

Black Dog Watershed Management Commission

Agenda Background May 18, 2022

I. Approval of Agenda

Agenda enclosed.

Action Requested: A motion be considered to approve the Agenda.

II. Approval of Minutes from the April 20, 2022 Meeting

Minutes enclosed.

Action Requested: A motion be considered to approve the Minutes from the April 20, 2022 meeting.

III. Approval of Accounts Payable

Accounts payable list enclosed.

Action Requested: A motion be considered to approve the accounts payable list as submitted by staff.

IV. Review of Budget Performance Reports

Current Budget Performance Reports enclosed.

Action Requested: No formal action required.

V. Approval of the 2021 Annual Activity Report

The Commission is required to generate and distribute an Annual Activity Report. Enclosed is a "Draft" of the 2021 Annual Activity Report for the Commission's review and approval.

Action requested: Consider a motion approving the annual activity report and authorizing staff to distribute to the appropriate parties.

VI. Approval of the Draft 2023 Work Plan and Budget

Enclosed is a "Draft" Work Plan and Budget for 2023. Per the BDWMO Joint Powers Agreement, the Commission is to send out a proposed budget for 2023 by July 1, 2022.

Staff will provide an overview of the work plan and budget at the meeting and answer any questions Commissioners might have.

Action Requested: Commissioners consider a motion approving the 2023 work plan and budget for distribution to member cities.

VII. Miscellaneous

VIII. Adjournment

Black Dog Watershed Management Commission

AGENDA

Wednesday, May 18, 2022

5:00 P.M.

COMMISSIONERS:

Curt Enestvedt, Chairperson

Mike Hughes, Vice-Chairperson

Scott Thureen, Secretary/Treasurer

Tom Harmening

Rollie Greeno

Frank Boyce, Alternate

Greg Helms, Alternate

Natalie Walker, Alternate

- I. Approval of Agenda
- II. Approval of Minutes – April 20, 2022
- III. Approval of Accounts Payable
- IV. Review Budget Performance Reports
- V. Approval of 2021 Annual Activity Report
- VI. Approval of Draft 2023 Work Plan and Budget
- VII. Miscellaneous
- VIII. Adjournment

The City of Burnsville and Black Dog Watershed Management Organization do not discriminate on the basis of race, color, national origin, sex, religion, age, or disability in the admission or access to, or treatment or employment in, its programs, activities, or services.

To obtain this information in alternative forms such as braille, large print, audiotape or qualified readers, please contact the City of Burnsville. Telephone (952) 895-4400, TDD (952) 895-4567.

DRAFT

Meeting Minutes

April 20, 2022

MEMBERS PRESENT

Curt Enestvedt, Chair
Mike Hughes, Vice Chair
Scott Thureen, Secretary/Treasurer
Tom Harmening
Greg Helms, Alternate

MEMBERS ABSENT

Frank Boyce, Alternate
Rollie Greeno
Natalie Walker, Alternate

OTHERS PRESENT

Karen Chandler – Barr Engineering
Greg Williams – Barr Engineering
Joel Jamnik – Campbell Knutson
Samantha Berger – City of Apple Valley
Ann Messerschmidt – City of Lakeville
Curt Coudron – Dakota County Soil and Water Conservation District
Daryl Jacobson – BDWMO Administrator
Marie Maczko – Fill in BDWMO Secretary

Curt Enestvedt, Chair, called the April 20, 2022 meeting to order at 5:00pm.

I. Approval of Agenda

Motion by Thureen, second by Hughes, to approve the April 20, 2022 Agenda as presented.

Ayes – Enestvedt, Hughes, Thureen, Harmening, Helms

Nays – None

Motion Carried Unanimously

II. Approval of Minutes from the March 16, 2022 Meeting

Motion by Harmening, second by Hughes, to approve the March 16, 2022 Minutes as presented.

Ayes – Enestvedt, Hughes, Thureen, Harmening, Helms

Nays – None

Motion Carried Unanimously

III. Approval of Accounts Payable

Motion by Thureen, second by Harmening, to approve accounts payable to Barr Engineering in the amount of \$18,745.13 for services from February 26, 2022 through April 1, 2022; and, to Campbell Knutson in the amount of \$157.50 for March 2022 general services.

Ayes – Enestvedt, Hughes, Thureen, Harmening, Helms

Nays – None

Motion Carried Unanimously

IV. Review Budget Performance Reports

Daryl Jacobson, BDWMO Administrator, shared that invoices have gone out. The budget for 2023 will be discussed next month.

No Formal Action Required

V. Approval of the Liability Coverage Waiver form

Each year in conjunction with completing the BDWMO's insurance application the Commission is required to complete a Liability Coverage Waiver Form. This form states whether or not the WMO wishes to waive the statutory tort liability limits. Historically, the Black Dog WMO has chosen not to waive the monetary limits on tort liability established by MN statutes.

Motion by Harmening, second by Hughes, to approve the liability coverage waiver form, not waiving the monetary limits on municipal tort liability established by MN Statutes 466.04

Ayes – Enestvedt, Hughes, Thureen, Harmening, Helms

Nays – None

Motion Carried Unanimously

VI. Review 2021 Kingsley Lake Habitat Monitoring Report

Karen Chandler, Barr Engineering, reviewed the 2021 Kingsley Lake Monitoring Report, which was in the packet. The technical memo provides information most people will find beneficial. The technical reference provides more detailed information and data.

Motion by Harmening, second by Thureen, to accept the 2021 Kingsley Lake Habitat Monitoring Report as presented.

Ayes – Enestvedt, Hughes, Thureen, Harmening, Helms

Nays – None

Motion Carried Unanimously

VII. Review 2021 Crystal Lake Water Quality Monitoring Report

Barr Engineering, Kevin Menken, reviewed with the Commission the monitoring performed in 2021 on Crystal Lake. He briefly went over the information available in the packet, and it was noted that no new information has been added although the MPCA has removed Crystal Lake from the impaired lake listing.

Motion by Hughes, second by Thureen, to accept the 2021 Crystal Lake Water Quality Monitoring Report as presented.

Ayes – Enestvedt, Hughes, Thureen, Harmening, Helms

Nays – None

Motion Carried Unanimously

VIII. Review Draft of the 2022 Watershed Management Plan

Barr Engineering, Greg Williams, took lead of the discussion on the draft plan. This has been reviewed several times and the Commission is familiar with the plan. It was noted that the Black Dog WMO's goal is to have the new plan approved before the current plan expires.

Motion by Hughes, second by Thureen, authorizing Barr to distribute the draft plan for a formal 60-day review. When reviewed by Board of Water and Soil Resources (BWSR) the plan will not need to come back to the Commission for approval, unless there are significant changes.

Ayes – Enestvedt, Hughes, Thureen, Harmening, Helms

Nays – None

Motion Carried Unanimously

IX. Miscellaneous

1. The next Black Dog WMO meeting will be May 18, 2022
2. 2023 Draft budget will be reviewed at the May meeting

X. Adjournment

Motion by Helms, second by Harmening, to adjourn at 5:58 pm.

Ayes – Enestvedt, Hughes, Thureen, Harmening, Helms

Nays – None

Motion Carried Unanimously



Accounts Payable - May 18, 2022 Meeting

Barr Engineering - Services from April 2, 2022 through, April 29, 2022

Engineering	\$	3,454.25
Special Projects General Fund - Reporting on Crystal Lk 2021 Water Qual Mon	\$	1,511.50
Special Projects: General Fund - 2022 Management Level Monitoring - Lac Lavon	\$	758.38
Special Projects: General Fund Reserve - Watershed Management Update	\$	2,447.50
Water Quality Monitoring - Reporting on 2021 Kingsley Lake Habitat Monitoring	\$	1,050.50
Water Quality Monitoring - Update Trend Analyses	\$	390.00
Public Education - Watershed Annual Report	\$	95.00
Public Education - Annual Activity Report (BWSR)	\$	1,642.50
	\$	11,349.63

Campbell Knutson

General Services - April 2022	\$	262.50
	\$	262.50

Dakota County Soil & Water Conservation District - Services for January-March 2022

Website Updates & Maintenance	\$	170.00
Website Hosting (Annual, Includes Security)	\$	965.00
	\$	1,135.00

Accounts Payable Total \$ 12,747.13

resourceful. naturally.
engineering and environmental consultants



May 10, 2022

Black Dog Watershed Management Commission
City of Burnsville
13713 Frontier Court
Burnsville, MN 55337-4720

Attn: Mr. Daryl Jacobson

RE: Engineering & Environmental Consulting Services

**Invoice of Account with
BARR ENGINEERING COMPANY**

For professional services during the period of April 2, 2022 through April 29, 2022

TOTAL PAYABLE THIS INVOICE:	\$ 11,349.63
Allocation:	
Engineering	\$ 3,454.25
Special Projects: General Fund	
• Reporting on Crystal Lk 2021 Water Qual Mon	\$ 1,511.50
• Lac Lavon 2022 Management Level Monitoring	\$ 758.38
Special Projects: General Fund Reserve	
• Watershed Management Update	\$ 2,447.50
Water Quality Monitoring	
• Reporting on 2021 Kingsley Lake Habitat Mon	\$ 1,050.50
• Update Trend Analyses	\$ 390.00
Public Education	
• Watershed Annual Report	\$ 95.00
• Annual Activity Report (BWSR)	\$ 1,642.50

Barr declares under the penalties of law that
this account, claim, or demand is just and that
no part of it has been paid.

Karen L. Chandler

Karen L. Chandler
Vice President

BUDGET SUMMARY - 2022 FY
Black Dog Watershed Management Commission
through April 29, 2022

Work Description	Pre-2022 Costs	2022 Barr Budget	Current Invoice	Spent This Year	Balance
Engineering	-----	31,000.00	3,454.25	11,106.72	19,893.28
Special Projects: General Fund					
<i>Reporting on Crystal Lk 2021 Water Quality Monitoring</i>	-----	4,600.00	1,511.50	4,558.00	42.00
<i>Lac Lavon 2022 Management Level Monitoring</i>		22,500.00	758.38	1,132.88	21,367.12
Subtotal -- Special Projects: General Fund	-----	27,100.00	2,269.88	5,690.88	21,409.12
Special Projects: General Fund Reserve					
<i>Watershed Management Plan Update</i> ¹	41,159.50	40,000.00	2,447.50	25,070.50	14,929.50
Subtotal -- Special Projects: General Fund Reserve	-----	40,000.00	2,447.50	25,070.50	14,929.50
Water Quality Monitoring					
<i>Reporting on 2021 Kingsley Lake Habitat Monitoring</i>	-----	9,200.00	1,050.50	9,181.00	19.00
<i>2022 Orchard Lake Habitat Monitoring</i>		2,200.00		72.50	2,127.50
<i>Update Trend Analyses</i>	-----	2,000.00	390.00	1,885.00	115.00
Subtotal -- W.Q. Monitoring	-----	13,400.00	1,440.50	11,138.50	2,261.50
Public Education					
<i>Watershed Annual Report</i>	-----	4,300.00	95.00	4,841.50	(541.50)
<i>Annual Activity Report (BWSR)</i>	-----	2,000.00	1,642.50	1,642.50	357.50
Subtotal -- Public Education	-----	6,300.00	1,737.50	6,484.00	(184.00)
Total Services	-----	117,800.00	11,349.63	59,490.60	58,309.40

Notes:

¹ Plan Update budget=\$98,200 (\$97,000 authorized at 11/18/2020 meeting, additional \$1,200 authorized at 1/20/2021 meeting), including \$10,000 budgeted in 2020



INVOICE

Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435
Phone: 952-832-2600; Fax: 952-832-2601
FEIN #: 41-0905995 Inc: 1966

Remittance address:
Lockbox 446104
PO Box 64825
St Paul, MN 55164-0825

Mr. Daryl Jacobson
Black Dog WMO
City of Burnsville
13713 Frontier Court
Burnsville, MN 55337-4720

May 9, 2022
Invoice No: 23190374.22 - 4

Total this Invoice	\$5,191.75
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Regarding: BDWMO 2022 Engineering Services

Professional Services from April 2, 2022 to April 29, 2022

Job:	2022	Engineering Services
Task:	001	Attend BDWMO Meetings

Labor Charges

	Hours	Rate	Amount
Vice President Chandler, Karen	2.30	190.00	437.00
Engineer / Scientist / Specialist III Williams, Sterling	2.00	155.00	310.00
	4.30		747.00
Subtotal Labor			747.00

Expense Charges

Travel			
4/20/2022	Chandler, Karen	Mileage	14.04
Subtotal Expenses			14.04

Task Subtotal \$761.04

Task:	002	Miscellaneous Consulting
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Labor Charges

	Hours	Rate	Amount
Vice President Chandler, Karen	13.80	190.00	2,622.00
Support Personnel II Shea, Jayne-Anne	.40	140.00	56.00
	14.20		2,678.00
Subtotal Labor			2,678.00

Terms: Due upon receipt. 1 1/2% per month after 30 days. Please refer to the contract if other terms apply.

Project	23190374.22	BDWMO 2022 Engineering Services	Invoice	4
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Expense Charges

Travel				
4/6/2022	Chandler, Karen	Mileage	15.21	
	Subtotal Expenses			15.21
		Task Subtotal		\$2,693.21

Task: 003 Annual BWSR Activity Report

Labor Charges

	Hours	Rate	Amount	
Vice President				
Chandler, Karen	8.40	190.00	1,596.00	
Engineer / Scientist / Specialist III				
Williams, Sterling	.30	155.00	46.50	
	8.70		1,642.50	
	Subtotal Labor			1,642.50
		Task Subtotal		\$1,642.50

Task: 004 Newsletter/Watershed Report

Labor Charges

	Hours	Rate	Amount	
Support Personnel I				
Kaul (Contracted), Karen	1.00	95.00	95.00	
	1.00		95.00	
	Subtotal Labor			95.00
		Task Subtotal		\$95.00
		Job Subtotal		\$5,191.75
		Total this Invoice		\$5,191.75

	Current	Prior	Total	Received	A/R Balance
Invoiced to Date	5,191.75	12,398.97	17,590.72	12,398.97	5,191.75

Thank you in advance for the prompt processing of this invoice. If you have any questions, please contact Karen Chandler, your Barr project manager, at (952) 832-2813 or email at kchandler@barr.com.



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Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435
Phone: 952-832-2600; Fax: 952-832-2601
FEIN #: 41-0905995 Inc: 1966

Remittance address:
Lockbox 446104
PO Box 64825
St Paul, MN 55164-0825

Mr. Daryl Jacobson
Black Dog WMO
City of Burnsville
13713 Frontier Court
Burnsville, MN 55337-4720

May 9, 2022

Invoice No: 23190375.22 - 4

Total this Invoice	\$2,269.88
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Regarding: 2022 BDWMO Management Level Water Quality Monitoring

Professional Services from April 2, 2022 to April 29, 2022

Job: CRY Crystal Lk 2021 Reporting

Task: 100 Letter Report

Labor Charges

	Hours	Rate	Amount
Vice President			
Chandler, Karen	.80	190.00	152.00
Engineer / Scientist / Specialist II			
Menken, Kevin	2.50	130.00	325.00
Support Personnel II			
Huffman, Yvonne	.50	105.00	52.50
Shea, Jayne-Anne	.30	140.00	42.00
	4.10		571.50
Subtotal Labor			571.50
		Task Subtotal	\$571.50

Task: 200 Presentation

Labor Charges

	Hours	Rate	Amount
Vice President			
Chandler, Karen	.50	190.00	95.00
Engineer / Scientist / Specialist II			
Menken, Kevin	6.50	130.00	845.00
	7.00		940.00
Subtotal Labor			940.00
		Task Subtotal	\$940.00
		Job Subtotal	\$1,511.50

Terms: Due upon receipt. 1 1/2% per month after 30 days. Please refer to the contract if other terms apply.

Project	23190375.22	Management Level Water Qual Monitoring	Invoice	4
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Job: LAC Lac Lavon 2022 Water Quality Monitoring

Task: 100 Monitoring Data Mgmt & Proj Mgmt

Labor Charges

	Hours	Rate	Amount	
Engineer / Scientist / Specialist II				
Menken, Kevin	.40	130.00	52.00	
Technician II				
Melmer, David	3.00	95.00	285.00	
Novack, John	2.20	105.00	231.00	
Support Personnel II				
Treanor, Margaret	.40	120.00	48.00	
	6.00		616.00	
Subtotal Labor				616.00

Unit Charges

Barr Owned Vehicle Use	0.5 days @ 95.00	47.50	
Canoe	0.5 days @ 32.00	16.00	
Ice (per bag)	2.0 ea @ 2.50	5.00	
Kemmerer Vertical Bottle Sampler	0.5 days @ 33.50	16.75	
Vehicle (Mileage)	25.0 miles @ 0.585	14.63	
Water Quality Meter (YSI 556 MPS)	0.5 days @ 85.00	42.50	
Subtotal Units			142.38

Task Subtotal \$758.38

Job Subtotal \$758.38

Total this Invoice \$2,269.88

	Current	Prior	Total	Received	A/R Balance
Invoiced to Date	2,269.88	3,421.00	5,690.88	3,421.00	2,269.88

Thank you in advance for the prompt processing of this invoice. If you have any questions, please contact Kevin Menken, your Barr project manager, at (952) 832-2794 or email at kmenken@barr.com.



INVOICE

Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435
Phone: 952-832-2600; Fax: 952-832-2601
FEIN #: 41-0905995 Inc: 1966

Remittance address:
Lockbox 446104
PO Box 64825
St Paul, MN 55164-0825

Mr. Daryl Jacobson
Black Dog WMO
City of Burnsville
13713 Frontier Court
Burnsville, MN 55337-4720

May 9, 2022

Invoice No: 23190375.99 - 9

Total this Invoice	\$390.00
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Regarding: Trend Analysis

Professional Services from April 2, 2022 to April 29, 2022

Job:	2022	2021 Data
Task:	100	Trend Analysis 2021 Data

Labor Charges

	Hours	Rate	Amount	
Engineer / Scientist / Specialist II				
Menken, Kevin	3.00	130.00	390.00	
	3.00		390.00	
Subtotal Labor				390.00
		Task Subtotal		\$390.00
		Job Subtotal		\$390.00
		Total this Invoice		\$390.00

	Current	Prior	Total	Received	A/R Balance
Invoiced to Date	390.00	5,115.00	5,505.00	5,115.00	390.00

Thank you in advance for the prompt processing of this invoice. If you have any questions, please contact Greg Wilson, your Barr project manager, at (952) 832-2672 or email at gwilson@barr.com.

Terms: Due upon receipt. 1 1/2% per month after 30 days. Please refer to the contract if other terms apply.



