

AGENDA
CASCADE CHARTER TOWNSHIP
REGULAR BOARD MEETING

Wednesday, March 23, 2022

7:00 P.M.

Wisner Center

2870 Jacksmith Drive SE, Grand Rapids 49546

Public may access the meeting via video conference software Zoom

<https://us02web.zoom.us/j/84639072455>

Meeting ID: 846 3907 2455

By Phone: 1 312 626 6799

Expected Meeting Procedures

1. During public comments you may speak on any item not noted on the agenda for a public hearing.
2. Please limit comments to 3 minutes per person and the Board may or may not choose to respond.
3. Please limit your comments to a specific issue.
4. Please turn OFF cellular phones.

Article 1. Call to Order, Roll Call

Article 2. Pledge of Allegiance to the Flag

Article 3. Approval of Agenda

Article 4. Presentations
None

Article 5. Public Comments - Anything on the Agenda not scheduled for a public hearing. (limit comments to 3 minutes)

Article 6. Approval of Consent Agenda

- a. Receive and File Minutes
 1. Township Board – 3/9/2022
 2. Thornapple River SAD Ad-Hoc Committee Minutes – 1/17/22
- b. Receive and File Reports
 1. Treasurer’s Report – 2021 Tax Collection Report
 2. Treasurer’s Department Report – January 2022
 3. Cascade Fire Department Annual Report
 4. LGROW Annual Report
- c. Receive and File Education Requests
 1. Todd Pell – Michigan IAAI Annual Arson School – Lansing, MI – May 23-26, 2022
 2. Doug Poolman – Michigan IAAI Annual Arson School – Lansing, MI – May 23-26, 2022
- d. Receive and File Communication
 1. Liquor License Compliance Review – Exit 76 Corporation

Township Board Agenda

March 23, 2022

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- Article 7. Financial Actions**
a. Consider Approval of January 2022 Payables, Payroll, and Transfers
b. Consider Approval of January 2022 Financial Statements
- Article 8. Unfinished Business**
- Article 9. New Business**
- 019-2022 Consider the 2022 Spongy Moth Control Spray Program**
- 020-2022 Consider a Contract For Aquatic Weed Management for Thornapple River**
- 021-2022 Confirm Township Manager Appointments for Department Head Positions**
- Article 10. Discussion**
1. Deer Cull
- Article 11. Public Comments – Any comments...whether it is on the agenda or not. (limit comments to 3 minutes)**
- Article 12. Manager Comments**
- Article 13. Board Member Comments**
- Article 14. Adjournment**

**MINUTES OF THE
CASCADE CHARTER TOWNSHIP
REGULAR BOARD MEETING**

Wednesday, March 9, 2022

Wisner Center

2870 Jacksmith Dr SE

Grand Rapids, MI 49546

AND

Virtual Zoom Meeting

7:00 P.M.

HYBRID FORMAT

- Article 1.** Supervisor Lesperance called the meeting to order.
Present: Supervisor Lesperance, Clerk Slater, Treasurer Peirce, Trustees Koessel, McDonald, Shipley and Noordhoek
Absent: None
Also Present: Township Manager Swayze, Chief Magers, Interim Planning Director Hilbrands, Deputy Clerk Brott, and those listed in the Supplement
- Article 2.** Supervisor Lesperance led the Pledge of Allegiance.
- Article 3.** **Approval of Agenda**
Motion by Trustee Shipley, seconded by Trustee McDonald to approve the agenda.
Motion carried unanimously.
- Article 4.** **Presentations**
None
- Article 5.** **Public Comments-Anything on the Agenda not scheduled for a public hearing. (limit comments to 3 minutes)**
None
- Article 6.** **Approval of Consent Agenda**
a. Receive and File Minutes
1. Township Board – 02/23/22
2. Governance Committee – 01/26/22
b. Receive and File Reports
1. Building Department – February 2022 Report Summary
c. Receive and File Education Requests
None
d. Receive and File Communication
None
Motion by Trustee Shipley, seconded by Trustee Koessel to approve the Consent Agenda.
Motion carried unanimously.
- Article 7.** **Financial Actions**
None

Township Board Minutes
March 9, 2022

Article 8. Unfinished Business

005-2022 Consider Amendments to the Township Committee Policy

Considerable discussion. Motion by Trustee McDonald, seconded by Treasurer Peirce to approve. Motion carried 4-3 by roll call vote. In favor-Treasurer Peirce, Clerk Slater, Trustees Koessel and McDonald. Opposed-Supervisor Lesperance, Trustees Noordhoek and Shipley.

Article 9. New Business

014-2022 Consider Amendment to Patterson Ice Center PUD Ordinance to Lift a Number of Use and Development Restrictions

Interim Planning Director Hilbrands presented and answered questions with Tom Mehney, Chuck Hoyt, and Kevin Wood from Patterson Ice Center.

a. Public Hearing for Amendment to Patterson Ice Center PUD Ordinance to Lift a Number of Use and Development Restrictions

Motion by Trustee McDonald, seconded by Trustee Koessel to open Public Hearing. Motion carried unanimously by roll call vote.

1. Ken VanDerKolk-7200 Leyton Dr-Asked if Patterson Ice Center will be increasing parking, bathrooms, or making any changes to the building? Representatives from Patterson Ice Center answered that there will be no physical changes to the property. The request for a liquor license is to supplement the business and honor the request from many patrons and residents. The request to increase the number of people allowed without requesting permission from the Board is to be in line with business needs.

Motion by Trustee Koessel, seconded by Trustee Shipley to close Public Hearing. Motion carried unanimously by roll call vote.

b. Consideration of an Amendment to Patterson Ice Center PUD Ordinance to Lift a Number of Use and Development Restrictions (Roll Call)

Chief Magers and Patterson Ice Center representatives answered questions.

Motion by Trustee McDonald, seconded by Trustee Koessel to approve. Motion carried unanimously by roll call vote.

015-2022 Consider the Signed 2020 Contracts from Funny Business and Signal Point Band Applying to the 2022 Fourth of July Celebration

Chief Magers answered questions.

Motion by Trustee Koessel, seconded by Trustee Shipley to approve. Motion carried unanimously by roll call vote.

016-2022 Consider Resolution for Road Closures for the 2022 Fourth of July Celebration (Roll Call)

Motion by Trustee McDonald, seconded by Trustee Shipley to approve. Motion carried unanimously by roll call vote.

017-2022 Consider Bids for the Replacement of the HVAC and Air Make Up Unit at Fire Station #2

Motion by Trustee Koessel, seconded by Trustee Shipley to approve. Motion carried unanimously.

018-2022 Consider the 2022 Local Road Maintenance Program

Manager Swayze answered questions. Considerable discussion.

Motion by Trustee Shipley, seconded by Trustee McDonald to approve. Motion carried unanimously.

Article 10. Discussion

1. Update on Township Job Postings/Positions

- Manager Swayze advised that Jessica Stine was chosen to be the Administrative Assistant to the Manager. Her position as Administrative Assistant in the Planning Department will be posted.
- The Zoning Administrator and Director of Public Works positions are closed. Some applicants have Civil Engineering. The Township received around 10 applications, but they look promising. Interviews will begin in two weeks.
- Manager Swayze will be requesting that Interim Planning Director Hilbrands and Interim Human Resources Director Murawski be named as Planning Director and Human Resources Director.
- A high number of applications were received for the Fire Department positions to replace retirements. A promotion ceremony will be held April 13. Summer positions for the Building and Grounds Department are available.

Article 11. Public Comments – Any comments...whether it is on the Agenda or not. (limit comments to 3 minutes)

1. Chuck Whitley via Zoom-5030 Sequoia Dr-Looking forward to community project updates on the website as we fill the open positions.

Article 12. Manager Comments

1. Because of the population boost from the 2020 Census data, the Township's Revenue Sharing increased by \$320K annually. This will be used for debt service on the new Fire Station. In addition, retroactive pay from October 2020 will be paid to the Township.
2. Thank you to the retiring firefighters Captain Venema and Firefighter Norris. Wished them well and stated they have done a lot of good for the Township.

Article 13. Board Member Comments

1. Trustee Shipley-Thanked all in attendance, both in person and virtually. Bring your neighbors.
2. Trustee Noordhoek-Other Townships are doing "green" burials in their cemeteries. We should research what is involved.
3. Supervisor Lesperance-The Strategic Planning Committee has created four focus groups from the feedback of surveys received from residents. These focus groups will have public meetings – dates/times are on the website. Asked how the Board can address the deer over-population? Manager Swayze advised that he will add the topic to the next meeting.

Article 14. Adjournment

Motion by Trustee Shipley, seconded by Trustee McDonald to adjourn. Motion carried unanimously.

Meeting adjourned at 8:06 pm.

Krissi Brott
Deputy Clerk

Approved by:

Grace Lesperance, Supervisor

Susan B. Slater, Clerk

DRAFT

CASCADE CHARTER TOWNSHIP
THORNAPPLE RIVER SAD AD-HOC COMMITTEE MEETING
January 17, 2022 at 5:30pm
Cascade Township Hall
5920 Tahoe Dr. SE
Grand Rapids, MI 49546

Members Present: Trustee Shipley, Members, Scott Rissi, Thomas Keith, Mike Wiegand, Jeff Carpenter, Paul Strauss, Charles Whitley, Lori Gottlieb

Others Present: Township Manager (TM) Ben Swayze

Members of the Public: None

ARTICLE 1. Call to Order: Meeting was called to order at 5:00p

ARTICLE 2. Approval of the Agenda: Motion by Member Rissi, Supported by Member Keith to approve the agenda. Motion Carried.

ARTICLE 3. Acknowledge Visitors & Public Comment: No Members from the public

ARTICLE 4. Approval of the Minutes of the 12.27.21 Meeting: Motion by Member Rissi, Supported by Member Keith to approve the agenda. Motion Carried.

ARTICLE 5. Review and Consideration of Aquatic Weed Management RFP - Manager Swayze explained that the RFP was a little different in that costs won't be known until a plan is put together, as such the RFP was designed to solicit costs such as per acre chemical application costs, per acre mechanical harvesting costs, control plan survey costs, etc...

Committee will be responsible for reviewing the proposals and making a recommendation to the Township Board. Evaluation criteria is designed to provide latitude to both the Committee and Board for making decisions. Schedule for RFP was reviewed.

Discussion ensued. Committee discussed timelines, contract length and renewals and insurance requirements. Committee would like clarification from legal counsel on whether indemnification is required for all SAD members or just the Township.

Motion by Member Rissi, Supported by Member Keith to recommend Township Board approve issuance of the RFP. Motion Carried.

ARTICLE 6. Roundtable Q & A Discussion was held regarding other aspects of river management and future planning opportunities. Budget will need to be developed once a consultant is selected.

ARTICLE 7. Discuss and Consider Future Meeting Dates/Times: Monday evenings generally work for everyone. Twice monthly meetings may be necessary to ensure 2022 weed removal plan can be formulated quickly enough. Next meeting tentatively scheduled for February 14.

ARTICLE 8. Public Comment None

Adjournment: Motion was made to adjourn the meeting. Motion carried 8-0. Meeting adjourned at 6:57 pm

Approved by the Thornapple River SAD Ad-Hoc Committee – March 7, 2022

CASCADE CHARTER TOWNSHIP 2021 TAX COLLECTION REPORT

MARCH COLLECTION	TOTAL ROLL	1-Mar	%
2021	66,515,509.11	65,754,430.03	98.86%
2020	65,833,678.67	64,674,526.76	98.24%
2019	62,310,818.55	61,540,349.90	98.93%
2018	60,345,253.94	59,581,618.49	98.93%
2017	57,825,775.53	57,204,190.86	98.93%
2016	54,481,024.95	53,813,198.02	98.77%
2015	53,558,009.69	52,179,975.44	97.43%
2014	51,526,241.60	50,381,416.49	97.78%
2013	49,411,512.30	48,291,325.98	97.73%
2012	49,148,430.58	47,871,280.99	97.40%
2011	49,836,936.86	48,262,089.84	96.84%
2010	50,948,225.81	48,633,295.61	95.46%

	Taxing Authority	2021 Tax Roll	Taxes Collected	Real Delq (KC)	PP Delinq	IFT	BLL	Total Delq Tax
(S)	FOREST HILLS D	4,540,777.04	4,516,434.17	22,276.21	2,066.66			24,342.87
(S)	FOREST HILLS O	3,467,680.14	3,457,010.90	8,710.19	1,959.05			10,669.24
(S)	FOREST HILLS R	732,878.45	728,949.60	3,595.34	333.51			3,928.85
(S)	KENT INTERM SCH	9,832,573.17	9,756,361.78	61,382.58	14,828.81			76,211.39
(S)	GR COMMUNITY COL	3,085,420.61	3,061,507.57	19,260.16	4,652.88			23,913.04
(S)	STATE EDUCATION	10,645,109.02	10,573,785.64	66,772.38	4,551.00			71,323.38
(S)	KENT COUNTY OPER	7,460,878.17	7,403,053.30	46,573.56	11,251.31			57,824.87
(S)	LOWELL DEBT	137,320.94	134,732.41	2,588.53				2,588.53
(S)	LOWELL OPER	55,485.45	54,458.44	1,027.01				1,027.01
(S)	LOWELL BLDG/SITE	19,384.35	19,018.96	365.39				365.39
(S)	CALEDONIA COMM D	891,729.16	873,892.06	10,798.95	7,038.15			17,837.10
(S)	CALEDONIA COMM O	1,548,171.07	1,528,585.06	19,343.31	242.70			19,586.01
(W)	FOREST HILLS D	4,540,777.04	4,468,009.36	68,300.32	4,467.36			72,767.68
(W)	FOREST HILLS O	3,426,514.47	3,373,757.40	49,005.37	3,751.70			52,757.07
(W)	FOREST HILLS R	732,729.75	720,987.36	11,021.58	720.81			11,742.39
(W)	KENT DIS LIBRARY	2,225,307.04	2,183,020.26	36,072.88	6,213.90			42,286.78
(W)	KENT COUNTY JAIL	1,362,896.23	1,337,000.83	22,090.21	3,805.19			25,895.40
(W)	KENT COUNTY SENR	863,063.31	846,662.68	13,990.66	2,409.97			16,400.63
(W)	KENT COUNTY VET	85,854.60	84,222.93	1,391.95	239.72			1,631.67
(W)	KENT COUNTY Z/M	759,303.36	744,870.86	12,311.68	2,120.82			14,432.50
(W)	KENT COUNTY CHLD	434,964.91	426,697.37	7,052.66	1,214.88			8,267.54
(W)	CAS TWP OPERATING	1,712,664.38	1,680,123.01	27,759.54	4,781.83			32,541.37
(W)	CAS TWP FIRE	2,318,449.25	2,274,397.64	37,578.38	6,473.23			44,051.61
(W)	CAS TWP POLICE	808,979.39	793,608.59	13,112.22	2,258.58			15,370.80
(W)	CAS TWP LIBRARY	264,326.13	259,307.14	4,281.50	737.49			5,018.99
(W)	CAS TWP PATHWAYS	619,502.46	607,732.40	10,040.55	1,729.51			11,770.06
(W)	CAS TWP OP SPACE	405,359.58	397,657.84	6,570.06	1,131.68			7,701.74
(W)	LOWELL DEBT	137,320.94	133,524.84	3,796.10				3,796.10
(W)	LOWELL OPER	53,985.98	51,205.40	2,780.58				2,780.58
(W)	LOWELL BLDG/SITE	19,384.35	18,848.50	535.85				535.85
(W)	CALEDONIA COMM D	891,729.16	860,472.46	18,961.50	12,295.20			31,256.70
(W)	CALEDONIA COMM O	1,542,672.07	1,508,696.68	30,951.65	3,023.74			33,975.39
(*)	STREETLIGHTING	80,256.75	79,286.35	970.40				970.40
(W)	KENT COUNTY DRAINS	23,353.98	22,599.28	754.70				754.70
(*)	SPECIAL ASSESSMENTS	130,391.58	123,170.12	3,145.63			4,075.83	7,221.46
TOTAL TAXES		65,857,194.28	65,103,649.19	645,169.58	104,299.68	-	4,075.83	753,545.09
	Admin Fee	658,314.83	650,780.84	6,450.59	1,042.65		40.75	7,533.99
GRAND TOTALS		66,515,509.11	65,754,430.03	651,620.17	105,342.33	-	4,116.58	761,079.08

TAXES LEVIED BY CASCADE TWP

6,129,281.19

CASCADE TWP REAL - CHECK FROM KENT CO EXPECTED IN JUNE

109,908.87

CASCADE TWP PERSONAL & BLL - TO BE COLLECTED BY TREASURER

18,195.72

CASCADE TWP 2021 DELINQUENT TAXES

128,104.59

All Records
SPEC. POPULATION: AD VALOREM+SPECIAL ACTS
REAL & PERSONAL PROPERTY
SUMMER/WINTER BILLING TYPE(S)
USE CURRENTLY CHARGED INTEREST/PENALTY %

*** QUESTIONABLE PARCELS/PAYMENTS DETECTED ***

Taxing Authority	Original Roll	+/- Adjustments	Total to Collect	Taxes Collected	Amount Delinquent	Leased Land Delinquent
(S) FOREST HILLS D	4,549,278.02	-8,500.98	4,540,777.04	4,516,434.17	24,342.87	0.00
(S) FOREST HILLS O	3,494,133.57	-26,453.43	3,467,680.14	3,457,010.90	10,669.24	0.00
(S) FOREST HILLS R	734,250.51	-1,372.06	732,878.45	728,949.60	3,928.85	0.00
(S) KENT INTERM SCH	9,852,323.11	-19,749.94	9,832,573.17	9,756,361.78	76,211.39	0.00
(S) GR COMMUNITY COL	3,091,617.66	-6,197.05	3,085,420.61	3,061,507.57	23,913.04	0.00
(S) STATE EDUCATION	10,666,593.10	-21,484.08	10,645,109.02	10,573,785.64	71,323.38	0.00
(S) KENT COUNTY OPER	7,475,863.28	-14,985.11	7,460,878.17	7,403,053.30	57,824.87	0.00
(S) SCHOOL OPER FC	0.00	0.00	0.00	0.00	0.00	0.00
(S) LOWELL DEBT	137,320.94	0.00	137,320.94	134,732.41	2,588.53	0.00
(S) LOWELL OPER	55,485.45	0.00	55,485.45	54,458.44	1,027.01	0.00
(S) LOWELL BLDG/SITE	19,384.35	0.00	19,384.35	19,018.96	365.39	0.00
(S) CALEDONIA COMM D	894,506.25	-2,777.09	891,729.16	873,892.06	17,837.10	0.00
(S) CALEDONIA COMM O	1,555,600.79	-7,429.72	1,548,171.07	1,528,585.06	19,586.01	0.00
(W) FOREST HILLS D	4,549,278.02	-8,500.98	4,540,777.04	4,468,009.36	72,767.68	0.00
(W) FOREST HILLS O	3,494,049.99	-67,535.52	3,426,514.47	3,373,757.40	52,757.07	0.00
(W) FOREST HILLS R	734,101.60	-1,371.85	732,729.75	720,987.36	11,742.39	0.00
(W) KENT DIS LIBRARY	2,229,777.13	-4,470.09	2,225,307.04	2,183,020.26	42,286.78	0.00
(W) KENT COUNTY JAIL	1,365,633.59	-2,737.36	1,362,896.23	1,337,000.83	25,895.40	0.00
(W) KENT COUNTY SENR	864,796.99	-1,733.68	863,063.31	846,662.68	16,400.63	0.00
(W) KENT COUNTY VET	86,027.13	-172.53	85,854.60	84,222.93	1,631.67	0.00
(W) KENT COUNTY Z/M	760,829.01	-1,525.65	759,303.36	744,870.86	14,432.50	0.00
(W) KENT COUNTY CHLD	435,838.90	-873.99	434,964.91	426,697.37	8,267.54	0.00
(W) CAS TWP OPERATIN	1,716,104.28	-3,439.90	1,712,664.38	1,680,123.01	32,541.37	0.00
(W) CAS TWP FIRE	2,323,105.87	-4,656.62	2,318,449.25	2,274,397.64	44,051.61	0.00
(W) CAS TWP POLICE	810,604.23	-1,624.84	808,979.39	793,608.59	15,370.80	0.00
(W) CAS TWP LIBRARY	264,856.75	-530.62	264,326.13	259,307.14	5,018.99	0.00
(W) CAS TWP PATHWAYS	620,746.66	-1,244.20	619,502.46	607,732.40	11,770.06	0.00
(W) CAS TWP OP SPACE	406,173.73	-814.15	405,359.58	397,657.84	7,701.74	0.00
(W) SCHOOL OPER FC	0.00	0.00	0.00	0.00	0.00	0.00
(W) LOWELL DEBT	137,320.94	0.00	137,320.94	133,524.84	3,796.10	0.00
(W) LOWELL OPER	55,485.45	-1,499.47	53,985.98	51,205.40	2,780.58	0.00
(W) LOWELL BLDG/SITE	19,384.35	0.00	19,384.35	18,848.50	535.85	0.00
(W) CALEDONIA COMM D	894,506.25	-2,777.09	891,729.16	860,472.46	31,256.70	0.00
(W) CALEDONIA COMM O	1,555,600.79	-12,928.72	1,542,672.07	1,508,696.68	33,975.39	0.00
(*) 101650 STREETLIGHTING	80,018.86	-82.11	79,936.75	78,966.35	970.40	0.00
(*) PA 105 PA 105 INTEREST	0.00	117.10	117.10	77.99	39.11	0.00
(*) 23LL LARAWAY LAKE SAD	11,574.98	0.00	11,574.98	10,568.46	1,006.52	0.00
(*) 801 8342 TOBIAS AND WA	7,236.82	0.00	7,236.82	7,107.92	128.90	0.00
(*) 801 8150 GILLETT	0.41	0.00	0.41	0.00	0.41	0.00
(*) 101636 STREETLIGHTING	320.00	0.00	320.00	320.00	0.00	0.00
(*) 21 Use 2021 Delq Usage	9,360.87	0.00	9,360.87	5,285.04	0.00	4,075.83
(*) 801 8260 OATMAN	16,116.75	0.00	16,116.75	15,491.36	625.39	0.00
(*) 301TRD THORNAPPLE RIVE	90,300.00	-600.00	89,700.00	87,600.00	2,100.00	0.00
(*) TRD Sewer 2017 TRD Sew	17,100.85	0.00	17,100.85	17,100.85	0.00	0.00
(*) OakTerrace OakTerrace	2,537.78	0.00	2,537.78	2,537.78	0.00	0.00
(S) SubTotals	42,526,357.03	-108,832.36	42,417,524.67	42,107,867.88	309,656.79	0.00
(W) SubTotals	23,558,788.98	-119,119.37	23,439,669.61	22,995,781.31	439,812.47	4,075.83
Grand SubTotals	66,085,146.01	-227,951.73	65,857,194.28	65,103,649.19	749,469.26	4,075.83
(S) Admin Fee	425,124.11	-1,087.82	424,036.29	420,940.07	3,096.22	0.00
(W) Admin Fee	235,469.66	-1,191.12	234,278.54	229,840.77	4,397.02	40.75
(S) Interest					0.00	0.00
(S) Penalty					0.00	0.00
(S) Totals	42,951,481.14	-109,920.18	42,841,560.96	42,528,807.95	312,753.01	0.00
(W) Totals	23,794,258.64	-120,310.49	23,673,948.15	23,225,622.08	444,209.49	4,116.58
Grand Totals	66,745,739.78	-230,230.67	66,515,509.11	65,754,430.03	756,962.50	4,116.58

TREASURER'S DEPARTMENT

CASCADE CHARTER TOWNSHIP

TAX ACCOUNTS

JANUARY 2022

BANK BALANCES

TOWNSHIP BALANCES

BANK	AMOUNT
<u>FLAGSTAR BANK</u>	
TAX CHECKING	\$1,993,405.58

REGISTER	AMOUNT
<u>FLAGSTAR BANK</u>	
TAX CHECKING	\$1,993,405.58

<u>FLAGSTAR BANK</u>	
DELINQUENT TAX	\$5,632.66

<u>FLAGSTAR BANK</u>	
DELINQUENT TAX	\$5,632.66

<u>FLAGSTAR BANK</u>	
TAX WIRE ACCT	\$71,734.40

<u>FLAGSTAR BANK</u>	
TAX WIRE ACCT	\$71,734.40

GRAND TOTAL	<u><u>\$2,070,772.64</u></u>
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GRAND TOTAL	<u><u>\$2,070,772.64</u></u>
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Oxana Sourine 3/16/22

Submitted by
OXANA SOURINE
DEPUTY TREASURER

Date

Kenneth B. Peirce 3/23/22

Reviewed by
KENNETH B. PEIRCE
TREASURER

Date

CASCADE CHARTER TOWNSHIP
TREASURER'S OFFICE REPORT

JANUARY 2022

FUND	INSTITUTION	DEMAND DEPOSIT		CDs			SECURITIES			TOTALS				
		\$	%	\$	%	DATE	\$	%	DATE	\$	%			
101	GENERAL FUND	FLAGSTAR	466,649.92	0.15										
		FLAGSTAR MMA	588,586.07	0.25										
		KENT CTY POOL	1,181,547.40	0.35										
		MI CLASS	457,403.27	0.04										
		MERCANTILE			535,196.94	2.45	7/26/2022							
		ADVENTURE CU			561,348.57	1.05	9/24/2025							
		HORIZON BANK	527,923.38	0.15										
		GRAND RIVER			539,829.11	0.15	6/19/2022							
		CONSUMERS CU			289,648.86	0.75	1/8/2023							
		LMCU			1,044,648.34	0.90	6/2/2024							
		MSUFCU			500,015.00	0.80	8/24/2022							
		COMERICA SECUR						500,015.63	1.13	1/26/2026				
	TOTAL GENERAL FUND		3,222,110.04	0.20	3,450,686.82	1.02		500,015.63				7,172,812.49	0.58	
151	CEMETERY	LMCU	126,342.25	0.35								126,342.25	0.35	
206	FIRE FUND	FLAGSTAR	1,139,009.30	0.25										
		MI CLASS	706,866.62	0.04										
		COM CHOICE CU			278,486.90	0.45	4/20/2022							
		CONSUMERS CU			277,245.99	0.65	5/23/2023							
		ADVENTURE CU			517,061.41	1.95	2/27/2023							
	TOTAL FIRE FUND		1,845,875.92	0.17	1,072,794.30	1.22		-				2,918,670.22	0.56	
207	POLICE FUND	FLAGSTAR	691,429.63	0.25										
		NORTHPOINTE BANK	278,057.38	0.35			1.00	11/11/2021						
		CIBC/ fina PRIVATE			788,499.63	1.95	3/25/2022							
		LMCU			412,762.10	1.00	3/18/2024							
	TOTAL POLICE FUND		969,487.01	0.18	1,201,261.73	1.62		-				2,170,748.74	0.98	
208	HAZMAT FUND	LMCU	41,845.43	0.25								41,845.43	0.25	
209	OPEN SPACE	HUNTINGTON BANK	657,004.59	0.01										
		MI CLASS	380,319.24	0.04										
	TOTAL OPEN SPACE		1,037,323.83	0.02	-							1,037,323.83	0.02	
211	DAM REPAIR	MI CLASS	214,951.68	0.04										
		LMCU			348,202.46	1.00	3/10/2024							
	TOTAL DAM REPAIR		214,951.68	0.04	348,202.46	1.00		-	-			563,154.14	0.63	
220	LARAWAY LAKE IMP	FLAGSTAR	7,550.01	0.25								7,550.01	0.25	
230	THORAPPLE RIVER	FLAGSTAR	68,709.46	0.25								68,709.46	0.25	
216	PATHWAY FUND	MACATAWA	423,614.87	0.01										
		MI CLASS	108,704.07	0.04										
		GRAND RIVER			518,170.99	2.05	10/4/2022							
	TOTAL PATHWAY FUND		532,318.94	0.02	518,170.99	2.05		-				1,050,489.93	1.02	
246	PUBLIC UTILITY	FLAGSTAR	1,437,003.20	0.25										
	IRF	MI CLASS	851,693.03	0.04										
	TOTAL PUBLIC UTILITY		2,288,696.23	0.17	-			-	-			2,288,696.23	0.17	
248	DDA FUND	FLAGSTAR	760,963.08	0.25										
		MI CLASS	829,688.44	0.04										
		UNION BANK			261,997.60	0.45	8/26/2022							
		ADVENTURE CU			220,919.55	1.05	10/27/2025							
	TOTAL DDA FUND		1,590,651.52	0.14	482,917.15	0.72		-	-			2,073,568.67	0.28	
249	BLDG. INSPECTION	FLAGSTAR BANK	411,898.61	0.25										
		FLAGSTARL BANK R.	99,775.17	0.25										
		MI CLASS	7,180.57	0.04										
		CONSUMERS CU	319,411.47	0.30										
		HUNTINGTON BANK			569,753.35	1.93	10/28/2022							
		FNB OF AMERICA			320,815.75	0.90	10/19/2024							
		FNB OF AMERICA			111,514.75	0.70	12/18/2022							
		FNB OF AMERICA			226,536.98	1.05	9/18/2026							
		FNB OF MI			556,467.53	0.30	6/11/2022							
		INDEPENDENT BANK			336,175.42	0.20	3/16/2022							
	TOTAL BLDG. INSPECT.	CHEMICAL BANK	838,265.82	0.15	2,121,263.78	0.91		-				2,959,529.60	0.70	
270	LIBRARY FUND	UNITED BANK	614,343.28	0.15										
		MI CLASS	466,556.55	0.04										
		LMCU			453,604.26	1.00	3/27/2024							
		WMCB	273,360.56	0.10				0.10	12/1/2021					
		NORTHPOINTE BANK			575,731.39	0.25	4/8/2022							
	TOTAL LIBRARY FUND		1,354,260.39	0.08	1,029,335.65	0.58		-				2,383,596.04	0.30	
282	CARES ACT FUND	LMCU	1,016,803.67	0.35								1,016,803.67	0.35	
701	T & A	HUNTINGTON BANK	177,815.74	0.01								177,815.74	0.01	
701	JAMES TIMMONS	HUNTINGTON BANK			12,400.00	2.00	3/21/2022					12,400.00	2.00	
701	JACK SMITH INV.	HUNTINGTON BANK	23,120.53	0.01								23,120.53	0.01	
701	HENRY KRAMER	HUNTINGTON BANK	15,371.30	0.01								15,371.30	0.01	
	TOTAL		14,278,436.63	0.15	10,237,032.88	1.09		500,015.63	-			26,108,548.28	0.51	

Oxourne 3/15/22
Submitted by Oxana Sourine
Deputy Treasurer

Ken Peirce 3/16/22
Reviewed by Ken Peirce
Treasurer



80
YEARS
— Est. 1942 —

DEDICATED TO SERVING YOU





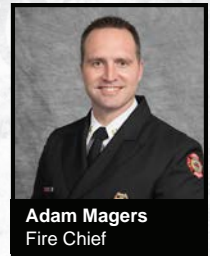
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1974

FROM THE FIRE CHIEF



Adam Magers
Fire Chief

The Cascade Township Fire Department is pleased to share our 2021 annual report with you. In this report, you will find general information about our fire stations, personnel, vehicles, response data and updates on the department's programs.

Life has definitely changed over the last couple years with the pandemic. 2021 has in some ways felt like a return to normalcy, but Cascade Fire has seen numerous changes in the way we disinfect/decontaminate, operate, respond and interact with residents and businesses. Our mission is to continue to serve our residents at a high level, while adjusting to – and respecting – the serious issues our community is facing.

2021 saw a significant increase in emergency responses. Cascade responded to 2,242 calls for service this year, resulting in a 15.1% increase over 2020. These emergencies consisted of fires, vehicle crashes, hazmats, 911 medical calls, rescues, alarms, mutual aid and more.

Personnel Changes

Full-time Firefighter Jeff Rashid retired after 25 years of service. New to the department are Paid On-Call Firefighters Owen Gelder, Cullen Dodge, Shane Jordan and Matt Milmeister.

2021 Achievements

Capt. Jeff Knowles completed the Eastern Michigan University Fire Staff and Command course in Ypsilanti. Several members of the department were recognized by Kent County EMS for Life Saving and Exceptional Patient Care awards: Capt. Doug Venema, Lt. Andy Albright, and Firefighters Andy Marsman, James Walker, Zeke Kadish, Michael Lemkuil and Jon Snyder. Firefighter Todd Pell became certified as a fire investigator. Lastly, the Cascade Firefighters Association raised close to \$20,000 for various charities. I am incredibly proud of this amazing group of firefighters!



Recognized by Kent County EMS for Life Saving and Exceptional Patient Care awards

Left to right: FF. Andy Marsman, EMS Sgt. James Walker, Lt. Andy Albright, Capt. Doug Venema, Chief Adam Magers, FF. Michael Lemkuil, FF. Jon Snyder, FF. Zeke Kadish.

2021 Goals and Outcomes

Goal 1: Successfully transition to the 800 megahertz (MHz) radio platform to improve radio transmission locally and statewide.

- Inspector Colin Forzley was instrumental in making this project a success. Radio clarity and operability has never been better!

Goal 2: Implement a new hose plan.

- Under the supervision of Capt. Stevenson, a perpetual, compliant hose replacement plan was implemented. This 10-year process will repeat in perpetuity, keeping all of our fire hoses and nozzles compliant. 2021 saw the update of Engine 1's hose and nozzles.

Goal 3: Hold computer training for command staff.

- In 2021, Cascade Fire brought in a third-party company to train our command staff in modern computer skills. Today's firefighters are required to do much more than respond to emergencies. Quite often, fire personnel are required to navigate numerous software platforms.

Goal 4: Complete several construction projects, including Station 1, Station 2 storage building and Station 2 bunkroom update.

- We learned some lessons this year on construction project dynamics, including supply chain issues, inflation, scheduling and the like. Our goals still remain but were a little too ambitious looking back. Station 1 is proceeding nicely; we are through schematic design and on to bidding. The project is scheduled to break ground this summer. The Station 2 storage building project came back with a higher-than-expected estimate and was tabled after we were able to secure a larger lease space for temporary operations during construction. Space needs will still need to be addressed in the future, but considerable taxpayer dollars were saved by utilizing an alternate plan.

2022 Goals

- Successfully transition Station 1 operations to the Air Cargo facility during construction.
- Break ground on new Station 1 at its current location.
- Create a training library where all 37 firefighters have access to mandated fire training.
- Increase entire department "low angle" rescue capabilities, using technical rescue team instruction.
- Establish a compliant training calendar to adhere to new state continuing education requirements.

I am encouraged by the exciting projects and events that 2022 is scheduled to bring. I could not be happier to work with the outstanding men and women of the Cascade Fire Department. It is our mission to handle 2022 with the utmost professionalism and customer service to our community. We look forward to keeping our residents safe in 2022!

Chief Adam Magers



Left to right: Capt. Todd Stevenson, Lt. Michael Bolt, Chief Adam Magers and Capt. Jeff Knowles

Analysis Report Presentations by Shifts



Shift A



Shift B



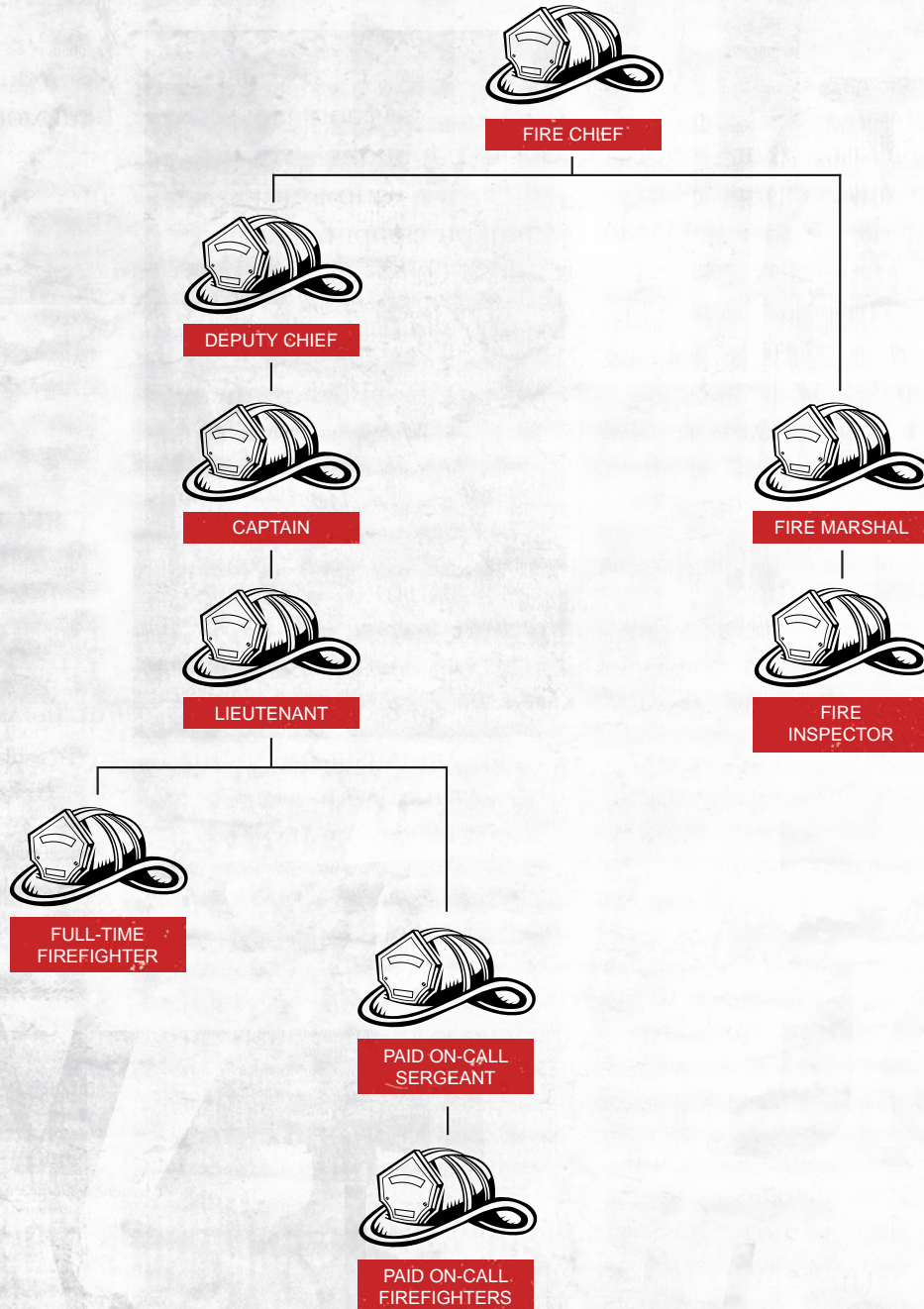
Shift C



Fire Marshal and Fire Inspector

DEPARTMENT ORGANIZATION

The chain of command for the Cascade Fire Department shall be as shown.





YOUR 2021
CASCADE FIRE DEPARTMENT



Chief Adam Magers 11/27/17

CASCADE FIRE DEPARTMENT



Capt. Doug Venema 3/17/87



Capt. Todd Stevenson 5/14/07



Capt. Jeff Knowles 4/26/02



Lt. Andy Albright 8/1/94



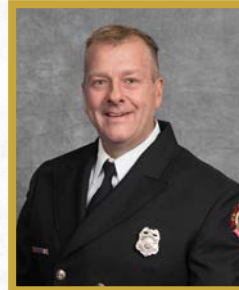
Sgt. Brett Boonenberg 10/26/11



Kreigh Deering 4/1/95



Jeff Rashid 11/20/95



Robert Norris 7/1/00



Andy Marsman 1/14/03



Michael Kadish 4/20/11



David Lintemuth 1/12/15



Colin Rodriguez 10/1/15



Todd Pell 5/6/17



Eric Melse 5/07/17



Joel Baker 9/30/19



Luke McCarthy 12/1/19



Heather Flathau 4/9/20



Jake Lotterman 9/9/20



Cullen Dodge 1/26/21



Lt. Michael Bolt 12/06/10



Lt. Josh Dettwiler 1/12/15



Fm. Doug Poolman 4/18/18



Insp. Colin Forzley 11/24/06



Jim Walker 1/24/05



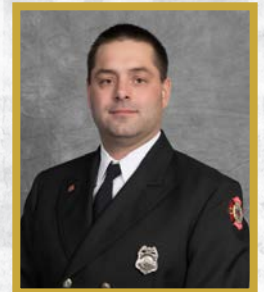
John Makuch 11/24/06



Lance Korhorn 7/7/07



Jon Snyder 9/22/08



Michael Lemkuil 10/15/09



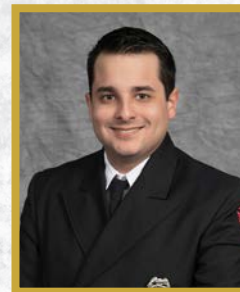
Todd Hemmi 1/22/18



Richard Raviolo 1/29/18



Mike Poolman 4/18/18



Zachery Christian 7/27/18



Steven Riddle 1/15/19



Owen Gelder 4/16/21



Matt Milmeister 9/17/21



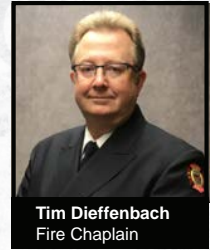
Shane Jordan 9/17/21



Cindy Holzhei

FIRE CHAPLAIN

REPORT



NEW VOLUNTEER POSITION

We hear a lot about the importance of mental health and wellness in the workplace. Providing support and encouragement to our firefighters is one of the primary roles of a fire chaplain. Being physically and emotionally present allows for more positive outcomes of challenging situations that our department responds to throughout any given year.

I have served as a co-pastor of Thornapple Community Church (TCC) for the past 16 years and have 35 years of pastoral experience in Grand Rapids. TCC's church leadership believes this is a significant way our church can contribute to the community to which we belong.

For 22 years, my wife Brenda and I have raised our family in the Cascade community. During this time, I've had the opportunity to get to know many of the firefighters through church life connections and various friendships. Over the last several years, I've assisted with situations that allowed me to use my pastoral

skill set to extend care to our fire firefighters and area families. Some of this has included offering counsel regarding life challenges, participating in the annual Memorial Day service, assisting with support of families in crisis and officiating a wedding in the midst of COVID-19. When Chief Magers asked if I would officially accept the role of volunteer chaplain, I humbly and gladly accepted.

My focus over the last months has been getting to know the names and faces of our crews. This has been accomplished by station visits and showing up at department training events. Foundational to my understanding of ministry is building trusting and lasting relationships. I've also been seeking wisdom from other area fire chaplains, drawing upon their experiences. To continue to grow my skill base, I will be completing a three-day training course with others who work with law enforcement and fire departments. **Assisting Individuals in Crisis and Group Crisis Intervention** are two core classes toward achieving advanced chaplaincy certification.

While we are still shaping the outcomes of this role, I look forward to serving our department and community.

FIRE MARSHAL

REPORT



Doug Poolman
Fire Marshal

2021 continued to bring many challenges for the department and the community. With the ongoing pandemic, the face of our community changed. Many of our businesses struggled and some unfortunately didn't survive. Many businesses continue to have their employees work from home; others had to change or adapt the way they conducted business and the services they provided. All of it certainly changed the dynamics of fire prevention.



As inspectors, we found ourselves challenged by businesses that wanted and needed to modify their operations in order to survive. This included the type of occupancy they operate within and how we protect their employees and customers. Working in conjunction with the Cascade Township Building Department, we were able to put guidelines in place and work with those business owners in creative ways to accomplish their goals while keeping people safe in the process.

Despite the challenges, we were happy to welcome many new businesses to our township this year. Some moved in to existing buildings that were available, and some were new construction. Driving throughout the township, one certainly can recognize the physical changes, as many old buildings have been removed and new ones put up in their place.

Working inside the Building Department brings a big advantage to my work in the Fire Department.

Seeing new or newly remodeled buildings, I learn their characteristics and how the fire and life safety systems are designed and put in place. In 2021, I performed 254 inspections just for the Building Department, as well as dozens of plan reviews for fire and life safety systems.

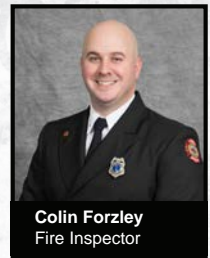
I am fortunate to have Inspector Forzley work beside me to accomplish our goals in the fire prevention bureau. We have three fully trained and certified fire investigators, and one more has passed their training and is currently testing for their certification. Well-trained personnel can smoothly step in to provide seamless services to our residents, businesses and guests when retirements occur.

We look forward to 2022 and to a brighter and stronger community.



NEW TECHNOLOGY

REPORT



We have gone digital! 2021 was another year of communication advances for not only Cascade Fire, but all emergency service providers in Kent County. A voter-approved 911 surcharge in 2016 laid the groundwork for a \$25 million multi-year 800 MHz radio project led by the Kent County Dispatch Authority that began in 2017. The two main objectives of this project were to make advancements to an aging VHF radio system that had been in use for decades, and to increase interoperability between agencies.

The new 800 MHz system is a local expansion of the existing Michigan State Police radio system that provided expanded coverage along the freeways and major highways throughout the state. To extend coverage throughout Kent County, and not just along the freeways, six new towers were constructed, bringing the total number of communications towers to 12. This greatly increased signal strength in areas that previously did not have any radio coverage on the old VHF system. Switching to the 800 MHz platform allows local, state and federal agencies to operate off the same system and will allow easier and faster communication of broad geographic emergencies such as natural disasters.

Countless hours went into the planning, development, user training, and implementation of this system, and as of June 2021, all fire departments in Kent County have migrated to the new 800 MHz radio system. The overall coverage of the new 800 MHz system far exceeds the coverage and capabilities of the old VHF system, and we look forward to the continued benefit of the new system as we bring our alert paging and other responding agencies online with the new system!



PAID ON-CALL REPORT



It is my honor to be the paid on-call (POC) sergeant for such a hardworking and dedicated group of men and women. There are many responsibilities and requirements placed on a POC firefighter. At times, it can be quite challenging to balance civilian life with the duties of the department.

The Cascade Fire Department is a combination department made up of roughly 20 full-time firefighters and 15 part-time or paid on-call staff. Cascade has two stations that are occupied 24/7 with six full-time firefighters. In the event of a structure fire, vehicle accident, hazardous material incident or any other call that requires extensive labor, both stations are depleted of qualified firefighters. The moment a call comes in, POC staff are notified via pager to report to their assigned stations. Once arriving at the station, POC staff are assigned to either pull another vehicle or to remain at the station to prepare for the next emergency call. All qualified POC staff have been through a rigorous six-month firefighting training course consisting of both class time and practical training. At the conclusion of that course, they must pass a state exam before receiving their firefighter badge. Once the firefighter portion of training has been completed, they move into a six-month EMT medical class. Then they must pass another state exam before receiving an EMT license. These are the minimum starting requirements to work as a POC firefighter in Cascade Township. Once hired as a POC, the firefighter has 24 months to learn the protocol for Cascade Fire and then pass a test to become a fully qualified "black helmet" POC firefighter. Once qualified, the firefighter is eligible to work shifts or fill in for full-time firefighters when they are off. This saves the taxpayers money by not having to pay overtime to full-time employees.

Training is a huge part of being a firefighter in Cascade Township. Firefighters are required to attend evening department trainings twice a month for approximately three hours each. POC firefighters also are required to obtain a minimum of 192 hours of classroom instruction and practical testing annually, to meet MIOSHA standards. POC firefighters spent over 8,000 hours of their time serving Cascade Township this year. This included participating in more than 40 community events

such as Project Night Lights and Touch A Truck, as well as responding to over 1,000 emergency calls. Ongoing training is required to meet our accreditations, state and national requirements, and most importantly, to ensure we have highly trained personnel to serve the residents of Cascade.

It's been an exciting year with many changes within the POC roster. We have added two qualified POC firefighters who passed our rigorous "black helmet" testing which allows them to fill shifts with the full-time firefighters. A big congratulations to Owen Gelder and Joel Baker for a job well done. In our cadet program, we have added Cullen Dodge, Matt Milmeister, Shane Jordan, Nick Rodriguez and Hannah DeMuth. I am very optimistic about these five cadets and look forward to them being fully qualified "black helmets" in 2022. Our fully POC are well-trained and sought-after by many departments hiring full-time firefighters. Jake Lotterman will be taking the next step in his life and has taken a full-time firefighting job with the City of Wyoming. We wish Jake much success, and his presence will be missed here in Cascade.



It's an honor to serve on the Cascade Fire Department. I look forward to improving our level of service in the years to come.



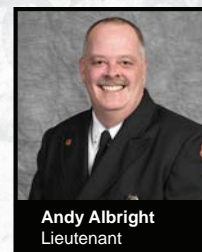


PHOTOGRAPH OF CASCADE FIRE MEN IN FORMATION

From left to right: Jack Buys, Ron Reitsma, Clare Snyder, Bill Johnson, Floyd Atchinson, John Kwekel, Lee Norton, Keith Wager, Bill Pretzel, Tom Carpenter, Clare Atchinson, Jake Klein, Don Winters, Julius Boersma, John Wood, Cal Loper and Grover Buttrick.

COMMUNITY RISK REDUCTION

REPORT



2021 saw a bit of normalcy return to Cascade Fire. Community risk reduction is best delivered in person, which was virtually impossible during 2020 and the early months of the COVID-19 pandemic. The following are a few ways we made the return to normal at Cascade Fire while still taking precautions to keep everyone safe.

Fire Prevention/Fire Safety Education

Fire prevention can best be taught through education. This year, we were able to get back into some of our preschools and early child development centers. We teach age-appropriate material on topics such as smoke alarms, changing the batteries, what to do when the smoke alarm sounds, closing your bedroom door at night (also known as Close Before You Doze), home escape planning, crawling low under smoke, having a meeting place, calling 911, stop drop and roll, and – maybe most importantly – Firefighters Are Your Friends. This is so very important because when the Fire Department arrives for a fire, the firefighters can sometimes look scary with all of their protective gear on. We combat that fear by dressing up a teacher or classroom assistant in firefighter gear. To the children, this is a trusted person. Seeing their trusted person wearing firefighter gear makes them feel safe, makes firefighters safe and teaches them not to hide from a firefighter when there is an emergency. This is very important because it may save their life!



Fire Drills

Every year, the two elementary schools, in conjunction with the Kent County emergency manager, provide the Fire Department with fire drill dates and times. Barring any emergency calls, the Fire Department attends these drills to make sure they are running smoothly and efficiently. This also gives school personnel the chance to ask any questions they may have.

Fire Extinguisher Training

The Cascade Fire Department is proud to offer fire extinguisher training to businesses and their staffs, general residents, boy/girl scout groups and other community groups. We have a video screen and laser extinguisher to provide year-round, indoor training.

New Partnership

Cascade Township is proud of the 20+ miles of pedestrian pathway that residents and guests use to ride their bikes, jog, walk the dog or take a family stroll. This year, the Cascade Fire Department has partnered with Grand Valley Metro Council and its "Stay Visible. Be Seen" campaign that distributes bike lights, reflective jogging belts and reflective snap bracelets. These items are made to keep those who wear them safe and seen! These items are now in our fire safety packets, Halloween bags and also are available at Station 1. Stop by to get yours soon!



Parties and Get-Togethers

Every year, we get many requests to attend block parties and other get-togethers. Some may just see it as a fun activity for the small kids, which it is. Every kid likes a fire hat, coloring book, stickers and other fire safety materials. However, we often find it is a great time for our firefighters to educate the adults on the Fire Department apparatus, station coverage, staffing and even how they may be able to save money on their homeowners insurance because of a better Insurance Services Office rating their Fire Department achieved.



Birthday Drive-By Parties

Prior to 2020, your Cascade firefighters would attend children's birthday parties, show the fire truck and spray water. Post-2020, the birthday parties have turned into birthday drive-by parties! This is great fun for the birthday kiddo! Some families have even turned it into a parade for family and friends led by the shiny fire truck with lights on and siren blaring.



Special Events

Every year, there are a few special events your Cascade Fire Department either organizes or is asked to participate in. Although we were not able to put on the July 4th parade and street fair this year, we are hopeful that it will make a return in 2022. Other events that we did participate in included Metro Cruise Warm-Up, National Night Out, Heritage Day and Halloween.



Metro Cruise Warm-Up

Your Cascade firefighters set up a tent to hand out fire safety materials, showed off the fire truck and took pictures with the kids. This is always a fun event with classic cars, a band, food vendors and other community partners.



National Night Out

Another great community event put on by the Kent County Sheriff's Office, National Night Out brings together agencies from law enforcement, fire, EMS, military and even Aero Med air ambulance. This is a great way for families to interact with all of these fantastic public servants.



Heritage Day

2021 was the first year for Heritage Day. The day began with a 5K run, including participation by a few of our firefighters (one ran in full turnout gear and SCBA pack!) The 5K was followed by activities for the kids, with pony rides, inflatables and games. At the same time, a competitive cornhole tournament was played. As day turned into night, there was a live band, food vendors and a beer tent. Besides enjoying a day with the community, the Fire Department provided emergency services the whole day along with the command post.



Halloween

Halloween and the Fire Department are a tradition in Cascade. Just like last year, the firefighters brought Halloween to four different neighborhoods. Firefighters and Ember The River Otter arrived in fire trucks to hand out fire safety packets and candy to all the little ghosts and goblins.

Ember

Last year, we introduced you to Cascade Fire Department's newest member and mascot, Ember The River Otter. As you can see, Ember had a very busy year attending all kinds of events! Now that Ember is no longer a rookie, she will be out at as many events as possible this coming year. Look for her, give a thumbs up and get your picture taken.



Contact Us

We are always looking for new ways to interact and educate. If you have a new idea or would like to schedule a visit from the Fire Department, please contact Lt. Andrew Albright at 616. 949.1320 or AAlbright@cascadetwp.com.

EMERGENCY MEDICAL SERVICES



Jim Walker
EMS Sergeant

REPORT

Each year brings new and varying challenges to the Emergencies Medical Services. Whether it be the continuation of the COVID-19 pandemic or simply the availability of basic personal protective equipment for EMS providers, we at Cascade Fire have met and risen above many of these types of challenges. Some of the key factors to overcoming these challenges have been improving the quality of training, maintaining high standards of care with regulatory compliance and keeping an eye on the future can help us to better improve our service to the residents of Cascade Township.

In 2021, Cascade Fire Department helped to develop, conduct and evaluate over 18 trainings related to EMS topics. These trainings resulted in the accumulation of 34 continuing education (CE) credits in the past year. The topics ranged from cardiac emergencies, what to deal with hazardous and infectious materials, all the way from how to the importance of why writing a quality EMS report matters. These CEs are required for maintaining individual licensure as either a medical first responder or emergency medical technician within the state of Michigan, by the Michigan Department of Health and Human Services Bureau of EMS, Trauma and Trauma Preparedness. The department was also fortunate enough to win a grant for \$4,895 to pay for a new trauma manikin from the Bureau of Emergency Trauma Preparedness (BETP). This manikin is used in training to increase the realism so responders can build skills to effectively treat various traumatic injuries. Being equipped and properly trained helps all the personnel meet and exceed the set levels of patient care as outlined in emergency medical protocols.

Maintaining high standards of patient care has always been a hallmark the Cascade Fire Department has striven for. Some of this year's high points have been the saving of a person that suffered a cardiac arrest while at work, the rescue of an individual from a dangerous situation by the Cascade Dam and the successful delivery of a baby with the assistance of Cascade Fire personnel. Maintaining regulatory compliance with state standards for EMS care and EMS agency licensure keeps us ready to serve whenever calls for help come in.

In 2021, the Cascade Fire Department responded to well over 1,539 EMS and EMS-related calls for help. This number of calls is steadily increasing and keeps us looking to the future so we can be responsive to the needs of the residents and community of Cascade Township.

With an eye on the future and the adaptability of different vehicle platforms helps to keep the motor pool of the Cascade Fire Department up to date and ready to respond when and wherever needed. The new medical response unit, Medic 1, is a look at that future and the adaptability of the pickup truck platform to the needs of those providing EMS services. In the past, we have used Suburbans, which are good, but the adaptive of a pickup truck better suits the needs of EMS equipment storage, increased durability and compartment adaptability.

In 2021, the Cascade Fire Department responded to over 1,539 EMS and EMS-related calls for help.



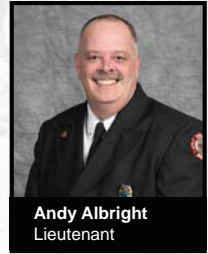


Cascade Township Fire Department (1948)

Names include Alfred Scott, Ken Mercer, Pete Kulbakas, R.A. Phillips, Ray Oostenhouse, John Kleinheksel, Bob Van Lewen, Lester Antonides, Bill Blain, Lawton Cole, Herm Heemstra, Bernie McDiarmod, Grover Buttrick, Peter Buys, Charlie Buttrick, Alex Rosak, Gerrit Baker, and Jack Buys.

CHARITIES

REPORT



How We Help

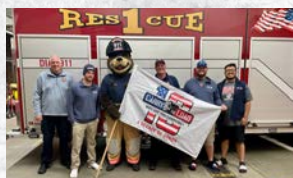
Fire departments and their members are by nature, giving, helping, generous institutions and people!

There are two ways the Cascade Fire Department and its firefighters can help and support local, state and national charities.

Cascade Fire Department

The Cascade Fire Department gives to charities through non-monetary support. Support is given by being a destination and providing meals, hot showers and fellowship.

In 2021, for the second year in a row, Cascade Fire Station 2 was the destination for #WalkForTheRed140. During this time, Macomb Township Firefighter Joe Warne walks 140 miles in full turnout gear from Macomb Township to Grand Rapids to raise money and awareness for Michigan firefighters and their families affected by cancer. This year, three Cascade firefighters joined Joe and his crew for the final four miles from the Lowell/Cascade Township line to Station 2. Joe was also joined in the final quarter-mile by a Grand Rapids Fire Department Pipes & Drums bagpiper playing Amazing Grace. Joe was greeted at Station 2 by the community, fire trucks lined up with lights on, a hot meal and a place to rest before heading home.



