Background

Over the last 30 years, waters in Illinois have been monitored for chemical, biological and physical conditions. In some cases, the conditions of those rivers and lakes fall short of the need to support basic water quality use goals. These waters are deemed impaired since they cannot meet use expectations set for them under state and federal law. When this happens Total Maximum Daily Load (TMDL) reports are developed for impaired waters to determine the maximum amount of a pollutant a water body can receive and still meet water quality standards and support its designated uses. Designated uses include aquatic life, public water supply, swimming, recreation, fish consumption, and aesthetic quality.

TMDLs are done in stages to allow for public involvement and input. TMDL development in Illinois begins with the collection data—water quality, point source discharge, precipitation, soils, geology, topography, and land use—within the specific watershed. All impaired water body segments within the watershed are identified, along with potential pollutants causing the impairment. Illinois EPA determines the tools necessary to develop the TMDL. In most cases, computer models are used to simulate natural settings and calculate pollutant loads. Along with data analysis, model recommendations are made in the first stage of the TMDL. This information is presented at the first public meeting.

The appropriate model or models are selected based on the pollutants of concern, the amount of data available and the type of water body. In some cases, additional data needs to be collected before continuing. The model is used to determine how much a pollutant needs to be reduced in order for the water to be meeting its designated uses. Another public meeting is held to present this information.

An implementation plan is developed for the watershed spelling out the actions necessary to achieve the goals. The plan can specify limits for point source dischargers and recommend best management practices (BMPs) for nonpoint sources. Another public meeting is held to discuss this plan and to involve the local community. Commitment to the implementation plan by the citizens who live and work in the watershed is essential to success in reducing the pollutant loads and improving water quality.

Waterbody Designated Uses and Impairments (* 2008 Assessment Cycle)

<table>
<thead>
<tr>
<th>Water Body</th>
<th>Impaired Designated Use</th>
<th>Potential Cause(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont City Reservoir</td>
<td>General, Public and Food Processing Water Supplies Use, Aesthetic Quality</td>
<td>Phosphorus (Total), Total Suspended Solids, Manganese, Atrazine and Aquatic Algae</td>
</tr>
<tr>
<td>Sugar Creek</td>
<td>General Use</td>
<td>Fecal Coliform</td>
</tr>
</tbody>
</table>

* These pollutants are subject to change due to future assessments.
Watershed Map

Watershed Information

The Sugar Creek watershed is located in McDonough, Fulton and Schuyler counties in western Illinois. The headwaters of Sugar Creek are located in southeast McDonough County. Sugar Creek flows in a northeasterly direction as it enters Fulton County, but gradually swings to the southwest over the next 5 miles and passes through McDonough County and into Schuyler County until its confluence with the West Branch of Sugar Creek. After the West Branch joins the main-stem, Sugar Creek continues in a general southeasterly direction until its confluence with the Illinois River. Total drainage area for the Sugar Creek watershed is approximately 161 square miles.

Vermont City Reservoir, also known as Vermont New Lake, is located on an unnamed tributary to Sugar Creek in southeast McDonough County and covers 38.5 surface acres. The reservoir spillway is located approximately 0.3 river miles above the mouth of the unnamed tributary. The Vermont City Reservoir watershed has a total drainage area of approximately 2.3 square miles.

Potential Pollutant Sources

Potential nonpoint sources include agriculture, crop production, contaminated sediments, lithoral/shore are modifications, livestock (grazing or feeding operations), natural sources, runoff from forest/grassland/parkland, as well as unknown sources.

For more information on this specific TMDL or the TMDL program, visit the Illinois EPA website at http://www.epa.state.il.us/water/tmdl/.

For information on the assessment of Illinois waters, refer to the Integrated Report and 303(d) List at http://www.epa.state.il.us/water/tmdl/303d-list.html.

If you have any questions, please contact Abel Haile at by phone at 217-782-3362 or email at Abel.Haile@illinois.gov.

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