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Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435
Phone: 952-832-2600; Fax: 952-832-2601
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PO Box 64825
St Paul, MN 55164-0825

Mr. Daryl Jacobson
Black Dog WMO
City of Burnsville
13713 Frontier Court
Burnsville, MN 55337-4720

May 9, 2022

Invoice No: 23190457.22 - 4

Total this Invoice	\$1,050.50
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Regarding: BDWMO Habitat Monitoring

Professional Services from April 2, 2022 to April 29, 2022

Job:	KING	Kingsley Lake 2021 Reporting
Task:	001	Analysis, Report & Presentation

Labor Charges

	Hours	Rate	Amount	
Vice President				
Chandler, Karen	2.40	190.00	456.00	
Engineer / Scientist / Specialist III				
Wold, Karen	4.10	145.00	594.50	
	6.50		1,050.50	
Subtotal Labor				1,050.50
		Task Subtotal		\$1,050.50
		Job Subtotal		\$1,050.50
		Total this Invoice		\$1,050.50

	Current	Prior	Total	Received	A/R Balance
Invoiced to Date	1,050.50	8,203.00	9,253.50	8,203.00	1,050.50

Thank you in advance for the prompt processing of this invoice. If you have any questions, please contact Karen Wold, your Barr project manager, at (952) 832-2707 or email at kwold@barr.com.

Terms: Due upon receipt. 1 1/2% per month after 30 days. Please refer to the contract if other terms apply.



INVOICE

Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435
Phone: 952-832-2600; Fax: 952-832-2601
FEIN #: 41-0905995 Inc: 1966

Remittance address:
Lockbox 446104
PO Box 64825
St Paul, MN 55164-0825

Mr. Daryl Jacobson
Black Dog WMO
City of Burnsville
13713 Frontier Court
Burnsville, MN 55337-4720

May 9, 2022

Invoice No: 23191455.00 - 17

Total this Invoice	\$2,447.50
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Regarding: BDWMO 2022 Watershed Management Plan

Professional Services from April 2, 2022 to April 29, 2022

Job:	200	Draft Plan Development
Task:	001	Physical Environment Inventory

Labor Charges

	Hours	Rate	Amount	
Engineer / Scientist / Specialist III				
Williams, Sterling	1.50	155.00	232.50	
Engineer / Scientist / Specialist I				
Long, Colleen	1.80	105.00	189.00	
	3.30		421.50	
Subtotal Labor				421.50
				Task Subtotal
				\$421.50

Task:	005	Compile Draft Plan
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Labor Charges

	Hours	Rate	Amount	
Vice President				
Chandler, Karen	1.20	190.00	228.00	
Engineer / Scientist / Specialist III				
Williams, Sterling	11.60	155.00	1,798.00	
	12.80		2,026.00	
Subtotal Labor				2,026.00
				Task Subtotal
				\$2,026.00
				Job Subtotal
				\$2,447.50
				Total this Invoice
				\$2,447.50

Terms: Due upon receipt. 1 1/2% per month after 30 days. Please refer to the contract if other terms apply.

Project	23191455.00	BDWMO 2022 Watershed Management Plan	Invoice	17
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	Current	Prior	Total	Received	A/R Balance
Invoiced to Date	2,447.50	53,811.50	56,259.00	53,811.50	2,447.50

Thank you in advance for the prompt processing of this invoice. If you have any questions, please contact Greg Williams, your Barr project manager, at (952) 832-2945 or email at gwilliams@barr.com.

CAMPBELL KNUTSON
Professional Association
Attorneys at Law
Federal Tax I.D. #41-1562130
Grand Oak Office Center I
860 Blue Gentian Road, Suite 290
Eagan, Minnesota 55121
(651) 452-5000

Black Dog Watershed Management Organization
Attention: Daryl Jacobson
City of Burnsville
100 Civic Center Parkway
Burnsville MN 55337-3817

Page: 1
April 30, 2022
Account # 602-0000G
374

RE: GENERAL SERVICES
RENDERED TO DATE:

			HOURS	
04/20/2022	JJJ	Review agenda, materials.	0.30	52.50
	JJJ	Board meeting.	1.00	175.00
04/21/2022	JJJ	Review Board meeting actions.	0.20	35.00
		AMOUNT DUE	1.50	262.50
		TOTAL CURRENT WORK		262.50
		PREVIOUS BALANCE		\$157.50
04/26/2022		Payment - thank you		-157.50
		TOTAL AMOUNT DUE		<u>\$262.50</u>

OK

5-10-22

Amounts due over 30 days will be subject to a finance charge of
.5% per month (or an annual rate of 6%). Minimum charge - 50 cents.



**Dakota County Soil & Water
Conservation District**

**4100 220th Street West, Ste 102
651-480-7777
Farmington, MN 55024**

Invoice

DATE	INVOICE #
4/22/2022	3183

BILL TO

Black Dog WMO
Daryl Jacobson, Administrator
13713 Frontier Court
Burnsville, MN 55337

Reference

TERMS

ITEM CODE	DESCRIPTION	HOURS	RATE	AMOUNT
	January - March 2022			
Black Dog	EDUCATION AND OUTREACH ASSISTANCE:			
Black Dog	Website Updates and Maintenance	2	85.00	170.00
	Website Hosting (Annual, Includes Security)		965.00	965.00
Black Dog	LANDSCAPING FOR CLEAN WATER WORKSHOPS:		0.00	0.00
Black Dog	TECHNICAL ASSISTANCE AND COST SHARE:		0.00	0.00
<p>OK Daryl Jacobson 4-27-22</p>				
Thank you.			Total	\$1,135.00

BLACK DOG WMO
CASH ACTIVITY REPORT 2022

Date	Description	Deposits	Check #	Check Amount	Monthly Cash Balance	Expenditures: General Engineering Support	Special Projects (General)	Special Projects (Capital)	Special Projects (Gen. Reserve)	Insurance	Legal & Audit	Admin Support	Public Education	Water Quality Monitoring	Conf Public	Contin-gency
Balance as of 12/31/21					456,991.62											
19-Jan	Barr Engineering Co (2021)		1774	9,154.44		4,758.94	1,406.00	-	2,989.50					-		
19-Jan	Met Council - Environ Services (2021)		1775	3,800.00										3,800.00		
20-Jan	State of MN Grant (2021) - Cap	65,926.24														
31-Jan	Interest Income	4.16														
01/31/22 Balance		65,930.40		12,954.44	509,967.58	4,758.94	1,406.00	-	2,989.50	-	-	-	-	3,800.00	-	-
16-Feb	Barr Engineering Co		1776	11,132.63		2,156.63	163.00	-	7,965.00				655.50	192.50		
16-Feb	Campbell Knutson (2021)		1777	221.00							221.00					
16-Feb	City of Burnsville (2021)		1778	24,302.86								24,302.86				
16-Feb	Dakota County Soil & Water (2021)		1779	1,280.00			-	-	-				1,280.00			
28-Feb	Interest Income	3.95														
02/28/22 Balance		3.95		36,936.49	473,035.04	2,156.63	163.00	-	7,965.00	-	221.00	24,302.86	1,935.50	192.50	-	-
16-Mar	Barr Engineering		1780	18,263.21		2,923.71	1,300.00	-	7,394.50				1,696.50	4,948.50		
16-Mar	Campbell Knutson		1781	666.68				-			666.68					
31-Mar	Interest Income	22.10														
03/31/22 Balance		22.10		18,929.89	454,127.25	2,923.71	1,300.00	-	7,394.50	-	666.68	-	1,696.50	4,948.50	-	-
20-Apr	Barr Engineering		1782	18,745.13		2,572.13	1,958.00	-	7,263.50				2,394.50	4,557.00		
20-Apr	Campbell Knutson		1783	157.50							157.50					
30-Apr	Interest Income	74.49														
04/30/20 Balance		74.49		18,902.63	435,299.11	2,572.13	1,958.00	-	7,263.50	-	157.50	-	2,394.50	4,557.00	-	-
Total Revenue		66,030.94	Total Expense		87,723.45	12,411.41	4,827.00	-	25,612.50	-	1,045.18	24,302.86	6,026.50	13,498.00	-	-
Less: 2021 A/R		(65,926.24)	Less: 2021 A/P		(38,758.30)	(4,758.94)	(1,406.00)	-	(2,989.50)	-	(221.00)	(24,302.86)	(1,280.00)	(3,800.00)	-	-
December LMC insurance reclass		-			-											
Total YTD 2022 Revenue		104.70	Total YTD 2022 Exp		48,965.15	7,652.47	3,421.00	-	22,623.00	-	824.18	-	4,746.50	9,698.00	-	-
			2022 Budget		186,750.00	31,000.00	40,600.00	5,000.00	40,000.00	3,000.00	5,500.00	19,000.00	20,050.00	17,100.00	500.00	5,000.00
			Budget Remaining		137,785.00	23,348.00	37,179.00	5,000.00	17,377.00	3,000.00	4,675.82	19,000.00	15,303.50	7,402.00	500.00	5,000.00

BLACK DOG WATER MANAGEMENT COMMISSION

Budget Performance Report April 30, 2022

	CURRENT MONTH	YEAR TO DATE			
	ACTUAL	GENERAL FUND BUDGET	CAPITAL IMPROVEMENT FUND BUDGET	ACTUAL	VARIANCE FAVORABLE (UNFAVORABLE)
Opening Fund Balance		\$ 402,670	\$ 81,489	\$ 484,160	
REVENUES :					
Member Contributions:					
City of Apple Valley	\$ -	\$ 10,399	\$ 1,742	\$ -	\$ (12,141)
City of Burnsville	-	94,104	16,193	-	(110,297)
City of Eagan	-	575	-	-	(575)
City of Lakeville	-	25,922	4,065	-	(29,987)
Total Member Contributions	-	131,000	22,000	-	(153,000)
Other Revenues:					
Interest	\$ 74	\$ 40	\$ -	\$ 105	\$ 65
Grant (State of MN BWSR)	-	-	-	-	-
Total Other Revenue	74	40	-	105	65
Total Revenues	\$ 74	\$ 131,040	\$ 22,000	\$ 105	\$ (152,935)
EXPENDITURES :					
General Engineering Support	\$ 2,572	\$ 31,000	\$ -	\$ 7,652	\$ 23,348
Special Projects - General Fund	1,958	40,600	-	3,421	37,179
Special Projects - Capital Improvement Fund	-	-	5,000	-	5,000
Special Projects - General Fund Reserve	7,264	40,000	-	22,623	17,377
Insurance	-	3,000	-	-	3,000
Legal and Audit	158	5,500	-	824	4,676
Administrative Support	-	19,000	-	-	19,000
Public Education	2,395	20,050	-	4,747	15,304
Water Quality Monitoring	4,557	17,100	-	9,698	7,402
Conference/Publications	-	500	-	-	500
Contingency	-	5,000	-	-	5,000
Total Expenditures	18,903	181,750	5,000	48,965	137,785
EXCESS OF REVENUES OVER (UNDER) EXPENDITURES	<u>(18,828)</u>	<u>(50,710)</u>	<u>17,000</u>	<u>(48,860)</u>	
EXCESS OF REVENUES OVER (UNDER) EXPENDITURES PLUS OPENING FUND BALANCE				<u><u>435,299</u></u>	
TOTAL CASH AVAILABLE 4/30/2022	435,299				
Fund Balance 4/30/2022	<u>\$ 435,299</u>				



BLACK DOG

Watershed Management Organization

DRAFT

2021 ANNUAL ACTIVITY REPORT

Prepared for
Black Dog Watershed
Management Commission

May 2022

2021 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 2021 Black Dog WMO Board Members and the city/cities they represent are listed below:

Board Members:	Term Ending
1. Curtis Enestvedt (Chair) Representing the City of Burnsville	November 2022
2. Mike Hughes (Vice-Chair) Representing the City of Burnsville	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. Rollie Greeno Representing the Cities of Apple Valley and Eagan	November 2022

Alternate Board Members:	Term Ending
1. Frank Boyce Representing City of Burnsville [Appointed January 2021]	November 2022
2. Greg Helms Representing the Cities of Apple Valley and Eagan	November 2022
3. Natalie Walker Representing the City of Lakeville	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 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.

2021 Black Dog WMO Activities

- Continued work on updating the Black Dog WMO Watershed Management Plan, which expires in September 2022. The planning process usually takes approximately two years to complete; preliminary work began late in 2020. In 2021, work included continued stakeholder engagement, issue identification and prioritization, and drafting of the plan document. The work will extend through much of 2022.
- Completed the Keller Lake Alum Treatment project, by implementing the second phase of a two-phase alum treatment of the lake in Fall 2021. Work included preparation of contract documents, permitting, contract administration, treatment oversight, alum treatment expenses, and grant administration. 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 expired in 2021.
- Participated in the Metropolitan Council's Citizen-Assisted Lake Monitoring Program (CAMP) for the BDWMO strategic water bodies:
 - Crystal Lake • Keller Lake • Kingsley Lake
 - Lac Lavon • Orchard LakePerformed management level monitoring at Crystal Lake (see below). Completed water quality trend analyses on these lakes using the information gathered through CAMP and the more-detailed monitoring on Crystal Lake.
- Prepared memo regarding Orchard Lake 2020 management level water quality monitoring results and presented to the Black Dog WMO at a Commission meeting.
- Performed management level monitoring of Crystal Lake water quality, per guidance in the Black Dog WMO Watershed Management 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 three to eight meters. 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 measurements of water temperature, dissolved oxygen, pH, specific conductance, and oxidation/reduction potentials were collected at 1-meter depth intervals at the deepest spot in the lake. Field measurements of turbidity were also taken on the surface water sample at the monitoring location. The City of Burnsville performed aquatic plant surveys on two occasions over the monitoring season and shared the results with the Black Dog WMO. The work also included lab work, QA/QC of lab data (including coordination with lab), 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 2022 and posted on the Black Dog WMO website.

- Performed habitat monitoring of Kingsley 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. In 2021, an aquatic vegetation survey was conducted in June within the submergent and emergent zones, and emergent vegetation and upland buffer zone surveys were conducted in July. The lake was also evaluated for sedimentation and shoreline erosion problems. A memo summarizing the habitat monitoring results will be completed in 2022 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 workshops include three programs—Introduction to Clean Water Class, Design Course, and Maintenance Workshop. All programs continued online in 2021 due to the ongoing Covid-19 pandemic. Four live virtual Introduction to Clean Water Class offerings were held in the spring (March through May) and then pre-recorded so others could participate in the classes at their leisure. A total of 123 residents of the BDWMO participated in the Introduction classes through either a live virtual class or through the recordings. A total of 45 participants took part in the virtual Design Course classes which consisted of a series of pre-recorded videos. Project materials for participants were made available online and an “Office Hours” program was used to provide virtual consultations to Design Course class participants. A total of 14 participants took advantage of these virtual consultations with staff in 2021. Participants were thankful for the additional one-on-one design assistance. In 2021, the Maintenance Workshop classes were split into three online sessions. Each workshop focused on maintenance for a given season (Spring, Summer and Fall) allowing for season specific information on how to maintain and promote the health, performance, and beauty of their garden. A total of 26 people registered for the Maintenance classes.
- Continued implementing plan to accrue funds in 1) a Capital Improvement Fund, to be used for completing 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.
- Conducted an annual evaluation of the watershed programs and reported the results to member communities via the Watershed Annual Report and Annual Activity Report.

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- Formulated and approved the 2022 Work Plan and Budget.
 - Completed 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.
 - 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 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 redesigned the Black Dog WMO website.

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

2021 Black Dog WMO Expenditures

	<u>BUDGET</u>	<u>ACTUAL</u>
<u>General Engineering Support</u>	\$31,000	\$26,663
Consulting services for engineering support, such as to prepare for and attend meetings; review/respond to issues and opportunities; assist with BWSR watershed-based implementation funding grant process; 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.		
<u>Special Projects – General Fund:</u>	\$36,800	\$25,887
Crystal Lake Management Level Monitoring	\$18,800	\$15,011
Funding to conduct “management level” monitoring of the lake’s water quality, per guidance in the Black Dog WMO Plan.		
Dakota County SWCD—Landscaping for Clean Water Program Support	\$13,500	\$6,750
Funds to partner with the Dakota County SWCD Landscaping for Clean Water program for Black Dog WMO residents.		
Reporting on 2020 Orchard Lake Management Level Monitoring	\$4,500	\$4,126.
Prepare the 2020 Orchard Lake technical memo summarizing the monitoring results and a presentation for a Commission meeting.		
<u>Special Projects – Capital Improvement Fund:</u>		
Keller Lake Alum Treatment	\$17,000	\$128,572
Funds to complete the second alum treatment in Fall 2021 (the first alum treatment was in spring 2019). The Black Dog WMO received a \$230,000 BWSR Clean Water Fund Grant (awarded in December 2018, final contract execution in April 2019), which covers 80% of the project cost (grant requires a 20% local share). In 2021, this work includes preparation of contract documents, permitting, contract administration, treatment oversight, alum treatment expenses, and grant administration. All of this work is reimbursable (up to 80%) by the BWSR grant.		
<u>Special Projects – General Fund Reserve:</u>		
Watershed Management Plan Update	\$70,000	\$30,255
Continue work on updating the Black Dog WMO Watershed Management Plan, which expires in September 2022. The planning process usually takes approximately two years to complete; preliminary work began later in 2020. In 2021, work		

includes continued stakeholder engagement, issue identification and prioritization, and drafting of the plan document. The work will extend through much of 2022. Budget amount shown is preliminary; the Black Dog WMO set the final budget later in 2020.

<u>Insurance:</u>	\$3,000	\$1,407
<u>Legal and Audit:</u> Consulting fees for legal services.	\$5,000	\$2,584
<u>Administrative Services:</u> City of Burnsville charges for providing administrative services to the Commission, including staff time, printing and postage. This also includes City accounting staff time to prepare the annual finance statement in years when an audit not required.	\$18,000	\$24,303
<u>Public Education:</u> 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 and redesign the Black Dog WMO website.	\$22,100	\$21,421
<u>Water Quality Monitoring:</u> Cost associated with water quality monitoring programs, including the habitat monitoring program, Metropolitan Council's CAMP, and analysis of water quality data.	\$17,100	\$17,480
<u>Conference / Publications:</u> Commissioner training and education materials.	\$500	\$0
<u>Contingency:</u> Funding for unexpected expenses and/or new program opportunities approved by the Commission	\$1,000	\$0
Expenditure Total:	\$221,500	\$278,570

2021 Black Dog WMO Revenues

	<u>BUDGET</u>	<u>ACTUAL</u>
<u>Interest</u>	\$40	\$65
<u>Member City Contributions (Fees)</u>	\$131,000	\$131,000
<u>Member City Contributions—Capital Improvement Fund</u>	\$22,000	\$22,000
<u>Grants</u>	\$0	\$79,987
<u>Fund Balance Utilized</u>	\$68,460	\$46,518
Revenue Total:	\$153,040	\$233,052

2021 Black Dog WMO Planned Changes in Fund Balance

	<u>BUDGET</u>	<u>ACTUAL</u>
<u>Capital Improvement Fund:</u>	\$5,000	\$(26,584)
This fund serves as a savings account for future internal load reduction projects stemming from TMDLs.		
<u>General Fund Reserve:</u>	(\$73,460)	\$(18,934)
This fund serves as a savings account for the Black Dog WMO watershed plan ten-year update.		
Planned Changes in Fund Balance Total:	(\$68,460)	\$(45,518)

2022 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 approximately two years to complete; preliminary work began in 2020. In 2022, work will include finalizing goals and policies, developing a prioritized implementation schedule, completing the draft plan document, navigating the formal plan review process, and obtaining approval from the Minnesota Board of Water and Soil Resources.
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 Lac Lavon Lake.

