

## Capitol Region Watershed District

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# 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 **Spring 2009**

## CRWD Goes Down Under!

While this past winter's frigid temperatures were unwelcome by many Minnesotans, it provided ideal outdoor conditions for Capitol Region Watershed District (CRWD) to conduct repairs to a 5,000-foot section of the Trout Brook Storm Sewer Interceptor (TBI) in St. Paul. Owned and operated by CRWD, this section of TBI suffered from severe cracking and settlement. Between November 2008 and February 2009, CRWD replaced a 200-foot section of TBI underneath L'Orient Street Bridge; reinforced a 260-foot section of TBI underneath Maryland Avenue with foundation supports; and conducted concrete repairs inside another 4,500 feet of TBI.

Besides the harsh weather conditions, this repair project posed other challenges that design engineer, Barr Engineering of Minneapolis, and construction contractor, Minger Construction of Chanhassen had to overcome.

The project schedule was very tight, and the storm sewer needed to be fairly dry for contractors to complete their work. A minimum of six inches of water flows through TBI all year-round because of groundwater and other water sources, so to dry out TBI, Minger Construction installed a large pump at the upper end of the project and connected it to two 3,000-foot six-inch pipes placed above ground along the Gateway Bike Trail that returned the water back to TBI at the terminus of the project. Additionally, a series of small dikes and pumps were also used inside the tunnel.

The section of TBI in most urgent need of repair necessitating full replace-



Creation of concrete forms to connect old sewer sections to new

ment had very tight working conditions because of its location underneath the L'Orient Street Bridge, which could not be removed for this project. To excavate around and demolish TBI under the bridge, a slide shoring system was installed to prevent movement of soils and protect the bridge. Since the bridge also had a low clearance from

its bottom to the base of TBI, it required some ingenuity to lift and place 43 new 6-foot-wide sections of TBI, each weighing 26,000 pounds, under the bridge. In the end, the sections were placed onto plastic pool liners and pushed into place with a skid steer loader, a task made easier by the slightly

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## 2009 Summer Events

### Como Lake Shoreline Clean-up

Saturday, June 13, 8:30-10:30am

Meet near Schiffman Fountain south of Como Lakeside Pavilion, 1360 N Lexington Parkway, St. Paul. Bags and gloves provided. Bring your own canoe or walk the shoreline. Sponsored by CRWD, District 10 Environment Committee, and St. Paul Parks & Rec. Information at [capitolregionwd.org](http://capitolregionwd.org).

### Como Area Raingarden Walking Tour

Saturday, June 13, 10:30am-12:30pm

Presented by Friends of the Mississippi River and Capitol Region Watershed District. You must register for this free tour. Contact [sue rich](mailto:sue_rich@fmr.org) at [sue\\_rich@fmr.org](mailto:sue_rich@fmr.org) or 651-222-2193 x14.

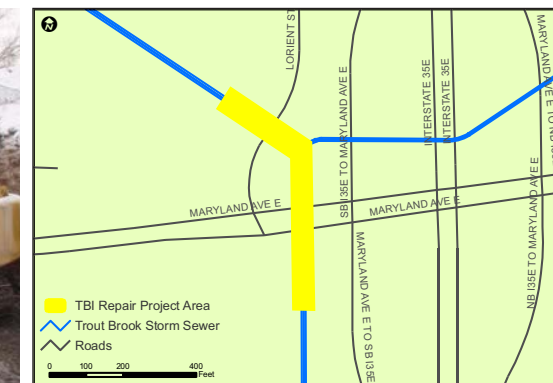
### Bugs' Night Out

Tuesday, June 30, 6:00-8:00pm

Meet at the pier at Como Pavilion, 1360 N Lexington Parkway, St. Paul. Dip into the lake with bug expert Brandon Burns! We'll use dip nets to get a closer look at macroinvertebrates living in the lake, and learn about the effect pollution has on these tiny creatures. Each adult may bring one or two children ages 6 to 11. You must register for this free event: call 651-644-8888 or email [elizabeth@capitolregionwd.org](mailto:elizabeth@capitolregionwd.org).



