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## REFLECTIONS: A WATERSHED MOMENT FOR THE NEW MWMO

BY DOUG SNYDER, EXECUTIVE DIRECTOR

On Sept. 19, 2015, hundreds of our friends, neighbors and partners gathered to celebrate the grand opening of our Stormwater Park and Learning Center in Northeast Minneapolis. Although the building itself opened three years ago, this fall's event marked the completion of our unique stormwater-filtering landscape (i.e. "Stormwater Park") as well as our educational and interpretive features (i.e. "Learning Center").

More than a celebration of the facility itself, our grand opening marked the transformation of the Mississippi Watershed Management Organization from a fledgling organization to a mature one. Today's MWMO is a full-service urban watershed management organization, with a diverse set of programs and a full complement of 16 staff. In ways both figuratively and literally, our efforts to improve water quality in the Mississippi River are leaving indelible marks on the landscape.



MWMO Executive Director Doug Snyder leads a tour of the Stormwater Park and Learning Center at the Sept. 19, 2015 Grand Opening.

Looking ahead to 2016, major projects include an underground stormwater treatment and research facility in St. Anthony Village, a stormwater reuse system in the Minneapolis Sculpture Garden and our continued work toward a "Green Campus" for Thomas Edison High School. The MWMO will also continue funding smaller, innovative projects with our Stewardship Fund Grants.

The next year will also see an expansion of our outreach and communication efforts. The MWMO will join several other watersheds in sponsoring its own class of Master Water Stewards, providing community members the knowledge they need to be leaders for clean water. We'll also be launching a new MWMO website in early 2016, and collaborating with other watersheds on education and communication initiatives.

It's an exciting time for the MWMO, and we invite you to get involved. Visit us online or in person and learn how you can make a difference for clean water.

## MWMO SIGN SCULPTURE CONNECTS RIVER AND COMMUNITY



"The Drift, Volume 9," featured Northeast sculptor Jim Brenner as he worked to complete a 3D glass and steel sculpture for the MWMO Stormwater Park and Learning Center. Completed in May, this brilliant blue sculpture (above) can be seen after sunset. So check it out the next time you visit us!



Protect it. Pass it on.

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WATERSHED  
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## JOIN OUR CITIZEN ADVISORY COMMITTEE!



From left: MWMO Citizen Advisors Nicole Menard, Charlene Brooks, Anne Wilkinson and Craig Larson.

If you care about water quality in the Mississippi River and have a desire to learn how stormwater is managed in the Twin Cities, joining the MWMO's Citizen Advisory Committee is a great way to get involved.

The CAC meets at the request of the MWMO Board of Commissioners (typically three times per year) to assist in managing the water resources of the MWMO. CAC members review grant proposals and make recommendations to the board. In addition, they review the MWMO's annual budget, and assist with outreach and other activities as needed.

The MWMO is currently seeking new CAC advisors from several of its member communities. Contact Tammy Schmitz at [tschmitz@mwm.org](mailto:tschmitz@mwm.org) or 612-746-4988 to learn more about joining the CAC, or visit us online at [mwm.org/cac.html](http://mwm.org/cac.html).

## PROJECT SHOWCASE: ST. ANTHONY REGIONAL STORMWATER TREATMENT SYSTEM

Workers recently broke ground on construction of a new \$1.6 million regional stormwater treatment and research facility for St. Anthony Village.

In addition to removing pollution from stormwater runoff for a large portion of the city, the underground system will allow the MWMO to test new methods of filtering stormwater.

The project — the result of a partnership between the MWMO and the Cities of St. Anthony Village and Minneapolis — represents a unique opportunity to capture and clean stormwater runoff draining from a 600-acre urbanized area and discharging directly into the Mississippi River.

The system uses a combination of gravity and the natural flow of the water to settle, trap and remove solids and phosphorus. A built-in secondary filtration system uses iron-enhanced sand and other filtration technologies to remove additional pollutants. Once completed, it will treat an estimated 169 million gallons of runoff annually, removing an estimated 63 percent of sediment (39 tons) and 47 percent of phosphorus (176 pounds) per year.

