

Challenges for the community

Dependable flood protection system is critical

Editor's note: This is the second in a series of articles exploring challenges facing the community, and how MSD is working to resolve them.

Protecting the community from flooding has been MSD's job since 1987, when the U.S. Army Corps of Engineers turned over maintaining and operating the flood protection system. Although the system isn't used everyday, its dependability is critical when floods threaten.

Flood Protection System By the Numbers

Area (in square miles) protected:	110
Miles of floodwall and earthen levee:	29
Number of street closures:	50
Quantity of gates, valves:	150 +
Number of flood pumping stations:	16
Flood pumping stations 50+ years old:	10
Cost of improvements since 2000 (in millions):	\$11
Cost to rehab flood pumping stations (in millions):	\$37 +
Square miles in floodplain:	60 +

"When nature takes its course, the entire system must quickly come into service."

More than 60 square miles of Louisville Metro is located in the Ohio River floodplain. Protecting residents and property is a system of floodwall, earthen levee and pumping stations, with some components dating back to 1947. "When nature takes its course, the entire system must quickly come into service," said Executive Director Bud Schardein. "Otherwise we risk the consequences of flooding from Butchertown to Valley Station."

While the system has successfully reduced flood damage, its 16 flood pumping stations are showing their age. Most are more than 50 years old, requiring more maintenance to ensure they can be operable on short notice.

Within the last five years, MSD has spent more than \$700,000 in maintenance and nearly \$11 million in capital improvements for the flood pumping stations. Schardein said many of the repairs and improvements were unplanned, largely due to the equipment's age.

A major overhaul of the system's oldest pumping station at Buchanan Street was recently completed, taking more than four years and costing \$8 million. "Other stations in the system also will require substantial major equipment improvements," Schardein said. To plan for upgrades, MSD is working with the U.S. Army Corps of Engineers on a priority listing of improvements, along with a shared funding agreement and schedule.

Cost to rehabilitate all flood pumping stations is estimated to top \$37 million, with replacing pumps and motors at each station expected to cost the most. "Most of these components have been in service for more than 50 years without major reconstruction or mechanical repair," Schardein said. "As replacement parts for the older equipment become more difficult to obtain and maintaining them requires more time, we run the risk of not being prepared when a flood threatens."



MSD crews installed a street closure as the Ohio River neared flood stage in January.

CONNECT WITH MSD

502-540-6000

24/7 Customer Service:
587-0603

www.msdlouky.org

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En español: 540-6423
(Entre 8 mañana y 5 p.m.
lunes a viernes)

Upcoming Events

June 2
DiverseWorks for You
Certification Orientation, 9 a.m.
700 W. Liberty, first floor

June 13
MSD Board Meeting, 10 a.m.,
700 W. Liberty, first floor

June 27
MSD Board Meeting, 10 a.m.,
700 W. Liberty, first floor

MSD Milestones

We're proud to announce: MSD won second place overall in the 18th annual APWA Central Branch Chapter Roadeo. Bill Caswell took first place in the truck serpentine competition and Tim Durham won first place in the back hoe-bowling pin contest.

Welcome to MSD:
Jamar Blevins, Utility Trainee
Michael Moore, Emergency Response Pretreatment Inspector
Daymond Talley, Emergency Response Pretreatment Inspector

Congratulations on your promotion: Kevin Ries to Process Supervisor/East Region

Changing the pace: Alan Mattingly, Master Maintenance Mechanic, from West Region to East Region

We will miss: These employees are retiring June 1: Norman Brown, Project Engineer II
Lee Hatchett, Sewer Maintenance Utility Leader
Andrew Schmoyer, Master Maintenance Technician
Greg "Pete" Daugherty, Stormwater Maintenance Utility Leader

Area Team News

Floyds Fork/North County/MFWTP: A new transformer will replace existing equipment at the **Shawnee Flood Pump Station**.

With six pumps and a pumping capacity of 526,500 gallons per minute, the station has relied on the same electric power equipment since going into service in 1951. The new \$166,210 transformer will be more reliable and easier to maintain.

