3B IMPAIRED WATERS AND TMDL APPROACH

1. ISSUE

"Impaired waters" are those waters that do not meet state water-quality standards for one or more pollutants, thus they are "impaired" for their designated uses. Total Maximum Daily Load (TMDL) studies are then conducted in order to set pollutant reduction goals needed to restore waters.

2. BACKGROUND

This chapter discusses some of the tools the CCWMO can use to address existing surface water impairments. There is some overlap between the issues and information presented in this chapter and those presented in the Urban Stormwater Management and Wetland Management chapters. For more detailed information on stormwater and wetland issues, please see those chapters.

2.1. Impaired Waters

The federal Clean Water Act (CWA) requires states to adopt water quality standards to protect the nation's waters. Water quality standards designate beneficial uses for each waterbody and establish criteria that must be met within the waterbody to maintain the water quality necessary to support its designated use(s). Section 303(d) of the CWA requires each state to identify and establish priority rankings for waters that do not meet the water quality standards. The list of impaired waters, or sometimes called the 303(d) list, is updated by the state every two years.

For impaired waterbodies, the CWA requires the development of a total maximum daily load (TMDL) study. A TMDL is a threshold calculation of the amount of a pollutant that a waterbody can receive and still meet water quality standards. A TMDL study establishes the pollutant loading capacity within a waterbody and develops an allocation scheme amongst the various contributors, which include point sources, nonpoint sources and natural background, as well as a margin of safety. As a part of the allocation scheme, a waste load allocation (WLA) is developed to determine allowable pollutant loadings from individual point sources (including loads from storm sewer networks in MS4 communities), and a load allocation (LA) establishes allowable pollutant loadings from nonpoint sources and natural background levels in a waterbody.

Several of the CCWMO waterbodies are on the 2008 MPCA's 303(d) list of impaired Waters. Table 3B-1 lists the lakes with impaired waters within the CCWMO, the affected MPCA designated use and the pollutant or stressor that is not meeting the MPCA water quality criteria. Table 3B-2 lists the streams with impaired waters within the CCWMO, a description of the stream reach, the affected MPCA designated use and the pollutant or stressor that is not meeting the MPCA water quality criteria. The State of Minnesota has developed a State-wide Mercury TMDL that addresses lakes that are listed because of mercury in fish tissue. Carver County will not be conducting any additional Mercury TMDLs because of this. Figure 3B-1 shows impaired waters in Carver County.

Table 3B-1. CCWMO Lake Impairment Status (2008).

Lake	DNR Lake ID	Affected Use		Pollutant/Stressor			Year Listed	TMDL		
		Aquatic Consumption	Aquatic Recreation	Mercury in Fish Tissue	Nutrient Eutrophication	Biological Indicators		Status (Author)	Target Comp. Date[1]	Upstream Lakes
Assumption	10-0063									
Aue	10-0028									
Barlous	10-0067									
Barnes	10-0109									
Bavaria	10-0019	✓		✓			2006	Draft (CCWMO)	2021	--
Benton	10-0069		✓		✓	✓	2002	Draft (CCWMO)	2010	Meuwissen
Berliner	10-0103									
Brand	10-0110									
Braunworth	10-0107									
Burandt	10-0084		✓		✓	✓	2004	Approved (CCWMO)		
Campbell	10-0127									
Donders	10-0079									
Eagle	10-0121	✓	✓	✓	✓	✓	2002	Draft (CCWMO)	2014	Braunworth
Gaystock	10-0031		✓		✓	✓	2004	Started (CCWMO)	2010	Aue
Goose	10-0089		✓		✓	✓	2002	Draft (CCWMO)	2010	Donders, Rutz, Swan
Hazeltine	10-0014		✓		✓	✓	2004	Started (CCWMO)	2010	--
Hydes	10-0088	✓	✓	✓	✓	✓	2002	Draft (CCWMO)	2010	Patterson
Jonathan	10-0217									
Kelly	10-0021									
Lippert	10-0104									
Long	10-0016		✓		✓	✓	2006	Unplanned[2] (MPCA)	2016	
Maria	10-0058		✓		✓	✓	2004	Planned (CCWMO)	2010	--
McKnight	10-0216									
Meuwissen	10-0070									
Miller	10-0029		✓		✓	✓	2002	Draft	2010	--

Table 3B-1. CCWMO Lake Impairment Status (2008).

