customer service at (502) 540-6000.

Your best protection is to buy flood insurance. Louisville is a Class 3 community in FEMA's Community Rating System program. The Class 3 rating entitles Louisville Metro residents to receive a 35 percent reduction on their flood insurance rates. Information on flood insurance is available in the attached Floodplain News. If you have



Floodplain Letter



Phone 502,540,6000 | LouisvilleMSD.org

700 West Liberty Street | Louisville, KY 40203-1911

flood insurance questions, contact your current insurance provider. If you do not have an insurance provider, Michael Fleitz at DM Fleitz Insurance and Robert English with English Insurance Group have agreed to answer flood insurance questions.

Michael Fleitz (502)935-5970

Mike@fleitzinsurance.com

Robert English (502)807-2244 Robert@englishgrp.com

MSD is currently updating Louisville Metro's Floodplain Management Plan, which is a planning document that reviews the flood hazards in our community and strategies to reduce the flooding impacts. MSD is seeking to better understand the drainage and flooding problems in your community. If you would like to share your personal experience about the impacts of flooding on your property and in your neighborhood, please scan the QR code below to take a brief survey or visit www.surveymonkey.com/r/V8XL8YG.



If you have any floodplain management questions, contact Matt Schaaf at (502) 540-6148 or floodpermits@louisvillemsd.org.

Sincerely,

Lori Rafferty, PE, CFM MS4/Floodplain Manager



Floodplain Letter: Repetitive Loss Properties



December 6, 2022

«CUR_FULLNA»
«CUR_ADDRES»
«CUR_CITY», «CUR_STATE» «CUR_ZIP»

RE: «PROP_ADDRE», LOUISVILLE, KY

Dear Resident

You are receiving this letter because your property is an area that has been flooded several times. MSD is sending this letter to let you know of the potential for flooding and that flood insurance is available for all Jefferson County residents to purchase. Check with your insurance agent to determine the right amount of flood coverage needed.

If you have a mortgage from a federally regulated or insured lender and the building(s) on this property are within the high-risk flood area, by Federal law, your lender must require flood insurance. Flood insurance is available through the National Flood Insurance Program. Contact your insurance agent to learn about rating options and coverage.

Even if you do not have a mortgage, we recommend that you purchase flood insurance to reduce flooding's potential financial impact. Most homeowners insurance does not cover flood damage. When just one inch of water in a home can cost more than \$25,000 in damage, flood insurance can be the difference between recovery and financial difficulty.

If you would like to check the current floodplain status of the main building on your property, you can go to MSD's website to use our online floodplain map determination at https://apps.lojic.org/msdflooddetermination/. Visit https://

MSD staff can answer questions you might have about flood protection measures that can help prevent damage to your home by phone or by scheduling a site visit. Measures to protect a property from flood damage include retrofitting, grading a yard, correcting local drainage problems, and emergency measures, such as moving furniture and sandbagging. According to your flooding source, we can provide you with floodproofing advice on steps you can take to protect your home from flooding. Staff can also evaluate and discuss drainage problems on your property and determine if any financial assistance may be available. For example, if your flooding problem is basement backups from the sewer, MSD offers the Plumbing Modification Program, a free program designed to reduce basement backups. You can learn more about the Plumbing Modification Program by calling MSD's customer service at (502) 540-6000.



Floodplain Letter: Repetitive Loss Properties



Your best protection is to buy flood insurance. Louisville is a Class 3 community in FEMA's Community Rating System. The Class 3 rating entitles Louisville Metro residents to receive a 35 percent reduction on their flood insurance rates. Information on flood insurance is available in the attached Floodplain News. If you have flood insurance questions, contact your current insurance provider. If you do not have an insurance provider, Michael Fleitz at DM Fleitz Insurance and Robert English with English Insurance Group have agreed to answer flood insurance questions.

Michael Fleitz (502)935-5970 Mike@fleitzinsurance.com Robert English (502)807-2244 Robert@englishgrp.com

MSD is currently updating Louisville Metro's Floodplain Management Plan, which is a planning document that reviews the flood hazards in our community and strategies to reduce the flooding impacts. MSD is seeking to better understand the drainage and flooding problems in your community. If you would like to share your personal experience about the impacts of flooding on your property and in your neighborhood, please scan the QR code below to take a brief survey or visit www.surveymonkey.com/r/v8xl.8YG.



If you have any floodplain management questions, contact Matt Schaaf at (502) 540-6148 or floodpermits@louisvillemsd.org.

Sincerely.

Lori Rafferty, PE, CFM MS4/Floodplain Manager



Are you in or are you out? Know Your Home's Flood Risk

To check your property's floodplain status, please visit: apps.lojic.org/msdflooddeterminatiory/. If you would like to view flood mapping, visit www.lojic.org/lojic-online, enter your address in the search box, select Layers on the right side and check the Floodplain tab to turn on Floodplain layers.

Most homeowner and renter insurance policies do not cover flood darnage. Anywhere it rains, it can flood. MSD recommends homeowners consider buying flood insurance. Check with your insurance agent to determine the right amount of flood coverage for your property. Note that your lender still retains the right to require flood insurance.

Anyone in Louisville Metro can purchase flood insurance. Without flood insurance, owners must pay to repair flood damages using loans and minimal federal assistance. Don't delay. NFIP flood insurance policies can take up to 30 days to go into effect. Just a few inches of water can cause thousands of dollars in damage.

The Louisville Metro Floodplain Ordinance states that homes in the floodplain that experience substantial damage (damages costing more than 50% of the structure's market value to repair in a one year rolling period) will be required to come into compliance with the Louisville Metro floodplain ordinance when repairing damage (i.e. the first floor and mechanicals are elevated to the freeboard requirements defined by the current floodplain ordinance). Substantially damaged homes covered by flood insurance may be eligible for Increased Cost of Compliance coverage, which is up to \$30,000, to help with measures to reduce flood risk.

You can protect yourself and your home by contacting your insurance agent, visiting www.floodsmart.gov or calling 877.336.2627 to learn more about flood insurance. MSD Floodplain staff can answer your questions about floodplain mapping. You may contact them at 502.540.6000 or floodpermits@louisvillemsd.org.

Basement flooding

If you have experienced a rain-related sewer backup through a basement-plumbing fixture—floor drain, shower, toilet or sink—or live in an area of documented wet-weather backups, MSD's **Plumbing Modification Program** can help. To date, backflow prevention devices have helped more than 17,200 customers protect their basements from sewer backups.

If approved, MSD will pay a licensed plumbing contractor to install the backflow prevention devices to your plumbing layout. Go to **LouisvilleMSD.org** to learn more or call **502.540.6000**.

FLOODPLAIN NEWS November 2022



OUR VISION

The innovative regional utility for safe, clean waterways



Safety tips during flooding

- Move vehicles, furniture, and valuables to higher ground if possible.
- Do not drive through flooded areas.
 Turn around, don't drown!
- Stay out of the floodwater, inside and outside of your home. Six inches of flowing water can knock a person down. Water can also conduct electric current, which can be fatal.



MSD FLOODPLAIN NEWS November 2022

Drainage problems

To solve a small drainage problem, look to see if removing obstructions or grading your yard can resolve the drainage issue. Also, check to see if a clogged ditch could be the source of any flooding problems. Clogged ditches, creeks, and channels can cause water to overflow or divert into yards and onto roads.

Never dump grass clippings or yard waste into a stream or ditch. Dumping anything in our streams is illegal and can cause flooding or water quality problems. To report obstructions or illegal dumping, contact MSD 24/7 at 502.540.6000.

Floodplain regulations

Properties in a flood hazard area have special requirements regarding land use and construction. Regulations require a floodplain permit before you start any repair, renovation, development, improvement, or construction. MSD staff will explain the floodplain requirements to you or you can visit MSD's website for more information. If you see illegal construction in the floodplain, contact MSD immediately.

For more information about floodplain permitting, visit Louisville MSD.org/floodplain.



Help keep our streams clean

- Decrease your use of fertilizer and pesticides.
 Stormwater runoff containing these chemicals can enter our waterways and cause increased algae, which depletes oxygen in the water.
- Put pet waste in the trash When left on the ground, it too can cause depleted oxygen in streams.
- Plant a tree or rain garden—they are great filters for stormwater runoff.
- Dechlorinate your swimming pool water before draining it.

Elevation certificates

Having an elevation certificate for your home can save you money on flood insurance if your property is in the Special Flood Hazard Area. MSD has elevation certificates available for some properties in Louisville Metro. To check and see if an elevation certificate is on file, go to our Floodplain Website: LouisvilleMSD.org/floodplain. Under the Insurance tab is a list of all the elevation certificates on file. If the property is on the list, we can send you a copy. If a property is not on the list, a licensed surveyor must be hired to complete the elevation certificate. If you have an elevation certificate completed for your home, please send us a copy at floodplainpermits@LouisvilleMSD.org so that we can add it to the database.

Know when to evacuate

The Ohio River rises relatively gradually, giving several days warning before reaching flood stage. However, as we know, heavy rainstorms can cause local flooding in less than an hour. Flood watches and warnings are broadcast on NOAA weather radios, and television and local radio stations. When warning sirens are heard, tune a battery-operated radio to a local radio station and listen for weather reports and possible evacuation orders. In order to receive emergency warnings on your phone, sign up for LensALERT, Louisville's local emergency notification system. For this free service, visit smart911.com.

About MSD

Learn more about our Floodplain Program and other ways MSD is helping protect our community and its waterways. LouisvilleMSD.org/floodplain.



OUR VISION

The innovative regional utility for safe, clean waterways

24/7/865

502.587.0603 CustomerRelations@LouisvilleMSD.org





GLAR News: Nov. 14, 2022 - REALTOR DIRECT



MSD Shares Important Floodplain Info & Map Updates

Louisville-Jefferson County's updated flood map information is available online. To check to see if a property is in the flood hazard area, visit https://www.lojic.org/lojic-online. FEMA has updated the National Flood Insurance Program's (NFIP) risk rating methodology through the implementation of a new pricing methodology called Risk Rating 2.0.

For information about the current floodplain maps for any property in Jefferson County, go to http://apps.lojic.org/msdflooddetermination/. This service is free, easy to use and gives you valuable information about a property's flood risk. For areas outside of Jefferson County, flood insurance maps can be found at https://msc.fema.gov/. From this site you can also find FEMA's interactive map, which is easy to use and shows not only the Special Flood Hazard Areas, but also the Letters of Map Amendment.



MSD has elevation certificates available for some properties in Jefferson County. To check to see if an elevation certificate is on file, go to our Floodplain Website here: https://louisvillemsd.org/programs/floodplain-management/insurance-community-rating-system. If a property is on the list, MSD can send you a copy of the elevation certificate. If a property is not on the list of available elevation certificates and an elevation certificate is needed, a licensed surveyor must be hired to complete the certificate.

MSD can provide additional information, such as the base flood elevation or estimated flood depth, historic flood information, and natural floodplain functions if requested. To request this information for properties in Louisville-Jefferson County, email FloodPermits@louisvillemsd.org or call (502)540-6148. For more information about flood insurance, check out FEMA's website at www.floodsmart.gov.

MSD Floodplain staff will be presenting a webinar on flood insurance requirements, how to determine if a property is in the floodplain and where you can find FEMA maps on Tuesday, December 6 at 2:00pm. Please email Jennifer.Kern@LouisvilleMSD.org for the registration link.

Annual Newsletter to Lenders November 14, 2022



November 14, 2022

«Name»

«Street1»«Street2»

«City», «State» «Zip»

SUBJECT: Floodplain Information

Louisville-Jefferson County's updated flood map information is available online. To check to see if a property is in the flood hazard area, visit https://www.lojic.org/lojic-online.

FEMA has updated the National Flood Insurance Program's (NFIP) risk rating methodology through the implementation of a new pricing methodology called Risk Rating 2.0 (https://www.fema.gov/flood-insurance/risk-rating).

For information about the current floodplain maps for any property in Jefferson County, go to http://apps.lojic.org/msdflooddetermination/ This service is free, easy to use and gives you valuable information about a property's flood risk, including:

- Whether a property is in or out of the Special Flood Hazard Area (SFHA) as shown on the current Flood Insurance Rate Map (FIRM)
- Additional flood insurance data, such as the flood zone
- Information about flood risks not shown on the FIRM, such as the combined sewer floodprone areas and the local regulatory floodplain
- Information about the mandatory purchase requirement

For areas outside of Jefferson County, flood insurance maps can be found at https://msc.lema.gov/. From this site you can also find FEMA's interactive map, which is easy to use and shows not only the Special Flood Hazard Areas, but also the Letters of Map Amendment.

MSD also has elevation certificates available for some properties in Jefferson County. To check to see if an elevation certificate is on file, go to our Floodplain Website here: https://louisvillemsd.org/programs/floodplain-management/insurance-community-rating-system. If a property is on the list, we can send you a copy of the elevation certificate. If a property is not on the list of available elevation certificates and an elevation certificate is needed, a licensed surveyor must be hired to complete the certificate.

MSD can provide additional information, such as the base flood elevation or estimated flood depth, historic flood information, and natural floodplain functions if requested. To request this information for properties in Louisville-Jefferson County, email FloodPermits@louisvillemsd.org or call (502)540-6148. For more information about flood insurance, check out FEMA's website at www.floodsmart.gov.



Weekly news & updates

February 2, 2023





DATE: November 4, 2022
TO: Insurance Agents
FROM: Lori Rafferty, PE, CFM
SUBJECT: Floodplain Information

Louisville-Jefferson County's updated flood map information is available online. To check to see if a property is in the flood hazard area, visit https://www.lojic.org/lojic-online.

FEMA has updated the National Flood insurance Program's (NFIP) risk rating methodology through the implementation of a new pricing methodology called Risk Rating 2.0.

For information about the current floodplain maps for any property in Jefferson County, go to http://apps.lojic.org/msdflooddetermination/. This service is free, easy to use and gives you valuable information about a property's flood risk, including:

- Whether a property is in or out of the Special Flood Hazard Area (SFHA) as shown on the current Flood Insurance Rate Map (FIRM)
- Additional flood insurance data, such as the flood zone
- Information about flood risks not shown on the FIRM, such as the combined sewer floodprone areas and the local regulatory floodplain
- Information about the mandatory purchase requirement

For areas outside of Jefferson County, flood insurance maps can be found at https://msc.fema.gov/. From this site you can also find FEMA's interactive map, which is easy to use and shows not only the Special Flood Hazard Areas, but also the Letters of Map Amendment.

MSD also has elevation certificates available for some properties in Jefferson County. To check to see if an elevation certificate is on file, go to our Floodplain Website here. https://louisvillemsd.org/programs/floodplain-management/insurance-community-rating-system. If a property is on the list, we can send you a copy of the elevation certificate. If a property is not on the list of available elevation certificates and an elevation certificate is needed, a licensed surveyor must be hired to complete the certificate.

MSD can provide additional information, such as the base flood elevation or estimated flood depth, historic flood information, and natural floodplain functions if requested. To request this information for properties in Louisville-Jefferson County, email FloodPermits@louisvillemsd.org or call (502)540-6148. For more information about flood insurance, check out FEMA's website at www.floodsmart.gov.



Bill Stuffer: General outreach including information about flood insurance, basement flooding and water quality



MSD remains solid and steadfast in delivering topquality wastewater, stormwater and flood protection services to our customers



However, we must balance repairing aging infrastructure—in some cases built more than 100 years ago-with the mandated requirements of our Consent Decree with the U.S. Environmental Protection Agency to significantly reduce sewer overflows during periods of heavy rains.

We are leveraging grants and innovative loans for the critical work of replacing

outdated biosolids processing at our Morris Forman Water Quality Treatment Center and updating and expanding our Paddy's Run Flood Pumping Station, both of which were built in the 1950s. Additionally, frequent sewer cave-ins and failures are examples of the challenges MSD faces across the service area with outdated infrastructure that is long past its useful life.

Much-needed upgrades and refurbishments across our service area will move forward under MSD's Board-approved Fiscal Year 2023 rate proposal and budget plan, MSD will invest more than \$195 million to support 190 projects while tripling EWRAP-Emergency Wastewater Assistance Program, to help those experiencing financial hardships.

The fiscal year 2023 rate proposal adds \$3.35 to the average monthly residential bill for Jefferson County customers beginning August 1, 2022.



Need help paying your bill?

Drops of Kindness is an effort by MSD and Louisville Water to help customers with unpaid bills. Whether you are a resident or a

business owner, Drops of Kindness offers a customizable approach to managing through difficult times and reducing future financial obligations.

Emergency Wastewater Rate Assistance Program

The Emergency Wastewater Rate Assistance Program discount increases to 30 percent, up from the current 10 percent, effective October 1, 2022. Households qualify for the discount if their total income is 150 percent or less of the official poverty guideline. The discount is available in all MSD service areas.

Senior Citizen Discount

Seniors with household incomes of \$35,000 or less qualify for the discount.

assistance programs, visit: euisvilleMSD.org/PayMy6III or call 502.540.6000

MSD Rates on August 1, 2022

charge increases 59 cents.

The MSD Board approved a final rate resolution for MSD. Jefferson County customers effective August 1, 2022.* The average monthly residential wastewater billbased on 4,000 gallons per month of water usage increases \$2.76. The monthly stormwater/drainage service

Rate increase does not apply to former Bullitt County Sanitation District or Oldham County Environmental Authority customers, or Glen Cake and Moser Farms residents.

