

**Lake Status**

**Overall Strategy:** Routine Watershed Management

**Water Quality Rating:** C: Secchi – 6.9 ft.; TP – 41 µg/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 µg/L ± 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 µg/L ± 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	
<b>DNR ID</b>	82001600
<b>Section</b>	7
<b>Township</b>	30
<b>Range</b>	20
<b>Lake Area</b>	98 acres
<b>Subwatershed Area</b>	644 acres
<b>Outlet Elevation</b>	N/A
<b>Low Water Level</b>	905.76 ('08)
<b>High Water Level</b>	910.28 ('03)
<b>Ordinary High Water</b>	908.00
<b>100-Yr. Flood Elev</b>	912.3 (District)
<b>Greatest Depth</b>	11 ft.
<b>Control Structures:</b>	None
<b>Fish Species:</b>	N/A
<b>Aquatic Nuisance Species:</b>	Reed Canary Grass
<b>CMSCWD References:</b>	WCD Water Monitoring Report ('08) DNR Lake Water Level Report CMWD Silver Creek Corridor 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 (60µg/L). Uncontrolled non-point 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 µg/L ± 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.

