Black Dog Watershed Management Organization

2020 ANNUAL ACTIVITY REPORT

Prepared for
Black Dog Watershed
Management Commission

April 2021

2020 BOARD MEMBERS

The Black Dog Watershed Management Organization (WMO) was established by a joint powers agreement. The member cities appoint Board Members (and alternates) to serve three-year terms. The 2020 Black Dog WMO Board Members and the city/cities they represent are listed below:

Board Members:	Term Ending
1. Roger Baldwin (Chair) Representing the City of Burnsville (Resigned at end of term)	November 2020
2. Greg Helms (Vice-Chair) Representing the Cities of Apple Valley and Eagan	November 2022
3. Scott Thureen (Secretary/Treasurer) Representing the City of Lakeville	November 2022
4. Tom Harmening Representing the City of Burnsville	November 2022
5. Mike Hughes Representing the City of Burnsville	November 2022

Alternate Board Members:	Term Ending
1. Rollie Greeno Representing the Cities of Apple Valley and Eagan	November 2022
2. Curtis Enestvedt Representing the City of Burnsville	November 2022
3. Natalie Walker Representing the City of Lakeville (Appointed November 2020)	November 2022

CONSULTANTS

In accordance with Minnesota Statutes, Section 103B.227, Subdivision 5, the Black Dog Watershed Management Commission solicited interest proposals for engineering consulting, legal services, and auditor services in January 2020. As the statutes require the solicitation to occur every two years, the Black Dog Watershed Management Commission will solicit proposals again in 2022. The Black Dog Watershed Management Commission Board retains services from the following consultants:

Engineering:	Barr Engineering Co. Karen Chandler 4300 MarketPointe Dr. Minneapolis, MN 55435 Phone: (952) 832-2600
Legal:	Campbell, Knutson Attorneys at Law Joel Jamnik Roger Knutson (retired October 30, 2020) Eagandale Office Center 1380 Corporate Center Drive Eagan, MN 55121 Phone: (651) 452-5000
Auditor:	MMKR: Certified Public Accountants James Eichten 5353 Wayzata Boulevard Suite 410 Minneapolis, MN 55416 Phone: (952) 545-0424

The Black Dog WMO currently does not employ any staff. Administrative support is provided by the City of Burnsville.

Administrator	City of Burnsville Daryl Jacobson 13713 Frontier Ct. Burnsville, MN 55337 Phone: (952) 895-4574
Website:	www.blackdogwmo.org

PERMITS AND VARIANCES

The Black Dog WMO does not have a permit program.

WETLAND BANKING

The Black Dog WMO does not have a wetland banking program.

STATUS OF LOCAL PLAN ADOPTION AND IMPLEMENTATION

The Black Dog WMO adopted the 2012 Watershed Management Plan in October 2012. The member cities are required to update their local water management plans to conform to the 2012 Black Dog WMO Plan, per Minnesota Statute 103B.235. In 2014, the City of Burnsville updated their Water Resources Management Plan; the Black Dog WMO approved the updated plan at their May 21, 2014 meeting. At their November 16, 2016 meeting, the Black Dog WMO approved the City of Apple Valley's 2007 Surface Water Management Plan and associated city ordinances, finding them in conformance with the 2012 Black Dog WMO Plan. In 2017, the City of Burnsville updated their Water Resources Management Plan; the Black Dog WMO approved the updated plan at their September 20, 2017 meeting. At their July 18, 2018 meeting, the Black Dog WMO approved the City of Apple Valley's Surface Water Management Plan. At their December 19, 2018 meeting, the Black Dog WMO approved the City of Eagan's Storm Water Master Plan Update and Water Quality and Wetland Management Plan. At their February 20, 2019 meeting, the Black Dog WMO approved the City of Lakeville's Water and Natural Resources Management Plan.

2020 Black Dog WMO Activities

- Participated in the Metropolitan Council's Citizen-Assisted Lake Monitoring Program (CAMP) at four of the five Black Dog WMO-designated strategic water bodies: Crystal Lake, Keller Lake, Lac Lavon, and Orchard Lake. Due to COVID-19, Kingsley Lake was not monitored in 2020, Performed management level monitoring at Orchard Lake (see below). Completed water quality trend analyses on these lakes using the information gathered through CAMP and the more-detailed monitoring on Orchard Lake.

- Performed management level monitoring of Orchard Lake water quality, per guidance in the Black Dog WMO Plan. The monitoring consisted of collecting samples on 11 occasions—ice out and then May through September, twice per month. On each monitoring occasion, samples were collected at the deepest spot in the lake at seven depths, a surface sample (0-2 meters), plus six samples at 1-meter intervals from 3 meters to 8 meters depth. All of the samples were analyzed for total phosphorus; the surface water samples were also analyzed for chlorophyll-a. Secchi disc readings were also taken. Field probe measurements of water temperatures, dissolved oxygen concentrations, pH levels, specific conductivities, and oxidation/reduction potentials were collected at 1-meter depth intervals at the deepest spot in the lake. Field probe measurements of turbidity were also taken on the surface water sample at the monitoring location. The City of Lakeville performed aquatic plant surveys on two occasions over the monitoring season and shared the results with the Black Dog WMO. The work also included entering data into EQuIS database, and submitting the data to the MPCA. A technical memo summarizing the water quality monitoring results will be completed in 2021 and posted on the Black Dog WMO website.

- Continued implementing the Keller Lake Alum Treatment project. In 2020, this included grant administration, following the 2019 completion of the first phase of a two-phase alum treatment of the lake. In December 2018, BWSR awarded the Black Dog WMO a $230,000 Clean Water Fund grant for the alum treatment project, and executed an agreement with the Black Dog WMO in early 2019. The project (and grant funding) will continue through 2021.

- Performed habitat monitoring of Keller Lake, per the redesigned habitat monitoring program, which was implemented beginning in 2011 with Kingsley Lake. The redesigned program includes monitoring of a single water body on a cycle of once every five years. Monitoring included a meandering survey of the entire lake (in the submergent, emergent, and upland buffer zones), rather than only at sample plots, as done in the past. The lake was also evaluated for sedimentation and shoreline erosion problems. A memo summarizing the habitat monitoring results will be completed in 2021 and posted on the Black Dog WMO website.

- Partnered with the Dakota County SWCD by providing funding and support to install 9 water quality improvement projects through the Landscaping for Clean Water program for Black Dog WMO residents, consistent with SWCD cost share policies.

- Partnered with the Dakota County SWCD to fund Landscaping for Clean Water workshops. The program moved online in the spring of 2020 in response to the Covid-19 pandemic. All three programs—Introduction to Clean Water Class, Design Course, and Maintenance Workshop — became available to participants beginning in mid-April. Over 600 people participated in the Introduction to Clean Water class, either in-person or online. Three Introduction to Clean Water Class workshops were held in-person before the shutdown; one hosted by the BDWMO. 31 people attended the class hosted by the BDWMO, 26 of whom reside in Burnsville. 6 Burnsville residents attended the other two presentations.

- Continued implementing plan to accrue funds in 1) a Capital Improvement Fund, to be used for the current Keller Lake Alum Treatment project, and future Black Dog WMO internal load reduction projects stemming from TMDLs for lakes with intercommunity shoreline (Crystal Lake, Keller Lake, and Lac Lavon), and 2) in a General Fund Reserve to be used for the Black Dog WMO watershed plan ten-year update.

- Began preliminary work on updating the Watershed Management Plan, including developing a stakeholder engagement plan and project scope, sending out the plan notification letters and summarizing responses, and holding and summarizing interviews with Black Dog WMO partners.

- Conducted an annual evaluation of the watershed programs and reported the results to member communities via the Watershed Annual Report and Annual Activity Report.

- Formulated and approved the 2021 Work Plan and Budget.

- Completed the 2019 Financial Audit—statute changes allow the Black Dog WMO to perform audits every five years, rather than every year. Annual finance statements will be prepared in the intervening years between audits.

- Developed an annual activity report and watershed annual report and distributed them via the Black Dog WMO website and through the member communities (see attached Watershed Annual Report). The annual activity report meets all of the State reporting requirements and is submitted to the Minnesota Board of Water and Soil Resources (BWSR).

- Reviewed and responded to any issues and opportunities brought to the attention of the Black Dog WMO.

- Maintained, updated, and revised the Black Dog WMO website.

**Table 1 shows the Status of Implementation Tasks from the Black Dog WMO *Watershed Management Plan*

2020 Black Dog WMO Expenditures

	BUDGET	ACTUAL
General Engineering Support: Consulting services for engineering support, such as to prepare for and attend meetings, review/respond to issues and opportunities, assist with BWSR watershed-based funding grant application and work plan; apply for grants, review/comment on proposed projects, EAWs, revisions to local water management plans, comprehensive plans, and other plans; communications/ meetings with agencies and member cities; track and report on impaired waters and TMDL issues, and other tasks.	$31,000	$27,591
Special Projects – General Fund:	$36,500	$32,210
Orchard Lake Management Level Monitoring. Funding to conduct "management level" monitoring of the lake's water quality, per guidance in the Black Dog WMO Plan.	$23,000	$14,979
Dakota County SWCD—Landscaping for Clean Water Program Support Funds to partner with the Dakota County SWCD Landscaping for Clean Water program for Black Dog WMO residents.	$13,500	$6,750
2019 Work Carried into 2020 Finalization of the 2019 Lac Lavon water quality monitoring report and the 2019 Lac Lavon habitat monitoring report.	$0	$10,481
Special Projects – Capital Improvement Fund:		
Keller Lake Alum Treatment Feasibility Study & Implementation Planning Funding to perform grant administration work.	$0	$714
Special Projects – General Fund Reserve:		
Watershed Management Plan Update Perform preliminary plan update work in late 2020.	$10,000	$10,905
Insurance:	$3,000	$2,301
Legal and Audit: Consulting fees for legal and annual audit services (full audit in 2020).	$8,400	$9,320
Administrative Services: City of Burnsville charges for providing administrative services to the Commission, including staff time, printing and postage.	$18,000	$19,101
Public Education:	$17,900	$17,292

Cost to produce and distribute the annual activity report and watershed annual report, funding support for the Dakota County SWCD Landscaping for Clean Water workshop support, and costs to maintain the Black Dog WMO website.		
Water Quality Monitoring: Cost associated with water quality monitoring programs, including the habitat monitoring program, Metropolitan Council's CAMP, and analysis of water quality data.	$15,400	$6,524
Conference / Publications: Commissioner training and education materials.	$500	$26
Contingency: Funding for unexpected expenses and/or new program opportunities approved by the Commission	$5,000	$115
Expenditure Total:	**$145,700**	**$126,099**

2020 Black Dog WMO Revenues

	BUDGET	ACTUAL
Interest	$40	$2,051
Member City Contributions (Fees)	$131,000	$131,000
Member City Contributions—Capital Improvement Fund	$22,000	$22,000
Grants	$0	$0
Fund Balance Utilized	$0	$0
Revenue Total:	**$153,040**	**$155,051**

2020 Black Dog WMO Planned Changes in Fund Balance

	BUDGET	ACTUAL
Capital Improvement Fund: This fund serves as a savings account for future internal load reduction projects stemming from TMDLs.	$22,000	$21,286
General Fund Reserve: This fund serves as a savings account for the Black Dog WMO watershed plan ten-year update.	($14,660)	$7,666
Planned Changes in Fund Balance Total:	**$7,340**	**$28,952**

2021 Black Dog WMO Goals & Work Plan

1. Continue work on updating the Black Dog WMO Watershed Management Plan, which expires in September 2022. The planning process usually takes between one and two years to complete; preliminary work began in 2020. The most intense work of the planning process will likely be in 2021 and work will extend through much of 2022. In 2021, work will include stakeholder engagement, issue identification and prioritization, and drafting of the plan document.

2. Participate in Metropolitan Council's Citizen Assisted Water Quality Monitoring Program (CAMP) for the following strategic water bodies:

*Crystal Lake	*Keller Lake	*Kingsley Lake
*Lac Lavon	*Orchard Lake	

   Complete water quality trend analyses on these lakes using the information gathered through CAMP and the more detailed monitoring on Crystal Lake.

3. Prepare memo regarding Orchard Lake 2020 management level water quality monitoring results and present to the Black Dog WMO.

4. Perform additional (management level) monitoring on Crystal Lake, as recommended in the Black Dog WMO Watershed Management Plan. The monitoring will consist of collecting samples on 11 occasions—ice-out and then May through September, twice per month. On each monitoring occasion, analytical samples will be collected at seven depths at the deepest spot in the lake—a surface sample, plus six samples at one-meter intervals from three to eight meters. All of the samples will be analyzed for total phosphorus. In addition, Secchi disc readings will be taken, and the surface samples will be analyzed for chlorophyll-a. Field measurements of temperature, dissolved oxygen, pH, redox potential, and specific conductivity will be taken at one meter intervals at the monitoring location. Turbidity field measurements will also be taken on the surface water sample at the monitoring location. The work includes field work, lab work, QA/QC of lab data (including coordination with lab), entering data into EQuIS database, submitting the data to the MPCA, preparing a technical memo summarizing the monitoring results, and preparing a presentation for a Commission meeting. The City of Burnsville will perform aquatic plant surveys in June and August, and share the results with the Black Dog WMO. In 2022, work will include preparing the technical memo summarizing the monitoring results, and preparing a presentation for a Commission

5. Final implementation of the Keller Lake Alum Treatment project, by completing the second phase of a two-phase alum treatment of the lake. In 2021, this work will include preparation of contract documents, permitting, contract administration, treatment oversight, alum treatment expenses, and grant administration. Keller Lake CAMP monitoring data will be used to understand the project impacts, with the collection of additional field data (temperature and dissolved oxygen) during each monitoring event, if possible. BWSR awarded the Black Dog WMO a $230,000 Clean Water Fund

Grant in December 2018, and executed an agreement with the Black Dog WMO in early 2019. The grant covers 80% of the project cost (grant requires a 20% local share). The grant funding) will continue through 2021.

6. Prepare report regarding Keller Lake 2020 habitat monitoring results and present to the Black Dog WMO.

7. Perform habitat monitoring of Kingsley Lake. Habitat monitoring is performed at one strategic water body per year, such that all five strategic water bodies will be completed over a five-year cycle. Monitoring will include a meandering survey around the entire lake as well as the previously established sample plots (in the emergent and upland buffer zones) and identification of sedimentation and shoreline erosion problems. Barr staff, on behalf of the Black Dog WMO, will perform a meandering aquatic plant survey in late May by canoe, followed by a later, additional meandering survey by kayak with City of Lakeville staff to evaluate the submergent zone and document the presence of additional species observed later in the growing season. In 2022, work will include preparing the report and a presentation for a Commission meeting.

8. Conduct an annual evaluation of the watershed programs and report the results to member communities via a watershed annual report (this report is incorporated into the annual activity report submitted to the Minnesota Board of Water and Soil Resources).

9. Partner with the Dakota County SWCD by providing funding and support to install up to 18 water quality improvement projects through the Landscaping for Clean Water program for Black Dog WMO residents, consistent with SWCD cost share policies.

10. Partner with the Dakota County SWCD to fund two Landscaping for Clean Water workshops and two design workshops (four evenings) in the Black Dog WMO area. Due to COVID-19, the workshops could be held in-person or virtual.

11. Complete the 2020 Annual Finance Statement—statute changes allow the Black Dog WMO to perform audits every five years, rather than every year. As the last audit was prepared for year 2019; the next audit needs to be prepared in 2025 for year 2024. In the other years, an annual finance statement is prepared.

12. As budget allows, prepare up to two educational pieces and/or presentations for the Commission regarding new technology (e.g., new stormwater best management practices, new lake treatment technologies, etc.) or aquatic invasive species.

13. Apply for grants and/or assist member cities with grant applications.

14. Assist with BWSR watershed-based funding grant application and work plan.

15. Formulate and approve the year 2022 Work Plan and Budget.

16. Review and respond to any issues and opportunities brought to the attention of the Black Dog WMO.

17. Maintain and update web site. In 2021, there will also be a website redesign.

18. Respond to requests to partner with member communities and Dakota County on educational outreach programs.

19. Keep abreast of changes to the TMDL program, including additions to/removals from the impaired waters list and the listing criteria.

20. Review revisions to local water management and comprehensive plans as needed. No reviews are expected in 2021, as the last of the member cities' plans were reviewed and approved in 2019.

21. Continue implementing plan to accrue funds in 1) a Capital Improvement Fund, to be used for the current Keller Lake Alum Treatment project, and future Black Dog WMO internal load reduction projects stemming from TMDLs for lakes with intercommunity shoreline (Crystal Lake, Keller Lake, and Lac Lavon) and 2) in a General Fund Reserve to be used for the Black Dog WMO watershed plan ten-year update.

