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## **MSD prepares for flood season while reflecting on major flooding anniversary**

LOUISVILLE, KY – Living in a river city has advantages, but there are also challenges to protecting lives and property from Ohio River flooding. As Louisville reaches peak flooding season, MSD crews today trained on installing floodwall closures.

The training exercise replicates portions of MSD's flood-protection system, which protects more than 200,000 people, 137,000 structures, and \$34 billion in property throughout 110 square miles of Louisville Metro. The system includes 26.1 miles of floodwall and earthen levee, 16 flood pumping stations, nearly 150 underground floodgates and 79 floodwall closures.

"We have to be ready for flood conditions 24/7/365," said Dane Anderson, MSD's operations director for flood protection.

The training exercise comes as the community marks five years since the severe flooding of 2018, resulting from a rising Ohio River and intense rainfall over the course of five days that dumped 40 billion gallons of water on the city. The torrential downpours rounded out a record-setting rainfall for a Louisville February, breaking a record that had stood since 1884.

The Ohio River rose to its highest levels in 20 years, cresting at 36.1 feet on the upper gauge and 67.4 feet on the lower gauge, compared to normal levels of 12 feet and 9 feet, respectively. At times, MSD's flood pumping stations were at full capacity and pumping 8 million gallons per minute.

"The flood pumping stations were not designed for the more severe storm events we are seeing in modern times," Anderson said. "It was all hands on deck in an around-the-clock operation during the February 2018 rain event to keep our system operating. Even our top executive officers were helping to staff pumps during the worst of the flood."

While some impact from a flood at this level is unavoidable, MSD's flood protection system prevented what could have been a much worse situation. The 16 flood pumping stations, some built more than 50 years ago, required constant monitoring and maintenance to continue operating throughout the event and ultimately pumped about 26.4 billion gallons of water out of the city and into the river. Additionally, MSD's stormwater storage basins and other facilities built since 1997 protected hundreds of at-risk homes. At one

point during the flooding response, MSD constructed temporary gravel roads to assist a local fire department with resident evacuations.

### **Continued investments and improvements lead to increased flood protection for residents**

MSD's total flood protection system pumping capacity is 7.8 million gallons per minute, which adds up to 11 billion gallons per day. Such an intricate system requires ongoing maintenance. Since the 2018 flood, MSD has made more than \$14M in updates and repairs to its flood pumping stations, including replacing control panels at its Beargrass Flood Pumping Station.



Plans are also underway to replace MSD's Paddy's Run Flood Pumping Station (FPS) in West Louisville. This station helps protect 200,000 properties and a large portion of West Louisville. A nearly 70-year-old facility, MSD has kept Paddy's Run FPS in service through constant maintenance, as it operates with original parts that are no longer available for replacement. MSD will replace Paddy's Run FPS with a new, modern pump station doubling pumping capacity from the current 875 million gallons per day to 1.9 billion gallons per day with a projected completion date in 2026.

Some benefits of the pump station replacement include increasing capacity to reduce flood risk for 63,000 residents, improving resilience, and delivering a measure of environmental justice to the predominantly Black neighborhoods of West Louisville. In addition, the new Paddy's Run flood pumping station will reduce combined sewer overflows during flood conditions, helping prevent catastrophic environmental harm by protecting the Rubbertown industrial area from flooding.

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#### **About MSD**

  The Louisville/Jefferson County Metropolitan Sewer District (MSD) works to achieve and maintain clean, environmentally safe waterways for a healthy and vibrant community. The organization's more than 670 employees provide wastewater management, drainage and flood protection services across the 376 square miles of Louisville Metro, and wastewater service in portions of Bullitt and Oldham counties. In addition to operating and maintaining Louisville Metro's sewer system, floodwall system, water quality treatment centers and flood pumping stations, MSD invests in hundreds of infrastructure improvement projects each year, plants more than 1,000 trees and other vegetation annually to enhance water filtration and reduce runoff, and provides numerous outreach programs to inform and educate the community about protecting our waterways.