Average Monthly Residential Customer Bill

		08/01/21		08/01/25	
Wastewater	5	54.99	5	57.75	
Stormwater/Drainage	\$	11.88	\$	12.47	
Total	\$	66.87	5	70.22	

Sample Monthly Residential Customer Bill

Total Wastewater and Drainage Charges As of August 1, 2022	\$	70.22
Stormwater/Drainage Service Charge	- \$	12.47
Wastewater Charges	\$	57.75
Consent Decree Surcharge	\$	16,22
Monthly Volume Charge (\$5.42 per 1,000 gallons)	\$	21.68
Monthly Service Charge	\$	19.85
Wastewater		

Commercial and Industrial Customers

Wastewater, drainage volume, and service charges, as well as optional and quality charge rates, increase 5-percent beginning August 1, 2022, for MSD Commercial and industrial customers. For a complete schedule of Rates. Rentals and Charges visit LouisvilleMSD.org/Rates.

or an explanation of the charges on your bill, visit: LouisvilleMSD.org/PayMyBill



The innovative, regional utility for safe, clean waterways.

CUSTOMER RELATIONS

502.540.6000 · OustomerRelations@LouisvilleMSD.org



Bill Stuffer: General outreach including information about flood insurance, basement flooding and water quality





Protect yourself with flood insurance

MSD has earned Louisville Metro a Class 3 status allowing our residents to automatically receive a 35 percent discount on flood insurance premiums through the National Flood insurance Program's Community Rating System.

To find out if a property is located in a floodplain, visit: http://apps.lojic.org/ msdflooddetermination/

You can make a difference in the health of our streams.

Clean up after your pet

Dispose of pet waste in the trash so that it isn't washed into our steams. Dogs in Jefferson County produce four dumptruck loads of waste every day.



msd

OUR VISION

The innovative, regional utility for safe, clean waterways.

CUSTOMER RELATIONS
502540.6000

OustomerRelations@LouisvilleMSD.org



CAIRITY

Clearing the Air: The MSD clAlRity Program

The MSD clAlRity Program is our proactive odor control initiative designed to reduce sewer and wastewater treatment odors now and into the future.

Smell something...say something!

Let's face it: Sewer and wastewater treatment is an "odorous" endeavor.

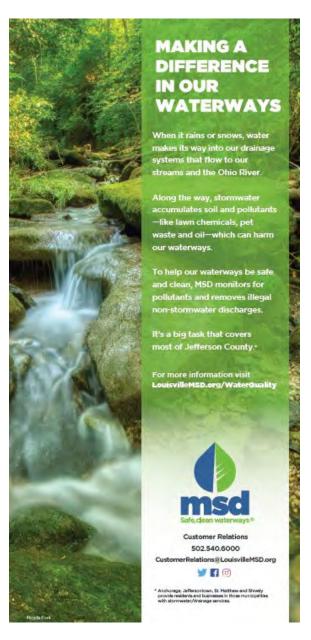
If you experience sewer odors, call **502.540.6000** or fill out our Report an Odor form at **LouisvilleMSD.org/odor.**

The sooner we hear from you, the better the chance of identifying the source and addressing the problem.

February 2022



March 2022





April 2022



MAKING A DIFFERENCE IN OUR WATERWAYS

Did you know?

Dogs in Jefferson County produce FOUR dump-truck loads of waste EVERY DAY!



Please do your part to help by scooping the poo and properly disposing of it in the trash.

Pet waste that is left behind on sidewalks, in parks and yards finds its way to our local waterways when it rains. This waste increases bacteria and nitrogen levels in the water, depleting oxygen for fish and aquatic life.

Working together, we can achieve safe, clean waterways for our community.

For more information visit LouisvilleMSD.org/WaterQuality



502.540.6000
CustomerRelations@LouisvilleMSD.org

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June 2022



MAKING A DIFFERENCE IN OUR WATERWAYS

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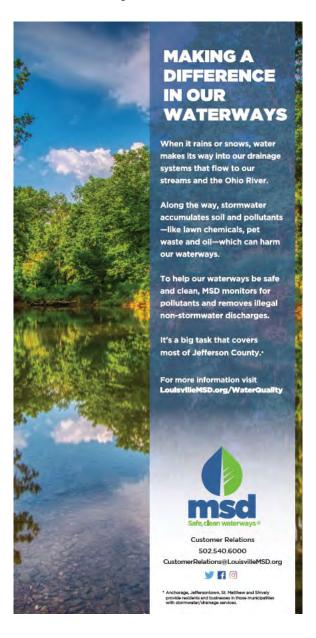


Customer Relations
502.540.6000
CustomerRelations@LouisvilleMSD.org





July 2022



September 2022





October 2022





Plumbing Modification Packets

Helping protect homes from sewer backups Plumbing Modification Program

Backflow Prevention

backflow device in the customer's basement to reduce available to MSD customers who have experienced a wet-weather related sewer backup in their basement, cover the cost of having a licensed plumber install a weather backups. Through this program, MSD will MSD's Plumbing Modification Program (PMP) is or live in a geographic area with a history of wetthe risk of sewers backups caused by heavy rains

> pump disconnection. Keeping rainwater out of the sewer through cost-effective methods like downspout or sump MSD strives to keep rainwater out of the sewer system

waterways, and helps avoid sewer backups into homes

system helps prevent sewer overflows into our local

Illicit connections to the sewer system can cause sewer

overflows, which lead to pollution problems in our

Sump Pump

Sump pumps connected 8-inch neighborhood to the sanitary sewer to the sanitary sewer gallons of rainwater system. The typical add hundreds of

can become overwhelmed with as few as eight sump licensed plumber to disconnect the sump pump from pumps connected to the system. The PMP allows a

Relations Department - at 502-587-0603 - or email residential customers should call MSD's Customer For more information concerning these programs CustomerRelations@LouisvilleMSD.org your downspouts if needed.

effective way. This licensed plumber can also disconnect

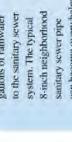
the sanitary sewer and re-direct the water in a safe and

Disconnection

sewer. Improper connections increase the volume of water in the sewer system, contribute to sewer overflows that pollute

our waterways and cause sewer backups into homes

and downspouts flow directly into a sanitary or combined waterways. These connections let rainwater from gutters





Minimizing the amount of rainwater entering the Downspout Disconnection Program stormwater system

homes have downspouts connected to the sewer sewer pipe can handle neighborhood sanitary become overwhelmed homes. This pipe can situation, MSD offers approximately 200 when as few as six line. To relieve this wastewater from A typical 8-inch

residential customers a one-time incentive of \$100 per downspout for disconnection from the sewer system.







MSD strives to keep rainwater out of the sewer system through cost-effective methods like downspout disconnection. Keeping rainwater out of the sewer system helps prevent sewer overflows into our local waterways, and helps avoid sewer backups into homes.

MSD is improving the sanitary sewers in your neighborhood. We need your help disconnecting downspouts in order to fully complete the project. The sewers in your area are part of a separate sewer system. A two-pipe system runs under your neighborhood streets; one pipe for the rainwater and one pipe for the sanitary sewer.

Downspouts that are connected to the sanitary-sewer pipe let rainwater from gutters and downspouts flow directly into the sanitary system. A typical 8-inch neighborhood sanitary-sewer pipe can handle wastewater from approximately 200 homes. This pipe can become overwhelmed when as few as six homes have downspouts that are connected to the sanitary system.

This Downspout Disconnection Project will also help eliminate the need for a sewer overflow storage basin in the area.

> MSD offers residential customers a one-time incentive of

\$100 per downspout

for disconnection from the sewer system

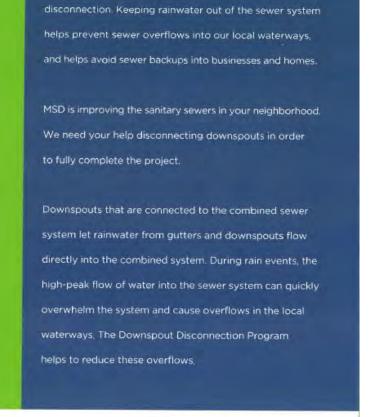


Plumbing Modification Packets



Downspout
Disconnection
Guide

for Commercial Customers



MSD strives to keep rainwater out of the sewer system

through cost-effective methods like downspout

MSD offers commercial customers a one-time

monetary incentive

for disconnection from the sewer system.



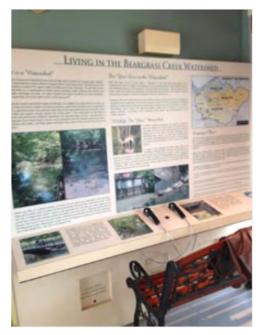


Brochures/Displays

Louisville MSD Lobby Video and Historic Flood Map, Louisville Science Center, Parklands of Floyds Fork Display



MSD Lobby Video and Historic Map



Louisville Nature Center Display



Parklands of Floyds Fork Display



Louisville Science Center





OP #14 Brochures on Priority Topics in MSD Lobby

Homeowner's Guide to Retrofitting

Who the Guide is For

As a homeowner, you need clear information about the retrofitting options that are available to help reduce flood damage to your home. as well as guidance on selecting the option that is best for you. FEMA P-312 is intended for homeowners who have little or no knowledge of flood protection meth-



ods or building construction techniques.

In order to avoid repetitive flood damage to your home, you need to know what damage-reduction methods are available, the degree to which they are successful, how much they cost, and whether they are likely to meet your needs. These issues are addressed by the guide. In addition, the guide explains how the degree of flood risk can vary from one location to another. By knowing the basic questions to ask your local officials, you are guided toward the retrofitting technique that is appropriate for you



Under State or local laws, ordinances, or regulations, some retrofitting techniques may not be used in certain circumstances. This is another important reason to consult your local officials.

Want to Learn More?

Homeowner's Guide to Retrofitting: Six Ways to Protect Your Home From Flooding, FEMA P-312,

FEMA P-312 can be downloaded from FEMA's web site: http://www.fema.gov/library/viewRecord.

You can also call 1-800-480-2520 to order a copy of FEMA P-312 or other FEMA publications, including those listed below.

Related Publications

- · FEMA 259, Engineering Principles and Practices for Retrofitting Flood-Prone Residential Buildings (recommended for architects and
- FEMA 348, Protecting Building Utilities from Flood Damage
- FEMA 499, Home Builder's Guide to Coastal Construction Technical Fact Sheets
- FEMA P-85, Protecting Manufactured Homes from Floods and Other Hazards: A Multi-Hazard Foundation and Installation Guide, Second Edition
- FEMA P-550, Recommended Residential Construction for Coastal Areas, Second Edition



Homeowner's Guide to Retrofitting

Six Ways To Protect Your House From Flooding

FEMA L-235 / December 2009





What is "Retrofitting"?

Retrofitting means making changes to an existing building to protect it from flooding or other hazards such as high winds and earthquakes. FEMA publica-tion P-312, Second Edition, Homeowner's Guide to Retrofitting: Six Ways to Protect Your Home From Flooding, provides information that will help you decide whether your home is a candidate for retrofitting.

The guide describes six retrofitting methods that can help to protect your home from flooding.



Elevation is raising your home so that the lowest floor is above the flood level. This is the most common way to avoid flood damage



Wet floodproofing is making uninhabited parts of your home resistant to flood damage when water is allowed to enter during flooding.



Relocation is moving your home to higher ground to protect it from flood-



Dry floodproofing is sealing your home's exterior walls to protect your home from flooding.



Levee and floodwall protection is constructing barriers to prevent floodwaters from entering your home.



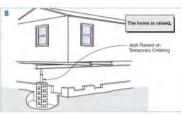
Demolition is razing your home and rebuilding properly on the same property or buying a home elsewhere.

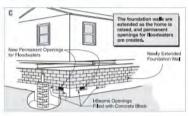
FEMA P-312 uses photographs and illustrations to help explain how each of the six retrofitting methods



For example, this series of illustrations from the guide shows how a home on a basement or crawlspace foundation can be elevated above the flood level on extended foundation walls.











The Next Step

Whether or not your home has been damaged by flooding, contact your local floodplain administrator or building official before retrofitting. This is a critical step to reducing potential flood losses. Local officials know the retrofitting methods that meet State and local government requirements.

Financial Assistance

FEMA P-312 provides information on government and non-government financial assistance (e.g., loans, grants, and insurance payments) that can help homeowners with retrofitting projects.

For example, under FEMA's National Flood Insurance Program (NFIP), a policy holder may qualify for Increased Cost of Compliance (ICC) coverage If your home is substantially damaged by flooding, ICC coverage may help to pay for some types of retrofitting. The Hazard Mitigation Assistance grant programs are designed to provide financial assistance for retrofit projects. FEMA P-312 describes financial assistance and how you might qualify.

FEMA Fact Sheet

Federal Emergency Management Agency

Building Considerations:

- Building code requirements and current best practices for safer building standards can reduce your future flood risks
 - Grant programs and loans can help you rebuild in a way that provides better protection from future floods, or help you relocate your home or business outside the floodplain



the lowest floor built at three different elevations: From left to right: at four feet below the BFE, at deductible and includes \$250,000 building coverage only (does not include contents coverage) for a single-family, one-story structure in Zone AE (high risk). The graphics represent buildings with The illustration above is based on a minimum National Flood Insurance Program (NFIP) the BFE, and at three feet above the BFE.

Resources for More Information

To ask questions and get information about flood insurance, call the National Flood Insurance Program Help Center at 800-427-4661.

To see if you are eligible for Hazard Mitigation Assistance grants and loans, visit

To learn how to build safer and stronger structures and potentially decrease your flood insurance

To learn more about the National Flood Insurance Program or to find an insurance agent, visit

Contact your local officials for information about local building codes and permit

requirements, and to learn whether your community participates in the Community Rating System – which can help lower your flood insurance premiums.

FEMA's mission is helping people before, during, and after disasters

Page S



Fact Sheet

Safer and Stronger **Build Back** If Your Home or Business Has Been Flooded,

This information should be used by homeowners and business owners who are recovering after a disaster to reduce their risk of future disasters and build back safer and stronger.

Manage Your Future Risk

If your home or business is damaged or destroyed by a flood, you will face major decisions about your property. Do you repair or rebuild? Do you relocate?

Before you build, consult your

local government to determine

the mandatory elevations for business, and find out which

rebuilding your home or

The decisions you make now can help provide a safer, stronger property for you and your family. If you decide to repair or rebuild, here are some points to consider:

 Historic flood risk may not be the same risk you face today or in the future

building permits are required.

 By rebuilding higher, you can reduce—or avoid—future flood loss and reduce the impact on your finances

The consequences of not having flood insurance coverage can be financially devastating and have a long-term impact on your financial and emotional health

Reduce Your Risk, Reduce Your Premium

water is expected to rise during flooding in

manager can help you find this

The Base Flood Elevation is how high high- risk areas. Your local floodplain

benefits when considering your options for repairing or flood losses is to elevate your building above the Base rebuilding. The primary way to reduce or avoid future Flood Elevation (BFE). If you have a flood insurance It is important to understand the long-term costs and

policy, elevating your building could also reduce your premium substantially—saving you thousands of dollars over the life of your home or business. (See Figure 1). If your home is built on land that has a high risk for flooding, moving your home or relocating to higher ground outside the floodplain could be your best option. Talk to your local floodplain administrator for more information.

Flood Insurance Considerations.

 Elevating your home or business can help reduce your flood insurance premium rates

conditions and your flood risk

If you rebuild to pre-flood

increases over time, so could

your flood insurance

- Premiums may increase for all homes and businesses There are options for insuring your building and its
- contents, and structural mitigation measures can reduce your risk

Other circumstances that could increase your rates include flood map revisions triggered by changing land use, new development patterns, major population changes, evolving risk, or flood studies based on improved information

FEMA's mission is helping people before, during, and after disasters

When flooded... Turn Around Don't Drown!



Follow These Safety Rules

Monitor the NOAA Weather Radio All Hazards, or your favorite news source for vital weather related information.

If flooding occurs, get to higher ground. Get out of areas subject to flooding. These include dips, low spots, canyons, and normally dry washes.

These include dips, low spots, canyons, and normally dry washes.

Avoid roads already flooded.

Road may be washed out under flood waters. Turn Around Don't Drown $^{\text{TM}}$ when you encounter a flooded road.

If heavy rain is forecast or occurring, move your camp site and vehicle away from streams and washes.

Be especially cautious when driving at night when it is harder to recognize flood dangers.

For more information:
Turn Around Don't Drown™ online Toolbox - http://www.weather.
gov/os/water/tadd/
FLASH – http://flash.org/video.php

Partners

American Association of Motor Vehicle Administration Federal Alliance for Safe Homes



Turn Around Don't Drown™ is a National Oceanic and Atmospheric Administration trademark

NOAA/YPA - 201150

When flooded...



Photo: Marvin Nauman, FEMA

Turn Around Don't Drown!

DEPARTMENT OF COMMERCEE
National Oceanic and Atmospheric Administration
National Weather Service

Turn Around Don't Drown™

In direct response to so many unnecessary vehicular-related flood deaths, the National Weather Service developed a national campaign called, "Turn Around Don't Drown". The campaign aims to educate motorists of the dangers of driving across flooded roads.

Dangerous Water

"I urge all Texans to realize the dangers of crossing flooded roadways and respect the barricades put in place by officials to protect Texans' lives. Remember these words: Turn around don't drown," (Governor Rick Perry, Press Release, July 7, 2010).

Words to live by for all motorists. On average, nearly 100 people drown every year in floods-more than half are caused by motorists trying to drive through flooded roads. Too often, motorists across the nation find themselves in trouble:

Indiana--a pregnant woman and her 7-year-old daughter were rescued when their vehicle became stranded on a flooded road.

Georgia—a 39-year-old woman drowned in her minivan when flash flooding trapped her in her vehicle.

Arizona—a swift water team rescued a man from a car stranded in a wash after he drove past a "Flood Area" sign.