—See Attached Watershed Annual Report for information on the 2021 Budget—

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Table 1: Status of Implementation Tasks from 2012 Black Dog WMO *Watershed Management Plan*—through December 31, 2020

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
Administrative and Operational—Watershed-wide			
General WMO administration, including reviewing and responding to issues and opportunities (not otherwise described in this table) as they arise. This may include services provided by: • Administrator (City of Burnsville) • Black Dog WMO consulting engineer • Black Dog WMO Attorney	Ongoing	Black Dog WMO continues to perform these actions as needed/requested. In 2019, this included coordinating with BWSR regarding BWSR's final policy for its watershed-based funding program.	Continue to perform as needed/requested.
Revise joint powers agreement (JPA) to allow cost allocation apportionment specified in Section 4.7.4 – Policy 8 of the 2012 Black Dog WMO Plan (funding of internal load reduction projects)	2013	Revision of the JPA not required to develop and implement plan to accrue funds in a Capital Improvement Fund.	None.
Review Burnsville local watershed management plan	2014	Black Dog WMO approval of plan in 2017.	None.
Review Lakeville local watershed management plan	2014	Black Dog WMO approval of plan in 2019.	None.
Review Apple Valley local watershed management plan	2014	Black Dog WMO approval of plan in 2018.	None.
Review Eagan local watershed management plans	2014	Black Dog WMO approval of plan in 2018.	None.
Miscellaneous reviews including, but not limited to: • Review city comprehensive plan changes that require review by the Metropolitan Council • Review projects for consistency with the Black Dog WMO plan, as requested by member cities or other governmental agencies • Review and approve any proposed changes to the intercommunity stormwater system that are inconsistent with an approved local plan • Review and approve changes to an approved local plan that would cause the local plan to be inconsistent with the Black Dog WMO plan	Ongoing	Black Dog WMO continues to perform these reviews as needed/requested.	Continue to perform as needed/requested.

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO *Watershed Management Plan*—through December 31, 2020

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
City technical staff (technical advisor) attendance at Black Dog WMO meetings	Ongoing	City technical staff regularly attend Black Dog WMO meetings	City staff continue to attend Black Dog WMO meetings.
Facilitate intercommunity flood control, stormwater runoff, erosion, and sediment control projects	As needed	No facilitation of intercommunity projects currently planned	Provide facilitation, if needed.
Apply for and/or assist member cities with grant applications	Ongoing	The Black Dog WMO continues to pursue these opportunities as they arise. In December 2018, BWSR awarded the Black Dog WMO a $230,000 Clean Water Fund Grant (grant agreement executed in early 2019) for the Keller Lake Alum Treatment project.	Continue to apply for grants or assist member cities in their grant applications, as appropriate/requested.
Complete and submit annual audit to BWSR	Ongoing	Submitted annually; per revised statute, the Black Dog WMO is required to perform an audit every 5 years, rather than annually. In the other years, the Black Dog WMO will prepare an annual finance statement. In 2020, the BDWMO prepared an audit for year 2019; the next audit will need to be prepared for year 2024.	Prepare next audit in 2025; prepare annual finance statements in intervening years.
Update Black Dog WMO Watershed Management Plan	2020	Black Dog WMO adopted its latest Watershed Management Plan in 2012. In late 2020, the Black Dog WMO began preliminary work on updating the Watershed Management Plan. This included developing a stakeholder engagement plan and project scope, sending out the plan notification letters and summarizing responses, and holding and summarizing interviews with Black Dog WMO partners.	Continue updating the Plan in 2021 and 2022, with approval and adoption expected in 2022.

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO *Watershed Management Plan*—through December 31, 2020

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
Development of TMDL Studies and Implementation Plans	Ongoing	Black Dog WMO will perform these tasks as necessary; there are no TMDL studies or implementation plans currently planned by the Black Dog WMO	Black Dog WMO will perform these tasks as necessary; do not anticipate studies in the near future.
Complete and publish watershed annual report (newsletter) and post on website	Ongoing	Published annually.	Complete annually.
Complete and submit annual activity report to BWSR and post on website	Ongoing	Completed, published, and submitted annually	Complete annually.
Create, maintain and update web site—put plan, data, meeting agenda and minutes, watershed annual reports, water quality monitoring reports, educational materials, project updates, etc. on the site	Ongoing	Website is hosted by Dakota SWCD and regularly updated as new material is available.	Continue to maintain and update website. Dakota SWCD will update the website in 2021.
Educational outreach including, but not limited to: exploring social media and email list serves to expand communication with the public, sponsoring workshops in partnership with the Blue Thumb program, the promotion of awareness of groundwater resource issues, and seeking volunteers to participate in water quality and water quantity programs	Ongoing	Provided watershed annual report to member cities and posted to Black Dog WMO website; maintained website (see above); since 2009, Black Dog WMO has partnered with the Dakota SWCD to fund Landscaping for Clean Water (formerly Blue Thumb) Program workshops in the Black Dog WMO area. Black Dog WMO provided funding for 4 workshops in 2020 (2 Landscaping for Clean Water Intro Workshops and 2 Landscaping for Clean Water Design Workshops). However, only 3 Introduction classes were held before the pandemic shutdown; all programs moved online after that.	Continue providing watershed annual report to member cities and partnering with Dakota SWCD to fund workshops.

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO *Watershed Management Plan*—through December 31, 2020

<table>
<tr><th>Implementation Task</th><th>Original Implementation Date from Plan</th><th>Status/Accomplishments</th><th>Next Steps</th></tr>
<tr><td>Implementation of small-scale best management practices on private property to improve water quality</td><td>Ongoing</td><td>Since 2009, Black Dog WMO has partnered with the Dakota County SWCD by providing funding and support to install water quality improvement projects through the Landscaping for Clean Water Program (formerly Blue Thumb and Community Conservation Cost Share Programs) for Black Dog WMO residents. Projects have included rainwater gardens, native gardens, shoreline improvements, and a bioretention site.<table><tr><th>Year</th><th>Number of projects</th></tr><tr><td>2009</td><td>9</td></tr><tr><td>2010</td><td>7</td></tr><tr><td>2011</td><td>6</td></tr><tr><td>2012</td><td>18</td></tr><tr><td>2013</td><td>13</td></tr><tr><td>2014</td><td>16</td></tr><tr><td>2015</td><td>18</td></tr><tr><td>2016</td><td>16</td></tr><tr><td>2017</td><td>17</td></tr><tr><td>2018</td><td>18</td></tr><tr><td>2019</td><td>19</td></tr><tr><td>2020</td><td>9</td></tr><tr><td>Total</td><td>166</td></tr></table></td><td>Continue partnering with Dakota SWCD to fund water quality improvement projects.</td></tr>
<tr><td>Implement recommended internal phosphorus load reduction projects identified in UAA and/or TMDL for non-strategic waterbodies or strategic waterbodies without inter-community shoreline</td><td>As needed</td><td>Black Dog WMO will implement these projects when watershed load reduction projects have been implemented and further water quality improvements are needed. See below for Black Dog WMO's Keller Lake implementation project.</td><td>Implement when needed (see Keller Lake actions below).</td></tr>
</table>

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO *Watershed Management Plan*—through December 31, 2020

<table>
<tr><th>Implementation Task</th><th>Original Implementation Date from Plan</th><th>Status/Accomplishments</th><th>Next Steps</th></tr>
<tr><td>Annual CAMP water quality monitoring, performing trend analysis, and establishing action levels for the following strategic waterbodies:
• Crystal Lake • Keller Lake • Kingsley Lake
• Lac Lavon • Orchard Lake</td><td>Ongoing</td><td>CAMP monitoring completed annually; trend analysis completed annually.</td><td>Continue annual CAMP monitoring and trend analyses of monitoring data.</td></tr>
<tr><td>Management level water quality monitoring performed at 3-year intervals for the following strategic waterbodies:
• Crystal Lake • Lac Lavon • Orchard Lake</td><td>Ongoing</td><td>Performed for one lake annually; most recent monitoring includes Crystal Lake in 2018, Lac Lavon in 2019 and Orchard Lake in 2020.</td><td>Continue cycle of monitoring: Crystal Lake in 2021, Lac Lavon in , and Orchard Lake in 2022.</td></tr>
<tr><td>Habitat monitoring at 5-year intervals for the following strategic waterbodies:
• Crystal Lake • Keller Lake • Kingsley Lake
• Lac Lavon • Orchard Lake</td><td>Ongoing</td><td>Implementation of the redesigned program began in 2011; habitat monitoring has been performed as shown below:<table><tr><td>Kingsley Lake</td><td>2011, 2016</td></tr><tr><td>Orchard Lake</td><td>2012, 2017</td></tr><tr><td>Crystal Lake</td><td>2013, 2018</td></tr><tr><td>Lac Lavon</td><td>2014, 2019</td></tr><tr><td>Keller Lake</td><td>2015, 2020</td></tr></table></td><td>Continue cycle of monitoring: Kingsley Lake in 2021, Orchard Lake in 2022, Crystal Lake in 2023, Lac Lavon in 2024, and Keller Lake in 2025,</td></tr>
<tr><td>Implement lake water quality management actions recommended in Table 4-1 of the 2012 Black Dog WMO Plan, depending on water quality trends and comparison of recent water quality to action level, for the following strategic waterbodies:
• Kingsley Lake • Lac Lavon • Orchard Lake</td><td>As needed</td><td>Black Dog WMO will implement these actions as necessary; there are no actions currently planned.</td><td>Continue tracking water quality trends and action levels and take actions as/when necessary.</td></tr>
</table>

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO *Watershed Management Plan*—through December 31, 2020

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
Capital Projects—Crystal Lake			
Implement recommended watershed projects to reduce runoff-borne phosphorus loads, as identified in the TMDL, that may include: • Street sweeping • Native shoreline buffers • Public outreach and education	Ongoing	Projects to be performed by member cities (Lakeville, Burnsville) with possible grant funding from Black Dog MWO. Burnsville performs street sweeping in the watershed twice a year and performs ongoing outreach and education. Beyond website articles and city newsletter information, city staff meet with the Crystal Lake association twice a year. Black Dog WMO also performs ongoing public education.	Cities perform projects as needed; continue to perform public education.
Implement recommended internal phosphorus load reduction projects identified in the TMDL, that may include: • In-lake alum treatment • Aquatic macrophyte management • Internal load reduction in upstream Keller Lake	As needed	The Black Dog WMO began the Keller Lake Alum Treatment project in 2018 and received a BWSR Clean Water Fund grant for the project in 2019. The alum treatment was divided into two phases to increase the long-term effectiveness. Phase 1 occurred in June 2019 and Phase 2 will occur in fall of 2021. Other potential future projects are listed in Table 5-3 of the 2012 Black Dog WMO Plan; no other projects are currently planned.	Continue implementation of the Keller Lake Alum Treatment project in 2021. Implement other projects when recommended.

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO *Watershed Management Plan*—through December 31, 2020

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
Capital Projects—Keller Lake			
Implement recommended watershed projects to reduce runoff-borne phosphorus loads, as identified in the TMDL, that may include: • Construction of a water quality treatment pond in Crystal Beach Park • Construction of a water quality treatment pond on southwest side of Keller Lake • Street sweeping • Native shoreline buffers • Public outreach and education	Ongoing 2013 – 2015 (Crystal Beach Park project) 2018 (SW Keller Lake project)	Member cities perform projects, with possible grant funding obtained by Black Dog WMO; Black Dog WMO performs ongoing public education. Crystal Beach Park project: the City of Burnsville completed the project in 2017. SW Keller Lake project: the City of Burnsville will construct this if additional total phosphorus load reductions are required in the watershed. However, if the Crystal Beach Park project meets the city's TMDL load reduction goals for Keller Lake, the city will not construct the SW Keller Lake project. In 2017, the City of Apple Valley conducted a subwatershed assessment for the portions of the city that drain to Keller Lake to target potential projects. The city constructed one of the projects (Redwood Pond) in 2020.	Burnsville will construct SW Keller Lake project if additional load reductions required. Apple Valley will complete construction of the Redwood Pond project in 2021 and implement other projects from the subwatershed assessment as budget and opportunity allows.

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO *Watershed Management Plan*—through December 31, 2020

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
Implement recommended internal phosphorus load reduction projects identified in the TMDL, that may include: • In-lake alum treatment • Aquatic macrophyte management	As needed	The Black Dog WMO began the Keller Lake Alum Treatment project in 2018 and received a BWSR Clean Water Fund grant for the project in 2019. The alum treatment was divided into two phases to increase the long-term effectiveness. Phase 1 occurred in June 2019 and Phase 2 will occur in fall of 2021. Other potential future projects are listed in Table 5-3 of the 2012 Black Dog WMO Plan; no other projects are currently planned.	Perform second Keller Lake alum treatment in fall of 2021.
Capital Projects—Orchard Lake, Kingsley Lake, and Lac Lavon			
Implement water quality improvement measures in Orchard Lake, Kingsley Lake, and Lac Lavon as identified in future diagnostic feasibility studies, that may include: • Watershed projects (e.g., stormwater treatment ponds, rainwater gardens, infiltration basins) • Internal load reduction projects (e.g., in-lake alum treatment, aquatic macrophyte management)	As needed	Black Dog WMO will implement projects as necessary; no projects are currently planned.	Implement projects as necessary; no projects planned.

2020 Watershed Annual Report

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Black Dog Watershed Management Organization

2020 WATERSHED ANNUAL REPORT

Published April 2021

Our mission is . . .

To provide leadership in the management and stewardship of the water resources in northwestern Dakota County, Minnesota, through the cooperation of four cities and the involvement of local stakeholders.

Evaluating our Success

The BDWMO watershed management plan calls for the organization and its member cities to identify outcome-based goals for specific water bodies found within the watershed, and to meet annually to discuss progress toward these goals. The BDWMO uses the following tools to track progress toward goals:

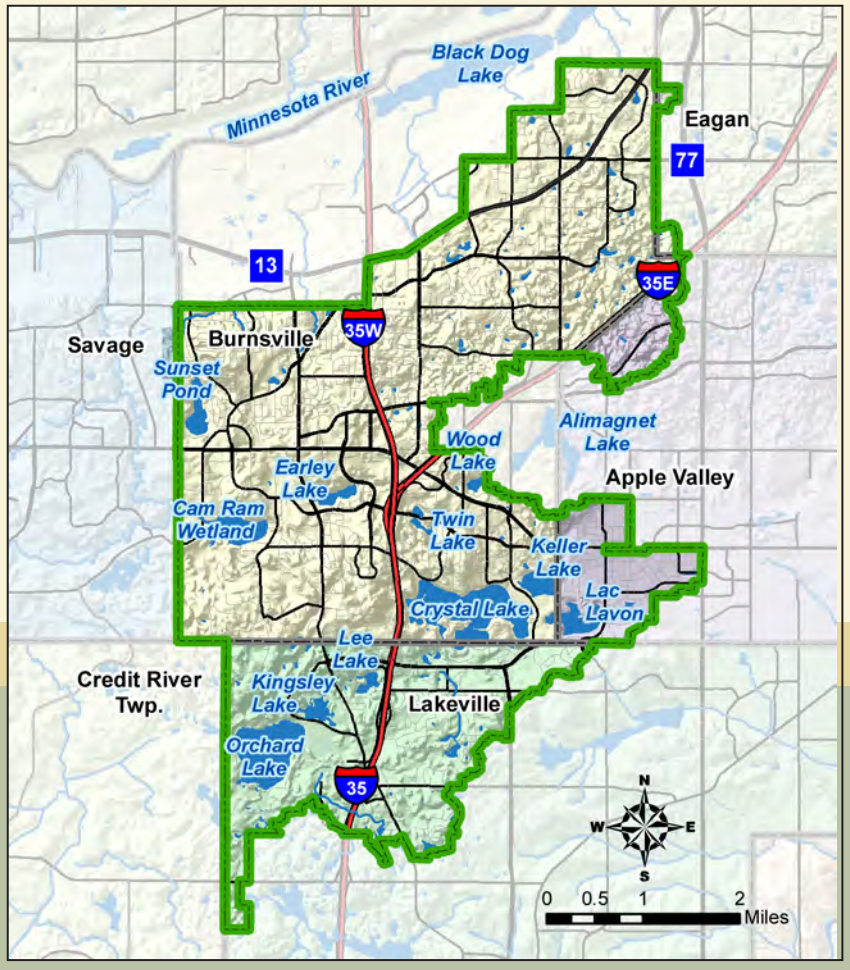
- **Trend Analysis**—The BDWMO collects water quality information to track water quality trends.
- **Performance Analysis**—The BDWMO will evaluate the member cities' implementation of maintenance plans, captial improvement projects, programs, and other items.
- **Habitat Quality Analysis**—The BDWMO collects habitat quality data to detect conditions that would trigger a need for management actions.

This annual report outlines the BDWMO's goals, progress toward those goals in 2020, and plans for 2021 and beyond.

What is the Black Dog Watershed Management Organization?

