

Going the Distance

Education program coordination highlights Minnesota water quality improvements

By Angie Hong

My breath puffed out in little white clouds as my feet kept rhythm against the pavement. At the top of the hill, I could see the driveway of Tatiana and Boris Zemcuznicov's home and my mind flashed back to the previous year's St. Croix Valley Garden Tour, when I visited their magazine-worthy spread. The couple had worked with our office and a local landscaping company to install rain gardens, native plants and a low-mow lawn on their property and the result was breathtaking. I craned my head as I passed before turning my attention back to the road ahead and my running pace.

Two blocks later, as I approached the turnoff for the new Brown's Creek Trail, I took in an unobstructed view of the St. Croix River down below. Over the tops of bare tree branches, I could see the ice had begun to break up, creating a winding patchwork quilt of grey and white. I smiled in anticipation of warmer weather and summer fun ahead.

Within the St. Croix Valley—a region in eastern Minnesota and western Wisconsin—the river is a ribbon of blue that binds communities and people together. Designated as a Wild and Scenic River, the St. Croix attracts canoeists, kayakers and nature enthusiasts to the upper reaches, as well as river boats, pontoons and million-dollar yachts on the lower portion. The small towns along the St. Croix are known for thriving art scenes, locally owned shops and restaurants, and hometown charm. Further inland, where the landscape is dotted with hundreds of wetlands, lakes and streams, the rolling hills beckon to



Above: Neighbors gather to learn how they can protect Lily Lake.

Bottom left: Visitors tour the Zemcuznicov home as part of the St. Croix Valley Garden Tour.

Bottom right: Brown's Creek is one waterway reaping benefits from the county's outreach efforts.



cyclists and Sunday drivers. Washington County, Minn., where I live and work, has more than 200 lakes, a dozen designated trout streams and too many wetlands to count. The Mississippi River forms its southern border, connecting it with hundreds of communities between here and the Gulf of Mexico.

Educating the Public

In 2006, six local units of government in Washington County came together to create the East Metro Water Resource Education Program (EMWREP). At the time, Phase II of the Municipal Separate Storm Sewer System (MS4) Program was coming into play, and small cities were being asked to create storm water education programs for the first time. Meanwhile, area watershed districts (local units of government unique to Minnesota that have the authority to levy taxes for

flood control and surface water quality projects) also were realizing they needed public support to build projects in residential neighborhoods and on privately owned land. Working together would help everyone avoid duplication and make better use of limited funding.

The partners chose Washington Conservation District (a county-wide entity that works directly with landowners) as a host and created a renewable, three-year contract outlining the roles, responsibilities and funding requirements for the program. Currently, cities pay \$650 to \$2,500 per year to participate; watershed districts pay \$12,500 to \$24,000; and the county contributes \$12,500. The number of EMWREP partners has grown from six to 23.

A Decade of Change

Ten years later, the impacts of our education efforts are visible across Washington

County. We have gone from installing five or six voluntary conservation projects per year to more than 200 annually.

A multifaceted approach to education has encouraged systematic change. Some areas of outreach include:

- **Public education and engagement.** We write weekly columns for local newspapers, attend numerous community events, and partner with other groups to educate the public about surface and groundwater issues.
- **Blue Thumb – Planting for Clean Water.** We help homeowners incorporate native plants, rain gardens and native shoreline plantings into their landscapes to reduce runoff, prevent erosion and increase habitat.
- **Direct outreach.** We reach out to homeowners, rural landowners and businesses in priority areas to

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- **Stormwater U.** We provide professional training to municipal staff and consultants, as well as builders, developers and contractors. Our MS4 Toolkit, developed in 2009, helps partners meet storm water education and training requirements.
- **NEMO (Non-point Education for Municipal Officials).**

We teach local decision makers—city councils, county commissioners, watershed boards, planning and environmental commissions—about local water issues, as well as policies, plans and practices they can use to protect their resources.

Measured Success

Running through the city of Stillwater, Minn., that early spring day,

I silently checked off the fruits of our labor as I passed. One of EMWREP's first professional trainings taught city engineers how to design bioretention practices. Local watershed districts also had updated their rules to require infiltration and storm water volume control measures be used during development and redevelopment projects. As a result, several streets in town now feature bump-outs with rain gardens that infiltrate storm water. Near McKusick, Lily and Long lakes, I could see dozens of front yard rain gardens, as well; the result of years' worth of workshops, neighborhood parties, direct outreach and partnership building.

Close coordination between EMWREP partner organizations, along with water monitoring and technical staff, has produced measurable water quality improvements. Near Lily and McKusick lakes, for example, the Washington Conservation District conducted a subwatershed analysis to identify best locations for storm water retrofits and we reached out directly to those homeowners to get right-of-way rain gardens installed. Water monitoring data from McKusick Lake have shown a slow but steady improvement since 2008, and the lake is one of few in Minnesota to be removed from the impaired waters list, as a result.


As a runner, I liken our water restoration efforts in Minnesota to a marathon. Right now we are somewhere around mile 10—far enough in to feel burning in our legs, but not yet close enough to the finish line to celebrate. Jogging down the Brown's Creek Trail, I paused to gaze at the creek passing under an old stone arch bridge, crusted with diamonds of ice like a fairy-tale illustration. Trout finally are starting to reproduce in the stream for the first time in more than 15 years. We are going the distance in water education, and when we finally reach the finish line, chances are we will probably sign up for another marathon. **SWS**

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