Many drivers over estimate their ability to navigate flooded roads, putting too much stock in their "heavy" vehicles. In reality, most motorists lose control of



their vehicles, including SUVs, in just six inches of water, while 18-24 inches of moving water will force a vehicle off the road. The menace is buoyant force. When the buoyant force is greater than the vehicle's weight, the vehicle will move with the moving water. Besides the buoyant force, erosion is another significant.



concern. Moving water is very powerful and can undermine the integrity of a road. A motorist will be unaware he is driving into a scoured out section of the road.

Warning and Incident Road Signs

The National Weather Service worked closely with the Department of Transportation Federal Highway Administration to develop two officially sanctioned road signs. Local officials are encouraged to use Turn Around Don't Drown't (TADD) signs to mitigate the loss of life and property.

WHEN FLOODED TURN AROUND DON'T DROWN

Warning Signs

Warning signs are permanent signs alerting drivers to existing or potentially hazardous road conditions. The TADD warning signs are used in locations where the risk for flooding is high, flooding happens very quickly, and/or where flooding occurs in isolated locations when emergency officials don't have time to post an incident sign.

FLOODING AHEAD TURN AROUND DON'T DROWN

Incident Signs Incident signs are temporary signs posted on an

incident signs are temporary signs posted on an as-needed basis. Incident signs should be deployed when a natural disaster (flood or flash flood) or other unplanned event impedes the normal flow of traffic.

The Manual on Uniform Traffic Control contains provisions for traffic control devices, including size of the sign, color, and shape. Standards for both incident and warning signs can be found at: http://mutcd.fhwa.dot.gov

Information for developing Turn Around Don't Drown™ signs can be found at the National Weather Service Turn Around Don't Drown™ Toolbox: http://www.weather.gov/os/water/tadd/

Know Your Flood Risk When Buying a Home

Are you buying a home?

You should check and see if it has flooded or had drainage problems. Even a shallow flood can cause costly damage.

If a home is located in a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area, it is five times more likely to experience a flood than a fire, so you should consider purchasing flood insurance.

Simply enter your address to determine if your property is in a FEMA floodplain area.

https://apps.lojic.org/msdflooddetermination/





700 West Liberty Street Louisville, KY 40203-1911

502.587.0603 CustomerRelations@LouisvilleMSD.org

Learn more about MSD and ways we are helping protect our community and its waterways.

LouisvilleMSD.org







Buying a home in a Special Flood Hazard Area

If you buy a home in a Special Flood Hazard Area and get a mortgage that is regulated or insured by the Federal Government, you will be required to buy a flood insurance policy. Ask the sellar and the agent if they know of any flooding or drainage problems at the property.

Check to see if the property is located in a Special Flood Hazard Area. For properties in Jefferson County, Kentucky visit: https://apps.lojic.org/msdflooddetermination/

Flood Insurance Rate Maps

FEMA has Flood Insurance Rate Maps that show Special Flood Hazard Areas and flood zones.

- A Zones (A and AE) are high-risk areas. There
 is at least a 1 in 4 chance of flooding during
 a 30-year mortgage. All home and business
 owners in these areas with mortgages from
 federally regulated or insured lenders are
 required to buy flood insurance.
- X Zones are moderate-to-low risk areas according to FEMA maps. The risk of flooding is reduced but not removed. Flood insurance is not required but may be advised, especially if you are in the Local Regulatory Floodplain.

The Local Regulatory Floodplain includes homes that are beyond the edges of the FEMA A Zones. These properties have been identified as has having a higher risk of flooding than areas outside the Local Regulatory Floodplain. Owners of these properties are required to follow the regulations in the Louisville Metro Floodplain. Ordinance

Flood insurance is not federally required in

What Prospective Property Owners Should Know

Local Floodplain Management Regulations MSD and the Kentucky Division of Water regulate construction and development in identified floodplains to ensure buildings are protected from flood damage.

- Any development (including renovations and additions) in the floodplain requires a permit from MSD and the Kentucky Division of Water.
- Filling in areas with extra soil and similar projects are prohibited in certain areas
- Houses that are considered substantially damaged (i.e., more than 50 percent of its market value) by fire, flood or other causes must be elevated to at least one foot above the flood level when they are repaired.
- Houses cannot be substantially improved (i.e. more than 50 percent of its market value) in a 1-year rolling period unless they are elevated to at least one foot above the flood level.
- New construction in the Floodplain, including additions, must be elevated at least two feet above the flood level.

Questions?

If you have questions about special land use, building, or floodplain management regulation; that apply to a property, contact MSD at 502,540,6439.

For more information about flooding, visit MSD's Floodplain Management website at: http://www.msdlouky.org/programs/crssite/fpindex.html

For flood insurance information, visit www.floodsmart.gov.

Other Resources

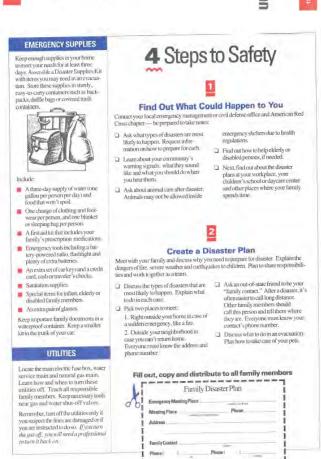
You can check on Special Flood Hazard Areas in Jefferson County three ways:

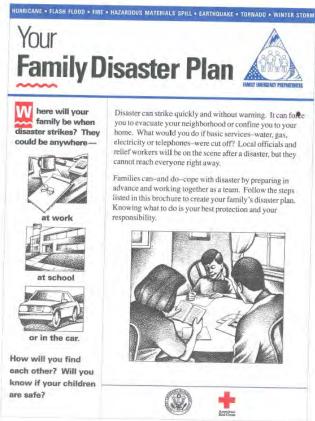
- MSD's Flood Determination website: https://apps.lojic.org/msdflooddetermination/
- The online LOJIC Map: www.lojic.org
- FEMA's Map Service Center: http://msc.fema.gov

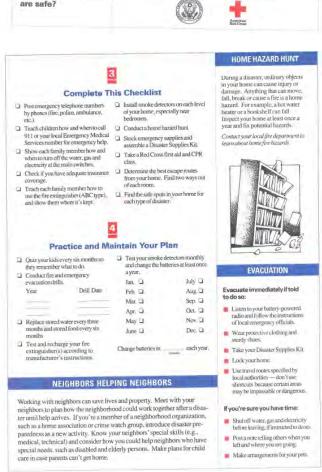


Your Family Disaster Plan









Army Corps of Engineers High Water Mark



Obelisk showing High Water Marks at McAlpine Locks and Dam Visitor Area





MSD's Tips, Tricks and Tools to use at Home

Who said education is only meant for the classroom? Let's learn how the decisions you make at home can help provide safe, clean waterways throughout Louisville and the surrounding region:

Kitchen and Laundry

- Dispose of lats clist glasse and food scraps in the trash to prevent clogs in your sewer line and backups into your home (see a list of companies) (this link goes to the brochure, plus the list services business not residential, commercial is a whole different ballgame. That brochure is underway now) that will haul away your FOG.
- Delay using washing machines and dishwashers during peak rain events
 —they can fill up the sanitary sewers and contribute to sewer overflows.

Bathroom

- Put (wipes should be at the top of this list) diapers, floss, feminine hygiene products, paper towels and waste from garbage disposals in the trash, not down your drains and toilets.
- . Know the Three P's of Polity Salety Pee, Pop and Paper.
- Do not flush medications as these substances are bad for our environment. Find disposal locations near you.



Yard

- Decrease use of fertilizer and pesticides, especially when it may rain soon. These chemicals get carried to waterways and can harm plants and animals.
- Compost grass clippings and leaves. These items can get carried off by rainwater and end up in streams, as well as contribute to flooding.
- When you wash your car on a driveway or other paved surface, the wash water carries oil, grit and dirt to nearby catch basins, drainage ditches and waterways. In the yard, water will soak into the grass, so less will run off to catch basin or drainage ditches.



- Put pet waste in the trash. Pet waste that is left on the ground can contaminate waterways.
- Disconnect downspouls from the sewer system.
- Direct downspouts away from paved surfaces so nature can filter rooftop pollutants before they reach waterways.
- Plant a <u>rain garden</u> to capture stormwater runoff (see our <u>Rain Garden</u> <u>Plant Guide</u> for gardening ideas).
- If you see a leaking sewer pipe or a clogged storm drain/catch basin, please report it to <u>Customer Relations</u>.



District 15 (November 3, 2022)

Street Sweeping Reminders

Street Sweeping Reminders

Why is street sweeping important? It helps remove debris from the



gutter and roadsides that would otherwise go into storm drains, causing water pollution.

District 5 (November 10, 2022)

Let's All do our part with Fall Leaves

With Fall arriving so do falling leaves!

Please Clear catch basins in front of your home to help drainage! MSD will assist in this effort as well when called (call 311 if needed) however with little effort, most of the time, we can sweep them from the catch basins and promote better drainage!



District 10 (November 11, 2022)

Remember to keep FOG: fats, oils, and grease, out of your drain



With the holidays ahead and lots of food for families to prepare, our friends at Louisville MSD warn about the dangers of letting fats, oils, and grease (FOG) go down your drain.

FOG may clog the sewer pipe and cause sewage overflows into your home, onto the ground, and into our local waterways, says MSD, which also warns that using your garbage disposal or a grease-cutting detergent does not keep FOG out of the plumbing system.

Metro Council eNewsletters

District 10 (November 23, 2022)

Remember to keep FOG: fats, oils, and grease, out of your drain



With the holidays ahead and lots of food for families to prepare, our friends at Louisville MSD warn about the dangers of letting fats, oils, and grease (FOG) go down your drain.

<u>FOG</u> may clog the sewer pipe and cause sewage overflows into your home, onto the ground, and into our local waterways, says MSD, which also warns that using your garbage disposal or a grease-cutting detergent does not keep FOG out of the plumbing system.

District 10 (December 16, 2022)

Remember to keep FOG: fats, oils, and grease, out of your drain



With the holidays ahead and lots of food for families to prepare, our friends at Louisville MSD warn about the dangers of letting fats, oils, and grease (FOG) go down your drain.

FOG may clog the sewer pipe and cause sewage overflows into your home, onto the ground, and into our local waterways, says MSD, which also warns that using your garbage disposal or a grease-cutting detergent does not keep FOG out of the plumbing system.

District 24 (December 22, 2022)



District 10 (December 23, 2022)

Remember to keep FOG: fats, oils, and grease, out of your drain



With the holidays ahead and lots of food for families to prepare, our friends at Louisville MSD warn about the dangers of letting fats, oils, and grease (FOG) go down your drain.

<u>FOG</u> may clog the sewer pipe and cause sewage overflows into your home, onto the ground, and into our local waterways, says MSD, which also warns that using your garbage disposal or a grease-cutting detergent does not keep FOG out of the plumbing system.



March 2022

ALL ABOUT RAIN GARDENS



There's a familiar saying April showers bring May flowers. Prepare for both by building a rain garden. Rain gardens reduce storm water runoff, showcase plants and flowers, and provide wildlife habitat. They capture rainwater then slowly release it into the soil. Drop by City Hall and pick up a free MSD rain garden handbook or website, at https://louisvillemed.org/

visit MSD's website at https://louisvillemsd.org/ and search "rain gardens" to learn the six simple steps for creating and maintaining a rain garden.



June 2022



BE PART OF THE SOLUTION, NOT PART OF THE PROBLEM

Scoop your pet's waste no matter where you are: community parks, sidewalks, or your yard. Waste left on the ground is carried to local waterways when it rains. Pet waste is one the greatest pollutants to Kentucky rivers, streams and lakes. Do your part to keep our creeks and streams clean. Highly frequented areas of the City have pet waste bags and receptacles specifically for the purpose of enjoying and cleaning up after your pets. Be a good resident and neighbor by keeping these open areas clean.



The clean up at Wilderness Part event was attended by MSD and promoted on our social media.



CLEAN UP AT WILDERNESS PARK

6014 PRESTON HWY
(field behind the corner of Laclede Ln and Preston Hwy)



MARCH 26TH 10:30AM

For Questions Contact: Councilwomen Nicole George (502) 574-1121











Councilwoman Nicole George

f Wilderness

I was blown away yesterday by Louisville MSD's commitment to the potential of Wilderness Nature Preserve and Preston Park neighbors. MSD worked alongside neighbors to clean Guardian Angels Ditch. This included clearing the silt to allow better flow of water. A turtle was even saved in the process! Parks Alliance of Louisville, Prosper Preston







Mayor's Give a Day of Service Projects April 1 – 30, 2022





MSD is participating in the month-long Mayor's Give a Day of Service to support the many needs of our local communities. The following projects have been selected for MSD employees to participate in. A team of three to five is needed for each project with one person serving as the team lead. **To participate you must have supervisor approval. Face mask and/or social distancing required.** Project details and sign-up instructions are listed below. To register for any of the events, please email Sherita Davis, Sherita.Davis@louisvillemsd.org

MSD sponsored event - Mill Creek Trash Cleanup Event

Project: MSD event, Southwest Regional Library, 9725 Dixie Highway, on Saturday, April 16, from 8:00 am to 12:00 pm.

Description: Trash cleanup

Tools and guidance provided. Volunteers will clean up the library and surrounding area.

Additional Details Is Family Friendly Is Outdoors Wear closed-toed shoes Dress for the weather

To register click the signup genius link provided https://www.signupgenius.com/go/10c0d4baca728a0f8c61-mill1 or email



River City Paddle Sports: Earth Day Clean Up at Shawnee Park (April 22, 2022)



Clean Ups Holy Cross High School (September 21, 2022)

Holy Cross High School partnered with MSD to give back to the Mill Creek Watershed through a trash pick up and park rehabilitation day. Twenty students and their teachers helped to pick up trash at Sylvania Park and helped to plant new trees, pull weeds, pick up trash and create seed packets at Rose Farm Park







Clean Ups Mill Creek Trash Cleanup and Community Event (November 5, 2022)

As part of the 319 watershed planning efforts for Mill Creek, MSD and partners hosted a trash cleanup with two shifts and a community event to share water quality messaging and current projects going on in the watershed.

Customer Relations 502.540.6000 · CustomerRelations@LouisvilleMSD.org



MSD EPSC Training for Contractors and Home Builders (On-Going)

In order to educate contractors and homebuilders about erosion prevention and sediment control (EPSC) requirements and to meet the EPSC ordinance, MSD teaches classes for both contractors and homebuilders. These classes are administered by Jefferson County Public Schools. During 2020, no classes were able to be offered due to the COVID-19 pandemic. This in person class format was transitioned to an online self-paced class as of January 2021 and is available in both English and Spanish in the hope to educate a larger customer base.



Website link: http://lifelonglearning4u.com/msd/

METROPOLITAN SEWER DISTRICT (MSD)

Certification Classes

Home © EPSC © QPCIP © Certification Assessment Tips © Check Your Certification Data QPCIP Inspection Services

Register Online

Click on the "reload" or "refresh" button on your browser to ensure you are viewing the latest version.

Due to the adoption of the Louisville and Jefferson County EPSC Ordinance, area Home Builders (Single-Lot Residential Construction or Demolition), Contractors, Inspectors, and Certified Plan Reviewers are required to participate in training courses and as a result, receive certification in compliance with the ordinance.

Erosion Prevention and Sediment Control (EPSC) Certification courses are prepared by MSD and offered online in cooperation with JCPS Adult & Continuing Education. EPSC courses listed are currently held online and access is granted after the student has been registered and then entered as a participant in the online course. Pre-registration with Adult & Continuing Education/Louisville Learns is required.

A Stormwater Prevention Resource Training video is also available for anyone to view. Please note that the Resource Training Videos do not result in an EPSC certification.

Online Courses:

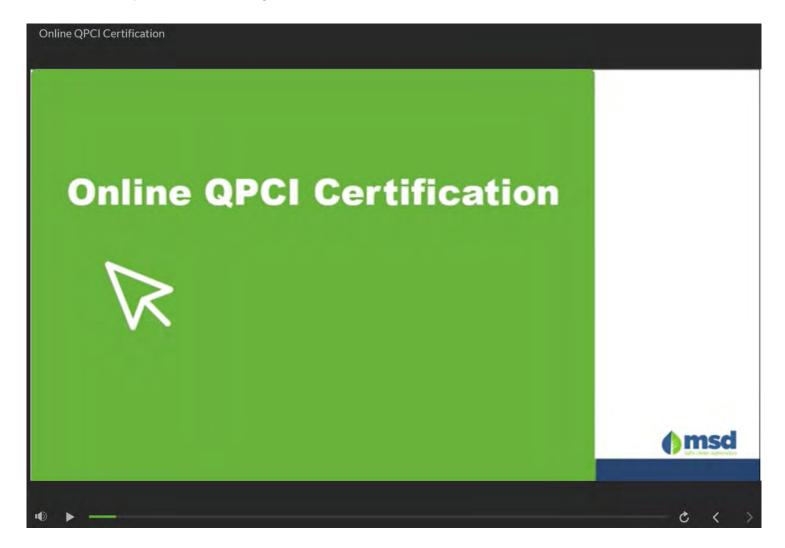
- Home Builder (Single-Lot Residential Construction or Demolition) Course fee: \$89
- Contractor Course fee \$95



MSD Qualified Post-Construction Inspector Training (QPCI) (On-Going)

Required annual inspections of post-construction best management practices must be completed by a Qualified Post-Construction Inspector (QPCI) per the Long Term Maintenance and Operation Agreement (LTMOA). The training, Qualified Post-Construction Inspector page, is provided free of charge. An 80% or better on the follow up quiz to receive the QPCI certification.