The Black Dog Watershed Management Organization (BDWMO) actively manages surface water, such as that found in lakes, streams, and wetlands, located in the Black Dog and Credit River watersheds within Dakota County. To effectively manage surface water, the BDWMO develops and implements plans that address water quality, responds to drainage issues that cross multiple municipal boundaries, and assists cities within the watershed to manage surface water runoff. The BDWMO is represented by commissioners who are appointed by the cities within the watershed, which include Burnsville, Lakeville, Apple Valley, and Eagan.

The total area of the Black Dog watershed is 17,500 acres; 70 percent of the watershed lies within the city of Burnsville, 21 percent of the area is within the city of Lakeville, 8 percent is within the city of Apple Valley, and 1 percent is within the city of Eagan.



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Watershed Management Plan Update

The BDWMO is in the process of updating its Watershed Management Plan. The Plan will establish the goals, policies, and activities for managing and protecting the lakes, ponds, creeks, streams, wetlands, drainages, and groundwater in the BDWMO from 2022 through 2032.

State law and rules govern the watershed planning process and require that watershed management plans be updated every 10 years. The BDWMO adopted its current Plan in 2012 and anticipates completing the updated Plan in 2022. To promote a transparent and inclusive plan development process, the BDWMO is collecting input from cities and other local stakeholders in developing the 2022 Plan. Representatives from the member cities and state, regional, and county agencies have been asked to participate in a technical advisory committee (TAC). The TAC will meet periodically during the project to discuss issues, priorities, and implementation activities.

In 2020, the BDWMO began the preliminary planning process and will continue with the numerous tasks required throughout 2021 and into 2022. The planning process is divided into three phases and includes the following tasks:

Phase I — Stakeholder Engagement

- Notifying Plan review authorities and summarizing responses
- Interviewing BDWMO city and partner staff
- Developing a stakeholder engagement plan for BWSR review and approval
- Providing updates for the BDWMO website
- Hosting an online survey
- Establishing and meeting with a Technical Advisory Committee
- Initial planning (public kickoff) meeting
- Hosting a Commissioner issue identification workshop
- Attending partner and community events (as public health guidance permits)

Phase II — Plan Development

- Updating the Land and Water Resources Inventory
- Defining issues and measurable goals
- Revising BDWMO policies
- Creating a targeted implementation program
- Compiling the complete draft Plan

Phase III — Plan Review, Approval and Adoption

- Completing formal 60-day review and responding to comments
- Distributing responses to comments and hosting public hearing
- Obtaining Plan approval by BWSR
- Adopting and distributing the final Plan

The BDWMO's current plan was approved by the Minnesota Board of Water and Soil Resources (BWSR) on September 26, 2012 and adopted by the BDWMO Board of Commissioners on October 17, 2012.

The 2012 Plan includes a summary of the BDWMO's history, inventory of water and other natural resources, discussion of issues facing the BDWMO, goals and policies defining the organization's and member cities' responsibilities, and an implementation plan outlining the BDWMO's activities over the next 10 years. An important aspect of the project was the incorporation of total maximum daily load (TMDL) studies into the implementation plan.

The 2012 Plan strengthened existing policies, but also addressed emerging and evolving topics, including cost allocation for internal load reduction projects. Based on new policies included in the 2012 Plan, the BDWMO began annual contributions to a Project Reserve Fund. This fund has served as a savings account for internal load reduction projects stemming from TMDLs. The establishment of this fund has allowed for a significant head start in financing internal load reduction projects.

The 2012 Plan is publicly available from the BDWMO's website at: www.blackdogwmo.org/pdfs/2012_Watershed_Mgmt_Plan.pdf

Landscaping for Clean Water—Clean Water Starts at Home

Since most land is privately owned, it is up to each individual landowner to do the right thing on their property to help keep water clean. The Landscaping for Clean Water program makes it easy for residents to turn their yards into a lush and lovely force for clean water rather than a contributor to water pollution.

Are you doing everything possible on your patch of lawn? Attend a Landscaping for Clean Water workshop to find out. Participants in the program attend design workshops to develop landscape plans for their own yards. These plans include creating native gardens, raingardens, or native shorelines that stabilize soil. These planting practices provide habitat for pollinators and birds, reduce watering and require no chemical inputs. On top of that, these practices help water soak into the ground rather than running off and delivering polluted stormwater into lakes, rivers and wetlands.

Who can get a grant?

Participants in the workshops can submit an application, project plan, and cost estimates to the Dakota County SWCD for grant funds of up to $250.

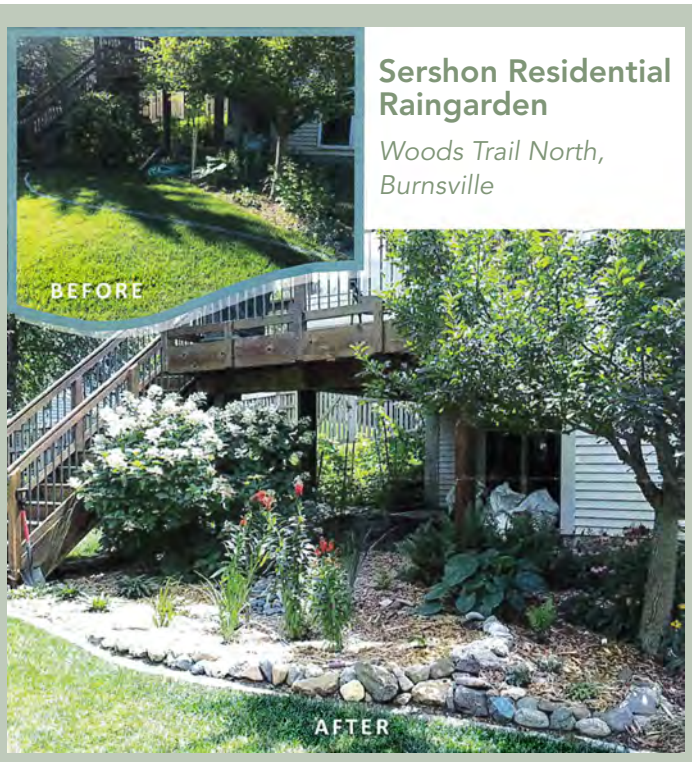
The Landscaping for Clean Water program moved online in the spring of 2020 in response to the Covid-19 pandemic. All three programs—Introduction to Clean Water Class, Design Course, and Maintenance Workshop —became available to participants beginning in mid-April. Over 600 people participated in the Introduction to Clean Water class, either in-person or online.

Three Introduction Classes were held in-person before the shutdown; one hosted by the BDWMO. 31 people attended the class hosted by the BDWMO, 26 of whom reside in Burnsville. 6 Burnsville residents attended the other two presentations.

In 2020, the BDWMO provided funding for 9 construction funding grants (2 native gardens, 1 shoreline restoration, and 6 raingardens) through the Landscaping for Clean Water program. In 2021, the BDWMO will provide 18 grants to residents interested in refreshing their landscaping with plants that support both pollinators and local water quality. Homeowners must attend workshops to apply for grants.

2020 Project Examples

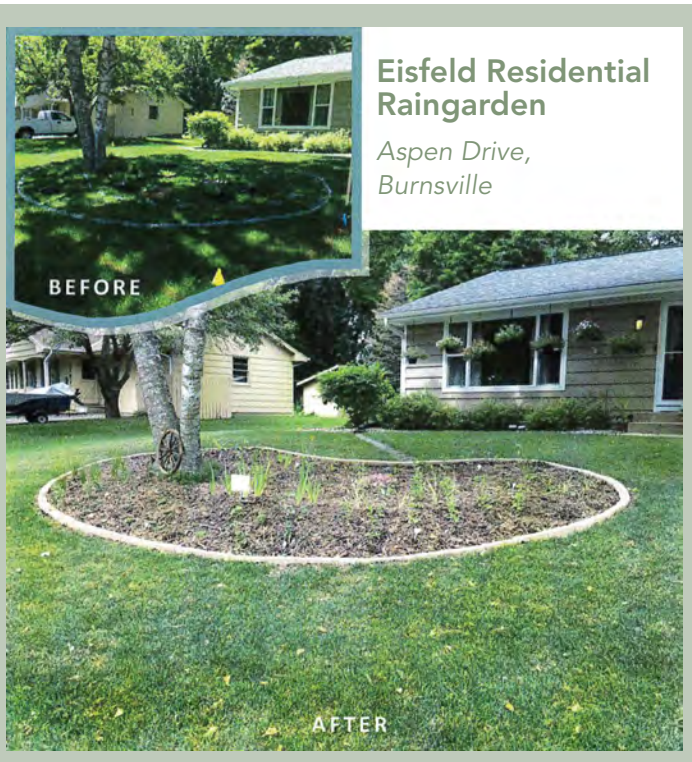
Benefits include: runoff volume reduction, improved water quality, improved wildlife habitat, opportunity for public education and outreach, and improved aesthetics.



Sershon Residential Raingarden

Woods Trail North, Burnsville

PROJECT: Installation of a 104 square foot raingarden. Project materials cost estimated at $497. Landowners received a $250 Landscaping for Clean Water grant as well as technical assistance provided by the Dakota County SWCD.



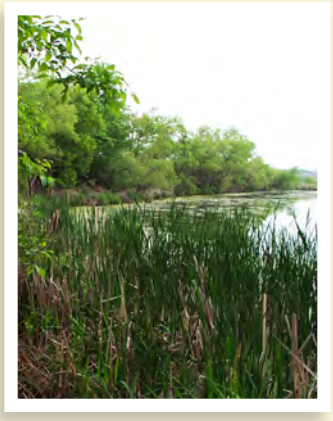
Eisfeld Residential Raingarden

Aspen Drive, Burnsville

PROJECT: Installation of a 210 square foot raingarden. Project materials cost estimated at $996. Landowners received a $250 Landscaping for Clean Water grant as well as technical assistance provided by the Dakota County SWCD.

Landscaping for Clean Water is one type of cost-sharing program offered by the Dakota County SWCD. For more information, call 651-480-7777 or go to https://dakotaswcd.org/services/landscaping-for-clean-water/.

Observing Orchard Lake



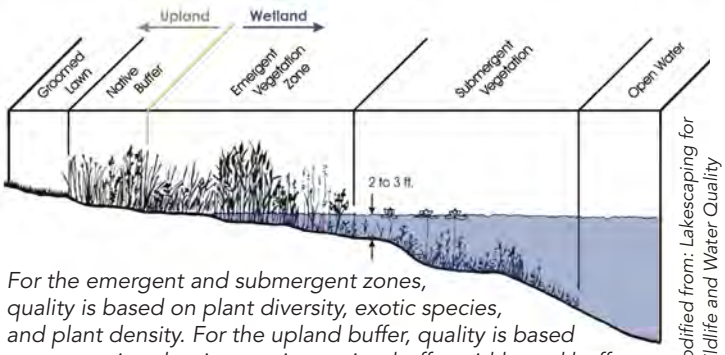
The BDWMO is pleased to report that Orchard Lake continues to have good water quality. The summer-average Secchi disc transparency (a measure of water clarity) in 2020 was 2.1 meters (6.9 feet), which is better than the MPCA deep-lake water quality standard of 1.4 meters. Concentrations of chlorophyll-*a* (a measure of algal abundance) and total phosphorus (the nutrient that drives algal growth) were also monitored in Orchard Lake. The summer-average concentrations of chlorophyll-*a* (5.2 µg/L) and total phosphorus (24 µg/L) were both better than the MPCA deep-lake water quality standards of 14 µg/L and 40 µg/L, respectively. There was a statistically significant trend of degrading water quality for the most recent 10-year period (2011-2020), as indicated by summer averages of Secchi disc transparency. However, summer averages of total phosphorus and chlorophyll-*a* do not show a statistically significant trend for the same period. The lake's water clarity is primarily influenced by changes in the amount of algae in the lake, but suspended sediments, and dissolved organic compounds from the decomposition of plants in the watershed may also contribute to reduced water clarity. Changes in the amount of annual precipitation can result in changes in the concentrations of sediments and dissolved organic compounds in the lake, as well as concentrations of phosphorus that spur algae growth.

Aquatic plant surveys were conducted in Orchard Lake in 2020, and two invasive, non-native aquatic plant species were identified—curly-leaf pondweed and Eurasian watermilfoil. Both plants can form dense nuisance growth in Minnesota lakes. Curly-leaf pondweed dies off in mid-summer, earlier than native plants, releasing nutrients that can contribute to summer algae blooms. An herbicide treatment was conducted in select areas of the lake in spring 2020 to reduce the growth of curly-leaf pondweed where spring surveys showed potential for heavy growth. Orchard Lake is also monitored for the non-native zebra mussel. No zebra mussels have been found in Orchard Lake to date, but zebra mussels continue to spread to Minnesota lakes, and zebra mussels have been identified in nearby Lake Marion. Invasive, non-native aquatic plants and animals can be spread to other lakes by transport of seeds and/or plant fragments. Zebra mussels can also be attached to plant fragments, and their microscopic larvae can be transported in live wells, wakeboard boat ballast tanks, or other watercraft areas that retain lake water. In order to prevent the spread of invasive plants and animals, lake users should take care in removing all plant fragments from boats and trailers; and remove boat plugs and thoroughly drain all water from live wells when leaving the lake.

The BDWMO will continue to monitor the water quality of Orchard Lake in 2021. Habitat monitoring is scheduled again for Orchard Lake in 2022.

Habitat Monitoring Program

Since 2003, the BDWMO has implemented a program for monitoring the wildlife and fish habitat quality of strategic water resources in the watershed, including biological and physical indicators, such as upland and aquatic vegetation, buffer zones, erosion, sedimentation, and the presence of non-native exotic species. The program also recommends management actions based upon monitoring results.



For the emergent and submergent zones, quality is based on plant diversity, exotic species, and plant density. For the upland buffer, quality is based on vegetation density, exotic species, buffer width, and buffer continuity.

Modified from: Lakescaping for Wildlife and Water Quality

In 2020, the BDWMO monitored the habitat quality of Keller Lake. Monitoring included transect, plot, and meandering surveys. Photographs were taken to document conditions. Analysis and reporting of the monitoring data includes a floristic quality assessment and a four-tiered rating system (poor, moderate, high, and excellent). Private versus public ownership was identified along the entire shoreline. The survey results, along with parcel data, were used to identify possible locations for restoration and preservation.

Also in 2020, the University of Minnesota conducted a seedbank assessment, which germinated nine aquatic plant species, eight of which are native species, from sediment cores within Keller Lake. In addition, a reintroduction program began in 2020, which included transplanting four species of native aquatic plants harvested from a nearby lake. The plants were transplanted into ten fenced plots and monitored from June-October 2020.

See page 7 for additional Keller Lake habitat monitoring results. See www.blackdogwmo.org for the full report.

The member cities have provided lakeshore owners with shoreline restoration information since 2004 and continually promote and encourage lakeshore property owners each year to take advantage of the Dakota County SWCD Landscaping for Clean Water shoreline restoration program. (See page 3 for more about this program.)

Water Quality Monitoring Program

The BDWMO and member cities continued to monitor several of its lakes during 2020 through the Metropolitan Council's Citizen-Assisted Monitoring Program (CAMP) to detect any water quality changes that would require management action by the WMO. In addition, the BDWMO conducted more detailed monitoring on Orchard Lake (see page 4). The monitoring focused on three water quality indicators—total phosphorus and chlorophyll-*a* concentrations, plus Secchi disc transparency. All three variables correlate strongly to the open-water nuisance conditions of lakes (i.e., algal blooms).

Long-term monitoring is important because lakes can change from year to year. Only when several years of data are compiled do trends become apparent. Because the MPCA periodically evaluates water quality data from the most recent ten-year period to determine if a lake violates applicable water quality standards, the WMO has adopted the same time convention for conducting its annual trend analyses. Graphs on this page and subsequent pages show historic trends in water quality.