Installation of new sections of storm sewer under L'Orient Avenue Bridge



**Board of Managers:** Robert P. Piram, President; Joe Collins; Marylyn Deneen; Mike Thienes; Seitu Jones

**Staff:** Mark Doneux, Administrator; Bob Fossum, Water Resource Project Manager; Katie Huser, Water Resource Technician; Forrest Kelley, Permit Coordinator; Anna Eleria, Water Resource Specialist; 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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## Reduce Your Contribution to Water Pollution

### How stormwater pollutes

The Capitol Region Watershed District is 42% *impervious surfaces*: hard surfaces in our urban areas that water cannot pass through as it does through soil. So, in our developed landscape of roads, houses, parking lots, sidewalks, and driveways, rainwater is forced to run off, and carries with it all the pollutants on these impervious surfaces: oil, pesticides, soil, pet waste, chemicals and other toxins. This polluted water flows untreated directly from the street to our lakes and rivers. Since each of us contributes to this pollution problem, we can all be part of the solution.

### Cover Story

**Down Under**, continued from front page

icy conditions on top of the TBI grade beam foundations.

This project was one of two major capital improvement projects CRWD has completed in the past several years to bring the 6.5-mile Trout Brook Storm Sewer Interceptor into “good operating condition” which was required as part of the 2006 transfer agreement between Metropolitan Council Environmental Services and CRWD. In 2007, a 200-foot TBI section was replaced near Willow Reserve in St. Paul.

### What can I do about stormwater pollution?

This summer, take concrete steps toward reducing your pollution contribution:

#### 1. Clean up your streets

Start with the sidewalk where you live. Sweep up and pick up anything on the impervious surfaces around your house, including the street gutter.

#### 2. Build a raingarden

Rain gardens are depressed areas that receive rainwater and allow it to soak into the ground instead of running off. Visit our website at [capitolregionwd.org](http://capitolregionwd.org) or [bluethumb.org](http://bluethumb.org) to get started. Also, contact CRWD about grant opportunities for rain gardens.

#### 3. Redirect your downspouts

This is one of the most basic things you can do to protect water quality. During a heavy storm, each downspout on your house can deliver 12 gallons of rainwater a minute to the storm sewer system. Use gutter extensions or elbows to instead direct the water into your lawn, garden, or rain garden.

#### 4. Install a series of rain barrels

It’s an old-fashioned idea, but water collected in a rain barrel can be put to good use, and it decreases runoff. You can purchase a fancy barrel from a retailer, or make your own. Visit [capitolregionwd.org](http://capitolregionwd.org) for a rain barrel construction plan.



Rain barrel water can be used to water gardens.



Last year's leaves can be added to a compost pile.



Rain gardens can be planted in spring or fall.

## Rain Garden Grooming

If you’ve been dreaming about planting a rain garden, it is now warm enough to prepare your site and plant. Very exciting! But for those of us who planted our rain gardens last year or earlier there is a bit of work to do. Start by removing any dead material, especially the stalks and stems of plants that no longer have seeds on them. Remove most of the leaves, older mulch, and garden debris. It might be necessary to rake out the garden and reform the basin so the garden holds as much water as possible. You may then replenish the mulch and spread it around evenly throughout the garden.

Look for spots where plants have died or are not growing well. They might need to be replaced or moved. As the growing season continues you might notice that some plants produce too many seeds or are too aggressive. Correct this by removing heads when they go to seed during the growing season.

*Adapted from Rain Garden Network Newsletter, 4.2*

## CRWD Watershed Survey

Water pollution is a problem to which we all contribute. The upside of that is, it’s a problem we can all help solve. With the ultimate goal of engaging at least a portion of some 245,000 residents in our mission to protect and improve water resources, CRWD has developed an Education and Outreach Plan to promote changes in behavior that will help restore community water quality.

The first aim of the plan is to assess the community’s willingness to work to improve water pollution. CRWD will collaborate with The Amherst H. Wilder Foundation to conduct a telephone survey of watershed residents. The survey will be conducted in English, Somali, Spanish, and Hmong, and will be followed up by a series of focus groups. The survey will ask residents about their experiences with activities that can affect water quality and seek to identify barriers to residents working to protect water quality. The survey will be carried out in Summer 2009.

Individual actions will help restore community water quality.