3. Prepare memo regarding Crystal Lake 2021 management level water quality monitoring results and present to the Black Dog WMO.
4. Perform additional (management level) monitoring on Lac Lavon, per guidance in the Black Dog WMO Watershed Management Plan. The monitoring will include water quality monitoring and aquatic vegetation surveys of Lac Lavon. The water quality 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. Two aquatic vegetation surveys will be conducted on Lac Lavon (by a qualified subcontractor); one in June and one in August. 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 (per guidance in the Black Dog WMO Watershed Management Plan. In 2023, work will include preparing the technical memo summarizing the monitoring results, and preparing a presentation for a Commission meeting.
5. Complete the BWSR Clean Water Fund grant administration and reporting activities to close out the grant for the Keller Lake Alum Treatment project.

6. Prepare report regarding Kingsley Lake 2021 habitat monitoring results and present to the Black Dog WMO.
7. Perform habitat monitoring of Orchard 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. The City of Lakeville will provide results of their 2022 aquatic vegetation surveys, which will be used to evaluate the submergent zone. In 2023, 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. Although the initial plan is to hold these workshops virtually, the plan will be evaluated in early spring to see if hosting in-person classes/workshops becomes feasible.
11. Complete the 2021 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 2023 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.
18. Respond to requests to partner with member communities and Dakota County on educational outreach programs.

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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 2022, 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 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 2022 Budget—

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO Watershed Management Plan—through December 31, 2021

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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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, 2021

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.

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO Watershed Management Plan—through December 31, 2021

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
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, 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. In 2021, work included continued stakeholder engagement, issue identification and prioritization, and drafting of the plan document.	Continue updating the Plan in 2022, with approval and adoption expected in 2022.
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. Dakota SWCD updated/ redesigned the website in 2021.	Continue to maintain and update website.

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO Watershed Management Plan—through December 31, 2021

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
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	<p>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. In 2021, Black Dog WMO provided funding for workshops in three program areas (all programs continued online in 2021 due to the ongoing Covid-19 pandemic):</p> <ol style="list-style-type: none"> 1. Introduction to Clean Water Class - four live virtual classes were held in the spring and were pre-recorded so others could participate. 2. Design Course – the virtual classes were a series of pre-recorded videos. Project materials for participants were available online and an “Office Hours” program provided virtual consultations to class participants. 3. Maintenance Workshop – in 2021, the classes were split into three online sessions, focused on maintenance for a given season (Spring, Summer and Fall). 	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, 2021

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps																														
Implementation of small-scale best management practices on private property to improve water quality	Ongoing	<p>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.</p> <table><thead><tr><th>Year</th><th>Number of projects</th></tr></thead><tbody><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>2021</td><td>9</td></tr><tr><td>Total</td><td>175</td></tr></tbody></table>	Year	Number of projects	2009	9	2010	7	2011	6	2012	18	2013	13	2014	16	2015	18	2016	16	2017	17	2018	18	2019	19	2020	9	2021	9	Total	175	Continue partnering with Dakota SWCD to fund water quality improvement projects.
Year	Number of projects																																
2009	9																																
2010	7																																
2011	6																																
2012	18																																
2013	13																																
2014	16																																
2015	18																																
2016	16																																
2017	17																																
2018	18																																
2019	19																																
2020	9																																
2021	9																																
Total	175																																
Implement recommended internal phosphorus load reduction projects identified in UAA and/or TMDL for non-strategic waterbodies or strategic waterbodies without inter-community shoreline	As needed	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.	Implement when needed (see Keller Lake actions below).																														

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO Watershed Management Plan—through December 31, 2021

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps										
Annual CAMP water quality monitoring, performing trend analysis, and establishing action levels for the following strategic waterbodies: <ul style="list-style-type: none">Crystal LakeKeller LakeKingsley LakeLac LavonOrchard Lake	Ongoing	CAMP monitoring completed annually; trend analysis completed annually.	Continue annual CAMP monitoring and trend analyses of monitoring data.										
Management level water quality monitoring performed at 3-year intervals for the following strategic waterbodies: <ul style="list-style-type: none">Crystal LakeLac LavonOrchard Lake	Ongoing	Performed for one lake annually; most recent monitoring includes Lac Lavon in 2019, Orchard Lake in 2020, and Crystal Lake in 2021,	Continue cycle of monitoring: Lac Lavon in 2022, Orchard Lake in 2023, and Crystal Lake in 2024.										
Habitat monitoring at 5-year intervals for the following strategic waterbodies: <ul style="list-style-type: none">Crystal LakeKeller LakeKingsley LakeLac LavonOrchard Lake	Ongoing	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, 2021</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>	Kingsley Lake	2011, 2016, 2021	Orchard Lake	2012, 2017	Crystal Lake	2013, 2018	Lac Lavon	2014, 2019	Keller Lake	2015, 2020	Continue cycle of monitoring: Orchard Lake in 2022, Crystal Lake in 2023, Lac Lavon in 2024, Keller Lake in 2025, and Kingsley Lake in 2026.
Kingsley Lake	2011, 2016, 2021												
Orchard Lake	2012, 2017												
Crystal Lake	2013, 2018												
Lac Lavon	2014, 2019												
Keller Lake	2015, 2020												
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: <ul style="list-style-type: none">Kingsley LakeLac LavonOrchard Lake	As needed	Black Dog WMO will implement these actions as necessary; there are no actions currently planned.	Continue tracking water quality trends and action levels and take actions as/when necessary.										

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO Watershed Management Plan—through December 31, 2021

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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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 occurred in September 2021. Other potential future projects are listed in Table 5-3 of the 2012 Black Dog WMO Plan; no other projects are currently planned.	Implement other projects when recommended.

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO Watershed Management Plan—through December 31, 2021

Implementation Task	Original Implementation Date from Plan	Status/Accomplishments	Next Steps
Capital Projects—Keller Lake			
<p>Implement recommended watershed projects to reduce runoff-borne phosphorus loads, as identified in the TMDL, that may include:</p> <ul style="list-style-type: none"> • 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 	<p>Ongoing</p> <p>2013 – 2015 (Crystal Beach Park project)</p> <p>2018 (SW Keller Lake project)</p>	<p>Member cities perform projects, with possible grant funding obtained by Black Dog WMO; Black Dog WMO performs ongoing public education.</p> <p>Crystal Beach Park project: the City of Burnsville completed the project in 2017.</p> <p>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.</p> <p>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 completed construction of one of the projects (Redwood Pond) in 2021.</p>	<p>Burnsville will construct SW Keller Lake project if additional load reductions required.</p> <p>Apple Valley will implement other projects from the subwatershed assessment as budget and opportunity allows.</p>

Table 1: Status of Implementation Tasks from 2012 Black Dog WMO Watershed Management Plan—through December 31, 2021

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: <ul style="list-style-type: none"> • 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 occurred in September 2021. Other potential future projects are listed in Table 5-3 of the 2012 Black Dog WMO Plan; no other projects are currently planned.	Implement other projects when recommended.
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: <ul style="list-style-type: none"> • 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.

2021 Watershed Annual Report

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BLACK DOG

Watershed Management Organization

2021 WATERSHED ANNUAL REPORT

Published April 2022

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:

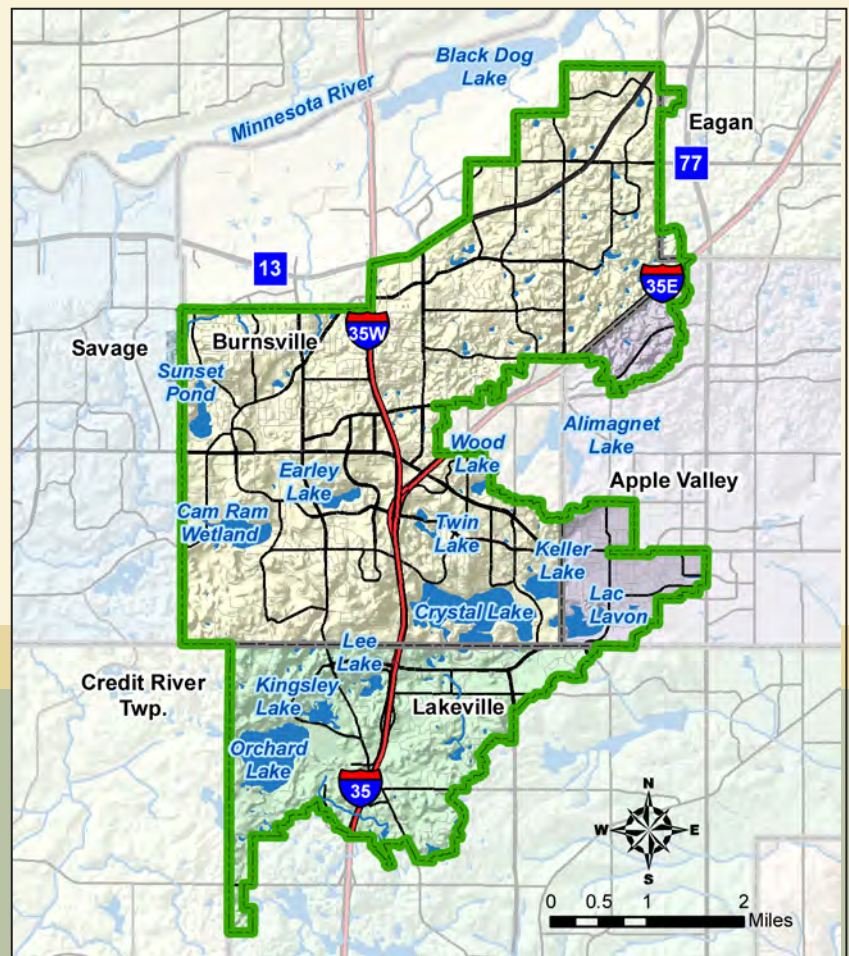
- **Trend Analysis**—The BDWMO collects water quality information to track water quality trends.
- **Performance Analysis**—The BDWMO will evaluate the member cities' implementation of maintenance plans, capital improvement projects, programs, and other items.
- **Habitat Quality Analysis**—The BDWMO 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 2021, and plans for 2022 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.



In this Issue

- Watershed Management Plan Update page 2
- Update on Keller Lake Projects page 2
- Landscaping for Clean Water Projects page 3
- Crystal Lake Water Quality page 4
- Monitoring Programs pages 4–5
- 2021 Monitoring Results pages 5–7
- 2022 Income & Expenditures page 8

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 2023 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. The Plan update began with a stakeholder engagement process to collect initial input from cities, residents, and other partners.

The BDWMO commissioners considered stakeholder input and available scientific data as they prioritized resources and issues, revised goals, and updated policies and performance standards through 2021. During this process representatives from the member cities and state, regional, and county agencies provided input through a technical advisory committee (TAC). The TAC will continue to meet in 2022 and provide input as part of the process.

In 2022, the BDWMO commissioners will work with its partners to develop a collaborative implementation schedule that outlines activities planned over the next 10 years. With the implementation schedule defined, the updated draft Plan will be submitted to the Board of Water and Soil Resources and other Plan review authorities for formal 60-day review required per state statute and rule.

Update on Keller Lake Projects

Alum Treatment Complete

In 2019, the BDWMO received a BWSR Clean Water Fund grant for an alum treatment project to improve Keller Lake's water quality. The alum and sodium aluminate treatment was divided into two phases to increase the long-term effectiveness. Phase I occurred in June, 2019, and Phase II was completed in September, 2021 when 37,673 gallons of chemical precipitant were applied to Keller Lake (see page 5 for story on Keller Lake water quality monitoring). It is expected that the in-lake aluminum treatment will reduce the annual average TP (total phosphorus) load to Keller Lake by 80% or 186 lbs/yr. The in-lake aluminum application represents most of the remaining TP load reduction required to ensure that Keller Lake water quality can meet the MPCA's shallow lake standards on a consistent basis.

Electrofishing Survey

In 2021, the cities of Burnsville and Apple Valley arranged for a company, Carp Solutions, to conduct an electrofishing survey on Keller Lake. The survey was designed to assess populations of goldfish, which had previously been observed by staff and residents, but also included a general assessment of the overall fish community in the lake. To get a good assessment of the population, three separate days of electrofishing occurred, with timed transects conducted on each visit. This protocol is similar to assessing common carp populations. An average of 12 goldfish were caught per sampling visit. Goldfish averaged 14 inches in length and 2.37 lbs, but one goldfish as large as 5.4 lbs was caught.

Although the goldfish captured were quite large, the study results suggest that the overall population is at a moderate density level, which is likely below the population threshold that would cause significant ecological damage. Furthermore, no smaller goldfish were captured during the survey, indicating that successful recruitment of new goldfish into the population may be rare. The survey found

healthy levels of other native gamefish like largemouth bass and sunfish. These other fish species could then prey on goldfish eggs, larvae, and juveniles—predation that may be holding the goldfish population in check.

The cities plan to continue periodic fish surveys to assess the health of the overall fish community and any changes or trends in the goldfish population over time.



Photo credit: Caleb Ashling, City of Burnsville

Redwood Pond Expansion

A recent pond expansion at Redwood Park in Apple Valley will help improve the water quality at Keller Lake. Keller Lake is impaired for nutrients and the City of Apple Valley and the BDWMO have an active shared interest in improving water quality. The City of Apple Valley's project included the expanding the pond, modifying the existing outlet, removing contaminated sediment, and redesigning the existing park trail and features impacted by the pond modifications. Project funding was leveraged by the Clean Water Land and Legacy amendment in partnership with the BDWMO.



Photo credit: Nearmap

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.

Adjusting and Accommodating

Due to the ongoing Covid-19 pandemic in 2021, all Landscaping for Clean Water programming was held virtually. Four live virtual Introduction classes were held in the spring (March through May) and then pre-recorded so others could participate in the classes at their leisure. A total of 123 residents of the BDWMO participated in the Introduction classes through either a live virtual class or through the recordings.

A total of 45 participants took part in the virtual Design classes which consisted of a series of pre-recorded videos. Project materials for participants were made available online and an "Office Hours" program was used to provide virtual consultations to Design class participants. A total of 14 participants took advantage of these virtual consultations with

staff in 2021. Participants were thankful for the additional one-on-one design assistance.

In 2021, the Maintenance classes were split into three online sessions. Each workshop focused on maintenance for a given season (Spring, Summer and Fall) allowing for season specific information on how to maintain and promote the health, performance, and beauty of their garden. A total of 26 people registered for the Maintenance classes.

The 2022 Landscaping for Clean Water program will be held virtually, although the plan will be evaluated in early spring to see if hosting in-person classes/workshops becomes feasible. For more information, visit <https://dakotaswcd.org/services/landscaping-for-clean-water/>.



**15 YEARS OF CLEAN WATER
ACCOMPLISHMENTS
within the BDWMO (2007-2021)**
Workshop Participants — 1,350
Projects Completed — 175

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/>.

Conservation in Action: Crystal Lake Shoreline Stabilization



Crystal Lake has been a major water quality success story, having been removed from the State's impaired waters list in 2018. A developing erosion issue was detected on the north shore of Crystal Lake around Tyacke Park. To prevent it from getting worse, the City of Burnsville and Dakota County Soil and Water Conservation District (SWCD) developed a plan and undertook a large shoreline stabilization project on the lake in the fall of 2021. To provide the best habitat and keep the natural aesthetics of the parkland, the plan utilized natural materials rather than the more intrusive rock rip rap.

Supported by a Conservation Initiative Funding grant from the SWCD, crews started by installing more than 980 feet of coconut fiber (coir) logs to buffer against the wave action. Invasive buckthorn was removed along the shoreline and native grasses and wildflowers were planted in its place. The deep-rooted native plants will help stabilize the shoreline long term while also providing valuable habitat to pollinators and other wildlife.

Crystal Lake in the Clear

The BDWMO is pleased to report that Crystal Lake continues to have good water quality. The 2021 summer-average Secchi disc transparency in Crystal Lake was 2.5 meters (8.1 feet), which is slightly better than it was in 2020, and better than the MPCA deep-lake water quality standard of 1.4 meters. The water clarity in Crystal Lake has been trending towards better water quality over the past 10-year period (statistically significant trend). The last time summer-average Secchi disc transparency for Crystal Lake was 2.5 meters or better was 1992. The 2021 summer average of total phosphorus (the nutrient that drives algal growth) was 20 µg/L, one of the best on record for the lake, and better than the MPCA's deep lake standard (40 µg/L). The summer-average chlorophyll-a (a measure of algal abundance) was 9 µg/L, which ties 2018 for the best on record for the lake, and better than the MPCA's deep lake standard (14 µg/L). During the period of 2008 to 2011, the BDWMO, along with its member communities, the Minnesota Pollution Control Agency (MPCA), and other state and local agencies, developed a Total Maximum Daily Load (TMDL) report for Crystal Lake. The TMDL was required because the MPCA added Crystal Lake to its impaired waters list in 2002. Two other lakes in the Crystal Lake watershed—Keller Lake and Lee Lake—were also part of the TMDL report. The TMDL established phosphorus load allocations that would achieve water quality goals for Crystal, Keller, and Lee Lakes. The BDWMO member cities continue to implement water quality improvement measures with the goal of improving water quality in Crystal, Keller and Lee Lakes. Additional



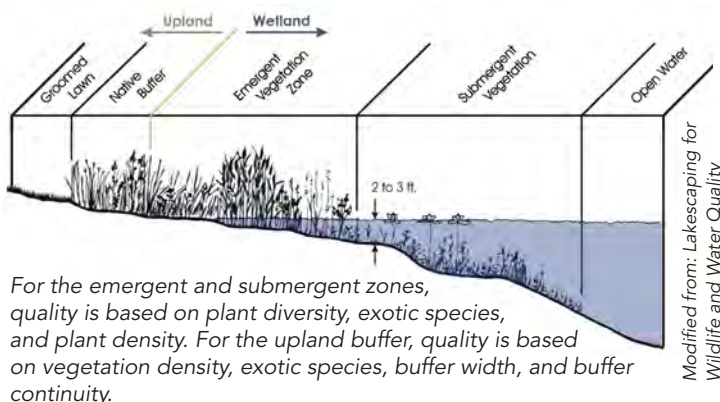
information regarding the Three-Lake TMDL can be found on page 2 of the BDWMO's 2011 Watershed Annual Report.

Aquatic plant surveys were performed in May and July of 2021. The May 2021 survey found 11 submerged plant species and one floating-leaf species, with curly-leaf pondweed as the dominant plant. The July 2021 survey found 15 submerged plant species and one floating-leaf species, with coontail as the dominant plant. Eurasian watermilfoil was found during both surveys at numerous sites. Harvesting of curly-leaf pondweed was conducted in Crystal Lake in 2021.

The BDWMO will continue to monitor the water quality of Crystal Lake in 2022, including regularly-scheduled management level monitoring and habitat monitoring.

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.



In 2021, the BDWMO monitored the habitat quality of Kingsley 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.

Habitat monitoring results showed that Kingsley Lake's submergent zone was rated moderate, but both the emergent and upland buffer zones were rated high. In one specific location in the western portion of Kingsley Lake, curly-leaf pondweed, a dominant species found some years in the lake, was present. Dense coverage of native submergent vegetation, including Robbin's pondweed and largeleaf pondweed in Kingsley Lake helps prevent the spread of curly-leaf pondweed.