Website link: http://oit.louisvillemsd.org/



Presentations: MSD Clairity (Odor Control) Public Meeting 01/11/2022 and 04/12/2022)

Online public meeting hosted by MSD to discuss odor control program. Slide 30 of the presentation included information to remove leaves and debris from catch basins and to put leaves and sticks in compost or yard waste.

Clearing the Air: The MSD cl**AIR**ity Program

Community Meeting January 11, 2022

msd

Catch Basins

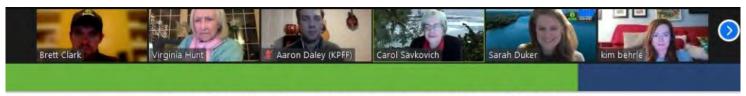
- Remove leaves and debris that may be obstructing rainwater from getting into the catch basin
- Leaves and sticks go into your yard waste or compost, and trash and other debris can be recycled or sent to the garbage





Presentations: Westwood Garden Club (January 27, 2022)

MSD staff made a presentation to Westwood Garden club about the Urban Reforestation Program and the benefits trees have on stormwater.



Louisville Metropolitan Sewer District

Sanitary Sewers





Stormwater





Flood Protection





Rain garden presentation to the Rambler Garden Club. Presentation included information about how you can improve water quality, including how to build a rain garden at your home. Margaret Shea with Dropseed Nursery also spoke about native plants that would do well in a rain garden.





Presentations Ohio Stormwater Conference (May 12, 2022)

Valentic PLA, GPD Group Colette Easter, PE, Louisville MSD provided an overview of challenges solutions encountered during the development of a GI Calculator to support a fee in-lieu-of program that will implement several GI measures throughout the MSD service area by utilizing funds from local development projects



Green Infrastructure In Lieu Fee Ivan Valentic PLA, GPD Group Colette Easter, PE, Louisville MSD

This presentation will provide an overview of challenges solutions encountered during the development of a GI Calculator to support a fee-in-lieu-of program that will implement several GI measures throughout the MSD service area by utilizing funds from local development projects.





Jefferson County Soil and Water Conservation District hosted a rail barrel workshop in collaboration with Louisville Grows

Rain Barrel Workshop

Learn how to install a rain barrel!

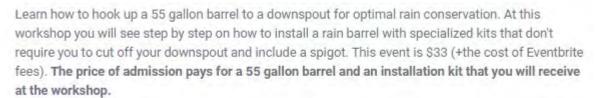
By Jefferson County Soil and Water Conservation District

When and where

Date and time

Thu, June 23, 2022, 5:30 PM - 6:30 PM EDT





The workshop will take place at Louisville Grows' Healthy House at 1641 Portland Ave. Louisville, KY 40203. Only one barrel and kit are available per participant.

Please join us in learning more about water conservation and how to utilize our water-rich environment to our advantage. We look forward to recycling rain with you!





Presentations Kentucky Stormwater Association Annual Conference MS4 Water Quality Monitoring Program (July 13, 2022)



2022 KSA Conference Agenda July 13-15 Seelbach Louisville Hotel

Wednesday, July 13 9:00 a.m 5:30 p.m. TRACK 1
A STAN A
TRACK 1
oville Metropolitan Sewer District (MSD 54 Water Quality Monitoring Program
Colette Easter, Louisville MSD & Lara Freeman, Stantec Consulting (Medallion Ballroom AB)

Louisville MSD

MS4 Water Quality Monitoring Program

July 13, 2022

Colette Easter, MSD, MS4 Program Administrator Lara Freeman, Stantec, Water Practice Lead





Presentations Sprouting Gardeners Club Presentation (July 28, 2022)

MSD staff met with the Sprouting Gardeners Club at the Louisville Grows Healthy House. They presented activates including identifying types of bugs and what that can tell us about water quality, and colored a watershed. They also toured the raingardens around the building and explained what they are and how they work.





Presentations Kentucky Society of Professional Engineers (September 21, 2022)

For KSPE's September Lunch and Learn Colette Easter presented on MSD Watershed Planning in Jefferson County including the value and need for watershed planning to improve water quality in Jefferson County. Colette also summarized the progress being made on two watershed plans in Jefferson County as well as how engineers in our community can help in the development and implementation of the plans.



MSD staff made a presentation about Prioritizing Flood Risks at the Kentucky Association of Mitigation Managers annual conference.



2022 KAMM Conference Agenda

September 20, Tuesday

11:20 - 11:50 am	1/4 Hr. Concurrent	1/2 Hr. Concurrent	1/2 Hr. Concurrent
	Beginner Tips & Tricks for Local Floodplain Managers Alex VanPelt, DOW	Intermediate From Forgotten to Critical Resource: Planning for Kentucky's Future with Wetlands Michaela Lambert, DOW	Intermediate Research to Operations: An Applied Service-Learning Mode for All-Hazards Mitigation Planning and Decision Support for Major Events and Incidents John Bowen, WKU
11:50 – 1:00 pm	mustard on wheat hoagi Turkey Wrap - Roast turk	cken - aged cheddar cheese, smokey t	The state of the s
	bar/restaurant. Follow the link Flood Mitigation – Sar	or ½ hour to conduct their yearly as to the agenda.	
	Grab lunch with a committee fi bar/restaurant. Follow the link Flood Mitigation – Sar	or 兆 hour to conduct their yearly cs to the agenda. rah Taylor	
	Grab lunch with a committee fi bar/restaurant. Follow the link • <u>Flood Mitigation</u> – Sar • <u>Education and Profess</u>	or ¼ hour to conduct their yearly is to the agenda. ah Taylor ional Development – Katherine O	Isborne

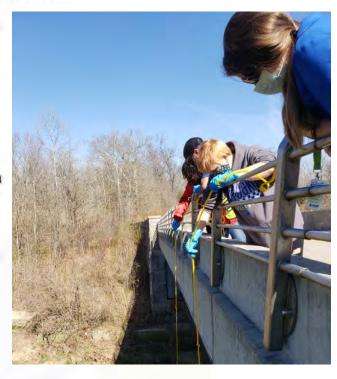


Floyds Fork Field Trip

March 2nd, 9:30 AM - Noon

- 9:30-9:05: Arrival and Heath Checks
- 9:35 9:45: MSD Overview, Watershed Planning and Floodplain
 - O Speakers: Colette Easter and Lori Rafferty
- 9:45 10:15: Plant Tour
 - o Speaker: Will Ford and/or Sean Smith
- 10:15 10:45: Laboratory Activity
 - o Speakers: Will Ford and/or Mike Stevenson
- 10:45-10:50: Break
- 10:50 11:25: Sampling Activity and Stream Walk
 - o Speakers: Sarah Duker
- 11:25 11:45: Bug Activity at Lookout
 - Speakers: Colette Easter and Brett Clark
- 11:45 12:15: Small Group Enviroscape and Floodplain Model Activity
 - o Speaker: Lori Rafferty and Brett Clark
- 12:20 12:30: Departure







MSD participates in neighborhood beautification

Chief of Government and Public Affairs Wes **Sydnor** joined Councilwoman Nicole George and Councilwoman Amy Holton Stewart on Saturday, April 9, for a tree planting event in the South End neighborhoods of Iroquois and Southland Park. The effort kicked off the annual South End Beautification Campaign, made possible through MSD's Urban Reforestation Grant totaling \$40,080. Volunteers planted 167 trees. Louisville Grows coordinated where to plant the trees, and Brightside is responsible for ongoing maintenance.





Festivals/Field Days/Shows Tree Planting at Beachland Beach Rd (April 15, 2021)

MSD staff completed a native tree planting at a floodplain grant buyout property on Beachland Beach Rd.







Presentations: Ripple Effects Photo Workshop (May 9, 2022)

2nd annual Ripple Effects Photo Contest—open to students from kindergarten through high school. Youth are asked to take photographs reflecting how water impacts them—from precipitation in their daily lives to their connection with local waterways. In support of the contest, Waterfront Park hosted a free workshop that included an Enviroscape demonstration.





Festivals/Field Days/Shows MSD Field Day (May 11, 2022)

This annual event is an educational day for professionals in the construction and engineering industries. MSD welcomes all contractors, developers, engineers, homebuilders, inspectors, regulators and vendors, as well as floodplain, industrial, real estate and stormwater professionals.



MSD Annual Field Day May 11, 2022 Gheens Foundation Lodge at the Parklands Louisville, Kentucky

	Wednesday, May 1	1	
7:30 - 8:00 AM	Registration Gheens Lodge F		
8:00 - 9:00 AM	Welcome and Opening Ceremony UPS Great Room		
8:00 – 9:00 AM	Welcome Tony Parrott, Executive Director, Louisville M	SD Updates and Welcome Facilitator: Matt Schaaf	
9:00 - 9:15 AM	Break and Transition to Technical Sessions		
9:15 - 11:00 AM	UPS Great Room	The Parklands Room	
	Technical Sessions Track 1 Engineering and Development Facilitator: Isabella Altier	Technical Sessions Track 2 Operations and Management Facilitator: Karina Henson	
9:15 – 9:45 AM	Maple Street Revitalization Project Stephanie Laughlin – Louisville MSD	EPSC and Post-Construction BMPs Maintenance Review Brett Clark and Ben Davidson – Louisville MSD	
9:50 - 10:20 AM	Development and Stormwater eServices Portal Brad Selch – Louisville MSD	Morris Forman Biosolids Project Alex Novak – Louisville MSD	
10:25 – 10:55 AM	Jefferson County Flood Study Update Lori Rafferty – Louisville MSD and Josh Hunn – AECOM	Louisville MSD Water Quality Treatment Center Updates Sharon Worley – Louisville MSD	
11:00 - 11:30 AM	Break/Networking/Demonstrations	Creek View Terrace	
11:30 - 1:00 PM	Lunch UPS Great Room		
12:15 - 12:45 PM	Key Note Speaker - Curtis Carman Director of Education, The Parklands of Floyds I	Fork Facilitator: Matt Schaaf	
1:00 - 1:35 PM	Louisville MSD Operations Updates - Brian Bingham		
1:35 - 2:10 PM	Louisville MSD Engineering Updates - David Johnson		
2:10 - 2:20 PM	Break		
2:20 - 2:30 PM	Louisville MSD Development Review Updates - Tony Marconi		
2:30 - 3:00 PM	MS4 and Floodplain Updates - Lori Rafferty		
3:00 - 3:50 PM	Stormwater and Development Review Department Panel and Q and A Facilitator: Colette Easte Panelist - Brad Selch, Lori Rafferty, Mark Sites, Joe Exley, Josh Dickerson, Vikki Huelsman		
3:50 - 4:00 PM	Closing Remarks	Facilitator: Matt Schaaf	







Festivals/Field Days/Shows Waterfront Park 4th of July (July 4, 2022)

Presented the enviroscape to attendees at the Louisville Waterfront Park 4th of July event.

Festivals/Field Days/Shows Jefferson Town Gas Light Festival (September 17, 2022)

In conjunction with the Jeffersontown Farmers Market MSD participated in the 3rd Annual Explore A Truck Event at the Gaslight Festival. In conjunction with MSD's vactor truck and TVI truck demonstration MSD hosted the enviroscape in the booth to teach the public about pollution that can impact our local streams through stormwater. Children and adults learned some of the ways we all can impact water quality through our daily activities. Then children had the opportunity to participate in a trivia question where they could win a prize. MSD also distributed Mandy books and activity books along with reusable bags.



Festivals/Field Days/Shows MSD Booth at Louisville Free Public Library Family STEAM Day (September 24, 2022)

During the South Central Regional Library STEAM event MSD participated in a day full of family fun as we explore Science, Technology, Engineering, Art & Mathematics with Kentucky Science Center, J.B. Speed School of Engineering, Louisville Nature Center, Frazier History Museum, Louisville Astronomical Society, Ambo Dance Company & more! MSD promoted how we protect our waterways through the treatment of wastewater and protection of stormwater.



Festivals/Field Days/Shows Tree Week Tree Plantings (October 8-16, 2022)

In celebration of Louisville's first Tree Week, MSD staff planted native trees at the Central Maintenance Facility. Other plantings occurred around the city as well.



Building on the success of Louisville's inaugural Tree Fest in April 2022, Tree Week is an effort to engage our community in celebrating and raising awareness of the value of our community forest. From October 8th-16th, join TreesLouisville and partners for a week of activities across Louisville Metro, including tree planting, mulching and pruning, tree tours/walks, outdoor activities like yoga, biking, scavenger hunts, hiking at local landmarks, and nature therapy/mindfulness walks. Tree-centric events like film showing, art and music, storytime and library events, K-12 programming, and guest speakers/webinars will also be included.

On October 8th, TreesLouisville will be hosting a tree giveaway at the Louisville Zoo, and on October 15th, TreesLouisville, Louisville Metro and Louisville Grows will be working with the Smoketown neighborhood on a community-wide planting day.





Festivals/Field Days/Shows Trinity High School Field Trip (October 18-19, 2022)

MSD staff hosted field trips with Trinity High School students at their Floyds Fork education center. Activities included touring the sewage treatment plant, stream sampling and instruction about factors that affect water quality.





Festivals/Field Days/Shows Holy Cross High School (October 21, 2022)

MSD staff visited Holy Cross High School and presented activities to students including the Flood model, Enviroscape, bug identification and Color me a watershed.









Festivals/Field Days/Shows Louisville Nature Center Field Trips, Scout Programs, Workshops, Pre-School Age Programs and Day Camps



Plan your fall, winter, or spring field trip to Louisville Nature Center! School classes, scouts, nature enthusiasts, senior citizens, and home-school groups are welcome to spend a couple of hours learning about the native flora and fauna of our area. Spots fill up quickly-often months in advance-so contact us early!









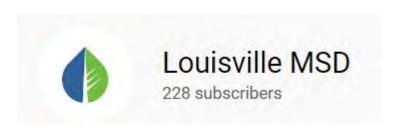












Social Media Posts Topic 3: Protect People





LouisvilleMSD @louisvillemsd · Feb 2, 2022

Following heavy and steady rain, roadways can be deceptive. Watch out for standing water. If an area looks flooded, don't attempt to drive through it. Find another route. #TurnAroundDontDown





LouisvilleMSD @louisvillemsd · Feb 18, 2022

We're experiencing heavy rains, which could result in standing water on roadways. If an area looks flooded, don't attempt to drive through it. Find another route. #TurnAroundDontDown



1

LouisvilleMSD @louisvillemsd - Feb 22, 2022 ***
Heavy rains can result in sudden street flooding. If a roadway looks dangerous, don't even risk it. Find another route. #TurnAroundDontDrown







Social Media Posts Topic 3: Protect People





















Most homeowners' and renters' insurance does not cover flood damage. Flood damage affects more than property—it impacts the entire community. Flood insurance gives you peace of mind. Learn more here: http://floodsmart.gov



FLOODSMART.GOV

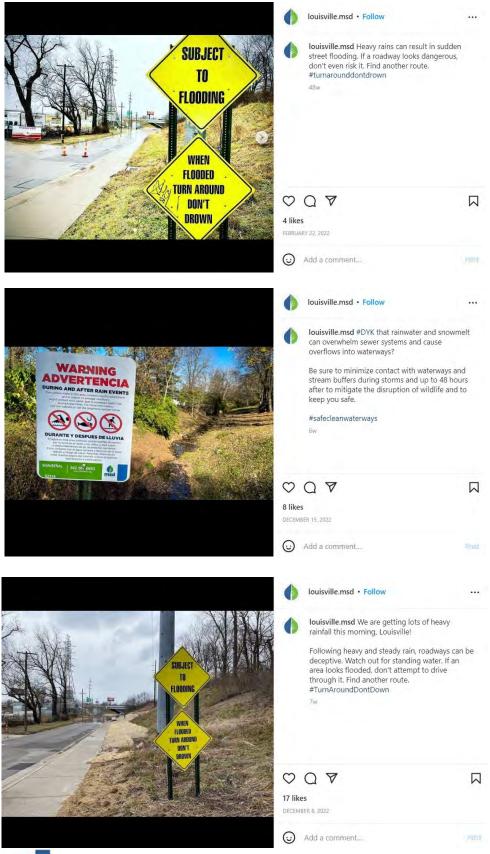
| The National Flood Insurance Program | FloodSmart

Secure .gov websites use HTTPS A lock () or https:// means you've safely connected to the .gov website. Share sensitive information only on official, secure websites.



Social Media Posts Topic 3: Protect People







Social Media Posts Topic 4: Protect Property





When raking your leaves, make sure you are disposing of them properly, and not in our waterways.

Where can you dispose of your fall leaves?

Composting is a great way to dispose of leaves and yard debris, and Louisville Metro Public Works offers a free leaf-drop service seasonally!

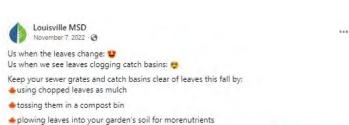
Check for updates as they become available here: https://bit.ly/3U4Hx5t





As much as we love the changing leaves in the fall, they can prevent proper drainage of our

Keep your sewer grates and catch basins free of fall leaves this season by composting or leaf-drop



Have another way to dispose of fall leaves? Let us knowin the comments! #safecleanwaterways





Louisville MSD

services.

September 28, 2022 - 3

Don't let the changing leaves "fall" off your radar.

Learn to keep your sewer grates and catch basins free of fall leaves this season with these helpful tricks for easier leaf removal:

🌞 Move backward as you rake to avoid spreading more leaves... See more





Social Media Posts Topic 4: Protect Property





LouisvilleMSD @louisvillemsd - Sep 28, 2022

As much as we love the changing leaves in the fall, they can prevent proper drainage of our waterways.

