

Capitol Region Watershed District



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Capitol Region Gets WET



Educator Workshop on February 29

Calling all educators within the CRWD! Join us for a Project WET (Water Education for Teachers) workshop on Friday, February 29, 9am - 4pm. The \$20 cost includes lunch, snacks, and the terrific Project WET curriculum. CRWD will provide substitute teacher stipends for the first 15 registrants. Participants learn about the Project WET Curriculum through hands-on activities.

Contact Elizabeth for more information, 651-644-8888 and elizabeth@capitolregionwd.org

Find more information about Project WET at www.dnr.state.mn.us/projectwet/index.html.

Project WET is a nonprofit water education program whose mission is to reach children, parents, and educators, with tools for water education. In Minnesota, Project WET is sponsored by the Minnesota Department of Natural Resources.

Capitol Region Watershed District



Our mission is to protect, manage and improve the water resources of the Capitol Region Watershed District.

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Capitol Region Watershed District Winter 2008

In the Trenches Improving Water Quality

When Capitol Region Watershed District staff started looking for ways to improve water quality in Como Lake, they eventually looked underground. "Our watershed is more than 40% hard surfaces such as roads, roofs, and driveways. We needed to look at some unique ways and locations to infiltrate stormwater," said Bob Fossum, Water Resource Project Manager. "There are some trenches in turn lanes in Florida's Dade County, but to our knowledge St. Paul's are the first trenches in the country built beneath a city street."

Infiltration trenches receive stormwater runoff from storm drains along the street curblines. These storm drains normally drain directly to lakes and rivers. But in this system they direct stormwater to a large manhole beneath the

street that then flows to two perforated, 10-inch diameter pipes. The perforated pipes then drain into coarse rock around them so water seeps back in to the ground. The storm drains and manhole are constructed to remove solids and trash. Also, if the trenches fill up during a large rain, the stormwater overflows into the storm sewer system.

An easier fix

As part of the Arlington Pascal Street Improvement Project, eight trenches were constructed underneath Arlington and Nebraska Avenues. The trenches receive stormwater from up to one acre of the surrounding area, and can store up to 60,000 gallons of water. The positioning of the trenches underneath the street makes them easier to maintain. "The original plan was to install the infiltration trenches in the boulevard, but maintaining them would have disrupted the curb, sidewalk, trees and possibly private property," said Mark Doneux, District Administrator. "With the trenches in the street, maintenance or repair work can be performed the



In-street trench under construction



Staff maintains catch basins leading to the trench

way other in-street repairs are done by saw-cutting the asphalt, excavating and repairing the trench, then repaving the street."

Testing the waters

Water quality monitoring of the trenches was carried out in summer 2007, and the data is being analyzed by CRWD staff. A water quality monitoring report will be published this spring.

Board of Managers: Robert P. Piram, President; Joe Collins; Marylyn Deneen; Mike Thienes; Seitu Jones
Staff: Mark Doneux, Administrator; Bob Fossum, Water Resource Specialist; Katie Huser, Water Resource Technician; Forrest Kelley, Permit Coordinator; Anna Eleria, Water Resource Technician; Dawn Nelson, Administrative Assistant; Melissa Baker, Water Resource Technician; Elizabeth Storey, Education & Outreach Coordinator

Established in 1998, the Capitol Region Watershed District covers 40 square miles and includes portions of the cities of Falcon Heights, Lauderdale, Maplewood, Roseville and St. Paul. Located within Ramsey County, it has a population of 245,000 people. The district drains to The Mississippi River, also its primary water resource. Como Lake, Crosby Lake, Loeb Lake and Lake McCarrons are also located in the District.

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Raingarden at Frankson and McKinley Streets

Raingarden Gets the Gold

Capitol Region Watershed District (CRWD) received a 2007 Golden Bloom Award for the beautiful raingarden at Frankson and McKinley Streets in St. Paul. The City of St. Paul and the St. Paul Garden Club presented the 3rd annual awards on January 28th at Como Park Conservatory. One of 95 nominations, and built in cooperation with the St. Paul Department of Public Works, the Frankson-McKinley garden won in the Environmental category which recognizes gardens that reduce negative environmental impacts.