Once again in 2021, Station 1 was a resting point for Carry The Load. Carry The Load was founded by U.S. Navy Seals veteran Clint Bruce and Stephen Holley. Carry The Load started as a mission to restore the true meaning of Memorial Day. Today, the Carry The Load mission has expanded.

The Cascade Fire Department provides the Carry The Load crew with hot showers, a good meal and camaraderie before they head down the road to their next stop.

Cascade Firefighters Association

Cascade Firefighters Association is made up of members of the Cascade Fire Department. Cascade Firefighters Association is able to raise funds to support its association as well as other local charities.

Early on in 2021, a Cascade Fire autism awareness shirt was designed and sold. In the month of April, firefighters were encouraged to wear the shirts while on duty. In mid-April, association member and Cascade Fire Chief Adam Magers presented a check to ASK-Autism Support of Kent County from the proceeds raised by the shirt sales.



In August, Cascade Firefighters Association hosted the inaugural charity hockey game. Association member Luke McCarthy brought this from idea to fruition. Rosters for the two teams consisted of current and former professional, semi-pro, college and local hockey players. In the beginning, the goal was to raise a couple thousand dollars for charity. In the end, through ticket sales, donations, sponsorship and fifty-fifty raffles, close to \$13,000 was raised.

Gilda's Club Grand Rapids was presented a check for \$4,500 to support its mission to ensure no one has to face cancer or grief alone.

Riding for Ryan, a charity near and dear to the Cascade Fire family, was created following the tragic accident that took the life of Ryan Marsman, son of Association member and Firefighter Andy Marsman and his wife, Stacie. Ryan was involved in a bicycle/truck accident on June 13, 2019. Riding for Ryan distributes high-visibility bike flags free of charge to families with children. This supports the mission and purpose of Riding for Ryan, which is to promote the safety of young bike riders through visibility and awareness. Riding for Ryan also received a check for \$4,500 that will go toward having more flags made to keep young riders safe.

The Cascade Fire Department and Cascade Firefighters Association will continue to do good work to support local, state and national charities.



In 2021, Cascade Firefighters Association raised more than \$24,000 for local charities.

APPARATUS

REPORT



Doug Venema
Captain



2021, like any other, was very busy as far as vehicle maintenance is concerned. We always hope that our fleet of vehicles will remain trouble-free. The reality is, they don't.

Our vehicles are always subjected to hard driving. While they often accrue fewer miles per year than a normal vehicle, the miles are under harsher conditions. At home, we can start our vehicles and let them warm up before we hit the road. In the fire service, we don't have that luxury. Even though most of our vehicles are kept in a climate-controlled environment, they still go from "cold" to active driving in a matter of seconds. Over the life of a vehicle, this can lead to problems. We try to keep issues that result from this to a minimum through our preventive maintenance. All of our larger trucks are subject to a yearly Department of Transportation inspection and pump testing. The smaller vehicles receive routine inspections at the same time they receive oil changes.

This year, we did have one major repair to one of our pumper trucks. The generator on Engine 2 had to be rebuilt. These generators run all the scene lighting, light towers and electrical outlets on the truck. Unfortunately, even with routine repairs and inspections, these types of failures happen. Predicting them is nearly impossible.

We were fortunate to replace two of our smaller vehicles in 2021; the command vehicle (Chief Magers' truck) and our medic unit that responds out of Station 1. Both vehicles are 2022 Ford F-250s, quad cab, four-wheel drive. We took delivery of the vehicles in the fall. After receiving them from the dealer, we sent them out to have all the emergency lighting, radios and graphics done. Both vehicles are officially in service, and we are very happy with them. The two vehicles that were replaced will be passed on to the fire marshal and fire inspector. We also sold our oldest Suburban in the fleet at auction earlier this year.

Firefighter Zeke Kadish has been assisting me all year with vehicles. He oversaw the purchase of the new vehicles and all of their equipment fitting. Going forward, he will oversee all of our department vehicles. I am retiring on March 17 after 35 years with the Cascade Fire Department, and I am confident that I am leaving our vehicles in good hands. You can look forward to year-end reports from Firefighter Kadish starting with the 2022 annual report.

Thank you to all the residents of Cascade Township for your support over the years.

HAZMAT REPORT



A material that poses an unreasonable risk to the health and safety of people and the environment if it is not properly controlled is considered a hazardous material. More than 80,000 chemicals are registered for use in commerce in the United States, with an estimated 2,000 being introduced annually. The Cascade Township Fire Department responded to 68 hazardous incidents in 2021. However, most of these incidents include natural gas incidents, carbon monoxide incidents, as well as fuel spills.

The Cascade Township Fire Department has been a part of a regional hazardous materials response team – which also includes the City of Kentwood Fire Department and Dutton Fire Department – called Tri-Com Hazmat Team. Our team consists of 14 active members and the three fire chiefs. All active members are trained to the technician level. We also have a few new members who will be trained in 2022.

Cascade Township currently has 16 occupancies that fall under Title III of the Superfund Amendments and Reauthorization Act (SARA), the Emergency Planning and the Community-Right-To-Know Act of 1986. These facilities have certain hazardous chemicals, or a quantity of a chemical, above a particular threshold which requires them to report all hazardous chemicals on-site. In addition to these facilities located in our township, we have a major interstate, a railroad and an international airport that transport all types of hazardous materials daily.

Tri-Com is part of Region 6 in the state of Michigan. Our region was awarded a grant for new Level A hazmat

suits. These suits are used in situations that require the highest level of protection from a chemical coming into contact with our body. Our previous Level A hazmat suits were old and have exceeded their expected life span. Our new suits are now the same brand as all teams in Region 6. Tri-Com has also reached out to Grand Rapids Fire Department to coordinate annual testing of Level A suits.

Tri-Com participated in the Northern Exposure simulation exercise with Kent County Emergency Management as well as the 51st Army Hazmat Team. Tri-Com was tasked with coordinating fuel transfer to emergency vehicles from a Crystal Flash fuel truck. Our main objective was to ensure no fuel was spilled, or that it be properly cleaned up, as well as provide security to ensure no unauthorized vehicles were allowed fuel.

Goals for 2022 include:

- Conduct quarterly hands-on training with our entire Tri-Com Hazmat Team.
- Send new members to Hazmat Tech class.
- Establish a plan to purchase outdated equipment.

If you have any questions regarding our Hazardous Materials Response Team or the 16 occupancies covered under SARA Title 3, please feel free to contact me at any time at Station 1 616.949.1320.



HEALTH AND WELLNESS

REPORT



The Cascade Township Fire Department has been very proactive in health and wellness. Most people probably think the leading cause of death among firefighters is fires. It's actually heart-related issues.

Firefighter line-of-duty deaths have been decreasing prior to COVID-19, but this infectious disease has been increasing the number of firefighter deaths once again. 141 firefighter fatalities were recorded for 2021.

The Cascade Township Fire Department has provided its firefighters with the proper equipment to help prevent these tragedies in our department. Each fire station is equipped with a treadmill, elliptical machine, various free weights and benches. Station 1 has a row machine and other additional equipment due to an increase in space. The Cascade Fire Department Policy requires each firefighter to perform a one-hour workout per shift. Workouts do get interrupted to respond to emergency calls.



review and revise the MIOSHA Part 74 General Industry Standards for Firefighting. I am truly honored to be placed on this committee and feel that I am making a positive change to firefighter safety in Michigan. We finalized our report in September 2021. We made many changes that we hope will be approved by state congress to ensure departments are safe and adequate measures are taken for firefighter safety.

Chief Magers, Capt. Stevenson and I worked collaboratively and submitted an AFG Grant for approximately \$126,000. If awarded, we will get new fitness equipment to replace outdated equipment, add personal trainers to assist members of the department to reduce injury and improve physical health and increase our annual physicals to test for multiple different cancers. I feel this would be one of the most important grants we have ever applied for. Firefighters are at a 250% higher risk of cancer than non-firefighters. If awarded, this grant could potentially diagnose a member with cancer they may not know they had. These would be diagnosed by ultrasounds of vital organs, in which firefighters have increased risk of developing cancer. Some departments already perform these tests and have caught cancer early for members.

Goals for 2022

In 2022, we also will start the process to become NFPA 1500 compliant. NFPA 1500 is the standard that covers the health and safety of members on and off from the fireground. Cascade Fire does a great job at keeping the firefighters safe, but NFPA 1500 just gives us some checkboxes to ensure we are doing our absolute best at following safe practices.



Cascade Fire has had a few members put their personal physical health as a top priority in 2021. Firefighter Deering lost 93.5 lbs., Firefighter Makuch lost 76 lbs. and Lt. Albright lost 45 lbs. I want to congratulate them all on their hard work and dedication to their personal and professional health improvements.

I was asked to apply for the MIOSHA Part 74 Committee in 2021 and elected to be a voting member. This committee is made up of firefighters and code and standard experts, along with MIOSHA members to

FIRE HYDRANT REPORT

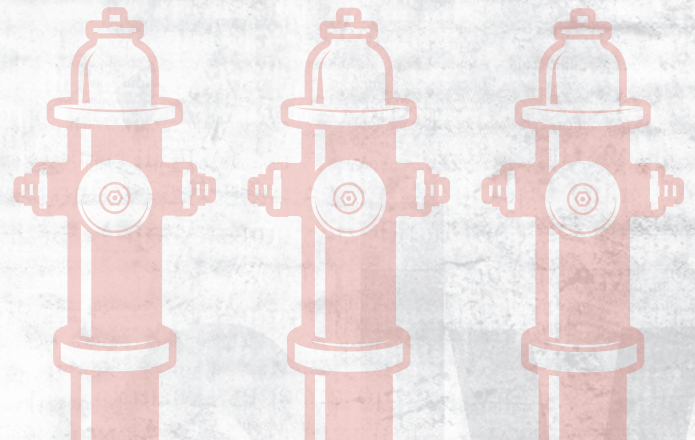


The City of Grand Rapids Water Department provides Cascade Township with drinking water along with the water used by the Fire Department to fight fires. That water comes to our township from the Lake Michigan Filtration Plant through 25 miles of large-diameter supply pipes into two water reservoirs in the Grand Rapids area. From there, it is pumped to various smaller reservoirs surrounding our township and then to our hydrants and homes.

Every year, the Water Department tests a select number of hydrants throughout the township for pressure and volume. On average, Cascade Township consumes 26.3 million gallons of water on a daily basis, with peak summer consumption of 74.9 million gallons per day.

There are 1,347 fire hydrants in Cascade Township. The Fire Department spent 335 hours in 2021 making sure these hydrants are ready for use in case of an emergency. In the spring, we flush out the hydrants to remove any sediments that may have collected during the winter months. In the fall, we pump out the water that is trapped in the hydrant so it will not freeze during the winter. We ask residents to please comply with Township ordinances and keep vegetation and snow piles clear

of any fire hydrants on your property. Fire hydrants are there to provide fire protection for your own property and that of your neighbors. If you see any issues with the fire hydrants, please contact the Cascade Fire Department so we can have them addressed.



**There are 1,347 fire hydrants
in Cascade Township.**

CPR AND FIRST AID

REPORT



Cascade Township Fire Department is proud to be associated with the American Heart Association and serve as a regional training center. We offer basic life support training in CPR with the use of an Automated External Defibrillator (AED) and Heartsaver® First Aid. This was the second year we worked under the COVID-19 restrictions set forth by the Michigan Department of Health and Human Services. Many students used the online classes offered by the American Heart Association to complete the classroom portion and then scheduled a one-on-one class with one of our instructors to complete the testing.

In 2021, we trained over 680 individuals in CPR/AED and Heartsaver® First Aid. We have had the opportunity to bring this training to businesses, church groups, medical professionals and charity organizations, while abiding by the restrictions put in place by the MDHHS and with careful sanitation of our facility and equipment.

While this year brought many challenges, our instructors found creative ways to continue to provide this education.

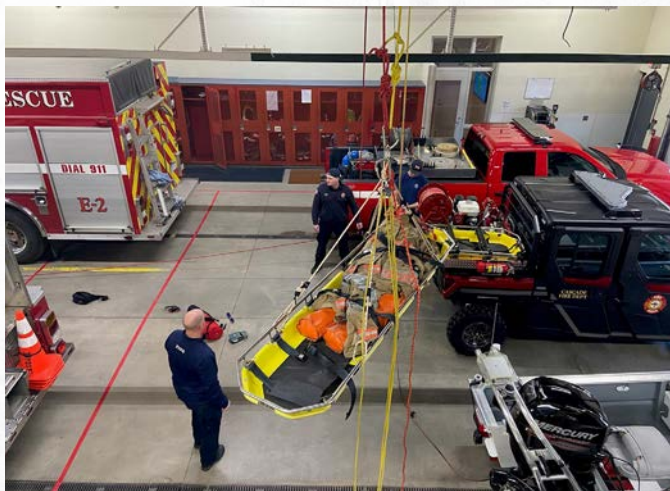


TECHNICAL RESCUE REPORT



In 2021, the Cascade Fire Department actively increased its ability to respond to rescues requiring a more technical approach. Multiple members of the Tech Rescue Team took classes outside of Cascade and brought that knowledge back to the department. Firefighters John Makuch and Lance Korhorn attended a Swift-Water Rescue Boat Operation class hosted by Grand Rapids Fire Department. Firefighters John Makuch and Michael Lintemuth attended a Swift-Water Technician class hosted by the Thornapple Kellogg Fire Department. Firefighter Jim Walker attended the Rope Rescue Technician class hosted by the Grand Rapids Tech Rescue Team. Firefighter Makuch also attended the Rope Rescue Technician class hosted by the Southfield Fire Department. Lt. Bolt attended the Confined Space Rescue class hosted by the Caledonia Fire Department. Each firefighter who attended a class was able to pass on the information they learned to the rest of the Cascade Fire Department Tech Rescue Team.

In 2021, the Cascade Fire Department responded to three incidents involving people stuck in a stalled elevator. We had two calls for Boat 2 to respond to people requiring a water rescue. Our Polaris off-road vehicle, Brush 6, responded to eight emergency calls. While calls for technical rescue are rare, our department continues to train to be ready in the event an emergency calls for technical skill.



TRAINING DIVISION

REPORT



With the beginning of 2021, we started to see more opportunities to get together and train than we did with the previous COVID-19 year of 2020. We started training again with the whole department coming together to attend fire and medical classes. As the training officer, it was nice to get some normalcy back into our trainings.

One of the important trainings we were able to resume this year was our live fire training. When we do live fire trainings, we have our members go into a specially designed burn building with active fire inside. This allows our members to work in a high heat-and smoke-filled environment, just like that of an actual structure fire. This type of training is invaluable. A structure fire is a high-risk, low-frequency event. This means they do not happen very often, but when they do, they can be very dangerous. Preparing for these types of events is the foundation of our training division.

Our trainings were not limited to just a smoke- and heat-filled building, we also got outside in the cold. Ice rescue training is something we schedule every winter once the local ponds start to freeze. We have a member/victim go out in the ice, then we use our ice suits and rescue equipment to safely remove them from the frozen pond.

With the lifting of some of the COVID-19 restrictions, we started doing joint training with our neighboring departments. The Caledonia Fire Department brought its ladder truck to our Station 2, giving us some great hands-on experience. Members got to climb the 100-foot ladder and practice spraying water from the aerial. Also, training with Gerald R. Ford International Airport Fire Rescue Department resumed, allowing us to go to the airport where we jointly trained on water shuttle operations and water supply skills.

Along with practical training opportunities opening up this year, we also were able to send a number of our members to various classes. Lt. Josh Dettwiler and Firefighters John Makuch and Mike Poolman successfully completed the Michigan State Fire Instructor I course and became state-certified instructors. Firefighter Todd Pell completed the Michigan State Police Fire Investigator I class. Capt. Jeff Knowles

completed the nine-month Eastern Michigan University Fire Staff and Command Executive Leadership Program, making him the fourth person in our command staff to graduate from EMU Fire Staff & Command. We are very fortunate to have the support of the Township Board to be able to have such great training opportunities for our officers and firefighters.

The entire department did an excellent job of training in 2021. Our members have different opportunities to get their training hours. We have hands-on practical trainings, classroom lectures and computer platforms. As the training officer, I rely on my training committee to come up with new and better ways we can train our members. Our members logged 8,115 hours of training in 2021.

Our goals for 2022 are to continue with our many training programs: computer-based, live fire, hands-on, classroom and neighboring department training. We plan to start filming our trainings and make a library our members can use whenever they want to arrange a training.

Hopefully as the new year progresses, restrictions will continue to lift and more opportunities to expand our training will occur. No matter what happens or what obstacles are in the way, rest assured that the members of the Cascade Township Fire Department will continue to train and improve our skills to be ready for any emergency that arises.

We don't rise to the level of our expectations, we fall to the level of our training.

— Archilochus

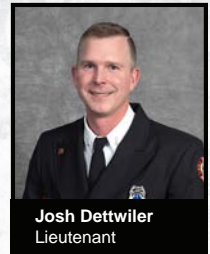






FACILITIES

REPORT



2021 has started to bring some normalcy back to the department. We are still disinfecting daily and taking all precautions necessary to stop the spread of COVID-19, but we were able to open the stations back up for car seat checks and visitors. It was great to be able to host events like Walk for the Red and the Ranger Walk at Station 2 again.

Cascade Fire is happy to announce that we have partnered with Williams Architects to design our new Station 1 at its existing site, 2865 Thornhills Ave SE. We had our kick-off meeting this summer and have continued with site planning, schematic design, design development and many other meetings to keep this project on track. We truly appreciate the support of our Board members and our community.

Station 1 equipment and personnel will be relocating to 6450 Air Cargo Drive SE during the demolition and construction phases of the new building. After looking at numerous options to house our engines, this location will suit us best. We will be doing a small amount of remodeling to the facility to add a kitchen, to convert storage rooms into bedrooms, to update the electrical system along with painting and carpet. This work will allow us to run our daily operations more efficiently.

We look forward to breaking ground on Station 1 in 2022! This new station will allow for department growth and will be more efficient in both energy and workspace. Some training elements have been incorporated into the plans, including a hose tower on the front of the building that can be used for high rise and standpipe training. The mezzanine in the bays will also include anchor points to train on rope rescue and ladders.

The current site will need extensive infrastructure updating to meet the newly adopted Lower Grand River Watershed Management Plan. This will create some engineering challenges to place stormwater runoff holding tanks and filtration systems underneath the property. We are committed to meet this new standard in order to help keep our rivers clean.

To make the entry ramps more user-friendly onto Thornhills Avenue, the site will need to have some major elevation changes done as well. These elevation changes will not only make it easier to enter and exit the property with our larger vehicles, but it will make the sidewalks up to the station handicapped-accessible.

Station 2 is now going on its 24th year as a fire station. We will continue to upgrade existing heating and cooling units to more energy-efficient systems. Our storage building that was planned for Station 2 came in with considerably higher bids than expected. Due to the increased cost of materials, that project was put on hold. We will be able to use the space at Air Cargo to house all of our equipment until our new station is built.

Stay tuned to the Township's website and social media for more information about future engagement opportunities as the Fire Station 1 project progresses. We'd like to thank the project team who have worked so hard to develop a facility that meets our department's needs now – and for decades to come. We'd also like to thank residents who have shared their feedback and asked good questions throughout the process.



1974

RESPONSES 2021

05:36

Average Response Time
Dispatch to Arrived



01:01

Average Turnout Time
Dispatch to Enroute

Incident Count for All Calls
All Statuses

2,242



1,539

Incident Count for EMS Calls
All Statuses

Incident Count for Fire Calls
All Statuses

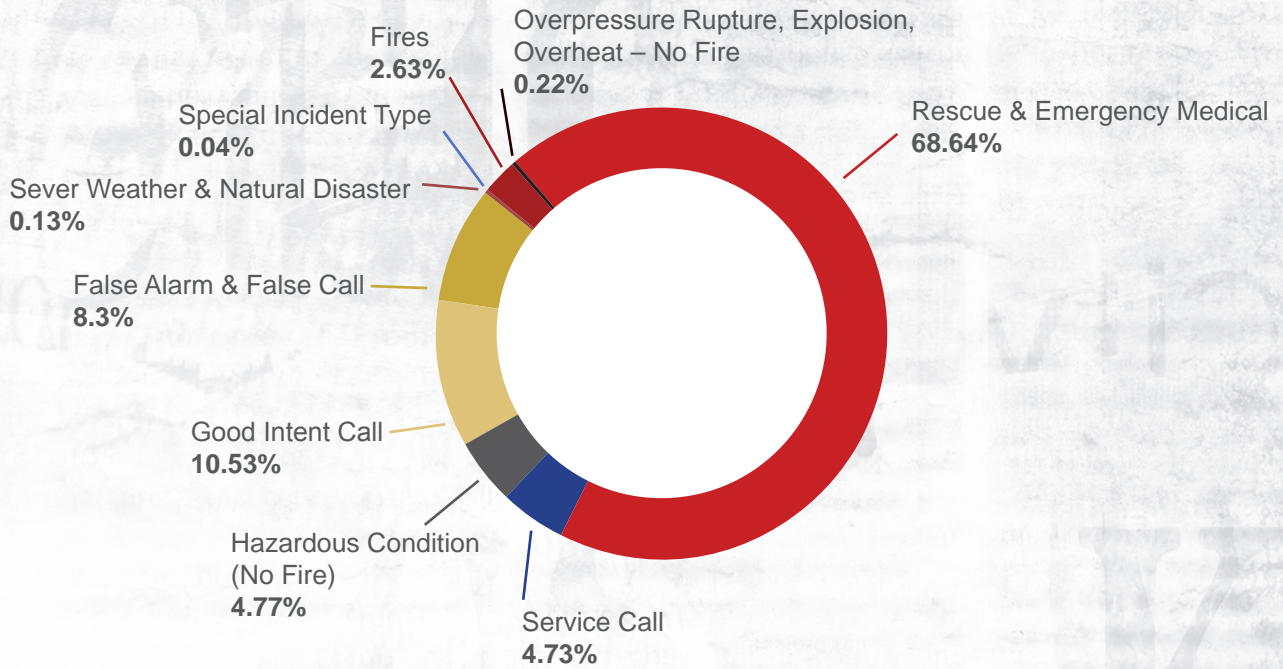
703



8,115.02

Total Training Hours

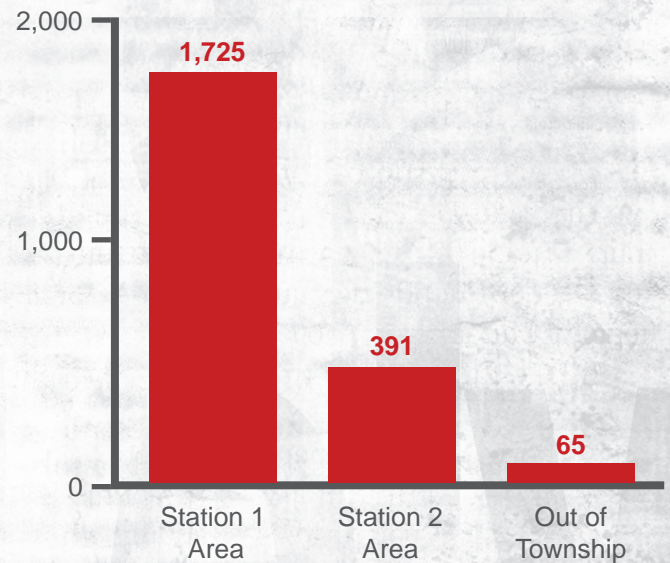
BREAKDOWN BY MAJOR INCIDENT TYPES



INCIDENTS PER SHIFT



INCIDENT COUNT PER ZONE



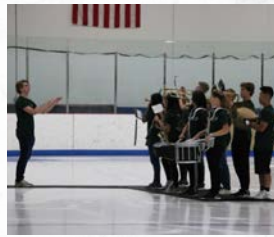
TOTAL: 2,242



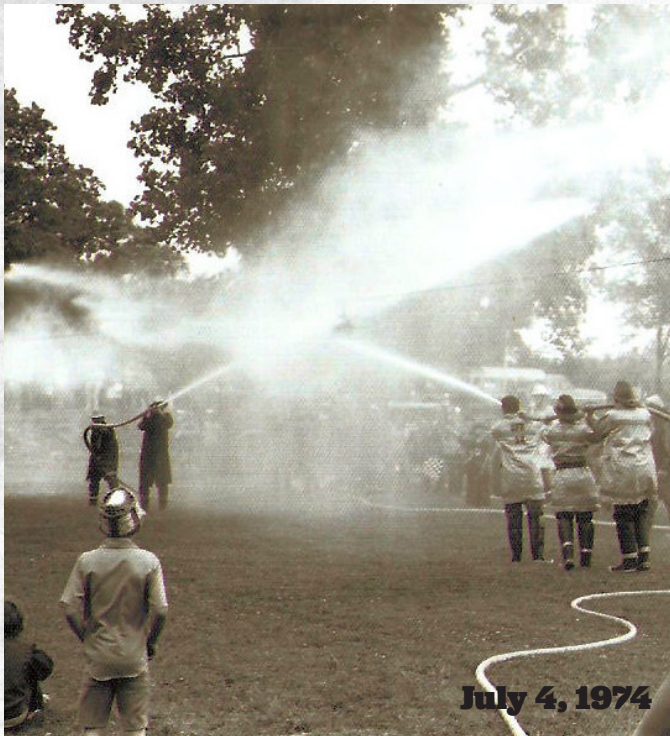
FIREFIGHTER ASSOCIATION



FIRST ANNUAL CHARITY HOCKEY GAME



CASCADE FIRE DEPARTMENT HISTORIC PHOTOS





July 4, 1974



July 4, 1974



1948



July 4, 1974



July 4, 1974

Virginia
This house
repeatedly
repeated to
6/7/78
4/17/79

Cascade Fire Department

Why ^{and when} the department was started. In 1936 or 1937 when Beuten's house burnt on Buttrick Ave. the Godwin Heights Dept. of Paris Twp. was the closest and responded to the ~~first~~ call; of course the house burnt to the ground. So the people started ^{talking and} working towards getting a truck which finally appeared when Kent County placed trucks in various County Stages. Ours of course was in Ada and ~~that~~ also ~~had~~ covered Ada, Cascade and Vergennes Twp. This was in Dec 1940. This also was very unique as it was the first such setup in the U.S. Then the townships organized their own departments to man the equipment. The County did hire one man to drive the truck.

Highway Dept

Our first fire Chief was Alfred Scott who had the job 1942 to 1951 when he retired after a heart attack. Communications to get the other men to a fire was by the Chief's wife calling each individual. In 1943 Cascade had a bad fire when an oil tanker came down 28th St and turned over on the corner of Cascade and Orange St. This was at 10:15 AM. When the Chief's wife first called all she could say was "Fire Fire Fire" and then she hung up the phone. She soon collected herself and then called the men plus some other trucks from other places. Many places were on fire and ~~in 1944~~ some lost. Fire even traveled

1943 FIRE



1980

down the river towards Ada.

In 1944 Chief Scott with help from some of his volunteers started construction of a tanker truck which consisted of a coal truck chassis and an oil tank from Cornello Oil Company in Lowell. This truck was housed at Chief Scott's Gas Station ^(1910 Cascade St) outside and then each winter it would have to be drained. In 1946 Chief Scott built a 3 bay garage so then the truck was kept in there. In 1947 the Township bought the property where the station now stands and the men moved a single stall garage on to the property to house their truck. In March, 1948 the Firemen solicited for funds and pledges to construct a new station and another truck. ^{new station was built at that time.} The reason for this ^{was} that the one county truck had to many twps. and area to cover and the firemen wanted faster response. Dedication of the new fire station was done at a Pancake Supper. The cost at that time was 7,000.00 for the truck.

Alfred Scott became Chief in 1951 thru 1965

In 1950 the protective wall was built by volunteers because a car had knocked part of the station down when being constructed. The wall is 4' wide and at least 4' deep underground, 30" wide and 3' high above ground, with lots of reinforcements. In Sept. 1956 the Legion and Fire Dept.

Had the Mills Brothers Circus here to help raise money for rescue equipment. They did have one piece of emergency equipment which was donated May 30, 1954 by the Cascade Trail Scout Troop. The 2 girls who presented the first oxygen insulator set were Karen Durham & Linda Fellows. The money raised at the circus was matched with CD funds and at this time the first station wagon was purchased for a Rescue Unit. Charles Weston equipped the First Aid Box. This Rescue Unit was also a first in the County - go Richard Washburn and Keate & Vining had a write up in "Prairie Farmer Magazine". In 1958 the station wagon was replaced by a Hearse donated by Springs Funeral Home in Grand Rapids then the Kent County Sheriff's Dept. First Aid Unit. About 1965 a trucking company in Grand Rapids donated a Chev Van to replace the Hearse. In 1973 the Chev Van was replaced with a new van which they have today.

Back when the dept. started getting too large for the Chief's wife to do all the calling it was divided up, so to speak, like a chain reaction ~~with~~ she called so many and each of them would call others. In 1951 we had Fire Cards printed and with the help of the Boy Scouts each promo was given a card. If you had 2 phones you received



July 4, 1974

2 cards. In 1962 the first 2 way radio system was used plus 10 monitors were placed in different ~~homes~~ firemen's homes. Today all firemen have a monitor in their home and some have them in their cars. Pocket monitors help those who are working ~~at~~ away from home.

Trucks

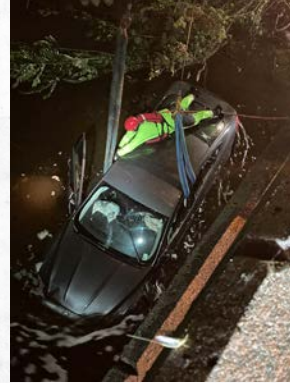
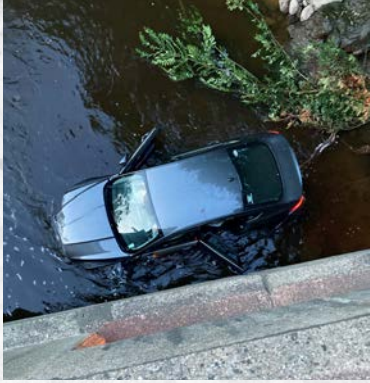
- 1957 International - \$16,300 received in 1958
- 1969 Ford pumper - 31,000 " " 1970
- 1970 Tanker (International) 23,034 " " 1971
- 1955 Jeeps from DNR surplus equipment - 1972
- 1955 - bought a chev ^{van} to replace gas truck

Fire truck accidents

- Aug. 5-1959 - The gas truck forced into the Thornapple River bayou on Burger returning from a grass fire. 3 firemen on truck, driver Lee Norton; passenger inside Groves Buttrick and outside Sgt. Dykhuizen, Sr.
no injuries
- Sept. 2-1961 - International was scorched at a Turkey Barn fire on Snow Ave. when it got stuck in a sand covered pit.
- Nov. 5-1973 - Van was rammed on 28th St. while Donald Winters and Groves Buttrick were checking a fire hydrant. This was before the van ~~had~~ was equipped.
injuries

replaced gas truck in 1975
 How Deal - 1975 (gas city)
 1973 road trip from Brown Trwp - 1978

A SNAPSHOT OF 2021 INCIDENTS





FUN PHOTOS 2021

National Night Out



Ember and Deputy Dieppa



FF. Jon Snyder



Lt. Albright and guest



Sgt. Boonenberg and guest

EMU Staff and Command Alumni Golf Outing



Lt. Michael Bolt, Capt. Todd Stevenson, Capt. Jeff Knowles and Chief Magers

Metro Cruise Warm-Up



FF. Owen Gelder with some of our biggest fans at Metro Cruise

Grand Rapids Triathlon



Sgt. Boonenberg, FF. Makuch, POC FF. Baker on the river with Boat 2



Lt. Albright, FF. Baker, FF. Lotterman





CASCADE TOWNSHIP FIRE DEPARTMENT

2865 Thornhills Ave. SE
Grand Rapids, MI 49546-7192
616.949.1320 (Non-Emergency)



2021

ANNUAL REPORT

A yearly celebration of
achievements in the
Lower Grand River Watershed

LOWER GRAND RIVER
ORGANIZATION *of* WATERSHEDS



GVMC

WHAT IS LGROW?

The Lower Grand River Organization of Watersheds (LGROW) brings together local municipalities and community stakeholders in a unique format to address issues facing the Lower Grand River and its 31 subwatersheds.

MISSION

To understand, protect and improve the natural resources of the Lower Grand River Watershed for all to enjoy.

VISION

Connect water with life.

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LGROW Spring Forum



LGROW Staff

Wendy Ogilvie

Director of Environmental Programs

Cara Decker

Stormwater Programs Coordinator

Courtney Cromley

Outreach and GIS Coordinator

Josh Arnold

Aquatic Specialist

Senci Pace

Environmental Programs Associate

Eileen Boekestein

Former Environmental Education Coordinator

Rachel Frantz

Former Environmental Programs Associate

Board of Directors

Aaron Vis

Chair

Carrie Rivette, P.E.

Past Chair

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Public Engagement Chair

Benjamin Jordan

Subwatershed Chair

Ken Krombeen

Fund Development & Membership Chair

Brad Boomstra, P.E.

Stormwater Ordinance Chair

Dan Taber, P.E

Sustainability Chair

Peter Klooster, P.E

Technical Chair

A LETTER FROM THE CHAIR

Hello LGROW Community –

One thing that has been on my mind recently is culture. Not societal culture, but rather organizational culture. The culture of LGROW and its supporting cast of employees and member organizations is why the accomplishments listed in this report occurred. *Culture* is why we are able to work together outside of jurisdictional boundaries. It is why “we” as engineers, scientists, administrators, elected officials, regulators, specialists, etc. can collectively make meaningful improvements to our watershed.

Respective of this, several significant events happened within our watershed this past year that I would like to briefly highlight. Probably the most noteworthy was that a number of municipalities received their stormwater permits from the state. These permits started as applications way back in 2015, finally coming to reality in 2021.

Several components of these permits are more rigorous than the old permits. These include additional sampling/monitoring of area waterbodies, and increased educational and reporting requirements. The most difficult but impactful permit-required work has been done drafting a design spreadsheet and a regional stormwater ordinance. If our respective participating organizations did not have cultures that emphasized collective, mutual benefit over selfish siloing, these two complicated items would never have been done at the existing scale.

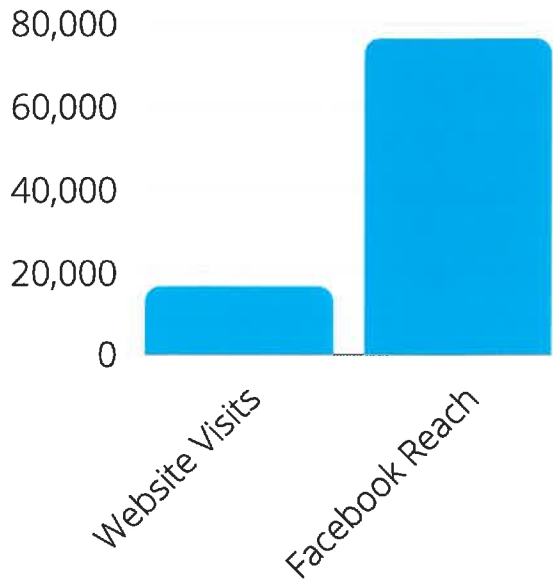
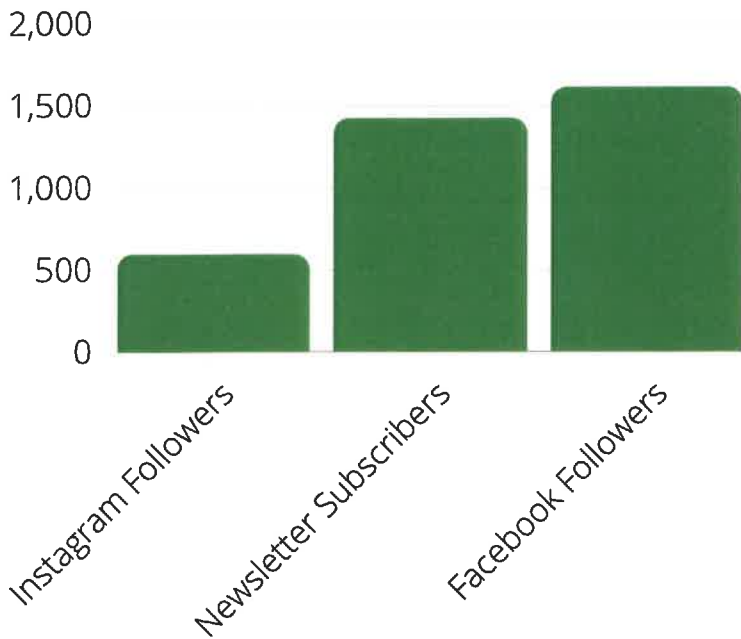
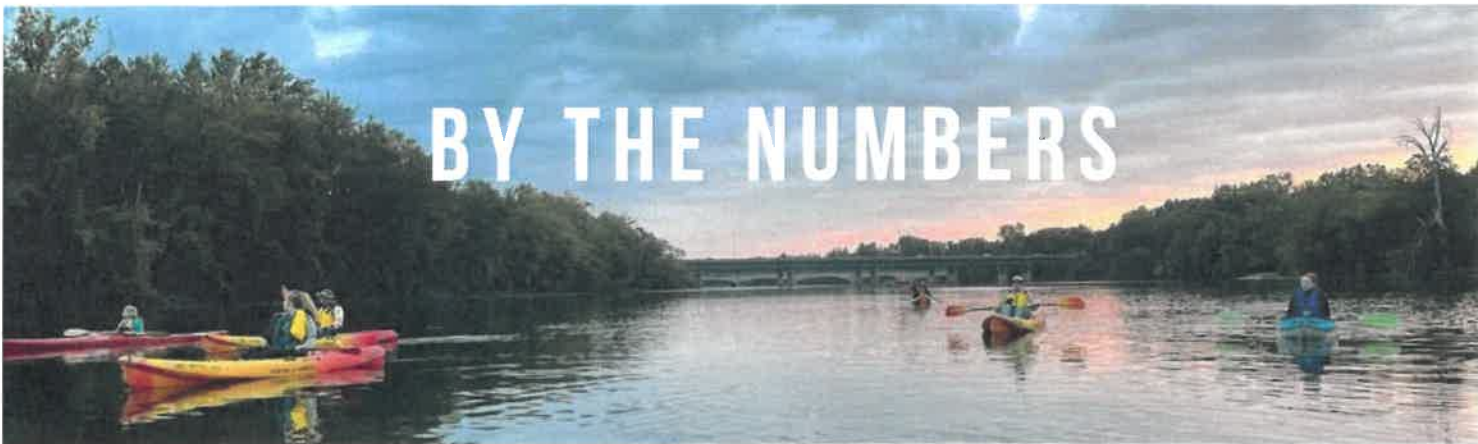
Additionally, LGROW staff were able to successfully hold a multi-day Spring Forum. With the theme of Learn-Help-Explore, staff and volunteers were able to provide a variety of in-person and virtual events throughout the community. This event was also only made possible by a willingness to work together for a shared good (and our amazing sponsors).

All of us work, volunteer, or participate in multiple organizations within West Michigan, and each of us bring our unique perspective to these groups. Yet, despite having varied backgrounds and perspectives, we are generally able to have meaningful conversations to resolve common problems. Sometimes I think we get so accustomed to this, that we fail to appreciate how unique and beneficial it really is. I hope each one of us takes a step back to realize these benefits, especially when contrasted with many events going on in society today.

Please enjoy the 2021 Annual Report and thank you to LGROW staff for another great year.

Aaron Vis
Assistant Director of Public Works
City of Wyoming
avis@wyomingmi.gov





WEBSITE & SOCIAL MEDIA

This year the LGROW Facebook page had **1,608** followers and reached **76,172** people through posts. The LGROW Instagram page had nearly **600** followers. Our website had **16,335** visits and **35,000** page views. Our seasonal newsletter had **1,420** subscribers.

PUBLIC ENGAGEMENT

LGROW hosted an **11-day** Spring Forum with **38** in-person and virtual events, with over **200** attendees! Throughout the year, LGROW visited **22** different schools to educate **2,566** students about healthy watershed practices.

LGROW received \$621,361 in new grant funding and entered into several partnership agreements.

WATERSHED WINS

Municipal Separate Storm Sewer System (MS4) Permits

LGROW collaborates with **23** communities to ensure that they are meeting federal National Pollution Discharge Elimination System (NPDES) regulations as specified by their Municipal Separate Storm Sewer System (MS4) permits. EGLE issued **19** individual permits to watershed communities in 2021, and LGROW continues to provide a regional approach for **23** municipalities with MS4 permits.

Adopt - a - Drain

A monumental **1,196** storm drains were adopted by the end of 2021. In 2020, only **891** drains were adopted, this results in a **34% increase** since last year! We now have **16** communities involved in the program.

ADOPT-A-DRAIN GRAND RIVER



Great Lakes Restoration Initiative Grant

Planting trees helps soak up stormwater runoff, filter pollutants, and provide valuable habitat for many different creatures. In this watershed win, we planted **300** trees at **15** schools. Staff, students, and their parents were invited to help plant, for a total of **1,093** helpers over the duration of this project! All **300** trees will intercept **123,459** gallons of stormwater runoff.





Macroinvertebrate Sampling

LGROW staff members sampled 15 creeks, streams, and rivers in the Lower Grand River Watershed in 2021. Collecting these macroinvertebrates helps scientists us determine water pollution levels in our local waterways. Macroinvertebrates have different tolerances to water pollution, which makes them indicators of water quality. LGROW staff is perfecting their techniques so they can train community scientists and subwatershed groups to conduct their own aquatic insect sampling at their local creeks, streams, and rivers.



Mussel Survey

LGROW helped Josh Arnold collect and measure 165 of the original 200 translocated freshwater mussels in Cedar Creek. This work was done for his thesis, in order to determine the effects of translocation on freshwater mussels. Josh found little to no differences in growth rates of mussels, indicating that in the short-term, translocation can have minimal effects on growth rates. He also found that short-term studies can be useful in determining if translocation sites can have long-term success.

A FEW PROGRAM HIGHLIGHTS:

Grand River Rainscaping

The Grand River Rainscaping program continues to inspire and help community members get involved in improving water quality through green infrastructure. This year, LGROW conducted **33** residential and business site assessments. The site assessments inform property owners of the best green infrastructure practices that could be implemented on their site to manage stormwater. These practices include raingardens, native plantings, vegetated swales, rain barrels, or riparian buffer zones. Through funding awarded to LGROW and partners in our watershed, we are implementing many of the recommended green stormwater infrastructure practices at residential and business sites.



**Grand River
Rainscaping**
An LGROW Program



Conservation Planning

LGROW continues to work on the ***Lower Grand River Watershed Resilience Plan***. The Resiliency Plan characterizes the threats and vulnerabilities the watershed faces from a changing climate and the resources and strengths it possesses for building resilience. It aims to create subwatershed-based action plans that allow our communities to prepare for and adapt to a changing environment.

The ***Lower Grand River Water Trail Development Plan*** describes the formation of a sustainable, enjoyable, and safe water trail for residents and tourists alike. With the help of citizens, access and launch points will be established, potential waterway hazards will be reported, and heritage sites will be identified. Once the plan is completed, we can apply for State designation and join the Middle and Upper Grand River Organizations in creating a seamless paddling experience.

LGROW, Great Lakes Audubon, and the West Michigan Environmental Action Council (WMEAC) were awarded funding to lead the ***Grand River Coastal Corridor Study***. This conservation project will support landscape level management by spatially prioritizing ecosystem creation, restoration, and enhancement areas on public and privately managed lands through public engagement, volunteer events, and community science efforts

COMMUNITY INVOLVEMENT



Earth Day

One of many Earth Day events LGROW attended was at Third Nature Brewing Company, where staff helped attendees find what subwatershed they lived in and collected comments about their environmental concerns.



West Michigan WhiteCaps

Batter Up! LGROW staff promoted proper pet waste disposal at two West Michigan WhiteCaps baseball games over the summer. Hundreds of attendees at these events learned more about their watershed and got free doggie waste pick up bags!



Festivals & Events

LGROW tabled at five festivals and events in 2021 all across the watershed. From *Movies in the Park* to the *Mayors' Grand River Cleanup*, staff was able to communicate and promote watershed stewardship to a diverse population.



Storm Drain Cleaning

Storm drain cleaning as a part of our Adopt-a-Drain program was successfully completed at four locations in the watershed, removing hundreds of pounds of garbage & debris from entering local waterways.

LGROW SPRING FORUM

Learn

The “Learn” events provided many opportunities: from butterfly walks to river tours, to virtual freshwater mussel webinars. The educational opportunities were available for all, with both in-person and virtual offerings. Pictured here is the Macroinvertebrate Survey taught by LGROWs Aquatic Specialist.



Help

The “Help” events were outdoor activities to get the whole family involved. People got their hands dirty with river clean-ups, volunteering at sustainable agriculture practices, and maintaining raingardens. Pictured here is the Indian Mill Creek clean-up where 4 car tires, a chair, a laundry basket, and several bags of garbage were removed from the river.



Explore

The “Explore” events were recreational activities that got people outside and active. Kayaking trips, cycling and walking explorations, and free fishing provided outdoor enthusiasts an opportunity for seeing a different view of the Grand River and its watershed. Pictured here is the guided exploration of the Native American Hopewell Indian Mounds Park.





LGROW STRATEGIC PLAN

Goal #1: Healthy Watersheds

- Restore and protect impaired and threatened waterways
- Advance natural connections
- Promote sustainable agriculture and rural character

Goal #2: Engaged Community

- Involve the public
- Incorporate diversity, equity, and inclusion

Goal #3: Robust Organization

- Recruit new members and develop watershed leaders
- Secure sustainable revenue and strengthen board

A Letter from the Director

I hope you enjoyed reading about our projects and program accomplishments from last year. I truly believe (and am forever hopeful) that 2022 is the year that we will be able to get together and celebrate our watershed in ways that foster collaboration, encourage a sense of community, and actually see each other in person! LGROW was founded on the idea of protecting and improving the Grand River - this valuable resource that we have in our own backyard. The importance of this idea has been evident these past two years as families are traveling less and exploring what trails, parks, and waterways they can find close to home. We are building on this increased use of our natural resources and finding innovative and community-centered projects that meet LGROW's goals of a Healthy Watershed, an Engaged Public, and a Robust Organization. We could not do this work without our valued partners, talented staff, and dedicated LGROW Board members.

Thanks to all and here's to a great 2022!

Wendy Ogilvie

Director of Environmental Programs, GVMC



LGROW IN THE PRESS

Stay up to date with what LGROW is doing by following us on social media, visiting www.lgrow.org, and by watching and reading about us in the press.

River Network

Eight Network Members Awarded Technical Assistance Grants to Support Community-Led Research

January 2021

Grand Haven Tribune

Let's Get Outside: Environmental activities in 2021

May 2021

Storm Water Solutions

Grand Rapids, MI, Advises Residents to Keep Storm Drains Free of Leaves & Debris

November 2021

NOTABLE ACHIVEMENTS

North American Association for Environmental Education

CEE-Change Fellow

Eileen Boekestein

Grand Valley State University

Masters of Aquatic Science

Josh Arnold

Grand Rapids Community College

National Green Infrastructure Certified Professional

Cara Decker

Non-Profit Leadership Lab

Grant Writing Boot Camp

Wendy Ogilvie

**LOWER GRAND RIVER
ORGANIZATION of WATERSHEDS**



For more information:

 www.lgrow.org

 (616) 776-7605

 info@lgrow.org

 [@LGROW.org](https://www.facebook.com/LGROW.org)

 [@lgrow_org](https://www.instagram.com/algrow_org)

LGROW is an agency of the Grand Valley Metro Council, which puts LGROW in a unique position to blend non-governmental organizations with the local governments in the watershed.

GVMC



Cascade Charter Township Seminar/Conference Attendance Request Form

This form must be filled out if the employee is requesting Township payment or reimbursement for the employee's attendance to a seminar or conference.

Conditions:

1. Cascade Charter Township will reimburse employees for approved registration for work related seminars and conferences. Individual seminars and conferences must be related to the employee's current job duties or a foreseeable-future position in the organization in order to be eligible for
2. Some seminars/conferences that an employee may attend may be unrelated to their particular job or government in general, and are therefore not covered by this assistance policy.
3. Any request that requires an overnight stay or expenditure over \$1,000 requires Township Board approval before the seminar/conference is attended.
4. Under extenuating circumstances, the Township Manager may approve an overnight stay or expenditure over \$1,000 for a conference or seminar prior to Township Board approval. The request must be made before attendance to a seminar/conference. The Township Board will be informed of request at their next scheduled meeting.

This form must be completed by the employee and approved by the Township Manager and/or Township Board before the seminar/conference is attended.

Name: Todd Pell Application Date: 3-14-22

Name of Proposed Seminar/Conference: Michigan IAAI Annual Arson School

Seminar/Conference Date(s): May 23-26, 2022

Location of Seminar/Conference: Radison Hotel, Downtown Lansing

Description of Seminar/Conference: *(may also be attached)*

This seminar will provide the latest updates / information pertaining to trends in fire investigation, cause and origin determination, and organize a case file for courtroom testimony and prosecution arson and other fire related crimes. This will also provide for us thre required continuing education credits required to maintain our licenses.

How will the Seminar/Conference benefit the employee and the township?

This seminar will provide the latest updates / information pertaining to trends in fire investigation, cause and origin determination, and organise a case file for courtroom testimony and prosecution arson and other fire related crimes. This will also provide for us thre required continuing education credits required to maintain our licenses.

Cost of the Seminar/Conference:

Registration \$ 350.00

Lodging \$ 440.00

Travel \$ 0.00

Account # 206336726000 - Training

Applicant: 
Signature

Approvals:

Department Head: 
Signature

3-14-22
Date

Township Manager: 
Signature

3-17-22
Date

Clerk: _____
(Signature Indicates Township Board Approval)

Date

➤ Original to Personnel File

➤ 1 Copy to Applicant

➤ 1 Copy to Accounting

REGISTER NOW!



2022 ARSON SCHOOL

May 23 - 26 | Radisson Hotel | Lansing, MI

JOIN US FOR AN EXCITING WEEK OF FIRE INVESTIGATION TRAINING AND EDUCATION

CONFERENCE SCHEDULE:

Monday-Wednesday – Classes from 8:00am to 5:00pm
(with breakfast and lunch provided)

Thursday – Classes from 8:00am to 11:00am and Testing from 11:00am to 12:00pm (with breakfast provided)

Registration will open at 7:00am each day

CONFERENCE TOPICS INCLUDE (full agenda published soon):

- Interview and Interrogation
- Evidence / Scene Documentation
- Courtroom Preparation for Fire Investigation
- Electric Vehicles and Fires
- Photography for Fire Investigation
- Battery Incident

BECOME A MEMBER or RENEW YOUR MEMBERSHIP TODAY!

Join the Michigan IAAI today to take advantage of member-only rates for our annual conference!

BECOME/RENEW MEMBERSHIP

Registration Information

CONFERENCE FEES

EARLY BIRD RATES *Through May 6*

	<u>Member</u>	<u>Non-Member</u>
Full Conference	\$350	\$450
Two-Day	\$285	\$385
One-Day	\$210	\$310

REGULAR RATES *Beginning May 7*

Full Conference	\$375	\$475
Two-Day	\$310	\$410
One-Day	\$235	\$335

PAYMENTS AND REFUNDS

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All cancellations must be received in writing no later than May 13, 2022, to receive a full refund (minus \$50.00 administrative fee). All telephone cancellations must be followed up with a written notice. Seminar refunds will not be issued for cancellations made after May 13.

Last day to register is Friday, May 13



2022 Arson School - Registration Information

HOTEL ACCOMMODATIONS


A block of hotel rooms has been reserved with Radisson Lansing at the Capitol at a rate of \$110.00 per night for single or double occupancy plus taxes.

The cost of the hotel room is not included in the registration fee. To make a hotel reservation, please contact the hotel directly.

Payment for the hotel **MUST** be paid separately and sent directly to the hotel.

Tax-exempt status: For any Radisson Hotel overnight guest(s) to be eligible for tax-exempt status, (1) the room must be paid for directly by the guest's government agency, either with a check or credit card, and (2) the guest must provide a copy of the agency's tax-exempt form. Tax-exempt status is not granted for rooms paid for by the individual, even if getting reimbursed. Please contact the hotel directly prior to arrival to ensure compliance with their requirements.

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Radisson Hotel Lansing at the Capitol

111 N. Grand Ave.
Lansing, MI 48933
800.333.3333 –or– 517.482.0188

Please note: All reservations must be guaranteed by the individual and accompanied by a first night room deposit or guaranteed with a major credit card. Each individual has up to 72 hours prior to arrival date to cancel the individual room. If the individual cancels the room within 72 hours of arrival, 100% of the first night's room rate plus tax will be charged to the individual's credit card or taken from the deposit.

Check-in is 4pm. Check-out is 12pm.



Parking available in surrounding ramps at \$15 per night.

MEMBERSHIP/RENEWAL

You can become a member* or renew your Michigan IAAI membership online when you register for the seminar. The cost of membership is \$20 per year.

**New memberships are subject to approval*

CONTINUING EDUCATION POINTS

Fire inspector continuing education points and MCOLES have been applied for. You **must** bring your MCOLES # and/or State of Michigan Bureau of Fire Services Certified Fire Inspector # to qualify.

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PO Box 60
Dewitt, MI 48820

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email: IAAI-Conference@outlook.com | phone: 517.899.1304





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www.michiganiaai.org



like us on Facebook!

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Michigan IAAI
PO Box 60
Dewitt, MI 48820

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Tammi Connell, Conference Administrator
email: IAAI-Conference@outlook.com | phone: 517.899.1304





Cascade Charter Township

Liquor License Compliance Review

Cascade Township does not issue liquor licenses but is notified of a license request by the Michigan Liquor Control Commission. The purpose of this form is to report any known non-compliance issues within any township department. Please respond via email to confirm you have or have not found non-compliance issues.

Organization: Exit 76 Corporation

Street Address: 4919 Town Center Ct SE, Grand Rapids, MI 49512-9669

LICENSE TYPE:

Transaction: NEW SDD (Specially Designated Distributor) LICENSE

Fire Department Approval Email: Yes Date: 3/9/22

Notes: _____

Building Department Approval Email: Yes Date: 3/9/22

Notes: _____

Clerk Department Approval Email: Yes Date: 3/9/22

Notes: _____

Treasurer Department Approval Email: Yes Date: 3/9/22

Notes: _____

Zoning Department Approval Email: Yes Date: 3/11/22

Notes: _____

Township Manager Approval Email: Yes Date: 3/9/22

Notes: _____



STATE OF MICHIGAN

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
LANSING

GRETCHEN WHITMER
GOVERNOR

ORLENE HAWKS
DIRECTOR

Friday, March 04, 2022

Joseph Albers, Applicant
c/o EXIT 76 CORPORATION
jalbers@jhoil.com

RID # RQ-2202-01162 **Reference/Transaction:** New SDD license in conjunction; new Sunday sales permit (PM) for SDD license – spirits; new direct connection; new motor vehicle fuel pumps issued under MCL 436.1541(1) \$250,000 & 5' (inside) at 4919 Town Center Ct SE, Grand Rapids, MI 49512-9669 in Cascade Twp in Kent County

Please let this letter serve as notice the Michigan Liquor Control Commission has referred your application to our Enforcement Division for investigation of your request.

Applicant/Licensee: EXIT 76 CORPORATION

Business address and phone number: 4919 Town Center Ct SE, Grand Rapids, MI 49512-9669 in Cascade Twp in Kent County

Home address and phone number of partner(s)/subordinates:

Loren C Hoppen Stock Trust; 3745 Greenly St Hudsonville MI 49426; Business: 616-534-2181; Cell: 616-293-7685
Abigail L Hoppen Stock Trust; 1767 24th St Allegan MI 49010; Business: 616-534-2181; Cell: 616-889-2750

As part of the licensing process, an investigation is required by the Michigan Liquor Control Commission Enforcement Division. The Enforcement investigation will be conducted from the following designated District Office:

Grand Rapids District Office (616) 447-2647

You may contact your designated District Office regarding any appointments or questions on documentation requested by the Investigator. **Failure to provide requested information or to keep scheduled appointments will cause the application to be returned to the Lansing office for cancellation.**

Under administrative rule R 436.1105, the Commission shall consider the opinions of the local residents, local legislative body, or local law enforcement agency with regard to the proposed business when determining whether an applicant may be issued a license or permit.

Under administrative rule R 436.1003, the licensee shall comply with all state and local building, plumbing, zoning, sanitation, and health laws, rules, and ordinances as determined by the state and local law enforcements officials who have jurisdiction over the licensee. The licensee must obtain all other required state and local licenses, permits, and approvals before using this license for the sale of alcoholic liquor. Approval of this license by the Michigan Liquor Control Commission does not waive any of these requirements.