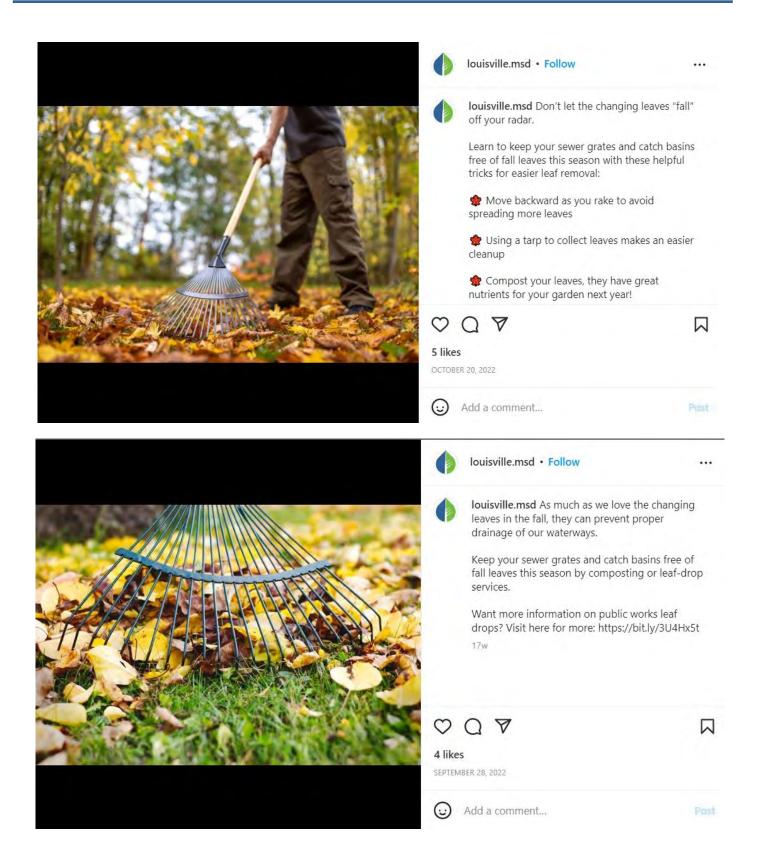
Keep your sewer grates & catch basins free of fall leaves this season by composting or leaf-drop services.

Visit here for more information: bit.ly/3U4Hx5t



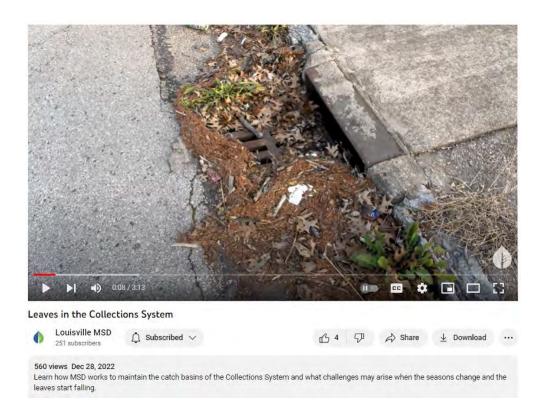


















LouisvilleMSD @louisvillemsd · Jan 31, 2022

It's cold today, but with spring just around the corner, it's already time to start thinking about a rain garden. Planting a rain garden adds beauty to your property while helping ensure #safecleanwaterways. Learn more at louisvillemsd.org/howyoucanhelp/....

Benefits of Rain Gardens

> 31 views

0:03 / 1:38 (l) v





LouisvilleMSD @louisvillemsd · Feb 28, 2022

Spring has nearly sprung; it's time to plan your rain garden. It's a great way to beautify your property while also helping ensure #safecleanwaterways.

Don't know where to start? We can help you there: louisvillemsd.org/sites/default/...





LouisvilleMSD @louisvillemsd · Apr 15, 2022

A rain garden is a beautiful way to ensure #safecleanwaterways by capturing and infiltrating rainwater during heavy rain events. You can learn more about rain garden cycles and maintenance at: youtube.com/watch?v=qBN_et...





LouisvilleMSD @louisvillemsd · Apr 22, 2022

Make #EarthDay a day not just to do something for the environment, but to make positive change year-round! When you compost grass clippings and use less yard fertilizer, you cut down potential harm to waterways. Learn more at louisvillemsd.org/athome.





LouisvilleMSD @louisvillemsd · Jul 2, 2022 How can YOU maintain stormwater run off?

Stormwater washes chemicals & bacteria build up from pavement into streams. Planting a rain garden or a rain barrel can filter it before reentering our waterways.

Check out some tips for starting your own: bit.ly/3uba0LY





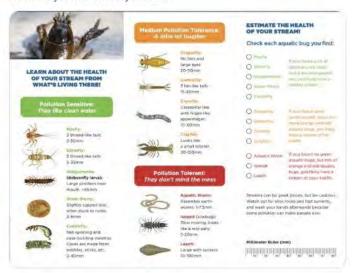




LouisvilleMSD @louisvillemsd · Jul 14, 2022 How clean is your stream?

Runoff pollution from rain can affect the health of our streams. How can you tell if your backyard stream is healthy? Aquatic bugs!

Check out this handy aquatic bug guide from Louisville MSD's Watershed Watch so you can collect your own.





LouisvilleMSD @louisvillemsd · Jul 23, 2022

How can you help Louisville MSD maintain stormwater run off at home?

Stormwater can quickly wash away chemicals and bacteria that build up on pavement into the streams. Having a rain barrel can help you contain stormwater and provide water for your yard.





LouisvilleMSD @louisvillemsd · Jul 21, 2022 Want to be in your Rain Garden era?

There are many benefits to starting a rain garden such as flood prevention, filtering runoff pollution, and reducing lawn maintenance, but where do you start?

Get some tips from the MSD team as they helped plant a rain garden in Portland.





LouisvilleMSD @louisvillemsd · Aug 6, 2022

Thinking about starting a rain garden? Here are 3 #LouisvilleMSD tips to get you #growing:

Plant in an area free of heavy soils with no filtration

* Adding mulch keeps soil moist & adds nutrients

🏲 Native plants are great pollinators, so include them in your garden!



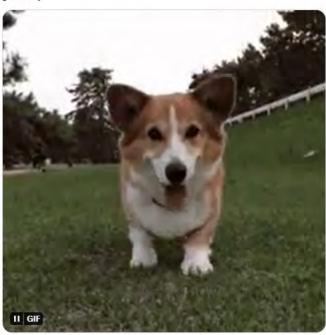






LouisvilleMSD @louisvillemsd · Apr 25, 2022 Who know who loves #safecleanwaterways?

Yep, doggos. And Jefferson County floofers produce four dump trucks' worth of poo a day. When you #scoopthepoop, you're preventing it from infiltrating groundwater or waterways. That'll make your pupper a happy good boy.





LouisvilleMSD @louisvillemsd · Mar 23, 2022

Jefferson County dogs produce four dump truck loads of waste every day. Just by picking up after your pupper, you ensure that waste doesn't end up in a waterway or contaminate groundwater. So #scoopthepoop and help ensure #safecleanwaterways for everyone—including your woofer.





LouisvilleMSD @louisvillemsd · Aug 18, 2022 Roses are red. Violets are blue.





LouisvilleMSD @louisvillemsd · Jun 30, 2022

#DidYouKnow dogs in Jefferson Co produce 4 dump-truck loads of waste every day? Pet waste that is left behind finds its way to our local waterways when it rains.

Do your part to #ScoopThePoo and dispose of your pet's waste in the

#LouisvilleMSD #SafeCleanWaterways













garden with native plant species providing pollinator habitat.

Learn how to plant your own rain garden at https://louisvillemsd.org/howyoucanhelp/raingarden. https://www.youtube.com/watch?v=XekAXIhn8Fw



Portland Basin Rain Garden

MSD Employees volunteer time to plant a rain garden at the site of the Portland Basin Pump S..



We monitor 27 sampling stations throughout Jefferson County and collect more than 3 million (!) individual water quality records each year. That's information that helps us know what effect the community has on our watershed. Learn what else we do at https://louisvillemsd.org/what-we-do.





It's cold today, but with spring just around the corner, it's already time to start thinking about a rain garden. Planting a rain garden adds beauty to your property while helping ensure #safecleanwaterways. Learn more at https://louisvillemsd.org/howyoucanhelp/raingarden.

Benefits of Rain Gardens





Spring has nearly sprung; it's time to plan your rain garden. It's a great way to beautify your property while also helping ensure #safecleanwaterways.

Don't know where to start? We can help you there:

https://louisvillemsd.org/.../Rain%20Garden%20Handbook...

Enhance the beauty of your yard and neighbor









A rain garden is a beautiful way to ensure #safecleanwaterways by capturing and infiltrating rainwater during heavy rain events. You can learn more about rain garden cycles and maintenance at: https://www.youtube.com/watch?v=qBN_etlp6m0





IDENTIFY THE INVASIVE PLANT!

Plants play a major role in the quality of our waterways. Native plants help to retain and infiltrate water while invasive plants are capable of harming other native plants, animals, and even people. That is why it is important to know what is native, and what is invasive.

So, which one is the invasive plant?

Honeysuckle VS Poison Ivy





Want to be in your Rain Garden era?

There are many benefits to starting a rain garden such as flood prevention, filtering runoff pollution, and reducing landscaping and lawn maintenance, but where do you start?

Get some tips from the MSD team as they helped plant a rain garden in Portland.





How clean is your stream?

Rainwater can bring runoff pollution to our waterways and affect the health of our streams. How can you tell if your backyard stream is healthy? Aquatic bugs!

Check out this handy aquatic bug guide from Louisville MSD's Watershed Watch so you can collect your own.

Want to know more about Watershed Watch in Kentucky? Check it out here: https://bit.ly/3HZBv0u





Thinking about starting a rain garden? Here are 3 #LouisvilleMSD tips to get you #growing:

- TPlant in an area free of heavy soils with no filtration
- TAdding mulch keeps soil moist and adds nutrients
- Native plants are great pollinators, be sure to include them in your garden!









Louisville MSD March 23, 2022 ·

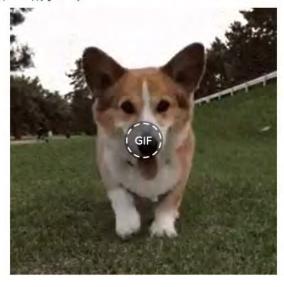
Jefferson County dogs produce four dump truck loads of waste every day. Just by picking up after your pupper, you ensure that waste doesn't end up in a waterway or contaminate groundwater. So #scoopthepoop and help ensure #safecleanwaterways for everyone—including your woofer.





You know who loves #safecleanwaterways?

Yep, doggos. And Jefferson County floofers produce four dump trucks' worth of poo a day. When you #scoopthepoop, you're preventing it from infiltrating groundwater or waterways. That'll make your pupper a happy good boy.





Responsible Dog Owner - Scooping Poo

We know you're a responsible dog owner and always #ScoopThePoo to reduce contaminating waterways, so help us celebrate #ResponsibleDogOwnerDay by sharing a pic of your pup in the comments!





Happy Halloween, Louisville! As you're getting all dressed up, remember some simple tricks (and treats) when out and about this evening!

Oogs love trick-or-treating too! Be sure to grab some extra doggy bags for the trip

Bring water to stay hydrated... See more





#DidYouKnow dogs in Jefferson County produce FOUR dump-truck loads of waste every day?

Pet waste that is left behind on sidewalks, in parks and yards finds its way to our local waterways when it rains and increases bacteria and nitrogen levels in the water.

Do your part to #ScoopThePoo and dispose of your pet's waste in the trash. ... See more







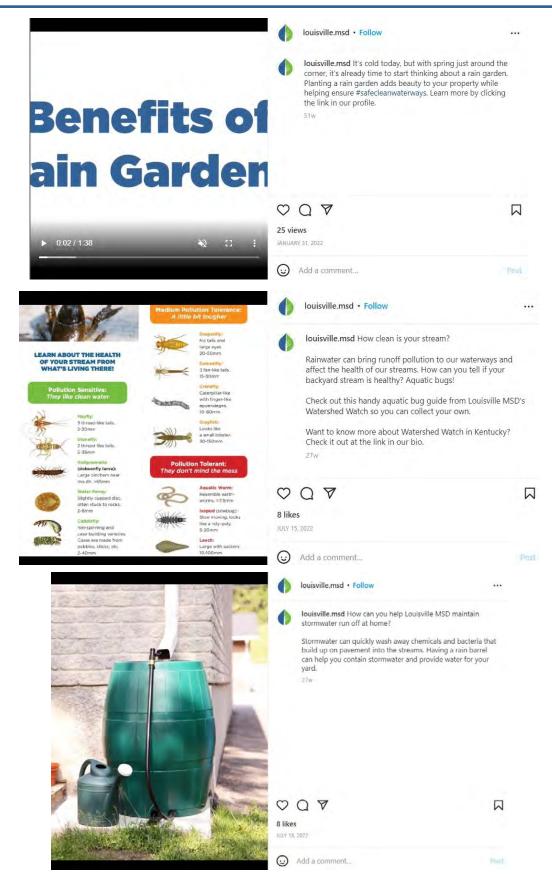






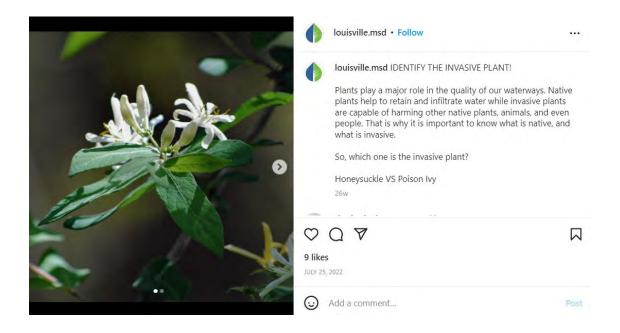


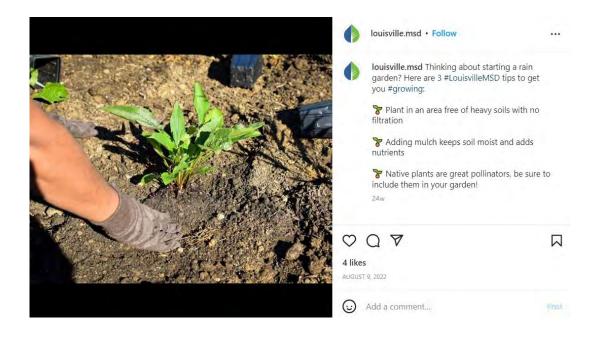






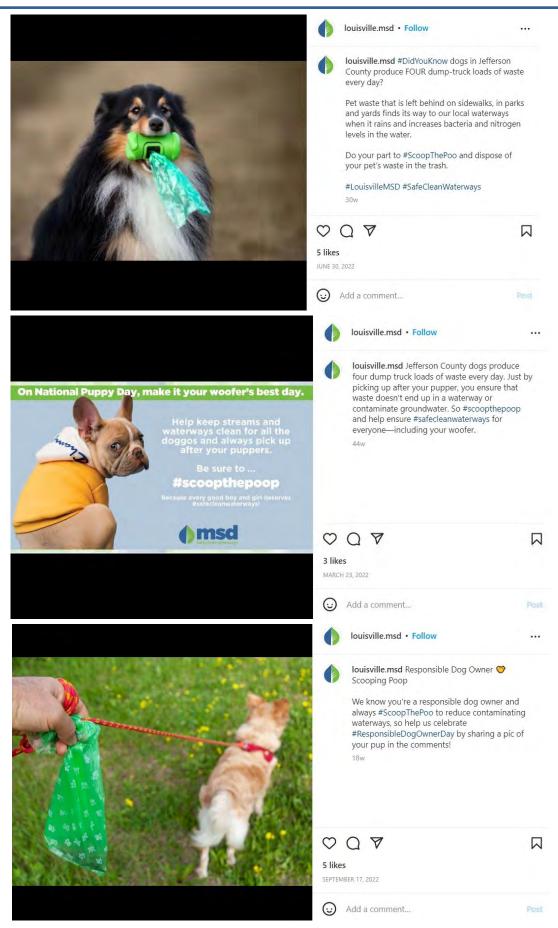
















Keeping an emergency kit filled with food, water, and medical care keeps you prepared when disaster strikes!

What special items do you keep in your emergency kit? Let us know below!









How do you protect you and your belongings from floods? Be prepared!

Keeping an emergency kit filled with food, water, and medical care keeps you prepared when disaster strikes!

What special items do you keep in your emergency kit? Let us know below!











Social Media Posts Topic 8: Basement Flooding





LouisvilleMSD @louisvillemsd · Feb 4, 2022

We all have struggles. We all have wounds to heal. Be kind to yourself and to others. We're all in this life together.

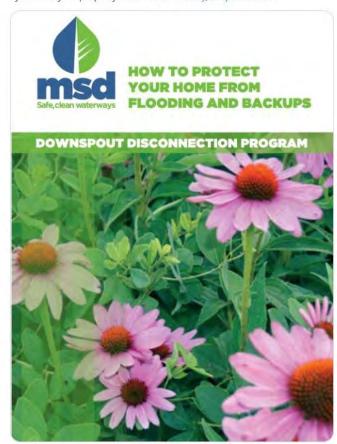
Yes, that includes what happens on both sides of the bathroom door. Just saying. #Sticktothe3Ps





LouisvilleMSD @louisvillemsd · Apr 11, 2022

With our Downspout Disconnection Program, you can receive a one-time incentive of \$100 for each downspout disconnected from the wastewater system on your property. Learn more at ow.ly/8fKp50IGwXm.