Changes in an air-thickening process will make processing waste-activated sludge at the Morris Forman plant more efficient. A new **dissolved air floatation thickening system** will be constructed, with new air pumps and upgraded controls, and the old system removed at a \$458,650 cost.

To make way for the widening of Westport Road, MSD's **Woodlawn Park Pump Station** will be removed from service. Project design, estimated at \$110,257, will be paid by Kentucky's Transportation Cabinet.

Pond Creek/Mill Creek: The fourth and final phase of the \$19 million **Pond Creek Flood Control Project** will get underway with the relocation of electric lines. When the utility relocation is completed, Phase Four work can begin. Plans call for widening two sections of Northern Ditch and Pond Creek, about a 3-mile span. In addition to providing flood protection, the \$6 million final phase also will include a trail.

The U.S. Army Corps of Engineers and MSD are partners in the Pond Creek Flood Control Project. Previous work includes environmental restoration at the old Okolona Wastewater Treatment Plant and construction of the Vulcan Quarry and Melco flood storage basins.

Regulatory Management Services: Water-quality assessments on two area streams will help with long-range project planning.

Sampling and analysis will be performed on the Jefferson County section of **Harrods Creek**. That evaluation will help determine the impact of recent upgrades in the wastewater collection system and limiting discharges from neighborhood treatment facilities. From the data collected, a water quality model will be developed to help determine future improvements in the watershed.

Work will continue toward completion of a water quality tool for all three forks of **Beargrass Creek**. The tool will aid in reporting data to the Kentucky Division of Water and support development of a long-term control plan for combined sewer overflows.



Drainage Response Initiative Projects

The Project DRI partnership between Louisville Metro and MSD is solving drainage problems throughout the community. These projects are ready for construction:

Floyds Fork/North County/Morris Forman: Fifty-five properties in the **Fairmeade Road** area will benefit from the installation of drainage facilities. The \$63,232 project will relieve standing water along Fairmeade and Alcott roads by installing driveway aprons and pipe, and regrading along the roadsides.

Pond Creek/Mill Creek: The \$164,393 **CR-1W** project will address standing water in the Rockford Estates subdivision. Installing paved roadside swales, replacing driveway aprons and improving system outlets will affect 69 properties and address 21 customer requests.

More than a mile of improvements will enhance roadside drainage near the **Dalton/Ponder Outlet**. Nine customer requests will be resolved and 52 properties will benefit from the \$175,550 project.

Improvements near the **Donerail Drive** Outlet will improve roadside drainage along portions of Bold Venture, Donerail Drive, Sir Barton Road, Wintergreen Drive and Zev Way. The \$169,650 project will install more than a mile of paved ditch, along with pipe and driveway replacements. When completed, 10 customer requests will be addressed and 65 properties will be affected.

Rear yard drainage improvements are slated for properties along **Nathan Hale Way** in Valley Village. The \$132,790 project will address 30 customer requests and benefit 78 properties.

Roadside drainage improvements will be made along **Trenta Lane, Vevey Road** and **St. Moritz Drive**. The \$78,525 project will impact 45 properties and address seven customer requests.



Project DRI continues to work in neighborhoods across Louisville Metro, like this one near St. Matthews, to upgrade existing drainage facilities and build new ones.

Customer First at Work

"Thanks to Leisa Calloway and Ron Henderson, who arranged for the connections of the homes we were building to be installed quickly!"
-- Chris, The Oracle Group

"My compliments to Brian Mathies, Greg McCraney, William Cunningham, Herman Brinegar and William Cotton. They went above and beyond their job duties by trimming the bushes at the corner of my street and making it a safer area."
-- Former U.S. Congressman
Ron Mazzoli

"June Rowan, Jim Wilson, Kelly Brown and Jeff Browning renewed my faith in public servants. They couldn't have been nicer or more responsive."
-- Carol Pryor, Crescent Hill

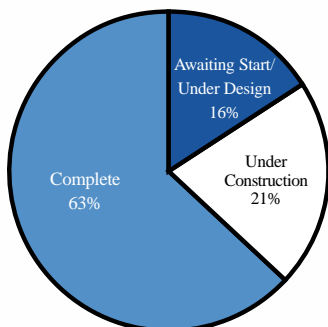
"John Loechle is wonderful at his job! He was easy to work with and accommodating on completing a project in my neighborhood."
-- Linda Fitzgerald, Middletown

