

## MSD crews battle threatening floodwaters Year-end snowfall added to challenge

The snow-piled Christmas holidays followed by a rainy New Year sent the Ohio River to its highest levels since floods ravaged Louisville Metro in 1997.

With an eye on the snow melt upriver and a view of approaching wet-weather systems, MSD had begun preparing the flood protection system on New Year's Eve. All 16 auxiliary pumps to keep stormwater out of sanitary sewers were in full operation to keep sewers from backing up into homes.

As rains continued, the river and creeks continued to swell. Roads were closed. Access to many buildings and public areas were cut off. Traffic was detoured. By January 11, MSD had erected floodwall closures at five locations downtown and in the west end. Thirteen of MSD's 16 flood pumping stations were put into service.

By the time the Ohio River crested above flood stage on January 12, MSD crews had been working around the clock for nearly three weeks.

It began December 23, 2004, when 10 to 12 inches of snow began falling throughout the community. MSD crews, working in partnership with Louisville Metro Public Works, plow and salt six major transportation routes, using MSD trucks fitted with special snow blades.

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*Crews install a flood protection street closure at Riverport.*

*By the time the Ohio River crested above flood stage on January 12, MSD crews had been working around the clock for nearly three weeks*

## Louisville Green heading to market

MSD will begin negotiating a long-term contract with Louisville-based engineering consulting firm Qk4 and its partner A-J, Inc. to market and distribute the dried biosolids produced from the wastewater solids treatment processes.

Executive Director Bud Schardein hopes the Qk4 team can begin marketing the biosolid pellets from the Morris Forman Wastewater Treatment Plant this spring. "MSD customers will start saving thousands of dollars in landfill disposal fees and the community can get to know the Louisville Green product," Schardein said.

The long-term contract follows a year of test-marketing Louisville Green as a fertilizer component and in topsoil production in recreational turf and agricultural venues. A-J, Inc. Vice President and Sales Manager Clarke Fenimore, who was involved in the test-marketing effort, said the product performed well in fertilizer manufacturing, sod farming and turf-building at golf courses.

MSD's Louisville Green Project Manager Sharon Worley said the Qk4/A-J team proposal to win the contract included plans to reduce MSD's operating costs by as much as \$4 million over five years by avoiding \$3 million in landfill fees and returning more than \$1 million in shared sales revenues to MSD. The only other proposal, from Houston-based waste management company Synagro, would have cost MSD about \$2.4 million over five years.

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### CONNECT WITH MSD

502-540-6000

24/7 Customer Service:  
587-0603

[www.msdlouky.org](http://www.msdlouky.org)

TDD/TTY: 540-6233

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



**MSD**

## Upcoming Events

February 3  
DiverseWorks Certification  
Orientation  
9 a.m., 700 W. Liberty, first floor

February 14  
MSD Board meeting, 10 a.m.,  
700 W. Liberty, first floor

February 21  
Presidents' Day. MSD offices  
are open.

February 28  
MSD Board meeting, 10 a.m.,  
700 W. Liberty, first floor

March 1  
Erosion Prevention and  
Sediment Control Workshop  
8 a.m., U of L Shelby Campus.  
Call 499-1900 to register

## MSD Milestones

Welcome to MSD:  
John Barkham,  
Operator-in-Training  
Donald Bowman,  
Operator-in-Training  
Stephan Brown,  
Utility Trainee

Congratulations  
on these promotions:  
Walter Johnson  
to Utility Worker II  
Kenny Patton  
to Utility Worker III  
David Roth  
to Senior Trainer-Operations

Changing the Pace  
Mike Raley  
to Utility Leader-Support

## Area Team News

### *Floyds Fork/North County/MFWTP:*

The final phase of the **Old Henry projects**, designed to provide sewer service to the northeast sector of MSD's service area, is set to begin. The \$2.79 million third phase includes constructing a 6,300-gallons-per-minute pumping station to move wastewater flows through the Old Henry north and south force mains to the Floyds Fork Wastewater Treatment Plant. An interceptor to connect the pumping station, a force main, manholes and other features also will be constructed. The project, which will demolish an existing Lake Forest pumping station as well, should be completed by spring 2006.



## 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:

**Beargrass Creek:** Installing pipe, yard drain inlets, catch basins and driveway aprons will relieve standing water along **Elam Drive**, **Deshler Drive** and in the 6000 block of **Loretta Street**. The project is expected to cost \$134,855.

Roadside drainage improvements will relieve standing water in the 3100 and 3200 blocks of **Melody Acres Lane**. The \$90,990 project will construct a pipe and inlet system, and replace driveway aprons.

A roadside pipe and inlet system, along with driveway apron replacements, will be constructed along the 3200 block of **Rosewedge Way**. The \$93,539 project will relieve roadside drainage problems in this cul-de-sac west of Cane Run Road.

**Floyds Fork/North County/MFWTP:** Drainage improvements in the **Lyndon/Colonial Terrace** area will reduce yard flooding, residential flooding, roadside standing water and erosion. The \$81,873 project will affect 35 properties and address eight customer requests in the 1800 block of **Military Avenue**, 1800 block of **Pershing Avenue**, and the 800 and 900 blocks of **Wilson Avenue**.



**Pond Creek:** Roadside drainage facilities will be installed along both sides of **Apple Valley Way**, from Old Outer Loop to Northern Spy Drive. The \$81,550 project will address seven customer requests and impact about 25 properties.