LouisvilleMSD @louisvillemsd - Jan 28, 2022
The simple things are the best. Is there anything simpler than to #Sticktothe3Ps and only flush pee, poo and toilet paper?

We didn't think so.

That's just one part of how to help keep #safecleanwaterways; learn more at louisvillemsd.org/athome.





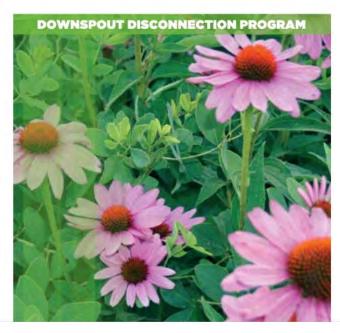
Social Media Posts Topic 8: Basement Flooding





With our Downspout Disconnection Program, you can receive a one-time incentive of \$100 for each downspout disconnected from the wastewater system on your property. Learn more at http://ow.ly/x/gF50IGwXI.







We all have struggles. We all have wounds to heal. Be kind to yourself and to others. We're all in this life together.





Social Media Posts Topic 8: Basement Flooding







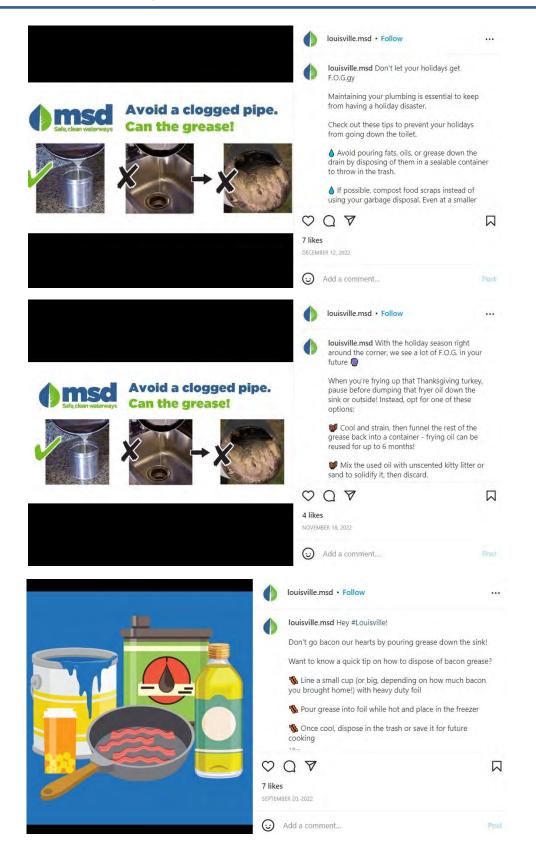






Louisville MSD











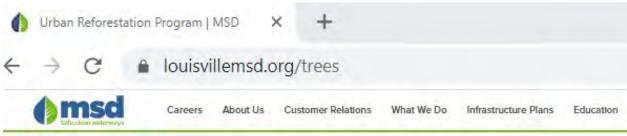
Urban Lifestylez- 'Plumbing Modification Program' March 2022











Home → Urban Reforestation Program

Urban Reforestation Program

Tree Planting Grants Available

The Louisville MSD Urban Reforestation Grants Program is now accepting applications for tree planting projects. Grants will pay for trees planted within the MSD Drainage Service area, which includes all of Jefferson County except for the cities of Shively, Jeffersontown, St. Matthews and Anchorage. Download the application at the link below. The application deadline is Monday August 1 at 5pm ET. Please contact Sarah Duker at Sarah. Duker@louisvillemsd.org or (502)540-6248 with any questions.

Urban Reforestation Grant Application

For more information regarding MSD's Urban Reforestation Program, please contact MSDMS4@louisvillemsd.org or 502.540.6248.

The MSD Urban Reforestation Program plants 1,000 trees annually by working with local businesses, municipal organizations and neighborhood associations. These trees redirect an average of 1.35 million gallons of stormwater away from the sewer system every year, which decreases sewer overflows into our waterways.

By planting more trees, MSD not only absorbs stormwater but also reduces erosion and flooding, provides shade, reduces noise pollution and carbon dioxide in the air, and provides a habitat for nearby wildlife.

You can help, too, by planting trees of your own. You can also use the following steps below to find the benefits your trees currently provide our community:

- Identify the species of your tree.
- 2. Measure the tree's circumference (at 4.5 feet from the ground).
- Convert that circumference to diameter using the formula: circumference/3.14 = diameter.
- Visit the Tree Benefits Calculator at www.treebenefits.com/calculator

Interested in incorporating Green Infrastructure in your construction projects? Please read Chapter 18 of the MSD Design Manual: Green Infrastructure, Strategies to Manage Stormwater in Our Community.

Smoketown Community Wide Tree Planting

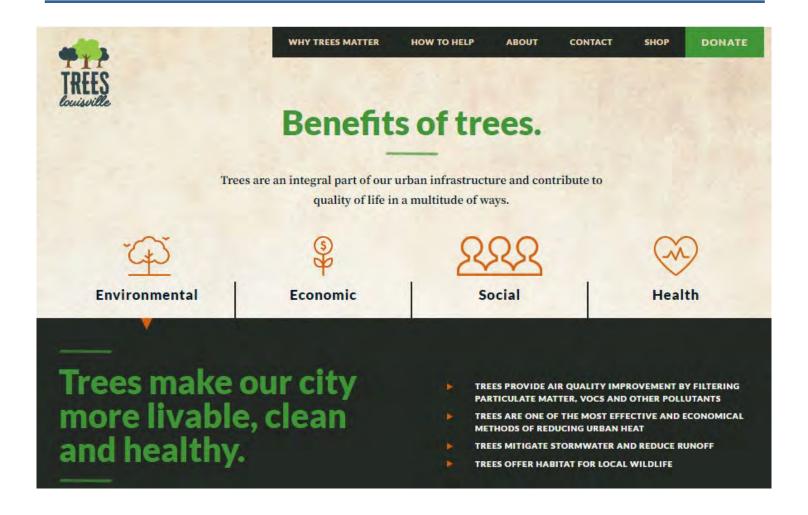
Hosted by: Louisville Grows



Help plant 200 trees in the Smoketown neighborhood! Trees will be planted on public, private and residential property.

Community Wide Planting Day is a partnership between Louisville Metro Urban Forestry, TreesLouisville, and Louisville Grows.





TreesLouisville Residential Tree Rebate Program

To participate, purchase and plant an eligible shade tree on your residential property and apply to receive \$30 back on up to three trees. This program is open to residents of Jefferson County, KY on a first-come, first-serve basis until all funds have been claimed. For full eligibility requirements or to apply, visit treeslouisville.org/rebate or find a brochure at your local garden center.



WDRB volunteers grabbed shovels and dirt on Monday, April 25, 2022 to help Trees Louisville plant new trees at Eisenhower Elementary School in Pleasure Ridge Park. (WDRB photo)



700 West Liberty Street | Louisville, KY 40203-1911 Phone: 502.540.6000 | LouisvilleMSD.org

Safe Swimming Pool Draining Tips Offered as Summer Closes

MSD encourages residents to drain pools in a safe, environmentally friendly way

DO NOT DRAIN YOUR POOL DURING OR UP TO 48 HOURS AFTER A RAIN EVENT.

Homeowners may soon begin to drain their pools as summer days come to a close. Proper draining of swimming pools is essential to the health of our local waterways and good relations with your neighbor.

"Water containing chlorine can kill fish and other aquatic life in creeks and streams," states MSD Development and Stormwater Services Director Tony Marconi. The average pool has a chlorine concentration that is 10 times higher than some aquatic life can withstand. MSD recommends that a pool sit for at least 10 days after chemical treatment before draining any water.

Improper draining can also become a nuisance for residents and their neighbors by causing basement flooding, a backup, or flooding of yards. Homeowners may **slowly** drain chlorine-free water to a grassy area in their yard if it is large enough to absorb the water. Or, they can drain into a sanitary sewer cleanout, if one is available on their property.

Please follow these guidelines when draining a swimming pool:

- Do not drain your pool during or up to 48 hours after a rain event.
- Dechlorinate your swimming pool water before draining it. The pool should sit at least 10 days after chemical treatment before draining any water.
- Test the pool water to ensure that it is essentially chlorine-free before draining (about 0.1 parts
 per million total chlorine). Bubbling, cascading, or other forms of aeration will help to remove
 chlorine from water.
- The pool's pH should be in a normal range of 6 to 8 before draining.
- Drain to a grassy area of the yard if it is large enough to absorb the water, or into a sanitary sewer cleanout, if one is available on the property.
- Discharge water slowly, at no more than 30 gallons per minute, to prevent soil erosion, flooding, or damage to adjacent properties, including backups into homes and businesses.

For more information, visit <u>LouisvilleMSD.org/WaterQuality</u> or call MSD Customer Relations at 502.540.6000 with your pool draining questions.

APPENDIX 5

Coverage Improvement Plan Worksheet

370 COVERAGE IMPROVEMENT PLAN IMPLEMENTATION

Community Name: Louisville/Jefferson County

State: Kentucky

CID: 210120

Coverage Improvement Plan Implementation (CPI) Project Worksheet									
	CPI Projects	Points per Topic	Times Delivered	CPI	PPI?	PPI	STK?	STK	CPI + PPI + STK
CPI#1	Metro Council Newsletters and Social Media Posts	4	7	28	у	11.2	у	11.2	39.2
CPI#2	MSD Floodplain Newsletter (Streamline)	4	1	4	у	1.6	n	0.0	5.6
CPI#3	MSD Website	2	1	2	у	0.8	n	0.0	2.8
CPI#4	Flood Insurance Brochures at MSD Main Office	2	3	6	у	2.4	n	0.0	8.4
CPI#5	Kentucky State Fair	2	1	2	у	0.8	у	0.8	2.8
CPI#6	Flood Insurance Social Media Posts	2	3	6	у	2.4	n	0.0	8.4
CPI#7	Flood Insurance Flyer to floodplain/rep loss areas	2	1	2	у	0.8	n	0.0	2.8
CPI#8	Building Industry Association Mailing	4	1	4	у	1.6	у	1.6	5.6
CPI#9	Flood Insurance Presentations (2)	4	2	8	у	3.2	у	3.2	11.2
	cFRP	=	∑CPI:	50	∑PPI:	24.8	∑STK:	16.8	91.6

Number of CPI projects:

9

∑CPI + PPI + STK ≤ 60

APPENDIX 6

Examples of Coverage Improvement Plan Projects

District 8 December Newsletter

12/06/2022



MSD: Did you know homeowner's insurance does not cover flood damage?

MSD wants you to know that anyone in Louisville Metro can purchase flood insurance. Lenders require flood insurance for those inside the mapped floodplain. Those who live outside of these areas can still be at risk for flooding.

More than 20-percent of all National Flood Insurance Program flood insurance claims are from areas outside the mapped high-risk areas. Just a few inches of water from a flood can cause tens of thousands of dollars in damage. Protect yourself and your home by calling your insurance agent to learn more about flood insurance or by going to www.floodsmart.gov.

Floods are the #1 natural disaster in the United States.

District 11 eNews December 2, 2022

12/02/2022



Did you know homeowner's insurance does not cover flood damage?

MSD wants you to know that anyone in Louisville Metro can purchase flood insurance. Lenders require flood insurance for those inside the mapped floodplain. Those who live outside of these areas can still be at risk for flooding.

More than 20-percent of all National Flood Insurance
Program flood insurance claims are from areas outside
the mapped high-risk areas. Just a few inches of water
from a flood can cause tens of thousands of dollars in
damage, Protect yourself and your home by calling your insurance agent to
learn more about flood insurance or by going to www.floodsmart.gov



District 16 eNewsletter - Friday, December 9, 2022

12/09/2022



Did you know homeowner's insurance does not cover flood damage?

MSD wants you to know that anyone in Louisville Metro can purchase flood insurance. Lenders require flood insurance for those inside the mapped floodplain. Those who live outside of these areas can still be at risk for flooding.

More than 20-percent of all National Flood Insurance Program flood insurance claims are from areas outside the mapped high-risk areas. Just a few inches of water from a flood can cause tens of thousands of dollars in damage. Protect yourself and your home by calling your insurance agent to learn more about flood insurance or by going to www.floodsmart.gov

District 17 Newsletter

12/02/2022



Flood Insurance Message From MSD

Did you know homeowner's insurance does not cover flood damage? MSD wants you to know that anyone in Louisville Metro can purchase flood insurance. Lenders require it for those inside the mapped floodplain, yet those who live outside of those areas can still be at risk for flooding. In fact, more than 20% of all National Flood Insurance Program flood insurance claims are from areas outside the mapped high-risk areas. Just a few inches of water from a flood can cause tens of thousands of dollars in damage. Protect yourself and your home by calling your insurance agent to learn more or by clicking here.



District 15 E-News

11/30/2022



MSD Flood Insurance

Did you know homeowner's insurance does not cover flood damage?

MSD wants you to know that anyone in Louisville Metro can purchase flood insurance. Lenders require flood insurance for those inside the mapped floodplain. Those who live outside of these areas can still be at risk for flooding.

More than 20-percent of all National Flood Insurance Program flood insurance claims are from areas outside the mapped high-risk areas. Just a few inches of water from a flood can cause tens of thousands of dollars in damage. Protect yourself and your home by calling your insurance agent to learn more about flood insurance or by going to www.floodsmart.gov

District 22 E-Newsletter Friday, December 2nd, 2022

12/02/2022



Did you know homeowner's insurance does not cover flood damage?

MSD wants you to know that anyone in Louisville Metro can purchase flood insurance. Lenders require flood insurance for those inside the mapped floodplain. Those who live outside of these areas can still be at risk for flooding.

More than 20-percent of all National Flood Insurance Program flood insurance claims are from areas outside the mapped high-risk areas. Just a few inches of water from a flood can cause tens of thousands of dollars in damage. Protect yourself and your home by calling your insurance agent to learn more about flood insurance or by going to www.floodsmart.gov



District 23 Update - November 28, 2022



MSD Flood Insurance Info



Did you know homeowner's insurance does not cover flood damage? MSD wants you to know that anyone in Louisville Metro can purchase flood insurance. Lenders require flood insurance for those inside the mapped floodplain. Those who live outside of these areas can still be at risk for flooding

More than 20-percent of all National Flood insurance Program flood insurance claims are from areas outside the mapped high-risk areas. Just a few inches of water from a flood can cause tens of thousands of dollars in damage. Protect yourself and your home by calling your insurance agent to learn more about flood insurance or by going to www.floodsmart.com



CPI #2 MSD Streamline Newsletter



Thu 12/1/2022 3:02 PM

Louisville MSD <Socialmedia@louisvillemsd.org>

Exciting news for what is in store at 12th and Rowan





Streamline

Louisville Flood Season History + How to Prep

Louisville and the surrounding regions have been subject to flooding for thousands of years. Low-lying land along the Ohio River is covered frequently in the winter and spring. While the Ohio River floods typically occur over days or weeks and waters rise relatively slowly.

The mighty Ohio River runs along the entire length of Louisville's northern and western edges, from Prospect in the north to West Point, 26 miles to the southwest. The river and its banks are a community living room, a recreation spot, a celebration center, a place for individual meditation, a drinking water source and more. But the waters of this powerful resource are also a powerful threat because of their tendency to overflow the riverbank and threaten 110 square miles of Louisville Metro with flooding. The most dramatic example came in 1937 when a massive flood put two-thirds of the city underwater.



More than 60 years ago, the U.S. Army Corps of Engineers responded by building a system of floodwalls to prevent a repeat of the disaster. That was the start of the more comprehensive Ohio River Flood Protection System, which is now maintained by Louisville MSD. The multipart system is designed to hold the river at bay, keeping it out of the city. Much of that system, including the floodwall constructed in the 1940s and '50s, is still in service. The pumping stations that redirect flood waters away from homes and businesses are part of that same system.

The floodwalls and levees provide a human-crafted secondary bank to corral the river after it escapes its primary bank. Together, the floodwalls, levees, floodgates and pumping stations form a system that protects Louisville from catastrophic river flooding



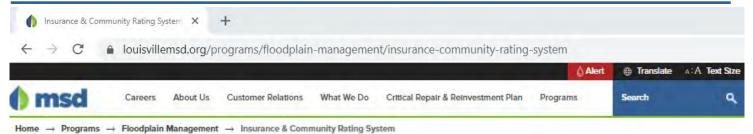
River levels and weather forecasts are constantly monitored to provide as much advance notice and preparation as possible. And that helps the River City remain a safe and enjoyable place to live.

Flood-season preparedness

Did you know that Homeowner's insurance does not cover flood damage? Anyone in Louisville Metro can purchase flood insurance. Even though flood insurance is not always required, people outside the mapped floodplain can still be at risk. More than 20 percent of all National Flood Insurance Program flood insurance claims are from areas outside the mapped high-risk areas. A home in a designated floodplain has a 26 percent chance of suffering flood damage during the term of a 30-year mortgage. Just a few inches of water from a flood can cause tens of thousands of dollars in damage. Protect yourself and your home by calling your insurance agent to learn more about flood insurance, or visit floodsmart.gov. To check to see if a building in Louisville/Jefferson County is in the FEMA floodplain, click here.



CPI #3 MSD Website



Insurance & Community Rating System

Louisville Metro participates in the National Flood Insurance Program (NFIP) so that community members can purchase flood insurance to protect themselves from flood losses and so that the community is eligible to receive federal disaster assistance. In order to participate in the NFIP, the community is required to adopt and enforce a floodplain ordinance. Learn more about Louisville Metro's Floodplain Ordinance.

