

# U.S. Army Corps of Engineers and MSD partner for Beargrass Creek Ecosystem Study

Louisville MSD and the U.S. Army Corps of Engineers are taking a big step in improving the Beargrass Creek watershed. On August 15, we joined together to announced the Three Forks Beargrass Creek Ecosystem Restoration Feasibility Study, which is one of only six new General Investigation Feasibility

**“This agreement is a model of how the environment, our economy, and the public can benefit when agencies come together with a common goal of health, safety and quality of life for our community.”**

— MSD Executive Director  
Tony Parrott

Study projects to be selected by the U.S. Army Corps of Engineers nationwide in a competitive pool of applicants for funding. The local project is the only ecosystem restoration and the sole inland project chosen nationwide.

This study will produce a plan that will outline what is necessary to restore the ecological form and function of the Beargrass Creek Watershed, which includes the South, Middle, and Muddy forks. The project will investigate options to restore ecosystem structure, function and processes that have been lost over time in the watershed. The current lack of riparian buffers and wetlands adjacent to Beargrass Creek have resulted in higher water temperatures, which lower dissolved oxygen levels and stress aquatic ecosystems. Portions of the creek—which are confined in concrete channels—are especially vulnerable habitats, becoming too warm for most aquatic life in the summer.



Beargrass Creek — Photo courtesy of John Nation

## STREAMLINE

News and Events at Louisville MSD

September 2019

### OUR VISION

Achieving Safe, Clean Waterways  
for a Healthy and Vibrant Community



MSD's Hite Creek Water Quality Treatment Center will expand to accomodate growth in northeastern Jefferson County. MSD will spend \$8 million on this effort in the next 12 months.

About one-third of all water that falls in the Beargrass Creek watershed lands on impervious surfaces, such as roofs and pavement—collecting toxins, pollutants, and sediments as it makes its way to the creek. Reconnecting the watershed with urban forests, wetlands, stream buffers and recreational trails will improve habitat and ecological function, as well as elevate the creek as a community amenity and resilient water resource for generations to come.

The maximum commitment from both organizations is \$1.5 million each for a total value of \$3 million. MSD's portion will be a mix of actual dollars and in-kind services.



### OUR MISSION

Providing Exceptional Wastewater, Drainage  
and Flood Protection Services for Our Community

### CUSTOMER RELATIONS

502.540.6000 · [CustomerRelations@LouisvilleMSD.org](mailto:CustomerRelations@LouisvilleMSD.org)





## Eighteen stories underground, Louisville's largest infrastructure project is buzzing along

MSD's massive tunnel boring machine is carving through rock to build the Waterway Protection Tunnel. Nicknamed "Bumblebee"—in honor of Muhammad Ali—the 412-foot long machine will bore a four-mile-long tunnel to store combined stormwater and wastewater to prevent it from overflowing sewers and polluting our river and streams.

Bumblebee is currently under the Ohio River near Fifth Street. The machine will continue east under the river to the east of the Clark Memorial (Second Street) Bridge, and then turn southeast under downtown Louisville to Butchertown, eventually ending near Lexington Road and Grinstead Drive.



Rock flows from the conveyor system from deep underground at the tunnel site. The rock is used as fill in other sections of the tunnel project, with the remainder delivered as fill to a rock quarry.

### How does Bumblebee work?

As the boring machine excavates the tunnel route, a conveyor system takes the rock to the shaft near 12th and Rowan streets and lifts the rock 18 stories to the surface. The excavated rock is loaded into dump trucks and transported to a local quarry.

After the excavation is complete, the entire length of the tunnel is lined in concrete, making it watertight. The Waterway Protection Tunnel will store up to 55 million gallons of combined wastewater and stormwater during periods of heavy rain



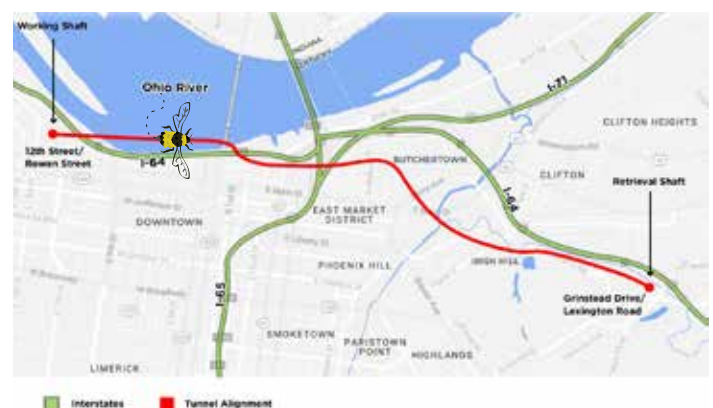
The tunnel's working shaft allows access and ventilation for workers 18 stories underground.

until capacity is available in the MSD sewer system. The contents are then pumped back into the system, conveyed to MSD's Morris Forman Water Quality Treatment Center for proper treatment and later released into the Ohio River.