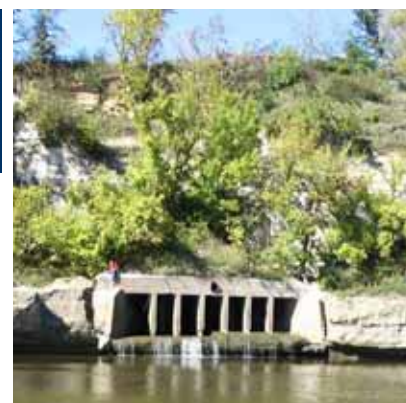
CRWD staff and Board Managers Mike Thienes and Marylyn Deneen accepted the award. John Thomas, a CRWD Stewardship Grant recipient, received a Good Gardener award for the raingarden at his home in the St. Anthony Park neighborhood.



Think Outside the Bottle

More than 40% of bottled water in the U.S. and Canada is sourced from municipal tap water, and making bottles to meet Americans' demand for bottled water required the equivalent of more than 17 million barrels of oil last year – enough fuel for more than 1 million U.S. cars for a year. Bottled water also results in the burning of fossil fuels to carry the bottles miles from the source and contributes to billions of plastic bottles ending up in our landfills.

Street sweeping efforts are increasingly hampered by the glut of plastic bottle litter in our streets, and the bottles also clog our catch basins, storm drains, and pipes. According to the Minnesota DNR, the bottom of the Mississippi River in the Twin Cities gorge is covered with plastic bottles. Help reduce the environmental harm by joining the effort to decrease plastic bottle use. More information at: <http://www.thinkoutsidethebottle.org/>.



Plastic bottles enter the Mississippi River via storm drain outfalls.



Governor Notices Our Blue Thumb

Clean Water Collaboration wins MN GREAT! Award

The Blue Thumb – Planting for Clean Water program has been awarded the Governor's MN GREAT! Award (Minnesota Government Reaching Environmental Achievements Together). For 17 years the Governor's office along with the Minnesota Pollution Control Agency has honored the superior environmental achievements of businesses, nonprofits, government units, and institutions. MN GREAT! recognizes organizations that focus on preserving our environment through innovative practices that prevent pollution and lead to sustainability. The Blue Thumb program is an online outreach program for residents who want to plan and plant native gardens, raingardens, and shorelines in an effort to protect water quality. Bluethumb.org features planting blueprints, a plant selector tool, local retailers and landscapers, grant information, and more.



Blue Thumb Partners

Capitol Region Watershed District (CRWD) staff are active partners in the Blue Thumb collaboration. "Watershed residents have a growing interest in planting that allows stormwater to soak into the ground. It's helpful to have a resource like bluethumb.org when planning watershed-friendly landscapes," said Elizabeth Storey, coordinator of Education and Outreach at CRWD.

The Blue Thumb partnership combines resources and helps partners present

a unified, public education message that saves both water resources and tax payer dollars. Blue Thumb is specific to water-quality friendly gardening activities, but the model can be easily transferred to other regions. In Minnesota, the program continues to grow, and shows potential to reach to other parts of the Midwest.

Blue Thumb partners were also involved in creating The

Blue Thumb Guide to Raingardens by local ecologists Dan Shaw and Rusty Schmidt. The Guide is an illustrated how-to manual with details about raingarden size, slope, and soil type, as well as garden design plans and plant descriptions. Residents of CRWD can pick up a free copy at the District office.



From Knowledge to Action Urban Stewards Make Waves in the Watershed

Sue Vang, a tenth-grader at Twin Cities Academy, started this Environmental Science class last semester not knowing much about watershed issues. But Vang and his classmates were part of Urban Stewards, a service-learning program that gives students real world opportunities to address environmental issues in their own communities. "The Urban Stewards process was very exciting. The best part was working with my peers and informing the public about stormwater runoff. It was fun to make a difference." The students started with a focus on water, gathered information from local environmental experts, and then honed in on the specifics of urban stormwater runoff. After studying the problem, they designed action projects that address environmental impacts.



At Gloria Dei Lutheran Church, students used a watershed model to show stormwater's route to the river.

Sponsored by the nonprofit Eco Education, the Urban Stewards model guides students through a year-long process that increases their environmental stewardship skills. "Urban Stewards emphasizes youth empowerment, problem-solving, and fosters community involvement," said coordinator Faith Krogstad.

Twin Cities Academy's projects were wide-ranging: one group of students polished their presentation skills and urban runoff knowledge to serve as guests on issues talk show, Truth to Tell on KFAI (90.3 and 106.7 FM). Another group created a suite of methods for communicating runoff know-how to middle school students: they assembled a lively Power-Point talk, used a watershed model, and created a water quality game show complete with prizes. Other students studied up on harm caused by cigarette butt litter and planned to distribute personal ashtrays, an alternative to throwing butts in the streets which lead directly to our waterways.

For more information about Eco Education's Urban Stewards Program, visit ecoeducation.org.