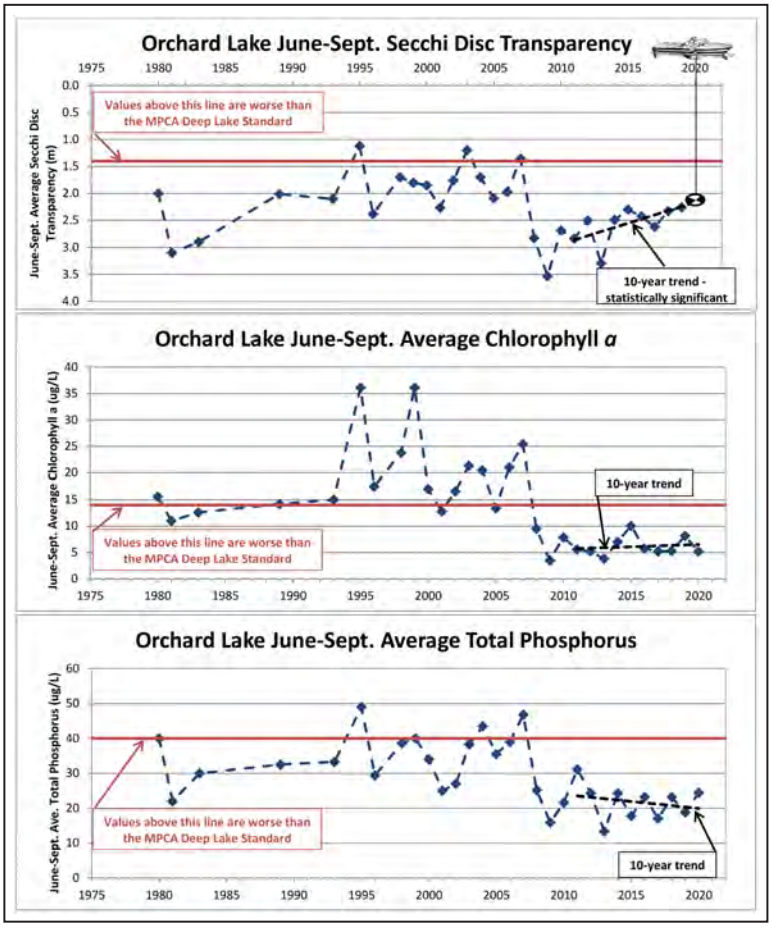
Orchard Lake (Lakeville)

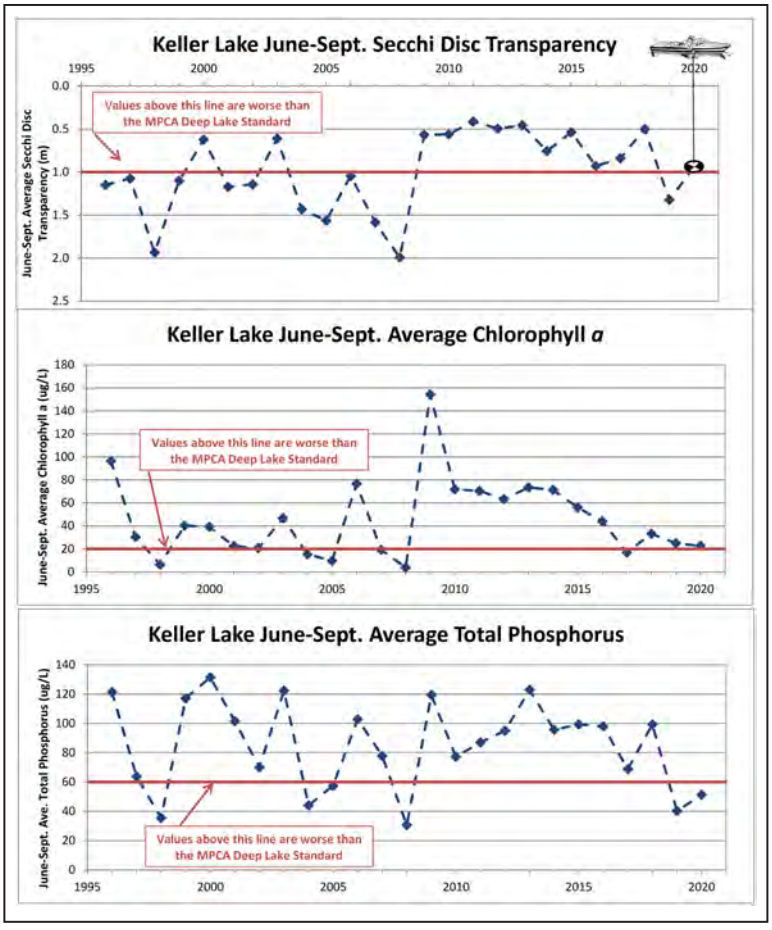
Water Quality Monitoring—In 2020, the BDWMO performed more detailed management level monitoring on the lake (see story on page 4). Habitat monitoring is scheduled for the lake in 2022.

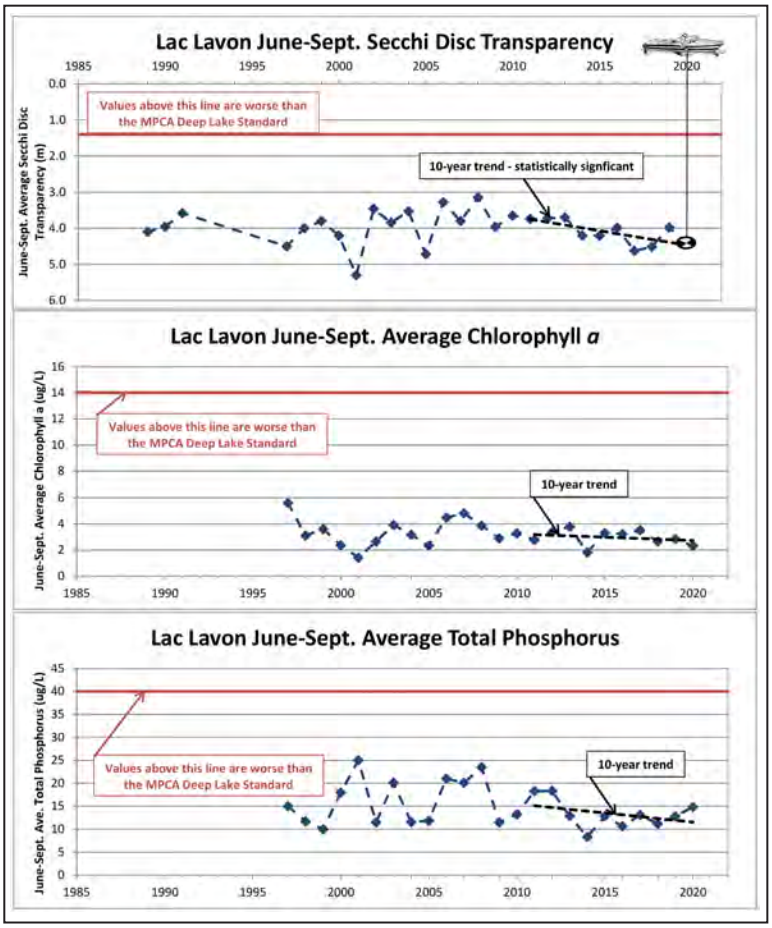
Keller Lake (Burnsville & Apple Valley)

Water Quality Monitoring—An alum and sodium aluminate treatment was conducted on Keller Lake in Spring 2019, resulting in improved water quality in 2019 and 2020 compared to the previous decade. A phase II alum treatment is planned for the fall of 2021. The 2020 Secchi disc transparency summer average was 0.9 meters (3.0 feet), which is worse than it was in 2019, and is slightly worse than the MPCA's shallow lake standard of 1.0 meter (3.3 feet). The summer-average total phosphorus (51 µg/L) was worse than it was in 2019, but was better than the MPCA's shallow lake standard of 60 µg/L. Summer averages of total phosphorus had been consistently worse than the MPCA standard every year for the period 2009-2018. The 2020 summer-average of chlorophyll-*a* (23 µg/L) was slightly better than it was in 2019, but is worse than the MPCA's shallow lake standard of 20 µg/L.

Trend analyses were not completed for Keller Lake because of the alum treatment that was conducted in Spring 2019. The three-lake TMDL study and implementation plan identifies the water quality improvement measures needed to achieve the BDWMO and MPCA goals for the lake. The BDWMO will continue to monitor the water quality of Keller Lake in 2021. Habitat monitoring was performed in 2020 (see page 7 for results).

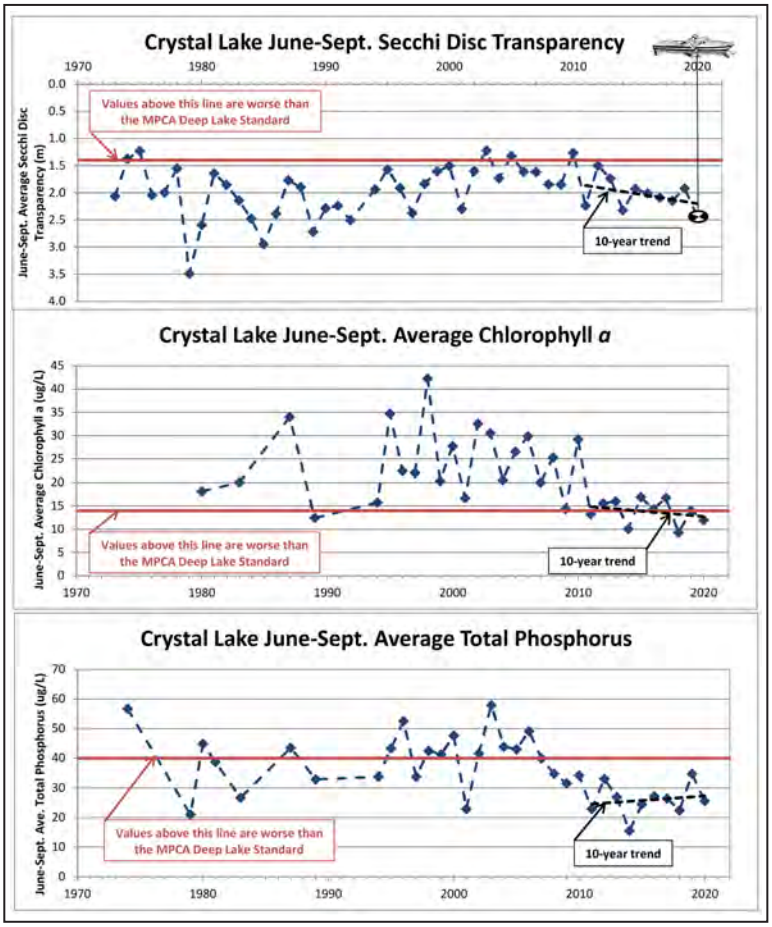






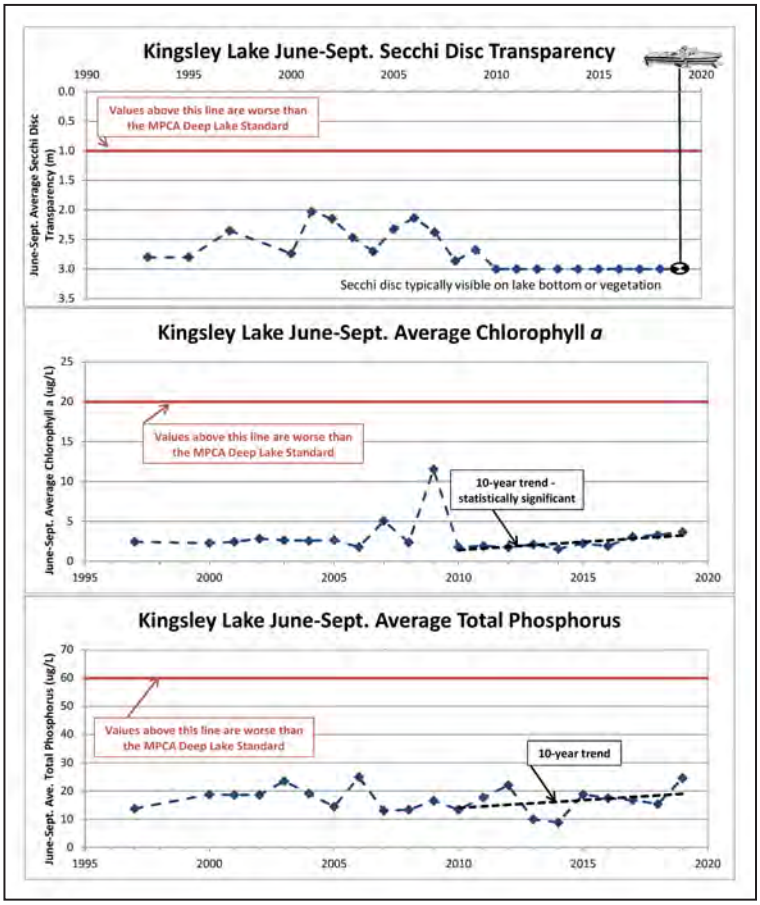
Lac Lavon (Apple Valley & Burnsville)

Water Quality Monitoring—Lac Lavon continued to experience excellent water quality in 2020. The 2020 summer-average Secchi disc transparency was 4.4 meters (14 feet), and is much better than the MPCA deep-lake water quality standard of 1.4 meters. The 2020 summer averages of total phosphorus (15 µg/L) and chlorophyll-*a* (2.3 µg/L) further indicate excellent water quality for Lac Lavon. Summer averages of Secchi disc transparency show a statistically significant improving trend for the most recent 10-year period of 2011-2020. There was no significant trend in summer averages of total phosphorus or chlorophyll-*a* for the same period. The BDWMO will continue to monitor the water quality of Lac Lavon in 2021. Habitat monitoring was performed in 2019 and is scheduled again in 2024.



Crystal Lake (Burnsville & Lakeville)

Water Quality Monitoring—The 2020 summer-average Secchi disc transparency was 2.4 meters (7.9 feet), which is better than other recent summer averages, and better than the MPCA deep-lake water quality standard of 1.4 meters. The last time the Secchi measurement was 2.4 meters or better was 1997. The 2020 summer average of total phosphorus (26 µg/L) was better than the 2019 summer average, and is better than the MPCA's deep lake standard (40 µg/L). The summer-average chlorophyll-*a* (12 µg/L) was better than the 2019 summer average, and is better than the MPCA's deep lake standard (14 µg/L). The BDWMO will continue to monitor the water quality of Crystal Lake in 2021, including management level monitoring that is conducted every 3 years. The next Crystal Lake habitat monitoring is scheduled for 2023.



2019 water quality monitoring data

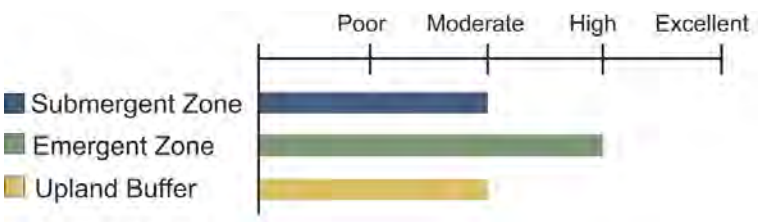
Kingsley Lake (Lakeville)

Water Quality Monitoring—Kingsley Lake was not monitored in 2020, but water quality monitoring data from 2019 (see above) show continued excellent water quality in Kingsley Lake. The lake is often clear enough that the Secchi disc used to measure transparency can still be seen when resting on the bottom of the lake.* The 2019 summer averages of total phosphorus (25 µg/L) was the highest it's been since 2006, but still considerably better than the MPCA shallow lake standard (60 µg/L). The 2019 summer average chlorophyll-*a* (3.7 µg/L) was similar to years 2015-2018, and is considerably better than the MPCA's shallow lake standard (20 µg/L). The BDWMO will continue to monitor the water quality of Kingsley Lake in 2021. Habitat monitoring is also scheduled for the lake in 2021.

** Secchi disc readings in Kingsley Lake are difficult because lake vegetation obscures the Secchi disc, giving false measurements; therefore, there is no trend line in the graph above.*

Keller Lake Habitat Monitoring Results for 2020

As mentioned in the article on page 4, Keller Lake habitat monitoring was conducted in 2020. The BDWMO made the following quality ratings, based on the monitoring results:



Submergent zone quality rating = Moderate

Rating based on averaging four criteria:

1. low total number of native species (2)
2. excellent average native plant density (1.2)
3. moderate rating for average exotic species density (1.8)
4. poor coefficient of conservatism value (mean C-value) (1.5)

Curly-leaf pondweed, a dominant species found every year in Keller Lake, was present at 43 percent of sample points in April. In July, (after treatment) no plants were observed. This die-off creates a sudden loss of habitat and releases nutrients into the water that can produce algal blooms and create turbid water conditions. A curly-leaf pondweed turion survey was conducted in mid-October, indicating the potential for continued growth of this species and the need for its long term control. Eurasian watermilfoil was also found in Keller Lake in 2020 and in previous years. It has fast growing stems that will branch out and cover the water surface—impeding boating, complicating water recreation, and shading out slower-growing native plants.

The BDWMO recommends continued monitoring, control, and management of invasive species and continued efforts to increase native aquatic plant diversity.

Emergent vegetation zone quality rating = High

Rating based on averaging four criteria:

1. excellent number of native wetland plant species (36)
2. high rating for % coverage of exotic species (26-50%)
3. a poor mean C-value rating (2.4)
4. high rating for total vegetative cover (51-75%)

Narrowleaf and hybrid cattail are dominant non-native invasive species found in the vegetated emergent zone. Purple loosestrife, another non-native invasive plant species, is present in shallow open water and along the shoreline and has been managed for years through the release of beetles, which eat the plants. A floodplain forest wetland community is present along the southern shoreline of Keller Lake.