Lake	DNR Lake ID	Affected Use		Pollutant/Stressor			Year Listed	TMDL		
		Aquatic Consumption	Aquatic Recreation	Mercury in Fish Tissue	Nutrient Eutrophication	Biological Indicators		Status (Author)	Target Comp. Date[1]	Upstream Lakes
								(CCWMO)		
Millman	10-0090									
Mud	10-0094									
Myers	10-0068									
Oak	10-0093		✓		✓	✓	2004	Draft (CCWMO)	2014	--
Patterson	10-0086									
Reitz	10-0052	✓	✓	✓	✓	✓	2002	Draft (CCWMO)	2010	--
Rice	10-0078									
Riverpointe Pond	10-0250									
Rutz	10-0080		✓		✓	✓	2006	Unplanned[2] (MPCA)	2016	--
Scott	10-0022									
Swan	10-0082									
Swede	10-0095		✓		✓	✓	2004	Draft (CCWMO)	2014	--
Tiger	10-0108									
Unnamed Lake (Hilk)	10-0085									
Unnamed Lake	10-0149									
Unnamed Lake	10-0150									
Unnamed Lake	10-0151									
Unnamed Lake	10-0181									
Unnamed Lake	10-0187									
Unnamed Lake (Grace)	10-0218		✓		✓	✓	2006	Unplanned[2] (MPCA)	2016	Jonathan, Big Woods, Hazeltine
Waconia	10-0059	✓		✓			2006	Approved (CCWMO)		
Winkler	10-0066		✓		✓	✓	2004	Draft (CCWMO)	2010	
Young America	10-0105									

1 The Target Completion Date is set by the MPCA and is updated every two years when the list of impaired waters is revised. The target completion date for Lake Maria is expected to be extended due to a request by the county in 2009 to designate Lake Maria as a wetland.

2 Impaired lakes with a TMDL status of "unplanned" will be addressed through the MPCA's Watershed Approach.

Table 3B-2. CCWMO Stream Impairment Status (2008).

