Arcola “Stream Team” Provides Vital Monitoring

The Arcola Stream Assessment and Protection (ASAP) Monitoring project is an effort to assess the current condition of the watershed flowing through Arcola Mills by monitoring water quality and sharing the information with appropriate agencies. A dedicated team of volunteers—including Larry Whitaker, Jenna Fletcher, Patricia Morrison and Mary Smith—is powering the effort.

The group began volunteering at Arcola Mills in 2008. With training and equipment from the Watershed District, the group collects water samples from the creek every month. They monitor the water level, water temperature, velocity, flow, turbidity, pH, dissolved oxygen and phosphate and nitrate levels. They also conduct a rudimentary test for e-coli. According to Larry, despite an indication of e-coli, “all the other monitoring levels are good—they show a good, consistent stream.”

A recently-completed Department of Natural Resources (DNR) fish survey found native brook trout in the stream. The survey also found barriers blocking and limiting the trout habitat. The monitoring group is working to address these barriers and formulating plans to improve the habitat. The group is also working with Washington Conservation District to leverage grant funds for expanding the monitoring program to add collection of macroinvertebrates (water bugs, which indicate water quality) and improved e-coli testing.

For more information on this project, or to get involved in volunteer water monitoring at Arcola Creek, call Larry Whitaker at 651.433.3896.

IMPROVING WATER QUALITY IN FALLS CREEK AND THE ST. CROIX RIVER

Falls Creek is a vibrant spring-fed tributary to the St. Croix River. Preventing stormwater runoff that could damage the creek has been a long-term priority for the District and Marine Watershed Management Organization (which is now merged with the District). Highway 95 is a significant land use near the creek, and this summer the Minnesota Department of Transportation (MnDOT) constructed an infiltration area that captures runoff from the road and allows it to seep naturally into the ground. “Road runoff used to flow into Falls Creek from the culverts along Highway 95,” said District Administrator Jim Shaver. “Now the culverts will drain into an infiltration area with soil and vegetation that allow the water to recharge groundwater—it’s essentially a big rain garden.”

The project is located on the west side of Highway 95 in Scandia, across from Wind in the Pines Nature Park. “It’s a great project that will reduce erosion and protect water quality in Falls Creek—and keep sediment out of the St. Croix,” said Shaver. “We talked to MnDOT about this several years ago and it’s great to see it come to fruition.”
Jim and Patty Schoeller's May Township home includes Willowbrook Stream, which flows to the St. Croix River, and a pond that flows to the stream. In the two years that they've owned the property, the Schoellers have taken numerous steps to protect this chain of water resources.

In 2007, they removed invasive plants, including reed canary grass, stinging nettles and buckthorn. In 2008, they planted seeds to begin creating a buffer of vegetation around 150 feet of the pond shoreline and 250 feet of the stream shoreline. In 2009, they expanded the buffer and added more plants with support from the District's Best Management Practices (BMP) program. According to Jim, it's all a work in progress. “You don’t just plant it,” he said. “It takes a couple of years for plants to get established.” The first year they saw a lot of blackeyed Susans and the second year brought more, different flowers including butterfly weed, boneset and blazing star. Jim enjoys the sedges that have stabilized the shoreline while allowing him to see down to the creek. But what pleases him the most is that he no longer needs to mow the steep slope to the pond.

For Patty, the increase in birds, butterflies and bumblebees has been notable. And she's glad that the natural buffer of native plants keeps her grandkids away from the water's edge.

District BMP funds are available for water quality projects in 2010. To discuss a potential project or seek technical advice, contact District Administrator Jim Shaver at 651.433.2150.