The BDWMO recommends continued control and management of purple loosestrife.

Upland buffer zone quality rating = Moderate

- 42 native species and 29 exotic species observed
- Exotic plant species > 40% of upland vegetative cover. The mean C-value rating is 1.8 (poor).
- Upland buffer within portions of the publicly owned shoreline is wide, providing wildlife habitat and shoreline protection.
- The majority of residential properties have a narrow width of naturalized vegetation along the shoreline, which helps provide some water quality protection and erosion prevention, but the buffer width is too narrow to provide significant wildlife habitat protection. The majority of the residential shoreline properties on Keller Lake have the potential to provide a 50-foot naturalized buffer without altering any structures. One residential property has a naturalized buffer width adequate for wildlife protection (≥100 feet).
- Lakeshore property owners are encouraged to apply for funds (see page 3) to assist with implementation of the BDWMO recommendations.

Black Dog Watershed Management Organization

Board of Commissioners

Representing Burnsville:

Curtis Enestvedt, Chair
(serving since 2014)
Mike Hughes, Vice Chair
(serving since 2008)
Tom Harmening, Commissioner
(serving since 2002)
Frank Boyce, Alternate
(serving since 2021)

Representing Apple Valley and Eagan:

Rollie Greeno, Commissioner
(serving since 2018)
Greg Helms, Alternate
(serving since 2011)

Representing Lakeville:

Scott Thureen, Secretary/Treasurer
(serving since 2008)
Natalie Walker, Alternate
(serving since 2020)

Engineering Consultant:

Karen Chandler, P.E., Barr Engineering Co.

Legal Consultant:

Joel Jamnik, Campbell Knutson, P.A.

Regular board meetings...

are held at 5:00 p.m. on the third Wednesday of the month at the Burnsville Maintenance Facility at 13713 Frontier Court.

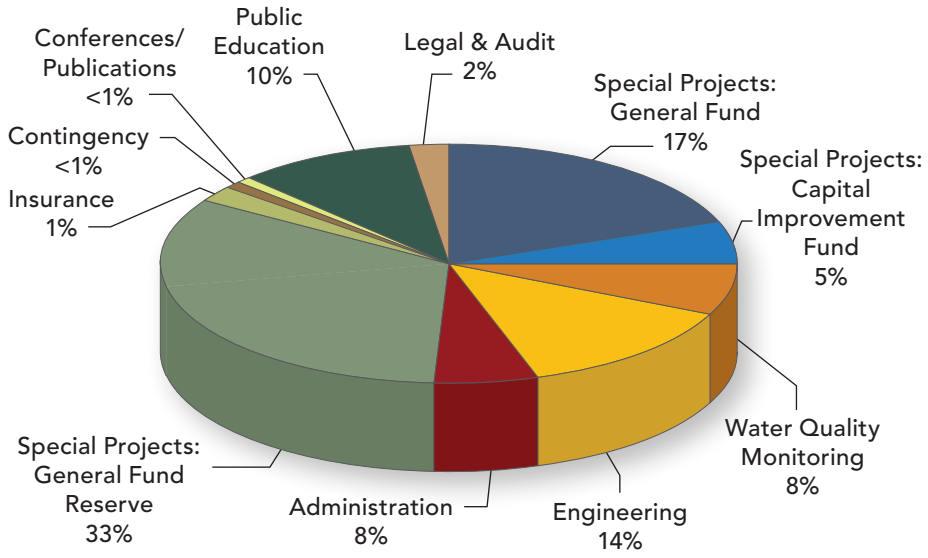
For more information, please contact:

Daryl Jacobson, Administrator
Black Dog WMO
City of Burnsville
13713 Frontier Court
Burnsville, MN 55337
Telephone: 952-895-4574
Fax: 952-895-4531

Website: www.blackdogwmo.org

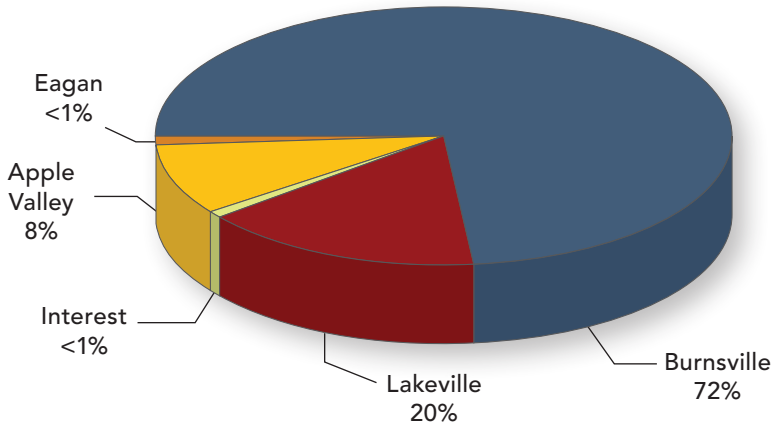
2021 Budget

Engineering	$31,000
Legal and Audit	$5,000
Administrative Services	$18,000
Public Education	$22,100
Insurance	$3,000
Special Projects – General Fund	$36,800
Special Projects – Capital Improvement Fund	$10,000
Special Projects – General Fund Reserve	$70,000
Conference/Publications	$500
Water Quality Monitoring	$17,100
Contingency	$1,000
Total Expenditures	**$214,500**



2021 Income

Member Contributions	$153,000
Interest	$40
Total Income	**$153,040**



2020 Water Quality Data

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The Black Dog WMO funds the water quality monitoring of its water bodies designated as "strategic" by the Black Dog WMO. In 2020, the strategic water bodies included:

1. Crystal Lake
2. Keller Lake
3. Kingsley Lake – due to COVID-19, Kingsley Lake was not monitored in 2020 (data shown in the following figures are repeated from 2019; there is no table because no data was collected in 2020)
4. Lac Lavon
5. Orchard Lake

Some of the water quality data for the strategic water bodies is presented on the following pages. First are a series of figures that summarize the historical summer average (June 1 through September 30) total phosphorus, chlorophyll *a*, and Secchi disc transparency data. The figures also display the trend lines for the past 10 years' water quality data, if a trend was observed. The linear best-fits were determined using a "least squares" regression analysis of the summer averages of the past 10 years (2011—2020) of data. Trend analyses were not performed for Keller Lake because of the alum treatment that was conducted in spring 2019. The 2020 CAMP data provided by the Metropolitan Council were preliminary data at the time this report was prepared.

Second are a series of tables that show the results of the water quality monitoring for each data collection date in 2020.

Water quality monitoring data is also available for other "non-strategic" water bodies in the Black Dog WMO. In 2019, the member cities funded participation in the CAMP program for the following non-strategic water bodies

- Earley Lake (City of Burnsville)
- Twin Lake (City of Burnsville)
- Sunset Pond (City of Burnsville)
- Wood Pond (City of Burnsville)
- Lee Lake (City of Lakeville)

Results of the 2020 water quality monitoring of these water bodies is available from the Metropolitan Council's CAMP program.

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Historical Water Quality Data—Figures

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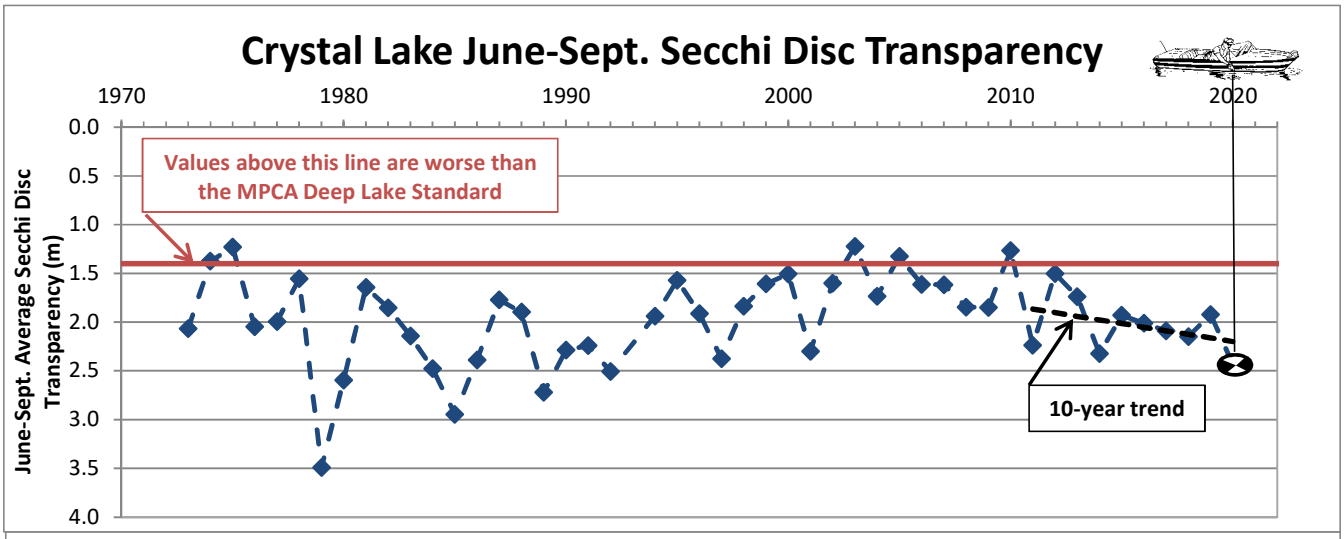
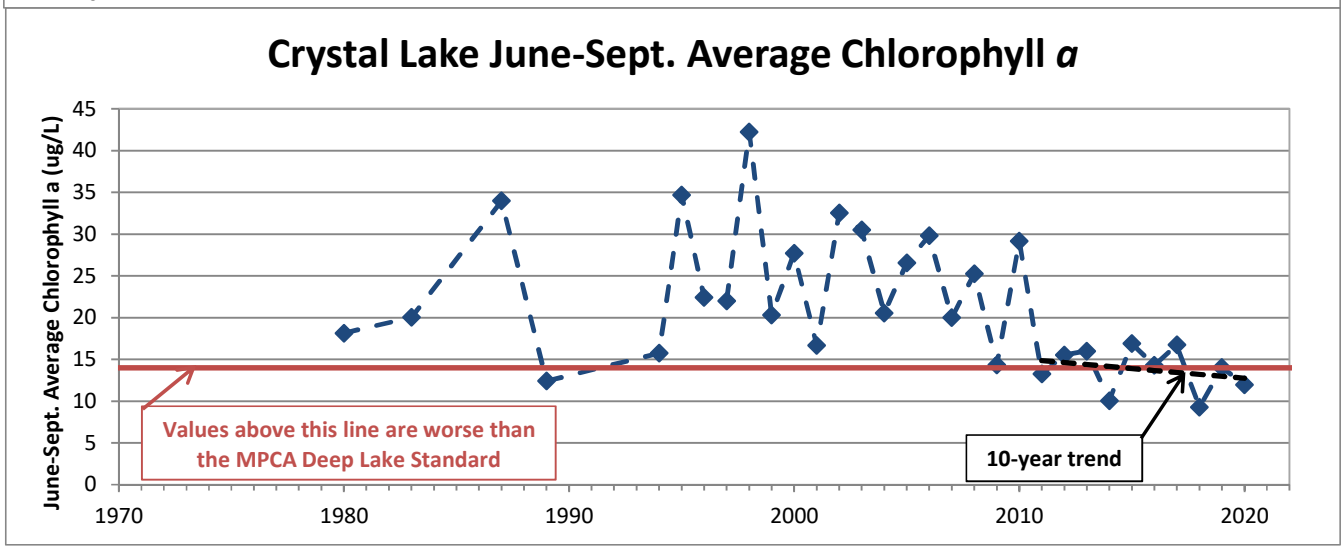
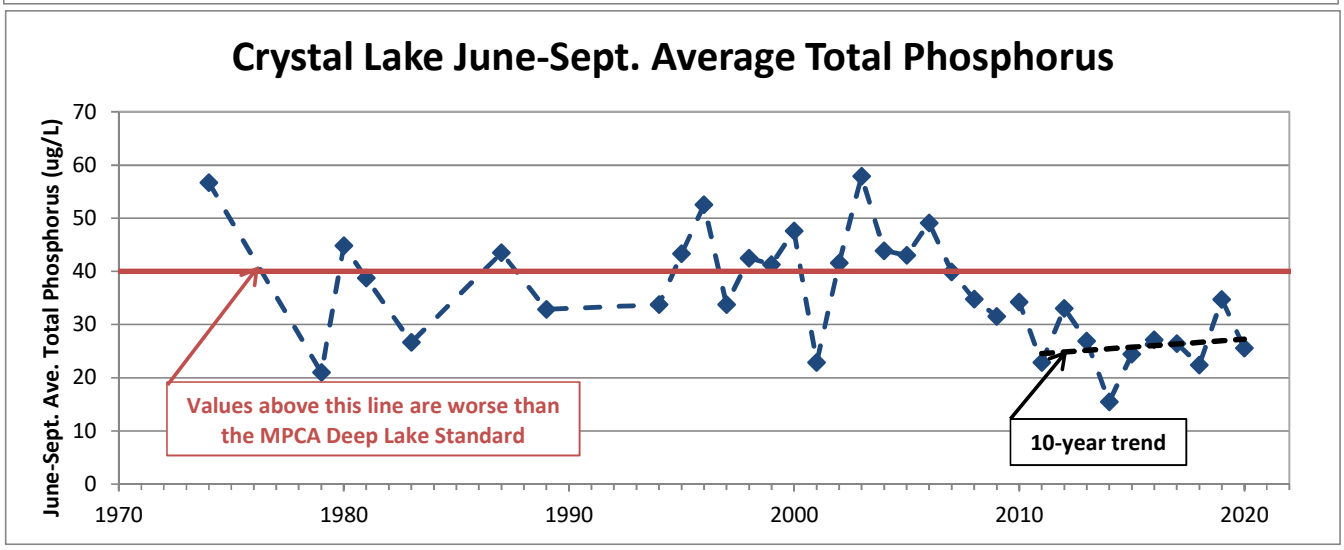
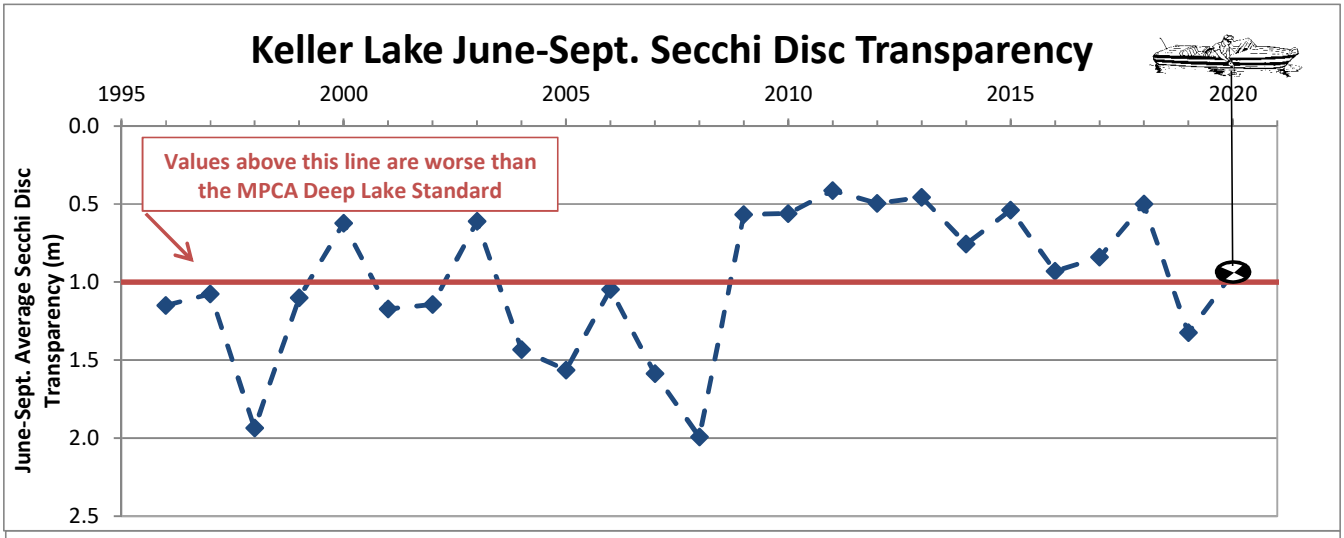
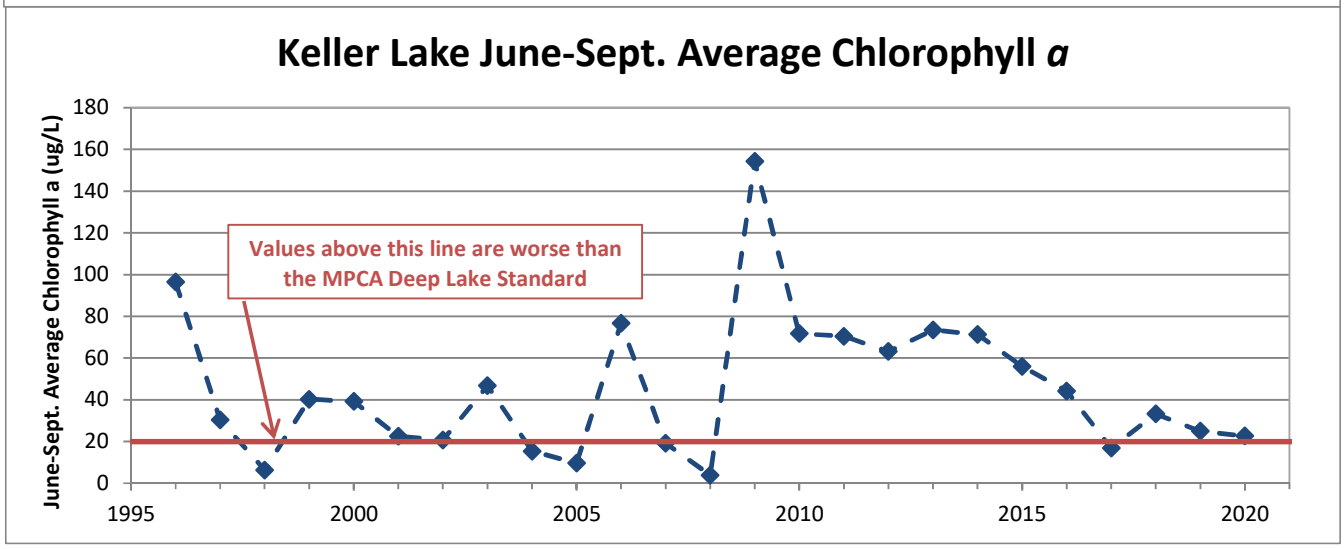
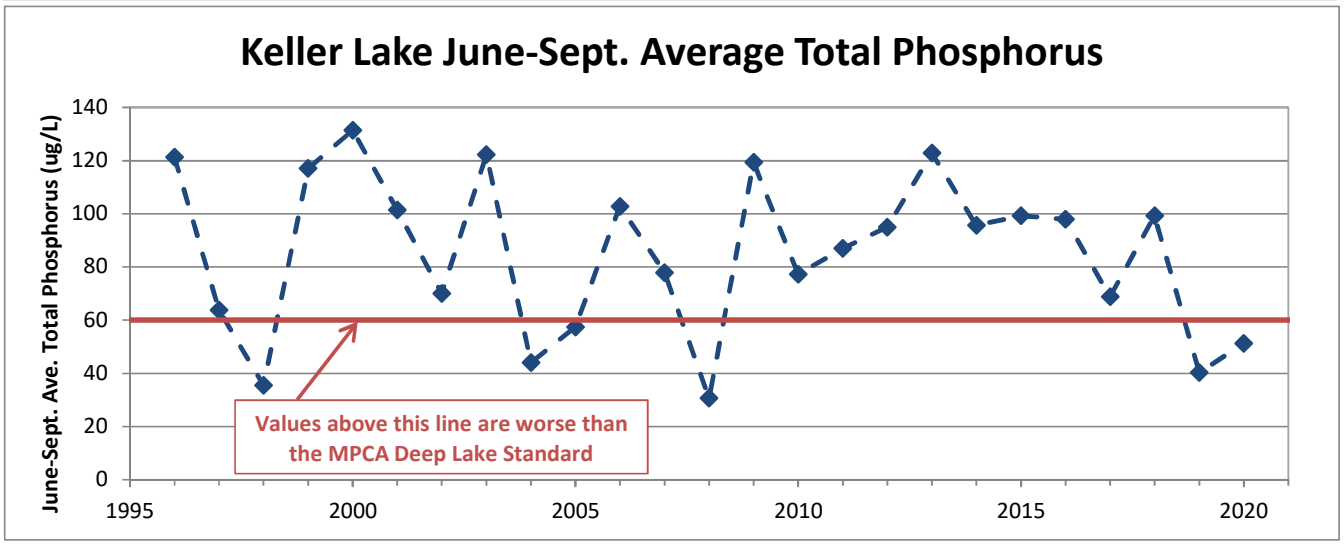