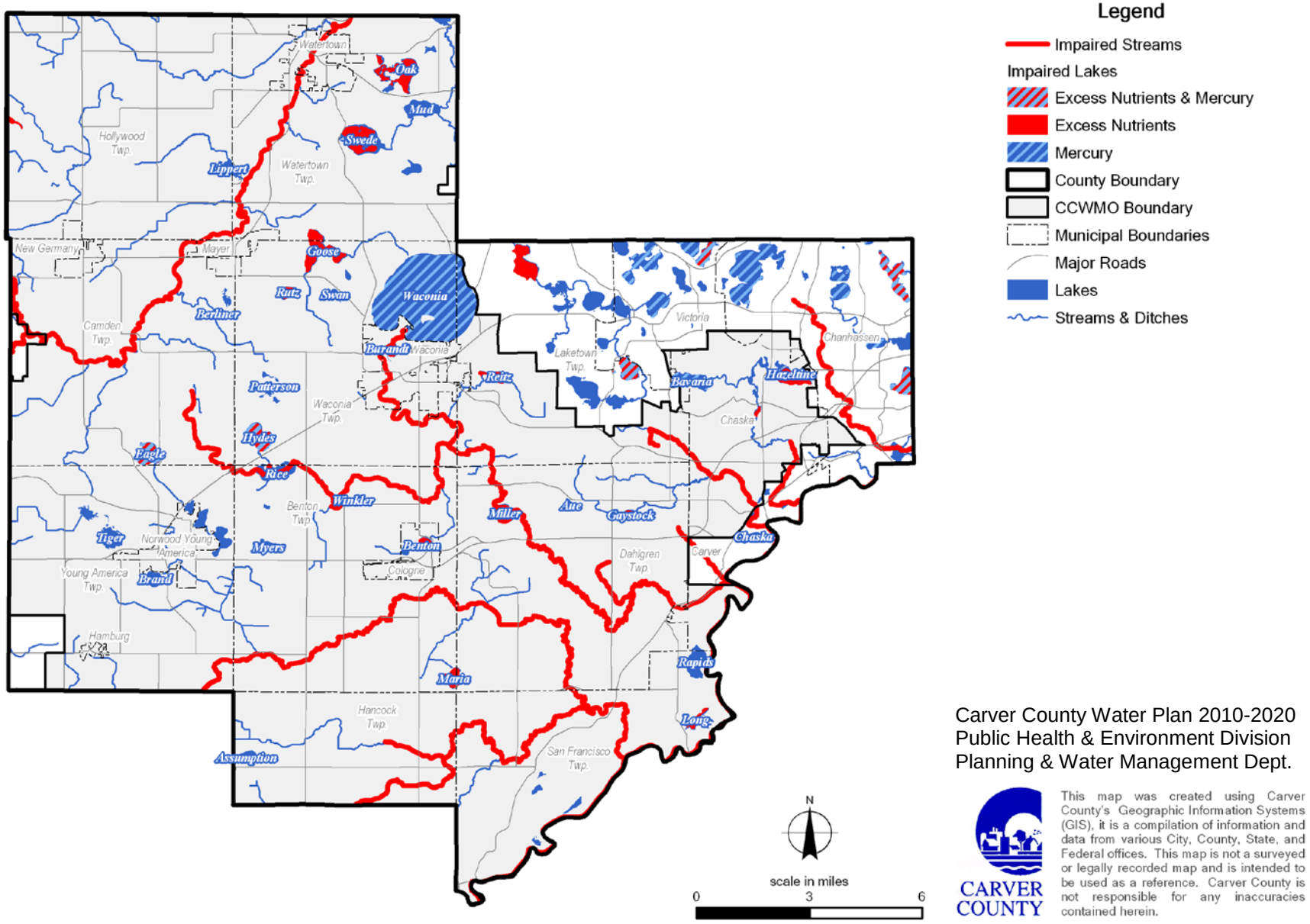
Stream Reach	Reach Number	Reach Description	Affected Use		Pollutant/Stressor : year listed (target date)					Status (Author)
			Aquatic Life	Aquatic Recreation	Chloride	Dissolved Oxygen	Fecal Coliform	Fish Bioassessments	Turbidity	
Crow River, South Fork[1]	07010205-508	Buffalo Cr to N Fk Crow R	✓	✓	2010 (2018[2])		2006 (2018[2])	2002 (2018[2])	2004 (2018[2])	
Crow River , South Fork[1]	07010205-512	Otter Creek to Buffalo Creek								
Crow River, South Fork[1]	07010205-524	Crane Cr to N Fk Crow River								
Crow River, South Fork[1]	07010205-535	Unnamed Cr (Eagle Lake Outlet) to N Fk Crow River								
Crow River, South Fork[1]	07010205-576	Unnamed Cr (Braunworth Lake Outlet) to Eagle Lake								
Chaska Creek	07020012-512	Headwaters to Minnesota River		✓			2006 (2016)			Unplanned[4] (MPCA)
Bevens Creek	07020012-514	Silver Creek to Minnesota River	✓				A[3]		2002 (2010)	Draft (CCWMO)
Carver Creek	07020012-516	Headwaters to Minnesota River	✓				A[3]		2002 (2010)	Draft (CCWMO)
Silver Creek	07020012-523	CD 32 to Bevens Creek	✓				A[3]		2006 (2010)	Draft (CCWMO)
Silver Creek	07020012-525	Unnamed Cr to Silver Cr								
Unnamed Creek	07020012-526	Headwaters to Carver Creek					A[3]			
Unnamed Ditch	07020012-527	Burandt Lake to Unnamed Creek	✓			2006 (2016)	A[3]			Unplanned[4] (MPCA)
Unnamed Creek	07020012-528	Headwaters to Minnesota River					A[3]			
Bevens Creek	07020012-533	CD 4A to Bevens Cr								
Carver Creek	07020012-565	Unnamed cr to Carver Cr								
Carver Creek	07020012-566	Unnamed cr to Benton Lake								
Carver Creek	07020012-568	Unnamed cr (Benton Lake Outlet) to Carver Creek								
Chaska Creek	07020012-569	Unnamed cr to Gaystock Lake								
Unnamed Creek (East Creek)	07020012-581	Unnamed Creek to Minnesota River	✓	✓			2006 (2018)	2004 (2018)	2008 (2018)	All Unplanned[4] (MPCA)
Chaska Creek	07020012-606	Unnamed cr (Gaystock Lake Outlet) to Chaska Cr								

Table 3B-2. CCWMO Stream Impairment Status (2008).