MICHIGAN LIQUOR CONTROL COMMISSION
Retail Licensing Division
(866) 813-0011

cc: CASCADE TWP sslater@cascadetwp.com

CHECK DISBURSEMENT REPORT FOR CASCADE CHARTER TOWNSHIP
CHECK DATE FROM 01/01/2022 - 01/31/2022

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
FUND 101 - GENERAL FUND							
01/06/2022	GENF	73953	AQUATIC CONSULTING SERVICES LLC	POPULATION SURVEY ANALYSIS REPORT	816-000	295	9,050.00
01/06/2022	GENF	73954*#	ARROWASTE	COMPLEX MAINTENANCE- TRASH/ RECYCLE	931-000	265	145.91
01/06/2022	GENF	73954	ARROWASTE	PARK MAINTENANCE-TRASH/ RECYCLE	935-000	756	252.68
				CHECK GENF 73954 TOTAL FOR FUND 101:			398.59
01/06/2022	GENF	73955	AMERICAN SOCIETY OF COMPOSERS,	TOWNSHIP DUES	723-000	101	390.00
01/06/2022	GENF	73956	AT&T	COMPLEX PHONES	924-000	265	369.84
01/06/2022	GENF	73959*#	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	295	1,213.00
01/06/2022	GENF	73959	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	295	1,016.00
01/06/2022	GENF	73959	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	295	1,016.00
01/06/2022	GENF	73959	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	295	1,501.00
01/06/2022	GENF	73959	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	295	1,016.00
01/06/2022	GENF	73959	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	295	1,072.00
01/06/2022	GENF	73959	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	295	1,540.00
				CHECK GENF 73959 TOTAL FOR FUND 101:			8,374.00
01/06/2022	GENF	73960	CASCADE CHARTER TOWNSHIP	HISTORICAL SOCIETY- PURCHASE OF BOOK	671-671	000	10.00
01/06/2022	GENF	73961*#	CASCADE PRINTING & GRAPHICS	YARD WASTE LABELS	787-000	447	377.34
01/06/2022	GENF	73968*#	DTE ENERGY	COMPLEX HEATING- 5920 TAHOE DR SE	923-000	265	696.87
01/06/2022	GENF	73968	DTE ENERGY	MUSEUM HEATING DTE ENERGY	923-000	803	124.89
				CHECK GENF 73968 TOTAL FOR FUND 101:			821.76
01/06/2022	GENF	73970	FOSTER, SWIFT, COLLINS & SMITH PC	LEGAL FEES	826-000	295	1,080.00
01/06/2022	GENF	73970	FOSTER, SWIFT, COLLINS & SMITH PC	LEGAL FEES	826-000	295	50.80
01/06/2022	GENF	73970	FOSTER, SWIFT, COLLINS & SMITH PC	LEGAL FEES	826-000	295	45.40
01/06/2022	GENF	73970	FOSTER, SWIFT, COLLINS & SMITH PC	LEGAL FEES	826-000	295	40.00
01/06/2022	GENF	73970	FOSTER, SWIFT, COLLINS & SMITH PC	LEGAL FEES	826-000	295	40.00
01/06/2022	GENF	73970	FOSTER, SWIFT, COLLINS & SMITH PC	LEGAL FEES	826-000	295	80.00
01/06/2022	GENF	73970	FOSTER, SWIFT, COLLINS & SMITH PC	LEGAL FEES	826-000	295	5,100.00
				CHECK GENF 73970 TOTAL FOR FUND 101:			6,436.20
01/06/2022	GENF	73971	FOX FORD MAZDA	VEHICLE MAINT	863-000	265	112.49
01/06/2022	GENF	73971	FOX FORD MAZDA	VEHICLE MAINT	863-000	265	112.70
				CHECK GENF 73971 TOTAL FOR FUND 101:			225.19
01/06/2022	GENF	73976*#	THE HOME DEPOT CREDIT SERVICES	FASTENERS	863-000	265	31.43
01/06/2022	GENF	73979	KENT COMMUNICATIONS INC.	ASSESSING PRINTING AND PUBLISHING	900-000	257	446.09
01/06/2022	GENF	73981	MCKENNA ASSOCIATES, INC.	PROFESSIONAL SERVICES NOV 2021	967-000	171	3,192.90
01/06/2022	GENF	73993	MICHIGAN MUNICIPAL EXECUTIVE	SUPERVISOR MEMBERSHIPS AND DUES	723-000	171	145.00
01/06/2022	GENF	73994	PHOENIX RESOURCES LLC	FALL BULK LEAF PROGRAM	939-000	447	7,370.00
01/06/2022	GENF	74012	TURF SERVICES INC.	FERTILIZER APPLICATIONS	935-000	756	7,024.00
01/07/2022	GENF	7254(A)*	DELTA DENTAL	DENTAL INSURANCE BENEFITS	721-000	850	1,579.33
01/07/2022	GENF	7255(A)	EASTERN FLORAL & GIFTS	PLANT MAINTENANCE- JAN. 2022	787-000	295	91.00

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01/07/2022	GENF	7257(A)	EVAN A. JOHNSON	ASSESSING CONTRACTUAL SERVICES	801-000	257	2,000.00
01/07/2022	GENF	7259(A)*#	FISHBECK THOMPSON CARR & HUBER	LEGAL FEES	826-000	295	925.00
01/07/2022	GENF	7259(A)	FISHBECK THOMPSON CARR & HUBER	LEGAL FEES	826-000	295	1,208.00
				CHECK GENF 7259(A) TOTAL FOR FUND 101:			2,133.00
01/07/2022	GENF	7261(A)	NAPA AUTO PARTS	FUEL	864-000	265	63.32
01/07/2022	GENF	7261(A)	NAPA AUTO PARTS	FUEL- OIL FILTERS	864-000	265	78.30
				CHECK GENF 7261(A) TOTAL FOR FUND 101:			141.62
01/07/2022	GENF	7262(A)	HOPE NETWORK	TRANSPORTATION SERVICES	859-000	652	133.00
01/07/2022	GENF	7263(A)*#	KINGSLAND'S ACE HARDWARE	SUPER CLEAN	863-000	265	23.38
01/07/2022	GENF	7263(A)	KINGSLAND'S ACE HARDWARE	GORILLA TAPE	863-000	265	9.54
01/07/2022	GENF	7263(A)	KINGSLAND'S ACE HARDWARE	SMART FLO MAXHOSE	931-000	265	157.58
01/07/2022	GENF	7263(A)	KINGSLAND'S ACE HARDWARE	WINDOW TRAP	931-000	265	5.03
01/07/2022	GENF	7263(A)	KINGSLAND'S ACE HARDWARE	WATER FILTER	931-000	265	39.21
01/07/2022	GENF	7263(A)	KINGSLAND'S ACE HARDWARE	GFCI OUTDOOR OUTLET	931-000	265	107.94
01/07/2022	GENF	7263(A)	KINGSLAND'S ACE HARDWARE	PVC PIPE	931-000	265	36.42
01/07/2022	GENF	7263(A)	KINGSLAND'S ACE HARDWARE	PAWS PET ICE MELT	935-000	756	57.58
				CHECK GENF 7263(A) TOTAL FOR FUND 101:			436.68
01/07/2022	GENF	7272(A)	THORNAPPLE RIVER NURSERY, INC.	YARD WASTE BAG PICKUP	939-000	447	19,256.25
01/13/2022	GENF	74017	B&V MECHANICAL INC.	COMPLEX MAINTENANCE	931-000	265	955.41
01/13/2022	GENF	74018	CASCADE PRINTING & GRAPHICS	OFFICE SUPPLIES	727-000	295	361.50
01/13/2022	GENF	74019	CASCADE CHARTER TOWNSHIP	TRANSFER TO FIRE FUND	999-006	965	33,333.33
01/13/2022	GENF	74020	CONSUMERS ENERGY	STREETLIGHTING	926-000	448	11,277.38
01/13/2022	GENF	74020	CONSUMERS ENERGY	STREETLIGHTING	926-000	448	559.65
				CHECK GENF 74020 TOTAL FOR FUND 101:			11,837.03
01/13/2022	GENF	74021*#	COMCAST	COMPLEX PHONES- B&G	924-000	265	965.05
01/13/2022	GENF	74022	FOX FORD MAZDA	VEHICLE MAINT	863-000	265	108.51
01/13/2022	GENF	74022	FOX FORD MAZDA	VEHICLE MAINT	863-000	265	60.81
				CHECK GENF 74022 TOTAL FOR FUND 101:			169.32
01/13/2022	GENF	74023	KENT COUNTY ROAD COMMISSION	ROAD OVERLAYS	821-000	446	7.85
01/13/2022	GENF	74025	MINER SUPPLY COMPANY	COMPLEX MAINTENANCE	931-000	265	344.70
01/13/2022	GENF	74036	UNEMPLOYMENT INSURANCE AGENCY	OTHER BENEFITS	723-000	850	593.81
01/13/2022	GENF	74037*#	VERIZON WIRELESS	TRUSTEE CELL PHONES/IPADS/DATA	924-100	101	30.06
01/13/2022	GENF	74037	VERIZON WIRELESS	MANAGERS CELL PHONE/IPADS/DATA	925-000	171	93.10
01/13/2022	GENF	74037	VERIZON WIRELESS	MANAGERS CELL PHONE/IPADS/DATA	925-000	171	67.79
01/13/2022	GENF	74037	VERIZON WIRELESS	CLERK CELL PHONE/IPADS/DATA	925-000	215	94.37
01/13/2022	GENF	74037	VERIZON WIRELESS	CLERK CELL PHONE/IPADS/DATA	925-000	215	77.81
01/13/2022	GENF	74037	VERIZON WIRELESS	TREASURER'S CELL PHONES/IPADS/DATA	924-100	253	10.02
01/13/2022	GENF	74037	VERIZON WIRELESS	ASSESSING CELL PHONES/ IPDADS /DATA	924-100	257	143.56
01/13/2022	GENF	74037	VERIZON WIRELESS	ASSESSING CELL PHONES/ IPDADS /DATA	924-100	257	20.04
01/13/2022	GENF	74037	VERIZON WIRELESS	BLDG AND GROUNDS CELL PHONES/ IPADS/DATA	924-100	265	139.65
01/13/2022	GENF	74037	VERIZON WIRELESS	BLDG AND GROUNDS CELL PHONES/ IPADS/DATA	924-100	265	79.35
01/13/2022	GENF	74037	VERIZON WIRELESS	ADMIN CELL PHONES/ IPADS/DATA	924-100	295	47.82
01/13/2022	GENF	74037	VERIZON WIRELESS	CREDIT BALANCE	924-100	295	(331.11)

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01/13/2022	GENF	74037	VERIZON WIRELESS	ADMIN CELL PHONES/ IPADS/DATA	924-100	295	20.04
01/13/2022	GENF	74037	VERIZON WIRELESS	COMM DEV CELL/IPADS/DATA	925-000	721	47.82
01/13/2022	GENF	74037	VERIZON WIRELESS	COMM DEV CELL/IPADS/DATA	925-000	721	10.02
				CHECK GENF 74037 TOTAL FOR FUND 101:			550.34
01/14/2022	GENF	7280(A)*#	CONSUMERS ENERGY	100012052419 6569 THORNBROOK ST SE	921-000	265	1,058.14
01/14/2022	GENF	7280(A)	CONSUMERS ENERGY	103036932491 5920 TAHOE DR SE	921-000	265	939.51
				CHECK GENF 7280(A) TOTAL FOR FUND 101:			1,997.65
01/14/2022	GENF	7281(A)*	DELTA DENTAL	DENTAL INSURANCE BENEFITS	721-000	850	1,638.74
01/14/2022	GENF	7282(A)	KONICA MINOLTA BUSINESS SOLUTIONS	SERVICE CONTRACTS	939-000	295	135.09
01/14/2022	GENF	7282(A)	KONICA MINOLTA BUSINESS SOLUTIONS	SERVICE CONTRACTS	939-000	295	31.56
01/14/2022	GENF	7282(A)	KONICA MINOLTA BUSINESS SOLUTIONS	SERVICE CONTRACTS	939-000	295	294.24
				CHECK GENF 7282(A) TOTAL FOR FUND 101:			460.89
01/20/2022	GENF	74038	290 SIGN SYSTEMS	COMM DEV SUPPLIES- NAME PLATE - J. STINE	727-000	721	50.60
01/20/2022	GENF	74041*#	BS&A SOFTWARE	ASSESSING SERVICE CONTRACTS	939-000	257	2,180.00
01/20/2022	GENF	74041	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	295	1,240.00
				CHECK GENF 74041 TOTAL FOR FUND 101:			3,420.00
01/20/2022	GENF	74042#	CARLETON EQUIPMENT	VEHICLE MAINT	863-000	265	1,398.00
01/20/2022	GENF	74042	CARLETON EQUIPMENT	PARK MAINTENANCE	935-000	756	676.00
				CHECK GENF 74042 TOTAL FOR FUND 101:			2,074.00
01/20/2022	GENF	74043	CONSUMERS ENERGY	STREETLIGHTING	926-000	448	375.00
01/20/2022	GENF	74044	CONSUMERS ENERGY	STREETLIGHTING	926-000	448	8.27
01/20/2022	GENF	74055	KENT COUNTY TREASURERS ASSOC	TREASURER MEMBERSHIPS AND DUES- KCTA	723-000	253	50.00
01/20/2022	GENF	74056	KENT COMMUNICATIONS INC.	NEWSLETTER	885-000	295	8,082.19
01/20/2022	GENF	74059*#	MUTUAL OF OMAHA INSURANCE	DEPENDENT LIFE W/H (C) GF	231-220	000	7.80
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	DEPENDENT LIFE W/H (C) FIRE	231-220	000	19.50
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	ADDITIONAL LIFE W/H (D) GF	231-221	000	17.00
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	ADDITIONAL LIFE W/H (D) FIRE	231-221	000	42.00
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	ADDITIONAL LIFE W/H (E) GF	231-221	000	100.00
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	ADDITIONAL LIFE W/H (E) FIR	231-221	000	285.40
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE LTD BENEFITS (F)	720-000	850	687.36
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE INSURANCE BENEFITS (A)	720-000	850	281.25
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE AD&D BENEFITS (B)	720-000	850	42.76
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE STD BENEFITS (G)	720-000	850	281.39
				CHECK GENF 74059 TOTAL FOR FUND 101:			1,764.46
01/20/2022	GENF	74060	AARON NEWTON	TREASURER MILEAGE	860-000	253	7.90
01/21/2022	GENF	62(E)*	WEST MICHIGAN HEALTH INSURANCE POOL	HEALTH INSURANCE BENEFITS	719-000	850	19,243.08
01/21/2022	GENF	7292(A)	CONSUMERS ENERGY	103040083240 2894 THORNAPPLE RIV	921-000	265	49.30
01/21/2022	GENF	7293(A)*#	NAPA AUTO PARTS	PLOW LIGHTS	863-000	265	41.70
01/21/2022	GENF	7293(A)	NAPA AUTO PARTS	VEHICLE MAINT	863-000	265	409.49
01/21/2022	GENF	7293(A)	NAPA AUTO PARTS	FUEL AIR FILTER CABLE TIES	863-000	265	207.61
01/21/2022	GENF	7293(A)	NAPA AUTO PARTS	CREDIT FOR INV 867291	863-000	265	(41.70)
				CHECK GENF 7293(A) TOTAL FOR FUND 101:			617.10
01/21/2022	GENF	7295(A)	KERKSTRA PORTABLE RESTROOM SERVICE	PORTABLE RESTROOM RENTAL - PEACE PARK	935-000	756	125.00

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01/21/2022	GENF	7298(A)*#	IT RIGHT	2022 UNIVERSAL SERVICE CONTRACT	932-000	265	15,600.00
01/27/2022	GENF	74077	KRISTINA BROTT	CLERK MILEAGE- K. BROTT	860-000	215	21.06
01/27/2022	GENF	74078*#	CASCADE PRINTING & GRAPHICS	OFFICE SUPPLIES	727-000	295	536.22
01/27/2022	GENF	74079*	FIDELITY SECURITY LIFE INS	VISION INSURANCE BENEFITS	718-000	850	165.00
01/27/2022	GENF	74079	FIDELITY SECURITY LIFE INS	VISION INSURANCE BENEFITS	718-000	850	191.32
				CHECK GENF 74079 TOTAL FOR FUND 101:			356.32
01/27/2022	GENF	74080*#	FIRST BANKCARD	TOWNSHIP DUES	723-000	101	230.00
01/27/2022	GENF	74080	FIRST BANKCARD	SUPERVISOR MEMBERSHIPS AND DUES	723-000	171	1,086.00
01/27/2022	GENF	74080	FIRST BANKCARD	CC BROTT - ACROBAT PRO DC	862-500	215	24.99
01/27/2022	GENF	74080	FIRST BANKCARD	CC GENTER - PRINTING AND PUBLISHING	900-000	257	184.68
01/27/2022	GENF	74080	FIRST BANKCARD	CC GENTER - ASSESSING SERVICE CONTRACTS	939-000	257	259.00
01/27/2022	GENF	74080	FIRST BANKCARD	CC MACDONALD - ICLOUD 50 GB STORAGE	924-000	265	0.99
01/27/2022	GENF	74080	FIRST BANKCARD	CC SWAYZE - STANDARD PRO MONTHLY	787-000	295	39.21
				CHECK GENF 74080 TOTAL FOR FUND 101:			1,824.87
01/27/2022	GENF	74081*#	FIRST BANKCARD	CC ADMIN - CLERK OFFICE SUPPLIES	710-000	215	6.99
01/27/2022	GENF	74081	FIRST BANKCARD	CLERK'S EXPENSE ACCOUNT	862-500	215	47.94
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE EQUIPMENT	981-000	253	17.26
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BLDG GRND OFFICE SUPPLIES	931-000	265	102.90
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	16.28
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	21.08
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	14.41
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	17.49
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	39.98
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	41.07
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	27.98
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	22.68
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	17.99
01/27/2022	GENF	74081	FIRST BANKCARD	OFFICE SUPPLIES	727-000	295	28.99
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - OFFICE SUPPLIES	727-000	295	72.62
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - OFFICE SUPPLIES	727-000	295	10.20
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - OFFICE SUPPLIES	727-000	295	61.60
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - OFFICE SUPPLIES	727-000	295	4.25
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - OFFICE SUPPLIES	727-000	295	46.31
01/27/2022	GENF	74081	FIRST BANKCARD	MISCELLANEOUS	787-000	295	43.55
01/27/2022	GENF	74081	FIRST BANKCARD	MISCELLANEOUS	787-000	295	15.63
01/27/2022	GENF	74081	FIRST BANKCARD	MISCELLANEOUS	787-000	295	33.89
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	10.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	10.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	25.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	35.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	50.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	75.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	10.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	10.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FACEBOOK ADS	967-000	295	15.00
				CHECK GENF 74081 TOTAL FOR FUND 101:			951.09
01/27/2022	GENF	74082	KENT COUNTY DRAIN COMMISSION	DRAIN MAINTENANCE	816-000	445	11.88
01/27/2022	GENF	74083	MCKENNA ASSOCIATES, INC.	SPECIAL PROJECTS	967-000	171	1,661.70
01/27/2022	GENF	74087#	MLIVE MEDIA GROUP	PRINTING/PUBLISHING	900-000	295	345.50
01/27/2022	GENF	74087	MLIVE MEDIA GROUP	PRINTING & PUBLISHING	900-000	721	353.26
01/27/2022	GENF	74087	MLIVE MEDIA GROUP	PRINTING & PUBLISHING	900-000	721	408.00
				CHECK GENF 74087 TOTAL FOR FUND 101:			1,106.76
01/27/2022	GENF	74088*#	MUTUAL OF OMAHA INSURANCE	DEPENDENT LIFE W/H (C) GF	231-220	000	7.80
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	DEPENDENT LIFE W/H (C) FIRE	231-220	000	19.50
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	ADDITIONAL LIFE W/H (D) GF	231-221	000	17.00

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01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	ADDITIONAL LIFE W/H (D) FIRE	231-221	000	42.00
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	ADDITIONAL LIFE W/H (E) GF	231-221	000	100.00
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	ADDITIONAL LIFE W/H (E) FIR	231-221	000	285.40
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE INSURANCE BENEFITS (A)	720-000	850	242.25
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE STD BENEFITS (G)	720-000	850	242.75
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE LTD BENEFITS (F)	720-000	850	594.27
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE AD&D BENEFITS (B)	720-000	850	36.82
				CHECK GENF 74088 TOTAL FOR FUND 101:			<u>1,587.79</u>
01/27/2022	GENF	74091	SLATER, SUE	CLERK MILEAGE	860-000	215	12.87
01/27/2022	GENF	74091	SLATER, SUE	CELL PHONE/ DATA	925-000	215	50.00
				CHECK GENF 74091 TOTAL FOR FUND 101:			<u>62.87</u>
01/28/2022	GENF	7311(A)	BLOOM SLUGGETT, PC	PROFESSIONAL SERVICES DECEMBER 2021	826-000	295	3,039.50
01/28/2022	GENF	7312(A)*#	CONSUMERS ENERGY	100012052419 6569 THORNBROOK ST SE	921-000	265	(793.55)
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	103023462197 2867 THORNHILLS AVE SE	921-000	265	32.33
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	103036591347 7200 30TH ST	921-000	276	33.46
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100011965082 2870 JACK SMITH AVE SE	926-000	448	102.48
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100014570673 3804 THORNAPPLE RIVE	921-000	756	94.25
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100014570889 3820 THORNAPPLE RIVER D	921-000	756	67.67
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100012592265 2900 THORNAPPLE RIVER DR	921-000	756	407.93
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100012592398 2839 THORNAPPLE RIVER DR	921-000	803	74.88
				CHECK GENF 7312(A) TOTAL FOR FUND 101:			<u>19.45</u>
01/28/2022	GENF	7313(A)	EVAN A. JOHNSON	ASSESSING CONTRACTUAL SERVICES	801-000	257	2,000.00
01/28/2022	GENF	7314(A)*#	FISHBECK THOMPSON CARR & HUBER	ENGINEERING COSTS	821-000	295	185.00
01/28/2022	GENF	7314(A)	FISHBECK THOMPSON CARR & HUBER	ENGINEERING COSTS	821-000	295	2,255.50
				CHECK GENF 7314(A) TOTAL FOR FUND 101:			<u>2,440.50</u>
01/28/2022	GENF	7315(A)*#	NAPA AUTO PARTS	BATTERY	863-000	265	182.89
01/28/2022	GENF	7316(A)	SABO PUBLIC RELATIONS	SPECIAL PROJECTS	967-000	295	5,462.60
01/28/2022	GENF	7327(A)*#	WEX BANK	FUEL	864-000	265	1,214.40
				Total for fund 101 GENERAL FUND			<u>197,595.64</u>
FUND 206 - FIRE FUND							
01/06/2022	GENF	73954*#	ARROWASTE	FIRE STATION MAINT	936-000	336	278.91
01/06/2022	GENF	73954	ARROWASTE	FIRE STATION MAINT/BUTTRICK- TRASH/ RECY	936-002	336	75.53
				CHECK GENF 73954 TOTAL FOR FUND 206:			<u>354.44</u>
01/06/2022	GENF	73963	COMCAST	COMMUNICATIONS- PHONES	850-000	336	96.90
01/06/2022	GENF	73964	COMCAST	COMMUNICATIONS- PHONES	850-000	336	187.18
01/06/2022	GENF	73965	COMCAST	COMMUNICATIONS- PHONES	850-000	336	37.95
01/06/2022	GENF	73968*#	DTE ENERGY	FIRE STATION #1	928-000	336	1,357.60
01/06/2022	GENF	73968	DTE ENERGY	FIRE STATION #2	928-000	336	500.20
				CHECK GENF 73968 TOTAL FOR FUND 206:			<u>1,857.80</u>
01/06/2022	GENF	73972	GORDON FOOD SERVICE STORE	SUPPLIES	752-000	336	40.67
01/06/2022	GENF	73973	GREAT LAKES UPFITTING	MEDIC 1	970-000	901	600.00
01/06/2022	GENF	73975	TODD HEMMI	FIRE UNIFORMS- BOOTS- TODD HEMMI	768-000	336	69.98

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01/06/2022	GENF	73976*#	THE HOME DEPOT CREDIT SERVICES	PLASTIC SHEETING	726-000	336	122.40
01/06/2022	GENF	73977	MICHELE HUGHEY	FIRE MILEAGE- ASSESSMENT PANEL	860-000	336	80.73
01/06/2022	GENF	73999	SHELDON CLEANERS	DRY CLEANING SERVICE DEC 2021	768-000	336	170.99
01/06/2022	GENF	74000	SUBURBAN INDUSTRIAL CONCEPTS	CAPITAL OUTLAY - FFE	970-000	901	3,500.00
01/06/2022	GENF	74002	SMART BUSINESS SOURCE	FIRE OFFICE SUPPLIES	727-000	336	172.40
01/06/2022	GENF	74010	TECH MASTER INC	E-1 ANNUAL AND MAINTENANCE	863-000	336	3,388.70
01/06/2022	GENF	74010	TECH MASTER INC	R-1 ANNUAL/MAINT	863-000	336	<u>1,461.99</u>
				CHECK GENF 74010 TOTAL FOR FUND 206:			4,850.69
01/07/2022	GENF	7254(A)*	DELTA DENTAL	DENTAL INSURANCE BENEFITS	721-000	850	2,179.11
01/07/2022	GENF	7260(A)	FUEL MANAGEMENT SYSTEM	FIRE FUELS	745-000	336	94.61
01/07/2022	GENF	7260(A)	FUEL MANAGEMENT SYSTEM	FIRE FUELS BALANCE FORWARD	745-000	336	293.87
01/07/2022	GENF	7260(A)	FUEL MANAGEMENT SYSTEM	FIRE FUELS DISCOUNT	745-000	336	<u>(2.21)</u>
				CHECK GENF 7260(A) TOTAL FOR FUND 206:			386.27
01/07/2022	GENF	7263(A)*#	KINGSLAND'S ACE HARDWARE	HUMIDIFIER	738-000	336	13.66
01/07/2022	GENF	7263(A)	KINGSLAND'S ACE HARDWARE	GOLD PASTE WAX	863-000	336	50.08
				CHECK GENF 7263(A) TOTAL FOR FUND 206:			63.74
01/07/2022	GENF	7266(A)	NYE UNIFORM COMPANY	FIRE UNIFORMS	768-000	336	103.00
01/07/2022	GENF	7278(A)	VALLEY CITY LINEN INC	FIRE STATION MAINT-RUG & TOWEL CLEANING	936-000	336	27.75
01/07/2022	GENF	7278(A)	VALLEY CITY LINEN INC	FIRE STATION MAINT-RUG & TOWEL CLEANING	936-000	336	27.75
01/07/2022	GENF	7278(A)	VALLEY CITY LINEN INC	FIRE STATION MAINT-RUG & TOWEL CLEANING	936-000	336	27.75
01/07/2022	GENF	7278(A)	VALLEY CITY LINEN INC	FIRE STATION MAINT-RUG & TOWEL CLEANING	936-000	336	27.75
01/07/2022	GENF	7278(A)	VALLEY CITY LINEN INC	FIRE STATION MAINT-RUG & TOWEL CLEANING	936-000	336	<u>27.75</u>
				CHECK GENF 7278(A) TOTAL FOR FUND 206:			138.75
01/07/2022	GENF	7279(A)	WILLIAMS ASSOCIATES ARCHITECTS, LTD	CAPITAL OUTLAY - BLDGIMP	975-000	901	43,976.92
01/13/2022	GENF	74021*#	COMCAST	COMMUNICATIONS- PHONES	850-000	336	482.52
01/13/2022	GENF	74024	MED-1 LEONARD	FIRE FIGHTER HIRING	803-000	336	518.00
01/13/2022	GENF	74034	TECH MASTER INC	VEHICLE MAINT	863-000	336	1,946.57
01/13/2022	GENF	74037*#	VERIZON WIRELESS	COMMUNICATIONS	850-000	336	327.12
01/13/2022	GENF	74037	VERIZON WIRELESS	COMMUNICATIONS	850-000	336	107.80
01/13/2022	GENF	74037	VERIZON WIRELESS	COMMUNICATIONS	850-000	336	<u>192.40</u>
				CHECK GENF 74037 TOTAL FOR FUND 206:			627.32
01/14/2022	GENF	7281(A)*	DELTA DENTAL	DENTAL INSURANCE BENEFITS	721-000	850	2,179.11
01/20/2022	GENF	74046	GORDON FOOD SERVICE STORE	COFFEE FILTERS	787-000	336	10.99
01/20/2022	GENF	74047	GR FORD AIRPORT	CAPITAL OUTLAY - BLDGIMP	975-000	901	8,647.00
01/20/2022	GENF	74050	HYDRO-CHEM SYSTEMS, INC	VEHICLE MAINT	863-000	336	299.95

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01/20/2022	GENF	74051	J&B MEDICAL SUPPLY	MEDICAL SUPPLIES	752-100	336	400.00
01/20/2022	GENF	74051	J&B MEDICAL SUPPLY	MEDICAL SUPPLIES	752-100	336	31.73
01/20/2022	GENF	74051	J&B MEDICAL SUPPLY	MEDICAL SUPPLIES	752-100	336	253.35
				CHECK GENF 74051 TOTAL FOR FUND 206:			685.08
01/20/2022	GENF	74052	KENT COUNTY EMERGENCY	FIRE MEMBERSHIP AND DUES	723-000	336	298.18
01/20/2022	GENF	74053	KENT COUNTY FIRE CHIEFS ASSOC	FIRE MEMBERSHIP AND DUES	723-000	336	40.00
01/20/2022	GENF	74057	MED-1 LEONARD	MEDICAL SUPPLIES	752-100	336	608.00
01/20/2022	GENF	74059*#	MUTUAL OF OMAHA INSURANCE	LIFE STD BENEFITS (G)	720-000	850	335.85
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE AD&D BENEFITS (B)	720-000	850	50.51
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE INSURANCE BENEFITS (A)	720-000	850	332.25
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE LTD BENEFITS (F)	720-000	850	827.30
				CHECK GENF 74059 TOTAL FOR FUND 206:			1,545.91
01/20/2022	GENF	74062	PHOENIX SAFETY OUTFITTERS	FIRE PROTECTIVE CLOTHING	959-000	336	264.60
01/20/2022	GENF	74062	PHOENIX SAFETY OUTFITTERS	FIRE PROTECTIVE CLOTHING	959-000	336	60.00
				CHECK GENF 74062 TOTAL FOR FUND 206:			324.60
01/20/2022	GENF	74065	SMART BUSINESS SOURCE	FIRE OFFICE SUPPLIES	727-000	336	8.24
01/20/2022	GENF	74065	SMART BUSINESS SOURCE	FIRE OFFICE SUPPLIES	727-000	336	59.04
01/20/2022	GENF	74065	SMART BUSINESS SOURCE	FIRE OFFICE SUPPLIES	727-000	336	69.97
01/20/2022	GENF	74065	SMART BUSINESS SOURCE	FIRE OFFICE SUPPLIES	727-000	336	(8.24)
				CHECK GENF 74065 TOTAL FOR FUND 206:			129.01
01/21/2022	GENF	62(E)*	WEST MICHIGAN HEALTH INSURANCE POOL	HEALTH INSURANCE BENEFITS	719-000	850	27,893.39
01/21/2022	GENF	7293(A)*#	NAPA AUTO PARTS	FUSE AND COOLANT	863-000	336	55.43
01/21/2022	GENF	7294(A)	HOOGERHYDE SAFE & LOCK, INC	FIRE STATION MAINT	936-000	336	643.00
01/21/2022	GENF	7296(A)	NYE UNIFORM COMPANY	FIRE UNIFORMS	768-000	336	111.50
01/21/2022	GENF	7296(A)	NYE UNIFORM COMPANY	FIRE UNIFORMS	768-000	336	77.00
01/21/2022	GENF	7296(A)	NYE UNIFORM COMPANY	FIRE UNIFORMS	768-000	336	161.50
01/21/2022	GENF	7296(A)	NYE UNIFORM COMPANY	FIRE UNIFORMS	768-000	336	196.50
				CHECK GENF 7296(A) TOTAL FOR FUND 206:			546.50
01/21/2022	GENF	7298(A)*#	IT RIGHT	2022 UNIVERSAL SERVICE CONTRACT	932-000	336	7,800.00
01/21/2022	GENF	7309(A)	VALLEY CITY LINEN INC	FIRE STATION MAINT-RUG & TOWEL CLEANING	936-000	336	27.75
01/21/2022	GENF	7309(A)	VALLEY CITY LINEN INC	FIRE STATION MAINT-RUG & TOWEL CLEANING	936-000	336	27.75
				CHECK GENF 7309(A) TOTAL FOR FUND 206:			55.50
01/27/2022	GENF	74078*#	CASCADE PRINTING & GRAPHICS	FIRE DEPT BUSINESS CARDS	727-000	336	59.00
01/27/2022	GENF	74078	CASCADE PRINTING & GRAPHICS	FIRE DEPT BUSINESS CARDS	727-000	336	59.00
				CHECK GENF 74078 TOTAL FOR FUND 206:			118.00
01/27/2022	GENF	74079*	FIDELITY SECURITY LIFE INS	VISION INSURANCE BENEFITS	718-000	850	225.22
01/27/2022	GENF	74079	FIDELITY SECURITY LIFE INS	VISION INSURANCE BENEFITS	718-000	850	251.54
				CHECK GENF 74079 TOTAL FOR FUND 206:			476.76
01/27/2022	GENF	74080*#	FIRST BANKCARD	FIRE MEMBERSHIP AND DUES	723-000	336	285.00
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - MICHIGAN MEMBERSHIP T.PELL	723-000	336	20.00
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - NON TRANSPORT APP FEE J.WALK	723-000	336	25.00
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - OVERLIMIT FEE	787-000	336	39.00
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - COFFEE SUPPLIES	787-000	336	88.04

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01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - CONTRACTUAL SERVICES	802-000	336	798.00
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - ASSESSMENT WEEK	803-000	336	21.06
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - ASSESSMENT LUNCH	803-000	336	217.34
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - PROMOTION ASSESS CENTER	803-000	336	134.54
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - RECURRING CAR WASH JAN 2022	863-000	336	15.99
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - RECURRING CAR WASH JAN 2022	863-000	336	19.99
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - RECURRING CAR WASH JAN 2022	863-000	336	15.99
01/27/2022	GENF	74080	FIRST BANKCARD	FIRE STATION MAINT/BUTTRICK	936-002	336	285.98
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - FIRE STATION MAINT/BUTTRICK	936-002	336	1,188.30
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - FIRE EQUIPMENT MAINT	938-000	336	368.52
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - OFFICE EQUIPMENT	981-000	336	176.77
01/27/2022	GENF	74080	FIRST BANKCARD	CC MAGERS - CAPITAL OUTLAY - FFE	970-000	901	799.99
01/27/2022	GENF	74080	FIRST BANKCARD	CAPITAL OUTLAY - BLDGIMP	975-000	901	445.57
01/27/2022	GENF	74080	FIRST BANKCARD	CAPITAL OUTLAY - BLDGIMP	975-000	901	278.96
				CHECK GENF 74080 TOTAL FOR FUND 206:			5,224.04
01/27/2022	GENF	74081*#	FIRST BANKCARD	FIRE OFFICE SUPPLIES	727-000	336	12.00
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FIRE CLEANING SUPPLIES	787-000	336	26.81
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FIRE MARINE CHARGER	787-000	336	114.95
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - FIRE CLEANING SUPPLIES	787-000	336	231.67
				CHECK GENF 74081 TOTAL FOR FUND 206:			385.43
01/27/2022	GENF	74088*#	MUTUAL OF OMAHA INSURANCE	LIFE INSURANCE BENEFITS (A)	720-000	850	332.25
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE LTD BENEFITS (F)	720-000	850	780.68
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE STD BENEFITS (G)	720-000	850	317.35
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE AD&D BENEFITS (B)	720-000	850	50.51
				CHECK GENF 74088 TOTAL FOR FUND 206:			1,480.79
01/27/2022	GENF	74089	PHOENIX SAFETY OUTFITTERS	FIRE PROTECTIVE CLOTHING	959-000	336	276.84
01/27/2022	GENF	74099	TECH MASTER INC	E-1 ELECTRICAL	863-000	336	1,962.00
01/28/2022	GENF	7312(A)*#	CONSUMERS ENERGY	100000285161 2865 THORNHILLS	928-000	336	1,609.90
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100012762959 2990 BUTTRICK AVE SE	928-000	336	644.85
				CHECK GENF 7312(A) TOTAL FOR FUND 206:			2,254.75
01/28/2022	GENF	7315(A)*#	NAPA AUTO PARTS	BATTERY SMALL ENGINE FUEL	863-000	336	215.83
01/28/2022	GENF	7326(A)	VALLEY CITY LINEN INC	FIRE STATION MAINT-RUG & TOWEL CLEANING	936-000	336	27.75
01/28/2022	GENF	7327(A)*#	WEX BANK	FIRE FUELS	745-000	336	1,683.11
01/28/2022	GENF	7328(A)	WILLIAMS ASSOCIATES ARCHITECTS, LTD	CAPITAL OUTLAY - BLDGIMP	975-000	901	1,729.26
				Total for fund 206 FIRE FUND			130,160.54
FUND 207 - POLICE FUND							
01/06/2022	GENF	73966	COUNTY OF KENT	SHERIFF PROTECTION- NOV 2021	801-000	301	63,156.31
				Total for fund 207 POLICE FUND			63,156.31
FUND 209- OPEN SPACE FUND							
01/06/2022	GENF	73968*#	DTE ENERGY	HEATING/UTILITY -6803 BURTON ST SE	923-000	751	176.52
01/06/2022	GENF	74001	SITE SPECIFIC, INC	FIELDWORK AND TRAVEL EXPENSES	935-000	751	4,752.11
01/28/2022	GENF	7312(A)*#	CONSUMERS ENERGY	100041772151 6803 BURTON ST SE@BARN	921-000	751	283.42
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100061096465 6803 BURTON ST SE	921-000	751	29.36
				CHECK GENF 7312(A) TOTAL FOR FUND 209:			312.78
				Total for fund 209 CCT OPEN SPACE			5,241.41

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FUND 216- PATHWAYS FUND							
01/06/2022	GENF	73980	LAWNS OF DISTINCTION	FTCH PROJECT 200014/ 2020 PATHWAY REPAIR	931-000	758	1,500.00
01/07/2022	GENF	7259(A)*#	FISHBECK THOMPSON CARR & HUBER	MAINT & REPAIR	931-000	758	2,483.54
01/07/2022	GENF	7259(A)	FISHBECK THOMPSON CARR & HUBER	CAPITAL OUTLAY - LANDIMP	974-000	901	1,077.00
				CHECK GENF 7259(A) TOTAL FOR FUND 216:			<u>3,560.54</u>
01/07/2022	GENF	7263(A)*#	KINGSLAND'S ACE HARDWARE	CHAINSAW CHAIN	931-000	758	58.48
01/28/2022	GENF	7314(A)*#	FISHBECK THOMPSON CARR & HUBER	CAPITAL OUTLAY - LANDIMP	974-000	901	407.00
01/28/2022	GENF	7314(A)	FISHBECK THOMPSON CARR & HUBER	CAPITAL OUTLAY - LANDIMP	974-000	901	274.00
				CHECK GENF 7314(A) TOTAL FOR FUND 216:			<u>681.00</u>
				Total for fund 216 PATHWAYS FUND			<u>5,800.02</u>
FUND 246 - IRF FUND							
01/27/2022	GENF	74090	SILVER & VAN ESSEN PC	ADMIN LEGAL FEES	826-000	295	2,051.00
				Total for fund 246 IRF			<u>2,051.00</u>
FUND 248 - DDA FUND							
01/07/2022	GENF	7259(A)*#	FISHBECK THOMPSON CARR & HUBER	CAPITAL OUTLAY - LANDIMP	974-000	901	211.00
01/07/2022	GENF	7263(A)*#	KINGSLAND'S ACE HARDWARE	TIME DELAY CART FUSE	931-000	170	35.07
01/13/2022	GENF	74037*#	VERIZON WIRELESS	DDA CELL PHONES/ IPADS/ DATA	924-100	170	46.55
01/13/2022	GENF	74037	VERIZON WIRELESS	DDA CELL PHONES/ IPADS/ DATA	924-100	170	10.02
				CHECK GENF 74037 TOTAL FOR FUND 248:			<u>56.57</u>
01/21/2022	GENF	7303(A)	THE LIGHT BULB COMPANY	MAINT & REPAIR/IMPROVEMENTS	931-000	170	475.80
01/27/2022	GENF	74080*#	FIRST BANKCARD	CC KORHORN ICLOUD 50 GB STORAGE	924-100	170	0.99
01/28/2022	GENF	7312(A)*#	CONSUMERS ENERGY	100063460503 5770 FOREMOST DR SE	921-000	170	130.16
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100066874924 2990 LUCERNE DR SE	921-000	170	251.00
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100041059393 6282 28TH ST SE	921-000	170	166.23
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100054379084 5196 28TH ST SE	921-000	170	289.31
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100054393572 5434 28TH ST SE	921-000	170	140.62
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100041058650 6116 28TH ST SE	921-000	170	123.19
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100041059278 5905 28TH ST SE	921-000	170	125.75
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100041081355 5613 28TH ST SE	921-000	170	99.44
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100088376080 3001 ORCHARD VISTA DR	921-000	170	67.34
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100090747807 6736 CASCADE RD SE	921-000	170	77.41
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100011901541 6800 CASCADE RD SE	921-000	170	384.47
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100011901814 6811 CASCADE RD SE	921-000	170	178.73
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100012017115 6753 OLD 28TH ST SE	921-000	170	229.51
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100012017305 6610 28TH ST SE	921-000	170	196.99
01/28/2022	GENF	7312(A)	CONSUMERS ENERGY	100012213862 6658 28TH ST	921-000	170	29.36
				CHECK GENF 7312(A) TOTAL FOR FUND 248:			<u>2,489.51</u>
01/28/2022	GENF	7314(A)*#	FISHBECK THOMPSON CARR & HUBER	CAPITAL OUTLAY - LANDIMP	974-000	901	254.00
				Total for fund 248 DDA			<u>3,522.94</u>
FUND 249 - BUILDING FUND							
01/06/2022	GENF	73957	BENOIT, BILL	MILEAGE - BENOIT	860-000	371	362.88
01/06/2022	GENF	73958	BIEGALLE, JEFFREY	MILEAGE- BIEGALLE,J	860-000	371	178.08

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01/06/2022	GENF	73959*#	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	371	3,768.00
01/06/2022	GENF	73959	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	371	2,330.00
				CHECK GENF 73959 TOTAL FOR FUND 249:			6,098.00
01/06/2022	GENF	73961*#	CASCADE PRINTING & GRAPHICS	SUPPLIES	727-000	371	154.66
01/06/2022	GENF	73962	CASCADE CHARTER TOWNSHIP	PERMITS DUE CASCADE TWP	964-800	964	29,671.80
01/06/2022	GENF	73967	CRAIG SMITH	CLOTHING ALLOWANCE- C. SMITH	768-000	371	300.00
01/06/2022	GENF	73967	CRAIG SMITH	MILEAGE- C. SMITH	860-000	371	255.92
				CHECK GENF 73967 TOTAL FOR FUND 249:			555.92
01/06/2022	GENF	73968*#	DTE ENERGY	HEATING/UTILITY- 5920 TAHOE DR SE	923-000	371	343.24
01/06/2022	GENF	73969	FIRST BANKCARD	CC WILSON ARCHITECTURE, ENGIN AND CONST	724-000	371	120.00
01/06/2022	GENF	73974	GRAND RAPIDS CHARTER TOWNSHIP	PERMITS DUE TO GR TWP	964-300	964	8,103.88
01/06/2022	GENF	73978	HUYSER, DANIEL A.	MILEAGE- HUYSER	860-000	371	367.92
01/06/2022	GENF	73982	VINCENT MILITO	DEPARTMENT UNIFORMS	768-000	371	197.00
01/06/2022	GENF	73982	VINCENT MILITO	MILEAGE MILITO-	860-000	371	307.44
				CHECK GENF 73982 TOTAL FOR FUND 249:			504.44
01/06/2022	GENF	73995	DOUG POOLMAN	MILEAGE D.POOLMAN	860-000	371	75.60
01/06/2022	GENF	73996	REITSMA, RON	MILEAGE - R.REITSMA	860-000	371	38.08
01/06/2022	GENF	73997	ROWLADER, DENNIS	MILEAGE- D. ROWLADER	860-000	371	342.72
01/06/2022	GENF	73998	RON SABIN	MILEAGE SABIN	860-000	371	272.16
01/06/2022	GENF	74013	JEFFREY C. VANTIL	CLOTHING ALLOWANCE- J. VANTIL	768-000	371	213.04
01/06/2022	GENF	74013	JEFFREY C. VANTIL	MILEAGE- J. VANTIL	860-000	371	273.84
				CHECK GENF 74013 TOTAL FOR FUND 249:			486.88
01/06/2022	GENF	74014	PAUL WESTHOUSE	CLOTHING ALLOWANCE- P. WESTHOUSE	768-000	371	99.62
01/06/2022	GENF	74014	PAUL WESTHOUSE	MILEAGE- PAUL WESTHOUSE	860-000	371	318.08
				CHECK GENF 74014 TOTAL FOR FUND 249:			417.70
01/06/2022	GENF	74015	BRIAN WILSON	MILEAGE WILSON	860-000	371	63.84
01/07/2022	GENF	7253(A)	ADA TOWNSHIP	PERMITS DUE TO ADA TWP	964-400	964	12,792.65
01/07/2022	GENF	7254(A)*	DELTA DENTAL	DENTAL INSURANCE BENEFITS	721-000	850	1,271.71
01/07/2022	GENF	7256(A)	EAST GRAND RAPIDS/CITY OF	PERMITS DUE TO EAST GR	964-500	964	3,654.80
01/07/2022	GENF	7258(A)	FIRST CHOICE COFFEE SERVICE	COFFEE SUPPLIES	787-000	371	103.61
01/07/2022	GENF	7264(A)	KONICA MINOLTA BUSINESS SOLUTIONS	SERVICE CONTRACTS	939-000	371	28.79
01/07/2022	GENF	7265(A)	LOWELL TOWNSHIP	PERMITS DUE TO LOWELL TWP	964-100	964	1,242.80

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01/07/2022	GENF	7267(A)	PLAINFIELD CHARTER TOWNSHIP	PERMITS DUE PLAINFIELD	964-600	964	4,064.00
01/13/2022	GENF	74021*#	COMCAST	BUILDING PHONES	924-000	371	482.52
01/13/2022	GENF	74037*#	VERIZON WIRELESS	BLDG CELL PHONES/IPADS/DATA	924-100	371	535.70
01/13/2022	GENF	74037	VERIZON WIRELESS	BLDG CELL PHONES/IPADS/DATA	924-100	371	167.92
01/13/2022	GENF	74037	VERIZON WIRELESS	BLDG CELL PHONES/IPADS/DATA	924-100	371	(13.00)
				CHECK GENF 74037 TOTAL FOR FUND 249:			690.62
01/14/2022	GENF	7280(A)*#	CONSUMERS ENERGY	103036932491 5920 TAHOE DR SE	923-000	371	462.74
01/14/2022	GENF	7281(A)*	DELTA DENTAL	DENTAL INSURANCE BENEFITS	721-000	850	1,212.30
01/20/2022	GENF	74039	BENOIT, BILL	MILEAGE - BENOIT	860-000	371	306.54
01/20/2022	GENF	74040	BIEGALLE, JEFFREY	MILEAGE- BIEGALLE,J	860-000	371	212.36
01/20/2022	GENF	74041*#	BS&A SOFTWARE	SERVICE CONTRACTS	939-000	371	5,510.00
01/20/2022	GENF	74045	CRAIG SMITH	MILEAGE- C. SMITH	860-000	371	197.73
01/20/2022	GENF	74048	THOMAS HANSON	MILEAGE- T. HANSON	860-000	371	193.64
01/20/2022	GENF	74049	HUYSER, DANIEL A.	MILEAGE- HUYSER	860-000	371	272.61
01/20/2022	GENF	74058	VINCENT MILITO	MILEAGE- V. MILITO	860-000	371	274.95
01/20/2022	GENF	74059*#	MUTUAL OF OMAHA INSURANCE	LIFE INSURANCE BENEFITS (A)	720-000	850	191.07
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE AD&D BENEFITS (B)	720-000	850	29.04
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE STD BENEFITS (G)	720-000	850	207.98
01/20/2022	GENF	74059	MUTUAL OF OMAHA INSURANCE	LIFE LTD BENEFITS (F)	720-000	850	510.47
				CHECK GENF 74059 TOTAL FOR FUND 249:			938.56
01/20/2022	GENF	74061	NMCOA	MEMBERSHIPS AND DUES- NMCOA	723-000	371	100.00
01/20/2022	GENF	74063	ROWLADER, DENNIS	MILEAGE- D. ROWLADER	860-000	371	182.52
01/20/2022	GENF	74064	RON SABIN	EDUCATION- ICC - FIRE INSPECTOR 1	724-000	371	230.00
01/20/2022	GENF	74064	RON SABIN	DEPARTMENT UNIFORMS	768-000	371	59.98
01/20/2022	GENF	74064	RON SABIN	MILEAGE SABIN	860-000	371	226.40
				CHECK GENF 74064 TOTAL FOR FUND 249:			516.38
01/20/2022	GENF	74074	JEFFREY C. VANTIL	MILEAGE- J. VANTIL	860-000	371	238.68
01/20/2022	GENF	74075	PAUL WESTHOUSE	MILEAGE- P. WESTHOUSE	860-000	371	279.63
01/20/2022	GENF	74076	BRIAN WILSON	DEPARTMENT UNIFORMS	768-000	371	300.00
01/20/2022	GENF	74076	BRIAN WILSON	MILEAGE WILSON	860-000	371	97.11
				CHECK GENF 74076 TOTAL FOR FUND 249:			397.11
01/21/2022	GENF	62(E)*	WEST MICHIGAN HEALTH INSURANCE POOL	HEALTH INSURANCE BENEFITS	719-000	850	13,381.14
01/21/2022	GENF	7297(A)	RICOH USA INC	SERVICE CONTRACTS	939-000	371	187.72

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01/21/2022	GENF	7298(A)*#	IT RIGHT	2022 UNIVERSAL SERVICE CONTRACT	932-000	371	7,800.00
01/21/2022	GENF	7310(A)	WOLVERINE PRINT SOOLUTIONS	SUPPLIES	727-000	371	171.00
01/27/2022	GENF	74079*	FIDELITY SECURITY LIFE INS	VISION INSURANCE BENEFITS	718-000	850	154.76
01/27/2022	GENF	74079	FIDELITY SECURITY LIFE INS	VISION INSURANCE BENEFITS	718-000	850	125.28
				CHECK GENF 74079 TOTAL FOR FUND 249:			280.04
01/27/2022	GENF	74080*#	FIRST BANKCARD	CC WILSON - GOLD YEARLY PLAN	723-000	371	300.00
01/27/2022	GENF	74080	FIRST BANKCARD	CC WILSON - J2 EFAX SERVICES	924-000	371	16.95
				CHECK GENF 74080 TOTAL FOR FUND 249:			316.95
01/27/2022	GENF	74081*#	FIRST BANKCARD	CC ADMIN - BLDG STAPLER	727-000	371	12.98
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BLDG PENCIL HOLDERS	727-000	371	19.80
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BLDG CALENDAR	727-000	371	14.99
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BUILDING OFFICE SUPPLIES	727-000	371	64.80
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BUILDING OFFICE SUPPLIES	727-000	371	19.47
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BUILDING OFFICE SUPPLIES	727-000	371	191.20
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BUILDING WALL CALENDAR	727-000	371	13.99
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BUILDING PRINTER INK	727-000	371	59.99
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BUILDING WHITEBOARD CADDY	727-000	371	27.90
01/27/2022	GENF	74081	FIRST BANKCARD	SUPPLIES	727-000	371	296.83
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - BUILDING OFFICE SUPPLIES	727-000	371	3.02
01/27/2022	GENF	74081	FIRST BANKCARD	CC ADMIN - LASER PRINTER	981-000	371	238.99
				CHECK GENF 74081 TOTAL FOR FUND 249:			963.96
01/27/2022	GENF	74084	METRO BLDG INSP ASSOCIATION	MEMBERSHIPS AND DUES- B. BENOIT	723-000	371	135.00
01/27/2022	GENF	74084	METRO BLDG INSP ASSOCIATION	MEMBERSHIPS AND DUES- B. WILSON	723-000	371	135.00
01/27/2022	GENF	74084	METRO BLDG INSP ASSOCIATION	MEMBERSHIPS AND DUES- D. ROWLADER	723-000	371	135.00
01/27/2022	GENF	74084	METRO BLDG INSP ASSOCIATION	MEMBERSHIPS AND DUES- R. SABIN	723-000	371	135.00
01/27/2022	GENF	74084	METRO BLDG INSP ASSOCIATION	MEMBERSHIPS AND DUES- T. HANSON	723-000	371	135.00
				CHECK GENF 74084 TOTAL FOR FUND 249:			675.00
01/27/2022	GENF	74088*#	MUTUAL OF OMAHA INSURANCE	LIFE INSURANCE BENEFITS (A)	720-000	850	168.31
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE STD BENEFITS (G)	720-000	850	171.97
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE LTD BENEFITS (F)	720-000	850	423.68
01/27/2022	GENF	74088	MUTUAL OF OMAHA INSURANCE	LIFE AD&D BENEFITS (B)	720-000	850	25.58
				CHECK GENF 74088 TOTAL FOR FUND 249:			789.54
Total for fund 249 BUILDING FUND							108,350.40
FUND 270 - LIBRARY FUND							
01/06/2022	GENF	73954*#	ARROWASTE	LIBRARY MAINTENANCE- TRASH/ RECYCLE	931-000	790	170.96
01/06/2022	GENF	73968*#	DTE ENERGY	LIBRARY HEATING DTE ENERGY	923-000	790	1,779.00
01/13/2022	GENF	74016	BUIST ELECTRIC INC	LIBRARY MAINTENANCE	931-000	790	290.00
01/27/2022	GENF	74101	WINDSTREAM HOLDINGS, LLC	LIBRARY PHONES	924-000	790	99.70
01/28/2022	GENF	7312(A)*#	CONSUMERS ENERGY	100000284784 2870 JACK SMITH AVE SE	921-000	790	3,227.48
Total for fund 270 LIBRARY FUND							5,567.14
FUND 703 - TAX FUND							
01/06/2022	GENF	73983	CORELOGIC REFUNDS	DUE TO 411907105038	275-000	000	2,971.58
01/06/2022	GENF	73984	LERETA CENTRAL REFUNDS	DUE TO 411905227010	275-001	000	5,174.77
01/06/2022	GENF	73985	LERETA REFUNDS	DUE TO 411905351035	275-001	000	1,642.31

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01/06/2022	GENF	73986	LERETA REFUNDS	DUE TO 411909460014	275-001	000	1,565.62
01/06/2022	GENF	73987	LERETA REFUNDS	DUE TO 411915180027	275-001	000	1,971.35
01/06/2022	GENF	73988	LERETA REFUNDS	DUE TO 411921114005	275-001	000	1,866.48
01/06/2022	GENF	73989	LERETA REFUNDS	DUE TO 411921276021	275-001	000	2,371.79
01/06/2022	GENF	73990	LERETA REFUNDS	DUE TO 411927232028	275-001	000	461.41
01/06/2022	GENF	73991	TITLE RESOURCE AGENCY	DUE TO 411904351015	275-000	000	200.00
01/06/2022	GENF	73992	UNITED BANK OF MI	DUE TO 411915275003	275-000	000	1,473.75
01/06/2022	GENF	74003	CASCADE CHARTER TOWNSHIP	CCT FIRE	214-115	000	1,050,770.72
01/06/2022	GENF	74003	CASCADE CHARTER TOWNSHIP	CCT - FIRE PP	214-115	000	17,897.82
01/06/2022	GENF	74003	CASCADE CHARTER TOWNSHIP	CCT - IFT FIRE	214-215	000	1,080.01
				CHECK GENF 74003 TOTAL FOR FUND 703:			<u>1,069,748.55</u>
01/06/2022	GENF	74004	CASCADE CHARTER TWP	CCT - OPERATING	214-110	000	776,215.55
01/06/2022	GENF	74004	CASCADE CHARTER TWP	CCT - OPERATING TAXES PP	214-110	000	13,221.16
01/06/2022	GENF	74004	CASCADE CHARTER TWP	CCT - OVER/SHORT	214-112	000	0.25
01/06/2022	GENF	74004	CASCADE CHARTER TWP	CCT - STREET LIGHTS	214-140	000	45,344.24
01/06/2022	GENF	74004	CASCADE CHARTER TWP	CCT - ADMIN	214-155	000	34,635.79
01/06/2022	GENF	74004	CASCADE CHARTER TWP	CCT - IFT OPERATING TAXES	214-210	000	797.82
				CHECK GENF 74004 TOTAL FOR FUND 703:			<u>870,214.81</u>
01/06/2022	GENF	74005	LIBRARY FUND	CCT - LIBRARY	214-120	000	119,883.67
01/06/2022	GENF	74005	LIBRARY FUND	CCT - LIBRARY PP	214-120	000	2,039.60
01/06/2022	GENF	74005	LIBRARY FUND	CCT-IFT LIBRARY	214-220	000	123.06
				CHECK GENF 74005 TOTAL FOR FUND 703:			<u>122,046.33</u>
01/06/2022	GENF	74006	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE	214-116	000	183,715.35
01/06/2022	GENF	74006	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE PP	214-116	000	3,129.05
01/06/2022	GENF	74006	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE IFT	214-216	000	188.84
				CHECK GENF 74006 TOTAL FOR FUND 703:			<u>187,033.24</u>
01/06/2022	GENF	74007	PATHWAYS FUND	CCT-PATHWAYS	214-100	000	280,786.87
01/06/2022	GENF	74007	PATHWAYS FUND	CCT-PATHWAYS PP	214-100	000	4,782.05
01/06/2022	GENF	74007	PATHWAYS FUND	CCT - IFT PATHWAYS	214-200	000	288.58
				CHECK GENF 74007 TOTAL FOR FUND 703:			<u>285,857.50</u>
01/06/2022	GENF	74008	POLICE FUND	CCT-POLICE	214-105	000	366,644.94
01/06/2022	GENF	74008	POLICE FUND	CCT-POLICE PP	214-105	000	6,244.83
01/06/2022	GENF	74008	POLICE FUND	CCT - IFT POLICE	214-205	000	376.85
				CHECK GENF 74008 TOTAL FOR FUND 703:			<u>373,266.62</u>
01/06/2022	GENF	74009	CASCADE CHARTER TOWNSHIP	DELQ USAGE	214-135	000	2,260.85
01/06/2022	GENF	74009	CASCADE CHARTER TOWNSHIP	OAKTERRACE	214-135	000	2,537.78
01/06/2022	GENF	74009	CASCADE CHARTER TOWNSHIP	TRD SEWER	214-135	000	10,523.60
01/06/2022	GENF	74009	CASCADE CHARTER TOWNSHIP	CCT- SPECIAL ASSESSMENTS	214-135	000	57,300.00
01/06/2022	GENF	74009	CASCADE CHARTER TOWNSHIP	LARAWAY LAKE	214-135	000	7,045.64
				CHECK GENF 74009 TOTAL FOR FUND 703:			<u>79,667.87</u>
01/06/2022	GENF	74011	KENT DISTRICT LIBRARY	KDL - TAXES	223-110	000	338,477.90
01/07/2022	GENF	7268(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - OPERATING	225-410	000	185,888.60