Crystal Lake June-Sept. Secchi Disc Transparency
June-Sept. Average Secchi Disc Transparency (m)
1970
1980
1990
2000
2010
2020
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend

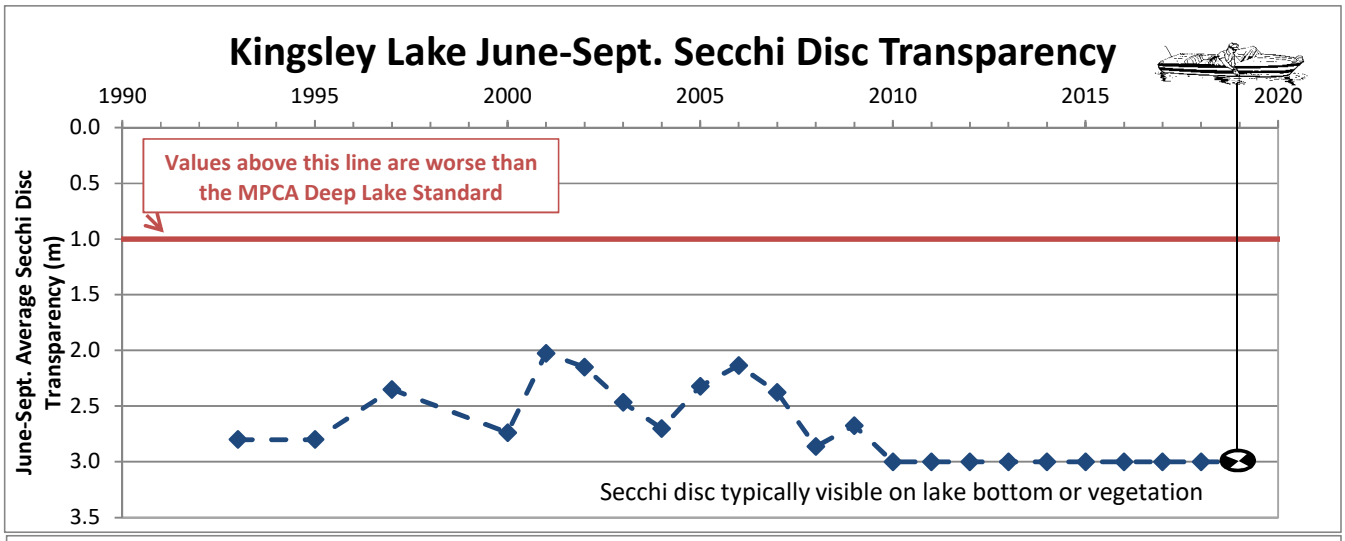

Crystal Lake June-Sept. Average Chlorophyll a
June-Sept. Average Chlorophyll a (ug/L)
45
40
35
30
25
20
15
10
5
0
1970
1980
1990
2000
2010
2020
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend

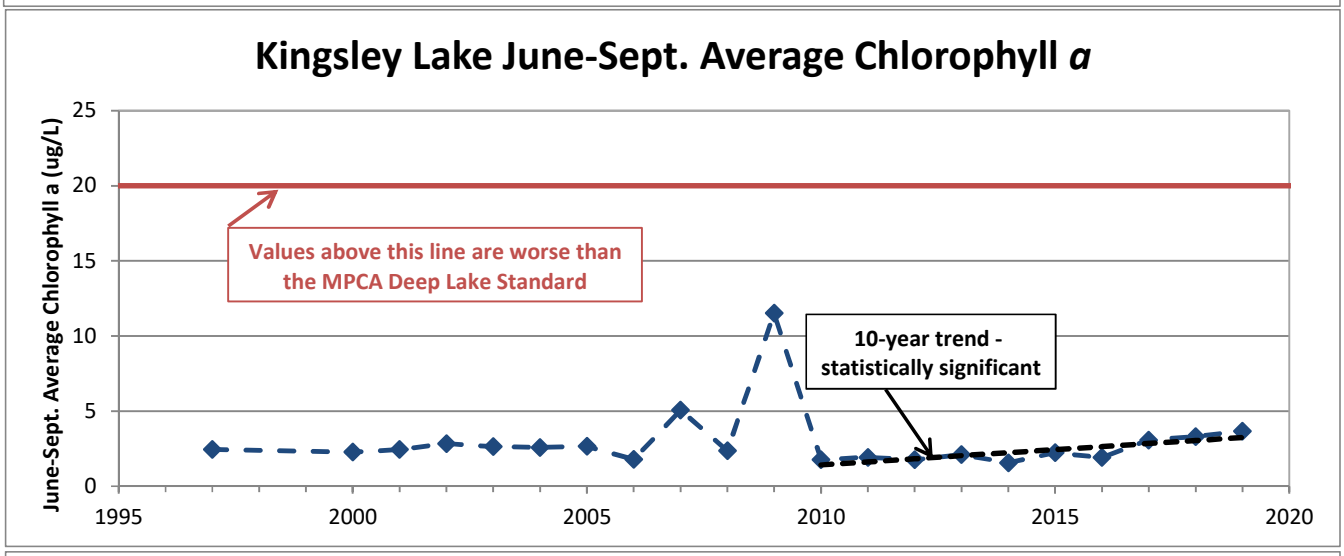

Crystal Lake June-Sept. Average Total Phosphorus
June-Sept. Ave. Total Phosphorus (ug/L)
70
60
50
40
30
20
10
0
1970
1980
1990
2000
2010
2020
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend

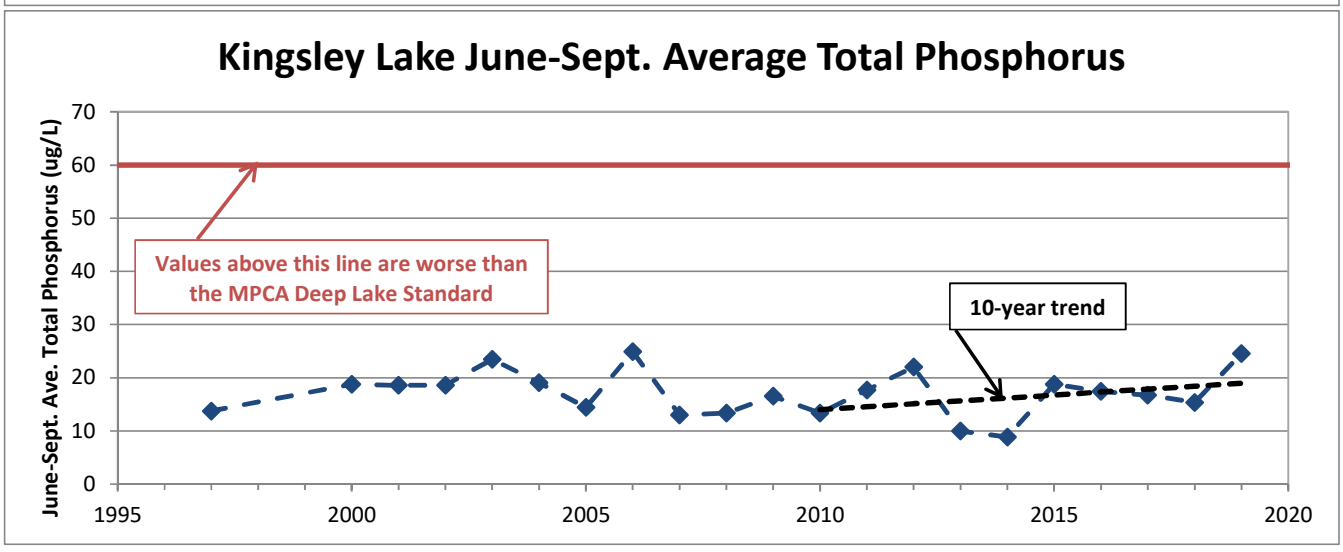

Keller Lake June-Sept. Secchi Disc Transparency
June-Sept. Average Secchi Disc Transparency (m)
0.0
0.5
1.0
1.5
2.0
2.5
1995
2000
2005
2010
2015
2020
Values above this line are worse than the MPCA Deep Lake Standard

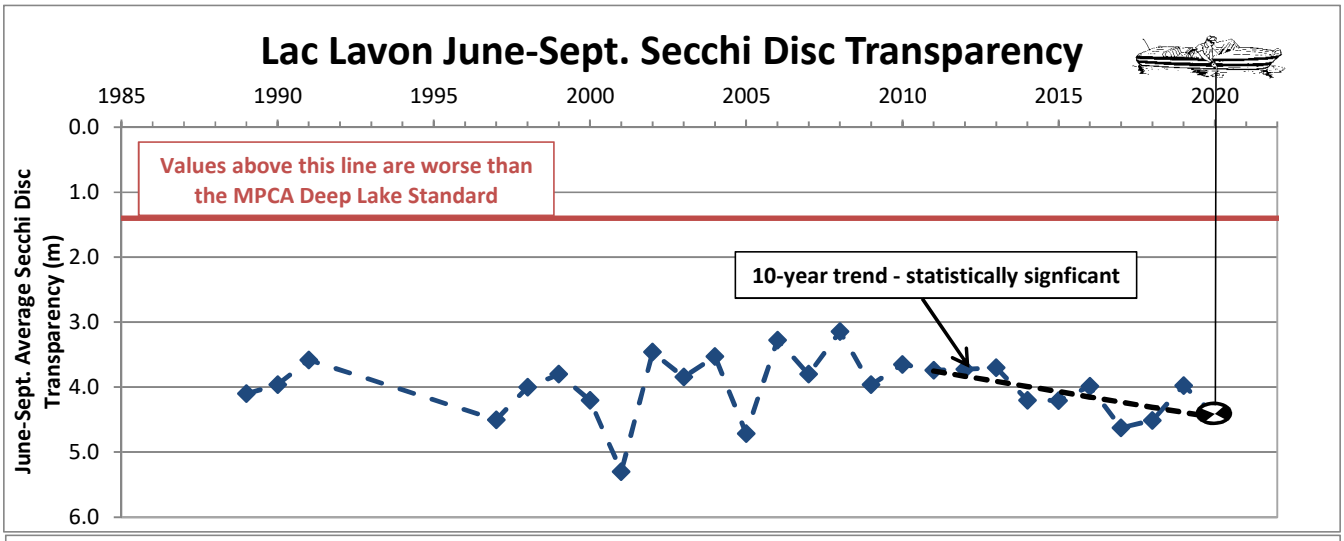

Keller Lake June-Sept. Average Chlorophyll a
June-Sept. Average Chlorophyll a (ug/L)
180
160
140
120
100
80
60
40
20
0
1995
2000
2005
2010
2015
2020
Values above this line are worse than the MPCA Deep Lake Standard

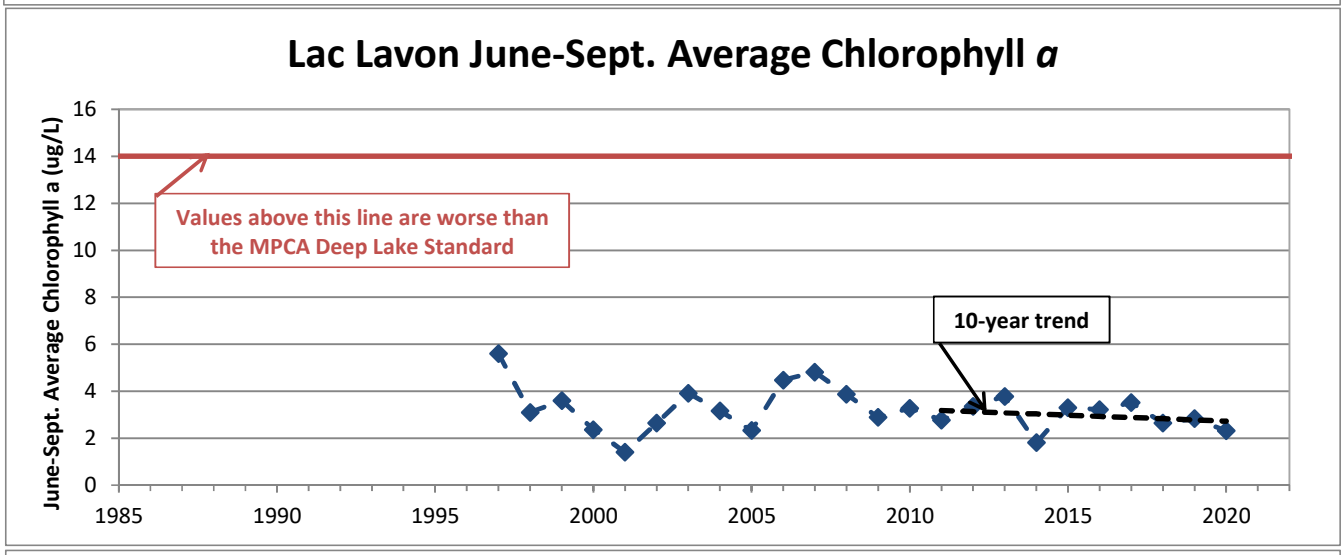

Keller Lake June-Sept. Average Total Phosphorus
June-Sept. Ave. Total Phosphorus (ug/L)
140
120
100
80
60
40
20
0
1995
2000
2005
2010
2015
2020
Values above this line are worse than the MPCA Deep Lake Standard

