



Metropolitan Water Reclamation District of Greater Chicago

# Press Release

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## **Metropolitan Water Reclamation District, Univ. of Illinois partnership earns American Society of Civil Engineers award**

### ***Bubbly Creek research reaps valuable insight***

Bubbly Creek, long known to be one of the Chicago River's most polluted segments, is the subject of award-winning water quality research sponsored by the Metropolitan Water Reclamation District of Greater Chicago (MWRD) and conducted by University of Illinois-Champaign Urbana researchers.

The American Society of Civil Engineers (ASCE) selected the work, which was presented in the Sept. 2010 publication "Journal of Environmental Engineering," to receive the prestigious Wesley W. Horner award for environmental excellence.

Graduate Research Assistant Davide Motta, Postdoctoral Research Associate Jorge D. Abad and Professor Marcelo H. Garcia conducted the research in 2006 and 2007. They used the data to develop a model for analyzing the behavior of suspended sediments resulting from combined sewer overflow events that occur in Bubbly Creek. These occur mainly when Racine Avenue Pump Station is activated to reduce the risk of flooding in Chicago during periods of heavy rainfall.

Understanding the behavior of these sediments is the key to engineering solutions to lingering water quality problems in Bubbly Creek and the South Branch of the Chicago River.

In the award letter, Patrick J. Natale, Executive Director, ASCE, wrote that by capturing key processes, the research provided useful preliminary results as well as "important guidance to assess potential water quality improvement and management solutions in the South Branch of the Chicago River."

David St. Pierre, MWRD Executive Director, said the MWRD will be able to use this research as a foundation for additional efforts to improve Chicago area waterways.

"The MWRD strives to understand challenges in the water environment, and it is through partnerships and studies such as this that we can all have a better understanding as to how the quality of our waterways can be improved," said St. Pierre. "We are especially committed to understanding and erasing the lingering effects of the pollution that persists at Bubbly Creek."

From 1865 through 1971, the Union stock yards, a meat packing industry, used Bubbly Creek as a dumping ground. As a matter of routine, workers tossed animal carcasses, grease and anything else that wasn't useful or valuable into the creek. The creek was so polluted that, to this day, it bubbles methane and hydrogen sulfide gases which escape from byproducts of the decomposing materials that were present underneath the surface. Even though the stock yards officially closed 40 years ago, significant pollutants remain due to the blatant disregard for the water. Its lingering stench has subsided in the past four decades but is still pungent on hot days.

"For over 100 years the site suffered from significant abuse, and we are making headway in reversing the effects of Bubbly Creek's history," explained St. Pierre. "That's why the results of this research are so important. By exploring the impacts of the pollutants along with developing a model for further studies on area waterways, we can learn what processes are needed to make improvement."

The award will be presented during the World Environmental & Water Resources Congress in Albuquerque, NM in May.

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*Established in 1889, the MWRD ([www.mwrdd.org](http://www.mwrdd.org)) is an award-winning, special purpose government agency responsible for wastewater treatment and stormwater management in Cook County, Illinois.*