

Lake Status

Overall Strategy: Routine Watershed Management

Water Quality Rating: B: Secchi – 8.2 ft.;
TP (2007) – 28 µg/L

Impairment: Not Impaired

Water Quality Trend: Secchi & TP – No Trend

Shoreland Classification: Natural Environment

Subwatershed Land Cover: 20% developed, 37% forests and woodlands, 3% grassland/shrubland/sparse vegetation, 13% lakes and open water wetlands, 11% planted or cultivated, 16% wetlands.



Resource Goals

Short Term Goals – Year 2015

- Maintain a water quality rating of at least B.
- Achieve a five-year mean summer phosphorus concentration at or below 30 µg/L ± 4%.
- Maintain a mean summer secchi depth no less than 9 ft.

Long Range Goals - Year 2020

- Maintain a water quality rating of at least B.
- Achieve a five-year mean summer phosphorus concentration at or below 30 µg/L ± 4%.
- Maintain a mean summer secchi depth no less than 9 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	82002800
Section	9
Township	31
Range	20
Lake Area	24 acres
Subwatershed Area	319 acres
Outlet Elevation	N/A
Low Water Level	943.07 ('07)
High Water Level	947.70 ('86)
Ordinary High Water	946.50 ft.
100-Yr. Flood Elev	949.9 (FEMA)
Greatest Depth	14 ft
Control Structures:	None
Fish Species:	Sunfish, Bullhead
Aquatic Nuisance Species:	None
CMSCWD References:	WCD Water Monitoring Report ('07 & '08) DNR Lake Water Level Report

Implementation

Operational Priorities

Routine Watershed Management

Education

Routine Watershed Education Program

Regulatory

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

Projects

Current:

- Routine Watershed Water Quality Monitoring
- Routine Watershed Best Management Practices (BMP) Program
- Ongoing Monitoring of BMPs
- 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: Staples Lake

Staples Lake is a small, clean, shallow, landlocked lake with little shoreland development. In-lake phosphorus concentrations seldom exceed the recommended limit for the North Central Hardwood Forest Ecoregion (40 µg/L). All future development needs to be well managed to minimize any negative effects that may degrade the lake beyond natural fluctuations. Approximately 50% of the shoreline has Best Management Practices (BMPs) in use (i.e. forested buffer).

Based on an Aerial Lakeshore Analysis study (1998), the greatest influence on the lake was runoff non-point source pollution. The most common issue is the lack of a vegetative buffer and insufficient lake setback. The recommendations from that study are to investigate and correct all point and non-point sources of pollution to the lake, keep the forested areas intact and to create a forested buffer adjacent to the shoreline.

Based on measured lake characteristics and landuse in the lake's minor subwatershed, water quality modeling indicated that minimal protection efforts to reduce phosphorus input to the lake can help maintain its good water quality. However, increased phosphorus loading from future development and unsound landuse will cause the water quality to degrade if not properly managed. Staples Lake has met 2010 goals of maintaining a water quality rating of at least 'B' but this year did not achieve a secchi depth no less than 9 feet. Phosphorus data has not been collected for all of the last five years so the five-year mean summer phosphorus goal cannot be evaluated this year. 2010 goals have been transferred to 2015 goals as appropriate. At this point in time, Staples Lake is undergoing routine watershed management to maintains its good water quality.