See page 7 for additional Kingsley 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.)

2021 Monitoring Results

Water Quality Monitoring Program

The BDWMO and member cities continued to monitor several of its lakes during 2021 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 Crystal 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.

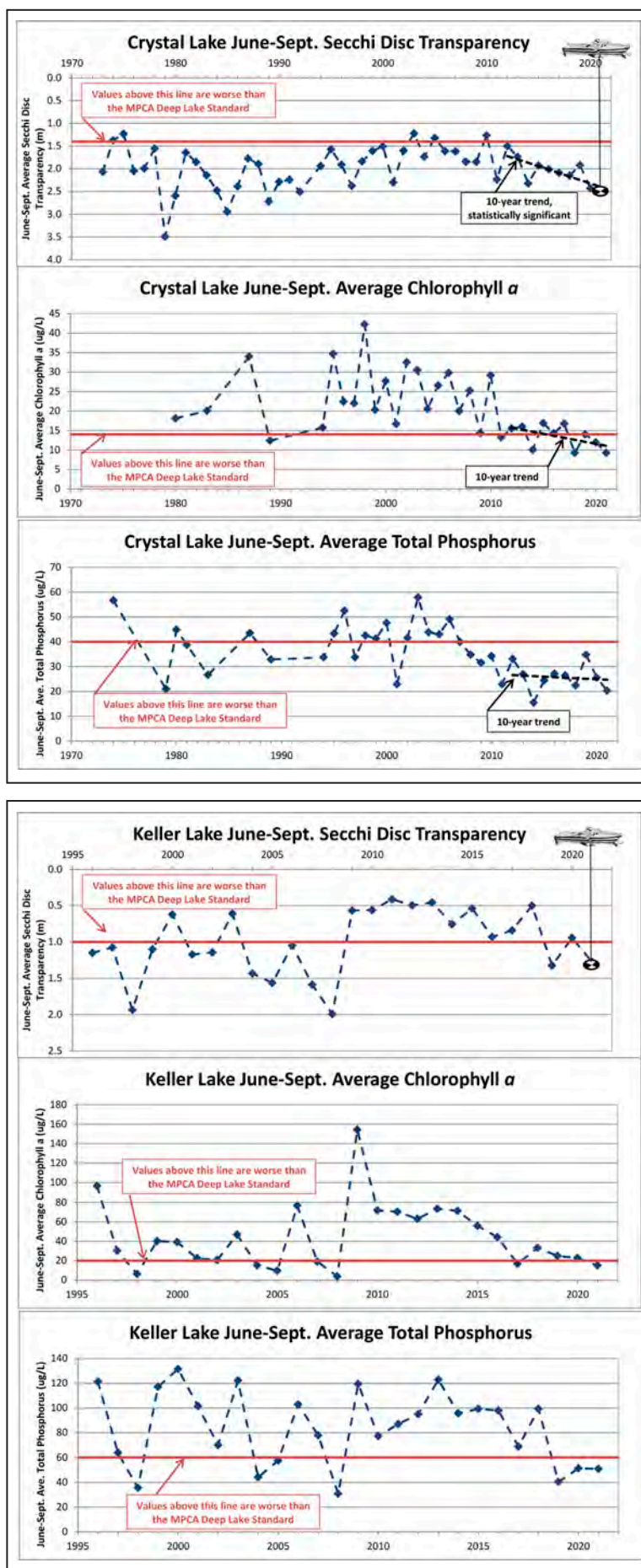
Crystal Lake (Burnsville & Lakeville)

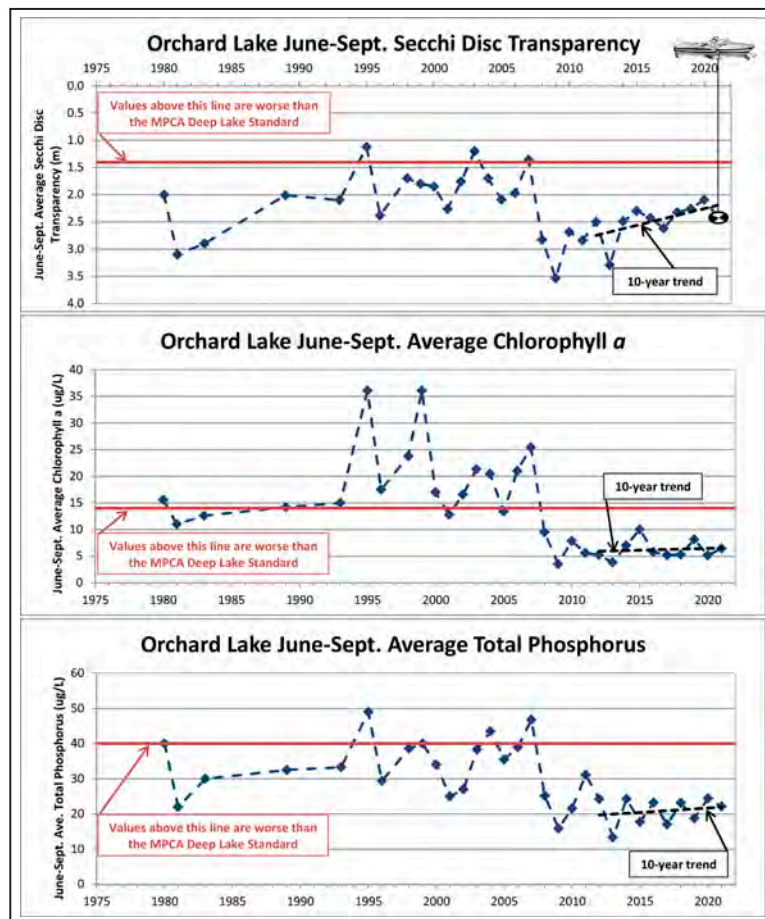
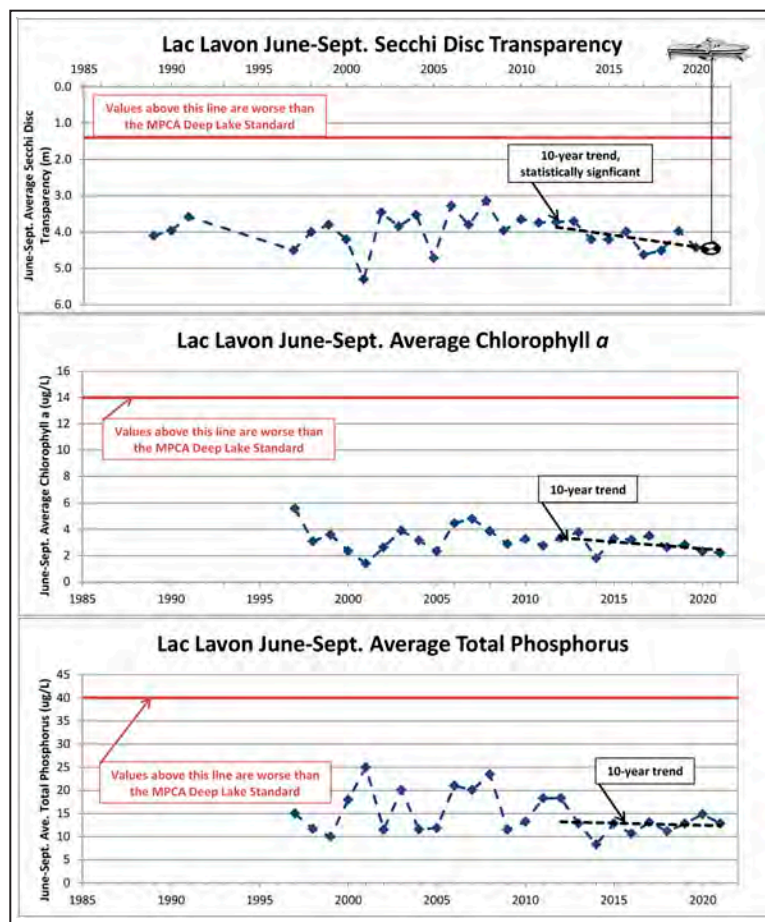
Water Quality Monitoring—In 2021, the BDWMO performed more detailed management level monitoring on the lake (see story on page 4).

Keller Lake (Burnsville & Apple Valley)

Water Quality Monitoring—An alum and sodium aluminate treatment was conducted on Keller Lake in Spring 2019 and Spring 2021, resulting in improved water quality in recent years (see details on page 2). The 2021 Secchi disc transparency summer average was 1.3 meters (4.2 feet), which is better than the MPCA's shallow lake standard of 1.0 meter (3.3 feet). The summer-average total phosphorus (51 $\mu\text{g/L}$) was also better than the MPCA's shallow lake standard of 60 $\mu\text{g/L}$. Summer averages of total phosphorus had been consistently worse than the MPCA standard every year for the period 2009-2018, before the alum and sodium aluminate treatment of the lake. The 2021 summer-average of chlorophyll-a (15 $\mu\text{g/L}$) was also better than the MPCA's shallow lake standard of 20 $\mu\text{g/L}$.

Trend analyses were not completed for Keller Lake because of the alum and sodium aluminate treatments that were conducted in 2019 and 2021. 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 2022. See page 2 for updates on several Keller Lake projects.





Lac Lavon (Apple Valley & Burnsville)

Water Quality Monitoring—Lac Lavon continued to experience excellent water quality in 2021. The 2021 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 2021 summer averages of total phosphorus (13 µg/L) and chlorophyll-a (2.2 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 2012-2021. 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 2022, including regularly-scheduled management level monitoring and habitat monitoring.

Water Quality Improvement Project

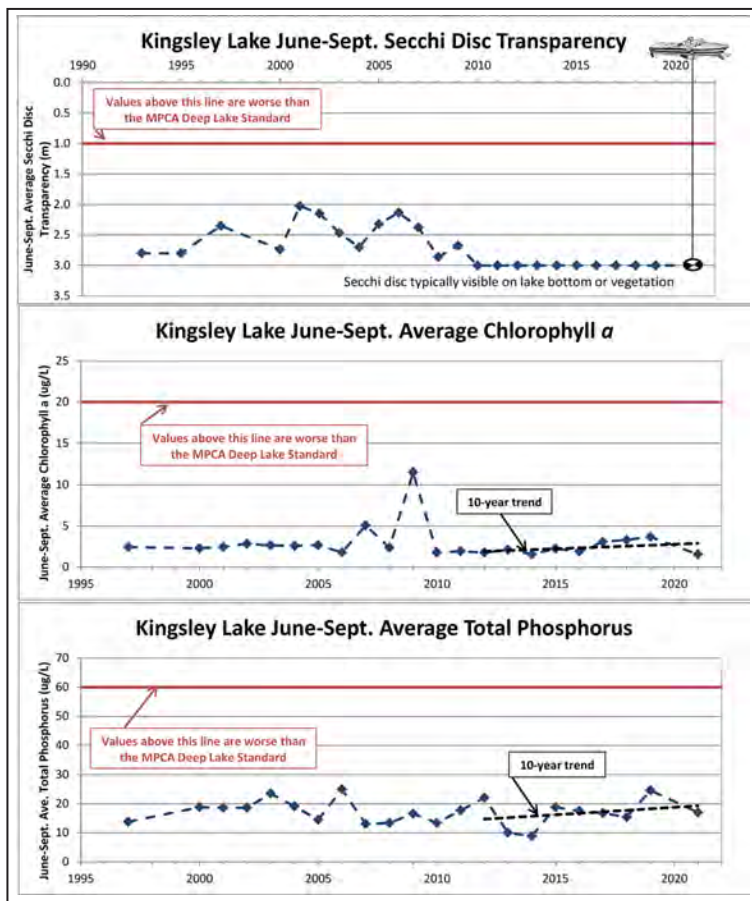
The City of Apple Valley leveraged additional BWSR Clean Water Fund dollars to design and construct a new raingarden in the Lac Lavon Park parking lot. Currently, stormwater runoff flows off the parking lot, down a slope, ultimately reaching Lac Lavon. The raingarden, featuring native plants, will serve as a demonstration project for the improvement of water quality within the watershed.



Orchard Lake (Lakeville)

Water Quality Monitoring—Orchard Lake had improved water quality in 2021 compared to the previous three years, but has generally experienced declining water clarity over the past 12 years. The 2021 summer average Secchi disc transparency was 2.5 meters (8.1 feet), which is better than the MPCA deep-lake water quality standard of 1.4 meters. The 2021 summer-averages of total phosphorus (21 µg/L) and chlorophyll-a (6 µg/L) were better than the MPCA's deep-lake water quality standards. There were no statistically significant trends in water quality for the most recent 10-yr period. Summer averages of water quality in Orchard Lake have been consistently better than the water quality standards for the last fourteen years (2008-2021). The BDWMO will continue to monitor the water quality of Orchard Lake in 2022.

2021 Monitoring Results

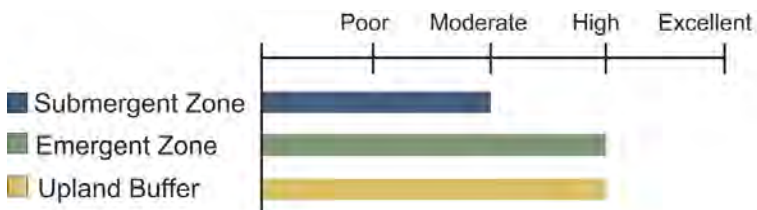


Kingsley Lake (Lakeville)

Water Quality Monitoring—Water quality monitoring data from 2021 show continued excellent water quality in Kingsley Lake. Water 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 2021 summer averages of total phosphorus (17 µg/L) and chlorophyll-a (2 µg/L) concentrations were better than in 2019, and similar to years 2015-2018. Water quality was not monitored in Kingsley Lake in 2020, but began again in 2021. The 2021 summer averages of total phosphorus and chlorophyll-a were considerably better than the MPCA's shallow lake standards, and have consistently been below the water quality standards since 1997. The BDWMO will continue to monitor the water quality of Kingsley Lake in 2022. * 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.

Kingsley Lake Habitat Monitoring Results for 2021

As mentioned in the article on page 4, habitat monitoring was conducted in 2021 on Kingsley Lake. The BDWMO made the following quality ratings, based on the monitoring results:



Submergent zone quality rating = Moderate

Rating based on averaging four criteria:

1. excellent total number of native species (19)
2. moderate average native plant density (1.7)
3. moderate rating for average exotic species density (1.5)
4. moderate coefficient of conservatism value (mean C-value) (5.5)

Curly-leaf pondweed, a dominant species found some years in Kingsley Lake, was present in only one specific location in the western portion of Kingsley Lake. The density increased slightly between 2016 and 2021. Dense coverage of native submergent vegetation, including Robbin's pondweed and largeleaf pondweed in Kingsley Lake helps prevent the spread of curly-leaf pondweed. A dense growth of filamentous and nostoc algae were present in the southeast lobe of the lake in 2021.

The BDWMO recommends continued monitoring and consideration of control measures if densities and locations increase to an extent of concern.

Emergent vegetation zone quality rating = High

Rating based on averaging four criteria:

1. excellent number of native wetland plant species (45)
2. high rating for % coverage of exotic species (26-50%)
3. a moderate mean C-value rating (4.0)
4. high rating for total vegetative cover (51-75%)

Non-native species including narrowleaf and hybrid cattail, purple loosestrife, and yellow iris are found in the vegetated emergent zone. Floating mats in the northeastern portion of Kingsley Lake contain diverse native vegetation including sundew, sedges, rushes, burr-reeds, ferns, and bog birch, which provide habitat for green frogs, painted turtles, egrets, green herons, wood ducks, loons, and great blue herons.

The BDWMO recommends continued control and management of purple loosestrife and yellow iris and protection of the floating mat habitat.

Upland buffer zone quality rating = High

- 67 native species and 28 exotic species observed.
- Exotic plant species 15-40% of upland vegetative cover. The mean C-value rating is 2.1 (poor).
- Upland buffer within portions of the shoreline is wide, providing wildlife habitat and shoreline protection. Though some areas with bare soil on steep slopes could cause erosion and sedimentation into the lake and should be vegetated with naturalized vegetation. Other areas with turf grass, gravel, and managed plantings with bare soil could be vegetated with native grasses and wildflowers. The BDWMO recommends control of non-native common buckthorn, Russian olive, Chinese silver grass, and Siberian elm
- The BDWMO recommends installation of a pre-treatment system such as a rain garden, pervious pavement, or sediment trap to collect sediment from a parking lot prior to discharge into the lake.
- 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:

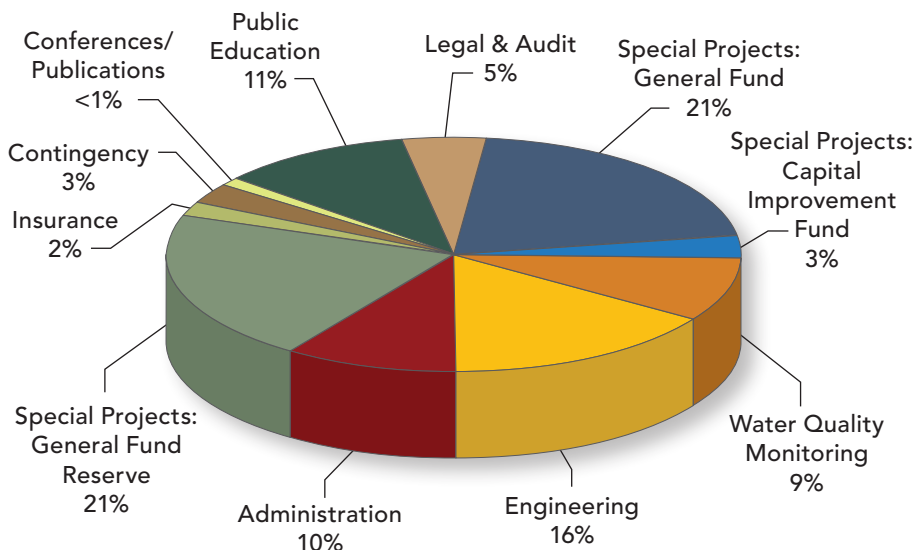
Daryl Jacobson, Administrator
Black Dog WMO
City of Burnsville
13713 Frontier Court
Burnsville, MN 55337
Telephone: 952-895-4574
Fax: 952-895-4531

Website: www.blackdogwmo.org

2022 Budget

Engineering	\$31,000
Legal and Audit	\$10,500
Administrative Services	\$19,000
Public Education	\$21,850
Insurance	\$3,000
Special Projects – General Fund	\$40,600
Special Projects – Capital Improvement Fund	\$5,000
Special Projects – General Fund Reserve	\$40,000
Conference/Publications	\$500
Water Quality Monitoring	\$17,200
Contingency	\$5,000

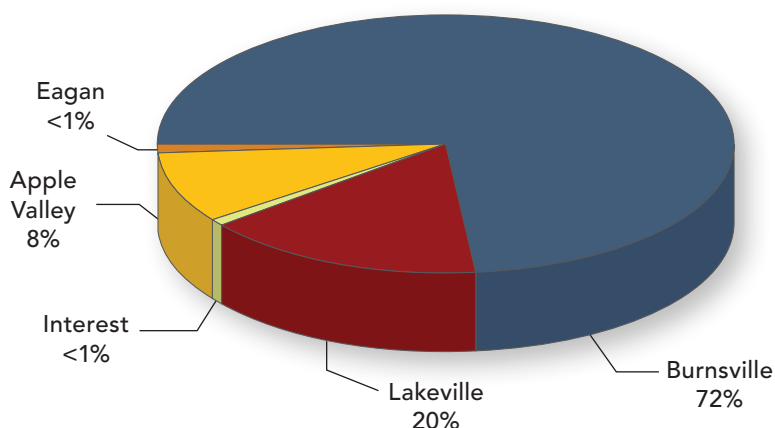
Total Expenditures \$193,650



2022 Income

Member Contributions	\$153,000
Interest	\$40

Total Income \$153,040



2021 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 2021, 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, but resumed in 2021
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, and note if the trend was statistically significant. The linear best-fits were determined using a “least squares” regression analysis of the summer averages of the past 10 years (2012—2021) of data. Trend analyses were not performed for Keller Lake because of the alum treatment that was conducted in spring 2019 and fall 2021. The 2021 CAMP data provided by the Metropolitan Council were final data (i.e., Metropolitan Council laboratory had finished their review of the 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 2021.