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01/07/2022	GENF	7269(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - INTEREST	225-411	000	42.78
01/07/2022	GENF	7269(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - DEBT	225-420	000	120,865.73
				CHECK GENF 7269(A) TOTAL FOR FUND 703:			120,908.51
01/07/2022	GENF	7270(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - OPERATING	225-110	000	442,000.21
01/07/2022	GENF	7270(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - INTEREST	225-111	000	148.31
01/07/2022	GENF	7270(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - DEBT	225-120	000	707,140.91
01/07/2022	GENF	7270(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - RECREATION	225-130	000	114,111.50
				CHECK GENF 7270(A) TOTAL FOR FUND 703:			1,263,400.93
01/07/2022	GENF	7271(A)	GRAND RAPIDS COMMUNITY COLLEGE	GRCC - TAXES	235-110	000	1,665.91
01/07/2022	GENF	7271(A)	GRAND RAPIDS COMMUNITY COLLEGE	GRCC - TAXES INTEREST	235-111	000	66.62
				CHECK GENF 7271(A) TOTAL FOR FUND 703:			1,732.53
01/07/2022	GENF	7273(A)	KENT COUNTY DRAIN COMMISSION	OATMAN	222-180	000	9,130.16
01/07/2022	GENF	7273(A)	KENT COUNTY DRAIN COMMISSION	T & W	222-180	000	1,125.78
				CHECK GENF 7273(A) TOTAL FOR FUND 703:			10,255.94
01/07/2022	GENF	7274(A)	KENT COUNTY TREASURER	KENT COUNTY - OPERATING	222-110	000	4,028.36
01/07/2022	GENF	7274(A)	KENT COUNTY TREASURER	KENT COUNTY - INTEREST	222-111	000	161.14
01/07/2022	GENF	7274(A)	KENT COUNTY TREASURER	KENT COUNTY - JAIL	222-160	000	207,275.90
01/07/2022	GENF	7274(A)	KENT COUNTY TREASURER	KENT COUNTY - ZOO/MUSEUM	222-165	000	115,523.76
01/07/2022	GENF	7274(A)	KENT COUNTY TREASURER	KENT COUNTY - SENIOR	222-170	000	131,276.79
01/07/2022	GENF	7274(A)	KENT COUNTY TREASURER	KENT COUNTY - VETERAN'S MILLAGE	222-172	000	13,061.85
01/07/2022	GENF	7274(A)	KENT COUNTY TREASURER	KENT COUNTY - EARLY CHILDHOOD	222-185	000	66,177.43
				CHECK GENF 7274(A) TOTAL FOR FUND 703:			537,505.23
01/07/2022	GENF	7275(A)	KENT COUNTY TREASURER-SET	KENT COUNTY - INTEREST	222-111	000	231.01
01/07/2022	GENF	7275(A)	KENT COUNTY TREASURER-SET	CALEDONIA SET & OPERATING TAX (COUNTY)	228-001	000	1,833.40
01/07/2022	GENF	7275(A)	KENT COUNTY TREASURER-SET	FHPS SET & OPERATING TAX (COUNTY)	228-001	000	3,808.69
01/07/2022	GENF	7275(A)	KENT COUNTY TREASURER-SET	LOWELL SET & OPERATING TAX (COUNTY)	228-001	000	133.36
				CHECK GENF 7275(A) TOTAL FOR FUND 703:			6,006.46
01/07/2022	GENF	7276(A)	KENT INTERMEDIATE SCHOOLS	KENT ISD - TAXES	234-110	000	5,309.25
01/07/2022	GENF	7276(A)	KENT INTERMEDIATE SCHOOLS	KENT ISD - TAXES INTEREST	234-111	000	212.37
				CHECK GENF 7276(A) TOTAL FOR FUND 703:			5,521.62
01/07/2022	GENF	7277(A)	LOWELL AREA SCHOOLS	LOWELL - OPERATING	226-110	000	3,065.49
01/07/2022	GENF	7277(A)	LOWELL AREA SCHOOLS	LOWELL - INTEREST	226-111	000	3.56
01/07/2022	GENF	7277(A)	LOWELL AREA SCHOOLS	LOWELL - DEBT	226-120	000	19,995.35
01/07/2022	GENF	7277(A)	LOWELL AREA SCHOOLS	LOWELL BLDG/SITE	226-130	000	2,822.51
				CHECK GENF 7277(A) TOTAL FOR FUND 703:			25,886.91
01/13/2022	GENF	74026	EXELA ENTERPRISE SOLUTIONS	DUE TO 415018023259	275-000	000	61.68
01/13/2022	GENF	74027	CASCADE CHARTER TOWNSHIP	CCT FIRE	214-115	000	52,602.76
01/13/2022	GENF	74028	CASCADE CHARTER TWP	CCT - OPERATING	214-110	000	38,858.19
01/13/2022	GENF	74028	CASCADE CHARTER TWP	CCT - OVER/SHORT	214-112	000	(3.18)
01/13/2022	GENF	74028	CASCADE CHARTER TWP	CCT - STREET LIGHTS	214-140	000	1,993.20
01/13/2022	GENF	74028	CASCADE CHARTER TWP	CCT - ADMIN	214-155	000	4,888.60
				CHECK GENF 74028 TOTAL FOR FUND 703:			45,736.81
01/13/2022	GENF	74029	LIBRARY FUND	CCT - LIBRARY	214-120	000	5,993.53
01/13/2022	GENF	74030	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE	214-116	000	9,197.03

CHECK DISBURSEMENT REPORT FOR CASCADE CHARTER TOWNSHIP
CHECK DATE FROM 01/01/2022 - 01/31/2022

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
01/13/2022	GENF	74031	PATHWAYS FUND	CCT-PATHWAYS	214-100	000	14,054.90
01/13/2022	GENF	74032	POLICE FUND	CCT-POLICE	214-105	000	18,354.67
01/13/2022	GENF	74033	CASCADE CHARTER TOWNSHIP	LARAWAY LAKE	214-135	000	503.26
01/13/2022	GENF	74033	CASCADE CHARTER TOWNSHIP	DELQ USAGE	214-135	000	594.87
01/13/2022	GENF	74033	CASCADE CHARTER TOWNSHIP	CCT- SPECIAL ASSESSMENTS	214-135	000	1,800.00
				CHECK GENF 74033 TOTAL FOR FUND 703:			2,898.13
01/13/2022	GENF	74035	KENT DISTRICT LIBRARY	KDL - TAXES	223-110	000	50,495.35
01/14/2022	GENF	7283(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - OPERATING	225-410	000	12,771.70
01/14/2022	GENF	7284(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - DEBT	225-420	000	9,945.67
01/14/2022	GENF	7285(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - OPERATING	225-110	000	52,370.74
01/14/2022	GENF	7285(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - INTEREST	225-111	000	45.24
01/14/2022	GENF	7285(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - DEBT	225-120	000	112,746.35
01/14/2022	GENF	7285(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - RECREATION	225-130	000	18,193.86
				CHECK GENF 7285(A) TOTAL FOR FUND 703:			183,356.19
01/14/2022	GENF	7286(A)	GRAND RAPIDS COMMUNITY COLLEGE	GRCC - TAXES	235-110	000	497.76
01/14/2022	GENF	7286(A)	GRAND RAPIDS COMMUNITY COLLEGE	GRCC - TAXES INTEREST	235-111	000	21.30
				CHECK GENF 7286(A) TOTAL FOR FUND 703:			519.06
01/14/2022	GENF	7287(A)	KENT COUNTY DRAIN COMMISSION	T & W	222-180	000	207.88
01/14/2022	GENF	7288(A)	KENT COUNTY TREASURER	KENT COUNTY - OPERATING	222-110	000	1,203.65
01/14/2022	GENF	7288(A)	KENT COUNTY TREASURER	KENT COUNTY - INTEREST	222-111	000	51.49
01/14/2022	GENF	7288(A)	KENT COUNTY TREASURER	KENT COUNTY - JAIL	222-160	000	30,922.11
01/14/2022	GENF	7288(A)	KENT COUNTY TREASURER	KENT COUNTY - ZOO/MUSEUM	222-165	000	17,234.15
01/14/2022	GENF	7288(A)	KENT COUNTY TREASURER	KENT COUNTY - SENIOR	222-170	000	19,584.29
01/14/2022	GENF	7288(A)	KENT COUNTY TREASURER	KENT COUNTY - VETERAN'S MILLAGE	222-172	000	1,948.48
01/14/2022	GENF	7288(A)	KENT COUNTY TREASURER	KENT COUNTY - EARLY CHILDHOOD	222-185	000	9,872.52
				CHECK GENF 7288(A) TOTAL FOR FUND 703:			80,816.69
01/14/2022	GENF	7289(A)	KENT COUNTY TREASURER-SET	KENT COUNTY - INTEREST	222-111	000	73.83
01/14/2022	GENF	7289(A)	KENT COUNTY TREASURER-SET	FHPS SET & OPERATING TAX (COUNTY)	228-001	000	1,725.66
				CHECK GENF 7289(A) TOTAL FOR FUND 703:			1,799.49
01/14/2022	GENF	7290(A)	KENT INTERMEDIATE SCHOOLS	KENT ISD - TAXES	234-110	000	1,586.38
01/14/2022	GENF	7290(A)	KENT INTERMEDIATE SCHOOLS	KENT ISD - TAXES INTEREST	234-111	000	67.87
				CHECK GENF 7290(A) TOTAL FOR FUND 703:			1,654.25
01/14/2022	GENF	7291(A)	LOWELL AREA SCHOOLS	LOWELL - DEBT	226-120	000	3,250.07
01/14/2022	GENF	7291(A)	LOWELL AREA SCHOOLS	LOWELL BLDG/SITE	226-130	000	458.79
				CHECK GENF 7291(A) TOTAL FOR FUND 703:			3,708.86
01/20/2022	GENF	74054	KENT COUNTY - HEALTH DEPT	KENT COUNTY - DOG LICENSE	222-175	000	452.00
01/20/2022	GENF	74066	CASCADE CHARTER TOWNSHIP	CCT FIRE	214-115	000	84,755.65
01/20/2022	GENF	74066	CASCADE CHARTER TOWNSHIP	CCT - FIRE PP	214-115	000	3,374.72
				CHECK GENF 74066 TOTAL FOR FUND 703:			88,130.37
01/20/2022	GENF	74067	CASCADE CHARTER TWP	CCT - OPERATING	214-110	000	62,609.89
01/20/2022	GENF	74067	CASCADE CHARTER TWP	CCT - OPERATING TAXES PP	214-110	000	2,492.93
01/20/2022	GENF	74067	CASCADE CHARTER TWP	CCT - OVER/SHORT	214-112	000	(0.25)
01/20/2022	GENF	74067	CASCADE CHARTER TWP	CCT - STREET LIGHTS	214-140	000	2,852.66
01/20/2022	GENF	74067	CASCADE CHARTER TWP	CCT - ADMIN	214-155	000	9,658.41
				CHECK GENF 74067 TOTAL FOR FUND 703:			77,613.64

CHECK DISBURSEMENT REPORT FOR CASCADE CHARTER TOWNSHIP
CHECK DATE FROM 01/01/2022 - 01/31/2022

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
01/20/2022	GENF	74068	LIBRARY FUND	CCT - LIBRARY	214-120	000	9,657.34
01/20/2022	GENF	74068	LIBRARY FUND	CCT - LIBRARY PP	214-120	000	384.47
				CHECK GENF 74068 TOTAL FOR FUND 703:			10,041.81
01/20/2022	GENF	74069	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE	214-116	000	14,819.06
01/20/2022	GENF	74069	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE PP	214-116	000	590.02
				CHECK GENF 74069 TOTAL FOR FUND 703:			15,409.08
01/20/2022	GENF	74070	PATHWAYS FUND	CCT-PATHWAYS	214-100	000	22,646.26
01/20/2022	GENF	74070	PATHWAYS FUND	CCT-PATHWAYS PP	214-100	000	901.68
				CHECK GENF 74070 TOTAL FOR FUND 703:			23,547.94
01/20/2022	GENF	74071	POLICE FUND	CCT-POLICE	214-105	000	29,574.12
01/20/2022	GENF	74071	POLICE FUND	CCT-POLICE PP	214-105	000	1,177.53
				CHECK GENF 74071 TOTAL FOR FUND 703:			30,751.65
01/20/2022	GENF	74072	CASCADE CHARTER TOWNSHIP	CCT- SPECIAL ASSESSMENTS	214-135	000	3,000.00
01/20/2022	GENF	74073	KENT DISTRICT LIBRARY	KDL - TAXES	223-110	000	84,599.63
01/21/2022	GENF	7299(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - OPERATING	225-410	000	50,054.06
01/21/2022	GENF	7300(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - INTEREST	225-411	000	0.28
01/21/2022	GENF	7300(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - DEBT	225-420	000	27,837.52
				CHECK GENF 7300(A) TOTAL FOR FUND 703:			27,837.80
01/21/2022	GENF	7301(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - OPERATING	225-110	000	210,986.88
01/21/2022	GENF	7301(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - INTEREST	225-111	000	84.30
01/21/2022	GENF	7301(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - DEBT	225-120	000	179,861.52
01/21/2022	GENF	7301(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - RECREATION	225-130	000	29,024.46
				CHECK GENF 7301(A) TOTAL FOR FUND 703:			419,957.16
01/21/2022	GENF	7302(A)	GRAND RAPIDS COMMUNITY COLLEGE	GRCC - TAXES	235-110	000	590.53
01/21/2022	GENF	7302(A)	GRAND RAPIDS COMMUNITY COLLEGE	GRCC - TAXES INTEREST	235-111	000	29.53
				CHECK GENF 7302(A) TOTAL FOR FUND 703:			620.06
01/21/2022	GENF	7304(A)	KENT COUNTY DRAIN COMMISSION	KENT COUNTY DRAIN T&W	222-180	000	395.10
01/21/2022	GENF	7305(A)	KENT COUNTY TREASURER	KENT COUNTY - OPERATING	222-110	000	1,427.99
01/21/2022	GENF	7305(A)	KENT COUNTY TREASURER	KENT COUNTY - INTEREST	222-111	000	71.40
01/21/2022	GENF	7305(A)	KENT COUNTY TREASURER	KENT COUNTY - JAIL	222-160	000	51,806.94
01/21/2022	GENF	7305(A)	KENT COUNTY TREASURER	KENT COUNTY - ZOO/MUSEUM	222-165	000	28,874.42
01/21/2022	GENF	7305(A)	KENT COUNTY TREASURER	KENT COUNTY - SENIOR	222-170	000	32,811.73
01/21/2022	GENF	7305(A)	KENT COUNTY TREASURER	KENT COUNTY - VETERAN'S MILLAGE	222-172	000	3,265.08
01/21/2022	GENF	7305(A)	KENT COUNTY TREASURER	KENT COUNTY - EARLY CHILDHOOD	222-185	000	16,540.68
				CHECK GENF 7305(A) TOTAL FOR FUND 703:			134,798.24
01/21/2022	GENF	7306(A)	KENT COUNTY TREASURER-SET	KENT COUNTY - INTEREST	222-111	000	102.36
01/21/2022	GENF	7306(A)	KENT COUNTY TREASURER-SET	CALEDONIA SET & OPERATING TAX (COUNTY)	228-001	000	9.66
01/21/2022	GENF	7306(A)	KENT COUNTY TREASURER-SET	FHPS SET & OPERATING TAX (COUNTY)	228-001	000	1,888.39
01/21/2022	GENF	7306(A)	KENT COUNTY TREASURER-SET	LOWELL SET & OPERATING TAX (COUNTY)	228-001	000	149.27
				CHECK GENF 7306(A) TOTAL FOR FUND 703:			2,149.68
01/21/2022	GENF	7307(A)	KENT INTERMEDIATE SCHOOLS	KENT ISD - TAXES	234-110	000	1,882.05
01/21/2022	GENF	7307(A)	KENT INTERMEDIATE SCHOOLS	KENT ISD - TAXES INTEREST	234-111	000	94.10
				CHECK GENF 7307(A) TOTAL FOR FUND 703:			1,976.15

CHECK DISBURSEMENT REPORT FOR CASCADE CHARTER TOWNSHIP
CHECK DATE FROM 01/01/2022 - 01/31/2022

<u>Check Date</u>	<u>Bank</u>	<u>Check #</u>	<u>Payee</u>	<u>Description</u>	<u>Account</u>	<u>Dept</u>	<u>Amount</u>
01/21/2022	GENF	7308(A)	LOWELL AREA SCHOOLS	LOWELL - OPERATING	226-110	000	405.87
01/21/2022	GENF	7308(A)	LOWELL AREA SCHOOLS	LOWELL - INTEREST	226-111	000	4.97
01/21/2022	GENF	7308(A)	LOWELL AREA SCHOOLS	LOWELL - DEBT	226-120	000	4,143.25
01/21/2022	GENF	7308(A)	LOWELL AREA SCHOOLS	LOWELL BLDG/SITE	226-130	000	584.88
				CHECK GENF 7308(A) TOTAL FOR FUND 703:			5,138.97
01/27/2022	GENF	74085	ZAWACKI JAMES J	DUE TO 41-19-07-177-139	275-000	000	20.00
01/27/2022	GENF	74086	PLAKMEYER STEVEN & KATHLEEN TRUST	DUE TO 41-19-16-251-016	275-000	000	44.00
01/27/2022	GENF	74092	CASCADE CHARTER TOWNSHIP	CCT FIRE	214-115	000	63,522.71
01/27/2022	GENF	74092	CASCADE CHARTER TOWNSHIP	CCT - FIRE PP	214-115	000	5,164.21
01/27/2022	GENF	74092	CASCADE CHARTER TOWNSHIP	CCT - IFT FIRE	214-215	000	57.48
				CHECK GENF 74092 TOTAL FOR FUND 703:			68,744.40
01/27/2022	GENF	74093	CASCADE CHARTER TWP	CCT - OPERATING	214-110	000	46,924.97
01/27/2022	GENF	74093	CASCADE CHARTER TWP	CCT - OPERATING TAXES PP	214-110	000	3,814.84
01/27/2022	GENF	74093	CASCADE CHARTER TWP	CCT - OVER/SHORT	214-112	000	0.54
01/27/2022	GENF	74093	CASCADE CHARTER TWP	CCT - STREET LIGHTS	214-140	000	2,177.85
01/27/2022	GENF	74093	CASCADE CHARTER TWP	CCT - ADMIN	214-155	000	6,678.83
01/27/2022	GENF	74093	CASCADE CHARTER TWP	CCT - IFT OPERATING TAXES	214-210	000	42.46
				CHECK GENF 74093 TOTAL FOR FUND 703:			59,639.49
01/27/2022	GENF	74094	LIBRARY FUND	CCT - LIBRARY	214-120	000	7,237.67
01/27/2022	GENF	74094	LIBRARY FUND	CCT - LIBRARY PP	214-120	000	588.33
01/27/2022	GENF	74094	LIBRARY FUND	CCT-IFT LIBRARY	214-220	000	6.55
				CHECK GENF 74094 TOTAL FOR FUND 703:			7,832.55
01/27/2022	GENF	74095	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE	214-116	000	11,106.29
01/27/2022	GENF	74095	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE PP	214-116	000	902.84
01/27/2022	GENF	74095	CASCADE CHARTER TOWNSHIP	CCT OPEN SPACE IFT	214-216	000	10.05
				CHECK GENF 74095 TOTAL FOR FUND 703:			12,019.18
01/27/2022	GENF	74096	PATHWAYS FUND	CCT-PATHWAYS	214-100	000	16,972.78
01/27/2022	GENF	74096	PATHWAYS FUND	CCT-PATHWAYS PP	214-100	000	1,379.79
01/27/2022	GENF	74096	PATHWAYS FUND	CCT - IFT PATHWAYS	214-200	000	15.35
				CHECK GENF 74096 TOTAL FOR FUND 703:			18,367.92
01/27/2022	GENF	74097	POLICE FUND	CCT-POLICE	214-105	000	22,165.04
01/27/2022	GENF	74097	POLICE FUND	CCT-POLICE PP	214-105	000	1,801.91
01/27/2022	GENF	74097	POLICE FUND	CCT - IFT POLICE	214-205	000	20.05
				CHECK GENF 74097 TOTAL FOR FUND 703:			23,987.00
01/27/2022	GENF	74098	CASCADE CHARTER TOWNSHIP	TRIF	214-135	000	2,400.00
01/27/2022	GENF	74100	KENT DISTRICT LIBRARY	KDL - TAXES	223-110	000	65,935.17
01/27/2022	GENF	74100	KENT DISTRICT LIBRARY	KDL - IFT TAXES	223-210	000	55.17
				CHECK GENF 74100 TOTAL FOR FUND 703:			65,990.34
01/28/2022	GENF	7317(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - OPERATING	225-410	000	16,918.73
01/28/2022	GENF	7318(A)	CALEDONIA COMMUNITY SCHOOLS	CALEDONIA - DEBT	225-420	000	12,221.75
01/28/2022	GENF	7319(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - OPERATING	225-110	000	93,361.58
01/28/2022	GENF	7319(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - INTEREST	225-111	000	210.97
01/28/2022	GENF	7319(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - DEBT	225-120	000	148,520.41
01/28/2022	GENF	7319(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - RECREATION	225-130	000	23,966.80
01/28/2022	GENF	7319(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - IFT DEBT	225-220	000	134.81
01/28/2022	GENF	7319(A)	FOREST HILLS PUBLIC SCHOOLS	FHPS - IFT RECREATION	225-230	000	21.75
				CHECK GENF 7319(A) TOTAL FOR FUND 703:			266,216.32

CHECK DISBURSEMENT REPORT FOR CASCADE CHARTER TOWNSHIP
CHECK DATE FROM 01/01/2022 - 01/31/2022

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
01/28/2022	GENF	7320(A)	GRAND RAPIDS COMMUNITY COLLEGE	GRCC - TAXES	235-110	000	1,094.33
01/28/2022	GENF	7320(A)	GRAND RAPIDS COMMUNITY COLLEGE	GRCC - TAXES INTEREST	235-111	000	54.72
				CHECK GENF 7320(A) TOTAL FOR FUND 703:			1,149.05
01/28/2022	GENF	7321(A)	KENT COUNTY DRAIN COMMISSION	T & W	222-180	000	221.37
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - OPERATING	222-110	000	2,646.21
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - INTEREST	222-111	000	132.31
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - JAIL	222-160	000	40,377.09
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - ZOO/MUSEUM	222-165	000	22,503.88
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - SENIOR	222-170	000	25,572.54
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - VETERAN'S MILLAGE	222-172	000	2,544.42
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - EARLY CHILDHOOD	222-185	000	12,891.21
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - IFT JAIL	222-260	000	33.79
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - IFT ZOO/MUSEUM	222-265	000	18.83
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - IFT SENIOR	222-270	000	21.40
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - IFT VETERAN'S MILLAGE	222-272	000	2.13
01/28/2022	GENF	7322(A)	KENT COUNTY TREASURER	KENT COUNTY - IFT EARLY CHILDHOOD	222-285	000	10.78
				CHECK GENF 7322(A) TOTAL FOR FUND 703:			106,754.59
01/28/2022	GENF	7323(A)	KENT COUNTY TREASURER-SET	KENT COUNTY - INTEREST	222-111	000	189.70
01/28/2022	GENF	7323(A)	KENT COUNTY TREASURER-SET	FHPS SET & OPERATING TAX (COUNTY)	228-001	000	3,793.88
				CHECK GENF 7323(A) TOTAL FOR FUND 703:			3,983.58
01/28/2022	GENF	7324(A)	KENT INTERMEDIATE SCHOOLS	KENT ISD - TAXES	234-110	000	3,487.66
01/28/2022	GENF	7324(A)	KENT INTERMEDIATE SCHOOLS	KENT ISD - TAXES INTEREST	234-111	000	174.39
				CHECK GENF 7324(A) TOTAL FOR FUND 703:			3,662.05
01/28/2022	GENF	7325(A)	LOWELL AREA SCHOOLS	LOWELL - OPERATING	226-110	000	355.26
01/28/2022	GENF	7325(A)	LOWELL AREA SCHOOLS	LOWELL - DEBT	226-120	000	4,415.78
01/28/2022	GENF	7325(A)	LOWELL AREA SCHOOLS	LOWELL BLDG/SITE	226-130	000	623.35
				CHECK GENF 7325(A) TOTAL FOR FUND 703:			5,394.39
Total for fund 703 CURRENT TAX COLLECTION FUND							7,649,333.31
TOTAL - ALL FUNDS						\$	8,170,778.71

*#-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE FUND

*#-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

Transactions Log for Payroll Deductions
MONTH ENDING: JANUARY 2022

Direct Deposit

Date Submitted	<u>1/3/22</u>	Transaction#	<u>HBCQMT97VE6</u>	Amount	<u>95,014.31</u>
Date Submitted	<u>1/14/22</u>	Transaction#	<u>TF4KGU8N1Z</u>	Amount	<u>94,755.96</u>
Date Submitted	<u>1/19/22</u>	Transaction#	<u>B7FSU36U1A</u>	Amount	<u>11,041.20</u>

Deferred Comp

Date Submitted	<u>1/3/22</u>	Transaction#	_____	Amount	<u>100</u>
Date Submitted	<u>1/14/22</u>	Transaction#	_____	Amount	<u>150</u>
Date Submitted	<u>1/19/22</u>	Transaction#	_____	Amount	<u>1156.11</u>

Payroll Taxes

Date Submitted	<u>1/3/22</u>	Transaction#	<u>02435919</u>	Amount	<u>34,216.28</u>
Date Submitted	<u>1/14/22</u>	Transaction#	<u>80239673</u>	Amount	<u>33,333.31</u>
Date Submitted	<u>1/19/22</u>	Transaction#	<u>41163547</u>	Amount	<u>3,268.34</u>

HSA

Date Submitted	<u>1/3/22</u>	Transaction#	<u>YWVLS9QL9Z</u>	Amount	<u>1944.85</u>
Date Submitted	<u>1/14/22</u>	Transaction#	<u>060LR80RA8</u>	Amount	<u>2094.85</u>
Date Submitted	_____	Transaction#	_____	Amount	_____

ICMA RC

Date Submitted	<u>1/3/22</u>	Transaction#	<u>5D14WXD1ZC6</u>	Amount	<u>783.51</u>
Date Submitted	<u>1/14/22</u>	Transaction#	<u>PV5F1COXAO</u>	Amount	<u>783.51</u>
Date Submitted	<u>1/19/22</u>	Transaction#	<u>11L89KONMP</u>	Amount	<u>534.91</u>

MERS DB EE

Date Submitted	<u>1/18/22</u>	Transaction#	_____	Amount	<u>6841.40</u>
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MERS DB ER

Date Submitted	<u>1/18/22</u>	Transaction#	_____	Amount	<u>22,174.00</u>
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MERS DC

Date Submitted	<u>1/3/22</u>	Transaction#	<u>117</u>	Amount	<u>\$ 16,821.02</u>
Date Submitted	<u>1/18/22</u>	Transaction#	<u>118</u>	Amount	<u>17,171.16</u>
Date Submitted	_____	Transaction#	_____	Amount	_____

MERS 457

Date Submitted	<u>1/3/22</u>	Transaction#	<u>27</u>	Amount	<u>185.66</u>
Date Submitted	<u>1/18/22</u>	Transaction#	<u>28</u>	Amount	<u>185.00</u>
Date Submitted	_____	Transaction#	_____	Amount	_____

Monthly Check Register - Gross

Date Submitted	<u>1-24-22</u>	Amount	<u>342,554.72</u>
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Clerk's Office

Date _____

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021	2022	ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022	BALANCE	
				INCREASE (DECREASE)	NORMAL (ABNORMAL)	
Fund 101 - GENERAL FUND						
Revenues						
101-000-401-401	GENERAL PROPERTY TAXES	1,466,381.00	1,517,478.08	924,608.60	592,869.48	60.93
101-000-401-405	STREETLIGHT	78,000.00	81,000.00	52,367.95	28,632.05	64.65
101-000-401-410	PERSONAL PROPERTY TAX	104,027.00	97,406.37	19,528.93	77,877.44	20.05
101-000-401-420	DELINQUENT TAXES	5,000.00	5,000.00	0.00	5,000.00	0.00
101-000-401-437	ABATEMENT TAXES	17,331.00	14,699.91	840.28	13,859.63	5.72
101-000-401-445	INTEREST & PENALTIES ON TAXES	5,000.00	5,000.00	1,593.97	3,406.03	31.88
101-000-401-447	TAX ADMINISTRATION FEES	635,000.00	645,000.00	55,861.63	589,138.37	8.66
101-000-450-460	CABLE REVENUE	336,000.00	324,000.00	0.00	324,000.00	0.00
101-000-450-465	CABLE - PEG FEES	70,000.00	66,000.00	0.00	66,000.00	0.00
101-000-450-490	DOG LICENSES	150.00	150.00	12.00	138.00	8.00
101-000-450-498	OTHER PERMITS	400.00	200.00	0.00	200.00	0.00
101-000-451-000	LIQUOR LICENSE	25,000.00	24,000.00	0.00	24,000.00	0.00
101-000-539-576	STATE SHARED REV.-SALES TAX	1,699,396.00	1,655,768.00	0.00	1,655,768.00	0.00
101-000-539-581	METRO ACT	22,405.06	22,000.00	0.00	22,000.00	0.00
101-000-573-000	LOCAL COMMUNITY STABILIZATION SHARE	53,818.00	61,480.00	0.00	61,480.00	0.00
101-000-600-608	PLANNING AND ZONING FEES	25,000.00	25,000.00	810.00	24,190.00	3.24
101-000-600-610	SUMMER TAX COLLECTION FEE	26,000.00	26,500.00	0.00	26,500.00	0.00
101-000-600-611	SEWER & WATER IMPLEMENTATION	21,000.00	21,000.00	0.00	21,000.00	0.00
101-000-600-614	PA 198 TAX APPLICATION FEE	2,000.00	2,000.00	0.00	2,000.00	0.00
101-000-600-626	PASSPORT APPLICATION FEE	11,000.00	10,500.00	1,960.00	8,540.00	18.67
101-000-600-634	CEMETERY-OPENINGS AND CLOSINGS	15,000.00	15,000.00	2,575.00	12,425.00	17.17
101-000-600-647	YARD WASTE TAG FEE	1,000.00	1,000.00	0.00	1,000.00	0.00
101-000-665-000	INTEREST ON INVESTMENTS	80,000.00	59,000.00	(1,541.86)	60,541.86	(2.61)
101-000-665-002	DAM LEASE PAYMENTS	70,000.00	70,000.00	17,500.00	52,500.00	25.00
101-000-665-003	RENTAL OF FACILITIES	600.00	600.00	75.00	525.00	12.50
101-000-665-004	CELLULAR TOWERS	109,000.00	109,000.00	34,228.74	74,771.26	31.40
101-000-665-014	CELL TOWER - KEPS ANTENNA LEASE	1,800.00	1,800.00	225.00	1,575.00	12.50
101-000-671-653	PARK INCOME	7,000.00	8,400.00	200.00	8,200.00	2.38
101-000-671-671	MISCELLANEOUS INCOME	4,000.00	4,000.00	53.94	3,946.06	1.35
101-000-671-676	PARK DONATIONS	0.00	0.00	200.00	(200.00)	100.00
101-000-671-680	MISC INCOME - TRANSIT TICKETS	500.00	500.00	105.00	395.00	21.00
101-000-673-000	SALE OF ASSETS	2,500.00	2,500.00	2,500.00	0.00	100.00
101-000-674-000	4TH OF JULY SPONSORS	0.00	20,000.00	0.00	20,000.00	0.00
101-000-674-200	HALLOWEEN SPONSORS	2,000.00	2,000.00	0.00	2,000.00	0.00
101-000-675-000	DDA CONTRIBUTION	99,426.00	98,077.00	0.00	98,077.00	0.00
101-000-676-000	ELECTION REIMBURSEMENT	0.00	25,000.00	0.00	25,000.00	0.00
101-000-679-000	INTERFUND REIMBURSE/BLDG INSPECTION FUND	100,000.00	100,000.00	29,671.80	70,328.20	29.67
101-000-679-100	REIMBURSEMENT FROM PATHWAYS	50,974.00	50,974.00	0.00	50,974.00	0.00
101-000-679-200	REIMBURSEMENT FROM LIBRARY	76,461.00	38,231.00	0.00	38,231.00	0.00
TOTAL REVENUES		5,223,169.06	5,210,264.36	1,143,375.98	4,066,888.38	21.94
Expenditures						
Dept 101 - TOWNSHIP BOARD						
101-101-704-000	WAGES- TRUSTEES (4)	40,765.00	42,183.00	3,397.00	38,786.00	8.05
101-101-723-000	TOWNSHIP DUES	19,050.00	19,350.00	620.00	18,730.00	3.20
101-101-724-000	EDUCATION	1,700.00	2,000.00	0.00	2,000.00	0.00
101-101-860-000	TRUSTEE MILEAGE	250.00	250.00	0.00	250.00	0.00
101-101-862-500	TRUSTEE EXPENSE ACCOUNT	500.00	500.00	0.00	500.00	0.00
101-101-924-100	TRUSTEE CELL PHONES/DATA	1,200.00	1,200.00	0.00	1,200.00	0.00
101-101-981-000	OFFICE EQUIPMENT	1,000.00	1,000.00	0.00	1,000.00	0.00
Total Dept 101 - TOWNSHIP BOARD		64,465.00	66,483.00	4,017.00	62,466.00	6.04
Dept 171 - SUPERVISOR						
101-171-702-000	WAGES- FULL TIME	200,061.00	49,254.00	10,439.34	38,814.66	21.19
101-171-702-001	WAGES - DEPARTMENT HEAD	0.00	137,612.00	0.00	137,612.00	0.00
101-171-703-200	ASSIGNABLE SALARY	0.00	20,000.00	0.00	20,000.00	0.00
101-171-704-000	WAGES- TOWNSHIP SUPERVISOR	22,647.00	23,435.00	1,887.23	21,547.77	8.05
101-171-707-100	ADDITIONAL HELP/OT	5,000.00	1,000.00	0.00	1,000.00	0.00
101-171-723-000	SUPERVISOR MEMBERSHIPS AND DUES	3,525.00	3,050.00	1,231.00	1,819.00	40.36
101-171-724-000	EDUCATION	7,546.00	5,100.00	0.00	5,100.00	0.00
101-171-725-100	TUITION REIMBURSEMENT	3,500.00	0.00	0.00	0.00	0.00
101-171-860-000	SUPERVISOR MILEAGE	4,600.00	4,000.00	0.00	4,000.00	0.00
101-171-862-500	SUPERVISOR EXPENSE ACCOUNT	500.00	500.00	0.00	500.00	0.00
101-171-862-550	MANAGER EXPENSE ACCOUNT	1,000.00	1,000.00	0.00	1,000.00	0.00
101-171-901-000	SUPERVISOR PUBLICATIONS	500.00	500.00	0.00	500.00	0.00
101-171-925-000	CELL PHONE/ DATA	2,940.00	1,800.00	0.00	1,800.00	0.00
101-171-967-000	SPECIAL PROJECTS	17,500.00	10,000.00	1,661.70	8,338.30	16.62
101-171-981-000	OFFICE EQUIPMENT	3,000.00	2,000.00	0.00	2,000.00	0.00
Total Dept 171 - SUPERVISOR		277,319.00	259,251.00	15,219.27	244,031.73	5.87

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.
PRE-AUDIT

GL NUMBER	DESCRIPTION	ACTIVITY FOR			AVAILABLE BALANCE NORMAL (ABNORMAL)	% BDGT USED
		2021 AMENDED BUDGET	2022 AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)		
Dept 215 - CLERK						
101-215-702-000	WAGES- FULL TIME	56,279.00	57,748.00	4,543.17	53,204.83	7.87
101-215-704-000	WAGES- CLERK	18,118.00	18,748.00	1,509.78	17,238.22	8.05
101-215-707-000	WAGES- CASUAL	17,087.00	0.00	0.00	0.00	0.00
101-215-710-000	CLERK EXPENSE ACCOUNT	0.00	0.00	6.99	(6.99)	100.00
101-215-723-000	CLERK MEMBERSHIPS AND DUES	600.00	800.00	0.00	800.00	0.00
101-215-724-000	EDUCATION	5,100.00	4,100.00	0.00	4,100.00	0.00
101-215-725-000	CLERK TUITION REIMBURSEMENT	3,500.00	0.00	0.00	0.00	0.00
101-215-768-000	UNIFORMS	1,000.00	1,000.00	0.00	1,000.00	0.00
101-215-860-000	CLERK MILEAGE	1,000.00	1,200.00	33.93	1,166.07	2.83
101-215-862-500	CLERK'S EXPENSE ACCOUNT	500.00	500.00	0.00	500.00	0.00
101-215-925-000	CELL PHONE/ DATA	1,800.00	1,800.00	50.00	1,750.00	2.78
101-215-981-000	OFFICE EQUIPMENT	2,000.00	2,000.00	0.00	2,000.00	0.00
Total Dept 215 - CLERK		106,984.00	87,896.00	6,143.87	81,752.13	6.99
Dept 253 - TREASURER						
101-253-702-000	WAGES- FULL TIME	114,070.00	115,667.00	8,774.40	106,892.60	7.59
101-253-704-000	WAGES- TREASURER	17,745.00	18,748.00	1,509.78	17,238.22	8.05
101-253-707-000	WAGES- CASUAL	3,000.00	3,000.00	0.00	3,000.00	0.00
101-253-707-100	ADDITIONAL HELP/OVERTIME	1,500.00	1,500.00	0.00	1,500.00	0.00
101-253-723-000	TREASURER MEMBERSHIPS AND DUES	600.00	650.00	50.00	600.00	7.69
101-253-724-000	EDUCATION	3,000.00	3,000.00	0.00	3,000.00	0.00
101-253-725-000	EDUCATION/TUITION REIMBURSEMENT	1,000.00	0.00	0.00	0.00	0.00
101-253-860-000	TREASURER MILEAGE	500.00	750.00	7.90	742.10	1.05
101-253-862-500	TREASURER'S EXPENSE ACCOUNT	200.00	200.00	0.00	200.00	0.00
101-253-924-100	TREASURER'S CELL PHONES/DATA	600.00	600.00	0.00	600.00	0.00
101-253-939-000	TREASURER SERVICE CONTRACTS	2,500.00	2,500.00	0.00	2,500.00	0.00
101-253-981-000	OFFICE EQUIPMENT	5,600.00	6,500.00	0.00	6,500.00	0.00
Total Dept 253 - TREASURER		150,315.00	153,115.00	10,342.08	142,772.92	6.75
Dept 257 - ASSESSING						
101-257-702-000	WAGES- FULL TIME	213,193.00	129,679.00	16,399.44	113,279.56	12.65
101-257-702-001	WAGES- DEPARTMENT HEAD	0.00	86,499.00	0.00	86,499.00	0.00
101-257-707-000	WAGES- CASUAL	17,836.00	25,110.00	0.00	25,110.00	0.00
101-257-723-000	ASSESSING MEMBERSHIPS AND DUES	1,820.00	2,170.00	0.00	2,170.00	0.00
101-257-724-000	EDUCATION	9,250.00	8,920.00	0.00	8,920.00	0.00
101-257-727-000	ASSESSING OFFICE SUPPLIES	1,500.00	1,500.00	0.00	1,500.00	0.00
101-257-801-000	ASSESSING CONTRACTUAL SERVICES	24,000.00	24,000.00	2,000.00	22,000.00	8.33
101-257-808-000	BOARD OF REVIEW EXPENSES	5,025.00	4,200.00	0.00	4,200.00	0.00
101-257-860-000	ASSESSING MILEAGE	2,900.00	2,900.00	0.00	2,900.00	0.00
101-257-862-500	ASSESSING EXPENSE ACCOUNT	100.00	100.00	0.00	100.00	0.00
101-257-900-000	ASSESSING PRINTING AND PUBLISHING	1,600.00	1,100.00	0.00	1,100.00	0.00
101-257-924-100	CELL PHONES/DATA	2,400.00	2,700.00	0.00	2,700.00	0.00
101-257-939-000	ASSESSING SERVICE CONTRACTS	6,925.00	12,305.00	2,180.00	10,125.00	17.72
101-257-981-000	OFFICE EQUIPMENT	5,600.00	3,000.00	0.00	3,000.00	0.00
Total Dept 257 - ASSESSING		292,149.00	304,183.00	20,579.44	283,603.56	6.77
Dept 262 - ELECTIONS						
101-262-707-000	WAGES- CASUAL	30,720.00	62,320.00	1,000.00	61,320.00	1.60
101-262-756-000	ELECTION SUPPLIES	6,000.00	30,250.00	0.00	30,250.00	0.00
101-262-788-000	ELECTION MISC EXPENSES	3,000.00	5,000.00	0.00	5,000.00	0.00
101-262-932-000	MAINT/OFFICE EQUIP & COMPUTER REPAIR	500.00	1,000.00	0.00	1,000.00	0.00
Total Dept 262 - ELECTIONS		40,220.00	98,570.00	1,000.00	97,570.00	1.01
Dept 265 - BUILDING AND GROUNDS						
101-265-702-000	WAGES- FULL TIME	297,711.00	350,637.00	20,297.07	330,339.93	5.79
101-265-707-000	WAGES- CASUAL	57,600.00	57,600.00	0.00	57,600.00	0.00
101-265-713-000	OVERTIME	10,000.00	10,000.00	249.73	9,750.27	2.50
101-265-724-000	EDUCATION	1,250.00	1,250.00	0.00	1,250.00	0.00
101-265-768-000	BLDG & GROUNDS UNIFORMS	3,200.00	3,200.00	0.00	3,200.00	0.00
101-265-802-200	JANITORIAL & MAINTENANCE	2,000.00	2,000.00	0.00	2,000.00	0.00
101-265-860-000	MILEAGE	250.00	100.00	0.00	100.00	0.00
101-265-863-000	VEHICLE MAINT	35,000.00	35,000.00	2,227.01	32,772.99	6.36
101-265-864-000	FUEL	20,000.00	24,000.00	141.62	23,858.38	0.59
101-265-921-000	COMPLEX ELECTRICITY	35,000.00	35,000.00	(711.92)	35,711.92	(2.03)
101-265-923-000	COMPLEX HEATING	12,000.00	12,000.00	0.00	12,000.00	0.00
101-265-924-000	COMPLEX PHONES	21,900.00	21,900.00	965.05	20,934.95	4.41
101-265-924-100	BLDG & GROUNDS CELL PHONES/ DATA	3,000.00	2,700.00	0.00	2,700.00	0.00
101-265-927-000	COMPLEX WATER-SEWER	7,500.00	7,500.00	0.00	7,500.00	0.00
101-265-931-000	COMPLEX MAINTENANCE	80,000.00	60,000.00	593.51	59,406.49	0.99
101-265-932-000	OFFICE EQUIP/COMPUTER REPAIR	16,750.00	18,850.00	15,600.00	3,250.00	82.76
101-265-939-000	SERVICE CONTRACTS	800.00	800.00	0.00	800.00	0.00

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021		2022		ACTIVITY FOR	AVAILABLE	% BGD USED
		AMENDED BUDGET	AMENDED BUDGET	INCREASE (DECREASE)	BALANCE	NORMAL (ABNORMAL)		
101-265-981-000	OFFICE EQUIPMENT	5,000.00	5,000.00	0.00	5,000.00	0.00	0.00	
Total Dept 265 - BUILDING AND GROUNDS		608,961.00	647,537.00	39,362.07	608,174.93		6.08	
Dept 276 - CEMETERY								
101-276-820-000	BACKHOE SERVICES	5,000.00	5,000.00	0.00	5,000.00	0.00	0.00	
101-276-921-000	CEMETERY ELECTRICITY	1,000.00	1,000.00	33.46	966.54	3.35	3.35	
101-276-931-000	MAINT & REPAIR/IMPROVEMENTS	15,000.00	0.00	0.00	0.00	0.00	0.00	
101-276-932-000	CEMETERY MAINT	0.00	15,000.00	0.00	15,000.00	0.00	0.00	
Total Dept 276 - CEMETERY		21,000.00	21,000.00	33.46	20,966.54		0.16	
Dept 295 - ADMINISTRATIVE								
101-295-702-000	WAGES- FULL TIME	127,976.00	142,730.00	10,768.00	131,962.00	7.54	7.54	
101-295-704-000	WAGES- PART TIME	36,350.00	38,305.00	0.00	38,305.00	0.00	0.00	
101-295-707-000	WAGES- CASUAL	5,000.00	5,000.00	2,677.46	2,322.54	53.55	53.55	
101-295-713-000	OVERTIME	5,000.00	5,000.00	0.00	5,000.00	0.00	0.00	
101-295-723-000	MEMBERSHIP AND DUES	775.00	710.00	0.00	710.00	0.00	0.00	
101-295-724-000	EDUCATION	7,000.00	6,000.00	0.00	6,000.00	0.00	0.00	
101-295-726-000	EMPLOYEE TRAINING	10,000.00	10,000.00	0.00	10,000.00	0.00	0.00	
101-295-727-000	OFFICE SUPPLIES	15,000.00	15,000.00	731.20	14,268.80	4.87	4.87	
101-295-730-000	POSTAGE	19,000.00	19,000.00	(26.95)	19,026.95	(0.14)	(0.14)	
101-295-787-000	MISCELLANEOUS	17,200.00	15,000.00	120.00	14,880.00	0.80	0.80	
101-295-807-000	AUDIT FEES & SERVICES	15,040.00	15,480.00	0.00	15,480.00	0.00	0.00	
101-295-810-000	LIABILITY INSURANCE	25,013.00	26,160.00	0.00	26,160.00	0.00	0.00	
101-295-814-000	TAX/ASSESSING ADMIN COSTS	22,000.00	22,000.00	0.00	22,000.00	0.00	0.00	
101-295-815-000	COMPUTER COSTS-ISP	4,800.00	5,500.00	0.00	5,500.00	0.00	0.00	
101-295-815-100	COMPUTER COSTS-WEB SITE	6,000.00	6,000.00	0.00	6,000.00	0.00	0.00	
101-295-816-000	INSECT/WEED CONTROL	58,800.00	59,500.00	0.00	59,500.00	0.00	0.00	
101-295-821-000	ENGINEERING COSTS	35,000.00	35,000.00	0.00	35,000.00	0.00	0.00	
101-295-826-000	LEGAL FEES	135,000.00	75,000.00	0.00	75,000.00	0.00	0.00	
101-295-860-000	ADMINISTRATIVE MILEAGE	500.00	500.00	0.00	500.00	0.00	0.00	
101-295-881-000	FOURTH OF JULY	50,000.00	50,000.00	0.00	50,000.00	0.00	0.00	
101-295-881-200	HALLOWEEN	2,500.00	2,500.00	0.00	2,500.00	0.00	0.00	
101-295-881-300	KDL MUSIC PROGRAMING	3,500.00	3,500.00	0.00	3,500.00	0.00	0.00	
101-295-882-000	SENIOR CITIZENS	2,000.00	2,000.00	0.00	2,000.00	0.00	0.00	
101-295-885-000	NEWSLETTER	22,800.00	22,800.00	0.00	22,800.00	0.00	0.00	
101-295-900-000	PRINTING/PUBLISHING	12,000.00	12,000.00	0.00	12,000.00	0.00	0.00	
101-295-924-100	CELL PHONES/DATA	1,800.00	1,800.00	0.00	1,800.00	0.00	0.00	
101-295-939-000	SERVICE CONTRACTS	17,000.00	17,000.00	1,240.00	15,760.00	7.29	7.29	
101-295-941-000	POSTAGE MACHINE LEASE	2,800.00	2,800.00	0.00	2,800.00	0.00	0.00	
101-295-950-000	PROPERTY TAX REFUNDS	2,500.00	2,500.00	0.00	2,500.00	0.00	0.00	
101-295-951-000	CABLE EQUIPMENT GRANTS	35,000.00	35,000.00	0.00	35,000.00	0.00	0.00	
101-295-952-000	REGIS	40,000.00	40,000.00	0.00	40,000.00	0.00	0.00	
101-295-952-100	KENT COUNTY AERIAL PHOTO	3,000.00	3,000.00	0.00	3,000.00	0.00	0.00	
101-295-954-000	NPDES PHASE II	10,100.00	10,500.00	0.00	10,500.00	0.00	0.00	
101-295-955-000	COMMUNITY MEDIA CENTER	5,000.00	5,000.00	0.00	5,000.00	0.00	0.00	
101-295-956-000	RIGHT PLACE PROGRAM	10,000.00	9,000.00	0.00	9,000.00	0.00	0.00	
101-295-957-000	GENERAL FUND PHYSICAL EXAMS	2,000.00	2,000.00	0.00	2,000.00	0.00	0.00	
101-295-967-000	SPECIAL PROJECTS	64,000.00	72,000.00	75.00	71,925.00	0.10	0.10	
101-295-981-000	OFFICE EQUIPMENT	9,700.00	9,600.00	0.00	9,600.00	0.00	0.00	
Total Dept 295 - ADMINISTRATIVE		841,154.00	804,885.00	15,584.71	789,300.29		1.94	
Dept 445 - DRAIN								
101-445-816-000	DRAIN MAINTENANCE	12,000.00	14,500.00	0.00	14,500.00	0.00	0.00	
101-445-821-000	DRAIN ENGINEERING	15,000.00	15,000.00	0.00	15,000.00	0.00	0.00	
101-445-822-000	ILLCIT DISCHARGE PLAN	500.00	500.00	0.00	500.00	0.00	0.00	
101-445-823-000	LGROW MEMBERSHIP DUES	400.00	400.00	0.00	400.00	0.00	0.00	
Total Dept 445 - DRAIN		27,900.00	30,400.00	0.00	30,400.00		0.00	
Dept 446 - ROADS								
101-446-818-000	DUST CONTROL LAYER	3,300.00	3,300.00	0.00	3,300.00	0.00	0.00	
101-446-821-000	ROAD OVERLAYS	1,100,000.00	400,000.00	0.00	400,000.00	0.00	0.00	
101-446-821-500	ROAD ENGINEERING STUDIES	30,000.00	50,000.00	0.00	50,000.00	0.00	0.00	
Total Dept 446 - ROADS		1,133,300.00	453,300.00	0.00	453,300.00		0.00	
Dept 447 - YARD WASTE REMOVAL								
101-447-787-000	MISCELLANEOUS	1,400.00	1,800.00	0.00	1,800.00	0.00	0.00	
101-447-820-000	SPRING/FALL CLEAN-UP	40,000.00	40,000.00	0.00	40,000.00	0.00	0.00	
101-447-939-000	SERVICE CONTRACTS	44,000.00	45,500.00	0.00	45,500.00	0.00	0.00	
Total Dept 447 - YARD WASTE REMOVAL		85,400.00	87,300.00	0.00	87,300.00		0.00	

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021	2022	ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)	BALANCE NORMAL (ABNORMAL)	
Dept 448 - STREET LIGHTS						
101-448-926-000	STREETLIGHTING	132,000.00	136,000.00	477.48	135,522.52	0.35
101-448-927-100	TRAFFIC SIGNALS	3,000.00	3,000.00	0.00	3,000.00	0.00
Total Dept 448 - STREET LIGHTS		135,000.00	139,000.00	477.48	138,522.52	0.34
Dept 652 - TRANSPORTATION						
101-652-859-000	TRANSPORTATION SERVICES	36,000.00	36,000.00	0.00	36,000.00	0.00
101-652-859-100	TRANSPORTATION SERVICE-GO BUS TICKETS	2,000.00	2,000.00	0.00	2,000.00	0.00
101-652-861-000	BUS SERVICE 33RD & 36TH	32,366.00	30,375.00	0.00	30,375.00	0.00
101-652-861-100	BUS SERVICE 28TH ST	60,000.00	0.00	0.00	0.00	0.00
Total Dept 652 - TRANSPORTATION		130,366.00	68,375.00	0.00	68,375.00	0.00
Dept 721 - PLANNING						
101-721-702-000	WAGES- FULL TIME	274,497.00	178,113.00	14,651.22	163,461.78	8.23
101-721-702-001	WAGES- DEPARTMENT HEAD	0.00	80,000.00	0.00	80,000.00	0.00
101-721-707-000	WAGES- CASUAL	21,500.00	21,500.00	0.00	21,500.00	0.00
101-721-723-000	COMM DEV MEMBERSHIPS AND DUES	1,700.00	1,550.00	0.00	1,550.00	0.00
101-721-724-000	EDUCATION	7,000.00	8,000.00	0.00	8,000.00	0.00
101-721-727-000	COMM DEV SUPPLIES	500.00	500.00	50.60	449.40	10.12
101-721-768-000	COMM DEV UNIFORMS	1,000.00	1,000.00	0.00	1,000.00	0.00
101-721-787-000	MISCELLANEOUS	750.00	1,000.00	0.00	1,000.00	0.00
101-721-809-000	PLANNING COMMISSION EXPENSES	2,500.00	0.00	0.00	0.00	0.00
101-721-860-000	COMM DEV MILEAGE	4,000.00	2,500.00	0.00	2,500.00	0.00
101-721-862-500	COMM DEV EXPENSE ACCOUNT	800.00	0.00	0.00	0.00	0.00
101-721-900-000	PRINTING & PUBLISHING	12,000.00	12,000.00	0.00	12,000.00	0.00
101-721-901-000	DIGITAL IMAGING	6,000.00	6,000.00	0.00	6,000.00	0.00
101-721-925-000	CELL PHONE/ DATA	1,800.00	1,800.00	0.00	1,800.00	0.00
101-721-967-000	SPECIAL PROJECTS	25,000.00	45,000.00	0.00	45,000.00	0.00
101-721-981-000	OFFICE EQUIPMENT	3,600.00	3,600.00	0.00	3,600.00	0.00
Total Dept 721 - PLANNING		362,647.00	362,563.00	14,701.82	347,861.18	4.05
Dept 756 - PARKS						
101-756-756-000	PARK OPERATING SUPPLIES	6,000.00	6,000.00	0.00	6,000.00	0.00
101-756-921-000	PARK ELECTRICITY	6,000.00	6,900.00	569.85	6,330.15	8.26
101-756-924-000	PARK PHONES	1,920.00	1,000.00	0.00	1,000.00	0.00
101-756-927-000	PARK WATER-SEWER	3,200.00	2,800.00	0.00	2,800.00	0.00
101-756-935-000	PARK MAINTENANCE	61,000.00	60,000.00	377.68	59,622.32	0.63
101-756-981-000	OFFICE EQUIPMENT	5,000.00	5,000.00	0.00	5,000.00	0.00
Total Dept 756 - PARKS		83,120.00	81,700.00	947.53	80,752.47	1.16
Dept 803 - HISTORICAL						
101-803-758-000	COMMUNITY PROMOTION	7,000.00	7,000.00	0.00	7,000.00	0.00
101-803-921-000	MUSEUM - ELECTRICITY	750.00	780.00	74.88	705.12	9.60
101-803-923-000	MUSEUM - HEATING/UTILITY	1,200.00	900.00	0.00	900.00	0.00
101-803-927-000	MUSEUM WATER-SEWER	300.00	400.00	0.00	400.00	0.00
101-803-961-000	MUSEUM MAINTENANCE	2,400.00	12,400.00	0.00	12,400.00	0.00
Total Dept 803 - HISTORICAL		11,650.00	21,480.00	74.88	21,405.12	0.35

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021	2022	ACTIVITY FOR		AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022		BALANCE	
				INCREASE	(DECREASE)	NORMAL (ABNORMAL)	
Dept 850 - BENEFITS/INSURANCE							
101-850-715-000	FICA-EMPLOYER	119,450.00	128,055.00		7,211.62	120,843.38	5.63
101-850-716-000	DEFINED CONTRIBUTION PLAN	109,868.00	124,821.00		7,432.20	117,388.80	5.95
101-850-717-000	WORKERS COMP INSURANCE	57,020.00	55,000.00		0.00	55,000.00	0.00
101-850-718-000	VISION INSURANCE BENEFITS	2,670.00	2,563.00		356.32	2,206.68	13.90
101-850-718-200	OTHER BENEFITS	40,700.00	40,600.00		35,000.00	5,600.00	86.21
101-850-718-300	OTHER BENEFITS- PTO BUYBACK PROGRAM	26,000.00	20,000.00		0.00	20,000.00	0.00
101-850-719-000	HEALTH INSURANCE BENEFITS	199,483.00	255,751.00		36,548.83	219,202.17	14.29
101-850-719-100	OPT-OUT INSURANCE	10,000.00	4,000.00		0.00	4,000.00	0.00
101-850-720-000	LIFE & DIS INSURANCE BENEFITS	15,138.00	16,100.00		2,408.85	13,691.15	14.96
101-850-721-000	DENTAL INSURANCE BENEFITS	21,311.00	20,994.00		3,068.91	17,925.09	14.62
101-850-722-000	PENSION PLAN BENEFITS	71,028.00	70,000.00		8,204.38	61,795.62	11.72
101-850-723-000	OTHER BENEFITS	1,050.00	0.00		0.00	0.00	0.00
Total Dept 850 - BENEFITS/INSURANCE		673,718.00	737,884.00		100,231.11	637,652.89	13.58
Dept 901 - CAPITAL OUTLAY							
101-901-970-000	CAPITAL OUTLAY - FFE	88,470.00	74,220.00		0.00	74,220.00	0.00
101-901-971-000	CAPITAL OUTLAY - LAND	310,000.00	0.00		0.00	0.00	0.00
101-901-974-000	CAPITAL OUTLAY - LANDIMP	0.00	100,000.00		0.00	100,000.00	0.00
101-901-975-000	CAPITAL OUTLAY - BLDGIMP	320,000.00	0.00		0.00	0.00	0.00
Total Dept 901 - CAPITAL OUTLAY		718,470.00	174,220.00		0.00	174,220.00	0.00
Dept 965 - TRANSFERS OUT							
101-965-999-004	TRANSFER TO CEMETERY TRUST FUN	1,500.00	1,500.00		0.00	1,500.00	0.00
101-965-999-005	TRANSFER TO DAM MAJOR REPAIR	40,000.00	40,000.00		0.00	40,000.00	0.00
101-965-999-006	TRANSFER TO FIRE FUND	400,000.00	400,000.00		33,333.33	366,666.67	8.33
Total Dept 965 - TRANSFERS OUT		441,500.00	441,500.00		33,333.33	408,166.67	7.55
Fund 101 - GENERAL FUND:							
TOTAL REVENUES		5,223,169.06	5,210,264.36		1,143,375.98	4,066,888.38	21.94
TOTAL EXPENDITURES		6,200,638.00	5,040,642.00		262,048.05	4,778,593.95	5.20
NET OF REVENUES & EXPENDITURES		(977,468.94)	169,622.36		881,327.93	(711,705.57)	519.58