Louisville Metro also participates in the Community Rating System (CRS). Currently, Louisville Metro is a Class 3 in the CRS program, which automatically gives community members up to a 35% discount on flood insurance premiums. The CRS program saves the community approximately \$2 million each year! For more information about the CRS program, click the CRS tab above.

Why buy flood insurance?

- Federal disaster assistance is usually a loan that must be paid back with interest. For a \$50,000 loan at 4% interest, your monthly payment would be around \$240 a month (\$2,880 a year) for 30 years. Compare that to the average flood insurance policy. As of March 2021, the average cost is about \$754 per year, or about \$63 per month.
- In most cases, it takes 30 days after purchase for a policy to take effect, so it's important to buy insurance before the storm approaches and the floodwaters start to rise.
- In a high-risk area, your home is more likely to be damaged by flood than by fire.
- Even though flood insurance isn't federally required, anyone can be financially vulnerable to
 floods. In fact, people outside of mapped high-risk flood areas file nearly 25% of all National Flood
 Insurance Program flood insurance claims and receive one-third of Federal Disaster Assistance for
 flooding.

Cost of Flooding

Only a few inches of water to cause major damage to your home and its contents. Find out how much flooding could cost you by clicking here.

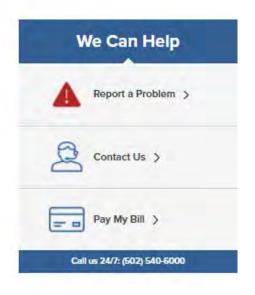
Elevation Certificates

Do you need a elevation certificate for your home or business? As part of the CRS program, MSD has been collecting elevation certificates since 1990. If you need an elevation certificate, see if MSD has one on file for your address. If your address is not on this list, you will need to hire a surveyor to complete an elevation certificate for your home. If your address is on the list, contact the Floodplain Management Department to request the elevation certificate.

For more information about flood insurance, go to the following links:

Answers to Questions About the National Flood Insurance Program, F-084 (2011)
www.floodsmart.gov
www.fema.gov/business/nfip





Quick Links

Consent Decree

Doing Business with Us

Current Projects

CPI #4 Flood Information Kiosk in MSD Lobby

Ask Before You Buy: Know Your Flood Risk

Are you buying a home?

You should check and see if it has flooded or had drainage problems. Even a shallow flood can cause costly damage.

If a home is located in a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area, it is five times more likely to experience a flood than a fire, so you should consider purchasing flood insurance.

Simply enter your address to determine if your property is in a FEMA floodplain area. https://apps.lojic.org/msdflooddetermination/



msd

700 West Liberty Street Louisville, KY 40203-1911

502.587.0603 CustomerRelations@LouisvilleMSD.org

Learn more about MSD and ways we are helping protect our community and its waterways.

LouisvilleMSD.org







Buying a home in a Special Flood Hazard Area

If you buy a home in a Special Flood Hazard Area and get a mortgage that is regulated or insured by the Federal Government, you will be required to buy a flood insurance policy. Ask the sellar and the agent if they know of any flooding or drainage problems at the property.

Check to see if the property is located in a Special Flood Hazard Area. For properties in Jefferson County, Kentucky visit. https://apps.lojic.org/msdflooddetermination/

Flood Insurance Rate Maps

FEMA has Flood Insurance Rate Maps that show Special Flood Hazard Areas and flood zones.

- A Zones (A and AE) are high-risk areas. There
 is at least a 1 in 4 chance of flooding during
 a 30-year mortgage. All home and business
 owners in these areas with mortgages from
 federally regulated or insured lenders are
 required to buy flood insurance.
- X Zones are moderate-to-low risk areas according to FEMA maps. The risk of flooding is reduced but not removed. Flood insurance is not required but may be advised, especially if you are in the Local Regulatory Floodplain.

The Local Regulatory Floodplain includes homes that are beyond the edges of the FEMA A Zones. These properties have been identified as has having a higher risk of flooding than areas outside the Local Regulatory Floodplain. Owners of these properties are required to follow the regulations in the Louisville Metro Floodplain Ordinance.

Flood insurance is not federally required in

What Prospective Property Owners Should Know

Local Floodplain Management Regulations MSD and the Kentucky Division of Water regulate construction and development in identified floodplains to ensure buildings are protected from flood damage.

- Any development (including renovations and additions) in the floodplain requires a permit from MSD and the Kentucky Division of Water.
- Filling in areas with extra soil and similar projects are prohibited in certain areas.
- Houses that are considered substantially damaged (i.e., more than 50 percent of its market value) by fire, flood or other causes must be elevated to at least one foot above the flood level when they are repaired.
- Houses cannot be substantially improved (i.e. more than 50 percent of its market value) in a 1-year rolling period unless they are elevated to at least one foot above the flood level.
- New construction in the Floodplain, including additions, must be elevated at least two feet above the flood level.

Questions?

If you have questions about special land use, building, or floodplain management regulations that apply to a property, contact MSD at 502,540,6439.

For more information about flooding, visit MSD's Floodplain Management website at: http://www.msdlouky.org/programs/crssite/folioder.html

www.floodsmart.gov.

Other Resources

You can check on Special Flood Hazard Areas in Jefferson County three ways:

- MSD's Flood Determination website: https://apps.lojic.org/msdflooddetermination/
- The online LOJIC Map: www.lojic.org
- FEMA's Map Service Center: http://msc.fema.gov



CPI #4 Flood Information Kiosk in MSD Lobby

Increased Cost of Compliance Coverage

Mitigation Reduces Future Flood Damage

Is your building insured through the National Rood Insurance Program (NFIP) with a Standard Rood Insurance Policy (SFIP)? If so, you may be eligible for up to \$30,000 in Increased Cost of Compliance (ICC) coverage. ICC will help cover the costs of meeting the community's rebuilding requirements that will protect your home from future flood damages.

ICC coverage can help to pay the cost of one or any combination of these four mitigation activities.



Elevate above the flood level required by your community



Relocate to a new site, preferably out of the floodplain



Demolish the building



Dry floodproof the building (primarily non-residential)

Your insurance carrier and community building department can help you to determine your ICC eligibility and the documentation you will need.



ICC Helps Reduce Future Flood Damage

Hooding badly damaged John Smith's \$200,000 home. After John reported his flood loss to his insurance carrier, an assigned adjuster inspected the property and said he may be eligible to receive ICC and should talk to his community building department.

John contacted the community building department and after an inspection of the home, it was declared substantially damaged. John and the building department jointly decided elevating his home was the best way to meet the local floodplain rebuilding requirements and reduce future flood damage.

John provided the substantial damage letter he received from his community building department to the insurance carrier. After the insurance carrier verified that the flood damages equaled at least 50 percent of the pre-flood market value, John qualified to receive ICC. After submitting a signed contract for the work, a building permit from the building department, and a signed ICC Proof of Loss form, John was ready to elevate his home*.

*Check with your insurance carrier to determine if you are able to receive a partial payment to help with the initial mitigation activity costs.

> For more information about the NFIP, flood insurance, and ICC, contact your insurance carrier or visit www.FloodSmart.gov.





National Flood Insurance Program

Increased Cost of Compliance Coverage

Reduces Future Flood Damages



F-663

What is Increased Cost of Compliance (ICC)?

ICC coverage is included under the National Flood Insurance Program (NFIP) Standard Flood Insurance Policy (SFIP). ICC helps policyholders with the costs incurred if they are required by the community building department to meet rebuilding standards after a flood.

ICC coverage provides up to \$30,000 to help pay for relocating, elevating, demolishing, and floodproofing (non-residential buildings), or any combination of these mitigation activities.

The ICC portion of the claim is handled separately from the building and/or contents portion of the claim. However, the combination of payments cannot exceed the maximum coverage limits available through the NFIP For example, a policyholder cannot receive more than \$250,000 in claim payments for a residential building.

Are You Eligible to File a Claim for ICC?

Yes, if

- 1) You have an NFIP flood insurance policy; and
- Your community building department determines your home is substantially or repetitively damaged by flooding; and
- The flood damage to your home is equal to 50 percent of the pre-flood market value.

"Substantially damaged" means damages of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damages occurred.

"Repetitively damaged" means the building must have flood damage on at least two occasions during a 10-year period; the cost of which to repair the flood damage, on average, equaled or exceeded 25 percent of the market value of the building on each occasion.

Starting the ICC Claims Process after a Flood



 If your community building department determines your structure is substantially or repetitively damaged, discuss what mitigation activities will be required to rebuild in the floodplain and if any grants may be available.



Promptly contact your insurance carrier to file a claim for ICC and document the loss (photographs, etc.) Do not begin minor repair work before filing an ICC claim.



3. Submit to your insurance carrier the letter from your community building department declaring the building substantially or repetitively damaged, a signed contract for the mitigation activity, and the building permit that documents rebuilding requirements in the floodolain.



4. The insurance carrier will verify that the flood damage to your building equals at least 50 percent of the pre-flood market value, which is required to start the ICC claim.

Where to Get More Information

For more information about the ICC claim process, visit www.FEMA.gov/Increased-Cost-Compliance-Coverage, contact your insurance carrier, or your State NFIP Coordinator (http://www.floods.org/).

Things to Remember about ICC

- After it has been determined which mitigation activity you will be taking, contact your insurance carrier to file a claim for ICC. An adjuster will be assigned to you.
- Your adjuster will ask you to submit your substantial damage letter and building permit from the community building department, a copy of a signed contractor bid for the work, and a signed ICC Proof of Loss form, which the adjuster may provide to you as a courtesy.
- Before you begin the work, check with your insurance carrier to see if you are able to receive a partial payment to help cover some of the initial construction costs.
- After the work is completed, your community building department will provide written evidence the work meets the floodplain management regulations. Submit this to your insurance carrier to receive a full or remaining partial ICC payment.
- If necessary, your community building department may also be able to use ICC to supplement Federal or state grant funding for your elevation, demolition, relocation, or floodproofing (non-residential buildings).





National Flood Insurance Program

Flood Insurance Claims Handbook

FEMA F-687

CPI #5

Kentucky State Fair

Louisville MSD partnered with Ripple Effects to host a both at the Kentucky state fair. Pamphlets advising homebuyers to understand their flood risk prior to purchase were distributed.









700 West Liberty Street Louisville, KY 40203-1911

Management Agency (FEMA) Special Floc

flood can cause costly damage.

Hazard Area, it is five times more likely t experience a flood than a fire, so you sh consider purchasing flood insurance

Simply enter your address

Are you buying a home?

502.587.0603

Learn more about MSD and ways we are helping protect

our community and its waterways. LouisvilleMSD.org

-

What Prospective Property Owner

ocal Floodplain Management Regulation protected from flood damage.

- additions) in the floodplain requires a perm from MSD and the Kentucky Division of We
 - Filling in areas with extra soil and similar projects are prohibited in certain areas.
- damaged (i.e., more than 50 percent of its market value) by fire, flood or other cause must be elevated to at least one foot abov Houses cannot be substantially improved (i.e. more than 50 percent of its market ve Houses that are considered substantial! the flood level when they are repaired.

You can check on Special Flood Hazard A

in Jefferson County three ways: MSD's Flood Determination https://apps.lojic.org/msdflooddet

The online LOJIC Map www.lojic.org

- In a 1-year rolling period unless they are elevated to at least one foot above the
- New construction in the Floodplain, including additions, must be elevated at least two feet above the flood level.

FEMA's Map Service Center



Flood Insurance Rate Maps

a 30-year mortgage. All home and busines A Zones (A and AE) are high-risk areas. T ederally regulated or insured lenders are required to buy flood insurance

X Zones are moderate-to-low risk areas according to FEMA maps. The risk of floor s reduced but not removed. Flood insura s not required but may be advised, espe f you are in the Local Regulatory Floodp

The Local Regulatory Floociplain include

CPI #5

and the agent if they know of any flooding or drainage problems at the property. to buy a flood insurance policy. Ask the sella

Check to see if the property is located in a ecial Flood Hazard Area. For propertie

https://apps.lojic.org/msdflooddeterminati



Flood damage affects more than property—it impacts the entire community!

Flood insurance gives you peace of mind that no matter what the future brings, you have all you need to rebuild, recover, and move forward.

Learn more about flood insurance at https://bit.ly/2bd8rYo







During #floodseason, the best way to protect your home and belongings from flood damage is to get flood insurance!

Don't let your hard work be washed away - learn more about planning for a flood here: https://bit.ly/3YkPmWS











700 West Liberty Street | Louisville, KY 40203-1911 Phone: 502:540.6000 | LouisvilleMSD.org

Protect Yourself with Flood Insurance

One of the best ways to protect a property is to carry flood insurance. Flood insurance can protect against financial disaster and should be your first line of defense. When a building is in a flood hazard area, your lender will require purchase of a flood insurance policy.

Because our community participates in the National Flood Insurance Program (NFIP), flood insurance can be sold for <u>any</u> property, whether the property is in the floodplain or not.

Why Care About Flooding: Floods are the most common natural disaster in the United States. Since 2010, flooding has caused more than \$54 billion in U.S. flood losses. There is a 26 percent chance of experiencing a flood during the life of a 30-year mortgage in high-risk flood areas.

Nearly 20% of flood insurance claims come from moderate-to-low risk areas.

In fact, 90 percent of all natural disasters are flood-related. The best protection against financial loss for a property owner is to buy flood insurance. Just a few inches of water from a flood can cause tens of thousands of dollars in damage.

Did you know that a standard homeowner's insurance policy does <u>not</u> cover flood losses? Flood insurance is available to homeowners, renters, condominium owners/renters, and commercial owners/renters. Costs vary depending on how much insurance is purchased, what it covers, and the property's flood risk. Ask your insurance agent about purchasing flood insurance to protect your home and/or your contents/possessions.

Floods are the #1 natural disaster in the United States. Flood-hazard maps have been created to show different degrees of risk for our community, which help determine the cost of flood insurance. Depending on your property location, your home is considered either at "moderate-to-low risk" or at "high-risk" for a flood. As a result, the lower the degree of risk, the lower the flood insurance premium is.

All flood insurance policies provide coverage for buildings. However, you might want to discuss insuring personal property with your agent, since contents coverage is optional. As a property owner, you should insure your home and its contents. There is a 30-day waiting period—from date of purchase—before a policy goes into effect. That means now is the best time to buy flood insurance before the next flood.

We recommend you visit www.Floodsmart.gov, or call the NFIP for information. You can easily find out on the basics about flood insurance, determining your flood risk, estimating your flood insurance premium, or to find a local insurance agent.



Call toll free: 1.800.427.4661







The Building Industry Association of Greater Louisville is the voice of the building industry by providing advocacy, member services, professional standards and signature events.

MSD Annual Reminder on Flood Insurance

DATE: November 4, 2022

TO: Building Industry Association of Greater Louisville

FROM: Lori Rafferty, PE, CFM

SUBJECT: Floodplain Information and Map Updates

Louisville-Jefferson County's updated flood map information is available online. To check to see if a property is in the flood hazard area, visit https://www.lojic.org/lojic-online. Construction in the floodplain must be permitted and buildings in the FEMA floodplain are required to have flood insurance if they have a federally backed mortgage.

FEMA has updated the National Flood Insurance Program's (NFIP) risk rating methodology through the implementation of a new pricing methodology called <u>Risk Rating 2.0</u>.

For information about the current floodplain maps for any property in Jefferson County, go to http://apps.lojic.org/msdflooddetermination/. This service is free, easy to use and gives you valuable information about a property's flood risk, including:

- Whether a property is in or out of the Special Flood Hazard Area (SFHA) as shown on the current Flood Insurance Rate Map (FIRM)
- · Additional flood insurance data, such as the flood zone
- Information about flood risks not shown on the FIRM, such as the combined sewer floodprone areas and the local regulatory floodplain
- · Information about the mandatory purchase requirement

For areas outside of Jefferson County, flood insurance maps can be found at https://msc.fema.gov/. From this site you can also find FEMA's interactive map, which is easy to use and shows not only the Special Flood Hazard Areas, but also the Letters of Map Amendment.

MSD also has elevation certificates available for some properties in Jefferson County. To check to see if an elevation certificate is on file, go to our Floodplain Website

here: https://louisvillemsd.org/programs/floodplain-management/insurance-community-rating-system. If a property is on the list, we can send you a copy of the elevation certificate. If a property is not on the list of available elevation certificates and an elevation certificate is needed, a licensed surveyor must be hired to complete the certificate.

MSD can provide additional information, such as the base flood elevation or estimated flood depth, historic flood information, and natural floodplain functions if requested. To request this information for properties in Louisville-Jefferson County, email FloodPermits@louisvillemsd.org or call (502)540-6148. For more information about flood insurance, check out FEMA's website at www.floodsmart.gov.





Join MSD floodplain staff for a webinar!

Join MSD Floodplain staff for a webinar presenting information on flood insurance requirements, how to determine if a property is in the floodplain and where you can find FEMA maps.

December 6, 2022, 2 pm

Please email Jennifer.Kern@LouisvilleMSD.org for registration link.



CPI #9B

Presentations related to flood insurance and floodplain issues

MSD staff presented floodplain information, including regulations, flood insurance, permitting requirements, and available resources to realtors.