To track the tunnel, visit  
[LouisvilleMSD.org/Tunnel](http://LouisvilleMSD.org/Tunnel)

Below: The path for the tunnel is shown in red. The boring machine—nicknamed Bumble Bee—is moving from west to east.





## Exceptional wastewater treatment allows local brewers to utilize MSD recycled water in a special craft brew



Four local brewers experimented with a new water source for a unique craft brew: recycled water from Louisville MSD's Floyds Fork Water Quality Treatment Center.

The Next Round Brewing project debuted its products at Water for Life—a water festival on the Big Four Lawn—on August 18, and at the 2019 Kentucky/Tennessee Water Professionals Conference held in Louisville. The participating brewers brought tasting samples of their brews to both events. MSD and other water professionals explained how recycled water works and the high-tech treatment process that made the Next Round Brewing project possible.

### What is recycled water?

Recycled water is the end-product for MSD. Every day, we collect the community's used water and treats it at one of our five Water Quality Treatment Centers before releasing it into local waterways. The recycled that we discharge into our waterways is cleaner than the water already in the receiving water body, meeting regulatory guidelines. For the Next Round project, MSD's recycled water received additional treatment—with a system designed and built for the project by Isopure with participation from University of Louisville J. B. Speed School of Engineering students. The extra filtration brings it up to drinking water standards, with independent third-party laboratories verifying the quality. Four local brewers: Akasha Brewing Company, Apocalypse Brew, Gordon Biersch and Holsopple used the recycled water as their source for their Next Round craft brew.

### No new water

So why experiment with recycled water? MSD and other water professionals from Kentucky and Tennessee want to demonstrate the quality that goes into treating all the water we use. Why? There is no "new water." We at MSD must focus on science to provide exceptional wastewater treatment so that our local waterways are safe and clean. Ultimately, the Next Round Brewing project sparks a conversation about water and creates a new appreciation for something most of us take for granted.



MSD's Floyds Fork Water Quality Treatment Center provided the recycled water for the Next Round Brewing project. The treatment center is located in The Parklands of Floyds Fork.

## Customer **Compliments**

Thank you to the MSD crew who removed the furniture from Goose Creek at Old Westport Road. I appreciate your prompt response. It is hard to believe that people would do such a thing, but I guess MSD sees it all the time. I appreciate the work of **Jimmy Krebs, Tony Linton, Miko Santana, Rick Tobin** and **Morris Tolbert**.

—Brainard Palmer-Ball, Jr.

Kudos to MSD staff! **Shawn Abma, Eric McKinney** who responded within 30 minutes to a call to **MSD Customer Relations**. We had a clean-up event in Cliff Park and uncovered a catch basin and several sink holes. MSD staff took our concerns seriously and the Customer Relations Agent thanked us for calling.

—Nicole George

Louisville Metro Councilwoman, District 21

I called MSD to report a complete blockage in a drainage ditch caused by someone dumping large branches. The next day your crews were out here working in the rain to clean it up. They did a great job. My thanks to Supervisor **Rickie Blesdsoe**, Inspector **Chris Huelsman** and the crew of **Nathan Capps, Phillip Bradley** and **Teron Mayers**.

—Linda Clements



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The public is welcome to attend MSD Board meetings.

For MSD Board information and meeting schedule visit:  
[LouisvilleMSD.org/About-Us/MSD-Board](http://LouisvilleMSD.org/About-Us/MSD-Board)

## Upcoming Events

### SEPTEMBER 17

#### MSD Infrastructure Committee Meeting

3:30 PM, Open Session, 700 West Liberty Street

### SEPTEMBER 30 — NEW DATE

#### MSD Board Meeting

1 PM, Open Session, 700 West Liberty Street



MSD crews work to remove a sofa from Goose Creek.

## MSD removes furniture from Goose Creek

There are plenty of legal ways to dispose of furniture. Dumping it into a stream isn't one of them. But that was what MSD crews faced on August 20, after a report from

Louisville Metro Public Works of furniture found in Goose Creek at Westport Road. The site was challenging to reach. MSD crews used a “clamshell” truck—commonly utilized in cleaning stormwater basins on the side of roadways—to remove the three-piece



MSD crews lift a mattress from Goose Creek for proper disposal.

sectional, mattress and box springs. Public Works has a Waste Reduction Center at 636 Meriwether Avenue where up to three large household items can be dropped off for free.