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 101 - GENERAL FUND			
101-000-001-001	CASH DRAWER-PETTY CASH	175.00	
101-000-001-110	FLAGSTAR BANK - CASH GENERAL FUND	547,215.40	
101-000-001-111	GENL CASH RECEIVING & WIRE - FLAGSTAR	970.72	
101-000-001-500	GF CASH - K.C. POOL	1,181,191.34	
101-000-001-510	MI CLASS CASH - POOL ACCOUNTS	457,384.18	
101-000-001-700	CASH - GIFT CARDS	333.04	
101-000-003-016	CD- ADVENTURE CREDIT UNION	561,348.57	
101-000-003-022	CD- MERCANTILE BANK OF MI M 7/26/22	535,196.94	
101-000-003-028	CONSUMER CREDIT UNION M 1/08/2021	271,969.51	
101-000-003-038	GRAND RIVER BANK CD M 12/19/20	539,829.11	
101-000-003-041	LAKE MICH CREDIT UNION CD M 6/02/2020	1,044,648.34	
101-000-003-042	CD MSU FCU	500,015.00	
101-000-015-018	MONEY MARKET - HORIZON BANK	527,891.99	
101-000-015-019	M/M - FLAGSTAR BANK	588,512.48	
101-000-017-405	COMERICA SECURITIES # 148983	500,015.63	
101-000-040-000	ACCOUNTS RECEIVABLE		2,500.00
101-000-202-000	ACCOUNTS PAYABLE	507.19	
101-000-204-000	ACCRUED PAYROLL		52,390.24
101-000-231-201	HEALTH SAVINGS ACCOUNT WITHHOLDING		2,800.00
101-000-231-205	COBRA		1,056.60
101-000-231-212	FICA W/H		34.72
101-000-231-213	MI W/H		9.64
101-000-231-220	DEPENDENT LIFE W/H		41.70
101-000-231-221	ADDITIONAL LIFE W/H	185.11	
101-000-390-000	FUND BALANCE - UNASSIGNED		3,978,217.99
101-000-391-001	FUND BALANCE - COMMITTED/PENSION 2012		499,543.00
101-000-391-004	FUND BAL - COMMIT FUTURE FACIL IMP 2018		2,500,000.00
101-000-401-401	GENERAL PROPERTY TAXES		924,608.60
101-000-401-405	STREETLIGHT		52,367.95
101-000-401-410	PERSONAL PROPERTY TAX		19,528.93
101-000-401-437	ABATEMENT TAXES		840.28
101-000-401-445	INTEREST & PENALTIES ON TAXES		1,593.97
101-000-401-447	TAX ADMINISTRATION FEES		55,861.63
101-000-450-490	DOG LICENSES		12.00
101-000-600-608	PLANNING AND ZONING FEES		810.00
101-000-600-626	PASSPORT APPLICATION FEE		1,960.00
101-000-600-634	CEMETERY-OPENINGS AND CLOSINGS		2,575.00
101-000-665-000	INTEREST ON INVESTMENTS	1,541.86	
101-000-665-002	DAM LEASE PAYMENTS		17,500.00
101-000-665-003	RENTAL OF FACILITIES		75.00
101-000-665-004	CELLULAR TOWERS		34,228.74
101-000-665-014	CELL TOWER - KEPS ANTENA LEASE		225.00
101-000-671-653	PARK INCOME		200.00
101-000-671-671	MISCELLANEOUS INCOME		53.94
101-000-671-676	PARK DONATIONS		200.00
101-000-671-680	MISC INCOME - TRANSIT TICKETS		105.00
101-000-673-000	SALE OF ASSETS		2,500.00
101-000-679-000	INTERFUND REIMBURSE/BLDG INSPECTION FUND		29,671.80

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
101-101-704-000	WAGES- TRUSTEES (4)	3,397.00	
101-101-723-000	TOWNSHIP DUES	620.00	
101-171-702-000	WAGES- FULL TIME	10,439.34	
101-171-704-000	WAGES- TOWNSHIP SUPERVISOR	1,887.23	
101-171-723-000	SUPERVISOR MEMBERSHIPS AND DUES	1,231.00	
101-171-967-000	SPECIAL PROJECTS	1,661.70	
101-215-702-000	WAGES- FULL TIME	4,543.17	
101-215-704-000	WAGES- CLERK	1,509.78	
101-215-710-000	CLERK EXPENSE ACCOUNT	6.99	
101-215-860-000	CLERK MILEAGE	33.93	
101-215-925-000	CELL PHONE/ DATA	50.00	
101-253-702-000	WAGES- FULL TIME	8,774.40	
101-253-704-000	WAGES- TREASURER	1,509.78	
101-253-723-000	TREASURER MEMBERSHIPS AND DUES	50.00	
101-253-860-000	TREASURER MILEAGE	7.90	
101-257-702-000	WAGES- FULL TIME	16,399.44	
101-257-801-000	ASSESSING CONTRACTUAL SERVICES	2,000.00	
101-257-939-000	ASSESSING SERVICE CONTRACTS	2,180.00	
101-262-707-000	WAGES- CASUAL	1,000.00	
101-265-702-000	WAGES- FULL TIME	20,297.07	
101-265-713-000	OVERTIME	249.73	
101-265-863-000	VEHICLE MAINT	2,227.01	
101-265-864-000	FUEL	141.62	
101-265-921-000	COMPLEX ELECTRICITY		711.92
101-265-924-000	COMPLEX PHONES	965.05	
101-265-931-000	COMPLEX MAINTENANCE	593.51	
101-265-932-000	OFFICE EQUIP/COMPUTER REPAIR	15,600.00	
101-276-921-000	CEMETERY ELECTRICITY	33.46	
101-295-702-000	WAGES- FULL TIME	10,768.00	
101-295-707-000	WAGES- CASUAL	2,677.46	
101-295-727-000	OFFICE SUPPLIES	731.20	
101-295-730-000	POSTAGE		26.95
101-295-787-000	MISCELLANEOUS	120.00	
101-295-939-000	SERVICE CONTRACTS	1,240.00	
101-295-967-000	SPECIAL PROJECTS	75.00	
101-448-926-000	STREETLIGHTING	477.48	
101-721-702-000	WAGES- FULL TIME	14,651.22	
101-721-727-000	COMM DEV SUPPLIES	50.60	
101-756-921-000	PARK ELECTRICITY	569.85	
101-756-935-000	PARK MAINTENANCE	377.68	
101-803-921-000	MUSEUM - ELECTRICITY	74.88	
101-850-715-000	FICA-EMPLOYER	7,211.62	
101-850-716-000	DEFINED CONTRIBUTION PLAN	7,432.20	
101-850-718-000	VISION INSURANCE BENEFITS	356.32	
101-850-718-200	OTHER BENEFITS	35,000.00	
101-850-719-000	HEALTH INSURANCE BENEFITS	36,548.83	
101-850-720-000	LIFE & DIS INSURANCE BENEFITS	2,408.85	
101-850-721-000	DENTAL INSURANCE BENEFITS	3,068.91	
101-850-722-000	PENSION PLAN BENEFITS	8,204.38	
101-965-999-006	TRANSFER TO FIRE FUND	33,333.33	
Total Fund 101 - GENERAL FUND		8,182,250.60	8,182,250.60
DEFICIENCY OF REVENUES/EXPENDITURES - 2021		660,532.27	

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 101 - GENERAL FUND		
*** Assets ***		
101-000-001-001	CASH DRAWER-PETTY CASH	175.00
101-000-001-110	FLAGSTAR BANK - CASH GENERAL FUND	547,215.40
101-000-001-111	GENL CASH RECEIVING & WIRE - FLAGSTAR	970.72
101-000-001-500	GF CASH - K.C. POOL	1,181,191.34
101-000-001-510	MI CLASS CASH - POOL ACCOUNTS	457,384.18
101-000-001-700	CASH - GIFT CARDS	333.04
101-000-003-016	CD- ADVENTURE CREDIT UNION	561,348.57
101-000-003-022	CD- MERCANTILE BANK OF MI M 7/26/22	535,196.94
101-000-003-028	CONSUMER CREDIT UNION M 1/08/2021	271,969.51
101-000-003-038	GRAND RIVER BANK CD M 12/19/20	539,829.11
101-000-003-041	LAKE MICH CREDIT UNION CD M 6/02/2020	1,044,648.34
101-000-003-042	CD MSU FCU	500,015.00
101-000-015-018	MONEY MARKET - HORIZON BANK	527,891.99
101-000-015-019	M/M - FLAGSTAR BANK	588,512.48
101-000-017-405	COMERICA SECURITIES # 148983	500,015.63
101-000-040-000	ACCOUNTS RECEIVABLE	(2,500.00)
	Total Assets	7,254,197.25
*** Liabilities ***		
101-000-202-000	ACCOUNTS PAYABLE	(507.19)
101-000-204-000	ACCRUED PAYROLL	52,390.24
101-000-231-201	HEALTH SAVINGS ACCOUNT WITHHOLDING	2,800.00
101-000-231-205	COBRA	1,056.60
101-000-231-212	FICA W/H	34.72
101-000-231-213	MI W/H	9.64
101-000-231-220	DEPENDENT LIFE W/H	41.70
101-000-231-221	ADDITIONAL LIFE W/H	(185.11)
	Total Liabilities	55,640.60

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
*** Fund Balance ***		
101-000-390-000	FUND BALANCE - UNASSIGNED	3,978,217.99
101-000-391-001	FUND BALANCE - COMMITTED/PENSION 2012	499,543.00
101-000-391-004	FUND BAL - COMMIT FUTURE FACIL IMP 2018	2,500,000.00
	Total Fund Balance	6,977,760.99
	Beginning Fund Balance - 2021	6,977,760.99
	Net of Revenues VS Expenditures - 2021	(660,532.27)
	*2021 End FB/2022 Beg FB	6,317,228.72
	Net of Revenues VS Expenditures - Current Year	881,327.93
	Ending Fund Balance	7,198,556.65
	Total Liabilities And Fund Balance	7,254,197.25

*** Year Not Closed**

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021	2022	ACTIVITY FOR	AVAILABLE	% BDGT
		AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022	BALANCE	
				INCREASE (DECREASE)	NORMAL (ABNORMAL)	USED
Fund 151 - CEMETERY TRUST FUND						
Revenues						
151-000-600-634	CEMETERY-OPENINGS AND CLOSINGS	1,500.00	1,500.00	0.00	1,500.00	0.00
151-000-600-636	CEMETERY-CARE FEE	3,500.00	5,000.00	0.00	5,000.00	0.00
151-000-665-000	INTEREST ON INVESTMENTS	580.00	580.00	0.00	580.00	0.00
TOTAL REVENUES		5,580.00	7,080.00	0.00	7,080.00	0.00
Expenditures						
Dept 276 - CEMETERY						
151-276-787-000	MISCELLANEOUS	500.00	1,000.00	0.00	1,000.00	0.00
151-276-931-000	MAINT & REPAIR/IMPROVEMENTS	2,000.00	2,000.00	0.00	2,000.00	0.00
Total Dept 276 - CEMETERY		2,500.00	3,000.00	0.00	3,000.00	0.00
Fund 151 - CEMETERY TRUST FUND:						
TOTAL REVENUES		5,580.00	7,080.00	0.00	7,080.00	0.00
TOTAL EXPENDITURES		2,500.00	3,000.00	0.00	3,000.00	0.00
NET OF REVENUES & EXPENDITURES		3,080.00	4,080.00	0.00	4,080.00	0.00

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
 PERIOD ENDING 01/31/2022
 PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 151 - CEMETERY TRUST FUND			
151-000-015-005	MONEY MARKET LAKE MICH CR UN 12/15	126,305.78	
151-000-390-000	FUND BALANCE		113,574.15
151-000-391-001	FUND BALANCE-COMMITTED WHITNEYVILLE M 11		5,000.00
Total Fund 151 - CEMETERY TRUST FUND		126,305.78	126,305.78
NET OF REVENUES/EXPENDITURES - 2021			7,731.63

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

<u>GL Number</u>	<u>Description</u>	<u>Balance</u>
Fund 151 - CEMETERY TRUST FUND		
*** Assets ***		
151-000-015-005	MONEY MARKET LAKE MICH CR UN 12/15	126,305.78
	Total Assets	<u>126,305.78</u>
*** Liabilities ***		
	Total Liabilities	<u>0.00</u>
*** Fund Balance ***		
151-000-390-000	FUND BALANCE	113,574.15
151-000-391-001	FUND BALANCE-COMMITTED WHITNEYVILLE M	5,000.00
	Total Fund Balance	<u>118,574.15</u>
	Beginning Fund Balance - 2021	<u>118,574.15</u>
	Net of Revenues VS Expenditures - 2021	<u>7,731.63</u>
	*2021 End FB/2022 Beg FB	<u>126,305.78</u>
	Net of Revenues VS Expenditures - Current Year	<u>0.00</u>
	Ending Fund Balance	<u>126,305.78</u>
	Total Liabilities And Fund Balance	<u>126,305.78</u>

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021	2022	ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)	BALANCE NORMAL (ABNORMAL)	
Fund 206 - FIRE FUND						
Revenues						
206-000-401-402	TAX LEVY	1,984,926.00	2,036,618.65	1,251,651.84	784,966.81	61.46
206-000-401-410	PERSONAL PROPERTY TAX	140,813.00	131,860.21	26,436.75	105,423.46	20.05
206-000-401-412	DELINQUENT TAXES-LEVY	5,500.00	5,000.00	0.00	5,000.00	0.00
206-000-401-437	ABATEMENT TAXES-LEVY	23,460.00	19,899.32	1,137.49	18,761.83	5.72
206-000-401-445	PENALTIES & INTEREST ON TAXES	450.00	450.00	0.00	450.00	0.00
206-000-543-000	STATE GRANT- ROBOTIC MANIQUIN	4,200.00	0.00	0.00	0.00	0.00
206-000-573-000	LOCAL COMMUNITY STABILIZATION SHARE	33,399.26	38,623.64	0.00	38,623.64	0.00
206-000-655-661	DISTRICT COURT FINES	54.45	100.00	0.00	100.00	0.00
206-000-665-000	INTEREST REVENUE	40,000.00	5,500.00	0.00	5,500.00	0.00
206-000-671-671	MISCELLANEOUS INCOME	250.00	250.00	0.00	250.00	0.00
206-000-671-675	DONATIONS	500.00	500.00	0.00	500.00	0.00
206-000-671-683	REIMBURSEMENTS/REFUNDS	250.00	250.00	0.00	250.00	0.00
206-000-699-000	TRANSFER IN	444,323.00	444,323.00	33,333.33	410,989.67	7.50
TOTAL REVENUES		2,678,125.71	2,683,374.82	1,312,559.41	1,370,815.41	48.91
Expenditures						
Dept 336 - FIRE DEPARTMENT						
206-336-702-000	WAGES- FULL TIME	1,420,300.00	1,396,018.00	63,552.92	1,332,465.08	4.55
206-336-702-001	WAGES- DEPARTMENT HEAD	0.00	104,472.00	0.00	104,472.00	0.00
206-336-703-200	ASSIGNABLE SALARY	34,902.00	25,000.00	0.00	25,000.00	0.00
206-336-707-000	WAGES- CASUAL	150,000.00	150,000.00	15,574.46	134,425.54	10.38
206-336-713-000	OVERTIME	115,000.00	100,000.00	5,923.48	94,076.52	5.92
206-336-723-000	FIRE MEMBERSHIP AND DUES	2,800.00	3,000.00	643.18	2,356.82	21.44
206-336-725-000	FIRE TUITION	5,000.00	7,000.00	0.00	7,000.00	0.00
206-336-726-000	FIRE TRAINING	30,500.00	38,620.00	0.00	38,620.00	0.00
206-336-727-000	FIRE OFFICE SUPPLIES	4,100.00	7,000.00	419.41	6,580.59	5.99
206-336-738-000	FIRE MAINT SUPPLIES	1,700.00	1,700.00	0.00	1,700.00	0.00
206-336-745-000	FIRE FUELS	20,000.00	22,000.00	0.00	22,000.00	0.00
206-336-752-000	SUPPLIES	2,500.00	2,500.00	40.67	2,459.33	1.63
206-336-752-100	MEDICAL SUPPLIES	7,000.00	8,000.00	685.08	7,314.92	8.56
206-336-768-000	FIRE UNIFORMS	14,000.00	16,000.00	546.50	15,453.50	3.42
206-336-787-000	MISCELLANEOUS	4,000.00	4,000.00	164.94	3,835.06	4.12
206-336-790-000	FIRE PREVENTION - INVESTIGATION	0.00	3,000.00	0.00	3,000.00	0.00
206-336-791-000	TECH RESCUE	0.00	4,500.00	0.00	4,500.00	0.00
206-336-792-000	HEALTH-WELLNESS	0.00	2,000.00	0.00	2,000.00	0.00
206-336-802-000	CONTRACTUAL SERVICES	16,000.00	20,000.00	0.00	20,000.00	0.00
206-336-803-000	FIRE FIGHTER HIRING	2,000.00	2,000.00	372.94	1,627.06	18.65
206-336-804-000	RESPIRATORY PROGRAM	8,600.00	10,375.00	0.00	10,375.00	0.00
206-336-807-000	FIRE AUDIT FEES & SERVICES	2,820.00	2,903.00	0.00	2,903.00	0.00
206-336-810-000	LIABILITY INSURANCE	23,781.30	23,781.00	0.00	23,781.00	0.00
206-336-826-000	FIRE LEGAL FEES	1,000.00	0.00	0.00	0.00	0.00
206-336-850-000	COMMUNICATIONS	14,500.00	15,000.00	890.45	14,109.55	5.94
206-336-860-000	FIRE MILEAGE	0.00	0.00	80.73	(80.73)	100.00
206-336-863-000	VEHICLE MAINT	52,000.00	55,000.00	2,605.12	52,394.88	4.74
206-336-887-000	FIRE PUBLIC RELATIONS	4,600.00	8,800.00	0.00	8,800.00	0.00
206-336-901-000	FIRE PUBLICATIONS	1,500.00	1,500.00	0.00	1,500.00	0.00
206-336-928-000	UTILITIES	18,820.00	25,000.00	2,254.75	22,745.25	9.02
206-336-932-000	FIRE OFF EQUIP & COMPUTER REPA	9,000.00	9,800.00	7,800.00	2,000.00	79.59
206-336-932-400	GRANT -ROBOTIC MANIQUIN TRAINING	4,200.00	0.00	0.00	0.00	0.00
206-336-936-000	FIRE STATION MAINT	12,000.00	6,000.00	484.77	5,515.23	8.08
206-336-936-002	FIRE STATION MAINT/BUTTRICK	28,000.00	30,000.00	75.53	29,924.47	0.25
206-336-937-000	FIRE RADIO MAINT	12,000.00	10,000.00	0.00	10,000.00	0.00
206-336-938-000	FIRE EQUIPMENT MAINT	10,000.00	12,000.00	21.97	11,978.03	0.18
206-336-939-000	FIRE COPIER/LEASE/SERVICE	3,100.00	0.00	0.00	0.00	0.00
206-336-941-000	FIRE POSTAGE & MACHINE LEASE	900.00	900.00	0.00	900.00	0.00
206-336-950-000	PROPERTY TAX REFUNDS	500.00	0.00	0.00	0.00	0.00
206-336-957-000	FIRE PHYSICAL EXAMS	16,000.00	18,000.00	0.00	18,000.00	0.00
206-336-958-000	FIRE SUPPLEMENTAL EQUIPMENT	7,000.00	6,000.00	0.00	6,000.00	0.00
206-336-959-000	FIRE PROTECTIVE CLOTHING	37,000.00	39,500.00	601.44	38,898.56	1.52
206-336-981-000	OFFICE EQUIPMENT	10,000.00	12,000.00	0.00	12,000.00	0.00
Total Dept 336 - FIRE DEPARTMENT		2,107,123.30	2,203,369.00	102,738.34	2,100,630.66	4.66
Dept 850 - BENEFITS/INSURANCE						
206-850-715-000	FICA-EMPLOYER	131,476.00	133,718.00	10,034.25	123,683.75	7.50
206-850-716-000	DEFINED CONTRIBUTION PLAN	118,411.00	132,721.00	9,833.74	122,887.26	7.41
206-850-717-000	WORKERS COMP INSURANCE	143,335.00	135,000.00	0.00	135,000.00	0.00
206-850-718-000	VISION INSURANCE BENEFITS	2,761.00	2,652.00	476.76	2,175.24	17.98
206-850-718-200	OTHER BENEFITS	39,997.00	30,800.00	29,400.00	1,400.00	95.45
206-850-718-300	OTHER BENEFITS- PTO BUYBACK PROGRAM	22,500.00	18,000.00	0.00	18,000.00	0.00

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021		2022		ACTIVITY FOR	AVAILABLE	% BDGT
		AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022	BALANCE	
						INCREASE (DECREASE)	NORMAL (ABNORMAL)	USED
206-850-719-000	HEALTH INSURANCE BENEFITS	243,072.00	207,888.00	207,888.00	207,888.00	43,792.14	164,095.86	21.07
206-850-719-100	OPT-OUT INSURANCE	12,000.00	12,000.00	12,000.00	12,000.00	0.00	12,000.00	0.00
206-850-720-000	LIFE & DISABILITY INSURANCE	14,407.00	19,186.00	19,186.00	19,186.00	3,026.70	16,159.30	15.78
206-850-721-000	DENTAL INSURANCE BENEFITS	22,679.00	23,172.00	23,172.00	23,172.00	4,139.08	19,032.92	17.86
206-850-722-000	PENSION PLAN BENEFITS	75,240.00	85,000.00	85,000.00	85,000.00	10,045.65	74,954.35	11.82
Total Dept 850 - BENEFITS/INSURANCE		825,878.00	800,137.00	800,137.00	800,137.00	110,748.32	689,388.68	13.84
Dept 901 - CAPITAL OUTLAY								
206-901-970-000	CAPITAL OUTLAY - FFE	141,250.00	0.00	0.00	0.00	0.00	0.00	0.00
206-901-974-000	CAPITAL OUTLAY - LAND IMP	35,000.00	0.00	0.00	0.00	0.00	0.00	0.00
206-901-975-000	CAPITAL OUTLAY - BLDGIMP	150,000.00	150,000.00	150,000.00	150,000.00	9,371.53	140,628.47	6.25
Total Dept 901 - CAPITAL OUTLAY		326,250.00	150,000.00	150,000.00	150,000.00	9,371.53	140,628.47	6.25
Dept 965 - TRANSFERS OUT								
206-965-999-208	TRANSFER TO HAZMAT	2,000.00	2,000.00	2,000.00	2,000.00	0.00	2,000.00	0.00
Total Dept 965 - TRANSFERS OUT		2,000.00	2,000.00	2,000.00	2,000.00	0.00	2,000.00	0.00
Fund 206 - FIRE FUND:								
TOTAL REVENUES		2,678,125.71	2,683,374.82	2,683,374.82	2,683,374.82	1,312,559.41	1,370,815.41	48.91
TOTAL EXPENDITURES		3,261,251.30	3,155,506.00	3,155,506.00	3,155,506.00	222,858.19	2,932,647.81	7.06
NET OF REVENUES & EXPENDITURES		(583,125.59)	(472,131.18)	(472,131.18)	(472,131.18)	1,089,701.22	(1,561,832.40)	230.80

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 206 - FIRE FUND			
206-000-001-001	CASH DRAWER-PETTY CASH	80.00	
206-000-001-510	MI CLASS CASH - POOL ACCOUNTS	706,837.12	
206-000-002-001	CASH/SAVINGS- FLAGSTAR BANK	1,067,812.08	
206-000-003-000	53RD -CASH	0.05	
206-000-003-015	CD - COMMUNITY WEST CR UN	5.00	
206-000-003-028	CD ONSUMER CREDIT UNION	277,394.10	
206-000-003-032	COMMUNITY CHOICE CR UN M 4/18/21	278,486.90	
206-000-003-035	ADVENTURE CR UNION M 2/23/20	517,061.41	
206-000-015-005	MONEY MARKET LAKE MICH CR UN	5.00	
206-000-202-000	ACCOUNTS PAYABLE		402.63
206-000-231-205	COBRA		4,038.20
206-000-390-000	FUND BALANCE		2,355,599.90
206-000-401-402	TAX LEVY		1,251,651.84
206-000-401-410	PERSONAL PROPERTY TAX		26,436.75
206-000-401-437	ABATEMENT TAXES-LEVY		1,137.49
206-000-699-000	TRANSFER IN		33,333.33
206-336-702-000	WAGES- FULL TIME	63,552.92	
206-336-707-000	WAGES- CASUAL	15,574.46	
206-336-713-000	OVERTIME	5,923.48	
206-336-723-000	FIRE MEMBERSHIP AND DUES	643.18	
206-336-727-000	FIRE OFFICE SUPPLIES	419.41	
206-336-752-000	SUPPLIES	40.67	
206-336-752-100	MEDICAL SUPPLIES	685.08	
206-336-768-000	FIRE UNIFORMS	546.50	
206-336-787-000	MISCELLANEOUS	164.94	
206-336-803-000	FIRE FIGHTER HIRING	372.94	
206-336-850-000	COMMUNICATIONS	890.45	
206-336-860-000	FIRE MILEAGE	80.73	
206-336-863-000	VEHICLE MAINT	2,605.12	
206-336-928-000	UTILITIES	2,254.75	
206-336-932-000	FIRE OFF EQUIP & COMPUTER REPA	7,800.00	
206-336-936-000	FIRE STATION MAINT	484.77	
206-336-936-002	FIRE STATION MAINT/BUTTRICK	75.53	
206-336-938-000	FIRE EQUIPMENT MAINT	21.97	
206-336-959-000	FIRE PROTECTIVE CLOTHING	601.44	
206-850-715-000	FICA-EMPLOYER	10,034.25	
206-850-716-000	DEFINED CONTRIBUTION PLAN	9,833.74	
206-850-718-000	VISION INSURANCE BENEFITS	476.76	
206-850-718-200	OTHER BENEFITS	29,400.00	
206-850-719-000	HEALTH INSURANCE BENEFITS	43,792.14	
206-850-720-000	LIFE & DISABILITY INSURANCE	3,026.70	
206-850-721-000	DENTAL INSURANCE BENEFITS	4,139.08	
206-850-722-000	PENSION PLAN BENEFITS	10,045.65	
206-901-975-000	CAPITAL OUTLAY - BLDGIMP	9,371.53	
Total Fund 206 - FIRE FUND		3,672,600.14	3,672,600.14
DEFICIENCY OF REVENUES/EXPENDITURES - 2021		602,060.29	

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 206 - FIRE FUND		
*** Assets ***		
206-000-001-001	CASH DRAWER-PETTY CASH	80.00
206-000-001-510	MI CLASS CASH - POOL ACCOUNTS	706,837.12
206-000-002-001	CASH/SAVINGS- FLAGSTAR BANK	1,067,812.08
206-000-003-000	53RD -CASH	0.05
206-000-003-015	CD - COMMUNITY WEST CR UN	5.00
206-000-003-028	CD ONSUMER CREDIT UNION	277,394.10
206-000-003-032	COMMUNITY CHOICE CR UN M 4/18/21	278,486.90
206-000-003-035	ADVENTURE CR UNION M 2/23/20	517,061.41
206-000-015-005	MONEY MARKET LAKE MICH CR UN	5.00
	Total Assets	2,847,681.66
*** Liabilities ***		
206-000-202-000	ACCOUNTS PAYABLE	402.63
206-000-231-205	COBRA	4,038.20
	Total Liabilities	4,440.83
*** Fund Balance ***		
206-000-390-000	FUND BALANCE	2,355,599.90
	Total Fund Balance	2,355,599.90
	Beginning Fund Balance - 2021	2,355,599.90
	Net of Revenues VS Expenditures - 2021	(602,060.29)
	*2021 End FB/2022 Beg FB	1,753,539.61
	Net of Revenues VS Expenditures - Current Year	1,089,701.22
	Ending Fund Balance	2,843,240.83
	Total Liabilities And Fund Balance	2,847,681.66

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	ACTIVITY FOR			AVAILABLE BALANCE NORMAL (ABNORMAL)	% BDGT USED
		2021 AMENDED BUDGET	2022 AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)		
Fund 207 - POLICE FUND						
Revenues						
207-000-401-402	TAX LEVY	691,029.00	716,781.98	436,738.77	280,043.21	60.93
207-000-401-410	PERSONAL PROPERTY TAX	49,150.00	46,009.73	9,224.27	36,785.46	20.05
207-000-401-412	DELINQUENT TAXES-LEVY	4,000.00	3,000.00	0.00	3,000.00	0.00
207-000-401-437	ABATEMENT TAXES-LEVY	8,189.00	6,943.74	396.90	6,546.84	5.72
207-000-401-445	INTEREST & PENALTIES ON TAX	150.00	150.00	0.00	150.00	0.00
207-000-573-000	LOCAL COMMUNITY STABILIZATION SHARE	11,609.00	13,481.84	0.00	13,481.84	0.00
207-000-665-000	INTEREST REVENUE	12,000.00	47,625.00	0.00	47,625.00	0.00
TOTAL REVENUES		776,127.00	833,992.29	446,359.94	387,632.35	53.52
Expenditures						
Dept 301 - POLICE DEPARTMENT						
207-301-787-000	MISCELLANEOUS	25,000.00	5,000.00	0.00	5,000.00	0.00
207-301-801-000	SHERIFF PROTECTION	665,000.00	685,000.00	(61,368.94)	746,368.94	(8.96)
207-301-950-000	PROPERTY TAX REFUNDS	400.00	1,000.00	0.00	1,000.00	0.00
TOTAL EXPENDITURES		690,400.00	691,000.00	(61,368.94)	752,368.94	(8.88)
Fund 207 - POLICE FUND:						
TOTAL REVENUES		776,127.00	833,992.29	446,359.94	387,632.35	53.52
TOTAL EXPENDITURES		690,400.00	691,000.00	(61,368.94)	752,368.94	8.88
NET OF REVENUES & EXPENDITURES		85,727.00	142,992.29	507,728.88	(364,736.59)	355.07

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 207 - POLICE FUND			
207-000-003-000	CASH-POLICE FUND - 53RD SECURITIES	0.05	
207-000-003-033	CD - PRIVATE BANK M 9/25/19	788,499.63	
207-000-003-041	LAKE MICH CREDIT UNION CD	412,762.10	
207-000-015-019	POLICE M/M FLAGSTAR BANK	691,303.37	
207-000-015-020	NORTHPOINTE MMA	277,974.99	
207-000-390-000	FUND BALANCE		1,335,958.06
207-000-391-001	FUND BALANCE - COMMITTED/ PP TAX 2012		230,000.00
207-000-401-402	TAX LEVY		436,738.77
207-000-401-410	PERSONAL PROPERTY TAX		9,224.27
207-000-401-437	ABATEMENT TAXES-LEVY		396.90
207-301-801-000	SHERIFF PROTECTION		61,368.94
Total Fund 207 - POLICE FUND		2,170,540.14	2,170,540.14
NET OF REVENUES/EXPENDITURES - 2021			96,853.20

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 207 - POLICE FUND		
*** Assets ***		
207-000-003-000	CASH-POLICE FUND - 53RD SECURITIES	0.05
207-000-003-033	CD - PRIVATE BANK M 9/25/19	788,499.63
207-000-003-041	LAKE MICH CREDIT UNION CD	412,762.10
207-000-015-019	POLICE M/M FLAGSTAR BANK	691,303.37
207-000-015-020	NORTHPOINTE MMA	277,974.99
	Total Assets	2,170,540.14
*** Liabilities ***		
	Total Liabilities	0.00
*** Fund Balance ***		
207-000-390-000	FUND BALANCE	1,335,958.06
207-000-391-001	FUND BALANCE - COMMITTED/ PP TAX 2012	230,000.00
	Total Fund Balance	1,565,958.06
	Beginning Fund Balance - 2021	1,565,958.06
	Net of Revenues VS Expenditures - 2021	96,853.20
	*2021 End FB/2022 Beg FB	1,662,811.26
	Net of Revenues VS Expenditures - Current Year	507,728.88
	Ending Fund Balance	2,170,540.14
	Total Liabilities And Fund Balance	2,170,540.14

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.
PRE-AUDIT

GL NUMBER	DESCRIPTION	2021		2022		ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)	BALANCE NORMAL (ABNORMAL)	
Fund 208 - HAZMAT FUND								
Revenues								
208-000-581-000	LOCAL CONTRIBUTIONS	4,000.00	4,000.00			0.00	4,000.00	0.00
208-000-665-000	HAZMAT INTEREST	120.00	120.00			0.00	120.00	0.00
208-000-699-000	TRANSFER IN	2,000.00	2,000.00			0.00	2,000.00	0.00
TOTAL REVENUES		6,120.00	6,120.00			0.00	6,120.00	0.00
Expenditures								
Dept 344 - HAZMAT								
208-344-726-000	HAZMAT SUPPLIES	500.00	500.00			0.00	500.00	0.00
208-344-787-000	MISCELLANEOUS	1,500.00	1,500.00			0.00	1,500.00	0.00
208-344-789-000	HAZMAT TRAINING	3,000.00	3,000.00			0.00	3,000.00	0.00
208-344-958-000	HAZMAT EQUIPMENT	3,000.00	3,000.00			0.00	3,000.00	0.00
TOTAL EXPENDITURES		8,000.00	8,000.00			0.00	8,000.00	0.00
Fund 208 - HAZMAT FUND:								
TOTAL REVENUES		6,120.00	6,120.00			0.00	6,120.00	0.00
TOTAL EXPENDITURES		8,000.00	8,000.00			0.00	8,000.00	0.00
NET OF REVENUES & EXPENDITURES		(1,880.00)	(1,880.00)			0.00	(1,880.00)	0.00

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 208 - HAZMAT FUND			
208-000-015-005	MM LAKE MICH CR UN 112010265771	43,836.55	
208-000-390-000	FUND BALANCE		38,325.64
Total Fund 208 - HAZMAT FUND		43,836.55	43,836.55
NET OF REVENUES/EXPENDITURES - 2021			5,510.91

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 208 - HAZMAT FUND		
*** Assets ***		
208-000-015-005	MM LAKE MICH CR UN 112010265771	43,836.55
	Total Assets	43,836.55
*** Liabilities ***		
	Total Liabilities	0.00
*** Fund Balance ***		
208-000-390-000	FUND BALANCE	38,325.64
	Total Fund Balance	38,325.64
	Beginning Fund Balance - 2021	38,325.64
	Net of Revenues VS Expenditures - 2021	5,510.91
	*2021 End FB/2022 Beg FB	43,836.55
	Net of Revenues VS Expenditures - Current Year	0.00
	Ending Fund Balance	43,836.55
	Total Liabilities And Fund Balance	43,836.55
* Year Not Closed		

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021	2022	ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)	BALANCE NORMAL (ABNORMAL)	
Fund 209 - CCT OPEN SPACE						
Revenues						
209-000-401-402	TAX LEVY	347,090.00	359,160.58	218,837.73	140,322.85	60.93
209-000-401-410	PERSONAL PROPERTY TAX	24,623.00	23,054.00	4,621.91	18,432.09	20.05
209-000-401-412	DELINQUENT TAXES-LEVY	1,000.00	1,000.00	0.00	1,000.00	0.00
209-000-401-437	ABATEMENT TAXES-LEVY	4,102.00	3,479.43	198.89	3,280.54	5.72
209-000-401-445	INTEREST & PENALTIES ON TAXES	75.00	75.00	0.00	75.00	0.00
209-000-573-000	LOCAL COMMUNITY STABILIZATION SHARE	13,665.56	15,753.04	0.00	15,753.04	0.00
209-000-665-000	INTEREST ON INVESTMENTS	500.00	2,500.00	0.00	2,500.00	0.00
209-000-665-408	INTEREST ON HOMEYER FUND	1,000.00	1,000.00	0.00	1,000.00	0.00
TOTAL REVENUES		392,055.56	406,022.05	223,658.53	182,363.52	55.09
Expenditures						
Dept 751 - OPEN SPACE PRESERVATION						
209-751-921-000	ELECTRICITY	2,800.00	3,000.00	312.78	2,687.22	10.43
209-751-923-000	HEATING/UTILITY	2,000.00	2,000.00	0.00	2,000.00	0.00
209-751-927-000	WATER-SEWER	1,000.00	1,000.00	0.00	1,000.00	0.00
209-751-935-000	PARK MAINTENANCE	20,000.00	20,000.00	0.00	20,000.00	0.00
209-751-950-000	TAX REFUNDS	250.00	250.00	0.00	250.00	0.00
TOTAL EXPENDITURES		26,050.00	26,250.00	312.78	25,937.22	1.19
Dept 990 - DEBT SERVICE						
209-990-991-201	BOND PRINCIPAL REFINANCE	279,000.00	284,000.00	0.00	284,000.00	0.00
209-990-992-201	BOND INTEREST REFINANCE	43,873.00	38,412.00	0.00	38,412.00	0.00
Total Dept 990 - DEBT SERVICE		322,873.00	322,412.00	0.00	322,412.00	0.00
Fund 209 - CCT OPEN SPACE:						
TOTAL REVENUES		392,055.56	406,022.05	223,658.53	182,363.52	55.09
TOTAL EXPENDITURES		348,923.00	348,662.00	312.78	348,349.22	0.09
NET OF REVENUES & EXPENDITURES		43,132.56	57,360.05	223,345.75	(165,985.70)	389.38

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 209 - CCT OPEN SPACE			
209-000-001-100	CASH -CHEM	657,107.36	
209-000-001-550	MI CLASS CASH - POOL ACCT/HOMEYER	380,303.34	
209-000-390-000	FUND BALANCE		410,443.92
209-000-391-004	FUND BALANCE - COMMITTTED HOMEYER 12/15		356,412.12
209-000-401-402	TAX LEVY		218,837.73
209-000-401-410	PERSONAL PROPERTY TAX		4,621.91
209-000-401-437	ABATEMENT TAXES-LEVY		198.89
209-751-921-000	ELECTRICITY	312.78	
Total Fund 209 - CCT OPEN SPACE		1,037,723.48	1,037,723.48
NET OF REVENUES/EXPENDITURES - 2021			47,208.91

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
 Fund 209 - CCT OPEN SPACE		
*** Assets ***		
209-000-001-100	CASH -CHEM	657,107.36
209-000-001-550	MI CLASS CASH - POOL ACCT/HOMEYER	380,303.34
	Total Assets	1,037,410.70
 *** Liabilities ***		
	Total Liabilities	0.00
 *** Fund Balance ***		
209-000-390-000	FUND BALANCE	410,443.92
209-000-391-004	FUND BALANCE - COMMITTTED HOMEYER 12/15	356,412.12
	Total Fund Balance	766,856.04
	Beginning Fund Balance - 2021	766,856.04
	Net of Revenues VS Expenditures - 2021	47,208.91
	*2021 End FB/2022 Beg FB	814,064.95
	Net of Revenues VS Expenditures - Current Year	223,345.75
	Ending Fund Balance	1,037,410.70
	Total Liabilities And Fund Balance	1,037,410.70

*** Year Not Closed**

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.
PRE-AUDIT

GL NUMBER	DESCRIPTION	2021		2022		ACTIVITY FOR MONTH 01/31/2022 INCREASE (DECREASE)	AVAILABLE BALANCE NORMAL (ABNORMAL)	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET			
Fund 211 - DAM MAJOR REPAIR FUND								
Revenues								
211-000-665-000	INTEREST REVENUE	8,000.00	6,000.00	0.00	6,000.00	0.00	6,000.00	0.00
211-000-675-000	CONTRIBUTIONS	5,000.00	5,000.00	0.00	5,000.00	0.00	5,000.00	0.00
211-000-699-101	TRANSFER FROM GENERAL FUND	40,000.00	40,000.00	0.00	40,000.00	0.00	40,000.00	0.00
TOTAL REVENUES		53,000.00	51,000.00	0.00	51,000.00	0.00	51,000.00	0.00
Expenditures								
Dept 901 - CAPITAL OUTLAY								
211-901-980-000	EXPENSES/DAM MAJOR REPAIR	85,000.00	85,000.00	0.00	85,000.00	0.00	85,000.00	0.00
TOTAL EXPENDITURES		85,000.00	85,000.00	0.00	85,000.00	0.00	85,000.00	0.00
<hr/>								
Fund 211 - DAM MAJOR REPAIR FUND:								
TOTAL REVENUES		53,000.00	51,000.00	0.00	51,000.00	0.00	51,000.00	0.00
TOTAL EXPENDITURES		85,000.00	85,000.00	0.00	85,000.00	0.00	85,000.00	0.00
NET OF REVENUES & EXPENDITURES		(32,000.00)	(34,000.00)	0.00	(34,000.00)	0.00	(34,000.00)	0.00

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 211 - DAM MAJOR REPAIR FUND			
211-000-001-510	MI CLASS CASH - POOL ACCOUNTS	214,942.71	
211-000-003-014	CD - LAKE MICH CR UN 3/10/2020	348,202.46	
211-000-390-000	FUND BALANCE		261,246.93
211-000-391-001	FUND BALANCE-COMMITTED/FUTURE REPAIRS12		250,000.00
Total Fund 211 - DAM MAJOR REPAIR FUND		563,145.17	563,145.17
NET OF REVENUES/EXPENDITURES - 2021			51,898.24

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

<u>GL Number</u>	<u>Description</u>	<u>Balance</u>
Fund 211 - DAM MAJOR REPAIR FUND		
*** Assets ***		
211-000-001-510	MI CLASS CASH - POOL ACCOUNTS	214,942.71
211-000-003-014	CD - LAKE MICH CR UN 3/10/2020	348,202.46
	Total Assets	563,145.17
*** Liabilities ***		
	Total Liabilities	0.00
*** Fund Balance ***		
211-000-390-000	FUND BALANCE	261,246.93
211-000-391-001	FUND BALANCE-COMMITTED/FUTURE REPAIRS12	250,000.00
	Total Fund Balance	511,246.93
	Beginning Fund Balance - 2021	511,246.93
	Net of Revenues VS Expenditures - 2021	51,898.24
	*2021 End FB/2022 Beg FB	563,145.17
	Net of Revenues VS Expenditures - Current Year	0.00
	Ending Fund Balance	563,145.17
	Total Liabilities And Fund Balance	563,145.17

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021 AMENDED BUDGET	2022 AMENDED BUDGET	ACTIVITY FOR MONTH 01/31/2022		AVAILABLE BALANCE NORMAL (ABNORMAL)	% BDGT USED
				INCREASE	(DECREASE)		
Fund 216 - PATHWAYS FUND							
Revenues							
216-000-401-402	TAX LEVY	530,414.00	548,902.11	334,460.81		214,441.30	60.93
216-000-401-410	PERSONAL PROPERTY TAX	37,626.00	35,231.87	7,063.52		28,168.35	20.05
216-000-401-412	DELINQUENT TAX LEVY	1,200.00	1,500.00	0.00		1,500.00	0.00
216-000-401-437	ABATEMENT TAXES-LEVY	6,269.00	5,317.11	303.93		5,013.18	5.72
216-000-401-445	PENALTIES & INTEREST ON TAX	120.00	120.00	0.00		120.00	0.00
216-000-573-000	LOCAL COMMUNITY STABILIZATION SHARE	20,886.24	24,074.51	0.00		24,074.51	0.00
216-000-665-000	INTEREST REVENUE	10,500.00	31,220.00	0.00		31,220.00	0.00
TOTAL REVENUES		607,015.24	646,365.60	341,828.26		304,537.34	52.88
Expenditures							
Dept 758 - PATHWAYS							
216-758-728-000	OPERATING SUPPLIES	18,000.00	18,000.00	0.00		18,000.00	0.00
216-758-821-100	ENGINEERING	15,000.00	15,000.00	0.00		15,000.00	0.00
216-758-931-000	MAINT & REPAIR	192,000.00	250,000.00	0.00		250,000.00	0.00
216-758-931-200	PATHWAY MAINTENANCE	50,974.00	50,974.00	0.00		50,974.00	0.00
216-758-950-000	PROPERTY TAX REFUNDS	300.00	300.00	0.00		300.00	0.00
TOTAL EXPENDITURES		276,274.00	334,274.00	0.00		334,274.00	0.00
Dept 901 - CAPITAL OUTLAY							
216-901-970-000	CAPITAL OUTLAY - FFE	34,000.00	0.00	0.00		0.00	0.00
216-901-974-000	CAPITAL OUTLAY - LANDIMP	395,000.00	0.00	0.00		0.00	0.00
Total Dept 901 - CAPITAL OUTLAY		429,000.00	0.00	0.00		0.00	0.00
<hr/>							
Fund 216 - PATHWAYS FUND:							
TOTAL REVENUES		607,015.24	646,365.60	341,828.26		304,537.34	52.88
TOTAL EXPENDITURES		705,274.00	334,274.00	0.00		334,274.00	0.00
NET OF REVENUES & EXPENDITURES		(98,258.76)	312,091.60	341,828.26		(29,736.66)	109.53

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 216 - PATHWAYS FUND			
216-000-001-510	MI CLASS CASH - POOL ACCOUNTS	108,699.53	
216-000-003-038	GRAND RIVER BANK M 10/4/19	518,170.99	
216-000-015-025	PATHWAYS M/M MACATAWA BANK	423,612.97	
216-000-202-000	ACCOUNTS PAYABLE		179,656.88
216-000-390-000	FUND BALANCE		660,037.17
216-000-401-402	TAX LEVY		334,460.81
216-000-401-410	PERSONAL PROPERTY TAX		7,063.52
216-000-401-437	ABATEMENT TAXES-LEVY		303.93
Total Fund 216 - PATHWAYS FUND		1,181,522.31	1,181,522.31
DEFICIENCY OF REVENUES/EXPENDITURES - 2021		131,038.82	

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 216 - PATHWAYS FUND		
*** Assets ***		
216-000-001-510	MI CLASS CASH - POOL ACCOUNTS	108,699.53
216-000-003-038	GRAND RIVER BANK M 10/4/19	518,170.99
216-000-015-025	PATHWAYS M/M MACATAWA BANK	423,612.97
	Total Assets	1,050,483.49
*** Liabilities ***		
216-000-202-000	ACCOUNTS PAYABLE	179,656.88
	Total Liabilities	179,656.88
*** Fund Balance ***		
216-000-390-000	FUND BALANCE	660,037.17
	Total Fund Balance	660,037.17
	Beginning Fund Balance - 2021	660,037.17
	Net of Revenues VS Expenditures - 2021	(131,038.82)
	*2021 End FB/2022 Beg FB	528,998.35
	Net of Revenues VS Expenditures - Current Year	341,828.26
	Ending Fund Balance	870,826.61
	Total Liabilities And Fund Balance	1,050,483.49

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021		2022		ACTIVITY FOR		AVAILABLE		% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022	INCREASE (DECREASE)	BALANCE	NORMAL (ABNORMAL)	
Fund 220 - LARAWAY LAKE IMPROVEMENT FUND										
Revenues										
220-000-672-013	S/A REVENUE - LARAWAY LAKE	0.00	0.00	0.00	0.00	7,548.90		(7,548.90)		100.00
TOTAL REVENUES		0.00	0.00	0.00	0.00	7,548.90		(7,548.90)		100.00
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Fund 220 - LARAWAY LAKE IMPROVEMENT FUND:										
TOTAL REVENUES		0.00	0.00	0.00	0.00	7,548.90		(7,548.90)		100.00
TOTAL EXPENDITURES		0.00	0.00	0.00	0.00	0.00		0.00		0.00
NET OF REVENUES & EXPENDITURES		0.00	0.00	0.00	0.00	7,548.90		(7,548.90)		100.00

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 220 - LARAWAY LAKE IMPROVEMENT FUND			
220-000-001-110	FLAGSTAR BANK - CASH	7,548.90	
220-000-030-013	S/A RECEIVALBE - LARAWAY LAKE		7,548.90
220-000-339-013	DEFERRED REVENUE- LARAWAY LAKE	7,548.90	
220-000-672-013	S/A REVENUE - LARAWAY LAKE		7,548.90
Total Fund 220 - LARAWAY LAKE IMPROVEMENT FUND		15,097.80	15,097.80

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 220 - LARAWAY LAKE IMPROVEMENT FUND		
*** Assets ***		
220-000-001-110	FLAGSTAR BANK - CASH	7,548.90
220-000-030-013	S/A RECEIVALBE - LARAWAY LAKE	(7,548.90)
	Total Assets	0.00
*** Liabilities ***		
220-000-339-013	DEFERRED REVENUE- LARAWAY LAKE	(7,548.90)
	Total Liabilities	(7,548.90)
*** Fund Balance ***		
	Total Fund Balance	0.00
	Beginning Fund Balance - 2021	0.00
	Net of Revenues VS Expenditures - 2021	0.00
	*2021 End FB/2022 Beg FB	0.00
	Net of Revenues VS Expenditures - Current Year	7,548.90
	Ending Fund Balance	7,548.90
	Total Liabilities And Fund Balance	0.00

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021		2022		ACTIVITY FOR		AVAILABLE BALANCE NORMAL (ABNORMAL)	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022	INCREASE (DECREASE)		
Fund 230 - THORNAPPLE RIVER IMPROVEMENT FUND									
Revenues									
230-000-672-014	S/A REVENUE- TRD - RIVER	0.00	0.00	0.00	0.00	68,700.00		(68,700.00)	100.00
TOTAL REVENUES		0.00	0.00	0.00	0.00	68,700.00		(68,700.00)	100.00
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Fund 230 - THORNAPPLE RIVER IMPROVEMENT FUND:									
TOTAL REVENUES		0.00	0.00	0.00	0.00	68,700.00		(68,700.00)	100.00
TOTAL EXPENDITURES		0.00	0.00	0.00	0.00	0.00		0.00	0.00
NET OF REVENUES & EXPENDITURES		0.00	0.00	0.00	0.00	68,700.00		(68,700.00)	100.00

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 230 - THORNAPPLE RIVER IMPROVEMENT FUND			
230-000-001-110	FLAGSTAR BANK - CASH	68,700.00	
230-000-030-014	S/A RECEIVALBLE - TRD- RIVER		68,700.00
230-000-339-014	DEFERRED REVENUE - TRD- RIVER	68,700.00	
230-000-672-014	S/A REVENUE- TRD - RIVER		68,700.00
Total Fund 230 - THORNAPPLE RIVER IMPROVEMENT FUND		137,400.00	137,400.00

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
 Fund 230 - THORNAPPLE RIVER IMPROVEMENT FUND		
*** Assets ***		
230-000-001-110	FLAGSTAR BANK - CASH	68,700.00
230-000-030-014	S/A RECEIVALBLE - TRD- RIVER	(68,700.00)
	Total Assets	0.00
 *** Liabilities ***		
230-000-339-014	DEFERRED REVENUE - TRD- RIVER	(68,700.00)
	Total Liabilities	(68,700.00)
 *** Fund Balance ***		
	Total Fund Balance	0.00
	 Beginning Fund Balance - 2021	 0.00
	Net of Revenues VS Expenditures - 2021	0.00
	*2021 End FB/2022 Beg FB	0.00
	Net of Revenues VS Expenditures - Current Year	68,700.00
	Ending Fund Balance	68,700.00
	Total Liabilities And Fund Balance	0.00

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021		2022		ACTIVITY FOR		AVAILABLE BALANCE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	INCREASE (DECREASE)	MONTH 01/31/2022	NORMAL (ABNORMAL)			
Fund 246 - IRF									
Revenues									
246-000-630-000	HOOKUP FEES	200,000.00	200,000.00	0.00				200,000.00	0.00
246-000-665-000	INTEREST ON INVESTMENTS	20,000.00	3,600.00	0.00				3,600.00	0.00
246-000-669-000	INT & P S/A-ORDINANCE	1,000.00	1,000.00	3,763.86				(2,763.86)	376.39
246-000-672-008	S/A REVENUE-INACTIVE	1,000.00	0.00	0.00				0.00	0.00
246-000-672-011	S/A REVENUE - OAK TERRACE	6,500.00	2,537.78	0.00				2,537.78	0.00
246-000-672-012	S/A REVENUE - TRD	12,500.00	17,100.85	0.00				17,100.85	0.00
TOTAL REVENUES		241,000.00	224,238.63	3,763.86				220,474.77	1.68
Expenditures									
Dept 295 - ADMINISTRATIVE									
246-295-821-000	ADMIN ENGINEERING COSTS	15,000.00	15,000.00	0.00				15,000.00	0.00
246-295-826-000	ADMIN LEGAL FEES	42,500.00	30,000.00	2,051.00				27,949.00	6.84
246-295-964-000	ADMIN 10%/HOOKUP TO GENERAL	20,000.00	20,000.00	0.00				20,000.00	0.00
246-295-967-100	WHOLE HOUSE FILTER PROJECT	244,000.00	120,000.00	0.00				120,000.00	0.00
246-295-980-000	ADMIN MISCELLANEOUS EXPENSE	1,000.00	10,000.00	0.00				10,000.00	0.00
TOTAL EXPENDITURES		322,500.00	195,000.00	2,051.00				192,949.00	1.05
Fund 246 - IRF:									
TOTAL REVENUES		241,000.00	224,238.63	3,763.86				220,474.77	1.68
TOTAL EXPENDITURES		322,500.00	195,000.00	2,051.00				192,949.00	1.05
NET OF REVENUES & EXPENDITURES		(81,500.00)	29,238.63	1,712.86				27,525.77	5.86

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 246 - IRF			
246-000-001-510	MI CLASS CASH - POOL ACCOUNTS	851,657.45	
246-000-002-001	CASH/SAVINGS- FLAGSTAR BANK	1,436,698.80	
246-000-030-010	S/A RECEIVABLE- KRAFT & 60TH IMPRV 2014	253,918.66	
246-000-030-011	S/A RECEIVABLE- OAK TERRACE	2,328.28	
246-000-030-012	S/A RECEIVABLE - TRD SEWER	178,588.97	
246-000-040-006	ACCOUNTS RECEIVABLE-DELQ USAGE	5,718.96	
246-000-202-000	ACCOUNTS PAYABLE		41,421.18
246-000-339-010	DEFERRED REVENUE- KRAFT & 60TH IMPROVEMT		253,918.66
246-000-339-011	DEFERRED REVENUE- OAK TERRACE		4,656.52
246-000-339-012	DEFERRED REVENUE TRD SEWER		185,558.25
246-000-390-000	FUND BALANCE		2,065,014.67
246-000-669-000	INT & P S/A-ORDINANCE		3,763.86
246-295-826-000	ADMIN LEGAL FEES	2,051.00	
Total Fund 246 - IRF		2,730,962.12	2,730,962.12
NET OF REVENUES/EXPENDITURES - 2021			176,628.98

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 246 - IRF		
*** Assets ***		
246-000-001-510	MI CLASS CASH - POOL ACCOUNTS	851,657.45
246-000-002-001	CASH/SAVINGS- FLAGSTAR BANK	1,436,698.80
246-000-030-010	S/A RECEIVABLE- KRAFT & 60TH IMPRV 2014	253,918.66
246-000-030-011	S/A RECEIVABLE- OAK TERRACE	2,328.28
246-000-030-012	S/A RECEIVABLE - TRD SEWER	178,588.97
246-000-040-006	ACCOUNTS RECEIVABLE-DELQ USAGE	5,718.96
	Total Assets	2,728,911.12
*** Liabilities ***		
246-000-202-000	ACCOUNTS PAYABLE	41,421.18
246-000-339-010	DEFERRED REVENUE- KRAFT & 60TH IMPROVEMT	253,918.66
246-000-339-011	DEFERRED REVENUE- OAK TERRRACE	4,656.52
246-000-339-012	DEFERRED REVENUE TRD SEWER	185,558.25
	Total Liabilities	485,554.61
*** Fund Balance ***		
246-000-390-000	FUND BALANCE	2,065,014.67
	Total Fund Balance	2,065,014.67
	Beginning Fund Balance - 2021	2,065,014.67
	Net of Revenues VS Expenditures - 2021	176,628.98
	*2021 End FB/2022 Beg FB	2,241,643.65
	Net of Revenues VS Expenditures - Current Year	1,712.86
	Ending Fund Balance	2,243,356.51
	Total Liabilities And Fund Balance	2,728,911.12