"When a sewer collapsed in Old Louisville, Craig Jones' idea to install the new line under the sidewalk saved the beautiful trees, avoided conflicts with other utilities which would have made the repair more costly and difficult, and helped us solve other problems to customer satisfaction."
-- Loyiso Melisizwe, MSD Area
Team Leader

"The professional and timely response from Marya Summers and James Robinson on clearing a drainage channel on my road was greatly appreciated."
-- Jerry Williams, Buechel

Certifiable Success

DiverseWorks for this recently certified business:
Dunn Electric, LLC (MBE)
Electrical and contracting
Contact: Steve Dunn, 502/494-6640



Project DRI Progress


Through May 19, 2005, the Project DRI partnership between Louisville Metro and MSD completed or started 84 percent of planned drainage improvements since Project DRI began in January 2003.



MSD

Louisville and Jefferson County
Metropolitan Sewer District

700 West Liberty Street
Louisville, KY 40203-1911

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Employees top off Derby week at work

Derby week is a time of celebrating for most, but MSD keeps working. While many people headed for the track to watch the running of the Kentucky Oaks, MSD employees staffed their positions wearing the event's trademark attire: hats. From left, front row are Janice Earl, Christina Tomasulo, Leisa Calloway and Joyce Daugherty. Back row, from left: Kathy Myers-Richenbach, Norman Brown and Leila Cunningham



Changing the trend

Five-year budget reins in costs and funds key initiatives

MSD will continue to contain costs and keep customer charges below the national average while funding much needed infrastructure improvements and continuing drainage initiatives.

A five-year budget, approved by MSD's Board, will take effect July 1, 2005. It illustrates MSD's evolution from a wastewater-focused utility to a broader vision of enhancing drainage, flood protection and water quality services.

The gap is closing on planned expenditures for wastewater services and funds earmarked for stormwater drainage services. Funds set aside for capital construction projects will ramp downward to below \$50 million annually by fiscal year 2008. That reflects the end of a massive effort to extend sewer service throughout Louisville Metro that has spanned two decades, according to Finance Director Marion Gee.

During the next five years, \$256.8 million is targeted for capital construction projects. The \$69.2 million for wastewater treatment and infrastructure improvements include costs to complete the expansion of the Hite Creek Wastewater Treatment Plant in northeastern Jefferson County along with ongoing improvements to sewer lines and other wastewater facilities.

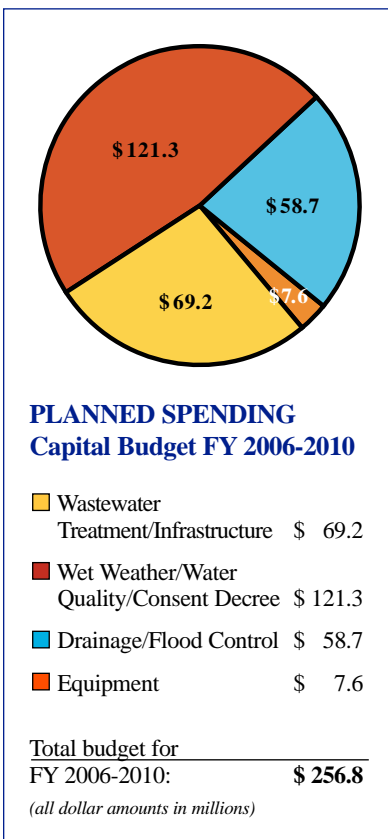
Nearly \$59 million is targeted to continue drainage and flood control efforts, including Project DRI, which will enter its second phase in fiscal year 2006. Since it began, Project DRI has focused on solving localized drainage problems in neighborhoods where drainage facilities are inadequate or non-existent. Funding also is set aside to overhaul and maintain the community's flood protection system, including many of the 16 flood pumping stations that are more than 50 years old.