Stream Reach	Reach Number	Reach Description	Affected Use		Pollutant/Stressor : year listed (target date)					Status (Author)
			Aquatic Life	Aquatic Recreation	Chloride	Dissolved Oxygen	Fecal Coliform	Fish Bioassessments	Turbidity	
Carver Creek	07020012-616	Hydes Lake to Rice Lake								
Unnamed Creek	07020012-617	Patterson Lake to Hydes Lake								
Unnamed Creek	07020012-618	Goose Lake to Unnamed Wetland					^			
Unnamed Creek (Lake Waconia Inlet)	07020012-619	Unnamed Wetland to Lake Waconia					^			
Unnamed Creek	07020012-620	Unnamed Cr to Reitz Lake								
Unnamed Creek	07020012-621	Reitz Lake to Carver Creek								
Unnamed Creek	07020012-623	Waconia Lake to Burandt Lake								
Judicial Ditch 22	07020012-629	Unnamed Creek to Silver Creek					^			
Unnamed Creek	07020012-657	Maria Lake to Unnamed Cr								
Unnamed Creek	07020012-671	Hazeltine Lake to Big Woods Lake								
Bevens Creek	07020012-717	Headwaters (Washington Lake) to Unnamed Creek	✓				^		2002 (2007)	Draft (CCWMO)
Bevens Creek	07020012-718	Unnamed Creek to Silver Creek	✓		2002 (2016)		^		2002 (2010)	Turbidity Draft (CCWMO) / Chloride Unplanned[4] (MPCA)
Unnamed Creek	07020012-907	Unnamed Cr to Goose Lake								

1 C.R.O.W. River JPO administers South Fork Crow River Projects
2 C.R.O.W. River JPO will oversee TMDL process
3 Carver-Bevens-Silver Creeks TMDL: Fecal Coliform approved 2007
4 Impaired streams with a TMDL status of "unplanned" will be addressed through the MPCA's Watershed Approach.

Figure 3B-1. Impaired Waters



Carver County Water Plan 2010-2020
Public Health & Environment Division
Planning & Water Management Dept.

CARVER COUNTY

This map was created using Carver County's Geographic Information Systems (GIS), it is a compilation of information and data from various City, County, State, and Federal offices. This map is not a surveyed or legally recorded map and is intended to be used as a reference. Carver County is not responsible for any inaccuracies contained herein.

Status of TMDL Studies and Implementation Plans

Table 3B-3 summarizes the status of TMDL Studies and Implementation Plans for impaired waters in Carver County Watershed Management Organization area. The most recent 303d TMDL List, approved TMDL Studies and Implementation Plans are adopted by reference as part of this Plan.

Table 3B-3. Status of Approved and Underway TMDL Studies and Implementation Plans[1]

Stream Name/ Study Name	Pollutant/ Stressor	Developed by	Status
Carver, Bevens and Silver Creeks Fecal Coliform TMDL	Fecal Coliform	CCWMO	TMDL Study and Implementation Plan approved March 2007; Implementation in progress.
Carver, Bevens and Silver Creeks Turbidity TMDL	Turbidity	CCWMO	Draft submitted to MPCA
Lower Minnesota River TMDL	Low DO	MPCA	TMDL Study approved September 2004. TMDL Implementation Plan approved February 2006.
Study Name (Lakes included))	**Pollutant/ Stressor**	**Developed by**	**Status**
Minnesota Statewide Mercury TMDL (covers mercury impairments for Bavaria, Eagle, Hydes, Reitz Lakes)	Mercury	MPCA	TMDL Study approved in March 2007; Implementation Plan approved October 2009.
Burandt Lake	Phosphorus	CCWMO	TMDL Study approved in November 2008; Implementation Plan approved June 2009; Implementation in progress.
Reitz Lake	Phosphorus	CCWMO	Draft submitted to MPCA
Four Lakes TMDL (Goose, Hydes, Miller, Winkler Lakes)	Phosphorus	CCWMO	Draft submitted to MPCA
South Fork Crow River Lakes TMDL (Eagle, Oak, Swede Lakes)	Phosphorus	CCWMO	Draft submitted to MPCA
Benton Lake	Phosphorus	CCWMO	Draft in progress
Campbell Lake	Phosphorus	CCWMO	Request to designate as wetland
Gaystock Lake	Phosphorus	CCWMO	Draft submitted to MPCA
Hazeltine Lake	Phosphorus	CCWMO	Draft submitted to MPCA

[1]For more information on these TMDLs and other impaired waters of Carver County, visit the MPCA Website.