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.
PRE-AUDIT

GL NUMBER	DESCRIPTION	2021		2022		ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	INCREASE (DECREASE)	MONTH 01/31/2022	BALANCE		
						NORMAL (ABNORMAL)		
Fund 248 - DDA								
Revenues								
248-000-401-401	TAXES - CASCADE TOWNSHIP	311,182.00	302,100.00	0.00		302,100.00	0.00	
248-000-401-402	TAXES - G.R.C.C.	159,934.00	156,000.00	0.00		156,000.00	0.00	
248-000-401-403	TAXES-KENT COUNTY	559,777.00	540,000.00	0.00		540,000.00	0.00	
248-000-401-406	KDL TAXES-DDA	113,574.00	110,500.00	0.00		110,500.00	0.00	
248-000-665-000	INTEREST REVENUE	5,000.00	3,000.00	0.00		3,000.00	0.00	
248-000-667-001	RENT-TUFFY	75,000.00	70,500.00	11,548.64		58,951.36	16.38	
248-000-671-671	MISCELLANEOUS INCOME	0.00	0.00	26,802.80		(26,802.80)	100.00	
248-000-675-300	DDA CONTRIB & DONATION- METRO CRUISE WU	5,000.00	2,500.00	0.00		2,500.00	0.00	
TOTAL REVENUES		1,229,467.00	1,184,600.00	38,351.44		1,146,248.56	3.24	
Expenditures								
Dept 170 - DDA OPERATIONS/CONSTRUCTION								
248-170-723-000	DDA - MEMBERSHIP AND DUES	1,220.00	1,320.00	0.00		1,320.00	0.00	
248-170-724-000	DDA - EDUCATION	2,000.00	2,000.00	0.00		2,000.00	0.00	
248-170-787-000	MISCELLANEOUS	7,000.00	7,000.00	0.00		7,000.00	0.00	
248-170-802-300	DDA ADMINISTRATIVE	99,426.00	99,426.00	0.00		99,426.00	0.00	
248-170-821-000	ENGINEERING	75,000.00	75,000.00	0.00		75,000.00	0.00	
248-170-826-265	LEGAL	2,500.00	2,500.00	0.00		2,500.00	0.00	
248-170-860-000	DDA - MILEAGE	400.00	400.00	0.00		400.00	0.00	
248-170-861-100	BUS SERVICE 28TH ST	214,712.00	217,540.00	0.00		217,540.00	0.00	
248-170-921-000	ELECTRICITY	20,000.00	24,000.00	2,489.51		21,510.49	10.37	
248-170-922-000	STREETLIGHTS	5,000.00	5,000.00	0.00		5,000.00	0.00	
248-170-924-100	CELL PHONES/DATA	850.00	900.00	0.99		899.01	0.11	
248-170-927-000	WATER-SEWER	6,500.00	6,500.00	0.00		6,500.00	0.00	
248-170-931-000	MAINT & REPAIR/IMPROVEMENTS	35,000.00	70,000.00	960.68		69,039.32	1.37	
248-170-931-300	DDA REPAIR & MAINT- METRO CRUISE WU	8,000.00	8,000.00	0.00		8,000.00	0.00	
248-170-950-000	DDA PROPERTY TAX REFUNDS	50,000.00	50,000.00	0.00		50,000.00	0.00	
248-170-967-000	SPECIAL PROJECTS	71,700.00	90,000.00	0.00		90,000.00	0.00	
248-170-981-000	OFFICE EQUIPMENT	1,000.00	1,000.00	0.00		1,000.00	0.00	
TOTAL EXPENDITURES		600,308.00	660,586.00	3,451.18		657,134.82	0.52	
Dept 901 - CAPITAL OUTLAY								
248-901-970-000	CAPITAL OUTLAY - FFE	230,000.00	80,000.00	0.00		80,000.00	0.00	
248-901-974-000	CAPITAL OUTLAY - LANDIMP	30,000.00	0.00	0.00		0.00	0.00	
Total Dept 901 - CAPITAL OUTLAY		260,000.00	80,000.00	0.00		80,000.00	0.00	
Dept 990 - DEBT SERVICE								
248-990-992-007	LOAN PRINCIPAL	70,000.00	75,000.00	0.00		75,000.00	0.00	
248-990-996-001	INTEREST AND FEES	24,050.00	21,775.00	0.00		21,775.00	0.00	
Total Dept 990 - DEBT SERVICE		94,050.00	96,775.00	0.00		96,775.00	0.00	
Fund 248 - DDA:								
TOTAL REVENUES		1,229,467.00	1,184,600.00	38,351.44		1,146,248.56	3.24	
TOTAL EXPENDITURES		954,358.00	837,361.00	3,451.18		833,909.82	0.41	
NET OF REVENUES & EXPENDITURES		275,109.00	347,239.00	34,900.26		312,338.74	10.05	

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 248 - DDA			
248-000-001-510	MI CLASS CASH - POOL ACCOUNTS	829,653.81	
248-000-002-001	CASH/SAVINGS- FLAGSTAR BANK	760,802.45	
248-000-003-035	ADVENTURE CU CD M 2/24/20	220,919.55	
248-000-003-040	CD - UNION BANK M 8/26/20	261,997.60	
248-000-202-000	ACCOUNTS PAYABLE		484.88
248-000-390-000	FUND BALANCE - UNASSIGNED		1,425,599.80
248-000-667-001	RENT-TUFFY		11,548.64
248-000-671-671	MISCELLANEOUS INCOME		26,802.80
248-170-921-000	ELECTRICITY	2,489.51	
248-170-924-100	CELL PHONES/DATA	0.99	
248-170-931-000	MAINT & REPAIR/IMPROVEMENTS	960.68	
Total Fund 248 - DDA		2,076,824.59	2,076,824.59
NET OF REVENUES/EXPENDITURES - 2021			612,388.47

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 248 - DDA		
*** Assets ***		
248-000-001-510	MI CLASS CASH - POOL ACCOUNTS	829,653.81
248-000-002-001	CASH/SAVINGS- FLAGSTAR BANK	760,802.45
248-000-003-035	ADVENTURE CU CD M 2/24/20	220,919.55
248-000-003-040	CD - UNION BANK M 8/26/20	261,997.60
	Total Assets	2,073,373.41
*** Liabilities ***		
248-000-202-000	ACCOUNTS PAYABLE	484.88
	Total Liabilities	484.88
*** Fund Balance ***		
248-000-390-000	FUND BALANCE - UNASSIGNED	1,425,599.80
	Total Fund Balance	1,425,599.80
	Beginning Fund Balance - 2021	1,425,599.80
	Net of Revenues VS Expenditures - 2021	612,388.47
	*2021 End FB/2022 Beg FB	2,037,988.27
	Net of Revenues VS Expenditures - Current Year	34,900.26
	Ending Fund Balance	2,072,888.53
	Total Liabilities And Fund Balance	2,073,373.41
* Year Not Closed		

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	ACTIVITY FOR			AVAILABLE	% BDGT USED
		2021 AMENDED BUDGET	2022 AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)	BALANCE NORMAL (ABNORMAL)	
Fund 249 - BUILDING FUND						
Revenues						
249-000-600-644	NSF FEES	50.00	0.00	0.00	0.00	0.00
249-000-607-483	CASCADE TWP BLDG COM PERMITS	155,000.00	155,000.00	826.50	154,173.50	0.53
249-000-607-484	CASCADE TWP BLDG RES PERMITS	85,000.00	95,000.00	5,952.00	89,048.00	6.27
249-000-607-485	CASCADE TWP ELECTRICAL PERMITS	80,000.00	88,000.00	8,613.00	79,387.00	9.79
249-000-607-486	CASCADE TWP MECHANICAL PERMITS	95,000.00	90,000.00	9,231.00	80,769.00	10.26
249-000-607-487	CASCADE TWP PLUMBING PERMITS	50,000.00	50,000.00	4,417.00	45,583.00	8.83
249-000-607-488	CASCADE - PR	35,000.00	22,000.00	152.50	21,847.50	0.69
249-000-607-490	CASCADE TWP CONTRACTOR REG	8,500.00	9,350.00	1,845.00	7,505.00	19.73
249-000-607-500	LOWELL TWP BUILDING PERMITS	55,000.00	80,000.00	4,305.00	75,695.00	5.38
249-000-607-501	LOWELL TWP ELECTRICAL PERMITS	25,000.00	33,000.00	651.00	32,349.00	1.97
249-000-607-502	LOWELL TWP MECHANICAL PERMITS	20,000.00	28,000.00	1,530.00	26,470.00	5.46
249-000-607-503	LOWELL TWP PLUMBING PERMITS	20,000.00	23,000.00	931.00	22,069.00	4.05
249-000-607-504	LOWELL TWP - PR	5,000.00	6,000.00	0.00	6,000.00	0.00
249-000-607-510	VERGENNES TWP BUILDING PERMITS	0.00	45,000.00	11,893.00	33,107.00	26.43
249-000-607-511	VERGENNES TWP ELECTRICAL PERMITS	13,000.00	14,000.00	2,125.00	11,875.00	15.18
249-000-607-512	VERGENNES TWP MECHANICAL PERMITS	13,000.00	16,000.00	1,040.00	14,960.00	6.50
249-000-607-516	VERGENNES TWP PLUMBING PERMITS	9,000.00	10,000.00	1,739.00	8,261.00	17.39
249-000-607-517	VERGENNES TWP - PR	0.00	0.00	2,170.00	(2,170.00)	100.00
249-000-607-520	ADA TWP BUILDING PERMITS	130,000.00	137,500.00	15,820.00	121,680.00	11.51
249-000-607-521	ADA TWP PLUMBING PERMITS	40,000.00	45,000.00	3,972.00	41,028.00	8.83
249-000-607-523	ADA TWP ELECTRICAL PERMITS	50,000.00	60,500.00	6,010.00	54,490.00	9.93
249-000-607-524	ADA TWP MECHANICAL PERMITS	55,000.00	66,000.00	4,955.00	61,045.00	7.51
249-000-607-525	ADA TWP - PR	20,000.00	17,000.00	3,121.00	13,879.00	18.36
249-000-607-531	GR TWP BUILDING PERMITS	120,000.00	135,000.00	9,812.00	125,188.00	7.27
249-000-607-532	GR TWP ELECTRICAL PERMITS	55,000.00	65,000.00	5,520.00	59,480.00	8.49
249-000-607-533	GR TWP MECHANICAL PERMITS	80,000.00	80,000.00	4,939.50	75,060.50	6.17
249-000-607-534	GR TWP PLUMBING PERMITS	40,000.00	44,000.00	12,081.00	31,919.00	27.46
249-000-607-535	GRT - PR	20,000.00	22,000.00	140.00	21,860.00	0.64
249-000-607-536	EAST GR BUILDING PERMITS	65,000.00	66,000.00	4,976.50	61,023.50	7.54
249-000-607-537	EAST GR ELECTRICAL PERMITS	35,000.00	38,500.00	3,385.00	35,115.00	8.79
249-000-607-538	EAST GR MECHANICAL PERMITS	40,000.00	44,000.00	3,530.00	40,470.00	8.02
249-000-607-539	EAST GR PLUMBING PERMITS	25,000.00	27,500.00	2,748.00	24,752.00	9.99
249-000-607-540	EGR - PR	10,000.00	11,000.00	1,021.50	9,978.50	9.29
249-000-607-541	EAST GR-RENTAL INSP	4,000.00	4,400.00	0.00	4,400.00	0.00
249-000-607-550	PLAINFIELD BUILDING PERMITS	0.00	220,000.00	8,776.00	211,224.00	3.99
249-000-607-551	PLAINFIELD - ELECTRICAL PERMITS	90,000.00	99,000.00	11,221.00	87,779.00	11.33
249-000-607-552	PLAINFIELD MECHANICAL PERMITS	110,000.00	121,000.00	11,132.75	109,867.25	9.20
249-000-607-553	PLAINFIELD - PLUMBING PERMITS	60,000.00	66,000.00	4,681.00	61,319.00	7.09
249-000-607-554	PLAINFIELD TWP- PR	0.00	0.00	462.00	(462.00)	100.00
249-000-607-555	PLAINFIELD INSPECTION FEES -NP	5,000.00	0.00	2,550.00	(2,550.00)	100.00
249-000-607-556	WYOMING INSPECTIONS	30,289.60	0.00	0.00	0.00	0.00
249-000-665-000	INTEREST REVENUE	35,000.00	40,000.00	0.00	40,000.00	0.00
249-000-671-671	MISCELLANEOUS INCOME	1,500.00	1,500.00	340.00	1,160.00	22.67
249-000-676-100	REIMBURSEMENT- SECURITY DEPOSIT	4,934.25	0.00	0.00	0.00	0.00
TOTAL REVENUES		1,794,273.85	2,175,250.00	178,615.25	1,996,634.75	8.21
Expenditures						
Dept 371 - BUILDING DEPARTMENT						
249-371-702-000	WAGES- FULL TIME	893,797.00	778,838.00	71,273.28	707,564.72	9.15
249-371-702-001	WAGES - DEPARTMENT HEAD	0.00	106,887.00	0.00	106,887.00	0.00
249-371-704-000	WAGES- PART TIME	8,000.00	8,000.00	694.49	7,305.51	8.68
249-371-707-000	WAGES- CASUAL	10,000.00	70,000.00	280.00	69,720.00	0.40
249-371-723-000	MEMBERSHIPS AND DUES	4,000.00	5,000.00	775.00	4,225.00	15.50
249-371-724-000	EDUCATION	6,000.00	8,000.00	230.00	7,770.00	2.88
249-371-727-000	SUPPLIES	8,000.00	11,000.00	572.73	10,427.27	5.21
249-371-757-000	BOOKS	3,500.00	4,200.00	0.00	4,200.00	0.00
249-371-768-000	DEPARTMENT UNIFORMS	4,800.00	4,200.00	359.98	3,840.02	8.57
249-371-787-000	MISCELLANEOUS	1,500.00	1,500.00	0.00	1,500.00	0.00
249-371-787-200	CREDIT CARD FEES	34,000.00	34,000.00	2,978.78	31,021.22	8.76
249-371-807-000	AUDIT FEES & SERVICES	940.00	968.00	0.00	968.00	0.00
249-371-810-000	LIABILITY INSURANCE	11,890.65	13,080.00	0.00	13,080.00	0.00
249-371-821-000	BLDG ENGINEERING	1,500.00	1,500.00	0.00	1,500.00	0.00
249-371-860-000	MILEAGE	60,000.00	68,000.00	2,482.17	65,517.83	3.65
249-371-862-500	DEPT HEAD, SUPV EXPENSES	500.00	750.00	0.00	750.00	0.00
249-371-923-000	HEATING/UTILITY	4,000.00	4,000.00	0.00	4,000.00	0.00
249-371-924-000	PHONES	2,000.00	3,000.00	482.52	2,517.48	16.08
249-371-924-100	CELL PHONES/DATA	9,950.00	11,000.00	0.00	11,000.00	0.00
249-371-932-000	OFFICE EQUIP & COMPUTER REPAIR	0.00	7,800.00	7,800.00	0.00	100.00
249-371-939-000	SERVICE CONTRACTS	18,413.00	18,413.00	5,697.72	12,715.28	30.94

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.
PRE-AUDIT

GL NUMBER	DESCRIPTION	2021	2022	ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)	BALANCE NORMAL (ABNORMAL)	
249-371-940-000	BUILDING RENTAL-LEASE	2,050.00	0.00	0.00	0.00	0.00
249-371-941-000	POSTAGE & MACHINE LEASE	1,000.00	1,000.00	0.00	1,000.00	0.00
249-371-957-000	BLDG PHYSICAL EXAMS	750.00	750.00	0.00	750.00	0.00
249-371-967-000	BLDG - SPECIAL PROJECTS	15,000.00	15,000.00	0.00	15,000.00	0.00
249-371-981-000	OFFICE EQUIPMENT	18,000.00	12,000.00	238.99	11,761.01	1.99
Total Dept 371 - BUILDING DEPARTMENT		1,119,590.65	1,188,886.00	93,865.66	1,095,020.34	7.90
Dept 850 - BENEFITS/INSURANCE						
249-850-715-000	FICA-EMPLOYER	70,667.00	73,113.00	5,262.26	67,850.74	7.20
249-850-716-000	DEFINED CONTRIBUTION PLAN	118,411.00	132,721.00	6,262.71	126,458.29	4.72
249-850-717-000	WORKERS COMP INSURANCE	23,323.00	28,000.00	0.00	28,000.00	0.00
249-850-718-000	VISION INSURANCE BENEFITS	1,858.00	1,727.00	280.04	1,446.96	16.22
249-850-718-200	OTHER BENEFITS	18,200.00	18,200.00	16,800.00	1,400.00	92.31
249-850-718-300	OTHER BENEFITS- PTO BUYBACK PROGRAM	8,100.00	6,000.00	0.00	6,000.00	0.00
249-850-719-000	HEALTH INSURANCE BENEFITS	155,626.00	148,852.00	28,570.43	120,281.57	19.19
249-850-719-100	OPT-OUT INSURANCE	4,000.00	4,000.00	0.00	4,000.00	0.00
249-850-720-000	LIFE & DISABILITY INSURANCE	12,447.00	10,982.00	1,728.10	9,253.90	15.74
249-850-721-000	DENTAL INSURANCE BENEFITS	13,105.00	12,516.00	2,366.69	10,149.31	18.91
249-850-722-000	PENSION PLAN BENEFITS	45,168.00	45,168.00	4,213.06	40,954.94	9.33
Total Dept 850 - BENEFITS/INSURANCE		470,905.00	481,279.00	65,483.29	415,795.71	13.61
Dept 901 - CAPITAL OUTLAY						
249-901-975-000	CAPITAL OUTLAY - BLDGIMP	98,301.00	30,000.00	0.00	30,000.00	0.00
Total Dept 901 - CAPITAL OUTLAY		98,301.00	30,000.00	0.00	30,000.00	0.00
Dept 964 - PAYMENTS TO OTHER TOWNSHIPS						
249-964-964-100	PERMITS DUE TO LOWELL TWP	25,000.00	34,000.00	0.00	34,000.00	0.00
249-964-964-200	PERMITS DUE TO VERGENNES TWP	7,000.00	17,000.00	0.00	17,000.00	0.00
249-964-964-300	PERMITS DUE TO GR TWP	63,000.00	69,200.00	0.00	69,200.00	0.00
249-964-964-400	PERMITS DUE TO ADA TWP	59,000.00	65,200.00	0.00	65,200.00	0.00
249-964-964-500	PERMITS DUE TO EAST GR	35,000.00	37,400.00	0.00	37,400.00	0.00
249-964-964-600	PERMITS DUE PLAINFIELD	52,000.00	106,000.00	0.00	106,000.00	0.00
249-964-964-800	PERMITS DUE CASCADE TWP	100,000.00	100,000.00	0.00	100,000.00	0.00
Total Dept 964 - PAYMENTS TO OTHER TOWNSHIPS		341,000.00	428,800.00	0.00	428,800.00	0.00
Fund 249 - BUILDING FUND:						
TOTAL REVENUES		1,794,273.85	2,175,250.00	178,615.25	1,996,634.75	8.21
TOTAL EXPENDITURES		2,029,796.65	2,128,965.00	159,348.95	1,969,616.05	7.48
NET OF REVENUES & EXPENDITURES		(235,522.80)	46,285.00	19,266.30	27,018.70	41.63

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 249 - BUILDING FUND			
249-000-001-111	-CASH-RECEIVING - FLAGSTAR	99,753.50	
249-000-001-510	MI CLASS CASH - POOL ACCOUNTS	7,180.26	
249-000-002-001	CASH/SAVINGS- FLAGSTAR BANK	373,034.96	
249-000-002-003	CONSUMERS CR UN SAVINGS	319,411.47	
249-000-003-001	CD - INDEPENDENT BANK M 6/19/21	336,175.42	
249-000-003-021	FNB OF MI M 2/11/20	556,467.53	
249-000-003-024	FIRST NATIONAL BANK OF AMERICA	658,867.48	
249-000-003-037	CHEMICAL BANK CD M 10/28/19	569,753.35	
249-000-202-000	ACCOUNTS PAYABLE		8,094.30
249-000-204-000	ACCRUED PAYROLL		34,772.77
249-000-237-000	DUE TO IRF SW CONNECTIONS		2,200.00
249-000-390-000	FUND BALANCE		1,762,791.88
249-000-391-001	FUND BAL- COMMITTED FUTURE FAC IMP 2018		1,000,000.00
249-000-607-483	CASCADE TWP BLDG COM PERMITS		826.50
249-000-607-484	CASCADE TWP BLDG RES PERMITS		5,952.00
249-000-607-485	CASCADE TWP ELECTRICAL PERMITS		8,613.00
249-000-607-486	CASCADE TWP MECHANICAL PERMITS		9,231.00
249-000-607-487	CASCADE TWP PLUMBING PERMITS		4,417.00
249-000-607-488	CASCADE - PR		152.50
249-000-607-490	CASCADE TWP CONTRACTOR REG		1,845.00
249-000-607-500	LOWELL TWP BUILDING PERMITS		4,305.00
249-000-607-501	LOWELL TWP ELECTRICAL PERMITS		651.00
249-000-607-502	LOWELL TWP MECHANICAL PERMITS		1,530.00
249-000-607-503	LOWELL TWP PLUMBING PERMITS		931.00
249-000-607-510	VERGENNES TWP BUILDING PERMITS		11,893.00
249-000-607-511	VERGENNES TWP ELECTRICAL PERMITS		2,125.00
249-000-607-512	VERGENNES TWP MECHANICAL PERMITS		1,040.00
249-000-607-516	VERGENNES TWP PLUMBING PERMITS		1,739.00
249-000-607-517	VERGENNES TWP - PR		2,170.00
249-000-607-520	ADA TWP BUILDING PERMITS		15,820.00
249-000-607-521	ADA TWP PLUMBING PERMITS		3,972.00
249-000-607-523	ADA TWP ELECTRICAL PERMITS		6,010.00
249-000-607-524	ADA TWP MECHANICAL PERMITS		4,955.00
249-000-607-525	ADA TWP - PR		3,121.00
249-000-607-531	GR TWP BUILDING PERMITS		9,812.00
249-000-607-532	GR TWP ELECTRICAL PERMITS		5,520.00
249-000-607-533	GR TWP MECHANICAL PERMITS		4,939.50
249-000-607-534	GR TWP PLUMBING PERMITS		12,081.00
249-000-607-535	GRT - PR		140.00
249-000-607-536	EAST GR BUILDING PERMITS		4,976.50
249-000-607-537	EAST GR ELECTRICAL PERMITS		3,385.00
249-000-607-538	EAST GR MECHANICAL PERMITS		3,530.00
249-000-607-539	EAST GR PLUMBING PERMITS		2,748.00
249-000-607-540	EGR - PR		1,021.50
249-000-607-550	PLAINFIELD BUILDING PERMITS		8,776.00
249-000-607-551	PLAINFIELD - ELECTRICAL PERMITS		11,221.00
249-000-607-552	PLAINFIELD MECHANICAL PERMITS		11,132.75
249-000-607-553	PLAINFIELD - PLUMBING PERMITS		4,681.00
249-000-607-554	PLAINFIELD TWP- PR		462.00
249-000-607-555	PLAINFIELD INSPECTION FEES -NP		2,550.00
249-000-671-671	MISCELLANEOUS INCOME		340.00
249-371-702-000	WAGES- FULL TIME	71,273.28	
249-371-704-000	WAGES- PART TIME	694.49	
249-371-707-000	WAGES- CASUAL	280.00	
249-371-723-000	MEMBERSHIPS AND DUES	775.00	
249-371-724-000	EDUCATION	230.00	
249-371-727-000	SUPPLIES	572.73	

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
249-371-768-000	DEPARTMENT UNIFORMS	359.98	
249-371-787-200	CREDIT CARD FEES	2,978.78	
249-371-860-000	MILEAGE	2,482.17	
249-371-924-000	PHONES	482.52	
249-371-932-000	OFFICE EQUIP & COMPUTER REPAIR	7,800.00	
249-371-939-000	SERVICE CONTRACTS	5,697.72	
249-371-981-000	OFFICE EQUIPMENT	238.99	
249-850-715-000	FICA-EMPLOYER	5,262.26	
249-850-716-000	DEFINED CONTRIBUTION PLAN	6,262.71	
249-850-718-000	VISION INSURANCE BENEFITS	280.04	
249-850-718-200	OTHER BENEFITS	16,800.00	
249-850-719-000	HEALTH INSURANCE BENEFITS	28,570.43	
249-850-720-000	LIFE & DISABILITY INSURANCE	1,728.10	
249-850-721-000	DENTAL INSURANCE BENEFITS	2,366.69	
249-850-722-000	PENSION PLAN BENEFITS	4,213.06	
Total Fund 249 - BUILDING FUND		3,079,992.92	3,079,992.92
NET OF REVENUES/EXPENDITURES - 2021			93,518.72

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 249 - BUILDING FUND		
*** Assets ***		
249-000-001-111	-CASH-RECEIVING - FLAGSTAR	99,753.50
249-000-001-510	MI CLASS CASH - POOL ACCOUNTS	7,180.26
249-000-002-001	CASH/SAVINGS- FLAGSTAR BANK	373,034.96
249-000-002-003	CONSUMERS CR UN SAVINGS	319,411.47
249-000-003-001	CD - INDEPENDENT BANK M 6/19/21	336,175.42
249-000-003-021	FNB OF MI M 2/11/20	556,467.53
249-000-003-024	FIRST NATIONAL BANK OF AMERICA	658,867.48
249-000-003-037	CHEMICAL BANK CD M 10/28/19	569,753.35
	Total Assets	2,920,643.97
*** Liabilities ***		
249-000-202-000	ACCOUNTS PAYABLE	8,094.30
249-000-204-000	ACCRUED PAYROLL	34,772.77
249-000-237-000	DUE TO IRF SW CONNECTIONS	2,200.00
	Total Liabilities	45,067.07
*** Fund Balance ***		
249-000-390-000	FUND BALANCE	1,762,791.88
249-000-391-001	FUND BAL- COMMITTED FUTURE FAC IMP 2018	1,000,000.00
	Total Fund Balance	2,762,791.88
	Beginning Fund Balance - 2021	2,762,791.88
	Net of Revenues VS Expenditures - 2021	93,518.72
	*2021 End FB/2022 Beg FB	2,856,310.60
	Net of Revenues VS Expenditures - Current Year	19,266.30
	Ending Fund Balance	2,875,576.90
	Total Liabilities And Fund Balance	2,920,643.97

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	2021	2022	ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)	BALANCE NORMAL (ABNORMAL)	
Fund 270 - LIBRARY FUND						
Revenues						
270-000-401-402	TAX LEVY	226,358.00	234,217.91	142,772.21	91,445.70	60.96
270-000-401-410	PERSONAL PROPERTY TAX	16,047.00	15,024.52	3,012.40	12,012.12	20.05
270-000-401-412	DELINQUENT TAX LEVY	600.00	600.00	0.00	600.00	0.00
270-000-401-437	ABATEMENT TAXES-LEVY	2,674.00	2,267.54	129.61	2,137.93	5.72
270-000-401-445	PENALTIES & INTEREST ON TAX	60.00	60.00	0.00	60.00	0.00
270-000-573-000	LOCAL COMMUNITY STABILIZATION SHARE	8,909.46	10,268.95	0.00	10,268.95	0.00
270-000-587-587	KENT DISTRICT LIBRARY PAYMENT	32,870.00	32,870.00	0.00	32,870.00	0.00
270-000-665-000	INTEREST REVENUE	16,000.00	2,340.00	0.00	2,340.00	0.00
TOTAL REVENUES		303,518.46	297,648.92	145,914.22	151,734.70	49.02
Expenditures						
Dept 790 - LIBRARY						
270-790-727-000	LIBRARY SUPPLIES	6,600.00	6,600.00	0.00	6,600.00	0.00
270-790-729-000	LIB ELECTRONIC SUBSCRIPTIONS	900.00	900.00	0.00	900.00	0.00
270-790-787-000	MISCELLANEOUS	1,000.00	1,000.00	0.00	1,000.00	0.00
270-790-802-200	JANITORIAL & MAINTENANCE	10,000.00	47,000.00	0.00	47,000.00	0.00
270-790-810-000	LIABILITY INSURANCE	19,817.75	21,719.80	0.00	21,719.80	0.00
270-790-921-000	LIBRARY ELECTRICITY	55,000.00	52,000.00	3,227.48	48,772.52	6.21
270-790-923-000	LIBRARY HEATING	12,000.00	11,000.00	0.00	11,000.00	0.00
270-790-924-000	LIBRARY PHONES	1,800.00	1,200.00	99.70	1,100.30	8.31
270-790-927-000	LIBRARY WATER-SEWER	8,000.00	8,000.00	0.00	8,000.00	0.00
270-790-931-000	LIBRARY MAINTENANCE	65,000.00	60,000.00	405.96	59,594.04	0.68
270-790-931-100	LIBRARY MAINTENANCE	76,461.00	50,904.00	0.00	50,904.00	0.00
270-790-950-000	PROPERTY TAX REFUNDS	500.00	500.00	0.00	500.00	0.00
270-790-981-000	OFFICE EQUIPMENT	1,000.00	1,000.00	0.00	1,000.00	0.00
Total Dept 790 - LIBRARY		258,078.75	261,823.80	3,733.14	258,090.66	1.43
Dept 901 - CAPITAL OUTLAY						
270-901-970-000	CAPITAL OUTLAY - FFE	25,000.00	35,000.00	0.00	35,000.00	0.00
Total Dept 901 - CAPITAL OUTLAY		25,000.00	35,000.00	0.00	35,000.00	0.00
Fund 270 - LIBRARY FUND:						
TOTAL REVENUES		303,518.46	297,648.92	145,914.22	151,734.70	49.02
TOTAL EXPENDITURES		283,078.75	296,823.80	3,733.14	293,090.66	1.26
NET OF REVENUES & EXPENDITURES		20,439.71	825.12	142,181.08	(141,355.96)	

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 270 - LIBRARY FUND			
270-000-001-510	CASH - MI CLASS	466,537.07	
270-000-002-004	WEST MICHIGAN COMMUNITY BANK	273,337.34	
270-000-003-014	CD - LAKE MICH CR UN #40 M3/27/2020	453,604.26	
270-000-003-027	CD - NORTHPOINTE BANK MM 4/7/2020	575,731.39	
270-000-015-023	LIBRARY M/M UNITED BANK	614,274.95	
270-000-202-000	ACCOUNTS PAYABLE		235.00
270-000-390-000	FUND BALANCE		1,766,582.22
270-000-391-001	FUND BALANCE - COMMITTED/MAJOR REPAIRS11		400,000.00
270-000-401-402	TAX LEVY		142,772.21
270-000-401-410	PERSONAL PROPERTY TAX		3,012.40
270-000-401-437	ABATEMENT TAXES-LEVY		129.61
270-790-921-000	LIBRARY ELECTRICITY	3,227.48	
270-790-924-000	LIBRARY PHONES	99.70	
270-790-931-000	LIBRARY MAINTENANCE	405.96	
Total Fund 270 - LIBRARY FUND		2,387,218.15	2,387,218.15
NET OF REVENUES/EXPENDITURES - 2021			74,486.71

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 270 - LIBRARY FUND		
*** Assets ***		
270-000-001-510	CASH - MI CLASS	466,537.07
270-000-002-004	WEST MICHIGAN COMMUNITY BANK	273,337.34
270-000-003-014	CD - LAKE MICH CR UN #40 M3/27/2020	453,604.26
270-000-003-027	CD - NORTHPOINTE BANK MM 4/7/2020	575,731.39
270-000-015-023	LIBRARY M/M UNITED BANK	614,274.95
	Total Assets	2,383,485.01
*** Liabilities ***		
270-000-202-000	ACCOUNTS PAYABLE	235.00
	Total Liabilities	235.00
*** Fund Balance ***		
270-000-390-000	FUND BALANCE	1,766,582.22
270-000-391-001	FUND BALANCE - COMMITTED/MAJOR REPAIRS1	400,000.00
	Total Fund Balance	2,166,582.22
	Beginning Fund Balance - 2021	2,166,582.22
	Net of Revenues VS Expenditures - 2021	74,486.71
	*2021 End FB/2022 Beg FB	2,241,068.93
	Net of Revenues VS Expenditures - Current Year	142,181.08
	Ending Fund Balance	2,383,250.01
	Total Liabilities And Fund Balance	2,383,485.01

* Year Not Closed

**REVENUE AND EXPENDITURE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022**

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

PRE-AUDIT

GL NUMBER	DESCRIPTION	ACTIVITY FOR			AVAILABLE	% BDGT USED
		2021 AMENDED BUDGET	2022 AMENDED BUDGET	MONTH 01/31/2022 INCREASE (DECREASE)	BALANCE NORMAL (ABNORMAL)	
Fund 282 - CARES ACT						
Revenues						
282-000-528-007	ARPA	0.00	0.00	(1,019,687.45)	(1,019,687.45)	100.00
TOTAL REVENUES		0.00	0.00	(1,019,687.45)	(1,019,687.45)	100.00
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Fund 282 - CARES ACT :						
TOTAL REVENUES		0.00	0.00	1,019,687.45	1,019,687.45	100.00
TOTAL EXPENDITURES		0.00	0.00	0.00	0.00	0.00
NET OF REVENUES & EXPENDITURES		0.00	0.00	1,019,687.45	1,019,687.45	100.00
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TOTAL REVENUES - ALL FUNDS		13,309,451.88	13,725,956.67	3,914,764.24	9,811,192.43	28.52
TOTAL EXPENDITURES - ALL FUNDS		14,891,719.70	13,124,233.80	592,434.35	12,531,799.45	4.51
NET OF REVENUES & EXPENDITURES		(1,582,267.82)	601,722.87	3,322,329.89	(2,720,607.02)	552.14

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 282 - CARES ACT			
282-000-001-100	CASH -CARES ACT	1,042,987.32	
282-000-391-000	FUND BALANCE - COMMITTED		709.21
282-000-528-007	ARPA	1,011,510.55	
Total Fund 282 - CARES ACT		2,054,497.87	2,054,497.87
NET OF REVENUES/EXPENDITURES - 2021			2,053,788.66

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

<u>GL Number</u>	<u>Description</u>	<u>Balance</u>
Fund 282 - CARES ACT		
*** Assets ***		
282-000-001-100	CASH -CARES ACT	1,042,987.32
	Total Assets	<u>1,042,987.32</u>
*** Liabilities ***		
	Total Liabilities	<u>0.00</u>
*** Fund Balance ***		
282-000-391-000	FUND BALANCE - COMMITTED	709.21
	Total Fund Balance	<u>709.21</u>
	Beginning Fund Balance - 2021	<u>709.21</u>
	Net of Revenues VS Expenditures - 2021	2,053,788.66
	*2021 End FB/2022 Beg FB	2,054,497.87
	Net of Revenues VS Expenditures - Current Year	(1,011,510.55)
	Ending Fund Balance	1,042,987.32
	Total Liabilities And Fund Balance	<u>1,042,987.32</u>

* Year Not Closed

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 701 - TRUST AND AGENCY			
701-000-003-002	HENRY KRAMER ESCROW	15,371.17	
701-000-003-004	JACK SMITH ESCROW	23,120.34	
701-000-003-018	CD - CHEMICAL BANK JAMES TIMMONS	12,400.00	
701-000-015-004	MONEY MARKET - CHEMICAL BANK	177,814.23	
701-000-214-000	DUE TO GENERAL FUND		4.63
701-000-230-004	T&A INTERST DUE GF		1,541.86
701-000-250-080	CASCADE POINTE-PATHWAY BOND		9,554.62
701-000-250-173	PATHWAYS-WOLVERINE BLDG GROUP- 6010 28TH		1,800.00
701-000-250-175	PATHWAYS - CASCADE TRAILS SENIOR LIVING		3,000.00
701-000-252-050	WALMART S/W INSP GR 3/2013		826.83
701-000-252-166	REDWOOD LIVING/WHITE WATER S/W 4/2014		3,413.30
701-000-252-167	RIDGES OF CASCADE S/W 4/2014		948.12
701-000-252-168	STONESHIRE PHASE II S/W 4/2014		1,559.25
701-000-252-205	GROOTERS DEV./ 5400 INTERNATIONAL PKWAY		500.00
701-000-252-227	CASCADE MARKETPLACE 5/08		8,858.33
701-000-252-230	FORD AIRPORT PK LOT S/W		8,468.75
701-000-252-231	DRURY DEVELOPMENT S/W 9/2015		4,201.08
701-000-252-232	FORD AIRPORT VIEWING PARK		32.00
701-000-252-236	LACKS TRIM DIV S/W 1/2016		4,518.05
701-000-252-238	LANTERNS OF CASCADE JUNE 2019		9,296.95
701-000-252-239	NATIONAL TIRE SEPTEMBER 2019		256.50
701-000-252-240	EDWARD ROSE/ GARDEN APARTMENTS	844.00	
701-000-252-751	GLENWOOD HILLS S/W BOND		23,211.72
701-000-253-221	UNIVERSAL SIGN SYSEMS 17-3397 7/2017		48.34
701-000-253-328	MIEDEMA METAL BUILDING SYSTEM 11/14		26.00
701-000-253-360	WOLVERING BLDG GROUP 16-3318 6/2016		500.00
701-000-253-373	ROBERT GROOTER 17-3386 5/2017		500.00
701-000-253-375	WATERFALL SHOPPES LLC 17-3389 6/2017		500.00
701-000-253-376	TOWN CENTER INN & SUITES 17-3391 6/2017		500.00
701-000-253-377	JAMNBEAN/FREEDOM REINS FARM 17-3392 7/17		500.00
701-000-253-378	PARADIGM DESIGN INC 17-3395 7/17		500.00
701-000-253-379	2771 ORANGE AVE LLC 17-3401 8/2017		500.00
701-000-253-382	RJP CONSULTING INC 17-3407 9/2017		500.00
701-000-253-385	INNOVATIVE DESIGN PC 17-3419 10/2017		500.00
701-000-253-386	LACK ENTERPRISES INC 17-3421 10/2017		500.00
701-000-253-387	NEDERVELD 17-3423 10/2017		500.00
701-000-253-388	BENITEAU RESIDENTIAL LLC 17-3424 11/2017		500.00
701-000-253-389	ALPHA LIMA VENTURES LLC 17-3425 11/2017		500.00
701-000-253-390	QUAIL RIDGE GOLF COURSE17-3428 12/2017		500.00
701-000-253-391	THORNAPPLE EVANGELICAL 17- 3429 12/17		500.00
701-000-253-392	THORNAPPLE RIVER NURSERY 18-3433 1/18		500.00
701-000-253-394	THE EAGLE PROPERTIES 18-3438 2/2018		500.00
701-000-253-395	KAMMINGA & ROODVOETS 18-3444 2/2018		500.00
701-000-253-397	DYKEMA EXCAVATORS INC 18:3450		500.00
701-000-253-398	SIBSCO LLC 18-3456 5/2018		500.00
701-000-253-399	GREEN CASTLE PROPERTIES 18-3458 5/2018		1,000.00
701-000-253-401	THORNAPPLE ENTERPRISES 18-3464 5/2018		500.00
701-000-253-404	NEDERVELD 18-3471 6/2018		500.00
701-000-253-405	NEWCO DESIGN BUILD LLC 18:3477		500.00
701-000-253-407	LANTERS 18:3488		500.00
701-000-253-408	PARADIGM DESIGN INC 18-3492 9/2018		500.00
701-000-253-409	LACKS TRIM SYSTEMS 18:3501 11/2018		500.00
701-000-253-411	BUFFUM HOMES LLC 18:3507		500.00
701-000-253-412	ROGUE LLC 18:3508		408.00
701-000-253-413	ROGUE LLC 18:3509		406.75
701-000-253-414	BDR EXECUTIVE HOMES PATHWAY BOND		1,000.00
701-000-253-415	GLENWOOD DEVELOPMENT PARTNERS 19:3516		500.00

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
701-000-253-416	GOLDEN VALLEY DEVELOPMENT 19:3519		500.00
701-000-253-417	ROBERT GROOTERS DEVELOPMENT CO 19:3526		380.50
701-000-253-418	TOM GIUSTI/ ROUND HILL 19:3527		15,862.25
701-000-253-419	CASCADE TLC DAYCARE 19:3534		500.00
701-000-253-420	NATIONAL TIRE WHOLESALE 19:3538		500.00
701-000-253-421	WATERMARK PROPERTIES LLC 19:3542		500.00
701-000-253-422	WALMART 19:3541		494.10
701-000-253-423	BRAD HARMON/ BKBE HOLDINGS LLC 19:3550		500.00
701-000-253-424	SARAH HOTCHKISS 19-3558		363.50
701-000-253-425	AUGUSTA TOWER 19-3570		1,087.30
701-000-253-426	EDWARD ROSE DEV CO., LLC		238.50
701-000-253-427	TARGET 20-3576 ZONING VARIANCE		171.00
701-000-253-431	GOLDEN VALLEY SITE CONDO #20-3593-ESCROW		80.00
701-000-253-432	GOLDEN VALLEY SITE CONDO #20-3594- PLAN		500.00
701-000-253-433	LIVE SPACE 4995 STARR ST SE		500.00
701-000-253-434	VENTURE ENGINEERING, PLLC		500.00
701-000-253-435	MOORE & BRUGGINK, INC		500.00
701-000-253-436	BOB MORSE 21-3629		500.00
701-000-253-437	GOLE DENTAL GROUP, PC 21-3632		500.00
701-000-253-438	MEDBIO #21-3620 4/2021		5,000.00
701-000-253-439	TOM GIUSTI/ ROUND HILL 21-3636 PUD AMEND		500.00
701-000-253-440	GOLF CLUB @ THORNAPPLE POINTE		500.00
701-000-253-445	DYKEMA EXCAVATORS, INC		500.00
701-000-253-446	DANIEL STEPHAN BUILDERS # 21-3665		10,000.00
701-000-253-447	QUAIL RIDGE GOLF COURSE #21-3680		500.00
701-000-253-448	PATTERSON ICE CENER, INC. #21-3681		500.00
701-000-253-449	JMR PROPERTY 2 LLC, #21-3629		20,000.00
701-000-255-000	CASCADE THORN RIVER ASSOC 16:3303		500.00
701-000-255-741	JAMES TIMMONS TRUST		12,400.00
701-000-255-742	JACKS SMITH (IRF) M 10/16/2015		23,120.34
701-000-255-743	CUSTOMER DEPOSITS- SOLICITATION BONDS		1,100.00
701-000-283-004	REDWOOD LIVING PERFORMANCE BOND 13-3139		10,000.00
701-000-283-168	RON DYKSTRA 2769 TRD		500.00
701-000-283-169	CHICK-FIL-A PUD AMEND 19:3533		500.00
701-000-283-171	PATHWAY BOND - 1990 SPAULDING		500.00
701-000-283-740	HENRY KRAMER PERFORMANCE BOND		15,371.17
701-000-283-741	PERFORMANCE BOND 5801 KRAFT		5,000.00
Total Fund 701 - TRUST AND AGENCY		229,549.74	229,549.74

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 701 - TRUST AND AGENCY		
*** Assets ***		
701-000-003-002	HENRY KRAMER ESCROW	15,371.17
701-000-003-004	JACK SMITH ESCROW	23,120.34
701-000-003-018	CD - CHEMICAL BANK JAMES TIMMONS	12,400.00
701-000-015-004	MONEY MARKET - CHEMICAL BANK	177,814.23
	Total Assets	228,705.74
*** Liabilities ***		
701-000-214-000	DUE TO GENERAL FUND	4.63
701-000-230-004	T&A INTERST DUE GF	1,541.86
701-000-250-080	CASCADE POINTE-PATHWAY BOND	9,554.62
701-000-250-173	PATHWAYS-WOLVERINE BLDG GROUP- 6010 28TH	1,800.00
701-000-250-175	PATHWAYS - CASCADE TRAILS SENIOR LIVING	3,000.00
701-000-252-050	WALMART S/W INSP GR 3/2013	826.83
701-000-252-166	REDWOOD LIVING/WHITE WATER S/W 4/2014	3,413.30
701-000-252-167	RIDGES OF CASCADE S/W 4/2014	948.12
701-000-252-168	STONESHIRE PHASE II S/W 4/2014	1,559.25
701-000-252-205	GROOTERS DEV./ 5400 INTERNATIONAL PKWAY	500.00
701-000-252-227	CASCADE MARKETPLACE 5/08	8,858.33
701-000-252-230	FORD AIRPORT PK LOT S/W	8,468.75
701-000-252-231	DRURY DEVELOPMENT S/W 9/2015	4,201.08
701-000-252-232	FORD AIRPORT VIEWING PARK	32.00
701-000-252-236	LACKS TRIM DIV S/W 1/2016	4,518.05
701-000-252-238	LANTERNS OF CASCADE JUNE 2019	9,296.95
701-000-252-239	NATIONAL TIRE SEPTEMBER 2019	256.50
701-000-252-240	EDWARD ROSE/ GARDEN APARTMENTS	(844.00)
701-000-252-751	GLENWOOD HILLS S/W BOND	23,211.72
701-000-253-221	UNIVERSAL SIGN SYSEMS 17-3397 7/2017	48.34
701-000-253-328	MIEDEMA METAL BUILDING SYSTEM 11/14	26.00
701-000-253-360	WOLVERING BLDG GROUP 16-3318 6/2016	500.00
701-000-253-373	ROBERT GROOTER 17-3386 5/2017	500.00
701-000-253-375	WATERFALL SHOPPES LLC 17-3389 6/2017	500.00
701-000-253-376	TOWN CENTER INN & SUITES 17-3391 6/2017	500.00
701-000-253-377	JAMNBEAN/FREEDOM REINS FARM 17-3392 7/17	500.00

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
701-000-253-378	PARADIGM DESIGN INC 17-3395 7/17	500.00
701-000-253-379	2771 ORANGE AVE LLC 17-3401 8/2017	500.00
701-000-253-382	RJP CONSULTING INC 17-3407 9/2017	500.00
701-000-253-385	INNOVATIVE DESIGN PC 17-3419 10/2017	500.00
701-000-253-386	LACK ENTERPRISES INC 17-3421 10/2017	500.00
701-000-253-387	NEDERVELD 17-3423 10/2017	500.00
701-000-253-388	BENITEAU RESIDENTIAL LLC 17-3424 11/2017	500.00
701-000-253-389	ALPHA LIMA VENTURES LLC 17-3425 11/2017	500.00
701-000-253-390	QUAIL RIDGE GOLF COURSE 17-3428 12/2017	500.00
701-000-253-391	THORNAPPLE EVANGELICAL 17-3429 12/17	500.00
701-000-253-392	THORNAPPLE RIVER NURSERY 18-3433 1/18	500.00
701-000-253-394	THE EAGLE PROPERTIES 18-3438 2/2018	500.00
701-000-253-395	KAMMINGA & ROODVOETS 18-3444 2/2018	500.00
701-000-253-397	DYKEMA EXCAVATORS INC 18:3450	500.00
701-000-253-398	SIBSCO LLC 18-3456 5/2018	500.00
701-000-253-399	GREEN CASTLE PROPERTIES 18-3458 5/2018	1,000.00
701-000-253-401	THORNAPPLE ENTERPRISES 18-3464 5/2018	500.00
701-000-253-404	NEDERVELD 18-3471 6/2018	500.00
701-000-253-405	NEWCO DESIGN BUILD LLC 18:3477	500.00
701-000-253-407	LANTERS 18:3488	500.00
701-000-253-408	PARADIGM DESIGN INC 18-3492 9/2018	500.00
701-000-253-409	LACKS TRIM SYSTEMS 18:3501 11/2018	500.00
701-000-253-411	BUFFUM HOMES LLC 18:3507	500.00
701-000-253-412	ROGUE LLC 18:3508	408.00
701-000-253-413	ROGUE LLC 18:3509	406.75
701-000-253-414	BDR EXECUTIVE HOMES PATHWAY BOND	1,000.00
701-000-253-415	GLENWOOD DEVELOPMENT PARTNERS 19:3516	500.00
701-000-253-416	GOLDEN VALLEY DEVELOPMENT 19:3519	500.00
701-000-253-417	ROBERT GROOTERS DEVELOPMENT CO 19:3526	380.50
701-000-253-418	TOM GIUSTI/ ROUND HILL 19:3527	15,862.25
701-000-253-419	CASCADE TLC DAYCARE 19:3534	500.00
701-000-253-420	NATIONAL TIRE WHOLESAL 19:3538	500.00
701-000-253-421	WATERMARK PROPERTIES LLC 19:3542	500.00
701-000-253-422	WALMART 19:3541	494.10
701-000-253-423	BRAD HARMON/ BKBE HOLDINGS LLC 19:3550	500.00
701-000-253-424	SARAH HOTCHKISS 19-3558	363.50
701-000-253-425	AUGUSTA TOWER 19-3570	1,087.30
701-000-253-426	EDWARD ROSE DEV CO., LLC	238.50
701-000-253-427	TARGET 20-3576 ZONING VARIANCE	171.00

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
701-000-253-431	GOLDEN VALLEY SITE CONDO #20-3593-ESCROW	80.00
701-000-253-432	GOLDEN VALLEY SITE CONDO #20-3594- PLAN	500.00
701-000-253-433	LIVE SPACE 4995 STARR ST SE	500.00
701-000-253-434	VENTURE ENGINEERING, PLLC	500.00
701-000-253-435	MOORE & BRUGGINK, INC	500.00
701-000-253-436	BOB MORSE 21-3629	500.00
701-000-253-437	GOLE DENTAL GROUP, PC 21-3632	500.00
701-000-253-438	MEDBIO #21-3620 4/2021	5,000.00
701-000-253-439	TOM GIUSTI/ ROUND HILL 21-3636 PUD AMEND	500.00
701-000-253-440	GOLF CLUB @ THORNAPPLE POINTE	500.00
701-000-253-445	DYKEMA EXCAVATORS, INC	500.00
701-000-253-446	DANIEL STEPHAN BUILDERS # 21-3665	10,000.00
701-000-253-447	QUAIL RIDGE GOLF COURSE #21-3680	500.00
701-000-253-448	PATTERSON ICE CENER, INC. #21-3681	500.00
701-000-253-449	JMR PROPERTY 2 LLC, #21-3629	20,000.00
701-000-255-000	CASCADE THORN RIVER ASSOC 16:3303	500.00
701-000-255-741	JAMES TIMMONS TRUST	12,400.00
701-000-255-742	JACKS SMITH (IRF) M 10/16/2015	23,120.34
701-000-255-743	CUSTOMER DEPOSITS- SOLICITATION BONDS	1,100.00
701-000-283-004	REDWOOD LIVING PERFORMANCE BOND 13-3139	10,000.00
701-000-283-168	RON DYKSTRA 2769 TRD	500.00
701-000-283-169	CHICK-FIL-A PUD AMEND 19:3533	500.00
701-000-283-171	PATHWAY BOND - 1990 SPAULDING	500.00
701-000-283-740	HENRY KRAMER PERFORMANCE BOND	15,371.17
701-000-283-741	PERFORMANCE BOND 5801 KRAFT	5,000.00
	Total Liabilities	228,705.74

***** Fund Balance *****

Total Fund Balance	0.00
Beginning Fund Balance - 2021	0.00
Net of Revenues VS Expenditures - 2021	0.00
*2021 End FB/2022 Beg FB	0.00
Net of Revenues VS Expenditures - Current Year	0.00
Ending Fund Balance	0.00
Total Liabilities And Fund Balance	228,705.74

*** Year Not Closed**

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
Fund 703 - CURRENT TAX COLLECTION FUND			
703-000-001-001	CASH (CASH DRAWER)	150.00	
703-000-001-103	CASH- CHEM /TAX WIRE	34.86	
703-000-001-110	FLAGSTAR BANK - CASH	1,904,405.93	
703-000-001-111	CASH RECEIVING & WIRE - FLAGSTAR	160,360.24	
703-000-001-112	CASH DELINQUENT - FLAGSTAR	5,631.47	
703-000-214-100	CCT-PATHWAYS		45,027.04
703-000-214-105	CCT-POLICE		58,801.36
703-000-214-110	CCT - OPERATING TAXES		124,485.44
703-000-214-112	CCT - OVER/SHORT		0.77
703-000-214-115	CCT - FIRE		168,516.85
703-000-214-116	CCT OPEN SPACE		29,464.35
703-000-214-120	CCT - LIBRARY		19,201.65
703-000-214-135	CCT- SPECIAL ASSESSMENTS		6,398.66
703-000-214-140	CCT - STREET LIGHTS		3,626.79
703-000-214-155	CCT - ADMIN		20,370.41
703-000-214-200	CCT - IFT PATHWAYS		5.90
703-000-214-205	CCT - IFT POLICE		7.70
703-000-214-210	CCT - IFT OPERATING TAXES		16.31
703-000-214-215	CCT - IFT FIRE		22.08
703-000-214-216	CCT OPEN SPACE IFT		3.86
703-000-214-220	CCT-IFT LIBRARY		2.51
703-000-222-110	KENT COUNTY - OPERATING		2,983.51
703-000-222-111	KENT COUNTY - INTEREST		347.80
703-000-222-160	KENT COUNTY - JAIL		99,061.94
703-000-222-165	KENT COUNTY - ZOO/MUSEUM		55,212.09
703-000-222-170	KENT COUNTY - SENIOR		62,740.73
703-000-222-172	KENT COUNTY - VETERAN'S MILLAGE		6,243.48
703-000-222-175	KENT COUNTY - DOG LICENSE		419.60
703-000-222-180	KENT COUNTY DRAIN		969.24
703-000-222-185	KENT COUNTY - EARLY CHILDHOOD		31,628.45
703-000-222-260	KENT COUNTY - IFT JAIL		12.98
703-000-222-265	KENT COUNTY - IFT ZOO/MUSEUM		7.23
703-000-222-270	KENT COUNTY - IFT SENIOR		8.22
703-000-222-272	KENT COUNTY - IFT VETERAN'S MILLAGE		0.81
703-000-222-285	KENT COUNTY - IFT EARLY CHILDHOOD		4.14
703-000-223-110	KDL - TAXES		161,765.68
703-000-223-210	KDL - IFT TAXES		21.20
703-000-225-110	FHPS - OPERATING		428,164.29
703-000-225-111	FHPS - INTEREST		169.64
703-000-225-120	FHPS - DEBT		292,892.40
703-000-225-130	FHPS - RECREATION		47,264.48
703-000-225-220	FHPS - IFT DEBT		51.79
703-000-225-230	FHPS - IFT RECREATION		8.35
703-000-225-410	CALEDONIA - OPERATING		250,760.19
703-000-225-411	CALEDONIA - INTEREST		1.60
703-000-225-420	CALEDONIA - DEBT		109,332.62
703-000-226-110	LOWELL - OPERATING		10,879.56
703-000-226-111	LOWELL - INTEREST		4.82
703-000-226-120	LOWELL - DEBT		10,585.04
703-000-226-130	LOWELL BLDG/SITE		1,494.22
703-000-228-001	SET & OPERATING TAX (COUNTY)		4,277.46
703-000-228-201	IFT SET & OPER TAX (STATE)		150.99
703-000-230-001	TAX INT- DUE TO OTHER UNIT GOVT		2,157.45
703-000-230-002	DELQ TAX - DUE TO OTHER UNIT OF GOVT		5,584.33
703-000-230-003	WIRE ACCT-DUE TO OTHER UNIT GOVT		1.00
703-000-230-012	DELQ TAX INT- DUE OTHER UNIT GOVT		28.94
703-000-230-013	WIRE ACCT INT - DUE TO OTHER GOVT		631.96

**TRIAL BALANCE REPORT FOR CASCADE CHARTER TOWNSHIP
PERIOD ENDING 01/31/2022
PRE-AUDIT**

GL NUMBER	DESCRIPTION	BALANCE DEBIT	BALANCE CREDIT
703-000-230-043	WIRE- ONLINE SERVICE FEES	129.62	
703-000-230-044	TAX NSF FEES		464.76
703-000-234-110	KENT ISD - TAXES		3,932.15
703-000-234-111	KENT ISD - TAXES INTEREST		188.35
703-000-235-110	GRCC - TAXES		1,233.82
703-000-235-111	GRCC - TAXES INTEREST		59.12
703-000-274-000	UNDISTRIBUTED TAX COLLECTION		371.87
703-000-275-000	DUE TO TAXPAYERS		2,612.14
703-000-275-001	DUE TAX PAYERS O/S		30.00
Total Fund 703 - CURRENT TAX COLLECTION FUND		2,070,712.12	2,070,712.12
Total - All Funds:		31,760,179.48	31,760,179.48

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
Fund 703 - CURRENT TAX COLLECTION FUND		
*** Assets ***		
703-000-001-001	CASH (CASH DRAWER)	150.00
703-000-001-103	CASH- CHEM /TAX WIRE	34.86
703-000-001-110	FLAGSTAR BANK - CASH	1,904,405.93
703-000-001-111	CASH RECEIVING & WIRE - FLAGSTAR	160,360.24
703-000-001-112	CASH DELINQUENT - FLAGSTAR	5,631.47
	Total Assets	2,070,582.50
*** Liabilities ***		
703-000-214-100	CCT-PATHWAYS	45,027.04
703-000-214-105	CCT-POLICE	58,801.36
703-000-214-110	CCT - OPERATING TAXES	124,485.44
703-000-214-112	CCT - OVER/SHORT	0.77
703-000-214-115	CCT - FIRE	168,516.85
703-000-214-116	CCT OPEN SPACE	29,464.35
703-000-214-120	CCT - LIBRARY	19,201.65
703-000-214-135	CCT- SPECIAL ASSESSMENTS	6,398.66
703-000-214-140	CCT - STREET LIGHTS	3,626.79
703-000-214-155	CCT - ADMIN	20,370.41
703-000-214-200	CCT - IFT PATHWAYS	5.90
703-000-214-205	CCT - IFT POLICE	7.70
703-000-214-210	CCT - IFT OPERATING TAXES	16.31
703-000-214-215	CCT - IFT FIRE	22.08
703-000-214-216	CCT OPEN SPACE IFT	3.86
703-000-214-220	CCT-IFT LIBRARY	2.51
703-000-222-110	KENT COUNTY - OPERATING	2,983.51
703-000-222-111	KENT COUNTY - INTEREST	347.80
703-000-222-160	KENT COUNTY - JAIL	99,061.94
703-000-222-165	KENT COUNTY - ZOO/MUSEUM	55,212.09
703-000-222-170	KENT COUNTY - SENIOR	62,740.73
703-000-222-172	KENT COUNTY - VETERAN'S MILLAGE	6,243.48
703-000-222-175	KENT COUNTY - DOG LICENSE	419.60
703-000-222-180	KENT COUNTY DRAIN	969.24
703-000-222-185	KENT COUNTY - EARLY CHILDHOOD	31,628.45
703-000-222-260	KENT COUNTY - IFT JAIL	12.98

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

GL Number	Description	Balance
703-000-222-265	KENT COUNTY - IFT ZOO/MUSEUM	7.23
703-000-222-270	KENT COUNTY - IFT SENIOR	8.22
703-000-222-272	KENT COUNTY - IFT VETERAN'S MILLAGE	0.81
703-000-222-285	KENT COUNTY - IFT EARLY CHILDHOOD	4.14
703-000-223-110	KDL - TAXES	161,765.68
703-000-223-210	KDL - IFT TAXES	21.20
703-000-225-110	FHPS - OPERATING	428,164.29
703-000-225-111	FHPS - INTEREST	169.64
703-000-225-120	FHPS - DEBT	292,892.40
703-000-225-130	FHPS - RECREATION	47,264.48
703-000-225-220	FHPS - IFT DEBT	51.79
703-000-225-230	FHPS - IFT RECREATION	8.35
703-000-225-410	CALEDONIA - OPERATING	250,760.19
703-000-225-411	CALEDONIA - INTEREST	1.60
703-000-225-420	CALEDONIA - DEBT	109,332.62
703-000-226-110	LOWELL - OPERATING	10,879.56
703-000-226-111	LOWELL - INTEREST	4.82
703-000-226-120	LOWELL - DEBT	10,585.04
703-000-226-130	LOWELL BLDG/SITE	1,494.22
703-000-228-001	SET & OPERATING TAX (COUNTY)	4,277.46
703-000-228-201	IFT SET & OPER TAX (STATE)	150.99
703-000-230-001	TAX INT- DUE TO OTHER UNIT GOVT	2,157.45
703-000-230-002	DELQ TAX - DUE TO OTHER UNIT OF GOVT	5,584.33
703-000-230-003	WIRE ACCT-DUE TO OTHER UNIT GOVT	1.00
703-000-230-012	DELQ TAX INT- DUE OTHER UNIT GOVT	28.94
703-000-230-013	WIRE ACCT INT - DUE TO OTHER GOVT	631.96
703-000-230-043	WIRE- ONLINE SERVICE FEES	(129.62)
703-000-230-044	TAX NSF FEES	464.76
703-000-234-110	KENT ISD - TAXES	3,932.15
703-000-234-111	KENT ISD - TAXES INTEREST	188.35
703-000-235-110	GRCC - TAXES	1,233.82
703-000-235-111	GRCC - TAXES INTEREST	59.12
703-000-274-000	UNDISTRIBUTED TAX COLLECTION	371.87
703-000-275-000	DUE TO TAXPAYERS	2,612.14
703-000-275-001	DUE TAX PAYERS O/S	30.00
	Total Liabilities	2,070,582.50
	Total Fund Balance	0.00

BALANCE SHEET FOR CASCADE CHARTER TOWNSHIP
Period Ending 01/31/2022
PRE-AUDIT

<u>GL Number</u>	<u>Description</u>	<u>Balance</u>
	Beginning Fund Balance - 2021	0.00
	Net of Revenues VS Expenditures - 2021	0.00
	*2021 End FB/2022 Beg FB	0.00
	Net of Revenues VS Expenditures - Current Year	0.00
	Ending Fund Balance	0.00
	Total Liabilities And Fund Balance	<u>2,070,582.50</u>

* Year Not Closed



CASCADE CHARTER TOWNSHIP

5920 Tahoe Dr. SE Grand Rapids, Michigan 49546

Date: March 23, 2022
To: Supervisor Lesperance and Township Board Members
From: Ben Swayze, Township Manager
Subject: Contract with Hamilton Helicopter Inc. for Spongy Moth Suppression Services

FACTS:

In the fall of 2021 Cascade Township contracted with Aquatic Consulting Services LLC to conduct spongy moth (the name has officially been changed from gypsy moth to spongy moth by the Entomological Society of America) egg mass surveys to determine areas that require aerial spraying for 2022. As a result of that survey, it has been recommended that approximately 431 acres of the Township be sprayed for spongy moth suppression. It should be noted that the recommended acreage is lower to what was sprayed in 2021 and significantly lower than years previous to that. In 2018 the Township sprayed 1,115 acres and 1,889 acres in 2019. 2020 brought a significant reduction in the spray area to 736 acres and in 2021 we sprayed 755 acres. Our biologist, Aquatic Consulting Services, indicates “Judging from observations this fall, Cascade Township is still in **much** better shape than other areas in Michigan, but we will need to maintain an intensive monitoring protocol to avoid losing the ground we have gained so far.”