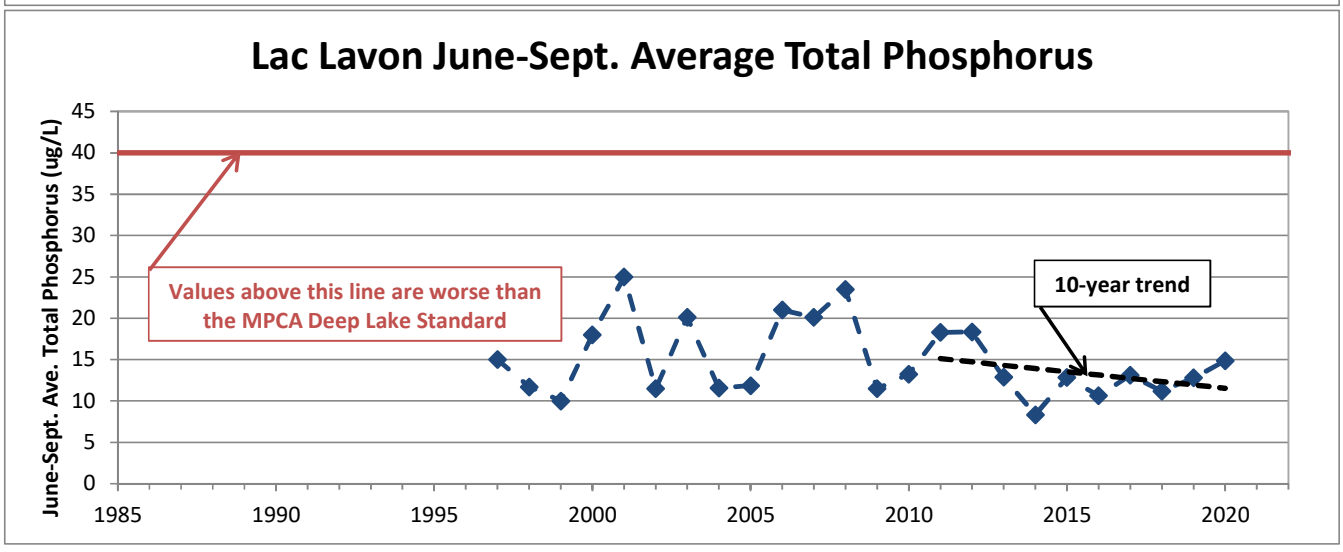

Kingsley Lake June-Sept. Secchi Disc Transparency
1990
1995
2000
2005
2010
2015
2020
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
June-Sept. Average Secchi Disc Transparency (m)
Values above this line are worse than the MPCA Deep Lake Standard
Secchi disc typically visible on lake bottom or vegetation

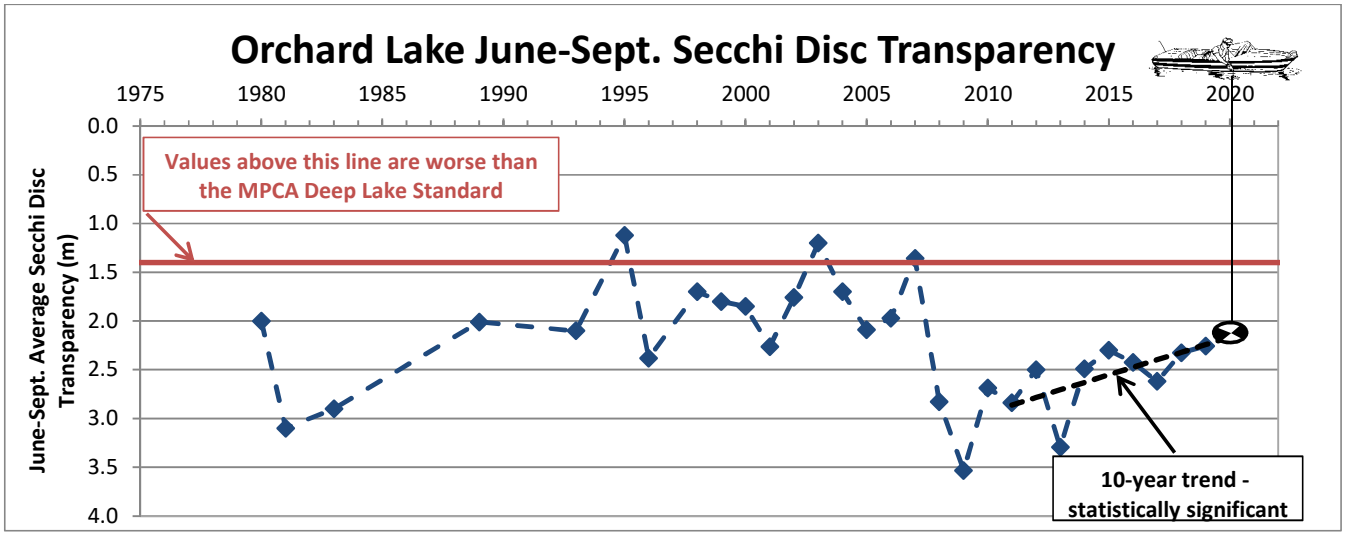

Kingsley Lake June-Sept. Average Chlorophyll a
25
20
15
10
5
0
1995
2000
2005
2010
2015
2020
June-Sept. Average Chlorophyll a (ug/L)
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend - statistically significant

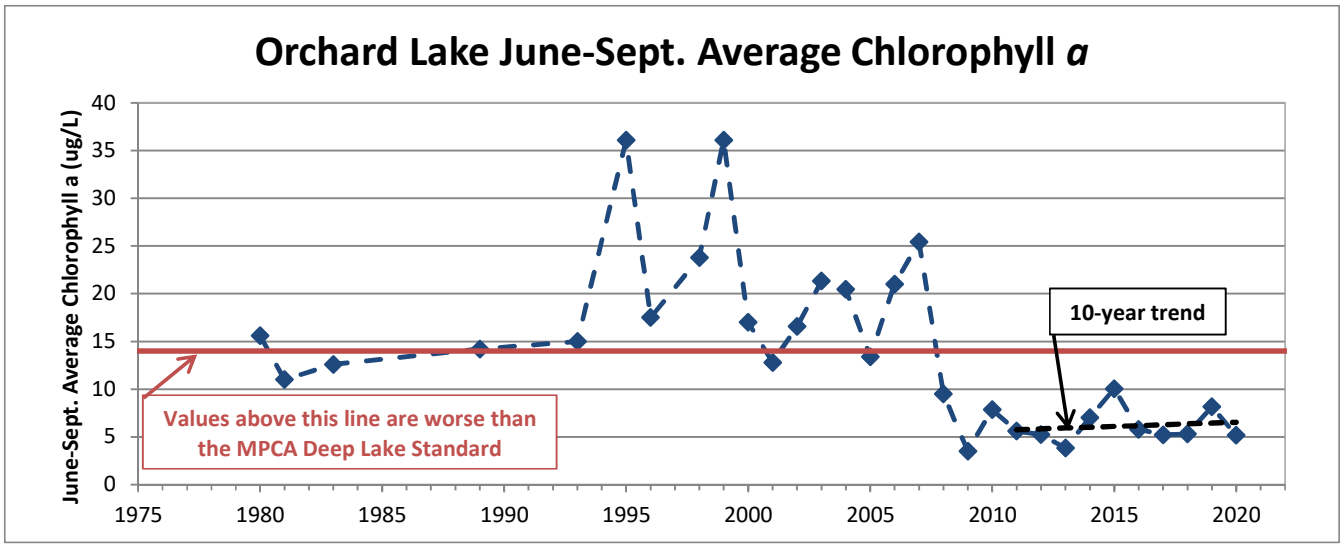

Kingsley Lake June-Sept. Average Total Phosphorus
70
60
50
40
30
20
10
0
1995
2000
2005
2010
2015
2020
June-Sept. Ave. Total Phosphorus (ug/L)
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend

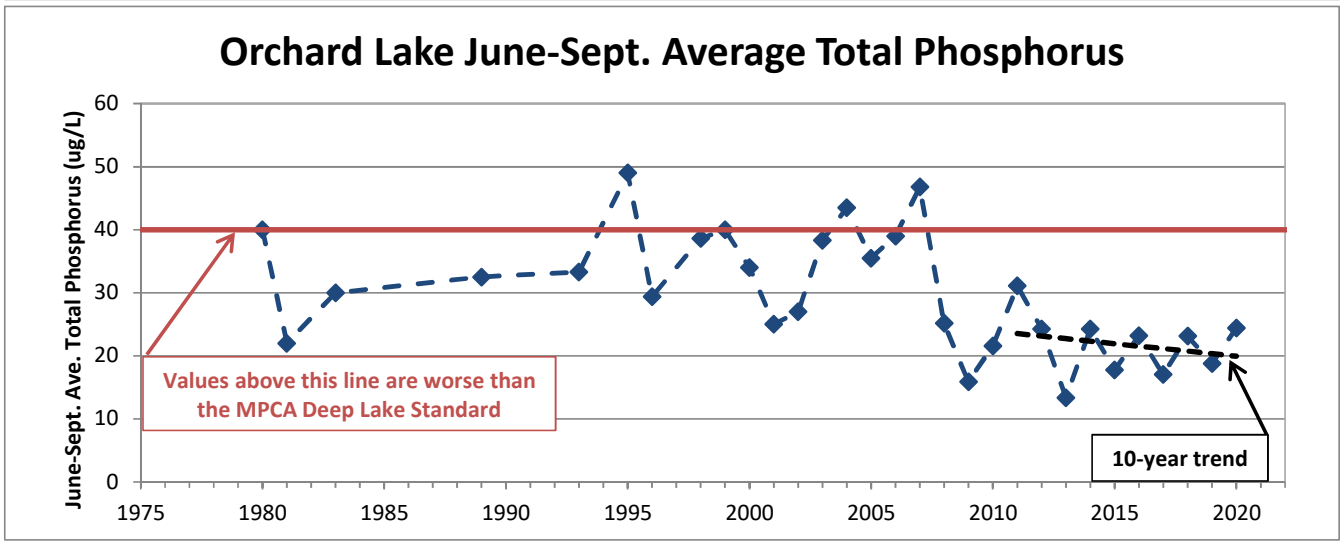

Lac Lavon June-Sept. Secchi Disc Transparency
June-Sept. Average Secchi Disc Transparency (m)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1985
1990
1995
2000
2005
2010
2015
2020
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend - statistically signficant


Lac Lavon June-Sept. Average Chlorophyll a
June-Sept. Average Chlorophyll a (ug/L)
0
2
4
6
8
10
12
14
16
1985
1990
1995
2000
2005
2010
2015
2020
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend


Lac Lavon June-Sept. Average Total Phosphorus
June-Sept. Ave. Total Phosphorus (ug/L)
0
5
10
15
20
25
30
35
40
45
1985
1990
1995
2000
2005
2010
2015
2020
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend


Orchard Lake June-Sept. Secchi Disc Transparency
June-Sept. Average Secchi Disc Transparency (m)
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend - statistically significant


Orchard Lake June-Sept. Average Chlorophyll a
June-Sept. Average Chlorophyll a (ug/L)
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend


Orchard Lake June-Sept. Average Total Phosphorus
June-Sept. Ave. Total Phosphorus (ug/L)
Values above this line are worse than the MPCA Deep Lake Standard
10-year trend

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2020 Water Quality Data—Tables

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Table 1: Crystal Lake 2020 Water Quality Data
Citizen-Assisted Monitoring Program

Sample Date	Sample Depth (m)	Secchi Disc Transparency (m)	Chlorophyll-a, Pheophytin Corrected (µg/L)	Total Phosphorus (µg/L)	Nitrogen, Total Kjeldahl (mg/L)	Temperature (°C)
5/22/2020	0	3.2	4.5	19	0.54	16.7
5/29/2020	0	4.2	3.0	16	0.51	19.0
5/30/2020	0	5.0	1.6	22	0.39	24.0
5/31/2020	0	4.0	< 1.0	14	0.29	24.0
6/1/2020	0	3.1	8.4	22	0.64	23.3
6/2/2020	0	2.2	4.6	14	0.61	29.2
6/3/2020	0	1.5	18	21	0.53	26.1
6/4/2020	0	1.8	12	30	0.61	21.6
6/5/2020	0	1.8	9.8	25	0.53	24.3
6/6/2020	0	1.5	26	46	0.76	21.7
6/7/2020	0	1.7	16	29	0.60	18.0
6/8/2020	0	1.7	22	33	0.79	16.9
6/9/2020	0	1.6	22	36	0.76	12.3

Notes
< 1.0 Indicates result is below the method detection limit.

Table 2: Keller Lake 2020 Water Quality Data
Citizen-Assisted Monitoring Program

Sample Date	Sample Depth (m)	Secchi Disc Transparency (m)	Chlorophyll-a, Pheophytin Corrected (µg/L)	Total Phosphorus (µg/L)	Nitrogen, Total Kjeldahl (mg/L)	Temperature (°C)
5/30/2020	0	1.8	5.8	26	0.66	22.5
6/12/2020	0	0.9	11	39	0.55	24.9
6/28/2020	0	0.9	13	45	0.82	27.5
7/11/2020	0	0.8	41	68	0.89	26.1
7/27/2020	0	0.7	33	91	0.86	18.7
8/27/2020	0	1.0	20	41	0.88	12.6
8/30/2020	0	0.9	24	45	0.92	13.4
9/18/2020	0	1.4	17	30	0.63	9.6
10/2/2020	0	1.9	7.6	24	0.62	8.7
10/12/2020	0	2.0	6.2	22	0.57	6.5

Table 3: Lac Lavon 2020 Water Quality Data
Citizen-Assisted Monitoring Program

Sample Date	Sample Depth (m)	Secchi Disc Transparency (m)	Chlorophyll-a, Pheophytin Corrected (µg/L)	Total Phosphorus (µg/L)	Nitrogen, Total Kjeldahl (mg/L)	Temperature (°C)
6/14/2020	0	5.2	1.3	15	0.57	22.8
6/30/2020	0	5.0	2.0	10	0.43	27.3
7/14/2020	0	3.9	2.4	14	0.44	27.4
7/27/2020	0	4.4	1.9	~ 5	0.47	27.8
8/9/2020	0	4.4	3.3	12	0.53	25.2
8/23/2020	0	3.9	2.1	17	0.49	27.6
9/21/2020	0	4.2	3.2	31	0.53	20.5
10/4/2020	0	3.1	7.8	21	0.61	15.2

Notes
~ 9 Indicates result is an estimated value above the method detection limit, but below the method reporting limit.

Table 4: Orchard Lake 2020 Water Quality Data, Citizen-Assisted Monitoring Program
Citizen-Assisted Monitoring Program

Sample Date	Sample Depth (m)	Secchi Disc Transparency (m)	Chlorophyll-a, Pheophytin Corrected (µg/L)	Total Phosphorus (µg/L)	Nitrogen, Total Kjeldahl (mg/L)	Temperature (°C)
5/30/2020	0	1.9	4.0	14	0.65	20.0
6/11/2020	0	2.8	2.2	12	0.58	
6/26/2020	0	3.4	1.6	~ 9	0.62	24.8
7/8/2020	0	2.8	3.6	16	0.44	29.4
7/24/2020	0	1.8	6.9	29	0.72	25.7
8/7/2020	0	1.5	11	30	1.00	24.9
8/20/2020	0	1.9	9.8	33	0.94	24.7
9/4/2020	0	1.1	< 1.0	34	0.68	21.7
9/20/2020	0	1.85	9.5	34	0.90	17.4
10/3/2020	0	2.0	8.9	22	0.84	14.9
10/17/2020	0	3.0	5.9	26	0.69	11.5

Notes
< 1.0 Indicates result is below the method detection limit.
~ 9 Indicates result is an estimated value above the method detection limit, but below the method reporting limit.