Summary of Completed TMDL Studies

Carver, Bevens, and Silver Creeks Fecal Coliform (Approved). Carver, Bevens, and Silver Creeks are located within Carver County. Carver Creek flows 89 miles through its 54,220 acre watershed. Bevens Creek and its tributary, Silver Creek, flow 97 miles with a combined watershed of 82,764 acres. These three Creeks are designated as recreational waters, which includes primary contact activities such as swimming and boating. Water quality analysis conducted within these waters indicates that fecal coliform levels exceed the State Standard of 200 colony-forming units per 100 milliliters of water. Goals have been set for the TMDL based upon seasons; with Spring requiring a 55 to 93 percent reduction, Summer requiring a 56 to 90 percent reduction, and Fall requiring a 85 to 91 percent reduction to achieve TMDL goals.

Carver Creek Turbidity (Draft submitted to MPCA). Carver Creek is located within Carver County and flows 89 miles through its 54,220 acre watershed. Carver Creek is designated as recreational waters, which includes primary contact activities such as swimming and boating. Water quality analysis conducted within these waters indicates that turbidity levels exceed the State Standard of 25 NTU. Monthly goals have been established for the TMDL with a range of 18 to 65 percent reduction required to achieve the TMDL goal.

Bevens and Silver Creek Turbidity (Draft submitted to MPCA). Bevens and Silver Creeks are located within Carver County, flowing 97 miles through the combined watershed of 82,764 acres. Bevens Creek and its tributary, Silver Creek, are designated as recreational waters, which includes primary contact activities such as swimming and boating. Water quality analysis conducted within these waters indicates that turbidity levels exceed the State Standard of 25 NTU. Monthly goals have been established for the TMDL with a range of 17 to 68 percent reduction required to achieve the TMDL goal.

Burandt Lake (Approved). Burandt Lake is a deep, 92 acre lake located 0.5 miles west of Waconia. The lake has a watershed area of 7,823 acres and is divided into three subwatersheds; land directly draining to the lake, Lake Waconia Subwatershed, and Scheuble Lake Subwatershed. Burandt Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 56 to 98 micrograms per liter (ug/L) over a time period from 1999 to 2005. Minnesota State standards have established a Total Phosphorus Concentration limit of 40 ug/L, which Burandt Lake is exceeding. Reductions of 32 to 66 percent of total phosphorus loadings are needed to achieve the water quality goal of 40 ug/L. The TMDL has set a phosphorus loading maximum of 321 kilograms per year.

Reitz Lake (Draft submitted to MPCA). Reitz Lake is a 90 acre lake on the eastern boundary of the City of Waconia. By 2030, 73 percent of Reitz Lake Watershed will be within the City boundaries of Waconia. Reitz Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 43 to 109 ug/L over a time period from 1999 to 2004. Minnesota State standards have established a Total Phosphorus Concentration limit of 40 ug/L, which Reitz Lake is exceeding. Depending upon the yearly precipitation, a 9 to 84 percent reduction is required to meet the State Standard of 40 ug/L. The TMDL has set a phosphorus loading maximum of 164 kilograms per year.

Four Lake TMDL (Draft submitted to MPCA)

Goose Lake. Goose Lake is a 333 acre lake located 4 miles northwest of Waconia. The lake has a maximum depth of 10 feet, which classifies it as a Shallow Lake. Goose Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 103 to 216 ug/L over a time period from 1997 to 2007. Minnesota State standards have established a limit of 60 ug/L, which Goose Lake is exceeding. Depending upon the yearly precipitation, a 58 to 86 percent reduction is required to meet the State Standard of 60 ug/L. The TMDL has set a phosphorus loading maximum of 270 kilograms per year.