To meet the terms of an agreement with the Kentucky Environmental and Public Protection Cabinet, \$121.3 million is set aside to address rehabilitation of and improvements to the separate and combined sewer systems. It also will fund efforts to reduce combined sewer overflows, eliminate sanitary sewer overflows, increase wet weather storage and treatment, and other water quality initiatives.

Another \$7.6 million is projected for capital equipment purchases over the next five years. MSD is working to hold down internal costs, Gee said. Since fiscal year 1996, the number of employees has been reduced by nearly a third, with about 608 employees currently. Also, costs for professional services contracts have declined as MSD staff takes on more of those tasks.

Increases in some costs are expected in areas that are outside of MSD's control, Gee said. Those include hikes in gas and electric rates, and increases in state retirement program contributions.

The budget includes a 6.5 percent increase in customer rates for both stormwater drainage and wastewater services. Gee said the increase, if approved, will move toward a more equitable rate structure shared among residential, commercial and industrial customers (*see story about proposed rates, back page*).



Rise in drainage, wastewater rates proposed

MSD's Board has authorized a preliminary resolution to increase stormwater and wastewater rates for all customers. If approved, the new rates will become effective August 1.

The resolution calls for a 6.5 percent rise in wastewater and stormwater volume and service charges for all customers, except for optional and quality charge rates assessed to commercial and industrial wastewater customers.

Under the proposed rate structure, average monthly residential wastewater rates will increase by \$1.24 from \$18.60 to \$19.84. Monthly stormwater drainage fees will rise 29 cents to \$4.70.

Proposed changes in optional rates will increase by 12 percent, expected to yield an additional \$1 million. Optional clean volume rates will rise by 16 cents per 1,000 gallons, and sewer-only optional rates will rise by 17 cents per 1,000 gallons. The increases in optional rates were recommended in a 2003 study of MSD rates, according to Finance Director Marion Gee.

Even with the proposed increase, MSD's rates for commercial, industrial and residential customers still compare favorably to other cities, as well as the national average, Gee said.

MSD's proposed wastewater charges for industrial and commercial customers will remain well below rates in Kansas City, St. Louis, Detroit, and Atlanta. Proposed residential wastewater charges are still below the national average of \$21.69 per month, keeping MSD's residential charges in the nation's lower 40 percentile according to the Association of Metropolitan Sewerage Agencies.

MSD will accept customers' comments on the proposed increase in writing or at a public meeting on June 9 at 7:00 p.m. at MSD. Written comments should be addressed to:

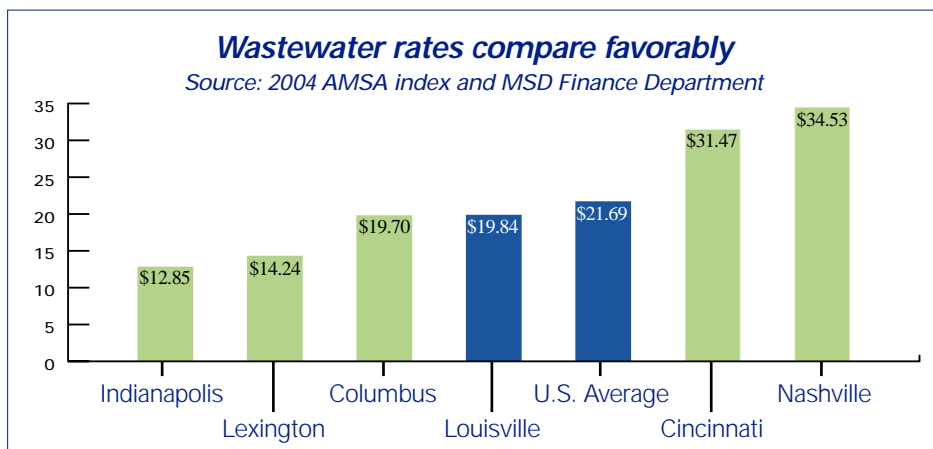
MSD
 Attention: Bud Schardein
 700 W. Liberty St.
 Louisville, KY 40203-1911

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 (Entre 8 mañana y 5 p.m.
 lunes a viernes)



Even with a proposed increase, MSD's average monthly rates will remain among the nation's lowest.