Table 5: Orchard Lake Water Quality Measured by Barr Engineering

		Field Measurements						Laboratory Analyses	
Sample Date	Sample Depth	Dissolved oxygen (mg/L)	pH	Specific conductance @ 25 ºC (umhos/cm)	Water Temperature (ºC)	Secchi disc (m)	Turbidity (NTU)	Chlorophyll-a, pheophytin-adjusted (µg/L)	Total Phosphorus as P (µg/L)
4/20/2020	0 - 2	--	--	--	--	2.8	2.5	3.3	21
4/20/2020	0	12.0	7.9	787	7.8	--	--	--	--
4/20/2020	1	11.9	7.9	786	7.8	--	--	--	--
4/20/2020	2	11.9	8.0	786	7.8	--	--	--	--
4/20/2020	3	11.9	8.0	787	7.8	--	--	--	20
4/20/2020	4	11.9	8.0	786	7.7	--	--	--	18
4/20/2020	5	11.7	8.0	787	7.5	--	--	--	24
4/20/2020	6	11.7	8.0	786	7.4	--	--	--	23
4/20/2020	7	11.7	8.0	786	7.4	--	--	--	22
4/20/2020	8	11.6	8.0	785	7.4	--	--	--	25
4/20/2020	8.5	10.6	7.4	786	7.3	--	--	--	30
5/18/2020	0 - 2	--	--	--	--	2.1	2.8	< 1	15
5/18/2020	0	9.7	8.2	790	13.7	--	--	--	--
5/18/2020	1	9.6	8.2	789	13.7	--	--	--	--
5/18/2020	2	9.6	8.2	790	13.7	--	--	--	--
5/18/2020	3	9.6	8.2	789	13.7	--	--	--	20
5/18/2020	4	9.5	8.2	788	13.6	--	--	--	15
5/18/2020	5	9.6	8.2	786	13.6	--	--	--	17
5/18/2020	6	9.5	8.2	787	13.6	--	--	--	11
5/18/2020	7	9.5	8.2	788	13.6	--	--	--	19
5/18/2020	8	9.0	8.2	786	13.5	--	--	--	23
6/02/2020	0 - 2	--	--	--	--	2.4	2.5	3.6	22
6/02/2020	0	9.8	8.3	767	22.4	--	--	--	--
6/02/2020	1	9.8	8.3	767	22.3	--	--	--	--
6/02/2020	2	9.5	8.3	770	22.0	--	--	--	--
6/02/2020	3	9.4	8.3	770	21.5	--	--	--	24
6/02/2020	4	8.1	8.0	784	18.5	--	--	--	34
6/02/2020	5	6.0	7.7	789	15.3	--	--	--	24
6/02/2020	6	5.2	7.6	789	14.0	--	--	--	25
6/02/2020	7	3.8	7.5	790	13.7	--	--	--	19
6/02/2020	8	1.9	7.4	793	13.3	--	--	--	26
6/02/2020	8.5	0.9	7.3	795	13.2	--	--	--	20

Table 5: Orchard Lake Water Quality Measured by Barr Engineering

		Field Measurements						Laboratory Analyses	
Sample Date	Sample Depth	Dissolved oxygen (mg/L)	pH	Specific conductance @ 25 ºC (umhos/cm)	Water Temperature (ºC)	Secchi disc (m)	Turbidity (NTU)	Chlorophyll-a, pheophytin-adjusted (µg/L)	Total Phosphorus as P (µg/L)
6/15/2020	0 - 2	--	--	--	--	2.8	1.2	2.0	18
6/15/2020	0	8.8	8.3	760	20.8	--	--	--	--
6/15/2020	1	8.8	8.4	758	20.8	--	--	--	--
6/15/2020	2	8.7	8.5	758	20.8	--	--	--	--
6/15/2020	3	8.7	8.5	758	20.8	--	--	--	17
6/15/2020	4	8.7	8.5	756	20.8	--	--	--	15
6/15/2020	5	8.7	8.5	758	20.8	--	--	--	22
6/15/2020	6	2.3	7.8	790	15.4	--	--	--	45
6/15/2020	7	0.6	7.5	793	14.0	--	--	--	41
6/15/2020	8	0.4	7.5	802	13.3	--	--	--	30
6/29/2020	0 - 2	--	--	--	--	3.0	2.4	4.0	18
6/29/2020	0	8.5	8.5	704	24.5	--	--	--	--
6/29/2020	1	8.5	8.5	704	24.8	--	--	--	--
6/29/2020	2	8.6	8.6	705	24.8	--	--	--	--
6/29/2020	3	7.7	8.5	719	24.7	--	--	--	18
6/29/2020	4	2.2	7.7	756	21.6	--	--	--	15
6/29/2020	5	0.5	7.5	781	19.5	--	--	--	18
6/29/2020	6	0.4	7.5	805	14.2	--	--	--	41
6/29/2020	7	0.3	7.5	819	13.5	--	--	--	38
6/29/2020	8	0.3	7.3	820	13.4	--	--	--	72
7/13/2020	0 - 2	--	--	--	--	2.1	3.8	6.7	28
7/13/2020	0	9.0	8.7	668	27.4	--	--	--	--
7/13/2020	1	9.0	8.7	668	27.5	--	--	--	--
7/13/2020	2	9.0	8.8	667	27.5	--	--	--	--
7/13/2020	3	9.0	8.9	668	27.5	--	--	--	22
7/13/2020	4	2.9	7.9	640	25.3	--	--	--	32
7/13/2020	5	0.4	7.7	666	22.1	--	--	--	95
7/13/2020	6	0.3	7.7	784	18.6	--	--	--	44
7/13/2020	7	0.2	7.7	805	15.7	--	--	--	40
7/13/2020	8	0.2	7.7	833	13.4	--	--	--	130

Table 5: Orchard Lake Water Quality Measured by Barr Engineering

		Field Measurements						Laboratory Analyses	
Sample Date	Sample Depth	Dissolved oxygen (mg/L)	pH	Specific conductance @ 25 ºC (umhos/cm)	Water Temperature (ºC)	Secchi disc (m)	Turbidity (NTU)	Chlorophyll-a, pheophytin-adjusted (µg/L)	Total Phosphorus as P (µg/L)
7/27/2020	0 - 2	--	--	--	--	1.8	3.3	3.1	24
7/27/2020	0	7.7	8.3	665	25.9	--	--	--	--
7/27/2020	1	7.6	8.3	666	25.9	--	--	--	--
7/27/2020	2	7.6	8.4	664	25.9	--	--	--	--
7/27/2020	3	7.6	8.4	664	25.9	--	--	--	22
7/27/2020	4	7.4	8.4	664	25.8	--	--	--	21
7/27/2020	5	0.3	7.4	686	23.4	--	--	--	58
7/27/2020	6	0.3	7.2	779	18.8	--	--	--	42
7/27/2020	7	0.3	7.3	818	15.7	--	--	--	45
7/27/2020	8	0.3	7.3	840	13.9	--	--	--	190
7/27/2020	8.5	0.2	7.2	860	13.0	--	--	--	310
8/10/2020	0 - 2	--	--	--	--	1.6	4.0	7.3	27
8/10/2020	0	7.5	8.2	668	24.5	--	--	--	--
8/10/2020	1	7.4	8.2	668	24.5	--	--	--	--
8/10/2020	2	7.4	8.3	667	24.5	--	--	--	--
8/10/2020	3	7.4	8.3	668	24.5	--	--	--	28
8/10/2020	4	7.4	8.3	667	24.4	--	--	--	28
8/10/2020	5	3.8	7.8	683	23.8	--	--	--	31
8/10/2020	6	0.3	7.3	768	20.1	--	--	--	54
8/10/2020	7	0.3	7.3	830	16.0	--	--	--	68
8/10/2020	8	0.3	7.3	841	14.8	--	--	--	190
8/26/2020	0 - 2	--	--	--	--	1.7	4.3	4.3	24
8/26/2020	0	8.4	8.4	668	26.4	--	--	--	--
8/26/2020	1	8.5	8.5	668	26.4	--	--	--	--
8/26/2020	2	8.5	8.5	667	26.4	--	--	--	--
8/26/2020	3	8.5	8.2	672	25.5	--	--	--	23
8/26/2020	4	2.7	7.6	673	24.4	--	--	--	26
8/26/2020	5	0.4	7.3	688	23.1	--	--	--	36
8/26/2020	6	0.3	7.2	756	20.2	--	--	--	41
8/26/2020	7	0.2	7.2	821	16.9	--	--	--	69
8/26/2020	8	0.2	7.1	862	14.6	--	--	--	96

Table 5: Orchard Lake Water Quality Measured by Barr Engineering

		Field Measurements						Laboratory Analyses	
Sample Date	Sample Depth	Dissolved oxygen (mg/L)	pH	Specific conductance @ 25 ºC (umhos/cm)	Water Temperature (ºC)	Secchi disc (m)	Turbidity (NTU)	Chlorophyll-a, pheophytin-adjusted (µg/L)	Total Phosphorus as P (µg/L)
9/10/2020	0 - 2	--	--	--	--	1.5	5.0	4.3	28
9/10/2020	0	6.2	7.3	678	17.6	--	--	--	--
9/10/2020	1	5.8	7.4	678	17.6	--	--	--	--
9/10/2020	2	5.8	7.5	678	17.6	--	--	--	--
9/10/2020	3	5.7	7.6	678	17.6	--	--	--	29
9/10/2020	4	5.7	7.7	678	17.6	--	--	--	26
9/10/2020	5	5.7	7.7	677	17.6	--	--	--	26
9/10/2020	6	5.6	7.7	677	17.5	--	--	--	26
9/10/2020	7	4.2	7.6	695	17.1	--	--	--	36
9/10/2020	8	0.5	7.3	846	15.8	--	--	--	140
9/21/2020	0 - 2	--	--	--	--	1.5	7.3	4.3	28
9/21/2020	1	8.4	7.7	691	16.8	--	--	--	--
9/21/2020	2	8.4	7.8	691	16.8	--	--	--	--
9/21/2020	3	8.3	7.8	691	16.8	--	--	--	29
9/21/2020	4	8.3	7.8	691	16.8	--	--	--	26
9/21/2020	5	8.2	7.9	692	16.8	--	--	--	26
9/21/2020	6	8.2	7.8	692	16.8	--	--	--	26
9/21/2020	7	8.3	7.8	692	16.8	--	--	--	36
9/21/2020	8	8.1	7.8	693	16.7	--	--	--	140

2020 Annual Finance Statement

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BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Net Position
as of December 31, 2020

	Governmental Activities 2020
Assets	
Cash and investments	572,983.92
Accounts receivable	-
Due from other governmental units	-
Prepaids	-
Capital assets	
Buildings	37,600.00
Equipment	110,138.00
Less accumulated depreciation	(134,578.00)
Total capital assets, net of accumulated depreciation	13,160.00
Total assets	586,143.92
Liabilities	
Accounts payable	4,338.50
Due to other governmental units	24,906.21
Unearned revenue	14,061.20
Total liabilities	43,305.91
Net position	
Net investment in capital assets	13,160.00
Restricted for capital improvements	108,073.33
Unrestricted	421,604.68
Total net position	542,838.01
Total liabilities and net position	586,143.92

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Unaudited
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BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Activities
Year Ended December 31, 2020

	Governmental Activities 2020
Expenses	
General government	
System operations	80,244.45
Administrative services	45,854.33
Depreciation	940.00
Total program expenses	127,038.78
Revenues	
General government	
Charges for services	
Management fees	153,000.00
Grants	
State of MN Board of Water and Soil Resources	-
General revenues	
Interest earnings	2,051.14
Total revenues	155,051.14
Change in net position	28,012.36
Net position	
Beginning of year	514,825.65
End of year	542,838.01

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Balance Sheet
Governmental Funds
Year Ended December 31, 2020

	General Fund	Capital Improvement Fund	Total Governmental Funds 2020
Assets			
Cash and investments	450,849.39	122,134.53	572,983.92
Liabilities			
Accounts payable	4,338.50	0.00	4,338.50
Due to other governmental units	24,906.21	0.00	24,906.21
Unearned revenue	0.00	14,061.20	14,061.20
Total liabilities	29,244.71	14,061.20	43,305.91
Fund balances			
Restricted for capital improvements	0.00	108,073.33	108,073.33
Assigned for subsequent year's budget deficit	73,460.00	0.00	73,460.00
Unassigned	348,144.68	0.00	348,144.68
Total fund balances	421,604.68	108,073.33	529,678.01
Total liabilities, deferred inflows of resources, and fund balances	450,849.39	122,134.53	572,983.92

Amounts reported for governmental activities in the Statement of Net Position differ because:	
Fund balances – governmental funds	529,678.01
Capital assets used in governmental activities are not financial resources and, therefore, are not reported as assets in governmental funds.	
Cost of capital assets	147,738.00
Less accumulated depreciation	(134,578.00)
Net position of governmental activities	542,838.01

Unaudited
Prepared by City of Burnsville

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Revenue, Expenditures, and Changes in Fund Balances
Governmental Funds
Year Ended December 31, 2020

	General Fund	Capital Improvement Fund	Total Governmental Funds 2020
Revenue			
Member assessments	131,000.00	22,000.00	153,000.00
Intergovernmental Revenue - Grants	-	-	-
Interest earnings	2,051.14	-	2,051.14
Total revenue	133,051.14	22,000.00	155,051.14
Expenditures			
General government			
System Operations			
Engineering	27,590.92	-	27,590.92
Special Projects	36,747.53	714.00	37,461.53
Insurance	2,301.00	-	2,301.00
Water quality monitoring	12,891.00	-	12,891.00
Administrative services			
Legal and audit	9,320.40	-	9,320.40
Administrative costs	19,101.21	-	19,101.21
Public education	17,292.00	-	17,292.00
Conferences, publications and reports	25.50	-	25.50
Contingency	115.22	-	115.22
Total expenditures	125,384.78	714.00	126,098.78
Expenditures	7,666.36	21,286.00	28,952.36
Other Financing Source (Uses)			
Transfers in	-	-	-
Transfers out	-	-	-
Total other financing sources (uses)	-	-	-
Net change in fund balances	7,666.36	21,286.00	28,952.36
Fund balances			
Beginning of year	413,938.32	86,787.33	500,725.65
End of year	421,604.68	108,073.33	529,678.01

Amounts reported for governmental activities in the Statement of Activities are different because:

Net change in fund balances – governmental funds	28,952.36
Capital outlays are reported as expenditures in governmental funds, but are allocated over the estimated useful lives of the capital assets as depreciation expense in the Statement of Activities.	
Depreciation expense	(940.00)
Change in net position of governmental activities	28,012.36

Unaudited
Prepared by City of Burnsville

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Revenue, Expenditures, and Changes in Fund Balances
Budget and Actual
General Fund
Year Ended December 31, 2020

	2020		
	Original and Final Budget	Actual	Over (Under) Final Budget
Revenue			
Management fees	131,000.00	131,000.00	-
Intergovernmental Revenue - Grants	-	-	-
Interest earnings	40.00	2,051.14	2,011.14
Total revenue	131,040.00	133,051.14	2,011.14
Expenditures			
General government			
System Operations			
Engineering	31,000.00	27,590.92	(3,409.08)
Special Projects	46,500.00	36,747.53	(9,752.47)
Insurance	3,000.00	2,301.00	(699.00)
Water quality monitoring	15,400.00	12,891.00	(2,509.00)
Administrative services			
Legal and audit	8,400.00	9,320.40	920.40
Administrative costs	18,000.00	19,101.21	1,101.21
Public education	17,900.00	17,292.00	(608.00)
Conferences, publications and reports	500.00	25.50	(474.50)
Contingency	5,000.00	115.22	(4,884.78)
Total expenditures	145,700.00	125,384.78	(20,315.22)
Expenditures	(14,660.00)	7,666.36	22,326.36
Other Financing Source (Uses)			
Transfers in	-	-	-
Transfers out	-	-	-
Total other financing sources (uses)	-	-	-
Net change in fund balances	(14,660.00)	7,666.36	22,326.36
Fund balances			
Beginning of year		413,938.32	
End of year		421,604.68	

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Revenue, Expenditures, and Changes in Fund Balances
Budget and Actual
Capital Improvement Fund
Year Ended December 31, 2020

	2020		
	Original and Final Budget	Actual	Over (Under) Final Budget
Revenue			
Management fees	22,000.00	22,000.00	-
Intergovernmental Revenue - Grants	-	-	-
Interest earnings	-	-	-
Total revenue	22,000.00	22,000.00	-
Expenditures			
General government			
System Operations			
Engineering	-	-	-
Special Projects	-	714.00	714.00
Insurance	-	-	-
Water quality monitoring	-	-	-
Administrative services			
Legal and audit	-	-	-
Administrative costs	-	-	-
Public education	-	-	-
Conferences, publications and reports	-	-	-
Contingency	-	-	-
Total expenditures	-	714.00	714.00
Excess (Deficiency) of Revenues Over (Under) Expenditures	22,000.00	21,286.00	(714.00)
Other Financing Source (Uses)			
Transfers in	-	-	-
Transfers out	-	-	-
Total other financing sources (uses)	-	-	-
Net change in fund balances	22,000.00	21,286.00	(714.00)
Fund balances			
Beginning of year		86,787.33	
End of year		108,073.33	