Water quality monitoring data is also available for other “non-strategic” water bodies in the Black Dog WMO. In 2021, 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)

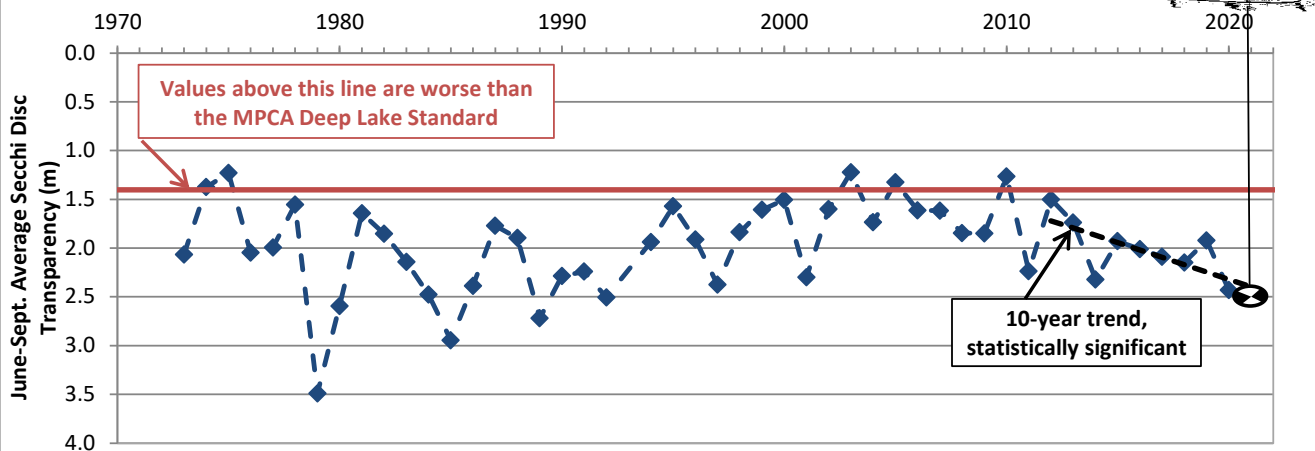
Results of the 2021 water quality monitoring of these water bodies is available from the Metropolitan Council’s CAMP program.

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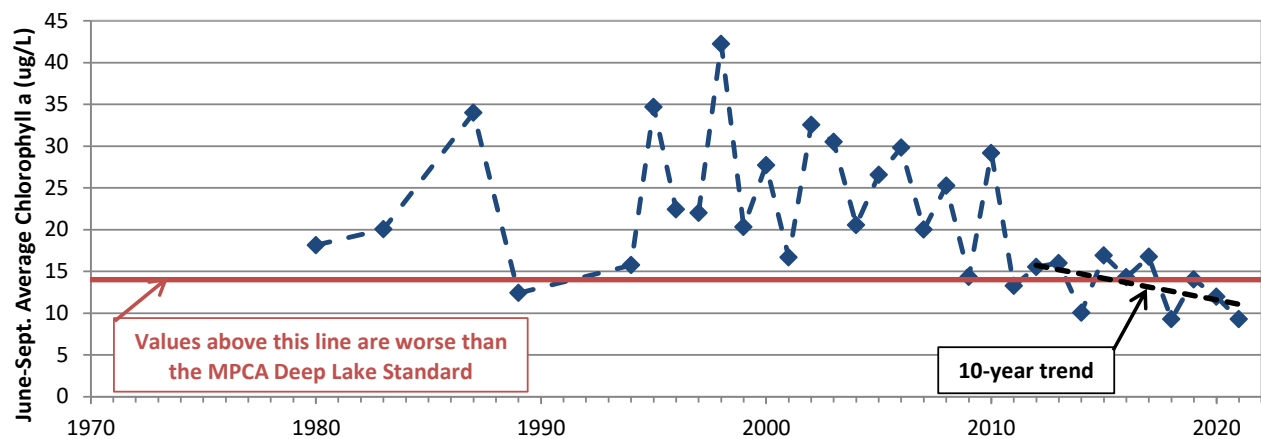
Historical Water Quality Data—Figures

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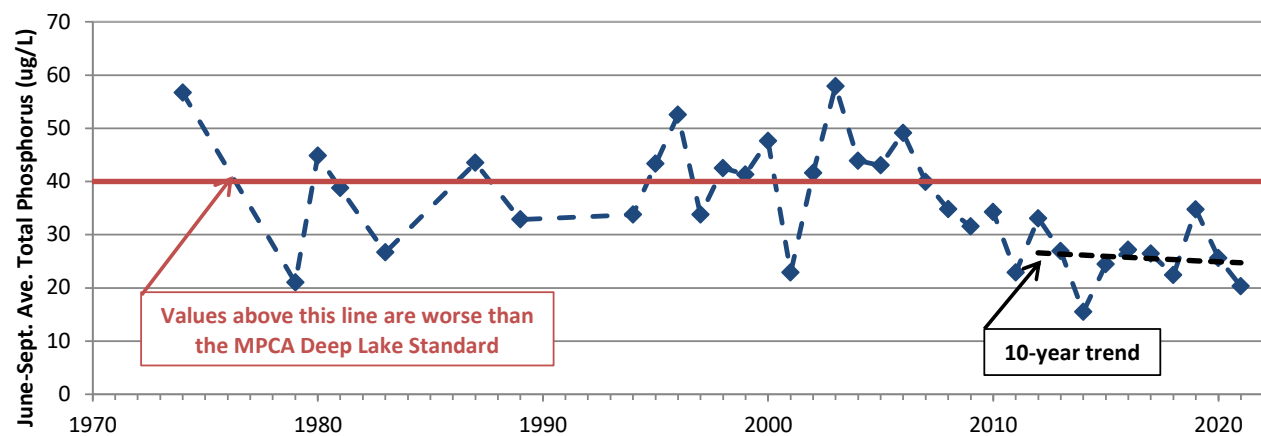
Crystal Lake June-Sept. Secchi Disc Transparency

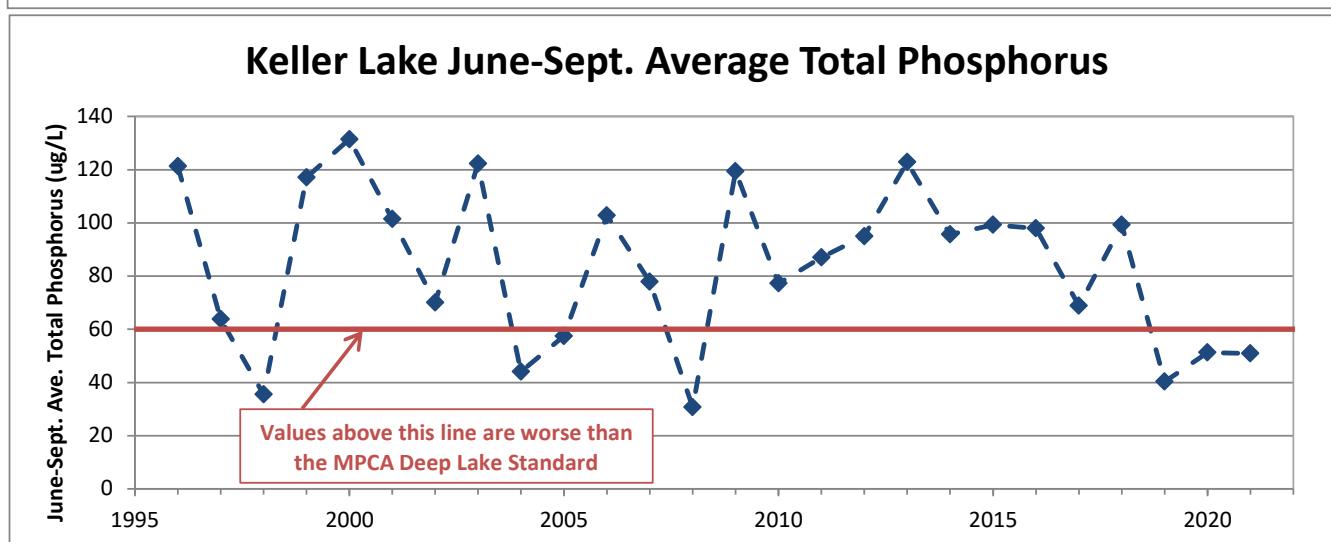
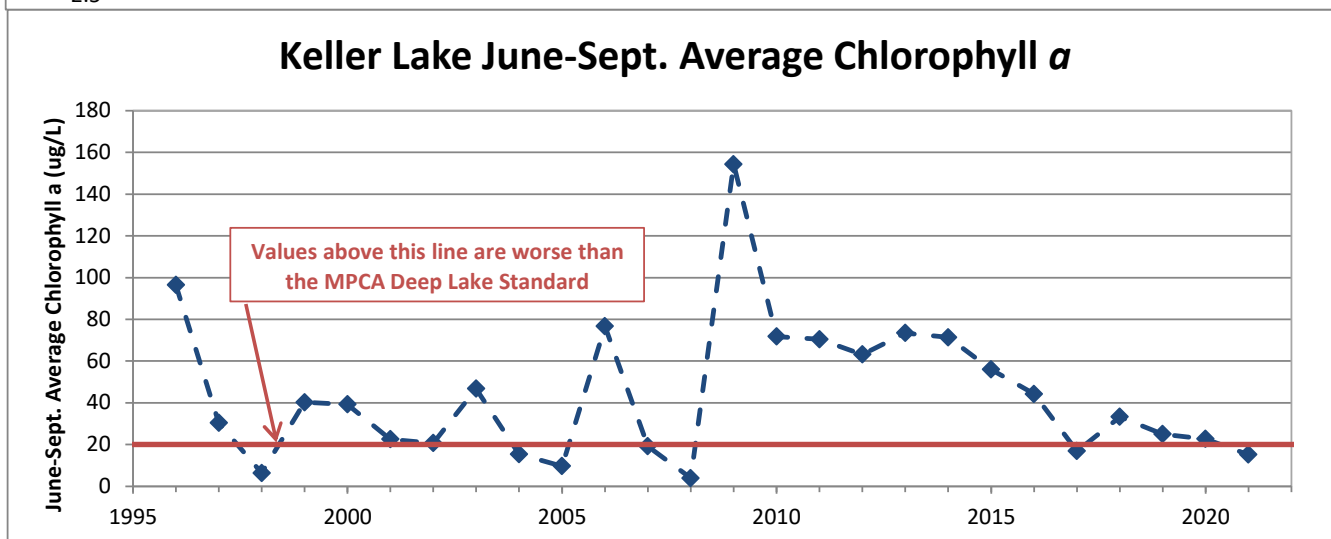
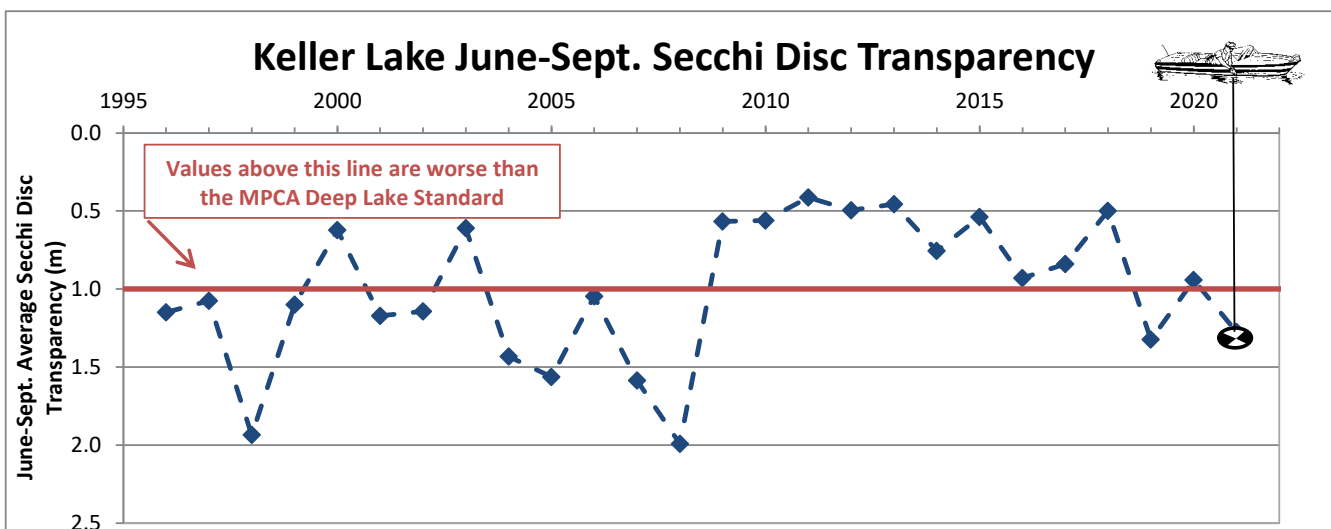


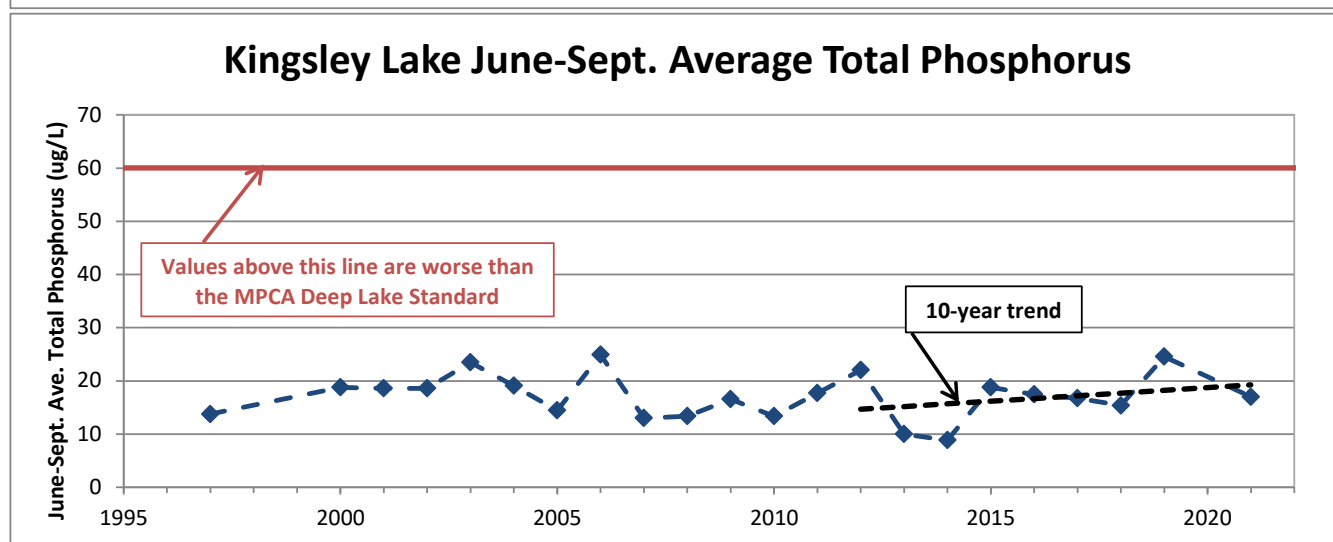
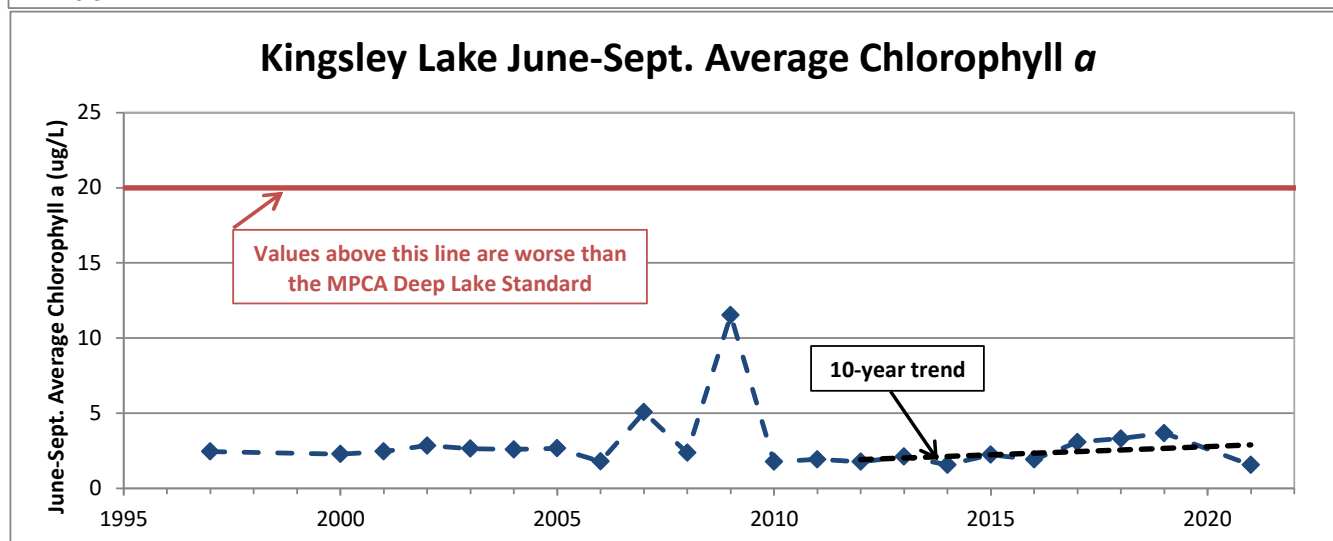
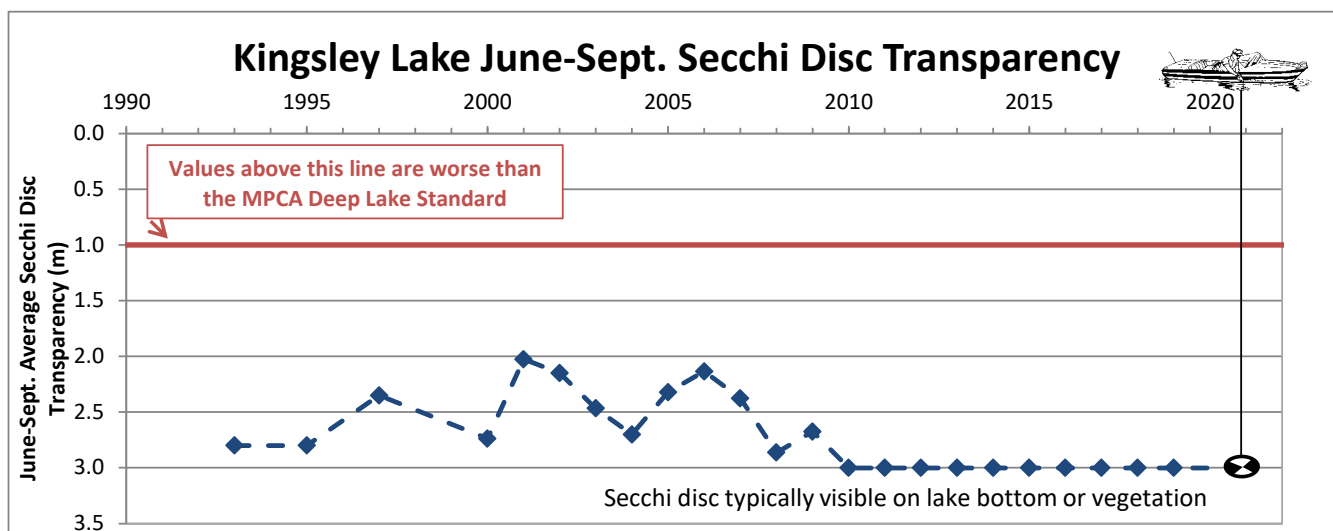
Crystal Lake June-Sept. Average Chlorophyll *a*