APPENDIX 7

Flood Response Preparations Projects Worksheet

330 FLOOD RESPONSE PREPARATIONS PROJECT WORKSHEET

Community Name: Louisville/Jefferson County

State: Kentucky

CID: 210120

Flood Response Preparations (FRP) Project Worksheet																
	Pr	Points	Number of times topic is repeated								Times					
	Outreach Projects	per Topic	1. Know Hazard	2. Insure Property	3. Protect People	4. Protect Property	5. Build Respon.	6. Natural Funct.	7. General Prepare	8. Basement Flooding	Deli- vered	Count	FRP	PPI?	PPI (FRP)	FRP + PPI
FRP#1	Letter to flooded properties	6		1	1	1	1			1	1	5	30	у	12.0	42.0
FRP#2	Door hangers	6			1	1	1				1	3	18	у	7.2	25.2
FRP#3	Website story	2		1	1	1	1				1	4	8	у	3.2	11.2
FRP#4	ICC Brochure	2		1							1	1	2	у	0.8	2.8
FRP#5	Clean-up Safety handout	2		1	1	1					1	3	6	у	2.4	8.4
FRP#6	Flood Permit handout	2					1				1	1	2	у	0.8	2.8
FRP#7	Selecting a Contractor	2					1				1	1	2	у	0.8	2.8
FRP#8	Press Release on Cleanup	2					1				1	1	2	у	0.8	2.8
													70.0	∑PPI:	28.0	98.0
	Maximum Points A												50	∑PPI:	20.0	70.0

APPENDIX 8

Examples of Flood Response Preparations Projects

FRP#1 Letter to Flooded Properties



700 West Liberty Street | Louisville, KY 40203-1911 Phone: 502.540.6000 | LouisvilleMSD.org

3/12/2021

- «OwnerAddressLine1»
- «OwnerAddressLine2»
- «OwnerAddressLine3»

Re: Property at «PropertyAddressLine1» Louisville, KY

Dear Property Owner:

Due to the recent flooding, your property may have suffered flood damage. According to Louisville's Floodplain Ordinance, MSD is required to make sure all development in the floodplain is permitted, including repairs from flood damage.

What is needed for a permit for interior repairs or improvements?

- Application for Permit to Develop/Repair in a Floodplain, which can be found at MSD's Main Office
 or on MSD's website: http://louisvillemsd.org/sites/default/files/inline-files/apppermit-1.pdf
- Cost estimate of repairs/improvements, estimate must be itemized and include an estimate for labor separately (even when work is being done by homeowner or volunteers)
- 3. Building value MSD can use PVA data, if available, OR owner can provide appraisal

Due to COVID19 precautions, it is preferred that permits and required supporting documents be submitted via email to floodpermits@lousivillemsd.org.

Floodplain permits are not required before cleaning up and residents are encouraged to begin cleaning up as soon as possible. If possible, take photographs of any damage before cleaning up. Below are flood safety tips from FEMA:

- Confirm the water supply is safe to drink. Listen for news reports to learn whether the community's
 water supply has been contaminated by the floodwaters. Remember to carry bottled drinking water and
 discard any food products that may have come in contact with floodwater.
- Wear protective clothing. Protect yourself during cleanup by wearing boots, gloves and masks. Clean and disinfect everything floodwater contacted.
- Ventilate your home. Open all doors and windows to allow air to circulate and dry out your home. Dehumidify as soon as possible after a flood.
- Service damaged septic tanks, cesspools, pit and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- Make a list of lost or damaged items. Be sure to include their age and value, and if possible, have receipts for those items available for insurance.
- Prevent mold growth. Wash all surface areas in the house that came in contact with floodwater. Disinfect and wipe surfaces dry with paper towels to minimize bacterial contamination.
- Isolate any moldy objects. Seal moldy trash in plastic bags and remove them immediately. Objects you can save should be dried as soon as possible.

Did you know you may be eligible for up to \$30,000 to elevate, relocate, or demolish a flood damaged building? If your structure is substantially damaged, which is defined as the building having damages or improvements that are more than 50% of the value of the building in the last year, and you carry flood insurance, you may be eligible for up to \$30,000 to elevate, relocate, or demolish your structure using Increased Cost of Compliance (ICC) funds from FEMA. Information about ICC funds can be found at this website: https://www.fema.gov/floodplain-management/financial-help/increased-cost-compliance.

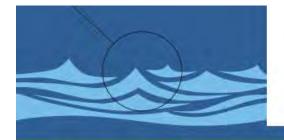
If you have any questions, please contact the floodplain hotline at (502)540-6126 or email at floodpermits@lousivillemsd.org.

Sincerely,

Lori Rafferty, PE, CFM

MS4/Floodplain Program Manager

FRP#2 Door Hangers





Get a **permit**before you repair or build in a floodplain

MSD is responsible for permitting and inspecting all new construction—including repairs and improvements to existing structures in the floodplain, according to the Louisville Metro Floodplain Ordinance.

To apply for a floodplain permit:

- Download the Application for a Permit to Develop/Repair in a Floodplain, visit http://www.msdlouky.org/insidemsd/pdfs/ apppermit.pdf
- For repairs or improvements to an existing structure, provide an itemized estimate of material and labor costs of the repairs or improvements to be made, including demolition costs—even if this work is to be done by the homeowner or a volunteer. It is not required to include cleanup costs in the estimate.
- Provide building value—PVA data or ownerprovided appraisal.
- Submit the application and all documents listed above.

In person

MSD, 700 W Liberty Street, Louisville, KY 40203 Monday through Friday, 9 am to 4 pm

Or by email:

FloodPermits@louisvillemsd.org

For questions concerning floodplain permitting, call 502.540.6126.



Safely eleaning up after a flood

Take photographs of the damage before cleanup. Residents are encouraged to begin cleanup as soon as possible, floodplain permits are not required before cleanup begins.

Flood cleanup safety tips:

- Before entering your home, check for damaged power lines, gas lines, foundation cracks and other exterior damage. It may be too dangerous to enter the home.
- If you smell natural gas or propane, or hear a hissing noise, leave immediately and contact the fire department
- Do not walk into a flooded basement because of the risk of electrocution. Turn off gas, water and electricity—if you can without wading into water.
- Check news outlets for safety of the local water supply.
- Discard any food, medicine or cosmetics that may have come into contact with floodwaters.
- Floodwaters can carry chemicals and germs that could be harmful to your health. Protect yourself during cleanup by wearing boots, gloves and masks. Clean and disinfect everything that may have come in contact with floodwater.
- Open all doors and windows to circulate air and dry out your home. Dehumidify as soon as possible.



40 2016 Couloitie and Jefferson County Herropoiter Seyver Cobin

FR#3 Website Story Example

Home → MSD News → Safely cleaning up after a flood

Safely cleaning up after a flood



March 6, 2021

With Ohio River floodwaters receding, home and business owners turn their attention to the task of cleaning up. MSD advises taking photographs of the damage before cleanup begins. Residents and owners are encouraged to begin cleanup as soon as possible; floodplain permits are not required before cleanup begins.

FRP#4 Handouts & Brochures: ICC Brochure

Mitigation Reduces Future **Flood Damage**

Is your building insured through the National Flood Insurance Program (NFIP) with a Standard Flood Insurance Policy (SFIP)? If so, you may be eligible for up to \$30,000 in Increased Cost of Compliance (ICC) coverage. ICC will help cover the costs of meeting the community's rebuilding requirements that will protect your home from future flood damages.

ICC coverage can help to pay the cost of one or any combination of these four mitigation activities



Elevate above the flood level required by your community



Relocate to a new site, preferably out of the floodplain



Demolish the building



Dry floodproof the building (primarily non-residential)

Your insurance carrier and community building department can help you to determine your ICC eligibility and the documentation you will need.



ICC Helps Reduce Future Flood Damage

Flooding badly damaged John Smith's \$200,000 home. After John reported his flood loss to his insurance carrier, an assigned adjuster inspected the property and said he may be eligible to receive ICC and should talk to his community building department.

John contacted the community building department and after an inspection of the home, it was declared substantially damaged. John and the building department jointly decided elevating his home was the best way to meet the local floodplain rebuilding requirements and reduce future flood damage.

John provided the substantial damage letter he received from his community building department to the insurance carrier. After the insurance carrier verified that the flood damages equaled at least 50 percent of the pre-flood market value, John qualified to receive ICC. After submitting a signed ontract for the work, a building permit from th building department, and a signed ICC Proof of Loss form, John was ready to elevate his home*.

*Check with your insurance carrier to determine if you are able to receive a partial payment to help with the initial mitigation

> For more information about the NFIP, flood insurance, and ICC, contact your insurance carrier or visit www.FloodSmart.gov.





National Flood Insurance Program

Increased Cost of Compliance Coverage

Reduces Future Flood Damages



What is Increased Cost of Compliance (ICC)?

ICC coverage is included under the National Flood Insurance Program (NFIP) Standard Flood Insurance Policy (SFIP). ICC helps policyholders with the costs incurred if they are required by the community building department to meet rebuilding standards after a flood.

ICC coverage provides up to \$30,000 to help pay for relocating, elevating, demolishing, and floodproofing (non-residential buildings), or any combination of these mitigation activities.

The ICC portion of the claim is handled separately from the building and/or contents portion of the claim. However, the combination of payments cannot exceed the maximum coverage limits available through the NFIP For example, a policyholder cannot receive more than \$250,000 in claim payments for a residential building.

Are You Eligible to File a Claim for ICC?

Yes, if:

- 1) You have an NFIP flood insurance policy; and
- Your community building department determines your home is substantially or repetitively damaged by flooding; and
- 3) The flood damage to your home is equal to 50 percent of the pre-flood market value.

origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the

ely damaged" means the building must repetutively damaged in least two occasions have flood damage on at least two occasions during a 10-year period; the cost of which to repair the flood damage, on average, equaled or exceeded 25 percent of the market value of the building on each occasion.

Starting the ICC Claims Process after a Flood



1. If your community building department determines your structure is substantially or repetitively damaged, discuss what mitigation activities will be required to rebuild in the floodplain and if any grants may be available.



2. Promptly contact your insurance carrier to file a claim for ICC and document the loss (photographs, etc.) Do not begin minor repair work before filing an ICC claim



5. Submit to your insurance ca 3. Submit to your insurance carrier building department declaring the building substantially or repetitively damaged, a signed contract for the mitigation activity, and the building permit that documents rebuilding requirements in the floodplain.



4. The insurance carrier will verify that the flood damage to your building equals at least 50 percent of the pre-flood market value, which is required to start the ICC claim

Where to Get More Information

For more information about the ICC claim process, visit www.FEMA.gov/Increased-Cost-Compliance-Coverage, contact your insurance carrier, or your State NFIP Coordinator (http://www.floods.org/).

Things to Remember about ICC

- · After it has been determined which mitigation activity you will be taking, contact your insurance carrier to file a claim for ICC. An adjuster will be assigned to you.
- · Your adjuster will ask you to submit your substantial damage letter and building permit from the community building department, a copy of a signed contractor bid for the work, and a signed ICC Proof of Loss form, which the adjuster may provide to you as a courtesy.
- · Before you begin the work, check with your insurance carrier to see if you are able to receive a partial payment to help cover some of the initial construction costs.
- · After the work is completed, your community building department will provide written evidence the work meets the floodplain management regulations. Submit this to your insurance carrier to receive a full or remaining partial ICC payment.
- If necessary, your community building department may also be able to use ICC to supplement Federal or state grant funding for your elevation, demolition, relocation, or floodproofing (non-residential buildings).



FRP#5 Clean-up Safety Handout



Flood Clean Up Safety

- 1. Confirm the water supply is safe to drink. Listen for news reports to learn whether the community's water supply has been contaminated by the floodwaters. Remember to carry bottled drinking water and discard any food products that may have come in contact with floodwater.
- 2. Check for structural damage before you enter your home.
- 3. Keep the power off until an electrician has inspected your system for safety.
- **4. Wear protective clothing.** Protect yourself during cleanup by wearing boots, gloves and masks. Clean and disinfect everything floodwater contacted.
- **5. Ventilate your home.** Open all doors and windows to allow air to circulate and dry out your home. Dehumidify as soon as possible after a flood.
- 6. Service damaged septic tanks, cesspools, pit and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- 7. Make a list of lost or damaged items. Be sure to include their age and value, and if possible, have receipts for those items available for insurance.
- **8. Prevent mold growth.** Wash all surface areas in the house that came in contact with floodwater. Disinfect and wipe surfaces dry with paper towels to minimize bacterial contamination.
- **9. Isolate any moldy objects.** Seal moldy trash in plastic bags and remove them immediately. Objects you can save should be dried as soon as possible.

Need Help after Flood?

Metro United Way's 2-1-1 directs people looking for resources to help them face life challenges, often for the first time, to the appropriate service provider. A trusted and caring call specialist will listen to the full scope of your issue and connect you immediately to the right source. This easy to remember phone number saves time and frustration by eliminating the need to navigate a maze of agencies and help-lines. With 2-1-1 services, there is no longer a wrong number when seeking to find or give help.

Get Connected, Get Answers,

FRP#6 Flood Permit Handout



Floodplain Permit for Repairs/Improvements

MSD is required by the Louisville Metro Floodplain Ordinance to permit any development, which includes repairs, improvements, and additions, in the floodplain. You must obtain a floodplain permit for repair or improvements if your building is in the floodplain.

The following information is needed to get a floodplain permit for interior repairs or improvements:

- 1. Application for Permit to Develop/Repair in a Floodplain, application can be found on MSD's website: http://www.msdlouky.org/insidemsd/pdfs/apppermit.pdf
- 2. Itemized cost estimate of repairs/improvements, cost estimate must include labor and itemized materials listed separately
- 3. Building value (MSD can obtain PVA data if available) OR building appraisal

In order to obtain the permit, bring the items listed above to MSD at 700 W. Liberty Street. Our office is open from 9:00-4:00 Monday through Friday. If you cannot obtain the permit in person, you can also email the items to floodpermits@lousivillemsd.org. If you have any questions about floodplain permitting, call John Selch at 540-6439.

NOTE:

MSD can permit repairs or improvements up to 50% of the value of the building in a 10 year rolling period. If the repairs or improvements are higher than 50% of the building value in 10 years, the building is required to meet the current floodplain ordinance, which means the first floor and mechanicals would have to be elevated at least 1' above the floodplain elevation.

FRP#7 Selecting a Contractor Handout



Tips for Selecting a Contractor

- 1. Get recommendations from friends and family and check the Better Business Bureau and Building Industry Association for contractors.
- 2. Do phone interviews to ask questions to find out what types of projects the contractors do, what kinds of experience they have, and if they have a list of references.
- 3. Based on phone interviews, make a short list and meet face to face.
- 4. Check out references and previous projects.
- 5. Get detailed cost estimates and compare each of them.
- 6. Set a payment schedule.
- 7. Choose the contractor you are most comfortable with.
- 8. Draw up a contract to specify price, schedule, materials and products to be used, proof of liability insurance and worker's compensation payments.

MSD recommends you always check on a contractor's history before signing a contract. Visit, call, or go online and inquire the Better Business Bureau about a company.

Better Business Bureau:

Inquire directly online about a firm or company, at http://search.bbb.org/

The Better Business Bureau 844 S. 4th Street Louisville, KY 40203 –2186 Phone: (502) 583-6546 Fax: (502) 589-9940

Building Industry Association

Are you looking for a Registered Builder or Registered Remodeler? The Building Industry Association of Greater Louisville has a list of Registered Builders and Registered Remodelers in the Louisville area.

Building Industry Association of Greater Louisville 1000 North Hurstbourne Parkway Louisville, KY 40223

Web: https://bialouisville.com/

E-mail: newhomes@bialouisville.com

Phone: (502) 429-6000

FRP#8 Press Release on Cleanup



700 West Liberty Street | Louisville, KY 40203-1911 Phone: 502.540.6000 | LouisvilleMSD.org

MEDIA RELEASE REVISED

CONTACT: Sheryl Lauder Sheryl Lauder@LouisvilleMSD.org

March 5, 2021

As the Ohio River floodwaters begin to recede, home and business owners turn their attention to the task of cleaning up. MSD advises *taking photographs of the damage before cleanup begins*. Residents and owners are encouraged to begin cleanup as soon as possible; *floodplain permits are not required before cleanup begins*.

Safely cleaning up after a flood

Flood cleanup safety tips:

- Before entering your home, check for damaged power lines, gas lines, foundation cracks and other exterior damage. It may be too dangerous to enter the home.
- If you smell natural gas or propane or hear a hissing noise, leave immediately and contact the fire department
- Do not walk into a flooded basement because of the risk of electrocution. Turn off gas, water and electricity — if you can without wading into the water.
- · Discard any food, medicine or cosmetics that may have come into contact with floodwaters.
- Floodwaters can carry chemicals and germs that could be harmful to your health. Protect yourself
 during cleanup by wearing boots, gloves and masks. Clean and disinfect everything that may have
 come in contact with floodwater.
- . Open all doors and windows to circulate air and dry out your home. Dehumidify as soon as possible.

Get a permit before you repair or rebuild in a floodplain

MSD is responsible for permitting and inspecting all new construction—including repairs and improvements to existing structures in the floodplain, according to the Louisville Metro Floodplain Ordinance.

To apply for a floodplain permit:

Apply online

- Download the Application for a Permit to Develop/Repair in a Floodplain, visit Louisville MSD.org/programs/floodplain-management and click on the "Permitting" icon.
 - For repairs or improvements to an existing structure, provide an itemized estimate of material and labor costs of the repairs or improvements to be made, including demolition costs—even if this work is to be done by the homeowner or a volunteer. It is not required to include cleanup costs in the estimate.
 - Provide building value—PVA data or owner-provided appraisal.
 - · Submit the application and all documents listed above.

Apply by email:

FloodPermits@louisvillemsd.org

For questions concerning floodplain permitting, call 502.540.6126.

For more information on the floodplain visit

https://louisvillemsd.org/programs/floodplain-management



700 West Liberty Street Louisville, KY 40203-1911 LouisvilleMSD.org 24/7 Customer Relations 502.540.6000

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Louisville Water Company, Louisville Metro Government and Jefferson County Property Valuation Administrator.

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