Lake Status

Overall Strategy: Routine Watershed Management

Water Quality Rating: C: Secchi – 6.9 ft.; $TP - 41 \mu g/L$

Impairment: Not Impaired

Water Quality Trend: Secchi – N/A (shallow);

TP – Improving

Shoreland Classification: Natural Environment

Subwatershed Land Cover: 19% developed, 14% forests and woodlands, 11% grassland/shrubland/sparse vegetation, 16% lakes and open water wetlands, 31% planted or cultivated, 9% wetlands.

Resource Goals

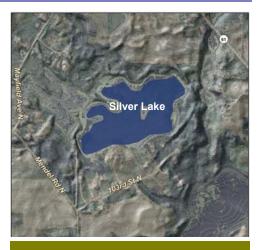
Short Term Goals - Year 2015

- Maintain a water quality rating of at least C.
- Achieve a five-year mean summer phosphorus concentration at or below 50 $\mu g/L \pm 4\%$.
- Maintain a mean summer secchi depth no less than 4.5 ft.
- Encourage an active Lake Association for teaming on lake management and education.

Long Range Goals - Year 2020

- Maintain a water quality rating of at least C.
- Achieve a five-year mean summer phosphorus concentration at or below 50 $\mu g/L \pm 4\%$.
- Maintain a mean summer secchi depth no less than 4.5 ft.
- Conduct watershed management in consideration of the area's statewide importance to the Blanding's turtle.

DNR Fisheries Lake Management Plan: None



BASIC FACTS

DNR ID	82001600
Section	7
Township	30
Range	20
Lake Area	98 acres
Subwatershed Area	644 acres
Outlet Elevation	N/A
Low Water Level	905.76 ('08)

 Low Water Level
 905.76 ('08)

 High Water Level
 910.28 ('03)

 Ordinary High Water
 908.00

100-Yr. Flood Elev 912.3 (District)

Greatest Depth 11 ft.

Control Structures:

None

Fish Species:

N/A

Aguatic Nuisance Species:

Reed Canary Grass

CMSCWD References:

WCD Water Monitoring Report ('08)

DNR Lake Water Level Report

CMWD Silver Creek Corridor
Management Plan (204)

Management Plan ('04)

CMSCWD Lake TMDL - Phase I Report ('08)

Implementation

Operational Priorities

- Routine Watershed Management
- Support County Efforts to Obtain Conservation Easements on Shorelands of Silver Lake.

Education

Routine Watershed Education Program

Regulatory

Activities impacting Silver Lake will be regulated by the watershed district through its Rules of the District. Regulatory efforts will be coordinated with Stillwater Township, Washington County and the Minnesota DNR, where applicable.

Projects

Current:

- Routine Watershed Water Quality Monitoring
- Routine Watershed Best Management Practices (BMP) Program
- Permitting Program

Future/Potential:

• None at this time

* See 2010 Watershed Management Plan Section V, Lake Management Plans for additional information on District lake management activities.

Overall Assessment: Silver Lake

Silver Lake is a shallow semi-developed lake that appears to be impacted negatively from the land use practices around it. Silver along with North Twin, South Twin, Carol and Loon lakes form the headwaters of the Silver Creek Flowage and a part of the Silver Creek Protective Corridor. In-lake phosphorus concentrations in 2008 were better than the MPCA shallow lake standard of ($60\mu g/L$). Uncontrolled nonpoint source runoff from agricultural and residential properties poses the greatest potential problem for future management of this lake.

Based on measured lake characteristics and land use in the lake's minor subwatershed, water quality modeling indicated that a significant amount of phosphorus needs to be removed to improve the water quality of the lake. Without extensive improvement efforts, this lake will remain eutrophic.

Although the lake is currently identified on the MPCA list of impaired waters due to excess nutrients and was included in the *CMSCWD Lakes TMDL Phase I Study* it is currently being considered for delisting by the MPCA. Silver Lake has achieved the 2010 goal of a mean summer secchi depth no less than 4.5 ft, a water quality rating of at least 'C,' and a five-year mean summer phosphorus concentration at or below $50 \mu g/L \pm 4\%$ based on the 2008 WCD Water Monitoring Report. These goals have been transferred to 2015 goals and Silver Lake is undergoing routine watershed management.