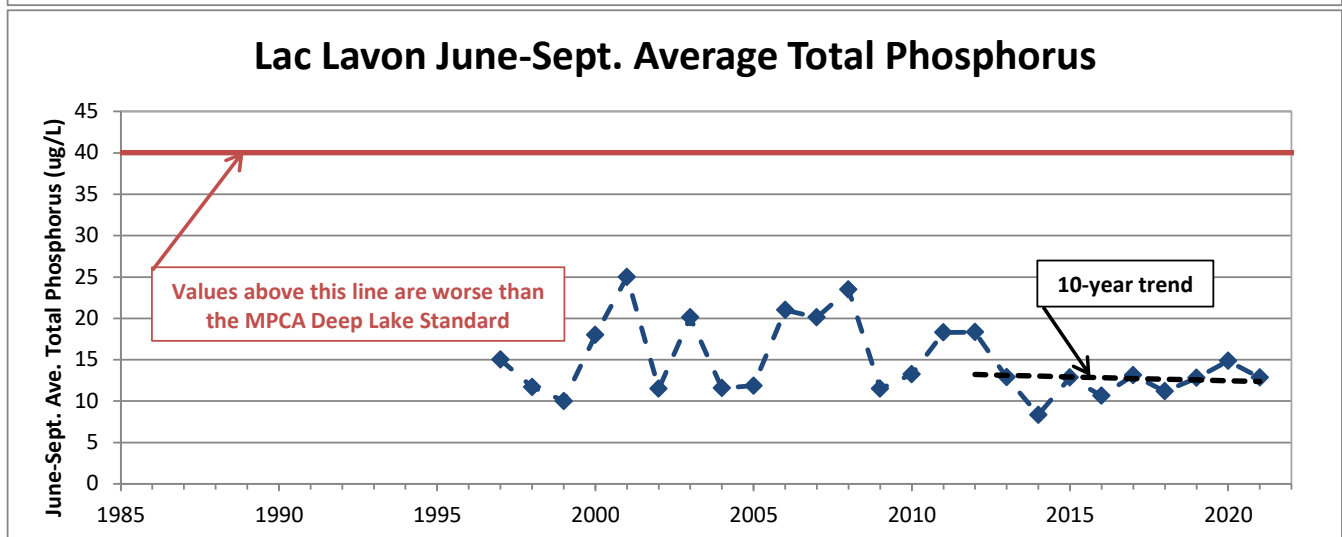
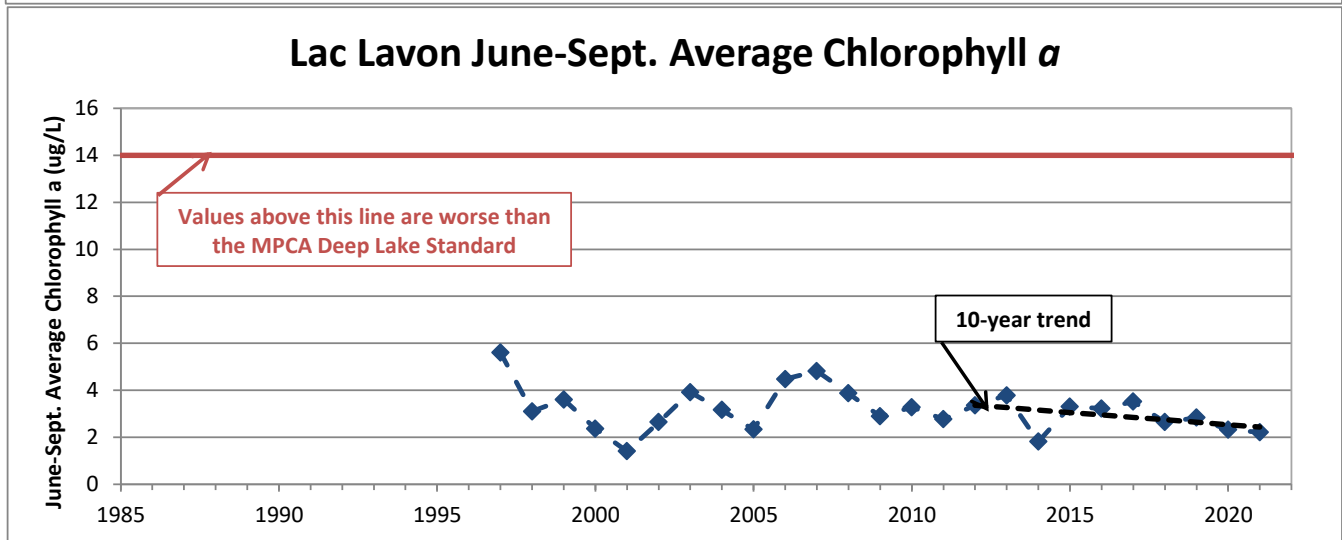
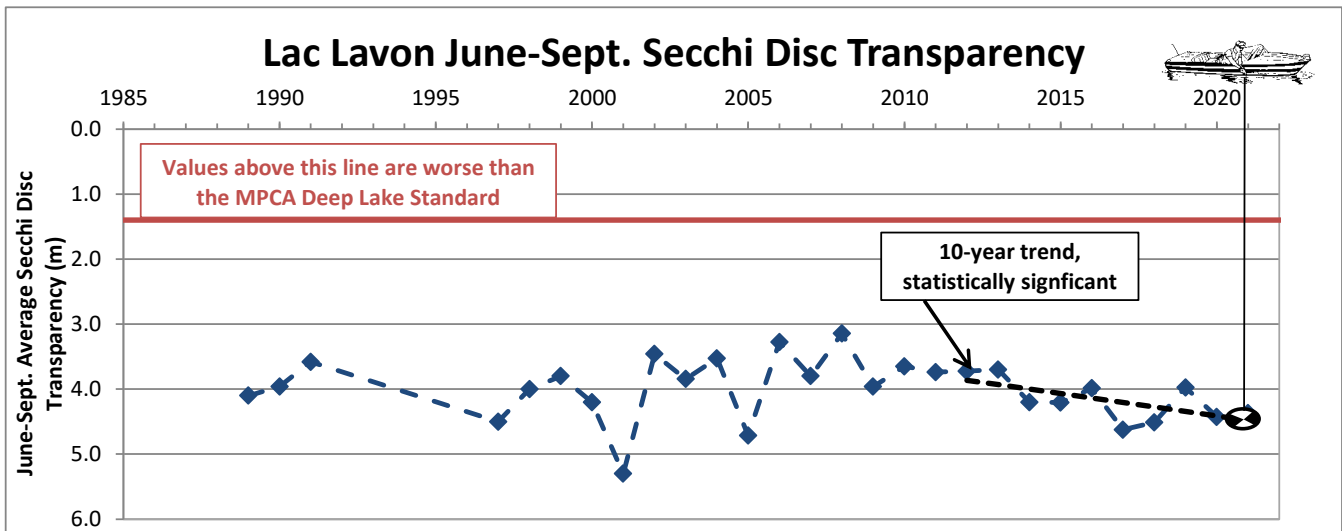


Crystal Lake June-Sept. Average Total Phosphorus



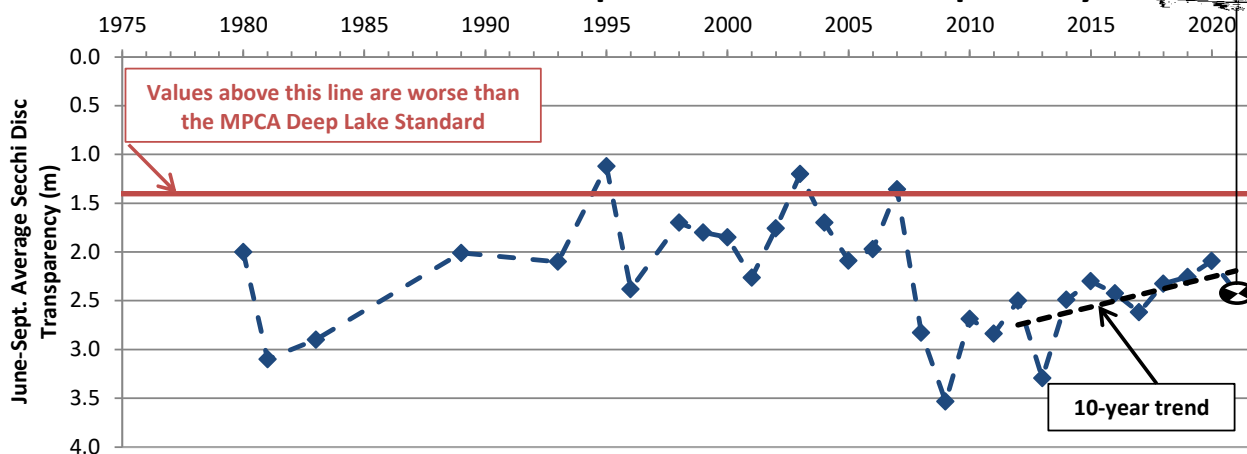




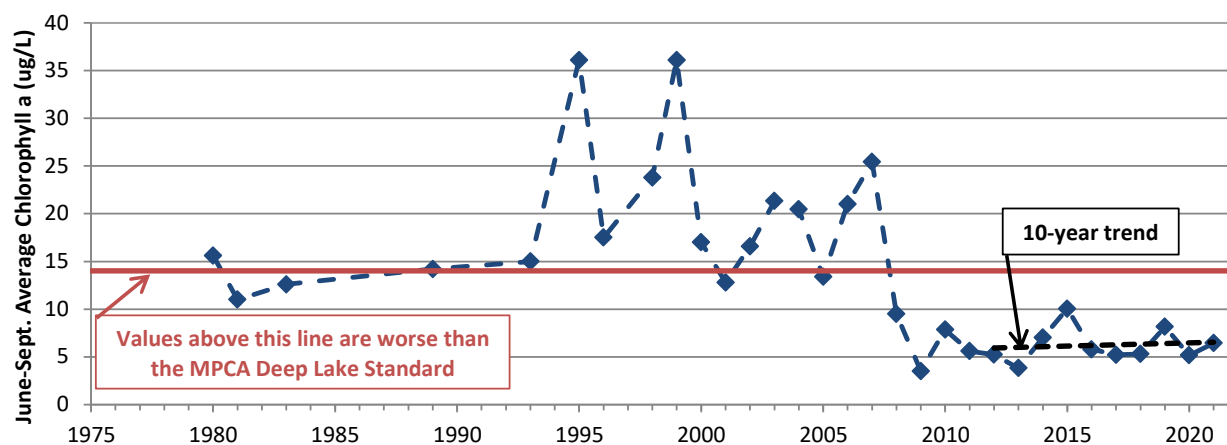




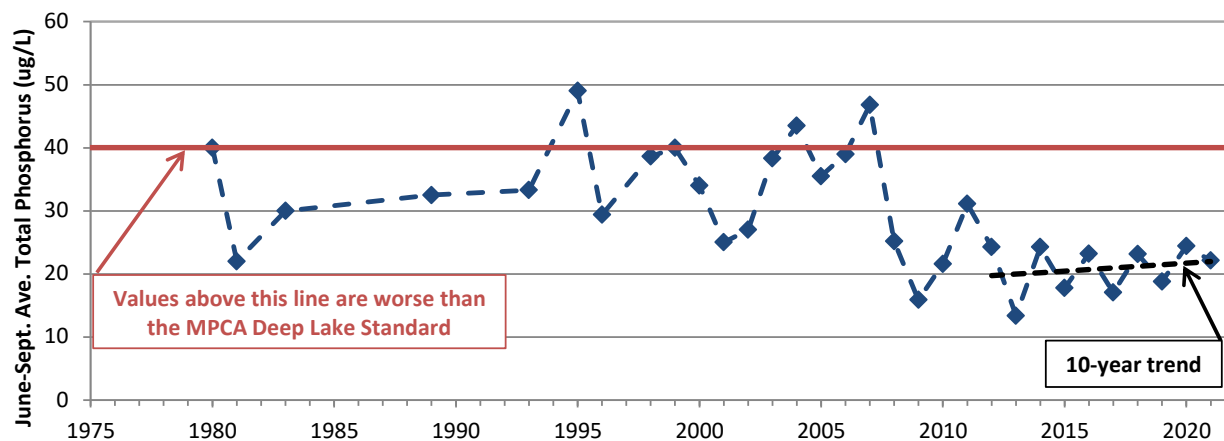
Orchard Lake June-Sept. Secchi Disc Transparency



Orchard Lake June-Sept. Average Chlorophyll *a*



Orchard Lake June-Sept. Average Total Phosphorus



2021 Water Quality Data—Tables

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**Table 1: Keller Lake 2021 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)
5/5/2021	0	2.1	2.1	39	0.62	18.2
5/22/2021	0	1.6	13	37	0.82	26.2
6/10/2021	0	1.9	10	46	0.65	28.7
6/17/2021	0	1.1	17	47	0.95	29.6
7/9/2021	0	1.1	17	56	0.98	--
7/22/2021	0	1.0	8.3	--	1.1	--
8/10/2021	0	1.4	20	44	0.98	26.8
8/27/2021	0	0.9	24	91	1.1	17.1
9/8/2021	0	0.8	23	61	1.2	19.1
9/26/2021	0	+2.0	2.1	11	0.46	16.7
10/6/2021	0	+1.9	27	21	0.54	13.4
10/18/2021	0	+1.9	4.1	71*	0.56	10.9

Notes

+2.0 Secchi disk was resting on vegetation or lake bottom.

71* Result is suspect

Table 2: Kingsley Lake 2021 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)
5/6/2021	0	+1.3	1.6	17	0.42	17.1
5/19/2021	0	+1.7	1.6	28	0.47	22.2
6/4/2021	0	+1.4	1.9	28	0.46	23.3
6/17/2021	0	+2.0	1.3	17	0.55	27.9
6/28/2021	0	>2.2	2.4	13	0.49	25.2
7/13/2021	0	>2.2	2.1	~8	0.44	27.2
7/29/2021	0	>2.05	1.3	13	0.49	27.8
8/11/2021	0	+2.0	1.3	11	0.49	25.5
8/24/2021	0	+1.95	1.1	22	0.45	23.8
9/13/2021	0	+2.0	1.6	20	0.47	21.1
9/23/2021	0	+2.0	<1.0	21	0.45	22.0
10/9/2021	0	+1.9	1.6	48	0.54	22.0

Notes

< 1.0 Indicates result is below the method detection limit.

+2.0 Secchi disk was resting on vegetation or lake bottom.

~ 8 Indicates result is an estimated value above the method detection limit, but below the method reporting limit.

**Table 3: Lac Lavon 2021 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)
5/4/2021	0	2.4	2.9	15	0.62	14.5
5/25/2021	0	4.4	2.9	32	0.60	22.8
6/19/2021	0	4.6	1.9	23	0.56	24.5
7/6/2021	0	4.7	1.6	~8	0.48	25.1
7/15/2021	0	4.7	2.4	12	0.56	25.0
8/1/2021	0	4.7	2.1	~8	0.46	25.8
8/16/2021	0	4.3	1.9	~9	0.48	25.6
8/29/2021	0	4.0	2.1	~8	0.46	24.5
9/12/2021	0	3.6	3.5	22	0.66	22.1
10/25/2021	0	2.4	14	19	0.61	13.8

Notes

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

Table 4: Orchard Lake 2021 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)
4/24/2021	0	2.9	< 1.0	21	0.61	9.4
5/6/2021	0	4.0	1.3	11	0.60	14.3
5/20/2021	0	5.9	1.9	26	0.59	20.1
6/4/2021	0	3.8	1.1	21	0.63	22.8
6/22/2021	0	3.1	6.1	25	0.66	22.8
6/28/2021	0	2.2	6.9	16	0.70	24.5
7/21/2021	0	2.8	6.1	16	0.60	26.7
7/29/2021	0	2.1	5.9	15	0.74	27.8
8/14/2021	0	1.9	9.1	15	0.63	23.8
8/24/2021	0	2.0	7.5	35	0.79	23.9
9/14/2021	0	2.0	4.3	30	0.81	20.3
9/23/2021	0	1.8	11	26	0.67	21.0
10/11/2021	0	1.8	8.3	24	0.79	19.1

Notes

< 1.0 Indicates result is below the method detection limit.

**Table 5: Crystal Lake 2021 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)
4/22/2021	0	3.4	5.1	24	0.47	13.5
5/7/2021	0	3.2	5.6	33*	0.60	14.6
5/23/2021	0	3.1	2.9	11	0.60	22.1
6/5/2021	0	4.0	2.7	33*	0.57	22.3
6/18/2021	0	3.6	2.1	14	0.54	27.0
7/3/2021	0	3.1	< 1.0	40*	0.42	27.1
7/14/2021	0	2.3	9.1	20	0.46	25.2
7/27/2021	0	1.8	5.6	14	0.61	27.8
8/9/2021	0	2.1	5.9	18	0.53	24.4
8/27/2021	0	2.1	9.1	18	0.64	25.2
9/12/2021	0	1.7	17	22	0.70	20.4
9/25/2021	0	1.2	9.3	23	0.76	18.5
10/6/2021	0	1.2	15	20	0.66	20.0

Notes

< 1.0 Indicates result is below the method detection limit.