The treatment system will also act as a research laboratory, allowing new filtration methods to be tried and tested for their effectiveness. The MWMO's monitoring team will be able to test the water quality when stormwater enters the system and again when it leaves.

Construction is expected to finish in early 2016.



Workers installing a stormwater treatment system similar to the St. Anthony Village system under construction. (Photo Courtesy Contech Engineered Solutions.)

## STORMWATER PARK AND LEARNING CENTER: NEW EXHIBITS, FEATURES

The MWMO's Stormwater Park and Learning Center recently added a number of exciting new features, including outdoor interpretive signage, digital and interactive touch-screens, a Magic Planet digital globe and a number of new educational displays. It's a great place for both youth and adults to learn about how our everyday decisions impact water quality.

So stop by, say hello and make or refill a free bottle of eco-friendly cleaner!



A floor map of the MWMO watershed and a pair of interactive touch-screen displays are among the new additions to the Stormwater Park and Learning Center.

Visit our [Stormwater Park and Learning Center](#) between 8 a.m. and 4:30 p.m. Monday through Friday (except federal holidays).

## MISSISSIPPI RIVER GREEN TEAM ALUMNI JOIN ENVIRONMENTAL WORKFORCE

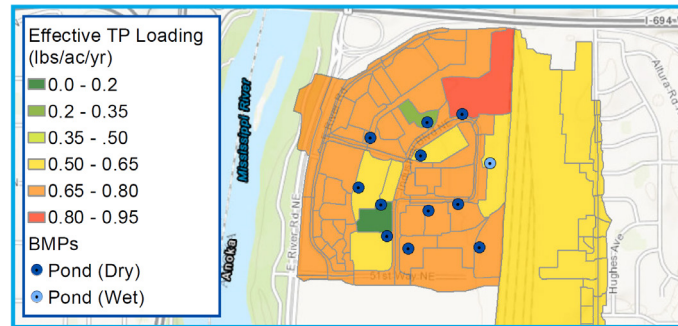


Mississippi River Green Team alumna Connie Xiong in 2015.

For Connie Xiong, the Mississippi River Green Team provided more than just a summer job — it gave her a path to a career. Connie, now in her third year at the University of Minnesota, worked as a volunteer engagement specialist with the Mississippi Park Connection this summer. She said her time on the MRGT from 2010 to 2012 taught her valuable skills and gave her the confidence to speak in public.

Connie is one of many alumni who used their MRGT experience to find employment in the environmental field. The MRGT program, which began in 2008, has successfully employed and educated more than 100 participants from North and Northeast Minneapolis. The program is a joint effort of the MWMO and the Minneapolis Park & Recreation Board.

## WATERSHED MODELING: MAPPING THE FUTURE



An example map showing effective phosphorus loading (the estimated amount of phosphorus leaving the landscape) and stormwater treatment feature locations near an industrial complex in Fridley.

The MWMO has embarked on a project to develop comprehensive flooding and water quality models for the entire MWMO watershed.

Using these models, the MWMO and its partners will be able to understand where stormwater runoff — and the pollution it carries — flows to and from during storm events.

The models will enable a better understanding of how our stormwater systems function as well as which areas of the landscape are generating the most pollution. This will help the MWMO prioritize the placement and design of major capital improvement projects that capture, clean and reuse stormwater runoff.

The MWMO will also be able to better support its partners in developing solutions to help alleviate flooding.

Modeling has already been completed for two watersheds covering portions of Northeast Minneapolis, Fridley, Hilltop and Columbia Heights. The MWMO is now partnering with the City of Minneapolis to develop models for watersheds covering North Minneapolis, and an area including portions of St. Anthony Village.

The modeling process is done in two phases. In the first phase, a detailed hydrology and hydraulics model is developed for a given area. That information is then used to create a water quality model.

Mapping of all major watersheds in the MWMO is expected to be completed in 2019.