The Township had utilized Mid-Michigan Helicopter Inc. for Spongy Moth Suppression services since the onset of our program until 2015. In 2015 Mid-Michigan Helicopter was bought by Hamilton Helicopter, and they have overseen our spraying program for the last seven years. Our spray program last year was successful with no known issues reported from the contractor or residents in the affected areas. The Township last sprayed for spongy moths in spring of 2021, when we sprayed 755 acres. The follow up report from Aquatic Consulting Services in summer of 2021 indicated the spray program was successful in suppressing the spongy moth population in a majority of the indicated spray areas.

The 2020 contract rate was \$61.75 and 2021 was \$62.20. The 2022 spray contract proposal from Hamilton Helicopter calls for spraying 431 acres at a cost of \$67.40 per acre, an increase of 8.4%. The rise in cost is associated in increases in product and fuel costs. The anticipated cost of the 2022 spray program is \$29,050.

The program will take place in the time period between May 1st and June 15th, with a more specific date to be available when the weather breaks. The Township is required to notify all residences in the spray block areas of the program. Any objectors to the spray program are eligible to be removed from the spray block at the discretion of the Township.

Attached for your review are:

- Proposed agreement with Hamilton Helicopter Inc. for Spongy Moth Suppression Services.
- Communication from Aquatic Consulting Services regarding spray program
- Map of the proposed spray blocks for 2022
- Spongy Moth information brochure published by the MSU Extension
- Information regarding Bacillus Thuringiensis pesticide.

ANALYSIS & CONCLUSIONS:

The Township has participated in the spongy moth spray program in conjunction with Mid-Michigan Helicopter Inc/Hamilton Helicopter and Aquatic Consulting Services going on 24 years. The Township has participated in the program because of the acknowledgement of the devastating effect the spongy moth population could have on the tree canopy cover of the Township.

During the onset of the program it was not uncommon for the Township to spray 1000 – 2000 acres per year. The continued treatment has allowed the program to be successful and our spongy moth populations to be controlled. The partnership with both Aquatic Consulting Resources and Hamilton Helicopters Inc. has allowed us to efficiently allocate our financial resources to this program. The survey ensures that the aerial spray program effectively targets areas of infestation above the set thresholds, and on several occasions has saved us from unnecessarily spraying, as was the case in 2013 and 2010-11

FINANCIAL CONSIDERATIONS:

The proposed agreement with Hamilton Helicopter Inc. is for a rate of \$67.40 per acre, which is \$5.20 per acre more than the 2022 contract and represents the increased cost of *Bacillus Thuringiensis* as well as a significant increase in fuel costs. The total cost of the program will come to \$29,050. The Township has budgeted \$50,000 for this program in 2022

RECOMMENDED ACTION:

Approve the agreement with Hamilton Helicopter Inc. for Spongy Moth Suppression Services.



Aquatic Consulting Services

P.O. Box 530, Sanford, MI 48657
www.aquaticremedies.com

989-689-0223

December 10, 2021

**Mr. Ben Swayze, Manager
Cascade Charter Township
5920 Tahoe Dr, S.E.
Grand Rapids, MI 49546**

Dear Mr. Swayze:

We have completed the gypsy moth egg mass surveys, maps, and report for the 2022 season in Cascade Charter Township. I have included JPG and PDF map files of the results for you to review and to post on the city website as needed. Both JPG and PDF files are printable for your purposes although the PDF file will be more user friendly on your website. I have also included a short report on the conditions in each recommended spray block. An 18 x 24-inch map may be sent in a separate package for display purpose, if desired.

Overall, I have fairly good news for Cascade Township. Gypsy moth egg mass numbers continue to trend downward across much of the township. In the attached report, you will see the conditions in each spray block explained as well as an explanation of how Integrated Pest Management (IPM) programs operate from a monitoring standpoint. We seem to have much of the populations in the Township suppressed, but a few areas do still contain high enough egg mass densities to cause nuisance to homeowners. Only one area, block Cas11, shows high enough densities to cause significant tree damage in 2022. All other areas are recommended primarily to inhibit population rebound or reduce residual infestation. Accordingly, we are pleased recommend a decrease of 324 acres (43%) for a total of 431 acres for spring 2022. We should continue to see much reduced nuisance and defoliation, but we are still in a very erratic gypsy moth cycle across much of the state. We have seen significant rebound in some neighboring West Michigan communities this year, so we need to be prepared to respond aggressively to any rebounding. Judging from observations this fall, Cascade Township is still in **much** better shape than other areas in Michigan, but we will need to maintain an intensive monitoring protocol to avoid losing the ground we have gained so far.

I will hold off on digitizing the spray blocks for the pilot's use until you have had a chance to review the maps. Once we get closer to spray time and you have selected an aerial applicator, I will provide the pilot with spray maps and digitized files.

Thank you for the opportunity to work for Cascade Township again this season. Please let me know if I can help with anything further, 989-689-0223 or gypsymoth@aquaticremedies.com.

Sincerely,

Neal Swanson
Owner/Biologist

Cascade Charter Township
Recommended Gypsy Moth Spray Areas 2022

By
Aquatic Consulting Services
December 2021

Block #	Acres	Reason for Spray
Cas01	33	An established population in good habitat. Population has been largely suppressed for a few years but does show signs of rebound. Population is continuous with Ada Township, so reinfestation is a concern. Nuisance is primary concern due to successive years of infestation. Spray to inhibit reinfestation and mitigate potential nuisance.
Cas02	40	A remnant population in very good habitat showing signs of rebound. Nuisance is primary concern due to prior infestation in the area. Tree damage is not as much of a concern due to relatively low egg mass densities. Spray to inhibit rebound and mitigate potential nuisance.
Cas03	32	A sustained population in good habitat. Tree damage is not a concern, but some nuisance has been confirmed in the area via homeowner interaction. Spray to reduce nuisance and further suppress population.
Cas04	41	A persistent remnant population in very good habitat. Population was largely suppressed for several years but is showing signs of slight rebound. Nuisance is primary concern as egg mass densities are not high enough to cause significant tree damage. Spray to mitigate potential nuisance and inhibit rebound.
Cas05	9	A rising population in good habitat. Several years ago, a small population was identified in Tassel Park. The area was treated, and no population was found in recent years. A small population was identified in 2021 surveys. Spray to contain any spreading and mitigate potential nuisance in public park.
Cas06	61	A persistent remnant population in prime habitat. Rebound in population is evident. Some trees in the area were heavily defoliated in successive years, so tree damage is primary concern, particularly along 30 th and Hayward St. Nuisance is a secondary concern due to history of infestation. Spray to limit further tree damage and inhibit rebound and mitigate potential nuisance.
Cas07	72	An established population in good habitat. Tree damage is primary concern particularly in trees overhanging 28 th St. Nuisance is secondary concern but is low according to resident reports. Spray to suppress population and limit tree damage.
Cas08	44	A persistent remnant population in very good habitat. Population was largely suppressed for a few years but does show signs of slight rebound. Some trees in the area were heavily defoliated in successive years, so tree damage is the primary concern. A secondary concern would be visibility of defoliation on the heavily traveled Whitneyville Rd. Spray to inhibit rebound and limit further tree damage.
Cas09	46	Conditions are similar to block Cas08. Area is not as heavily traveled but significant tree damage did occur in successive years in the area. A history of nuisance is also notable. Spray to limit further tree damage and mitigate potential nuisance

Cas10	23	A rising population in very good habitat. Population has been largely suppressed for several years. Population is continuous with untreated Caledonia Township, so reinfestation is a concern. A few trees in the area were heavily defoliated in prior years, so tree damage is the primary concern. Spray to limit further tree damage and inhibit reinfestation.
Cas11	30	A persistent remnant population in prime habitat. Population was largely suppressed but does show some signs of rebound. Tree damage is primary concern, especially in previously heavily infested trees along 60 th St. Reinfestation from untreated adjacent communities in Lowell and Caledonia Townships is also a concern. Spray to inhibit reinfestation and limit further tree damage.

Total Acreage = **431 acres**

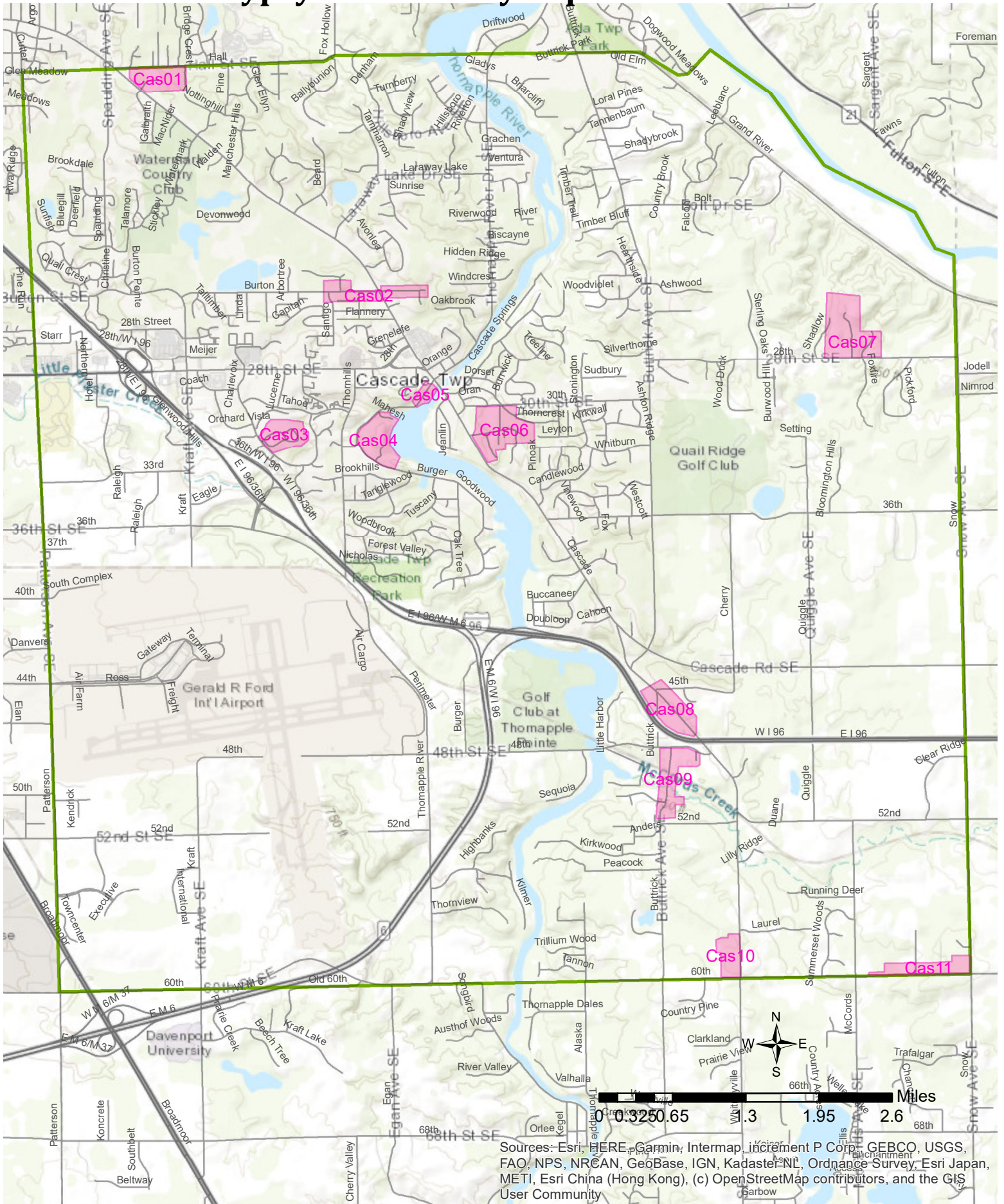
As stated in previous reports to Cascade Township, gypsy moth suppression programs in Michigan generally follow an Integrated Pest Management (IPM) strategy which is focused on low environmental impact and economic awareness. Further, an IPM strategy intends to mitigate exponential population growth with treatment only until latent environmental controls begin to limit populations sufficiently. This approach requires that a monitoring period be commenced once environmental controls begin to act on populations sufficiently where tree damage is expected to be minimal and nuisance levels will be tolerable in the coming season. Egg mass surveys for the 2020 season (fall 2019) showed that environmental controls had begun to act in various areas, so monitoring activities commenced in lieu of suppressive efforts. Considering the low number of complaints, and low defoliation levels observed in the 2020 post-spray survey, we are confident this was the correct approach. Unfortunately, a few monitoring areas did show some rebound in fall 2020 surveys, and we felt it was necessary to respond accordingly and increase spray acreage. It appears that we made the right call, as population growth in many of the monitoring areas has stalled and started to decline. Additionally, establishment of new populations is low, so we currently have acceptable suppression over much of the Township. However, there are a few areas that still contain high enough egg mass densities to cause potential nuisance, but these areas should respond well to treatment. **We are pleased to recommend a decrease of 43% (324 acres) for a total of 431 acres indicated above.** The current population cycle continues to be challenging, but we are headed the right direction (downward). We need to remain vigilant though, as we are already seeing significant rebound in neighboring West Michigan communities. We will have to continue to stay on top of monitoring and treating remnant populations and small rebounds as we continue to reduce numbers in wait of mother nature’s assistance. Accordingly, we advise that all recommended areas are treated with *Bacillus thuringiensis kurstaki* (B.t.k.) in Spring 2022.

The term “nuisance” is subjective and relates to the likelihood that the feeding behavior and number of caterpillars in the area will impact a property owner’s quality of life. Some property owners may experience heavy infestation yet go unbothered. Other property owners may view 5-10 caterpillars visible on a barn door as a nuisance. Field experience during gypsy moth infestation suggests that the number of egg masses found in an area may yield a widespread nuisance situation. The term “tree damage” is more literal, but relative to environmental and historical factors as well. Any level of defoliation should be considered damaging, but otherwise healthy trees are generally much more resilient, even after consecutive years of defoliation.

Other environmental stressors such as drought or disease are additive factors that will contribute to greater risk of tree degradation and/or mortality. Defoliation levels of >60% are also very stressful to trees, although most trees can survive 3+ years of >60% defoliation if few other stressors are present. Habitat quality relates to the species composition, density, distribution, understory, and topography of an area. Mixed forest type consisting primarily of oaks, neatly groomed understory, mixed age-class, and low topographic variability are the ideal conditions for persistent infestation, and so this habitat is designated as “prime” with very good, good, and marginal habitat in decreasing suitability. Trends in populations are designated by the egg mass residues in the area. Rising populations show a high new/old egg mass ratio, with established, sustained, and remnant populations extending toward a high old/new egg mass ratio.

Spray areas are recommended based on historical data, habitat suitability, population dynamics, and field experience in gypsy moth management. Other areas within the township may also contain some level of gypsy moth infestation, but such areas are either show a significant downward trend or habitat conditions do not exhibit high likelihood of a vigorous infestation. The level of damage and/or nuisance can be difficult to predict given the interaction of unpredictable environmental factors. Additionally, gypsy moth suppression program managers are often tasked with balancing high potential for damaging gypsy moth numbers with high community benefit. Areas where these considerations overlap are generally the areas that are treated first with available funds and areas of diminishing return are treated as funds are depleted. Our treatment recommendations take this into account, and we try to limit recommended spray areas to these top-tier areas. Accordingly, it is possible that some residents may observe low level gypsy moth activity outside of recommended treatment areas. These areas may have simply not met the requirements to warrant treatment this season but may qualify for treatment in coming seasons.

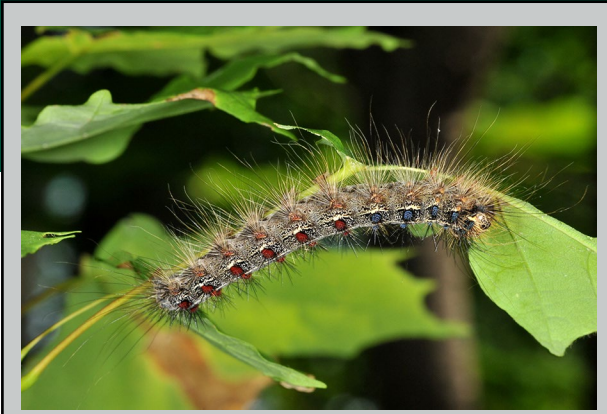
Cascade Charter Township Gypsy Moth Survey Report 2022 Season



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Shaded areas are recommended for aerial B.t.k. spray in Spring 2022

Aquatic Consulting Services 2021



Lymantria dispar caterpillar feeding on oak leaf.
Photo by Clifford Sadof, Purdue University.

Btk: One management option for *Lymantria dispar*

Authors: Deborah G. McCullough, Ph.D., Professor, Dept. of Entomology and Dept. of Forestry, Michigan State University

Leah S. Bauer, Ph.D., Research Entomologist, Northern Research Station, U.S. Dept. of Agriculture, Forest Service

Update MSU Extension bulletin E-2421 - October 2021

Lymantria dispar, formerly gypsy moth, an invasive pest native to Europe, was introduced into Massachusetts in 1869 by a well-meaning, but clearly misguided, amateur naturalist. Despite many efforts to contain this pest, *Lymantria dispar* populations have continued to expand. People can accidentally move *Lymantria dispar* egg masses or other life stages into new areas, which greatly increases the rate of spread. Populations are now found across much of the eastern United States and Canada.

Lymantria dispar was first discovered in central Lower Michigan in the 1950s, and the first outbreaks occurred in this area in the mid-1980's. By the late 1990's, much of Lower Michigan and areas in the Upper Peninsula had experienced a major *Lymantria dispar* outbreak. Today, *Lymantria dispar* is present in all Michigan counties. During most years, *Lymantria dispar* populations are low and few people even notice them. Occasionally, however, the density of a local *Lymantria dispar* population builds to outbreak levels.

Lymantria dispar outbreaks typically last two to four years, then collapse, usually because the caterpillars die from viral and fungal diseases. Parasitoids, predators, starvation and unfavorable weather may also help reduce *Lymantria dispar* numbers. Once an outbreak collapses, the population will remain low for some time, often several years.

A *Lymantria dispar* outbreak can be unpleasant for people who live, work or enjoy outdoor recreation in affected areas. Large hairy caterpillars can be abundant in forests, campgrounds and parks, and in residential areas. The caterpillars often wander in search of cool, shady areas, often resting on the sides of houses and trees during the day. Frass (insect feces) produced by the caterpillars feeding on leaves in the tree canopies can rain down on driveways, sidewalks and picnic tables. Oaks and other favorite host trees can be heavily defoliated, usually between late June and mid-July.

Lymantria dispar completes one generation each year. Tiny *Lymantria dispar* caterpillars hatch from eggs sometime between late April and mid to late May. Newly hatched caterpillars disperse by hanging from a silk strand and waiting to be carried in the wind. The caterpillars feed for six to eight weeks on the leaves of trees in forested, rural, suburban and urban areas. By the time caterpillars finish feeding, they may be 2 to 3 inches long.

Oak trees are usually their favorite hosts, but *Lymantria dispar* caterpillars can feed on many other hardwood trees including aspen, basswood (linden), willow, birch and crabapple. When populations are high, caterpillars sometimes feed on spruce, pines or other conifer trees. In fact, *Lymantria dispar* caterpillars can feed on at least 300 different species of trees and woody shrubs.

Hardwood trees (those that lose their leaves in fall) can tolerate two or three years of severe or even complete defoliation if they are reasonably healthy. Often, severely defoliated hardwood trees produce a second set of leaves in midsummer, which allows the trees to build up energy for the next year. Producing the second set of leaves, however, can stress the trees, slowing growth and sometimes making the trees more vulnerable to other pests.

Unfortunately, conifers (evergreens) such as spruce, fir and pine trees cannot produce a second set of buds during the summer. If caterpillars consume all or nearly all the needles on conifer trees, the trees will die.

Though *Lymantria dispar* is here to stay, there are several options to help control this pest during outbreaks. One option involves spraying Bt to protect tree foliage and reduce the annoyance caused by caterpillars. Bt refers to a microorganism called *Bacillus thuringiensis*. Bt is widely used to control *Lymantria dispar* and certain other caterpillar pests

because of its effectiveness, ease of use and its low toxicity to other animals, including other insects. This publication is designed to answer some frequently asked questions (FAQs) about Bt.

What is Bt?

Bt is the abbreviation for *Bacillus thuringiensis*, a native bacterium commonly found in soil and on plants. Thousands of Bt varieties exist in nature, each with its own unique characteristics. Most Bt varieties are insect pathogens that cause disease in specific groups of insects, and several are registered with the U.S. Environmental Protection Agency (EPA) as microbial insecticides. Though Bt products can be highly effective in controlling specific insects, they have little impact on other animals. Therefore, sprays made with Bt pose much less risk of affecting non-target organisms than conventional chemical insecticide sprays.

The Bt products used to control *Lymantria dispar* during outbreaks are made from a strain known as *Bacillus thuringiensis* var. *kurstaki* HD-1, or more simply, as Btk. Btk has been used for *Lymantria dispar* control in the northeastern U.S. since 1961 and in Michigan since 1985.

The Btk formulation used for *Lymantria dispar* spray programs in Michigan is certified by the Organic Materials Review Institute (OMRI), a national nonprofit organization that approves products for organic growers, as regulated by the USDA National Organic Program. Btk is commonly used by organic gardeners and farmers, as well as some conventional farmers, to control caterpillar pests of fruits and vegetables.

How does Btk control *Lymantria dispar*?

When Btk grows, it produces spores and non-living protein crystals. When *Lymantria dispar* caterpillars eat leaves that have been sprayed with Btk, the protein crystals dissolve in their digestive system and become toxic. This can occur only in caterpillars because of the many unique conditions present in their digestive system. For example, caterpillars have an alkaline digestive system, while humans and many other animals have acidic digestive systems.

Soon after caterpillars feed on leaves sprayed with Btk, they stop feeding. If the caterpillars consume enough Btk, they die after a few days from a combination of starvation, damage to their digestive system and bacterial growth within their bodies.



Newly hatched *Lymantria dispar* caterpillars on egg mass. Photo by Steven Katovich, USDA Forest Service, Bugwood.org.

There are a few unusual but important things to remember about the way Btk works:

- Btk must be eaten by caterpillars to be effective. Therefore, the leaves of trees or shrubs must be well coated with Btk.
- Young *Lymantria dispar* caterpillars are usually more sensitive to Btk than older, larger caterpillars. This is one reason why Btk should be applied soon after caterpillar eggs hatch. Timing of Btk applications depends on spring weather conditions and varies by location (see MSU's [Enviroweather's Lymantria dispar treatment guidelines](#)). Older, larger caterpillars may become ill, but can often survive a Btk application.

What are the ingredients in a Btk product?

Commercially available Btk products are composed of two major components: the active ingredients and the inert ingredients. The active ingredients in products used to control *Lymantria dispar* are Bt *kurstaki* HD-1 spores and protein crystals. Bt *kurstaki* HD-1 is a naturally occurring bacterium in the environment.

Inert (non-active) formulation ingredients are added to the Btk spores and crystals. These ingredients make it easier to mix, spray and store the product. These ingredients are food-grade additives that appear on the U.S. Food and Drug Administration's "[Generally Recognized As Safe](#)" list.

How does Btk differ from conventional chemical insecticides?

In contrast to Btk, conventional chemical insecticides are man-made or synthetic chemicals that usually affect the nervous systems of insects and other animals. These products can kill insects on contact or when eaten. This means conventional insecticides are capable of killing most non-target insects, including beneficial parasitoids and predators, and pose greater health hazards to humans and other animals.

How long does Btk last?

Most of the Btk sprayed on tree foliage is destroyed by sunlight and microbial activity within a few days. To help reduce *Lymantria dispar* populations and defoliation during an outbreak, tree foliage must be sprayed each year, ideally soon after *Lymantria dispar* eggs hatch.

Does Btk harm other insects?

Btk is much more selective than conventional

chemical insecticides, but it can affect other kinds of foliage-feeding caterpillars if they are also feeding on treated leaves. This is a good reason to use Btk only when *Lymantria dispar* populations are high. Some caterpillar species are more sensitive to Btk than *Lymantria dispar*, while others are less sensitive. Scientists have studied non-target species of caterpillars following Btk sprays for *Lymantria dispar* suppression. They found that populations of native caterpillar species tend to recover by re-colonizing areas relatively quickly.

Btk has little or no effect on the large majority of insects, including bees, lacewings, ladybird beetles and other beneficial species. This is a significant benefit of using Btk rather than conventional chemical insecticide products, which are toxic to many kinds of insects.

How safe is Btk for humans?

After 50 years of testing and widespread use, Btk has demonstrated minimal hazards to people and other mammals, birds, fish, beneficial insects and other non-target organisms. To ensure the continued safety of Btk for the public, the EPA administers an extensive system of regulatory safeguards. These include requirements for mammalian and environmental toxicology testing of the Btk active ingredients and formulated products. Quality control procedures are also in place to ensure the safety of each batch of Btk products.

As part of its regulatory function, a reassessment of Btk safety conducted by the EPA confirmed earlier findings, including: “...the lack of any reports of significant human health hazards of the various *Bacillus thuringiensis* strains...” (EPA document #EPA 738-R-98-004, available at: <https://archive.epa.gov/pesticides/reregistration/web/pdf/0247.pdf>).

Major studies were conducted in New Zealand when populated areas were repeatedly sprayed with Btk to eradicate another introduced pest, the white-spotted tussock moth¹. A key citation in a report on the New Zealand study stated: “...The data support the belief that they [*Bt kurstaki* products] can be safely used in environments in which human exposure is likely to occur.” However, if you are concerned about your exposure to Btk, remaining indoors during the spray application is a good, common-sense strategy.

This publication was produced in part with support by the Crop Protection and Pest Management Program 2017-70006-27175 from the USDA National Institute of Food and Agriculture. Any opinions, findings, conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

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WCAG 2.0 AA



Defoliated oak trees during a *Lymantria dispar* outbreak.
Photo by Clifford Sadof, Purdue University.

Will Btk get rid of ALL my *Lymantria dispar* caterpillars?

It's important to realize that a Btk spray will not kill every *Lymantria dispar* caterpillar on your property. When Btk is applied properly, however, it can help protect your trees from serious defoliation and reduce the annoyance caused by high numbers of *Lymantria dispar* caterpillars during an outbreak.

Is it possible to buy Btk to spray caterpillars in my own garden?

Yes, several commercially available Btk products can be used to control caterpillars on shade trees, fruit trees or plants in the garden. Both liquid formulations and wettable powders are available from local garden stores. Be sure to follow the directions on the label.

Where can I get more information on Bt?

More detailed information on the use of Btk to control *Lymantria dispar* caterpillars during an outbreak is available from:

- The U.S. Forest Service's "[Bacillus thuringiensis for managing gypsy moth: A review.](#)"
- The Entomological Society of America's "[Is Bt safe for humans to eat?](#)"

¹1998 Report to the Ministry of Forestry prepared by Jenner Consultants Ltd., Parnell Auckland, New Zealand, to address issues raised in 1995 by Diane Wharton, Society Targeting Overuse of Pesticides, North Vancouver.

Bacillus thuringiensis

Fact Sheet No. 5.556

Insect Series | Home and Garden



by W.S. Cranshaw*

Bacillus thuringiensis (Bt) is an insecticide with unusual properties that make it useful for pest control in certain situations. Bt is a naturally occurring bacterium common in soils throughout the world. Several strains can infect and kill insects. Because of this property, Bt has been developed for insect control. At present, Bt is the only “microbial insecticide” in widespread use.

The insecticidal activity of Bt was first discovered in 1911. However, it was not commercially available until the 1950s. In recent years, there has been tremendous renewed interest in Bt. Several new products have been developed, largely because of the safety associated with Bt-based insecticides.

Properties

Unlike typical nerve-poison insecticides, Bt acts by producing proteins (delta-endotoxin, the “toxic crystal”) that reacts with the cells of the gut lining of susceptible insects. These Bt proteins paralyze the digestive system, and the infected insect stops feeding within hours. Bt-affected insects generally die from starvation, which can take several days.

Occasionally, the bacteria enter the insect’s blood and reproduce within the insect. However, in most insects it is the reaction of the protein crystal that is lethal to the insect. Even dead bacteria containing the proteins are effective insecticides.

The most commonly used strain of Bt (*kurstaki* strain) will kill only leaf- and needle-feeding caterpillars. In the past decade, Bt strains have been developed that control certain types of fly larvae (*israelensis* strain, or Bti). These are widely used against larvae of mosquitoes, black flies and fungus gnats.

More recently, strains have been developed with activity against some

leaf beetles, such as the Colorado potato beetle and elm leaf beetle (*san diego* strain, *tenebrionis* strain). Among the various Bt strains, insecticidal activity is specific. That is, Bt strains developed for mosquito larvae do not affect caterpillars. Development of Bt products is currently an active area and many manufacturers produce a variety of products. Effectiveness of the various formulations may differ.

Disadvantages

Bt is susceptible to degradation by sunlight. Most formulations persist on foliage less than a week following application. Some of the newer strains developed for leaf beetle control become ineffective in about 24 hours.

Manufacturers are experimenting with several techniques to increase its persistence. One involves inserting Bt toxic crystal genes into other species of bacteria that can better survive on leaf surfaces (e.g., the M-Trak formulation of *san diego* strain).

The highly specific activity of Bt insecticides might limit their use on crops where problems with several pests occur, including nonsusceptible insects (aphids, grasshoppers, etc.). As strictly a stomach poison insecticide, Bt must be eaten to be effective, and application coverage must be thorough. This further limits its usefulness against pests that are susceptible to Bt but rarely have an opportunity to eat it in field use, such as codling moth or corn earworm that tunnel into plants. Additives (sticking or wetting agents) often are useful in a Bt application to improve performance, allowing it to cover and resist washing.

Since Bt does not kill rapidly, users may incorrectly assume that it is ineffective a day or two after treatment. This, however, is merely a perceptual problem, because Bt-affected insects eat little or nothing before they die.

Bt-based products tend to have a shorter shelf life than other insecticides.

Quick Facts

- *Bacillus thuringiensis* (Bt) is a naturally occurring bacterial disease of insects. These bacteria are the active ingredient in some insecticides.
- Bt insecticides are most commonly used against some leaf- and needle-feeding caterpillars. Recently, strains have been produced that affect certain fly larvae, such as mosquitoes, and larvae of leaf beetles.
- Bt is considered safe to people and nontarget species, such as wildlife. Some formulations can be used on essentially all food crops.
- Bt is used in agriculture as a liquid applied through overhead irrigation systems or in a granular form for control of European corn borer.

*Colorado State University Extension entomologist and professor, bioagricultural sciences and pest management. 12/2008





Figure 1: Alfalfa webworms killed by *Bacillus thuringiensis*.

Manufacturers generally indicate reduced effectiveness after two to three years of storage. Liquid formulations are more perishable than dry formulations. Shelf life is greatest when storage conditions are cool, dry and out of direct sunlight.

Advantages

The specific activity of Bt generally is considered highly beneficial. Unlike most insecticides, Bt insecticides do not have a broad spectrum of activity, so they do not kill beneficial insects. This includes the natural enemies of insects (predators and parasites), as well as beneficial pollinators, such as honeybees. Therefore, Bt integrates well with other natural controls. For example, in Colorado, Bt to control corn borers in field corn has been stimulated by its ability to often avoid later spider mite problems. Mite outbreaks commonly result following destruction of their natural enemies by less selective treatments.

Perhaps the major advantage is that Bt is essentially nontoxic to people, pets and wildlife. This high margin of safety recommends its use on food crops or in other sensitive sites where pesticide use can cause adverse effects.

Bt-based products tend to have a shorter shelf life than other insecticides.

Unlike most insecticides, Bt insecticides do not have a broad spectrum of activity, so they do not kill beneficial insects.

Perhaps the major advantage is that Bt is essentially nontoxic to people, pets and wildlife.

Table 1. Primary strains of *Bacillus thuringiensis* used in managing insects.

<i>Bacillus thuringiensis</i> strain (Common name)	Susceptible insects
<i>aizawi</i>	Many Lepidoptera larvae
<i>kurstaki</i>	Many Lepidoptera larvae
<i>israelensis</i>	Larvae of mosquitoes, black flies, fungus gnats
<i>japonensis</i>	Larvae of scarab beetles (Coleoptera: Scarabaeidae)
<i>tenebrionis (sandiego)</i>	Larvae of leaf beetles (Coleoptera: Chrysomelidae)
<i>CryIAb delta-endotoxin¹</i>	Many Lepidoptera larvae
<i>Cry3Bb1 variant¹</i>	Corn rootworm larvae (Coleoptera: Chrysomelidae)

¹Only used in production of genetically modified crops

Insects Controlled by Bt

Kurstaki strain (Biobit, Dipel, MVP, Steward, Thuricide, etc.):

Vegetable insects

- Cabbage worm (cabbage looper, imported cabbageworm, diamondback moth, etc.).
- Tomato and tobacco hornworm.

Field and forage crop insects

- European corn borer (granular formulations have given good control of first generation corn borers).
- Alfalfa caterpillar, alfalfa webworm.

Fruit crop insects

- Leafroller.
- Achemon sphinx.

Tree and shrub insects

- Tent caterpillar.
- Fall webworm.
- Leafroller.
- Redhumped caterpillar.
- Spiny elm caterpillar.
- Western spruce budworm.
- Pine budworm.
- Pine butterfly.

Israelensis strains (Vectobac, Mosquito Dunks, Gnatrol, Bactimos, etc.)

- Mosquito.
- Black fly.
- Fungus gnat.

San diego/tenebrionis strains (Trident, M-One, M-Trak, Foil, Novodor, etc.)

- Colorado potato beetle.
- Elm leaf beetle.
- Cottonwood leaf beetle.

Application

The greatest use of Bt involves the *kurstaki* strain used as a spray to control caterpillars on vegetable crops. In addition, Bt is used in agriculture as a liquid applied through overhead irrigation systems or in a granular form for control of European corn

borer. The treatments funnel down the corn whorl to where the feeding larvae occur.

Many formulations (but not all) are exempt from pesticide tolerance restrictions and may be used up to harvest on a wide variety of crops. This also makes Bt useful in applications where pesticide drift onto gardens is likely to occur, such as treating trees and shrubs. The exceptional safety of Bt products also makes them useful where exposure to pesticides is likely during mixing and application.

To control mosquito larvae, formulations containing the *israelensis* strain are placed into the standing water of mosquito breeding sites. For these applications, Bt usually is formulated as granules or solid, slow-release rings or brickettes to increase persistence. Rates of use are determined by the size of the water body. Make applications shortly after insect eggs are expected to hatch, such as after flooding due to rain or irrigation. Bt persistence in water is longer than on sun-exposed leaf surfaces, but reapply if favorable mosquito breeding conditions last for several weeks. Although the *israelensis* strain is quite specific in its activity, some types of nonbiting midges, which serve as food for fish and wildlife, also are susceptible and may be affected. For information on mosquito control, see fact sheet 5.526, *Mosquito Management*.

Use of Bt (*israelensis*) for control of fungus gnat larvae involves drenching the soil. Bt applied for control of elm leaf beetle or Colorado potato beetle (*san diego/tenebrionis* strain) is sprayed onto leaves in a manner similar to the formulations used for caterpillars. Bt does **not** control shore flies, another common fly found in greenhouses.

Colorado State University, U.S. Department of Agriculture and Colorado counties cooperating. CSU Extension programs are available to all without discrimination. No endorsement of products mentioned is intended nor is criticism implied of products not mentioned.



CASCADE CHARTER TOWNSHIP

5920 Tahoe Dr. SE Grand Rapids, Michigan 49546

Date: March 23, 2022
To: Supervisor Lesperance & Cascade Township Board
From: Benjamin Swayze, Township Manager
Subject: Thornapple River Aquatic Weed Management RFP

FACTS:

The Township recently approved the creation of the Thornapple River Special Assessment District. There are 301 properties included in the SAD, and each property contributes \$300 per year. The SAD collects a total of \$90,300 each year and the funds are available for the following purposes:

To make certain improvements to the Thornapple River including weed control and removal, debris removal and safety enhancements, and silt control and removal

As part of the process in establishing the SAD, the Township Board also created the Thornapple River SAD Ad-Hoc committee to provide recommendations to the Township Board on how the SAD funds should be utilized. The committee has focused on procuring the services of an Aquatic Weed Management consultant and contractor as the first “order of business” for the SAD. The Township Board approved the issuance of the RFP for these services in February. In response to the RFP, the Township received two bids, one from Aquatic Doctors and one from PLM Lake & Land Management Corp

Attached for your review is:

- Aquatic Weed Management Program proposals from Aquatic Doctors and PLM
- RFP to select a qualified firm for a Thornapple River Aquatic Weed Management Program

ANALYSIS & CONCLUSIONS:

The Thornapple River SAD Ad-Hoc Committee met in early March to review the proposed bids from the RFP. Both companies came highly regarded by references, and each have experience working in Cascade Township and on the Thornapple River. After reviewing qualifications and experience of each of the contractors, as well as the financial bids, the TR SAD Ad-Hoc committee has recommended the Township Board select PLM to do aquatic weed management activities on the Thornapple River. Reasoning for the selection include:

- Efficiencies from utilizing the same company that is currently working on other sections of the Thornapple River
- More robust mechanical harvesting capabilities
- More detailed initial management timeline.

The Thornapple River SAD Ad-Hoc Committee has recommended the initial contract be for a period of 3 years, but also have an “out” clause at the end of each year should the aquatic weed management program prove to be inefficient or ineffective, or if the contractor proves unsatisfactory.

If the Township Board chooses to award the contract, the next step will be for the committee to meet with the selected contractor to organize the program for the first year. Projected timeline includes:

March – Permit Application

April – Spring notices to residents and spring water quality testing

Early May – Initial vegetation survey

Late May – Initial herbicide application for exotic (invasive) plants

May – August – Application of various herbicides (if necessary)

June – Mid-summer herbicide application

July – Mid-summer water quality sampling

July – Mid-summer native plant control (mechanical or herbicide)

August – Late summer herbicide application

August/September – Fall vegetation survey

August/September – Fall water quality sampling

October/November – Year-end River Management Plan

November – Reporting to EGLE

FINANCIAL CONSIDERATIONS:

This initial estimate from PLM for the program is \$40,000 to \$58,000. Once the contractor is on board and a great understanding of the scope of work can be conducted, a narrower cost estimate will be available and a formal SAD budget will be forwarded to the Board by the committee for consideration.

RECOMMENDED ACTION:

To approve recommendation of PLM Lake & Land Management for a Thornapple River Aquatic Weed Management Program for a 3-year period with an annual out clause.

**CASCADE CHARTER TOWNSHIP
REQUESTS FOR PROPOSALS
Thornapple River Aquatic Weed Management**

Cascade Charter Township hereby requests proposals from qualified firms interested in providing a ***Thornapple River Aquatic Weed Management*** program for Cascade Charter Township.

Proposals shall be due March 5, 2022 at 4 p.m. Please mark the sealed envelope as "Cascade Township Thornapple River Aquatic Weed Management." A complete Request for Proposal document may be obtained at:

Cascade Charter Township
ATTN: Ben Swayze
Township Manager
5920 Tahoe Dr. SE
Grand Rapids, MI 49546
Phone: 616-949-1500

Or on the Web at:
<http://www.cascadetwp.com/>



Cascade Township Request for Proposals 2022 Thornapple River Aquatic Weed Management

Cascade Charter Township hereby requests proposals from qualified firms interested in providing assistance to the Cascade Township Board in developing and implementing an Aquatic Weed Management Program for the Thornapple River between the Cascade Dam and 60th Street (project area map included as Appendix A)

These specifications describe the conditions, requirements and responsibilities accepted by contractors when bidding on providing these services to Cascade Charter Township (Cascade *or* the Township).

I. INTRODUCTION

1.1 Background

Cascade Charter Township recently approved a 15-year Special Assessment District (SAD) that includes all properties on the Thornapple River between Cascade Dam and 60th Street. There are 301 properties included in the SAD, and each property contributes \$300 per year. The SAD collects a total of \$90,300 each year. The funds are available for the following purposes:

To make certain improvements to the Thornapple River including weed control and removal, debris removal and safety enhancements, and silt control and removal

This **Request for Proposal** is intended to solicit and secure proposals from contractors with experience in aquatic weed management on bodies of water similar to the Thornapple River between the Cascade Dam and 60th Street (see “Project Area Map in Appendix A). The successful bidder will be required to develop and implement an aquatic weed management program in accordance with all federal, state and local regulations, including all permits necessary to implement the proposed program. Funding for the program will come from the Thornapple River SAD, *though not all funding in the SAD is designated for aquatic weed management activities*. Assistance from qualified contractors is sought for specific tasks included in the plan preparation and execution process, as identified in the scope of services section of this document.

1.2 Minimum Qualifications

Proposals will be accepted from firms who meet the following minimum qualifications. Individuals or consultants that do not meet these minimum qualifications shall be deemed non-responsive and will not receive further consideration.

A. Standard Insurance Requirements:

1. Commercial General Liability Coverage: Commercial General Liability Coverage including products/completed operations, contractual liability, and personal injury. This insurance shall be on a commercial insurance, occurrence form. The certificate must contain, as an endorsement, the following language: “Cascade Charter Township, Michigan, its elected officials, officers, employees, boards, commissions, authorities, voluntary associations, and any other units operating under the jurisdiction of the Township and within appointment of its operating budget, including Cascade Charter Township, are named as additional insured and said coverage shall be considered to be the primary coverage rather than any policies and insurance or self-insurance retention owned or maintained by Cascade Charter Township”. The limit amount for this insurance shall be not less than \$1,000,000 per occurrence and \$2,000,000 aggregate.
2. Workers Compensation Coverage: At a minimum, Workers Compensation Insurance as required by State of Michigan law, Michigan statutory coverage, or evidence of an exemption for sole proprietors or a State issued exemption for corporations, partnerships or LLCs who have three or less employees. Employer Liability limits of \$500,000 each accident, \$500,000 disease policy limit and \$500,000 disease each employee.
3. Automobile Liability Coverage: The Automobile Liability Coverage shall cover all owned, non-owned, and hired automobiles with a limit of not less than \$1,000,000 combined single limit each accident.
4. Professional Liability Insurance: A policy in an amount not less than \$1,000,000 per claim.
5. Cancellation: Cancellation clause of insurance not less than thirty (30) days.
6. Proof of Insurance: The Township reserves the right to require complete, certified copies of all required insurance policies at any time.

B. The successful bidder will be required to enter into a professional service

contract with the Township. This RFP and the successful bidders RFP response will be included as part of the professional services agreement.

1.3 Funding

Any contract awarded as a result of this Request for Proposal is contingent upon the availability of funding, as determined by the Township Board.

1.4 Period of Performance

The period of performance of any contract resulting from this RFP is tentatively scheduled to begin on or about February 24th, 2022 and conclude on or before a date to be determined.

II. GENERAL INFORMATION FOR CONSULTANTS

2.1 Project Administrator

The Project Administrator is the sole point of contact for this procurement. All communication between prospective bidders and the Township upon receipt of this RFP shall be with the Project Administrator, as follows:

Ben Swayze
Township Manager
5920 Tahoe Dr. SE
Grand Rapids, MI 49546

Telephone: (616) 949-1500
E-mail: bswayze@cascadetwp.com

Prospective bidders are to rely on written statements issued by the Project Administrator. Any other communication will be considered unofficial and non-binding on the Township. Communication directed to parties other than the Project Administrator may result in disqualification of the prospective bidder.

2.2 Estimated Schedule of Procurement Activities

- | | |
|--|----------------------|
| • Issue request for proposals | January 27, 2022 |
| • Proposals due | March 5, 2022 |
| • TR Ad-Hoc Committee evaluates proposals | Week of March 7 |
| • TR Ad-Hoc Committee Makes Recommendation | Week of March 7 |
| • Township Board approves contract | March 9 or 23, 2022 |
| • Project Begins | March 10 or 24, 2022 |
| • Project Concludes (...on or before) | TBD |

2.3 Submission of Proposals

Responding firms are required to submit two (1) physical copy of their proposal, which must have original signatures, and one (1) electronic copy. The proposal, whether mailed or hand delivered, must arrive at the Cascade Township Hall no later than 4:00 p.m., local time, on Friday March 5, 2022.

Proposals must include all information as outlined in Section 4 of this document.

The proposal is to be sent to the Project Administrator at the address noted in Section 2.1, above. The envelope should be clearly marked “Thornapple River Aquatic Weed Management Plan” and addressed to the attention of the Project Administrator.

Bidders who mail proposals should allow normal mail delivery time to ensure timely receipt of their proposals by the Project Administrator. Respondents assume the risk for the method of delivery chosen. The Township assumes no responsibility for delays caused by any delivery service. Electronic proposals may be transmitted using electronic media such as email transmission, but one physical copy is still required to be delivered to the Township.

Late proposals will not be accepted and will be automatically disqualified from further consideration. All proposals and any accompanying documentation become the property of the Township and will not be returned.

2.4 Proprietary Information and Public Disclosure

Materials submitted in response to this competitive procurement shall become the property of the Township. All proposals received shall remain confidential until the deadline for submission of bids or proposals has expired, as defined by Michigan statute (MCL 15.243 (1)(i), the Freedom of Information Act).

2.5 Revisions to the RFP

In the event it becomes necessary to revise any part of this RFP, addenda will be reduced to writing and submitted to all prospective bidders known to the Township. For this purpose, the published questions and answers and any other pertinent information will be considered an addendum to the RFP and will be provided to prospective bidders.

The Township reserves the right to cancel or to reissue the RFP in whole or in part, prior to execution of a contract.

2.6 Acceptance Period

Proposals must provide 60 days for acceptance by Township from the due date for receipt of proposals.

2.7 Responsiveness

All proposals will be reviewed by the Project Administrator to determine compliance with administrative requirements and instructions specified in this RFP. Failure to comply with any part of the RFP may result in rejection of the proposal as non-responsive. The Township also reserves the right, at its sole discretion, to waive minor administrative irregularities.

2.8 Most Favorable Terms

The Township reserves the right to make an award without further discussion of the proposal submitted. Therefore, the proposal should be submitted initially on the most favorable terms that the respondent could propose. There will be no best and final offer procedure. The Township does reserve the right to contact a respondent for clarification of its proposal.

The Respondent should be prepared to accept this RFP for incorporation into a contract resulting from this RFP. Contract negotiations may incorporate some of or the Respondent's entire proposal. It is understood that the proposal will become a part of the official procurement file on this matter without obligation of the Township.

2.9 Costs of Proposal

The Township will not be liable for any costs incurred by the Respondent in preparation of a proposal submitted in response to this RFP, in conduct of a presentation, or any other activities related to responding to this RFP.

2.10 No Obligation Contract

This RFP does not obligate the Cascade Township Board to award a contract for services specified herein.

2.11 Rejection of Proposals

The Township reserves the right at its sole discretion to reject any and all proposals received without penalty and not to issue a contract as a result of this RFP.

2.12 Failure to Comply

The Respondent is specifically notified that failure to comply with any part of the RFP may result in rejection of the proposal as non-responsive.

2.13 Commitment of Funds

The Cascade Township Board or their delegates are the only individuals who may legally commit the Township to the expenditures of funds for a contract resulting from this RFP. No cost chargeable to the proposed contract may be incurred before receipt of a fully executed contract.

2.14 Signatures

The proposal must be signed and dated by a person authorized to legally bind the Respondent to a contractual relationship, e.g., the President or Executive Director if a corporation, the managing partner if a partnership, or the proprietor if a sole proprietorship.

III. SCOPE OF WORK

3.1 General Scope of Work

The scope of work the Township is seeking includes the development and implementation of an aquatic weed management program for the Thornapple River between the Cascade dam and 60th Street (see Appendix “A” for a project area map) in accordance with all federal, state and local regulations. The plan, though not necessarily exclusively, should focus in the control and/or eradication of non-native aquatic weeds. The Township is open to considering unique and creative processes for this project, but any project should include the following items at a minimum.

1. A full survey of the project area in order to develop an aquatic weed management plan that will encompass a minimum of 3 years of weed control activities. The Township can ensure access to the Thornapple River to complete the survey and, if necessary, provide aquatic transportation as well.
2. A narrative of the process that will be used to develop the aquatic weed management plan. The Township understand that without a full survey of the project area a management plan cannot be developed, but the respondent should be able to provide a detailed explanation of how that plan will be developed as well as a timeline of proposed activities.
3. Applying for and securing all of the necessary permits from all regulatory agencies in order to carry out the aquatic weed management program
4. Being available to meet with the Township staff, Thornapple River SAD Ad-Hoc committee and or Cascade Township Board, given a reasonable notice period, to provide periodic updates on the aquatic weed management program.
5. Execution of the developed and approved aquatic weed management program for an initial period of 3 years.

IV. PROPOSAL CONTENT

Bidders are encouraged to be creative in their project submissions, however each proposal must contain, at a minimum, the following information:

4.1 Business Organization

State the full name and address of your organization and, if applicable, the branch office, consultants, or other subordinate elements that will provide or assist in providing the service. Include phone number(s), email address(es) and respondent's website address.

4.2 Executive Summary

Summarize the respondent's strong points and how experience, particularly with similar responsibilities, will benefit the stakeholders. Include a brief description of the scope, staffing and dates.

4.3 Project Proposal

Describe in narrative form, the methods proposed for creating the plan. Identify deliverables with emphasis on the stated scope and intent of the project, including tasks and timelines. Emphasis on clarity and detail of the proposal is an important consideration in evaluation of the responses. Proposal must identify a timeline for this project, including proposed beginning date, length of time to conduct each phase and completion date.

4.4 Project Staffing

Provide a chart with the staff you are committing to the solicitation. Show lines of authority and communication and provide a brief role description with responsibilities for each person as they relate to the solicitation.

4.5 Pricing Methodology

Provide a price methodology with attention to detail and understandability that includes a properly designed and implemented all-inclusive response. The Respondent shall include all associated costs to successfully complete the project. At a minimum, proposal should include the following costs:

- Completion of the project area survey
- Development of the aquatic weed control program
- Costs (on a per acre basis) of any products that would be anticipated to be applied as part of the aquatic weed management program
- Costs (on a per acre basis) of mechanical harvesting should it be included as part of the aquatic weed management program
- Any other costs that respondent believes might be relevant in an eventual aquatic weed management program.

4.6 Authorized Negotiations

Include the names and telephone numbers of those persons in your organization authorized to negotiate the proposed contract with the Township.

4.7 References

Provide a minimum of three (3) relevant references preferably of similar scope and complexity. Include the names of the projects, location, completion date, project cost and specific challenges; identify project team members and references for each project including telephone numbers and email addresses.

Provide permission for the Township to contact any organization or individuals, whether offered as references or otherwise, to obtain information that will assist the Township in evaluating the Proposal. The Township retains the right to use such information to make selection decisions. Submittal of a proposal is an agreement that the Township may contact and utilize such information.

4.8 Additional Information

The respondent may also include any additional information and/or comments believed to be pertinent but not specifically requested elsewhere in the document.

IV. EVALUATION CRITERIA

5.1 Evaluation Subcommittee

The Thornapple River SAD Ad-Hoc Committee of Cascade Township will be responsible for evaluating the submitted proposals and submitting a recommendation of project award to the full Township Board for consideration. Though there are no formal evaluation criteria, the Committee will focus on the following items when evaluating the proposals:

1. Verification of the basic information provided by the firm including, but not limited to, entity name, principals, incorporation, licensing and references.
2. Completeness of the proposal
3. Responsiveness to all elements outlined in the request for proposal.
4. Project proposal and the likelihood it will satisfactorily address the needs of the Township in regards to the scope of services.
5. Experience and qualifications of the Respondent and all team members identified.
6. Experience and results in performing the services desired by the Township.

7. Cost proposal that is advantageous to the Township.

5.2 Subcommittee Recommendation

The Thornapple River SAD Ad-Hoc Committee will be responsible for making recommendations on the choice of a proposal to the full Cascade Township Board. The Cascade Township Board remains the sole body responsible for awarding a contract. The Thornapple River SAD Ad-Hoc Committee and Cascade Township Board reserves the right to request additional information from the firms including, but not limited to, formal interviews and/or firm presentations. Should firms be requested to present to the Committee or the Cascade Township Board, they will receive a minimum of five (5) days' notice.

Submission of a proposal indicates acceptance by the firm of the conditions contained in the Request for Proposal.



PLM
LAKE & LAND
MANAGEMENT CORP

February 21, 2022

Cascade Charter Township
Attn: Ben Swayze, Township Manager
5920 Tahoe Dr. SE
Grand Rapids, MI 49546

Thank you allowing me to submit a proposal to work on the Thornapple River. I am confident that the service you will receive will exceed your expectations. Please feel free to contact any of our references to gain more insight on the services available by PLM. PLM Lake & Land Management Corp. is a Michigan based company with a specific focus of lake management in Kent County. We have numerous offices throughout Michigan to serve our customers with the fastest response time and a highly educated and experienced staff with the latest technologies available in aquatics.

The following proposal is for your review for the Thornapple River for the 2022-2024 seasons with a variety of services available. To highlight a few of the advantages of working with PLM: All treatments are guaranteed. All billings are post service/treatment with itemized billing details. Reports and follow up information are readily available following service. In addition to any scheduled service, PLM is always available via phone or email for treatment/lake evaluation if something changes unexpectedly. Please review the following proposal and if any changes, additions, or modifications are required to suite your specific program needs, please contact me without hesitation.

PLM has been working closely with the Cascade Thornapple River Association over the last six years to help them develop an initial plan for aquatic plant management. PLM has surveyed the river multiple times, including the summer of 2021, therefore very familiar with the plant community and the immediate needs of this waterbody. PLM also works as with the Thornapple River Association located between the Cascade & Ada dams. PLM provides the association with invasive plant management, mechanical harvesting, water quality testing, vegetation surveys and any other lake management services needed. Obtaining an initial EGLE permit to treat this section of the river was a challenge due to the potential presence of a state threatened species. PLM worked tirelessly with the state agencies (EGLE, DNR) until a compromise was made and the permit was issued.

