



Capital Improvement Project

Lakeville: King Park Stormwater Pond Irrigation System



After

A stormwater pond in the City of Lakeville's King Park was fitted with a pump system attached to an irrigation network on two baseball fields. Less stormwater will discharge from the pond and reach Middle Creek, and reusing the stormwater reduces demand on the municipal water supply.

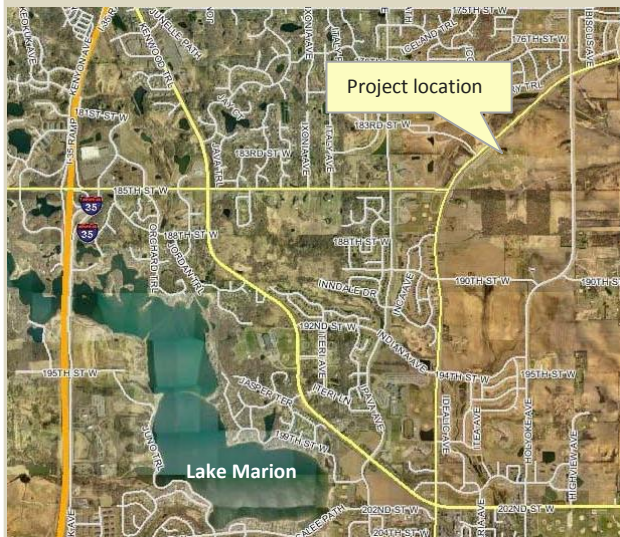
The project was completed cooperatively by the:

- City of Lakeville
- Vermillion River Watershed Joint Powers Organization

Using Less of Lakeville's Water Supply and Reducing Pollutants in Middle Creek

Stormwater runoff often viewed as a negative consequence of development and a source of pollution can, instead, be a reusable asset. King Park is a baseball field complex in the City of Lakeville consisting of fields, a park building, and parking lot. Currently, Dodd Boulevard and the parking lot drain to a stormwater pond at the north end of the park. During large storms, this pond can overflow and drain to Middle Creek, potentially contributing pollutants and warm water that may threaten fish and other species. Lakeville's population can also take a toll on its municipal water supply during the summer months and the City wants to decrease water usage for lawn watering and irrigation.

To demonstrate benefits to water reuse, the pond will be drawn down to irrigate two fields. By routinely drawing down the pond, less stormwater will reach Middle Creek and municipal water will not be needed to maintain the grass on these two fields.



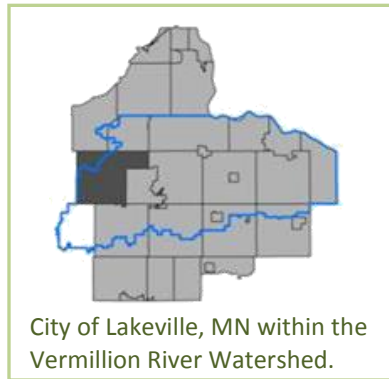
Cost-share funding from the Vermillion River Watershed Joint Powers Organization enabled the City of Lakeville to install the pumping and irrigation system to demonstrate multiple project benefits - stream protection, water conservation, and healthy grass.



Before



Baseball field post-installation



City of Lakeville, MN within the Vermillion River Watershed.



**Vermillion River Watershed
Joint Powers Organization**

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The Vermillion River is a vital natural resource that is important to public health and recreation, as well as preserving unique wildlife habitats. It flows from New Market Township in Scott County, through residential and agricultural areas in central Dakota County, and cascades into a 100-foot ravine before it enters the Mississippi River near the Cities of Hastings and Red Wing, Minnesota. Throughout its journey, the river reflects urban and rural life within its 335-square mile watershed.

Problem:

- King Park’s stormwater pond discharges potentially polluted and warm water to Middle Creek.
- The demand on municipal water supply is high during the summer months.
- City residents expect green lawns on public park lands.

Actions:

- Install a pump system to draw water from the stormwater pond.
- Install an irrigation network on two baseball fields to apply the water from the stormwater pond on the fields.

Benefits:

- Reduces the use of the municipal water supply to irrigate the two baseball fields.
- Reduces the amount of potentially polluted and warm pond water from reaching Middle Creek.
- Water from the stormwater pond originates as soft rain water, contains nutrients, and is better for application to grass.
- Allows for education, outreach, and stewardship.

Costs and contributions:

- City of Lakeville: \$17,125 – engineering , labor, and maintenance
- Vermillion River Watershed Joint Powers Organization: \$44,000 – cost share



Project completed November 2010