Street and yard flooding will be addressed by a \$72,210 project to improve drainage along **Markwell Lane**. The system of paved swales and driveway systems will address seven customer requests and benefit an additional 24 properties.

Roadside drainage facilities will be installed along both sides of **Pagoda Drive**, from Cooper Chapel Road to Burlwood Drive. The \$159,538 project will address 18 customer requests and affect about 65 properties.

## MSD crews... *continued from page 1*

As temperatures warmed enough to melt snow, MSD crews took to the streets clearing catch basins and storm drains. That prevented melting snow from becoming standing water along Louisville streets. “MSD employees didn’t know what the holiday season was last year,” said Executive Director Bud Schardein. “They did a wonderful job clearing roadways and storm drains.”

Then, the Ohio River began rising. MSD’s flood pumping stations along the river and inland tributaries were put into operation. When flood pumping stations go into service, they require round-the-clock staffing, according to Schardein. “Our operations folks got some help from customer service, engineering, legal and other divisions to keep the pumping stations staffed 24/7,” he said.

Despite nature’s onslaught of weather challenges, Schardein said MSD personnel couldn’t have done a better job. “About 80 employees who were involved in snow removal also were involved in flood protection, and they are to be commended for outstanding work,” he said. “It all went off without a glitch, thanks to the efforts of MSD personnel.”

MSD personnel work year-round to make sure they—and the system—are ready when disaster strikes. “Being ready for emergencies is part of the job at MSD,” Schardein said. Moveable street closures and floodwall features are regularly tested, and employees participate in drills to ensure the flood protection system can be put into service rapidly.

Schardein said MSD is exploring improvements to the community’s flood protection system. Much of the infrastructure is more than 50 years old, and 10 of the flood pumping stations still have the original equipment dating to the 1950s. MSD assumed responsibility for maintaining and operating the flood protection system in 1987.

Schardein said, “We can’t always predict the weather, but MSD is committed to protecting the community.”



*Sandbags help shore up street closures when the river floods.*

## By the numbers

Louisville Metro’s flood protection system includes:

- 16 flood pumping stations
- 200 floodgate closures
- floodwall and earthen levee stretching 29 miles from downtown to the Bullitt County line

Area protected from flooding:  
About 110 square miles

Number of flood pumping stations in service during January:  
13, combining for 6,122 hours

Gallons of water they pumped:  
More than 8 billion

Age of 10 flood pumping stations:  
More than 50 years, some with the original equipment

MSD staff hours spent on snow removal and flood protection since December 23, 2004: 2,954

Hours logged by MSD Maintenance personnel responding to the flood emergency: 1,246

Capital improvements on flood pumping stations in last five years:  
More than \$11 million, plus \$700,000 on maintenance

Estimated cost to rehabilitate all flood pumping stations:  
More than \$37 million

## Louisville Green... *continued from page 1*

Fenimore said the Qk4/A-J team already has written commitments for more than 100 percent of MSD’s annual pellet production from blenders and resellers in Arkansas, Georgia, Kentucky, Louisiana and South Carolina.

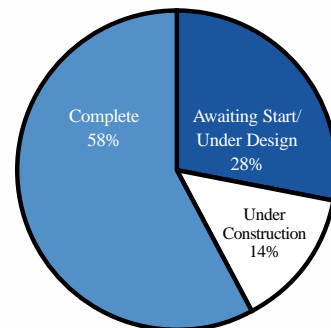
In addition to higher revenue potential, the Qk4/A-J team’s experience in marketing Louisville Green, public outreach plan and commitment to working with certified subcontractors set its proposal apart, according to Worley. She said MSD hopes the contract is in place for the spring planting season.

Louisville Green is the result of the heat-drying solids treatment system at the Morris Forman plant, where solids from all MSD wastewater treatment plants are processed. MSD built the new system to reduce odors from the old solids processing unit and to cut landfill disposal volumes. Heat-drying slashed MSD’s annual disposal fees by more than \$200,000, and the 80 tons of dried biosolids produced daily have earned federal and state approvals for use as a soil-enhancer in land applications.

“Our goal all along was to create a beneficial, reusable product that returns something to our customers, and Louisville Green has the potential to do that” Schardein said. “This is a significant accomplishment for MSD’s staff who’ve worked on this project and for our customers who will benefit for years to come.”

## Project DRI Progress

Through January 18, 2005, the Project DRI partnership between Louisville Metro and MSD completed or started nearly 75 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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## Reducing construction site erosion is workshop goal

Construction personnel can learn how to reduce erosion and sediment losses during construction at a workshop March 1.

It's one of a series of workshops sponsored in part by the Kentucky Division of Water to help the construction industry statewide meet local and regional stormwater requirements. The March 1 workshop also is sponsored by the Kentucky Division of Conservation, the Jefferson County Soil and Water Conservation District, Tetra Tech and MSD. It begins at 8 a.m. in the Founders' Building room 218 on the U of L Shelby Campus. The workshop continues until 3 p.m. and includes lunch.

The workshops are for excavation contractors, developers, equipment operators, public works employees, stormwater-program staff, code enforcement and anyone involved in construction involving earthwork or excavation. New regulations require construction sites larger than one acre to use sediment and erosion controls.

In addition to learning about protecting riparian areas and staging construction activities to reduce erosion, workshop participants will receive the Kentucky Erosion Prevention and Sediment Control Field Guide detailing control practices.

To register for the workshop or learn more, contact Joy Edwards (phone: 502/499-1900; e-mail: [joy.edwards@ky.nacednet.net](mailto:joy.edwards@ky.nacednet.net)).