Stream health, stabilized stream banks, improved habitat, and the protection of property from erosion. Normandale Lake

To improve the health of Normandale Lake, the District and City of Bloomington are conducting a lake-level drawdown. The drawdown will control curly-leaf pondweed, an invasive aquatic plant, and improve native plant diversity in the lake. The District will also conduct a selective herbicide treatment and alum treatment in 2019.

**Discovery Point Restoration**

We continue to remove buckthorn, an invasive plant, at the District’s five-acre office and educational facility in Eden Prairie. Native seeds, shrubs and trees were planted to replace the buckthorn, and the restored areas are growing in well.

**Managing the Watershed**

Five managers, appointed by the Hennepin County Board of Commissioners to three-year terms, direct the activities of the District. The Board of Managers work with state agencies, Hennepin County and the cities within the District to implement the goals and policies of the approved water management plan set forth in state law. Watershed District activities are funded through property tax levies and grant funds. Manager Maressia Twele, after serving since 2012 on the Board of Managers, decided not to seek reappointment. Her term expired in September 2018. We are grateful for the expertise and passion that Maressia brought to the Board. Robert Cutshall was appointed to fill the vacant position on the Board. Bob is also a Master Water Steward volunteer for the District.

**Lake and Creek Monitoring**

During the summer of 2018, the Riley Purgatory Bluff Creek Watershed District assisted Nine Mile Creek Watershed District in conducting a fish assessment of Normandale Lake, Lake Cornelius, and ponds connected to Cornelius. The fish sampled in Normandale Lake are similar to other metro lakes with bluegill being the most abundant. Bluegill may be keeping the invasive common carp population under control in Normandale. However, the large number of adult common carp captured in Normandale Lake are similar to other metro lakes with bluegill being the most abundant. Bluegill may be keeping the invasive common carp population under control in Normandale. However, the large number of adult common carp captured in Normandale indicate successful carp spawning happened within the Nine Mile Creek system at some time. The District is considering carp management options in Normandale Lake and Creek Monitoring.

**Staff conducting a fish survey**

In addition to the fish assessments, the District conducted its annual lake and creek monitoring. The lake and creek monitoring program collects water quality data from waterbodies across the watershed. In 2018, the District monitored Nine Mile Creek, Normandale, Bush, Smetana, and Southeast, Northwest & Southwest Anderson Lakes. The monitoring program provides data about past and present water quality conditions within the watershed. The data-establishes a reference point for normal water quality conditions, tracks changes, and informs additional studies. It also allows the District to measure the success of past and ongoing projects that seek to improve the health of District waterbodies. Our monitoring reports are available at: ninemilecreek.org/liglake-creek-monitoring. Volunteers also monitored the water quality of 6 lakes in the District. We thank them for their time.

**2018 Annual Communication**

**Program Highlights**

**Watersheds in virtual reality**

The watershed sandbox is a mobile, interactive education tool created in partnership with local artists and the Riley Purgatory Bluff Creek Watershed District. Through interactive virtual reality technology, the sandbox helps users understand watersheds and water flow. A projector shows elevations and topography lines on the sand below, in real time, as people move and shape the sand. Users can also control virtual water that “falls” onto the sand and moves across the landscape they built. Over 600 people have interacted with the sandbox since its launch in April 2018.

**Adopt a Drain**

Over 170 households in Bloomington are now participating in the Adopt a Drain program. This program involves more than 290 adopted drains of leaves, trash and other debris, and reporting how much debris they clean up. Since the fall of 2017, volunteers have kept nearly 200 thirty-gallon bags full of debris out of their drains and local waterbodies.

**Cost Share Grants**

Nineteen grants totaling over $100,000 in funds were awarded through the District’s cost share program in 2018. The program promotes installation of projects that improve and protect water quality, like rain gardens and shoreline restorations. For changes to the 2019 grant program, including increased funding amounts, visit: ninemilecreek.org/grants.

**Grants**

**Clean Water Fund Grant**

In 2017, the District received a Clean Water Fund grant to identify and prioritize locations for stormwater best management practices (BMPs) on nonprofit sites in the watershed. 58 sites were prioritized for BMP suitability, and select organizations were contacted to determine interest in partnering with the District on a project. Ultimately, six locations were selected for BMP installation. Preliminary design plans and cost estimates for the BMPs have been prepared and shared with the partner organizations. The District is currently pursuing grant funding opportunities for project installation.

**Regulatory**

District rules set thresholds for when a construction project must have a District permit; the permits have protection measures and standards to prevent harm to local lakes and Nine Mile Creek. The NMCD Board of Managers adopted amended rules on April 10, 2018. The amended rules regulate floodplain management and surface drainage alterations, wetlands management, stormwater management, erosion and sediment control, waterbody crossings, shoreline and streambank improvements on public waters, sediment removal from public waters and appropriations from public surface waters. The District issued 112 permits in 2018, as of the last part of September. 31 of these permits triggered the District’s stormwater rule requiring installation of best management practices, which resulted in the reduction of 250 pounds of phosphorus and 78,000 pounds of suspended sediment.