Hydes Lake. Hydes Lake is a 216 acre lake located 5.5 miles west of Cologne. The lake has a maximum depth of 18 feet, which classifies it as a Deep Lake. Hydes Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 84 to 362 ug/L over a time period from 1991 to 2007. Minnesota State standards have established a Total Phosphorus Concentration limit of 40 ug/L, which Hydes Lake is exceeding. Depending upon the yearly precipitation, a 73 to 94 percent reduction is required to meet the State Standard of 40 ug/L. The TMDL has set a phosphorus loading maximum of 197 kilograms per year.

Miller Lake. Miller Lake is a 141 acre lake located 2 miles northeast of Cologne. The lake has a maximum depth of 14 feet, which classifies it as a Shallow Lake. Miller Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 149 to 462 ug/L over a time period from 1999 to 2007. Minnesota State standards have established a Total Phosphorus Concentration limit of 60 ug/L, which Miller Lake is exceeding. Depending upon the yearly precipitation, a 65 to 91 percent reduction is required to meet the State Standard of 60 ug/L. The TMDL has set a phosphorus loading maximum of 1,738 kilograms per year.

Winkler Lake. Winkler Lake is a 73 acre lake located 3 miles northwest of Cologne. The lake has a maximum depth of 3 feet, which classifies it as a Shallow Lake. Winkler Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 173 to 471 ug/L over a time period from 1999 to 2007. Minnesota State standards have established a Total Phosphorus Concentration limit of 60 ug/L, which Winkler Lake is exceeding. Depending upon the yearly precipitation, a 68 to 95 percent reduction is required to meet the State Standard of 60 ug/L. The TMDL has set a phosphorus loading maximum of 643 kilograms per year.

Benton Lake TMDL (Draft in progress)

Benton Lake is a 49 acre lake located within the City of Cologne. The watershed covers 2,194 acres, which is divided into two subwatersheds; the Direct Subwatershed, and Meuwissen Lake Subwatershed. The lake has a maximum depth of 7 feet, which classifies it as a Shallow Lake. Benton Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 194 to 332 ug/L over a time period from 1999 to 2007. Minnesota State standards have established a Total Phosphorus Concentration limit of 60 ug/L, which Benton Lake is exceeding. Depending upon the yearly precipitation, a 79 to 82 percent reduction is required to meet the State Standard of 60 ug/L. The TMDL has set a phosphorus loading maximum of 116 kilograms per year.

South Fork Lakes TMDL (Draft submitted to MPCA)

Eagle Lake. Eagle Lake is a 235 acre lake located 2.7 miles north of Norwood Young America. The lake has a maximum depth of 14 feet, which classifies it as a Shallow Lake. Eagle lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 174 to 386 ug/L from 1999 to 2006. Minnesota State standards have established a Total Phosphorus Concentration limit of 60 ug/L, which Eagle Lake is exceeding. Depending upon the yearly precipitation, a 83 to 94 percent reduction is required to meet the State Standard of 60 ug/L. The TMDL has set a phosphorus loading maximum of 164 kilograms per year.

Oak Lake. Oak Lake is a 339 acre lake located 2.5 miles east of Watertown. The lake has a maximum depth of 11 feet, which classifies it as a Shallow Lake. Oak Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 87 to 191 ug/L from 2001 to 2006. Minnesota State standards have established a Total Phosphorus Concentration limit of 60 ug/L, which Oak Lake is exceeding. Depending upon the yearly precipitation, a 42 to 82 percent reduction is required to meet the State Standard of 60 ug/L. The TMDL has set a phosphorus loading maximum of 147 kilograms per year.

Swede Lake. Swede Lake is a 434 acre lake located 2.5 miles southeast of Watertown. The lake has a maximum depth of 12 feet, which classifies it as a Shallow Lake. Swede Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 224 to 344 ug/L from 2002 to 2007. Minnesota State standards have established a Total Phosphorus Concentration limit of 60 ug/L, which Swede Lake is exceeding. Depending upon the yearly precipitation, a 90 to 96 percent reduction is required to meet the State Standard of 60 ug/L. The TMDL has set a phosphorus loading maximum of 236 kilograms per year.