33* Result is suspect.

Table 6
Crystal Lake 2021 Water Quality Measured by Barr Engineering
BDWMO

Sample Date	Sample Depth	Field Measurements						Laboratory Analyses	
		Dissolved Oxygen (mg/L)	pH	Specific Conductance @ 25 °C (µS/cm)	Water Temperature (°C)	Secchi Disc Transparency (m)	Turbidity (NTU)	Chlorophyll-a, Pheo. Corr. (µg/L)	Total Phosphorus as P (µg/L)
4/14/2021	0 - 2	--	--	--	--	2.3	2.4	6.8	25
4/14/2021	0	10.7	6.9	676	9.4	--	--	--	--
4/14/2021	1	10.3	7.1	676	9.4	--	--	--	--
4/14/2021	2	10.3	7.2	676	9.4	--	--	--	--
4/14/2021	3	10.3	7.3	675	9.4	--	--	--	31
4/14/2021	4	10.3	7.3	674	9.4	--	--	--	26
4/14/2021	5	10.3	7.4	675	9.4	--	--	--	20
4/14/2021	6	9.1	7.2	680	8.5	--	--	--	20
4/14/2021	7	8.8	7.1	678	8.0	--	--	--	18
4/14/2021	8	7.8	7.0	679	7.1	--	--	--	16
5/13/2021	0 - 2	--	--	--	--	3.8	2.0	3.2	20
5/13/2021	0	12.1	8.0	664	15.5	--	--	--	--
5/13/2021	1	12.2	8.0	666	15.4	--	--	--	--
5/13/2021	2	12.3	8.0	667	15.4	--	--	--	--
5/13/2021	3	12.4	8.0	662	14.8	--	--	--	32
5/13/2021	4	11.9	7.9	664	14.1	--	--	--	23
5/13/2021	5	11.8	7.8	664	13.1	--	--	--	18
5/13/2021	6	9.8	7.4	665	10.8	--	--	--	17
5/13/2021	7	5.3	7.1	666	10.1	--	--	--	15
5/13/2021	8	3.2	7.0	667	9.7	--	--	--	23
5/26/2021	0 - 2	--	--	--	--	2.9	2.3	4.0	15
5/26/2021	0	9.6	7.9	656	21.8	--	--	--	--
5/26/2021	1	9.6	7.9	653	21.9	--	--	--	--
5/26/2021	2	9.6	8.0	653	21.9	--	--	--	--
5/26/2021	3	11.4	7.8	669	19.3	--	--	--	15
5/26/2021	4	11.8	7.7	671	16.2	--	--	--	18
5/26/2021	5	10.5	7.7	674	13.7	--	--	--	17
5/26/2021	6	9.2	7.4	674	11.8	--	--	--	18
5/26/2021	7	2.2	7.0	675	10.6	--	--	--	28
5/26/2021	8	0.1	6.8	681	9.8	--	--	--	32
6/08/2021	0 - 2	--	--	--	--	5.0	0.70	3.4	14
6/08/2021	0	9.2	8.3	646	25.8	--	--	--	--
6/08/2021	1	9.3	8.3	647	25.6	--	--	--	--
6/08/2021	2	9.5	8.3	647	25.2	--	--	--	--
6/08/2021	3	9.5	8.3	648	24.1	--	--	--	16
6/08/2021	4	8.1	7.9	655	19.7	--	--	--	14
6/08/2021	5	7.7	7.7	670	16.3	--	--	--	18
6/08/2021	6	6.2	7.5	675	13.1	--	--	--	28
6/08/2021	7	1.4	7.1	681	11.2	--	--	--	38
6/08/2021	8	0.6	6.9	690	10.5	--	--	--	53

Table 6
Crystal Lake 2021 Water Quality Measured by Barr Engineering
BDWMO

Sample Date	Sample Depth	Field Measurements						Laboratory Analyses	
		Dissolved Oxygen (mg/L)	pH	Specific Conductance @ 25 °C (µS/cm)	Water Temperature (°C)	Secchi Disc Transparency (m)	Turbidity (NTU)	Chlorophyll-a, Pheo. Corr. (µg/L)	Total Phosphorus as P (µg/L)
6/22/2021	0 - 2	--	--	--	--	2.7	1.6	8.2	17
6/22/2021	0	8.2	8.1	652	23.0	--	--	--	--
6/22/2021	1	8.2	8.1	652	23.0	--	--	--	--
6/22/2021	2	8.2	8.2	652	23.0	--	--	--	--
6/22/2021	3	8.2	8.2	651	23.0	--	--	--	17
6/22/2021	4	8.0	8.1	651	22.8	--	--	--	20
6/22/2021	5	7.9	7.9	667	19.7	--	--	--	8.4
6/22/2021	6	4.6	7.2	678	14.5	--	--	--	20
6/22/2021	7	0.5	7.0	683	12.0	--	--	--	19
6/22/2021	8	0.1	7.0	700	10.7	--	--	--	63
7/07/2021	0 - 2	--	--	--	--	2.5	2.2	14.4	23
7/07/2021	0	8.55	8.36	652	26.3	--	--	--	--
7/07/2021	1	8.54	8.37	651	26.4	--	--	--	--
7/07/2021	2	8.52	8.38	652	26.4	--	--	--	--
7/07/2021	3	8.47	8.38	652	26.4	--	--	--	20
7/07/2021	4	9.99	8.44	654	25.0	--	--	--	23
7/07/2021	5	3.60	7.56	663	20.7	--	--	--	30
7/07/2021	6	0.75	7.22	676	16.3	--	--	--	38
7/07/2021	7	0.50	7.08	677	13.0	--	--	--	56
7/07/2021	8	0.38	6.92	728	10.9	--	--	--	260
7/21/2021	0 - 2	--	--	--	--	2.4	2.0	6.9	19
7/21/2021	0	9.4	8.5	637	26.8	--	--	--	--
7/21/2021	1	9.5	8.5	637	26.8	--	--	--	--
7/21/2021	2	9.5	8.5	637	26.8	--	--	--	--
7/21/2021	3	9.5	8.5	637	26.8	--	--	--	20
7/21/2021	4	9.3	8.4	638	25.4	--	--	--	26
7/21/2021	5	0.9	7.5	647	22.2	--	--	--	45
7/21/2021	6	1.1	7.2	657	16.6	--	--	--	29
7/21/2021	7	0.5	7.0	674	13.1	--	--	--	59
7/21/2021	8	0.4	6.8	710	11.5	--	--	--	300
8/10/2021	0 - 2	--	--	--	--	2.1	2.5	10.6	23
8/10/2021	0	8.4	8.0	646	25.6	--	--	--	--
8/10/2021	1	8.4	8.1	645	25.7	--	--	--	--
8/10/2021	2	8.4	8.2	644	25.5	--	--	--	--
8/10/2021	3	7.1	8.0	643	25.5	--	--	--	24
8/10/2021	4	4.8	7.7	646	24.6	--	--	--	23
8/10/2021	5	0.5	7.2	653	23.0	--	--	--	24
8/10/2021	6	0.4	6.9	662	17.7	--	--	--	28
8/10/2021	7	0.4	6.6	695	13.2	--	--	--	87
8/10/2021	8	0.3	6.4	737	11.9	--	--	--	470

Table 6
Crystal Lake 2021 Water Quality Measured by Barr Engineering
BDWMO

Sample Date	Sample Depth	Field Measurements						Laboratory Analyses	
		Dissolved Oxygen (mg/L)	pH	Specific Conductance @ 25 °C (µS/cm)	Water Temperature (°C)	Secchi Disc Transparency (m)	Turbidity (NTU)	Chlorophyll-a, Pheo. Corr. (µg/L)	Total Phosphorus as P (µg/L)
8/25/2021	0 - 2	--	--	--	--	2.1	2.3	10.0	22
8/25/2021	0	7.9	8.1	650	24.5	--	--	--	--
8/25/2021	1	7.8	8.3	650	24.5	--	--	--	--
8/25/2021	2	7.8	8.3	650	24.5	--	--	--	--
8/25/2021	3	7.5	8.3	648	24.5	--	--	--	28
8/25/2021	4	5.5	8.0	650	24.2	--	--	--	29
8/25/2021	5	4.3	7.8	657	23.8	--	--	--	26
8/25/2021	6	0.4	7.4	665	20.3	--	--	--	30
8/25/2021	7	0.3	7.0	707	14.6	--	--	--	88
8/25/2021	8	0.3	6.7	748	12.9	--	--	--	270
9/09/2021	0 - 2	--	--	--	--	1.8	4.8	12.4	22
9/09/2021	0	8.4	8.2	639	21.9	--	--	--	--
9/09/2021	1	8.3	8.2	639	21.8	--	--	--	--
9/09/2021	2	8.1	8.2	639	21.7	--	--	--	--
9/09/2021	3	7.9	8.2	639	21.7	--	--	--	23
9/09/2021	4	7.7	8.1	639	21.6	--	--	--	22
9/09/2021	5	7.8	8.2	638	21.6	--	--	--	21
9/09/2021	6	2.8	7.6	643	21.0	--	--	--	19
9/09/2021	7	0.5	7.1	704	16.6	--	--	--	47
9/09/2021	8	0.4	6.9	768	13.0	--	--	--	300
9/21/2021	0 - 2	--	--	--	--	1.7	4.2	29.7	35
9/21/2021	0	7.2	7.8	650	20.7	--	--	--	--
9/21/2021	1	7.1	7.8	650	20.7	--	--	--	--
9/21/2021	2	7.0	7.8	650	20.6	--	--	--	--
9/21/2021	3	7.0	7.8	649	20.5	--	--	--	33
9/21/2021	4	6.8	7.8	648	20.5	--	--	--	28
9/21/2021	5	5.5	7.7	649	20.4	--	--	--	26
9/21/2021	6	1.2	7.3	654	20.2	--	--	--	29
9/21/2021	7	0.4	7.0	692	18.2	--	--	--	48
9/21/2021	8	0.2	6.8	780	15.1	--	--	--	160

2021 Annual Finance Statement

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BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Financial Statements
as of December 31, 2021

Unaudited
Prepared by the City of Burnsville

Contents:

Statement of Net Position
Statement of Activities
Balance Sheet - Governmental Funds
Statement of Revenue, Expenditures, and Changes in Fund Balances - Governmental Funds
Statement of Revenue, Expenditures, and Changes in Fund Balances - Budget and Actual - General Fund
Statement of Revenue, Expenditures, and Changes in Fund Balances - Budget and Actual - Capital Improvement Fund

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Net Position
as of December 31, 2021

	<u>Governmental Activities</u> <u>2021</u>
Assets	
Cash and investments	522,917.86
Accounts receivable	-
Due from other governmental units	65,926.24
Prepays	-
Capital assets	
Buildings	37,600.00
Equipment	110,138.00
Less accumulated depreciation	(135,518.00)
Total capital assets, net of accumulated depreciation	<u>12,220.00</u>
Total assets	<u><u>535,137.86</u></u>
Liabilities	
Accounts payable	9,375.44
Due to other governmental units	29,382.86
Unearned revenue	-
Total liabilities	<u>38,758.30</u>
Net position	
Net investment in capital assets	12,220.00
Restricted for capital improvements	81,489.27
Unrestricted	402,670.29
Total net position	<u>496,379.56</u>
Total liabilities and net position	<u><u>535,137.86</u></u>

-

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Activities
Year Ended December 31, 2021

	<u>Governmental Activities</u>
	<u>2021</u>
Expenses	
General government	
System operations	230,263.14
Administrative services	48,307.36
Depreciation	940.00
Total program expenses	<u>279,510.50</u>
Revenues	
General government	
Charges for services	
Management fees	153,000.00
Grants	
State of MN Board of Water and Soil Resources	79,987.44
General revenues	
Interest earnings	64.61
Total revenues	<u>233,052.05</u>
Change in net position	(46,458.45)
Net position	
Beginning of year	<u>542,838.01</u>
End of year	<u><u>496,379.56</u></u>

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Balance Sheet
Governmental Funds
Year Ended December 31, 2021

	General Fund	Capital Improvement Fund	Total Governmental Funds 2021
Assets			
Cash and investments	441,428.59	15,563.03	456,991.62
Accounts receivable	0.00	0.00	0.00
Due from other governmental units	0.00	65,926.24	65,926.24
Total assets	<u>441,428.59</u>	<u>81,489.27</u>	<u>522,917.86</u>
Liabilities			
Accounts payable	9,375.44	0.00	9,375.44
Due to other governmental units	29,382.86	0.00	29,382.86
Unearned revenue	0.00	0.00	0.00
Total liabilities	<u>38,758.30</u>	<u>0.00</u>	<u>38,758.30</u>
Fund balances			
Restricted for capital improvements	0.00	81,489.27	81,489.27
Assigned for subsequent year's budget deficit	73,460.00	0.00	73,460.00
Unassigned	329,210.29	0.00	329,210.29
Total fund balances	<u>402,670.29</u>	<u>81,489.27</u>	<u>484,159.56</u>
 Total liabilities, deferred inflows of resources, and fund balances	 <u>441,428.59</u>	 <u>81,489.27</u>	 <u>522,917.86</u>

Amounts reported for governmental activities in the Statement of Net Position differ because:

Fund balances – governmental funds	484,159.56
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	<u>(135,518.00)</u>
Net position of governmental activities	<u>496,379.56</u>

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Revenue, Expenditures, and Changes in Fund Balances
Governmental Funds
Year Ended December 31, 2021

	General Fund	Capital Improvement Fund	Total Governmental Funds 2021
Revenue			
Member assessments	131,000.00	22,000.00	153,000.00
Intergovernmental Revenue - Grants	-	79,987.44	79,987.44
Interest earnings	64.61	-	64.61
Total revenue	<u>131,064.61</u>	<u>101,987.44</u>	<u>233,052.05</u>
Expenditures			
General government			
System Operations			
Engineering	26,663.44	-	26,663.44
Special Projects	56,141.56	128,571.50	184,713.06
Insurance	1,407.00	-	1,407.00
Water quality monitoring	17,479.64	-	17,479.64
Administrative services			
Legal and audit	2,584.00	-	2,584.00
Administrative costs	24,302.86	-	24,302.86
Public education	21,420.50	-	21,420.50
Conferences, publications and reports	-	-	-
Contingency	-	-	-
Total expenditures	<u>149,999.00</u>	<u>128,571.50</u>	<u>278,570.50</u>
Excess (Deficiency) of Revenues Over (Under)	<u>(18,934.39)</u>	<u>(26,584.06)</u>	<u>(45,518.45)</u>
Other Financing Source (Uses)			
Transfers in	-	-	-
Transfers out	-	-	-
Total other financing sources (uses)	<u>-</u>	<u>-</u>	<u>-</u>
Net change in fund balances	(18,934.39)	(26,584.06)	(45,518.45)
Fund balances			
Beginning of year	<u>421,604.68</u>	<u>108,073.33</u>	<u>529,678.01</u>
End of year	<u>402,670.29</u>	<u>81,489.27</u>	<u>484,159.56</u>

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

Net change in fund balances – governmental funds (45,518.45)

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 (46,458.45)

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Revenue, Expenditures, and Changes in Fund Balances
Budget and Actual
General Fund
Year Ended December 31, 2021

	2021			
	Original Budget	Final Budget	Actual	Over (Under) Final Budget
Revenue				
Management fees	\$ 131,000.00	\$ 131,000.00	131,000.00	-
Intergovernmental Revenue - Grants	-	-	-	-
Interest earnings	40.00	40.00	64.61	24.61
Total revenue	131,040.00	131,040.00	131,064.61	24.61
Expenditures				
General government				
System Operations				
Engineering	31,000.00	31,000.00	26,663.44	(4,336.56)
Special Projects	106,800.00	106,800.00	56,141.56	(50,658.44)
Insurance	3,000.00	3,000.00	1,407.00	(1,593.00)
Water quality monitoring	17,100.00	17,100.00	17,479.64	379.64
Administrative services				
Legal and audit	5,000.00	5,000.00	2,584.00	(2,416.00)
Administrative costs	18,000.00	18,000.00	24,302.86	6,302.86
Public education	22,100.00	18,100.00	21,420.50	3,320.50
Conferences, publications and reports	500.00	500.00	-	(500.00)
Contingency	1,000.00	5,000.00	-	(5,000.00)
Total expenditures	204,500.00	204,500.00	149,999.00	(54,501.00)
Excess (Deficiency) of Revenues Over (Under)	(73,460.00)	(73,460.00)	(18,934.39)	54,525.61
Other Financing Source (Uses)				
Transfers in	-	-	-	-
Transfers out	-	-	-	-
Total other financing sources (uses)	-	-	-	-
Net change in fund balances	\$ (73,460.00)	\$ (73,460.00)	(18,934.39)	54,525.61
Fund balances				
Beginning of year			421,604.68	
End of year			402,670.29	

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Statement of Revenue, Expenditures, and Changes in Fund Balances
Budget and Actual
Capital Improvement Fund
Year Ended December 31, 2021

	2021			
	Original Budget	Final Budget	Actual	Over (Under) Final Budget
Revenue				
Management fees	\$ 22,000.00	\$ 22,000.00	22,000.00	-
Intergovernmental Revenue - Grants	-	-	79,987.44	79,987.44
Interest earnings	-	-	-	-
Total revenue	<u>22,000.00</u>	<u>22,000.00</u>	<u>101,987.44</u>	<u>79,987.44</u>
Expenditures				
General government				
System Operations				
Engineering	-	-	-	-
Special Projects	10,000.00	17,000.00	128,571.50	111,571.50
Insurance	-	-	-	-
Water quality monitoring	-	-	-	-
Administrative services				
Legal and audit	-	-	-	-
Administrative costs	-	-	-	-
Public education	-	-	-	-
Conferences, publications and reports	-	-	-	-
Contingency	-	-	-	-
Total expenditures	<u>10,000.00</u>	<u>17,000.00</u>	<u>128,571.50</u>	<u>111,571.50</u>
Excess (Deficiency) of Revenues Over (Under)				
Expenditures	<u>12,000.00</u>	<u>5,000.00</u>	<u>(26,584.06)</u>	<u>(31,584.06)</u>
Other Financing Source (Uses)				
Transfers in	-	-	-	-
Transfers out	-	-	-	-
Total other financing sources (uses)	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Net change in fund balances	<u>\$ 12,000.00</u>	<u>\$ 5,000.00</u>	<u>(26,584.06)</u>	<u>(31,584.06)</u>
Fund balances				
Beginning of year			<u>108,073.33</u>	
End of year			<u>81,489.27</u>	

BLACK DOG WATER MANAGEMENT COMMISSION
PBC (Prepared by Client) List - prepare for audit
12/31/2021

Item	Workpaper	Responsible	Completion Date
1	Black Dog WMC meeting minutes		
2	List of officers and directors		
3	Copy of 2021 budget and amendments		
4	Copies of all new grants, agreements, contract, etc.		
5	Trial Balance		
6	Bank account reconciliation w/outstanding check list		
7	List of accounts receivable		
8	List of accounts payable		
9	Update capital asset information		

