**Lake Status**

**Overall Strategy:** Routine Watershed Management

**Water Quality Rating:** C: Secchi – 5.9 ft.;
TP (2007) – 22 μg/L

**Impairment:** Not Impaired

**Water Quality Trend:** Secchi – N/A (shallow);
TP – No Trend

**Shoreland Classification:** Natural Environment

**Subwatershed Land Cover:**
18% developed, 19% forests and woodlands, 14% grassland/shrubland/sparse vegetation, 1% lakes and open water wetlands, 34% planted or cultivated, 14% wetlands.

**Resource Goals**

**Short Term Goals – Year 2015**
- Maintain a water quality rating of at least B.
- Maintain a five-year mean summer phosphorus concentration at or below 30 μg/L ± 4%.
- Maintain a mean summer secchi depth no less than 6 ft.
- Encourage an active Lake Association for teaming on lake management and education (including bog management and invasive species management).
- Manage upland areas to prevent lake degradation.
- Protect lakeshore property and lake access through management of floating bogs.

**Long Range Goals - Year 2020**
- Maintain a water quality rating of at least B.
- Maintain a five-year mean summer phosphorus concentration at or below 30 μg/L ± 4%.
- Establish rooted aquatic vegetation along 100% of the shoreline.
- Develop a Fisheries Management Plan with the Minnesota DNR.
- 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:** 82005600
- **Section:** 18
- **Township:** 32
- **Range:** 20
- **Lake Area:** 58 acres
- **Subwatershed Area:** 953 acres
- **Outlet Elevation:** Landlocked
- **Low Water Level:** 952.55 ('07)
- **High Water Level:** 957.13 ('03)
- **Ordinary High Water:** 955.50
- **100-Yr. Flood Elev:** 958.7 (FEMA)
- **Greatest Depth:** 12 ft.

**Control Structures:**
None

**Fish Species:**
Sunfish, Bullhead, Bass

**Aquatic Nuisance Species:**
Curlyleaf Pondweed

**CMSCWD References:**
WCD Water Monitoring Report (’07 & ’08)
German Lake Management Plan (’04)
DNR Lake Water Level Report
**Overall Assessment: German Lake**

German Lake is a shallow, landlocked lake with good water quality and limited development. The Lake is considered a high quality groundwater dependent resource and sensitive to any hydrologic alterations that could raise or lower water levels or increase duration of stormwater bounce. The lake and contributing watershed were annexed into the District in 2002. The District completed a detailed management plan for the lake and contributing watershed that was incorporated into the District Management Plan by amendment in 2004. Land use within the subwatershed is currently a mix of agriculture, undeveloped, single family residential, with a major gravel and sand mining operation.

An analysis of the lake’s water quality, based on land use and land cover in the subwatershed, in-lake monitoring data, and water quality modeling, indicated that future development to proposed zoning density would result in a predicted 20% percent increase in phosphorus loading to the lake which in turn would lead to an increase of the in-lake total phosphorus concentration from the 32 μg/L, (observed in 2002) up to 34 μg/L.

German Lake has not met the 2010 goal of maintaining a water quality rating of at least B. In-lake phosphorus concentrations (2007 average was 22 μg/L) are better than average compared to other lakes within the North Central Hardwood Forest Ecoregion (interquartile range of 23 - 50 μg/L) and significantly better than the MPCA shallow lake standard of (60μg/L). Routine watershed management will continue to be implemented.

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**Operational Priorities**

**Routine Watershed Management**

**Education**

- Routine Watershed Education Program.
- Landowner education for monitoring and management of invasive exotic species such as curly leaf pondweed within the lake and common buckthorn in the watershed.
- Landowner education for monitoring and management of oak wilt.

**Regulatory**

Activities impacting German Lake will be regulated by the watershed district through its *Rules of the District*. Regulatory efforts will be coordinated with City of Scandia, 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:**

- Invasive/exotic species management
- In-lake aeration**

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

** If undertaken, to be conducted by Lake Association.