

Stormwater Cleanup Around Local Lakes

Stormwater is one of many things that can hurt water quality in a lake. It is rainfall that flows across lawns, rooftops, driveways, roads, and other surfaces. As it travels it picks up a variety of pollutants – salt, sediment, nutrients, bacteria, heavy metals, and others. Today, regulations require that most of this water be treated with stormwater settling ponds or other practices. But it wasn't always so. Many areas developed before those requirements. Those areas, where untreated stormwater goes straight into lakes, are today being “retrofitted” to improve stormwater treatment. Two of those areas are Martin Lake and Coon Lake.

Stormwater retrofitting is a tricky process. Neighborhoods are already built up, so we must find ways to incorporate the stormwater retrofits. The best projects aren't always the ones you would expect, so the retrofitting process starts with an assessment to find all the possible projects, analyze how much pollution will be removed by each, and estimate the cost. The result is a list of projects prioritized by cost effectiveness. The best projects get installed first.

Martin Lake

Martin Lake stormwater retrofitting is currently underway in Linwood Township. It is in the assessment stage, but moving fast. To-be-determined projects will be installed by the end of the year using a combination of local funds and grants. So far, computer modeling has found that an area of 140 acres surrounding the lake is carrying approximately 70 lbs/yr of phosphorus and 31,712 lbs/yr of suspended solids into the lake. Phosphorus causes algae blooms while suspended solids cloud the water and carry many other pollutants, like heavy metals. Possible retrofit activities include residential rain gardens, modifying existing ponds, swales, and underground treatment devices. Some projects, like rain gardens, will require willing participation from residents; those who live in strategically important locations for stormwater treatment will be hearing from project leaders late this summer.



Rain gardens are attractive and effective

Coon Lake

A stormwater assessment for areas around Coon Lake is planned for 2012, but this year one demonstration project was installed to get a jump-start on the process. Along East Front Boulevard an area of about 1 acre drains to a ditch that then flows into Coon Lake, resulting in 2 lbs/yr of phosphorus being flushed to the lake. One concrete pretreatment

structure was placed at the ditch inlet, and two concrete weirs were placed at culverts. Together, these capture sediment, street grime, and other pollutants, reducing phosphorus entering Coon Lake by 1.34 lbs/yr. Considering 1 lb of phosphorus can produce 500 lbs of algae, this one project may reduce algal growth in Coon Lake by 670 lbs/yr!

Help Make a Difference

Anyone who lives near a stormwater drain has waterfront property, at least in a sense. These curbside gutters drain to lakes, streams, and wetlands. Let's keep it clean. If you do live directly next to water, don't mow the yard to the water's edge. Instead, leave a strip of plants to catch pollutants and provide habitat.

Project Leaders

Stormwater retrofitting on these lakes is led by the Sunrise River Watershed Management Organization (SRWMO) with assistance from partners including the Anoka Conservation District, City of East Bethel, Linwood Township, Martin Lakers Association, and the Coon Lake Improvement Association.

Sunrise River WMO Contact Information and Meetings

Information about the SRWMO may be found on the website at <http://www.anokanaturalresources.com/srwmo>. The remaining 2011 SRWMO meetings are on August 4th and November 3rd; meetings are held at 6pm at East Bethel City Hall.