BLACK DOG WATERSHED MANAGEMENT ORGANIZATION				
Accounts Receivable				
12/31/21				
Description			Amount	Deposit Date
None				
			0.00	

BLACK DOG WATERSHED MANAGEMENT ORGANIZATION				
Due From Other Governmental Units				
12/31/21				
Description			Amount	Deposit Date
State of MN Grant		DFOG	65,926.24	1/20/2022
			65,926.24	

BLACK DOG WATERSHED MANAGEMENT ORGANIZATION						
Accounts Payable/Due to Other Governments						
12/31/21						
Inv Date	Vendor Name	Amount	Description	Date Paid	Check #	Check Amt
	Barr Engineering	AP \$ 9,154.44	Prof. services Nov 27 - Dec 31, 2021	01/19/22	1774	\$ 9,154.44
	Met Council - ES	DTOG \$ 3,800.00	2021 CAMP - Citizen Assist Monitoring Project	01/19/22	1775	\$ 3,800.00
	Campbell Knutson	AP \$ 221.00	Dec 2021 services	02/16/22	1777	\$ 221.00
	City of Burnsville	DTOG \$ 24,302.86	2021 Support services	02/16/22	1778	\$ 24,302.86
	Dakota County Soil &	DTOG \$ 1,280.00	October - December 2021 (Quarterly fees)	02/16/22	1779	\$ 1,280.00
	<i>total</i>	\$ 38,758.30				
		AP 9,375.44				
		AP-Cap 0.00				
		DTOG 29,382.86				
	<i>total</i>	\$ 38,758.30				

BLACK DOG WATERSHED MANAGEMENT ORGANIZATION					
Outstanding checks at year-end					
12/31/2021					
Inv Date	Vendor Name	Amount	Description	Date Paid	Check #
None					
		\$ -			

BLACK DOG WATERSHED MANAGEMENT ORGANIZATION		
Management Fees		
12/31/2021		
Management Fees 2021 (General Fund):		
City of Apple Valley	\$ 10,489.00	
City of Burnsville	93,924.00	
City of Eagan	580.00	
City of Lakeville	26,007.00	
Total	\$ 131,000.00	
Member Fees - Capital Improvement Fund 2021:		
City of Apple Valley	\$ 1,773.00	
City of Burnsville	16,133.00	
City of Eagan	0.00	
City of Lakeville	4,094.00	
Total	\$ 22,000.00	
Grand Total	153,000.00	
Total by City 2021:		
City of Apple Valley	\$ 12,262.00	
City of Burnsville	\$ 110,057.00	
City of Eagan	\$ 580.00	
City of Lakeville	\$ 30,101.00	
Total	\$ 153,000.00	

BLACK DOG WATERSHED MANAGEMENT ORGANIZATION		
Grants		
12/31/2021		
Description	Amount	Deposit Date
Grant Award (2019):	\$ 230,000.00	
First Payment - 50% Advance	115,000.00	received April 12, 2019 - see April 4M bank statement
Grant Eligible Expenses 2019:	100,938.80	
	\$ 14,061.20	grant advance remaining at 12/31/2019 - unearned revenue
Grant Eligible Expenses 2020:	0.00	
	\$ 14,061.20	grant advance remaining at 12/31/2020 - unearned revenue
Grant Eligible Expenses 2021:	79,987.44	*recognize this much revenue in 2021
	(14,061.20)	previous advance recorded as revenue in 2021
	\$ 65,926.24	reimbursement request
Final (2nd) Payment - Reimb.	65,926.24	received Jan. 20, 2022 - see Jan. 4M/US Bank bank statement
Total Grant Expenses 2019-2021	\$ 180,926.24	
Grantor: State of Minnesota - Board of Water and Soil Resources		
Grant Purpose: Keller Lake Alum Treatment		
Grant Amount: \$230,000		
Grant Approval:		
Grant Approved by Board at February 20, 2019 Board Meeting, Item # VII.		
VII. Approve Grant Agreement with the Board of Soil and Water Resources for an Alum Treatment		
A copy of the Grant Agreement with the MN Board of Soil and Water Resources for the Alum Treatment on		
Keller Lake was provided to the Commission prior to tonight's meeting for review. All funds spent before the		
grant agreement is fully executed will not eligible for reimbursement.		
Total Grant Amount:	\$ 230,000.00	
First Payment - 50% Advance	115,000.00	received April 12, 2019 - see April 4M bank statement
Grant Eligible Expenses 2019:	100,938.80	
	\$ 14,061.20	grant advance remaining at 12/31/2019
Grant Eligible Expenses 2020:	0.00	
	\$ 14,061.20	grant advance remaining at 12/31/2020
The second half of the grant will be received on a reimbursement basis.		
BDWMO does not anticipate any activity on the Keller Lake Alum Treatment in 2020.		
The second treatment (and eligible expenses) will be performed in 2021.		
Calculation:		
Grant award (2019) :	\$ 230,000.00	
Grant expenses (2019-2021):	\$ 180,926.00	
Unspent grant award:	\$ 49,074.00	
Grant Advance/reimbursement requests:		
Total Grant Expenses:	\$ 180,926.00	
Less: 50% Advance (2019):	\$ 115,000.00	
Remaining for reimbursement:	\$ 65,926.00	
Revenue/Expense recognition:		
Eligible expenses in 2019:	\$ 100,939.00	(per 2019 audited financial statements)
Eligible expenses in 2020:	\$ -	
Eligible expenses in 2021:	\$ 79,987.00	(calculation) – recognize this much revenue in 2021
Total eligible expenses:	\$ 180,926.00	

BLACK DOG WATERSHED MANAGEMENT ORGANIZATION
CAPITAL ASSETS SUMMARY
YEAR ENDED DECEMBER 31, 2021

Acq Date	Description	Useful Life	Historical Cost 12/31/03	Accumulated Depreciation 12/31/20	Net Value 12/31/20	2021 Depreciation	Balance 12/31/2021	
1994	Building	40	37,600	(24,440.00)	13,160.00	(940.00)	12,220.00	
1994	Equipment	15	110,138	(110,138.00)	-	-	-	fully depreciated at 2009
			<u>147,738.00</u>	<u>(134,578.00)</u>	<u>13,160.00</u>	<u>(940.00)</u>	<u>12,220.00</u>	
total accumulated depreciation at YE						(135,518.00)		

Assets	Years
Buildings	40 years
Equipment	15 years

Capital asset activity for the year ended December 31, 2021 was as follows:

	Beginning Balance	Additions	Deletions	Ending Balance
Governmental Activities				
Capital assets, depreciated				
Buildings	\$ 37,600	\$ -	\$ -	\$ 37,600
Equipment	110,138	-	-	110,138
Total capital assets, depreciated	<u>147,738</u>	<u>-</u>	<u>-</u>	<u>147,738</u>
Less accumulated depreciation for				
Buildings	24,440	940	-	25,380
Equipment	110,138	-	-	110,138
Total accumulated depreciation	<u>134,578</u>	<u>940</u>	<u>-</u>	<u>135,518</u>
Governmental activities capital assets, net	<u>\$ 13,160</u>	<u>\$ (940)</u>	<u>\$ -</u>	<u>\$ 12,220</u>

BLACK DOG WATERSHED
MANAGEMENT ORGANIZATION

Board of Commissioners and Administrators
as of December 31, 2021

BOARD OF COMMISSIONERS

Curtis Enestvedt	Chair
Mike Hughes	Vice Chair
Scott Thureen	Secretary/Treasurer/Commissioner
Rollie Greeno	Commissioner
Tom Harmening	Commissioner
Frank Boyce	Commissioner (Alternate)
Greg Helms	Commissioner (Alternate)
Natalie Walker	Commissioner (Alternate)

ADMINISTRATORS

Daryl Jacobson	Administrator
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BLACK DOG WATERSHED MANAGEMENT ORGANIZATION				
Notes				
12/31/21				
Description	Amount			
The first half of the grant arrived as an advance. Not all of the advance was spent at the end of 2019.				
No activities eligible for the grant were performed in 2020.				
The grant related activities were completed in 2021. The remainder of the 2019 advance was recognized, and the rest was reimbursed.				
The last audit was performed for year-end 2019.				
An audit is required every 5 years OR if the revenue thresholds set by the OSA are met/exceeded.				

Black Dog Watershed Management Organization

2023 Work Plan

1. 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 Lac Lavon.

2. Perform more detailed (management level) 2023 monitoring on Keller Lake as recommended in the updated 2022 Black Dog WMO Watershed Management Plan. The 2023 monitoring includes water quality monitoring and aquatic vegetation surveys of Keller Lake. The water quality monitoring will consist of collecting samples on 11 occasions—ice-out (April) and then May through September, twice per month. On each monitoring occasion, a composite surface sample of 0-2 meters will be collected for laboratory analyses. Because Keller Lake is not much deeper than 2 meters, no additional samples will be collected at depth. The samples will be analyzed for total phosphorus, chlorophyll-a, and chloride. Surface samples will be collected for phytoplankton counts every other sampling event, or once per month April-September, for a total of 6 phytoplankton count samples. In addition, Secchi disc readings will be taken. 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. Burnsville and Apple Valley will coordinate to conduct two aquatic vegetation point intercept surveys on Keller Lake—one in June and one in August. In 2023, the work includes field work, lab work, QA/QC of lab data (including coordination with lab), entering data into EQulS database, and submitting data to the MPCA (per guidance in the BDWMO Plan). In 2024, work will include preparing the summary report of the monitoring results in a new format/template (not yet developed), and preparing a presentation for a Commission meeting.
3. Prepare the 2022 Lac Lavon technical memo summarizing the more detailed (management level) monitoring results and a presentation for a Commission meeting.
4. Prepare the 2022 Orchard Lake habitat monitoring report and a presentation for a Commission meeting.
5. As budget allows, develop a new template for the water monitoring reports (first report in 2024).
6. 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).
7. Hold at least one meeting with the member cities and Dakota County SWCD to align the BDWMO implementation schedule with member city capital improvement programs, as needed, and establish a work plan for the coming year.

8. Partner with the Dakota County SWCD by providing funding and technical 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.
9. Partner with the Dakota County SWCD to fund Landscaping for Clean Water workshops. The workshops include three programs—Introduction to Clean Water Class, Design Course, and Maintenance Workshop. All programs are expected to continue online in 2023 due to the ongoing Covid-19 pandemic. The virtual Introduction to Clean Water Class offerings will be held in the spring (March through May) and then pre-recorded so others can participate in the classes at their leisure. The virtual Design Course classes will consist of a series of pre-recorded videos. Project materials for participants will be available online and an “Office Hours” program will be used to provide virtual consultations to Design Course class participants. The Maintenance Workshop classes are split into three online sessions. Each workshop focuses on maintenance for a given season (Spring, Summer and Fall) allowing for season specific information on how to maintain and promote the health, performance, and beauty of their garden.
10. Complete the 2022 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.
11. As budget allows, prepare up to two educational pieces/presentations for the Commission regarding new technology (e.g., new stormwater best management practices, new lake treatment technologies, etc.) and/or aquatic invasive species.
12. Apply for grants and/or assist member cities with grant applications.
13. Assist with BWSR watershed-based funding.
14. Formulate and approve the year 2024 Work Plan and Budget.
15. Review and respond to any issues and opportunities brought to the attention of the Black Dog WMO.
16. Maintain and update web site.
17. Respond to requests to partner with member communities and Dakota County on educational outreach programs.
18. Keep abreast of changes to the TMDL program, including additions to/removals from the impaired waters list and the listing criteria.
19. Review revisions to local water management and comprehensive plans as needed. No reviews are expected in 2023, as all member cities’ plans have been reviewed and approved.
20. Continue implementing plan to accrue funds in a Capital Improvement Fund for the BDWMO watershed plan ten-year update and future projects including BDWMO internal load reduction projects stemming from TMDLs for lakes with intercommunity shoreline (Crystal Lake, Keller Lake, and Lac Lavon).

Black Dog Watershed Management Organization

2023 Budget

<u>ITEM</u>	<u>AMOUNT</u>
1. <u>ENGINEERING</u>	\$31,000
<p>Projected cost of engineering consulting fees required for the general operation of the Black Dog WMO. Includes funding for engineering consultant to prepare for and attend meetings (regular Commission meetings, new meeting(s) with the member cities and Dakota County SWCD to align the Black Dog WMO implementation schedule with member city capital improvement programs and establish a work plan for the coming year, and other meetings); review/respond to issues and opportunities; apply for grants; assist with BWSR watershed-based funding; 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 miscellaneous consulting/reviews. In 2023, we anticipate this budget also covering the development of a new template for the water monitoring reports (first report in 2024). As budget allows, this also includes the preparation of up to two educational pieces/presentations for the Commission regarding new technology (e.g., new stormwater best management practices, new lake treatment technologies, etc.) and/or aquatic invasive species.</p>	
2. <u>SPECIAL PROJECTS – GENERAL FUND</u>	\$37,300
<i>(A) <u>Keller Lake Management Level Monitoring</u></i>	<i>\$19,100</i>
<p>2023 costs to conduct management level monitoring of the lake’s water quality, per guidance in the updated 2022 BDWMO Plan. The 2023 monitoring includes water quality monitoring and aquatic vegetation surveys of Keller Lake. The water quality 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 the lake surface. The samples will be analyzed for total phosphorus, chlorophyll-a, and chloride. Phytoplankton counts will be performed on samples collected every other event (once per month), for a total of 6 samples. In addition, Secchi disc readings will be taken. 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. Burnsville and Apple Valley will coordinate to conduct two aquatic vegetation point intercept surveys on Keller Lake—one in June and one in August. The</p>	

Black Dog Watershed Management Organization

2023 Budget – Page 2

<u>ITEM</u>	<u>AMOUNT</u>
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budget does not include the cost of the aquatic plant surveys. The 2023 budget covers field work, lab work, QA/QC of lab data (including coordination with lab), entering data into EQulS database, and submitting data to the MPCA (per guidance in the BDWMO Plan. In 2024, work will include preparing the summary report of the monitoring results in a new format/template (not yet developed), and preparing a presentation for a Commission meeting.

<u>(B) Dakota County SWCD –Landscaping for Clean Water Implementation</u>	\$13,500
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Funds to partner with the Dakota County SWCD to provide cost share and technical assistance to landowners for up to 18 Landscaping for Clean Water projects including raingardens, native plantings and shoreline stabilization projects, consistent with SWCD cost share policies.

<u>(C) Reporting on 2022 Lac Lavon Management Level Monitoring</u>	\$4,700
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Prepare the 2022 Lac Lavon technical memo summarizing the monitoring results and a presentation for a Commission meeting.

<u>3. INSURANCE</u>	\$2,500
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Cost of insurance policy for WMO. Cost is net of any rebates anticipated.

<u>4. LEGAL AND AUDIT</u>	\$5,000
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This represents legal consultant fees and audit.

<u>5. ADMINISTRATIVE SERVICES</u>	\$24,000
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This represents charges from the City of Burnsville for providing administrative services to the Commission. It includes the Administrator's time, secretarial time, and accounting staff time (including preparing the annual finance statement in years when an audit not required), as well as postage and printing.

<u>6. PUBLIC EDUCATION</u>	\$25,700
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<u>(A) Watershed Annual Report (Newsletter)</u>	\$4,500
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Funds to prepare draft and final versions of annual report/newsletter, and to produce annual report/newsletter. Electronic distribution only of draft and final report.

Black Dog Watershed Management Organization

2023 Budget – Page 3

<u>ITEM</u>	<u>AMOUNT</u>
<u>(B) Dakota County SWCD Landscaping for Clean Water Workshop Support</u> Funds to partner with the Dakota County SWCD to conduct Landscaping for Clean Water workshops. The workshops include three programs— Introduction to Clean Water Class, Design Course, and Maintenance Workshop. All programs are expected to continue online in 2023 due to the ongoing Covid-19 pandemic. The virtual Introduction to Clean Water Class offerings will be held in the spring (March through May) and then pre-recorded so others can participate in the classes at their leisure. The virtual Design Course classes will consist of a series of pre-recorded videos. Project materials for participants will be available online and an “Office Hours” program will be used to provide virtual consultations to Design Course class participants. The Maintenance Workshop classes are split into three online sessions. Each workshop focuses on maintenance for a given season (Spring, Summer and Fall) allowing for season specific information on how to maintain and promote the health, performance, and beauty of their garden.	\$15,500
<u>(C) Maintain Web Site</u> Funds paid to Dakota County SWCD to maintain and update the BDWMO web site.	\$3,600
<u>(D) Annual Activity Report (to BWSR)</u> Funds for engineering consultant to prepare draft and final annual activity report (submitted to BWSR), including coordination with BDWMO administrator and updating water quality summaries in the appendices.	\$2,100
<u>7. WATER QUALITY MONITORING</u>	\$15,200
<u>(A) Metropolitan Council Lake Monitoring (CAMP)</u> Black Dog WMO payment for local communities to enroll all strategic water bodies in the Metropolitan Council’s Citizen Assisted (lake) Monitoring Program (CAMP) - 5 sites @ \$800. The strategic water bodies are Crystal Lake, Keller Lake, Kingsley Lake, Lac Lavon, and Orchard Lake.	\$4,000

Black Dog Watershed Management Organization

2023 Budget – Page 4

<u>ITEM</u>	<u>AMOUNT</u>
<i>(B) Habitat Monitoring</i>	\$9,200
1. <u>Reporting on 2022 Orchard Lake Habitat Monitoring</u>	\$9,200
Prepare the 2022 Orchard Lake habitat monitoring report and a presentation for a Commission meeting.	
<i>(C) Update Trend Analysis on Strategic Water Bodies</i>	\$2,000
Funding to analyze 2022 data, coordinate with Metropolitan Council regarding CAMP data, and update tables and figures for inclusion in annual activity report and water quality monitoring report.	
8. <u>CONFERENCE/ PUBLICATIONS</u>	\$500
Funds allocated to reimburse Commissioners for training, education, etc.	
9. <u>CONTINGENCY</u>	\$5,000
These funds are not allocated to a particular project and can be used for unexpected expenses and/or new program opportunities that may come up during the course of the year which the WMO wishes to pursue.	
TOTAL EXPENSES	\$146,200

REVENUES

INTEREST	\$40
MEMBER CONTRIBUTIONS	\$131,000
MEMBER CONTRIBUTIONS – Capital Improvement Fund	\$12,500
GRANTS	\$0
TOTAL REVENUES	\$143,540

Anticipated Fund Balance at the end of 2023 = **\$447,789**

Black Dog Watershed Management Organization

2023 Budget – Page 5

<u>ITEM</u>	<u>AMOUNT</u>
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PLANNED CHANGES IN FUND BALANCE

1. <u>Capital Improvement Fund</u>	\$12,500
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The cities of Apple Valley, Burnsville, and Lakeville pay into this fund (established in 2016). The accrued funds are allocated for the ten-year plan update and future projects including BDWMO internal load reduction projects stemming from TMDLs for lakes with intercommunity shoreline (Crystal Lake, Keller Lake, and Lac Lavon).

2. <u>General Fund Reserve</u>	(\$15,160)
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Use of fund balance in the general fund.

TOTAL PLANNED INCREASE IN (USE OF) FUND BALANCE	(\$2,660)
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