



Shields Lake Stormwater Reuse & Alum Treatment

Project Sponsor:

Comfort Lake—Forest Lake Watershed District (CLFLWD)

Targeted Water:

Shields Lake

Financial:

Clean Water Fund Grant	\$824,000
CLFLWD Grant Match	\$206,000
Total Project Budget	\$1,030,000

Project Timeline:

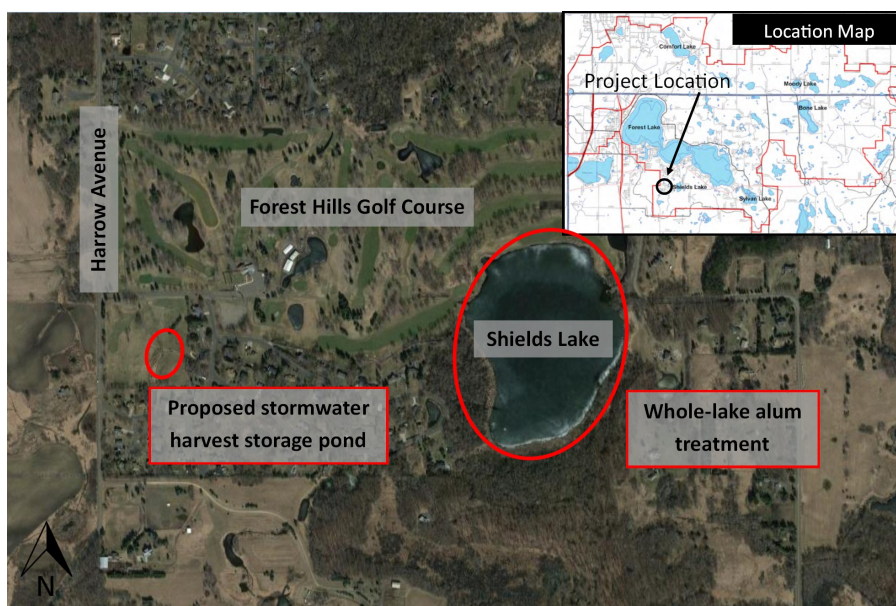
- 2018-2019: Stormwater harvest and irrigation reuse system construction
- Fall 2019: Whole-lake alum treatment part 1
- Fall 2020: Whole-lake alum treatment part 2

Contact:

Mike Kinney, Administrator
(651) 395-5850
Michael.kinney@clflwd.org
www.clflwd.org

Project Description: Phase 1 of this project included impounding/harvesting water from a tributary to Shields Lake for irrigation reuse by Forest Hills Golf Course. Phase 2 included a two-part whole-lake alum treatment to Shields Lake.

Project Location: West of Shields Lake, south of Forest Lake's middle basin.



Project Outcomes: The stormwater harvest and irrigation reuse component of the project is expected to result in a phosphorus reduction of 77-94 pounds per year to Shields Lake, and provide the golf course with up to 26 million gallons of irrigation water per year. Post-project water monitoring has shown that the combination of the irrigation reuse system and alum treatment has reduced phosphorus loads to Shields lake by >1,000 lbs/yr and Forest Lake by >500 lbs/yr. These improvements are expected to allow Shields Lake to achieve its long-term lake water quality goal and a clear water state.