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

### **Reduce Yard Runoff**

Compost grass clippings, and decrease use of fertilizer and pesticides. When it rains, these chemicals make their way to our streams.



### **Don't Flush Wet Wipes**

So-called "flushable wipes" do not break down properly in the sewer system. These wipes may clog sewer pipes and damage sewer line pumps.



### **Clean Trash From Streams**

Pick up litter or participate in a stream cleanup to help prevent trash from entering waterways.



### **Drains Are Only For Water**

Don't pour fats, oils, grease, paint, petroleum products or medications into a catch basin, storm drain or a drain in your house. These can make fish sick and cause clogs in the pipes.



### **Clean Up After Your Pet**

Dispose of pet waste in the trash so that it isn't washed down storm drains. Dogs in Jefferson County produce four dump-truck loads of waste every day.



### **Soak Up Extra Rainwater**

Plant a tree, construct a rain garden, or replace your downspout with a rain barrel garden to help absorb stormwater.



# Louisville's Rainwater Flood Protection System

#### The Last Line of Defense

Louisville Metro's Ohio River Flood Protection System exists to keep the river at bay and out of the city. The system protects more than 200,000 people, 87,000 homes and \$24 billion in property over 110 square miles. It includes 29 miles of flood wall and earthen levee, 16 flood pumping stations, nearly 150 floodgates and 80 flood wall closures.

Where creeks pass through the flood wall, gates can be closed to keep the river from flowing up the streams.

Large pumps at the flood pumping stations are used to lift the water out of the overflowing creeks and move it out into the Ohio River. Additional gates and pumping stations perform the same task to keep the river from backing up through stormwater pipes — pumping excess stormwater out of the sewers and out into the river.

Think of the flood protection system like the sides of a bowl.

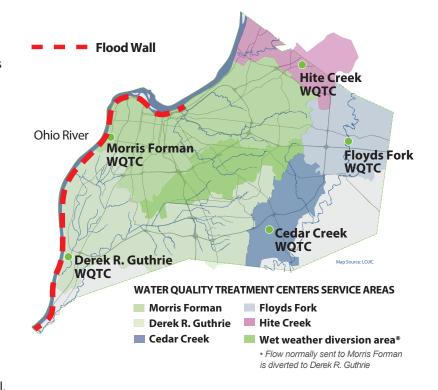
During times of extreme rainfall when creeks and rivers

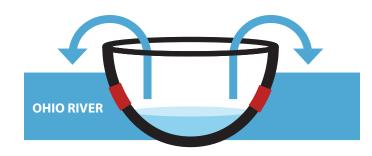
begin to overflow, the openings in the bowl wall are sealed

and pumps push water from the interior out into the river.



**HEAVY RAINS CAUSE WATERWAYS TO RISE** 

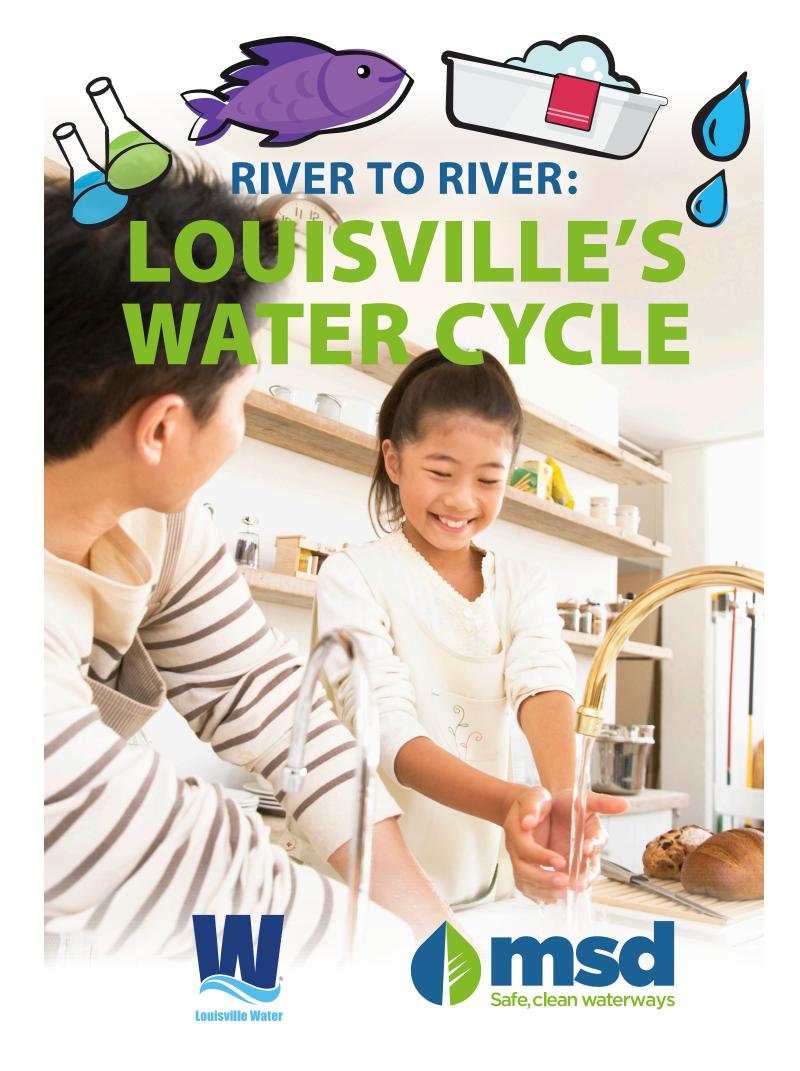




PUMPS MOVE WATER OUTSIDE FLOOD WALLS







MSD collects and treats wastewater for Jefferson County and a section of Crestwood in Oldham County.

Each person generates approximately 100 gallons of wastewater daily. That's about 75 million gallons of wastewater per day that MSD must treat and return to a watershed.





### **Usage in Homes and Businesses**

We use the water for everything from brushing our teeth, to washing clothes and dishes, to bath water. But eventually most used water goes back down the drain.

vels through a series of to homes and businessmunity. We have miles of water mains in

## Stormwater Runoff and Watersheds

#### wa-ter-shed

noun

1. an area of land that drains to its lowest point.

### **Polluted Stormwater**

Our community is part of a watershed, where stormwater or rainwater flows over rooftops, lawns, parking lots and roadways. This water collects soil and pollutants—like lawn chemicals, pet waste and oil—harming our waterways.

Trash and sediment can cloud the water in creeks and lakes, making it difficult for aquatic plants to grow. Excess nutrients from lawn chemicals can poison aquatic life, as well as the animals that eat fish and aquatic plants. Bacteria and other pathogens can flow into swimming or wading areas, which can affect human health.