## MWMO COMMISSIONERS

Kevin Reich Minneapolis, Chair  
Jim Saefke Fridley, Vice-Chair  
Mary Gaasch Lauderdale,  
Treasurer  
Jerry Faust Saint Anthony Village  
Donna Schmitt Columbia Heights  
and Hilltop  
Scott Vreeland Minneapolis Park  
and Recreation Board  
Betty Wheeler Saint Paul



## MWMO STAFF

Doug Snyder  
Executive Director  
Udai Singh  
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Stephanie Johnson  
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Dan Kalmon  
Principal Planner  
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Michele Ross  
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Marcy Bean  
Capital Projects and Land  
Conservation  
Tammy Schmitz  
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David Dahle  
Intern





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### CONNECT WITH US

Follow the MWMO on these  
popular social media sites:



### COMING SOON: A NEW MWMO WEBSITE

The MWMO will launch a  
new, completely redesigned  
website in March 2015.

### WOULD YOU LIKE THE DRIFT NEWSLETTER BY EMAIL?

Sign up on our website at  
[mwmo.org](http://mwmo.org), or email us at  
[contacts@mwmo.org](mailto:contacts@mwmo.org) and  
write "subscribe to e-Drift" in  
the subject line.

### APPLY FOR A STEWARDSHIP FUND GRANT

We can help you support  
clean water in your  
community. Visit our  
Stewardship Fund page at  
[mwmo.org/stewardshipfund.html](http://mwmo.org/stewardshipfund.html).

## BECOME A MASTER WATER STEWARD: BE A LEADER FOR CLEAN WATER

Are you concerned about water pollution? Is there  
a drainage problem in your neighborhood? Are you  
willing to step up and be a leader for clean water in  
your community?

Becoming a Master Water Steward is a  
great opportunity to learn how to solve real  
environmental problems and connect with  
a local network of energized leaders. Master  
Water Stewards are trained and certified to help  
manage stormwater and control pollution in their  
communities.



*The MWMO will sponsor a class of Master Water  
Stewards in 2016. (Photo courtesy Freshwater  
Society)*

The MWMO is sponsoring a class of Master Water Stewards in 2016. There is no tuition or  
fees for participation, and no previous experience is required. The program consists of 50  
hours of coursework and a capstone project from January to July 2016. After completion  
of the program, participants become certified and volunteer a certain number of hours of  
community service each year to retain their certification.

If you're interested in becoming a Master Water Steward through the MWMO, please contact Michele Ross at  
[mrross@mwmo.org](mailto:mrross@mwmo.org) or 612-746-4983 or visit [mwmo.org/masterwaterstewards.html](http://mwmo.org/masterwaterstewards.html).

## WATER ALMANAC: THE CHANGING ECOLOGY OF THE MISSISSIPPI RIVER



*MWMO staff conduct bathymetric mapping near  
the Lowry Avenue Bridge in June 2015.*

The closure of the Upper St. Anthony Falls Lock  
and Dam in June 2015 marked the end of an era for  
the Mississippi River, and the beginning of a grand  
experiment in the river's ecology. The removal of  
barge traffic from the river eliminates the need for  
dredging, which will allow sediment to accumulate  
on the river bottom and return the area north of  
downtown Minneapolis to a more natural state.

To help document these changes, the MWMO's  
water quality monitoring team recently used special equipment to map the depth and shape  
of the Mississippi River. Called "bathymetric mapping," the procedure produced data that  
provides a "before" picture of the river's condition. MWMO staff also aided in the collection  
of macroinvertebrate samples, which will similarly provide a snapshot of their populations  
in the river and provide insight into the river's current water quality. As the river's conditions  
evolve, MWMO staff will conduct follow-up data collection that will provide new insights  
about the environmental impacts of a lock closure and changes in river management.

Project partners include the Minneapolis Riverfront Partnership, the Legislative-Citizen  
Commission on Minnesota Resources, the University of Minnesota and the Minnesota  
Department of Natural Resources.