Gaystock Lake TMDL (Draft in Progress)

Gaystock Lake. Gaystock Lake is a 46 acre lake located 3.5 miles west of Chaska. The lake has a maximum depth of 18 feet, which classifies it as a Deep Lake. Gaystock Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 209 to 498 ug/L from 2000 to 2006. Minnesota State standards have established a Total Phosphorus Concentration limit of 40 ug/L, which Gaystock Lake is exceeding. Depending upon the yearly precipitation, an 88 to 96 percent reduction is required to meet the State Standard of 40 ug/L. The TMDL has set a phosphorus loading maximum of 101 kilograms per year.

Hazeltine Lake TMDL (Draft in Progress)

Hazeltine Lake. Hazeltine Lake is a 161 acre lake located within the City of Chaska. The lake has a maximum depth of 7 feet, which classifies it as a Shallow Lake. Hazeltine Lake is listed as impaired due to excess nutrients. Total phosphorus summer mean concentrations have ranged from 150 to 230 ug/L from 1999 to 2006. Minnesota State Standards have established a Total Phosphorus Concentration limit of 60 ug/L, which Hazeltine Lake is exceeding. Depending upon the yearly precipitation, a 78 to 90 percent reduction is required to meet the State Standard of 60 ug/L. The TMDL has set a phosphorus loading maximum of 75 kilograms per year.

Status of Un-sampled Lakes

There are currently several lakes in the CCWMO area that have not been sampled, primarily because of lack of public access to the lake. While the CCWMO does not currently plan to sample these lakes, they may eventually be monitored as part of the MPCA's proposed statewide watershed-based assessment program. Citizens or LGUs can request that the CCWMO monitor an un-sampled lake. Requests for additional monitoring would be authorized by the WENR committee and County Board based on available staff and funding resources.

3. IMPAIRED WATERS AND TMDL APPROACH GOAL

Goal IW-1 Receive EPA approval for TMDLs for all listed impaired waters within the CCWMO.

4. IMPAIRED WATERS AND TMDL APPROACH POLICIES

Policy IW-1 **TMDL Approval & Adoption**. This water management plan adopts by reference the approved TMDL Studies listed below. This policy may be amended from periodically to incorporate TMDL Studies completed and approved in the future.

- Carver, Bevens and Silver Creeks Fecal Coliform TMDL
- Burandt Lake Excess Nutrients TMDL

Policy IW-2 **TMDL and Implementation Plan Development**. Develop or partner in the development of TMDLs and Implementation Plans for listed impaired waters within the CCWMO, with the final goal of EPA approved TMDLs for all listed impaired waters. The CCWMO does not plan to lead all TMDLs within the watershed, as indicated in Tables 3B-1 and 3B-2.

Policy IW-3 **Local Plans**. Require LGUs to recognize and incorporate into their local water plans approved TMDL Implementation Plans.

Policy IW-4 **Monitoring**. Monitor non-sampled waterbodies depending on local needs, petition requests, waterbody condition, or outside funding assistance. Non-sampled waterbodies may eventually be monitored as part of the MPCA's proposed statewide watershed-based assessment program.

Policy IW-5 **Delisting Requests**. Ensure waterbodies currently listed on the 303(d) TMDL list are accurately classified and request delisting for shallow waterbodies with a predominance of wetland characteristics.

Policy IW-6 **Education.** Promote education about the benefits associated with the proper management of surface water resources.

5. IMPAIRED WATERS AND TMDL APPROACH IMPLEMENTATION

Imp Strategy IW-1 **TMDL and Implementation Plan Development**. Complete TMDLs and Implementation Plans for waterbodies in the CCWMO on 303d TMDL List and referenced in this plan, or pursue removal or delisting of waterbodies from the 303d TMDL List as appropriate. The CCWMO does not plan to lead all TMDLs within the watershed, as indicated in Tables 3B-1 and 3B-2.

Imp Strategy IW-2 **TMDL Funding**. Pursue funding from outside sources to assist in the completion and implementation of TMDLs.

Imp Strategy IW-3 **Local Plans**. Review local water plans for TMDL compliance.

Imp Strategy IW-4 **Education**. Incorporate the goals, policies, implementation activities listed in this Surface Water Management Chapter into the CCWMO education program. Public involvement processes will be included in the implementation of the activities described above.

Imp Strategy IW-5 **TMDL Implementation**. The CCWMO may periodically amend this chapter and the list of CWWMO Projects and list of CCWMO Potential Projects to incorporate implementation strategies and activities identified in approved TMDL Implementation Plans.