Management Program for 2022: The primary goal of aquatic plant management in the Thornapple River is the control of exotic aquatic plants. The exotic plant species, Eurasian watermilfoil, should be controlled throughout the river. The abundance of this species should be reduced to the maximum extent possible, and efforts should be made to reduce its recovery after treatment. Aquatic plant management should preserve species diversity and cover of native plants sufficient to provide habitat for fish and other aquatic organisms. Native plants should be managed to encourage the growth of plants that support the Thornapple River fishery (by creating structure and habitat) provided that they do not excessively interfere with recreational uses of the lake (e.g., swimming and fishing) in high-use areas. Where they reach recreational nuisance levels, management techniques that reduce the stature of native plants without killing them (e.g., harvesting, contact herbicides) should be used whenever possible. Specific areas should be set aside where native plants will not be managed, to provide habitat for fish and other aquatic organisms. Management will also include performing surveys (AVAS surveys when required), pre/post treatment surveys, water quality analysis and algae treatments if required.

The first step in developing a long-term aquatic plant management plan for the river is conducting a detailed vegetation survey. Performing surveys is a vital part of any lake management program. PLM typically surveys a lake in the spring and fall as well as surveying pre/post treatments. Vegetation surveys determine the locations of target and non-target plant species. The results of the surveys are used to determine the most appropriate management strategy. The vegetation surveys also document the success of the prescribed management program. An AVAS survey is the State of Michigan's method for conducting a complete aquatic vegetation survey. The Aquatic Vegetation Assessment Site (AVAS) survey divides the parts of the lake capable of growing plants (littoral zone) into subareas and records the cover of each aquatic plant found in each "site". This method of surveying considers not only the types of plant species present in the lake but also the densities of those species. AVAS surveys are also an excellent way to track plant species trends over time. A goal of invasive plant management is to have native plants increase or remain stable while exotic plants decrease over time. The success of this goal can be illustrated through the use of the AVAS data collected over several years.

An initial full river survey will take place in the spring to prepare treatment plans and evaluate overall river conditions. Acre plot maps, as well as GPS technology, will be used throughout the surveys when preparing treatment maps. Please note that board/association

members can accompany PLM in the field for surveys if pre-arranged. This initial survey will be used to determine the most appropriate, up to date, treatment recommendations based on the current growth in the river. Following this survey, recommendations will be made which will include treatment locations, products to be used and associated costs.

Proposed Timeline of Activities for 2022:

- March:* Submit Aquatic Nuisance permit application to EGLE (issuance of permit can take 6 weeks or longer)
- April:* Mail out required Spring Notice to residents, Spring water quality testing (complete in 1 day)
- Early May:* Spring AVAS vegetation survey to evaluate conditions in the river and direct management efforts (complete in 1 day)
- Late May:* Initial herbicide treatment to control any aquatic exotic plants that are found (complete in 1 day)
- May- August:* Monthly Algaecide/Chara/Starry stonewort (if found) treatments, if required (complete in 1 day)
- June:* Mid-summer herbicide treatment, if required (complete in 1 day)
- July:* Mid-summer native plant control, mechanical harvesting (complete in 3-5 days and/or herbicide treatments (complete in 1 day), if required)
- July:* Mid-summer water quality sampling (E. coli) (complete in 1 day)
- August:* Late summer herbicide treatment, if required (complete in 1 day)
- August/September:* Conduct a fall AVAS vegetation survey (complete in 1 day)
- August/September:* Conduct Fall water quality sampling (complete in 1 day)
- October/November:* Compose year-end Lake Management Plan for township review (Plan will be drafted after all water quality results are received from the state certified lab, 1 week)
- November:* Submit required treatment report to EGLE (complete in 1 day)

Below are the associated costs (on a per acre basis) of products that may be used as part of the aquatic weed management program.

Unit Cost per acre:

Contact Herbicides:

Diquat	\$150.00 (exotics)
Diquat	\$210.00 (hybrid/natives)
Aquathol K	\$170.00 (exotics)
AquaStrike	\$425.00
Nautique (Eel Grass)	\$390.00
Clipper 100ppb w/Contacts	\$425.00
Clipper 200ppb	\$550.00

Systemic Herbicides:

Navigate 2,4-D	\$400.00
Sculpin G	\$400.00
Renovate 3 (liquid)	\$325.00
Renovate OTF	\$580.00
ProcellaCOR	\$100.00/PDU
ProcellaCOR/Diquat Combo	\$575.00

Algaecides:

Copper sulfate/Chelated copper	\$45.00
Chelated copper	\$125.00
SeClear, filamentous algae	\$200.00
SeClear G, SSW Control	\$375.00
Green Clean	\$300.00
Phycomycin	\$125.00

PLM Consulting Services:

Vegetation AVAS Survey	\$560.00
Mid-summer brief checks	No Charge
Water Quality Program	\$900.00
Lake Management Plan	\$750.00
EGLE Permit Fee	\$1600.00 (cost of fee determined by EGLE annually)

Mechanical Harvesting Program:

Mechanical harvesting is best suited for nuisance native plant species. Mechanical harvesting can be used to provide relief from native plant species if they are causing a recreational nuisance. Harvesting does not kill the plants, but simply reduces it's stature, leaving lower growth for fish habitat and sediment stabilization. PLM will not harvest Eurasian watermilfoil, as this plant spreads by fragmentation.

PLM owns and operates 3 mechanical harvesting machines that operate throughout the state. We will cut down to a maximum depth of five (5) feet and require a minimum of 18 inches of water depth for harvester flotation. Harvested vegetation will be dumped at a predetermined location designated by the client within a ten (10) mile radius of the river. Any cost associated with the disposing of vegetation is the responsibility of the client, i.e., landfill disposing costs. There will be no set-up or breakdown fees of our equipment if a suitable access site is available. Expenses of an unsuitable launch site will be the responsibility of the river. A representative of the client will be required to periodically evaluate workmanship.

Cost of Harvesting: \$250.00/hour with a minimum per cutting of \$2,500.00

Water Quality Program:

The water quality program consists of sampling **two** sites on the river twice a season, spring and late summer. Parameter such as secchi disc, pH, D.O., conductivity, alkalinity and nutrient sampling of nitrates and total phosphorus give us the ability to monitor lake trends more efficiently. This information will enable us to include the trophic status of your lake. The program also tests your water for Fecal bacteria (E. Coli), in mid-summer at three separate locations, which can determine the condition of your river and if the water is safe for swimming. Reports will be issued annually in the fall.

Cost of Water Quality Program: \$900.00/annually

Estimated Budget for 2022-2024: Although a budget was not required at part of the RFP, PLM was able to put together an estimate based on past surveys of the river. All budgets are comprised using the unit costs per acre listed above and approximate acreages observed in 2021. All treatments will be preapproved prior to application. Low end budget includes EWM control and technical services (permit fee, AVAS Survey, WQ program). High end budget includes everything in the low-end budget and also incorporates native plant control (herbicides and/or harvesting).

2022:	\$40,000.00	\$58,000.00
2023:	\$40,000.00	\$58,000.00
2024:	\$40,000.00	\$60,000.00

Budget Total Three Years: \$120,000.00 to \$176,000.00

Average per Year: \$40,000.00 to \$58,667.00

This budget is an estimate and can be adjusted to meet the needs of the residents of the Thornapple River. Any management tool listed is an option and is the suggestion of PLM to meet those expectations. You will only be charged for the actual amount of control required, at the unit per acre prices listed above. All treatments are pending the approval of the Department of Environment, Great Lakes & Energy (EGLE). Treatments must be timed accordingly and conducted during low flow conditions. If native plant control is requested or recommended through the use of herbicides or mechanical harvesting, the high-end budget would be needed.

Description of Additional Management Services Available:

Meeting Attendance/Presentation: A representative of PLM is available to attend association/township meetings upon request. This request has to be made prior to meeting to allow for conflict in representative's schedule. If conflict in meeting time does arise, alternative dates and times need to be determined between representative and board. Residential concerns can always be brought to the lake association/board and then to PLM or directly to PLM by calling our office. There is no cost for PLM to attend a requested meeting.

Bathymetric Mapping: PLM utilizes state of the art mapping technology in order to provide you with an accurate and detailed depth contour map of your lake. This new software, combined with the latest in GPS/Depth finder units, has the ability to quickly collect precise bathymetry (depths) and aquatic vegetation of any given waterbody. This data can then be used to create accurate bathymetric, vegetation bio-volume, bottom hardness or treatment maps. A bathymetric map can be done with or without a survey of the lake and vice versa. A new bathymetric map is recommended every 10-20 years in order to establish updated base data on the lake, track historical changes, etc. Bathymetric mapping costs can range pending the time of year. Inquire for pricing.

Milfoil Genetic Testing: Over the last decade, advancements in technologies have allowed genetic testing of milfoil stems to determine genetic makeup (i.e. Northern watermilfoil versus Eurasian watermilfoil versus Hybrid watermilfoil). This testing has confirmed that there are variances in the genetic makeup of different hybrid milfoils. Genetically testing milfoil can be helpful if treatments have shown unexpected results. PLM has been collaborating with Universities across the country in sampling and studying the genetic makeup of milfoil infestations across Michigan. Although this data is very helpful in researching milfoil, genetic testing is not a requirement. PLM can genetically sample milfoil upon request or if required for management implementation. Inquire for pricing.

Nutrient Abatement: PLM's healthy lakefront living guide, which includes many measures taken to promote a healthy lake and reduce nutrient loads, can be presented to riparian's and discussed in the annual newsletter to residents. Additionally, PLM is certified to work with the natural shoreline partnership to restore shoreline areas for the protection of the lake and reduction of nutrients entering the lake. Cascade Charter Township can work with PLM to perform a "Score the Shore" to evaluate the river's shoreline and explore opportunities to improve conditions. In addition, nutrient remediation efforts can include dredging, bacteria augmentation, watershed planning, and tributary testing/improvement to name a few.

Contract Period:

Three Year Treatment Program: As an incentive to establish a multiple year agreement, we will treat your lake or pond at the same price structure as 2022 for 2023. The remaining year (2024) will have a cost increase of (3%) three percent or less. If total chemical cost increases 10% from the previous year a new agreement will have to be mutually acceptable. If during the life of the contract EGLE or other regulatory agencies significantly change the approved treatment procedures, either party may terminate this agreement upon giving ninety (90) days advance written notice thereof.

Permit Fee: PLM Lake & Land Management Corp. is responsible for completing and submitting aquatic nuisance permit applications. PLM Lake & Land Management Corp. will send an invoice or statement for the yearly EGLE permit application fee. It is your responsibility to send a check made out to the "State of Michigan" to our office. We must include this check with the EGLE permit application.

Posting of Treatment Areas: Posting of shoreline treatment areas is the responsibility of PLM Lake & Land Management Corp. and will be conducted according to EGLE regulations. Due to EGLE guideline changes and specific residential concerns, posting fees may apply. Signs will be attached to thick barked trees, posts or other suitable fixtures already on site. If homeowners wish to have signs posted in designated areas or on specific fixtures they must notify PLM Lake & Land Management Corp., providing lake address, location of property, and where the signs are to be posted. Pictures are the most informative way to relay this information. Notification of alternate posting must be made at least 14 days prior to treatment and additional fees may apply. The removal of posting signs after the restrictions have expired is the responsibility of the homeowner.

Notification of Treatments: It is your responsibility to notify each resident within **100 feet** of the treatment area at **least seven days** in advance, **but no more than forty-five days** prior to the first treatment date, that products will be applied to the lake (with a provided list of addresses from the lake board). This notification requirement **must** be administered to each and every property owner within 100 feet of any treatment area. PLM Lake & Land Management Corp. will provide a tentative treatment schedule and the **Notice** of proposed products to be used during the spring of each year. We will also notify resident within 100 feet of the treatment areas on the day of treatment.

Non-Target Species: Please be aware that we only control weeds and algae **present** at time of treatment. Emergent vegetation (cattails, bulrush, purple loosestrife), lily pads, eel grass and sago pondweed require separate programs for control and are not addressed unless specifically mentioned in the management program. We have no control over future weed or algae growth based on the current chemicals registered for aquatic use in Michigan.

Electronic Treatment Notification: In addition to the above-required notification procedures, the Department of Agriculture allows for electronic notification i.e. email with the contracting entity. Therefore, if the contracting entity is a township, lake board, or municipality, you will also receive the same information that is being distributed to each resident (Posting Sign) prior to the treatment. By signing this agreement with PLM Lake & Land Management Corp and providing us the contracting entity email address, we can legally implement the electronic notification procedure.

Invoicing and Payments: PLM Lake & Land Management Corp. will submit an invoice following treatment that will include the following information; lake and/or pond(s) treated, date of treatment and type of treatment or acres treated. Monies will be due net thirty (30) days after each treatment. The invoice may be subject to a fuel surcharge of up to 1% of the total treatment cost. Interest of 1.25% will be added to your bill for each additional sixty (60) days that payment is not received.

Liability Issues:

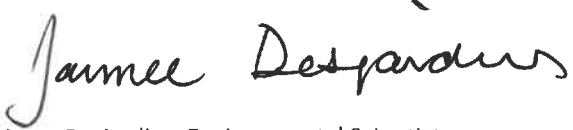
We are responsible for workman's compensation and liability insurance for the duration of the contracted period.

PLM Lake & Land Management Corp. is not responsible for fish loss due to low oxygen levels caused during warm water conditions.

Permitting:

PLM Lake & Land Management Corp. will apply for and secure all of the necessary permits from all regulatory agencies in order to carry out the aquatic weed management program.

For further clarification or modifications please contact.



Jaimee Desjardins, Environmental Scientist
West MI Regional Manager
PLM Lake & Land Management Corp.
616-891-1294 ext 2005
jaimeed@plmcorp.net
www.plmcorp.net

For: Thornapple River – Cascade Charter Township
Please Check Which Program you are participating in

Electronic Notification email address

Print Name

Text Message Number for Pre-Treatment Notification

Signature

Project Staffing



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MANAGEMENT CORP

Jaimee Desjardins, Project Lead - graduated from Michigan State University with a degree in Environmental Studies before beginning her career with PLM in 1999. While at MSU, Jaimee focused her studies on Environmental Impacts and interned with the Ingham County Drain Commissions Office. With over 20 years' experience in aquatic plants and lake management, Jaimee has focused much of her career in water quality analyzes, lake surveying/evaluation, and new technology. Jaimee's advanced knowledge in GIS has allowed PLM to expand their capabilities with mapping weed beds and preparing and evaluating treatments. Jaimee is PLM's West MI Regional Manager, managing lakes throughout the Grand Rapids Metro area to the lakeshore, as well as our Technical Services Manager where she oversees all water quality and vegetation monitoring.

Jason Broekstra, Project Support - earned his Bachelor's Degree in Biology from Grand Valley State University (GVSU) in 1995. While at GVSU he spent a summer as an intern for the Michigan Department of Natural Resources, Fisheries Division. For the past 25+ years, Jason has worked in all aspects of PLM and currently serves Vice President of MI Operations and is an active board member. Under Jason's leadership, PLM has become approved performing evaluation treatments and is leading the way to determining better application techniques and methods. Jason has focused his career at PLM working with customers in making sound scientific decisions while overseeing the work of his employees on hundreds of inland lakes and ponds. Jason is a past President of the Midwest Aquatic Plant Management Society, current President of the Michigan Aquatic Managers Association and current treasurer for the Michigan Chapter, North American Lake Management Society. He was the recipient of the "2009 Applicator of the Year" award by SePRO Corporation. Jason also serves on the Michigan Inland Lakes Partnership and many other organizations throughout Michigan.

Lucas Slagel, Senior Field Technician - has been with PLM for over 18 years. Lucas is our most senior field technician applying herbicides for the control of nuisance and invasive vegetation, conducting vegetation surveys and collecting water quality sampling. He is licensed through the Michigan Department of Agriculture and is required to take continuing education credits to stay up to date on industry advancements. Lucas is also responsible with training new technicians and managing the PLM shop. Over the years working with PLM, Lucas has been the first to identify new introductions of invasive plants to our customers' waterbodies. He has a keen eye for aquatic plant management and an incomparable asset to our team.

Eric Reed, Senior Field Technician - has been working for PLM for over 7 years. Eric has a Bachelor of Science degree from Aquinas College. As a senior field technician, Eric is responsible for applying herbicides for the control of nuisance and invasive vegetation. He also conducts vegetation survey and water quality sampling. Eric is licensed through the Michigan Department of Agriculture and is required to take continuing education credits to stay up to date on industry advancements.

AJ Weinberg, Field Technician - has been working for PLM for over 6 years. AJ has a Bachelor of Science degree from Grand Valley State University. As a senior field technician, Eric is responsible for applying herbicides for the control of nuisance and invasive vegetation. He also conducts vegetation survey and water quality sampling. Eric is licensed through the Michigan Department of Agriculture and is required to take continuing education credits to stay up to date on industry advancements. When AJ is not working with PLM during the summer he is a 4th grade teacher in Parchment.

Please see attached list of additional PLM staff that are certified to apply herbicides and/or mechanically harvest.

Authorized Negotiations

Jaimee Desjardins, Environmental Scientist
West MI Regional Manager
616-891-1294 ext 2005
jaimeed@plmcorp.net

Jason Broekstra, Biologist
VP MI Operations
616-891-1294 ext 2000
jasonb@plmcorp.net

PLM Lake & Land Management
 Employee Certifications by
 Michigan Department of Agriculture.



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Name	PLM Location	Certification #	Certification Expiration	~Initial Certification Date
Salvatore Adams	Ewart	C003130361	2022	2013
Jason Broekstra	Alto	C003960201	2023	1996
Adam Cichon	Alto	C001190506	2022	2019
Jaimee Desjardins	Alto	C003000069	2024	1999
William Ducham	Ewart	C001200459	2023	2020
Jeff Fischer	Morrice	C007120330	2024	2011
Chris Garner	Morrice	C002150136	2022	2014
BreAnne Grabill	Ewart	C003060277	2024	2006
Dustin Grabill	Ewart	C003070347	2022	2007
Steve Hanson	Morrice	C006020298	2023	2002
Kyle Heath	Ewart	C002160164	2022	2016
Jacob Hunt	Alto	C003060216	2024	2006
Caleb Hutchinson	Ewart	C001190373	2022	2019
Anna Lindquist	Ewart	C001180502	2024	2018
Blake Mallory	Sturgis	C005100409	2022	2010
Michael Pichla	Alto	C003140297	2023	2014
Eric Reed	Ewart	C002170165	2023	2016
Colton Risner	Alto	C003160331	2022	2016
Cameron Robinson	Alto	C003170475	2023	2017
Alison Schermerhorn	Ewart	C003170389	2023	2017
Ben Schermerhorn	Ewart	C003140356	2023	2014
James Scherer	Morrice	C006100412	2023	2010
Jon (Casey) Shoaff	Ewart	C002150071	2022	2015
Lucas Slagel	Alto	C005050338	2023	2005
Keith terHorst	Alto	C007160689	2022	2019
Jeff Tolan	Alto	C003960255	2023	1996
Andy Tomaszewski	Alto	C003010324	2022	2001
Dennis VanGessel	Morrice	C003150254	2024	2015
Andrew Weinberg	Alto	C002170187	2023	2017
Joel Wolthuis	Sturgis		2022	2020

Technical Equipment - Michigan



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Boats and Application Equipment: 10 Airboats (16-22 Ft)(2 new 2017 EPA compliant 16'), 6 (19Ft) Carolina Skiffs, 3 (21Ft) Carolina Skiff, 2 (16Ft) Carolina Skiffs, 9 (14Ft) Carolina Skiffs. Equipment is maintained/restored on an as needed basis. 1 -2 new boats/motors are purchased each year.

All boats are equipped with 5Hp pump systems for surface/subsurface (injection) applications of aqueous herbicides. The airboats and larger skiffs are equipped with spreader mounts and electrical connections for granular herbicide applications.

We have 16 boat mount spreaders for granular herbicide applications, such as 2,4-D/Triclopyr, and several backpack and hand-held herbicide sprayers for smaller applications. All boats and equipment older than five years have had upgrades and rebuilding as necessary. Trailers are also MDOT approved on an annual basis.

GPS and Injections Metering Systems: 2 GPS injection-metering systems for liquid application and/or granular products. 10 combination depth/GPS units. 10 Differential mapping Global Positioning (dGPS) receivers

Trucks: 28 4x4 trucks ranging from ½ to 1 ton with enclosed truck beds for on site herbicide storage. Years of trucks range from 2011 thru 2022 (2 new 2022 vehicles). Trucks are MDOT approved on an annual basis.

Spill kits containing supplies to soak up, contain and remove herbicides are in all vehicles. Eyewash safety kits are available on site at all times.

Aquatic Plant Harvesters: 2 Aquarius Harvester & 1 Aquatic Weed harvester, Weed Minder II

Mechanical harvesters use biodegradable hydraulic fluid that is environmentally safe if a spill occurred. Any other spill would be addressed based on the standards set by the Michigan Department of Agriculture.

Land Based Equipment:

- 1 Terra Track vehicle with 50-gallon spray system
- 1 Argo 8x8 amphibious vehicle with 50-gallon spray system
- 2 Honda Rancher 4x4 ATVs with 30-gallon spray systems
- 2 Back of Truck 50-gallon spray systems
- 12 Solo backpack sprayers, 12 Handheld 1/2 to 2-gallon spray units, Wick sticks and swiping mitts
- 2 Stihl chainsaws, 3 Stihl weed whip with brush blade, 1 commercial grade brush hog

Field Survey Equipment:

- 12 Differential mapping Global positioning (dGPS) receivers
- 2 Eagle combination Depth/ Global Positioning (GPS) units
- 3 Hummingbird combination Depth/ Global Positioning (GPS) units
- 10 Lowrance HDS-5 Depth/ Global Positioning (GPS) unit, 4 with side-scan technology
- 4 YSI multiparameter water quality meters
- Water and sediment sampling equipment

Laboratory Equipment: Compound microscopes and wet chemistry laboratory capabilities.

Mapping/CAD capabilities: BioBase, Auto Cad 2000 LT software, ArcMap- GIS, Global Mapper, planimeter.

Safety Equipment: All applicators are equipped with, and required to wear, personal protective equipment, including chemical suits, gloves and goggles. First aid kits and eye wash kits are kept on-site at all times. A minimum of two U.S. Coast Guard approved floatation devices (Kent) and one fire extinguisher is present on each boat.

MSDS Sheets Located in Every PLM Truck: ProcellaCOR, Aqua Pro, Aquathol K, Hydrothol 191, Clipper, Komeen, Komeen Crystal, Nautique, Navitrol, Navitrol OTF, Renovate 3, Renovate OTF, Sculpin G, Tribune, Reward, Habitat, Copper Sulfate, Cutrine Plus-Ultra, Captain- XTR, Alonglife, Cygnet Plus, PLM Blue, Cygnet Select, Poly An.

Lake References



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Algonquin Lake, 240 acres

2001 – Present

Annual Cost: ~\$65,000.00

Patrick Sharpe

2290 Ottawa Trail

Hastings, MI. 49058

269-948-8566

No email address

Specific Challenges: Widespread Eurasian watermilfoil (EWM) & Starry stonewort (SSW) infestations, prolific nuisance native plant population that require management.

Baldwin Lake, 71 acres

2000 – Present

Annual Cost: ~\$10,000.00

Don Gibbs

301 Manoka Lake Drive

Greenville, MI 48838

616-754-7714

buddy319@hotmail.com

Specific Challenges: Mis-management by previous company leading to widespread EWM and reduced native plant populations.

Big Whitefish Lake, 489 acres

1998 - Present

Annual Cost: ~\$50,000.00

Brad Quist

2680 Rush Point Dr.

Sand Lake, MI 49343

616-292-6734

tbquist@gmail.com

Specific Challenges: Lake has a history of challenging EWM that returns quickly after treatments. It also has a large littoral zone (area capable of growing plants) which can be a challenge to survey and record all exotic plants actively growing.

Lake Bella Vista, 220 acres

1998 – Present

Annual Cost: ~\$60,000.00

Dave Schmuker

6411 Bella Vista Dr.

Rockford, MI 49341

616-874-6777

dave@lakebellavista.net

Specific Challenges: Widespread Eurasian watermilfoil (EWM) & Starry stonewort (SSW) infestations, prolific nuisance native plant population that require management.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

12/14/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Michigan Community Insurance Agency Inc. 49357 Pontiac Trail Ste 101 PO Box 930599 Wixom MI 48393-0599	CONTACT NAME: Brian St. Charles, CIC, CISR	
	PHONE (A/C, No, Ext): (248) 679-7000	FAX (A/C, No): (248) 926-5959
E-MAIL ADDRESS: bwstcharles@michigancommunity.com		
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A: Homeland Insurance Company of NY		34452
INSURER B: Selective Ins Co of South Carolina		19259
INSURER C: Accident Fund National		12305
INSURER D:		
INSURER E:		
INSURER F:		

COVERAGES

CERTIFICATE NUMBER: 2022/2023 GL AU WC UMB

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS			
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			793001544	01/01/2022	01/01/2023	EACH OCCURRENCE \$ 1,000,000			
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000			
	<input checked="" type="checkbox"/> Primary Non-Contributory						MED EXP (Any one person) \$ 5,000			
	<input checked="" type="checkbox"/> Contractual Liability						PERSONAL & ADV INJURY \$ 1,000,000			
	GEN'L AGGREGATE LIMIT APPLIES PER:									GENERAL AGGREGATE \$ 2,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC									PRODUCTS - COMP/OP AGG \$ 2,000,000
	OTHER:					\$				
B	AUTOMOBILE LIABILITY			62416364	01/01/2022	01/01/2023	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000			
	<input type="checkbox"/> ANY AUTO ALL OWNED AUTOS	<input checked="" type="checkbox"/>	SCHEDULED AUTOS				BODILY INJURY (Per person) \$			
	<input checked="" type="checkbox"/> HIRED AUTOS	<input checked="" type="checkbox"/>	NON-OWNED AUTOS				BODILY INJURY (Per accident) \$			
							PROPERTY DAMAGE (Per accident) \$			
						\$				
A	UMBRELLA LIAB	<input checked="" type="checkbox"/>	OCCUR	Follows Form	01/01/2022	01/01/2023	EACH OCCURRENCE \$ 2,000,000			
	EXCESS LIAB	<input type="checkbox"/>	CLAIMS-MADE	793001545			AGGREGATE \$ 2,000,000			
	DED		RETENTION \$				\$			
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WCV6156749	01/01/2022	01/01/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER			
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input checked="" type="checkbox"/> Y/N	N/A				E.L. EACH ACCIDENT \$ 1,000,000			
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$ 1,000,000			
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000			
A	Professional Liability			793001544	01/01/2022	01/01/2023	Each Prof Service Wrongful Act 1,000,000			
A	Pollution Liability			793001544	01/01/2022	01/01/2023	Each Pollution Condition 1,000,000			

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

PLM Lake & Land Management DBA Professional Lake Management 8865 100th Street S E Alto, MI 49302	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE William St. Charles

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Invasive Plant Management

Protecting your environment today for tomorrow.



PLM
LAKE & LAND
MANAGEMENT CORP

PLM Lake & Land Management is the number one name in invasive plant management. For more than 40 years, our scientists and state-certified applicators have made it their priority to provide the highest quality service in all of our markets.

PLM provides you with a team of expert biologists, foresters, ecologists and managers to evaluate your environment, prioritize existing problems and develop plans to control existing and prevent new infestations. We use state-of-the-art equipment to analyze current conditions, then employ the safest and most effective tools to achieve the program goals while promoting ecological stability.

AN OVERALL PLANT MANAGEMENT PROGRAM

At PLM, our Plant Management Programs focus on preserving and protecting desirable plant life while controlling unwanted "weed" species through remediation services. In addition, these preventative programs strive to keep your site free of unwelcome plants that are known to be pests elsewhere in the region.

Under PLM's Plant Management Program, we first evaluate and record your site goals. Next, we prescribe an individually developed management plan to control unwanted plant growth. After consultation with you, we then implement the agreed upon plan. Later, we assess the results and use the information to modify and improve our priorities, processes and plans—starting the cycle again.

The key to our success is our Plant Management Program, which minimizes the total long-term impact of noxious aquatic and terrestrial vegetation. Our priorities include prevention of new infestations and management of existing plant growth, which provide the most value for your money while protecting our environment.

ABOUT US

- Long-term relationships with manufacturers and vendors which guarantee the highest level of technical and customer service
- Project collaboration with The Nature Conservancy, Ducks Unlimited, US Fish & Wildlife Service, US Forest Services, US Military Services and various state and local municipalities
- Licensed applicators serving the Midwest, Atlantic and Southeast regions of the United States
- Woman-owned business

MEMBERS OF

- Aquatic Plant Management Society (apms.org)
- Midwest Aquatic Plant Management Society (mapms.org)
- Responsible Industry for a Sound Environment (pestfacts.org)
- North American Lake Management Society, MI Chapter (mcnalms.org)
- Michigan Lake & Stream Associations (mymlsa.org)
- Michigan Aquatic Managers Association (mamagroup.org)
- Aquatic Ecosystem Restoration Foundation (aerf.org)
- Grand Rapids Chamber of Commerce (grandrapids.org)
- Better Business Bureau (bbb.org)
- Michigan Island Lake Partnership (canr.msu.edu/michiganlakes)



MICHIGAN LOCATIONS

8865 100th St. SE
Alto, MI 49302-9221

10785 Bennett Dr.
Morrice, MI 48857-8760

9826 S Industrial Drive
Ewart, MI 49631

1169 N Nottawa St.
Sturgis, MI 49091

Phone (616) 891-1294

Fax (616) 891-0371

Toll-free (800) 382-4434

PLMcorp.net

VEGETATION MANAGEMENT



AQUATIC

Services

- Vegetation Assessment/ Mapping
- Water Quality Monitoring
- Vegetation Management Planning
- Aquatic Invasive Plant and Algae Control
- Fisheries Evaluation
- Lake Depth and volume mapping
- Fountain Installation and Maintenance
- Phosphorus Mitigation
- Aquatic Plant Harvesting
- Aeration
- Shoreline Restoration

Markets

- Watershed Districts
- Lake Improvement Boards
- Lake Associations
- Federal, State and Local Municipalities
- Private Lake and Pond Owners
- Golf Courses
- Property Management Companies

TERRESTRIAL

Services

- Vegetation Assessments/ Mapping
- Invasive Species Management
- Roadside Vegetation Management
- Selective Timberland Improvement
- Wildlife Habitat Enhancement
- Utility Line Maintenance
- Bare Ground Maintenance
- Mechanical Mowing/Brushing

Markets

- Federal, State and Local Municipalities
- Utility Companies
- Power Transmission Companies
- Public Works
- DOTs
- Military Installations
- Private Landowners



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Aquatic Vegetation Assessment

Prescribing a Management Plan



PLM
LAKE & LAND
MANAGEMENT CORP

AQUATIC PLANTS

In moderation, aquatic plants provide many benefits to aquatic systems by producing oxygen, providing habitat for fish and other aquatic organisms, stabilizing bottom sediments and reducing shoreline erosion.

Problems exist when aquatic plants become too dense and create ecological and recreational issues. Excessive plant growth can impede biological interactions, reduce water quality and have impacts on residential property values.

ASSESSMENT

A number of factors can contribute to excessive aquatic plant growth. In most cases, several factors have combined to create the problem. Although excessive nutrients can impact aquatic plants and algae growth, the introduction of exotic plant species is responsible for the majority of aquatic plant issues.

Exotic aquatic plants are plant species that are not originally from this region. Once introduced to a waterbody they can quickly dominate a system. They have few natural controls and often crowd out native plant species, interrupt biological interactions and negatively affect water quality.

To determine what factors are contributing to excessive plant growth, a vegetation survey is recommended to assess the types, density and distribution of vegetation in the water body. This survey allows us to establish a Management Plan and track the results of management efforts.

It is also recommended to assess the water quality characteristics, as this will give us a baseline of nutrient levels, water clarity, dissolved oxygen and other parameters that can be assessed throughout the Management Program.



MICHIGAN LOCATIONS

Alto Location
8865 100th St. SE
Alto, MI 49302-9221

Morrice Location
10785 Bennett Dr.
Morrice, MI 48857-8760

Evart Location
9826 S Industrial Drive
Evart, MI 49631

Sturgis Location
1169 N Nottawa St.
Sturgis, MI 49091

Phone (616) 891-1294

Fax (616) 891-0371

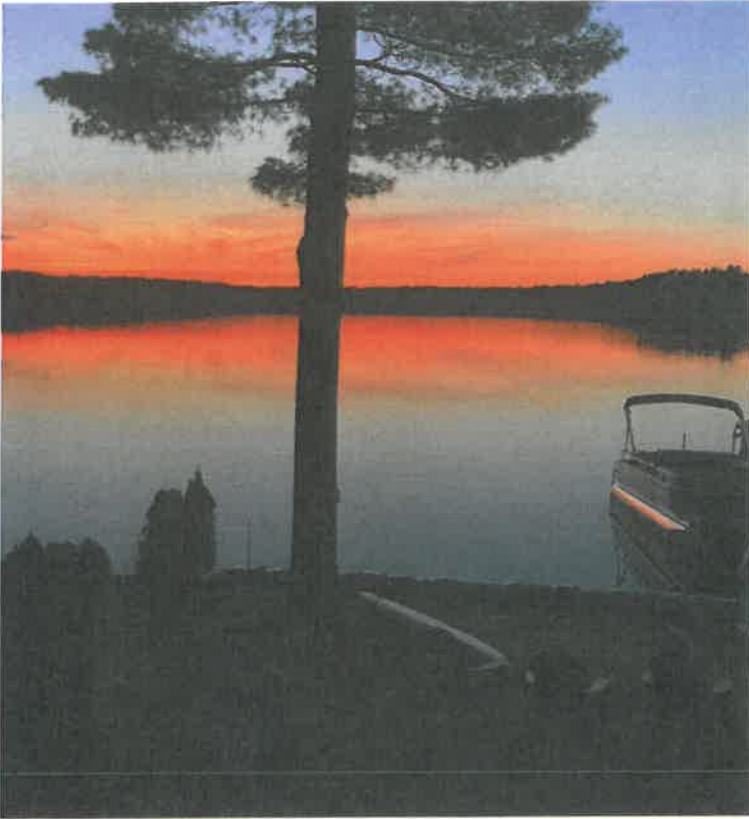
Toll-free (800) 382-4434



PLMcorp.net

PRESCRIBING & IMPLEMENTING A MANAGEMENT PLAN

Once the causes of the aquatic plant issues can be determined, a Management Plan can be developed to address the specific issues. Whether it is an exotic species, excessive native plant growth or other factors, we can prescribe a plan best suited for your water body's needs. Several options are available for aquatic vegetation management, and based on the goals of the program, the most appropriate options will be presented.



EVALUATION

By evaluating the success of the Management Program through repeated aquatic vegetation surveys, water quality assessment and stakeholder feedback, we can then determine if adjustments to the Plan are required.



HOW TO GET STARTED

To find out more about an assessment of your water body, give us a call or contact our website for the location closest to you. In most cases we can provide an informal meeting and quick assessment at your location free of charge. Complete vegetation surveys and water quality sampling charges are based on the size or specific requirements of your water body.

Don't wait for the impacts to your water body and property value to be irreversible. Contact us for an assessment to start making improvements now. You will be happy you did.

MICHIGAN LOCATIONS

Alto Location
8865 100th St. SE
Alto, MI 49302-9221

Morrice Location
10785 Bennett Dr.
Morrice, MI 48857-8760

Evart Location
9826 S Industrial Drive
Evart, MI 49631

Sturgis Location
1169 N Nottawa St.
Sturgis, MI 49091

Phone (616) 891-1294

Fax (616) 891-0371

Toll-free (800) 382-4434



Getting started with

Aquatic Plant Management



PLM
LAKE & LAND
MANAGEMENT CORP



Once an evaluation of your lake has occurred and it is determined that management of aquatic vegetation or algae is required, several options exist. Depending upon the nuisance species, location within the waterbody and established objectives, PLM will develop the most appropriate, cost effective plan to achieve the short- and long-term management goals.

PLM utilizes an Integrated Pest Management (IPM) approach to address aquatic problems. Using this method emphasizes spending more effort evaluating and determining the most effective control methods and applying them at the correct time to maximize effectiveness while minimizing costs and non- target impacts.

AQUATIC PLANT CONTROL METHODS

It is important that aquatic plant control methods meet the expectations of stakeholders' while being economically feasible and ensuring the protection of valued wildlife habitats. Each management method has some advantages and some disadvantages. PLM will prescribe a method best suited for each situation based on a variety of factors.

BIOLOGICAL CONTROL

Biological controls use a naturally occurring pest or disease to control nuisance vegetation. This method is typically used to control invasive exotic species that is displacing native species. Unfortunately, there are limited, if any, effective biological control methods for aquatic plant species in the Midwest.

AQUATIC HERBICIDES

Aquatic herbicides are the most commonly used method to control a variety of nuisance aquatic plant problems. Herbicides are relatively fast acting, cost effective and most can be used selectively to control target species while not affecting desirable native plant species. Aquatic herbicide use in Michigan requires a permit from the Michigan EGLE for most waterbodies and there are regulations on herbicide rates and locations within a waterbody where they can be used.

MECHANICAL HARVESTING

Harvesting is the process of cutting and removing aquatic vegetation from a waterbody. Harvesting is usually best suited for native plant control in areas where herbicides can not be used or in waterbodies where herbicides are not permitted. It is not recommended for some invasive species due to potential fragmentation. Harvesting does not require a permit and can be done anywhere the machines can get access.



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FUNDING AQUATIC PLANT MANAGEMENT

In general, it falls upon the residents to pay for the management of their lake. Unfortunately, there are limited State or Federal grant funds available for lake management activities. Most of the previous grant funding has gone to planning activities, scientific research and watershed level management and not to the direct control of invasive species.

For waterbodies that do not have lake association dues, either mandatory or voluntary, a tax district can typically be developed to assess a fee to riparians to fund management activities. The most common is a Special Assessment District (SAD) utilized by Townships to collect and disperse management funds. A SAD is frequently initiated by a petition process of the landowners within the proposed district. A Statutory Lake Board is similar to a SAD in its formation, but is administered through the County rather than at the Township level. Statutory Lake Board's are best suited for lakes located in more than one township or municipality.

If you have questions about funding for your lake's management, PLM will be glad to assist you. We work with many Special Assessment Districts and Statutory Lake Boards throughout Michigan and have extensive knowledge and experience in assisting riparians through this process.



WHAT TO EXPECT NEXT

After prescribing the best control options and establishing a funding mechanism, the implementation process can begin. A contractual agreement will be required prior to services taking place. In many cases, a signed contract, by either the Association or taxing municipality, is required in order to apply for State permits. The permitting process for the use of aquatic herbicides can take one to two months, so it is best to have this process started by late winter.

In the spring of each year, PLM will provide a schedule of planned management activities to be conducted for that season. For management activities that include aquatic herbicide treatments, a list of the herbicides planned for use and their associated water use restrictions will also be included. Prior to any management activities taking place, the account manager will confirm with the primary contact for your lake the intent of our visit, management activities planned and associated costs. This protocol allows the Association to be aware of our management activities, confirm funds are being spent efficiently and management costs are within the collected budget.



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Aquatic Plant Harvesting



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MANAGEMENT CORP

Certain circumstances call for the use of mechanical harvesting for nuisance aquatic vegetation. In this process, the plants are cut, collected and removed from the lake often providing immediate results. PLM Lake & Land Management Corp. has provided aquatic plant harvesting services for over thirty years. We currently operate three state-of-the-art aquatic plant harvesters operated by experienced staff to meet your harvesting needs.

ADVANTAGES OF HARVESTING

Nearly all aquatic plant species can be harvested, including species that are difficult or impossible to control using herbicides. In most cases a permit is not required, and the results are almost immediate as the plant material is cut and removed from the waterbody. In addition, the removal of plant biomass can also reduce the amount of nutrients in the lake by removing organic material contained within the harvested plants. Removal of excessive aquatic plant density can also benefit water quality and improve habitat for fish and other aquatic organisms.

The harvesting equipment can cut the aquatic vegetation 4-6 feet below the water's surface and collect the cut plant fragments for removal from the lake. A single machine can cut approximately 1 acre per hour, depending upon the location and density of the vegetation. The cut material is then deposited in a predetermined location (farm fields, land fill, etc.).



WHERE IS HARVESTING APPROPRIATE?

Some waterbodies may have limitations imposed on the types of aquatic plant management that can be conducted. In some situations, mechanical harvesting may be the only means of managing nuisance aquatic vegetation. The type and location of the aquatic plants within a lake may also dictate the type of management that can occur. In most cases, it is not advised to harvest certain exotic aquatic plant species, such as Eurasian Watermilfoil, as they are known to spread by fragmentation.

Aside from the types and location of the aquatic plants to be harvested, other criteria must be met in order to initiate a harvesting program. An adequate launch site, a suitable nearby location to dispose of the plant material, appropriate water depths and a minimum of stumps and other obstacles that may interfere with harvesting must all be examined prior to harvesting taking place.

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WHY HIRE A HARVESTING CONTRACTOR?

In most instances, it is less expensive for a lake association to contract harvesting services than buying and maintaining their own harvesting equipment. Only lakes with very large harvesting requirements are likely to benefit from having a harvester for their own exclusive use. In addition, management requirements and harvesting needs may vary from year to year as changes in environmental conditions and plant communities take place.



LIMITATIONS OF HARVESTING

The harvesting equipment requires a minimum depth in which to operate safely. This depth is usually a minimum of 24 inches of water, depending upon the harvesting equipment. Harvesting requires an adequate launch site and shoreline offload site for the transportation of cut material. A dump site for the plant material must be established prior to harvesting taking place, preferably within a 10-mile radius of the waterbody. Any fees for dumping the plant material are the responsibility of the contracting party.



For an evaluation of your waterbody and a price quote depending upon feasibility, contact your local PLM branch office for more details.



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Exotic Aquatic Plant Management



PLM
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EXOTIC AQUATIC PLANT SPECIES

Exotic aquatic plant species cause many of the most serious weed problems in lakes and ponds. Exotic plants are plant species that are not native to this area and have been introduced here inadvertently. Because they have few natural enemies in this region, they tend to grow unchecked often forming dense mats at the water's surface. These dense mats displace native vegetation, reducing diversity and can have serious implications to the aquatic habitat.

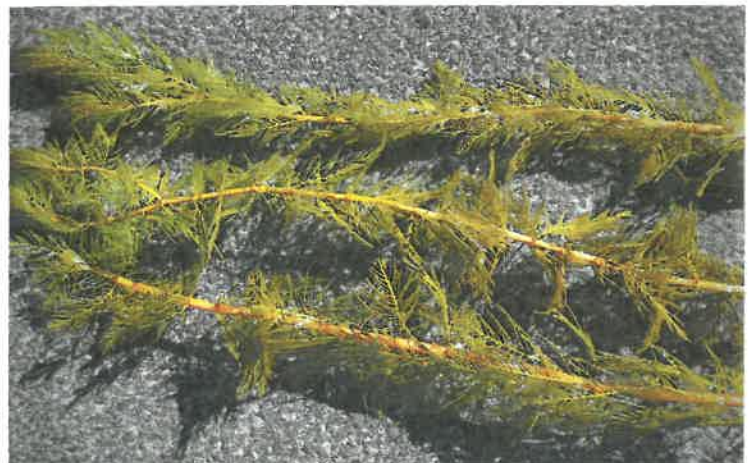
The most common exotic aquatic plant species in Michigan are Eurasian watermilfoil (*Myriophyllum spicatum*), Curlyleaf pondweed (*Potamogeton crispus*) and Starry stonewort (*Nitellopsis obtusa*). Other less common species include European frog-bit (*Hydrocharis morsus-ranae*), Cabomba (*Cabomba caroliniana*) and Parrot feather (*Myriophyllum aquaticum*). However, the majority of management efforts focus on the three main species.

EURASIAN WATERMILFOIL

Eurasian watermilfoil is native to Europe, Asia and northern Africa. It was introduced to the United States as early as the 1940s. Since its introduction, it has been identified in 45 states. Eurasian watermilfoil grows in dense stands in water less than one foot to depths of greater than twenty feet, depending upon water clarity. These dense stands in mid to shallow depths will often form surface canopies shading out native plants, restricting water use and altering habitat for fish and other organisms.

Eurasian watermilfoil can reproduce by seed or fragmentation. However, fragmentation is thought to be the main mode of distribution across waterbodies and within a waterbody. Boat activity

can increase fragmentation, but auto-fragmentation can occur multiple times within the growing season. These fragments are buoyant and will float to new areas where they will produce roots, settle to the bottom and start a new colony.



Although hybridization of Eurasian watermilfoil and native milfoil species have made control more difficult in some situations, Eurasian watermilfoil and its hybrid variations are almost exclusively through the use of aquatic herbicides. Other options exist, such as suction dredging or sediment covers, these options only apply to limited areas and do little to combat lake-wide infestations. Mechanical harvesting is not recommended for Eurasian watermilfoil as it increases fragmentation, has very limited control time, is not cost effective and tends to increase the distribution and density of Eurasian watermilfoil.

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CURLYLEAF PONDWEED

Curlyleaf pondweed is native to Europe and is thought to have been introduced to the United States as early as the mid-19th century. It typically grows in water depths of three to fifteen feet. Like Eurasian watermilfoil, Curlyleaf will form dense stands and often forms surface canopies from mid-May to Mid-June. However, unlike Eurasian watermilfoil, Curlyleaf pondweed canopies will usually disappear by early July each year as the plants complete their growing cycle.



Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

Reproduction of Curlyleaf pondweed is mainly through the production of buds called turions. These turions are formed on the plants early in the spring and drop to the bottom sediments. There they can remain dormant or germinate and produce seedlings which will remain dormant through the fall and winter. Once spring water temperatures reach around fifty degrees Fahrenheit, the seedling will grow towards the surface at an estimated rate of 1 to 2 inches per day. As they grow, turions are produced and the cycle repeats.

Control options for Curlyleaf pondweed include aquatic herbicides and mechanical harvesting. Mechanical harvesting can be an effective tool, but aquatic herbicides are usually far more cost effective. Either management option, if done prior to turion production, may help control future growth of Curlyleaf pondweed. However, turions may lay dormant in the sediments for more than five years so multiple years of either approach would be needed before reductions in Curlyleaf pondweed populations could be expected.

STARRY STONEWORT

Starry stonewort is native to Europe and Asia. It was first discovered in the St. Lawrence River in 1978. In 1983, it was found in the Detroit River near Belle Isle and has since infested many Michigan lakes. Starry stonewort is a macroalgae, and not a vascular aquatic plant. It resembles a close relative, the native macroalgae Chara. Unlike Chara, which is generally thought of as beneficial to aquatic environments, Starry stonewort will form dense blankets often several feet thick covering over native vegetation habitat and fish spawning areas.

Reproduction occurs through either star shaped structures called bulbils that are seed like formations or through vegetative spread. Fragments of Starry stonewort are capable of producing new colonies when transported within a waterbody or between waterbodies.



Control methods for Starry stonewort include copper products and other herbicides that are effective for algae, or mechanical harvesting. Mechanical harvesting can increase the spread of Starry stonewort and may not be economically advantageous compared to herbicides due to its high density and quick regrowth. Other control methods like suction dredging may be effective in small areas or for new infestations, but is not feasible for large areas or combating lake-wide infestations.

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March 3, 2022

Thornapple River- Cascade SAD

Attn: Lake Board

5920 Tahoe Dr. SE

Grand Rapids, MI 49546

Thornapple River,

I would like to thank you for considering "*Aquatic Doctors Lake Management, Inc.*" for your aquatic nuisance control needs. I believe *Aquatic Doctors* can provide your association a variety of options and insight to continually improve the condition of **Thornapple River** and possibly offer savings as well.

Aquatic Doctors is a fully integrated lake management company offering a variety of aquatic plant/algae control methods, lake consulting services and utilizes state-of-the art technology for mapping/location (including "BioBase", GPS and "Zero Gravity Aerial" drone mapping services). *Aquatic Doctors* has been servicing Michigan since 1997 and has become one of the most respected lake management companies in the state. Our experience includes: small backyard ponds, large lake associations, government municipalities and everything in-between. In 2021 we managed 200+ ponds and 95 lakes in the State of Michigan ranging in size from .01 acres to 2,800 acres.

Aquatic Doctors is a fully licensed and insured aquatic weed/algae control specialist, dedicated to customer service. Our main office is located in Grand Rapids with a Northern Michigan satellite to better serve the entire state. *Aquatic Doctors* is an active member of many related aquatic management organizations including: Michigan Aquatic Managers Association (MAMA), Midwest Aquatic Plant Management Society (MAPMS), Aquatic Ecosystem Restoration Foundation (AERF) and the Better Business Bureau of Michigan (A+ rating). Our experience and dedication will be a valued asset to **Thornapple River**.

Aquatic Doctors is qualified and eager to work with **Thornapple River**. We are confident we can offer a program to fulfill your needs and surpass all your expectations. We greatly appreciate the opportunity to work with **Thornapple River** and hope to continue our long established mutually beneficial relationship based on the continued improvement of **Thornapple River**.

Thank you for giving *Aquatic Doctors* the opportunity to submit a lake management bid for **Thornapple River**. As the board reviews our bid, please feel free to contact me with any questions you may have.

Sincerely,

Ryan Schauland- President/Owner
Aquatic Doctors Lake Management, Inc.
616-365-1698 (main)
ryan@aquaticdoctors.com

Aquatic Doctors Lake Management, Inc.

PO Box 150247 Grand Rapids MI 49515 Office: (616) 365 1698 Fax: (501) 647 3041 www.aquaticdoctors.com



Aquatic Doctors Lake Management Professional Staff

Ryan Schauland B.S.- President/Owner/Aquatic Manager:

ryan@aquaticdoctors.com

Qualifications: Ryan received his Bachelor's Degree in Zoology from Michigan State University in 1996. While at MSU, his main focus of study was marine biology and specifically aquatic ecosystems. In 1997, Ryan founded Aquatic Doctors and has since grown the business to one of Michigan's largest Lake Management companies. Ryan directs and facilitates all aspects of Aquatic Doctors including business operations and account development, State of Michigan requirements and legalities, acquisition and deployment of state-of-the art equipment, innovative water treatment and chemical application techniques, franchising initiatives, and most importantly customer service. Aquatic Doctors employs *first-class* treatment professionals, many of whom Ryan has recruited from MSU's biological sciences program. Ryan is an active member of many related aquatic management organizations including Michigan Aquatic Manager Association (MAMA), Midwest Aquatic Plant Management Society (MAPMS) and Aquatic Ecosystem Restoration Foundation (AERF). Ryan is an active sportsman and scuba diver who enjoys spending time with his family.

Zach Berry B.S.- General Manager/Biologist/Fisheries/Aquatic Manager:

zach@aquaticdoctors.com

Qualifications: Zach is a graduate of Lake Superior State University with a Bachelor's degree in fisheries management. Zach has conducted a wide variety of aquatic studies in both the lakes and rivers of the Great Lakes region. He has developed, managed, and analyzed the data of an aquatic restoration project on the St. Marys River in Michigan's Upper Peninsula. He then presented his findings to a board of government officials and PhD professors. Zach has a total of 9 years of fisheries and aquatic experience in the field. He is proficient in water quality analysis as well as species identification. Before being hired at Aquatic Doctors as a manager and biologist, Zach worked for the United States Fish and Wildlife Service in the sea lamprey control program. He is well trained in the handling, application, and analysis of restricted use pesticides/herbicides. He is exceedingly familiar with the control of invasive species populations. Zach is also an associate member of MAMA (Michigan Aquatic Managers Association). Zach spends most of his free time outside and on the water. He is a devoted husband and father to his wife and sons.

Aquatic Doctors Lake Management Commercial Applicators: Ryan Schauland, Zach Berry, Aidon Verhulst, Faida Murithi, Alex Riemersma, Corbin Stone, Chris Drost, Donnie Verhulst, William Mehney, Caleb Beach, Max VanVliet and Taylor Harris.

Aquatic Doctors Lake Management, Inc.

PO Box 150247 Grand Rapids MI 49515 Office: (616) 365 1698 Fax: (501) 647 3041 www.aquaticdoctors.com

Treatment Equipment

- 12' Aluminum boat for pond treatment and select emergent treatments
- 12' Aluminum boat for pond treatment and select emergent treatments
- 12' Aluminum boat for pond treatment and select emergent treatments
- 14' Fiberglass Carolina Skiff for lake & pond treatment 15HP Mercury
- 2- 14' Fiberglass Carolina Skiff for lake & pond treatment 25HP Yamaha
- 19' Aluminum Sea Ark for lake treatment 45HP Mercury
- 19' Aluminum Polar Kraft for lake treatment 25HP Yamaha
- 20' Fiberglass Carolina Skiff for lake treatment 115HP Evinrude
- All boats equipped and calibrated for liquid spray application using Honda Multipurpose pumps and 50 gallon chemical tanks (20 gallon on 12' boats)
- 19' & 20' boats equipped for granular applications (standard and blower spreaders)
- 2016 Dodge Ram 1500 4x4 long box
- 2020 Dodge Ram 1500 4x4 Crew Cab
- 2018 Dodge Ram 1500 4x4 Crew Cab
- 2010 Chevy Silverado 1500 Z-71 4x4 Extended Cab
- Equipment for AVAS surveys
- Bio Base Mapping
- Zero Gravity Aerial Mapping- Mapping done by drone, complete macrophyte study available. Examples available upon request.
- Lowrance GPS systems
- Scuba equipment, all required gear

Thornapple River Management Plan



Submitted by: Ryan Schauland and Zach Berry

Aquatic Doctors Lake Management, Inc.

PO Box 150247 Grand Rapids, MI 49515

Phone: 616-365-1698 (main)

Phone: 231-288-0087(northern)

www.aquaticdoctors.com

Integrated Pest Management (IPM)

Aquatic Doctors Lake Management, Inc. uses and practices Integrated pest management (IPM) approach. IPM is an ecological approach to pest management in which all available necessary techniques are consolidated into a unified program so that pest populations can be managed to avoid economic damage and minimize adverse effects.

Chemical control or the use of aquatic herbicides is the most common/widely used method of controlling aquatic vegetation. These products provide expected results and are supported by decades of research and data. Many available products will selectively control exotic plants while having little to no effect on native plants. Chemical control is the most effective way to promote a healthy diverse lake.

Mechanical Control methods to remove existing stands of aquatic weeds include hand pulling, raking and using mechanized equipment. Mechanical removal can be effective but it's extremely time consuming and laborious. Regrowth from seeds and underground plant parts can be expected along with regrowth from plant fragmentation. Mechanical harvesting can actually promote growth and infestations of exotic/invasive plants. Mechanical harvesting is an alternative option to chemical control but is not advised to promote a healthy native plant community.

Biological Control is control by predators and parasites, either naturally occurring or introduced. At this time, there are very few options with biological control. There is no guarantee of success with biological control.

Likely Plants found in The Thornapple River:

Eurasian Watermilfoil is native to Europe, Asia, and north Africa. It is a submerged aquatic plant, and grows in still or slow-moving water.



The stem is thin, flexible, often pinkish red. Whorled leaves delicate, usually spaced at least 2-3cm apart, with 12-20 pairs of leaflets per leaf. The tip of the plant is often red in summer. Flower spike emergent with whorled flowers and tiny, smooth bracts. Hybridizes with northern watermilfoil. Eurasian watermilfoil often branches frequently near the surface, and forms dense mats that make recreational activities difficult. EWM forms a canopy above native plants, choking out the competition. EWM also has the ability to overwinter underneath the ice, allowing it to be present throughout the winter. This gives the plant a head start in growing during the spring and chokes out native plants very quickly. EWM should be controlled as soon as it is found within a waterbody to prevent further infestation and loss of native plant diversity.

Curly Leaf Pondweed is a rhizomatous perennial herb producing a flattened, branching stem up to a meter long. The leaves are linear or oblong in shape. Only submerged leaves are produced, which are sessile, linear or oblong in shape, 25–95 mm long and 5–12 mm wide.⁽¹⁾ The leaves may be bright green, olive green or (especially later in the season) brownish and have noticeably serrated margins, a feature that distinguishes them from other pondweeds. The leaves usually have wavy edges but this is not always apparent, especially on new growth.



Curlyleaf pondweed, an exotic species, usually emerges early each spring, flowers and sets seed in the late spring and early summer, and then collapses by the first week in July. Early treatment/management is also encouraged to take place prior to seed production therefore, reducing the next generation of early pondweed growth.

Starry Stonewort is usually less than 30cm tall. Branchlets 5-8 per whorl, each with 1-2 long bract cells giving the appearance of the branchlet being forked. Often lime-encrusted. White star-shaped bulbils are abundantly produced on colorless rhizoids. Each one of these bulbils can detach and produce a new individual. Starry Stonewort should be actively controlled and managed. Starry stonewort, which looks very similar to the beneficial species Chara, is appearing in more and more lakes.



Chara is a highly-desired plant because it is typically low growing, keeps the water clear and can slow down the invasion of exotic weed species. Starry stonewort also forms dense mats, but unlike chara, it can grow from 5 to 7 feet tall. Starry stonewort can be very detrimental to a lake's ecosystem and has the ability to kill off native plants and have a negative impact on a lake's fisheries

Vallisneria (Water Celery) grows in a basal rosette form with long, thin leaves up to 2 meters long and 1cm wide, that often stream along the surface. Plants are connected by rhizomes. The edge of the leaf may be wavy. Female flowers are produced on a long, spiraled stalk, and can often be seen in large numbers in mid-summer.



Logans Landing with the water of the water Photo: Alan Harper, Flickr.com

Management Goals for The Thornapple River

- The control of exotic aquatic plants in the Thornapple River is the principal goal of the aquatic management plan. The exotic plant species, Eurasian watermilfoil, Curlyleaf pondweed and various nuisance species, should be controlled throughout the river. Attempts to eliminate exotic invasive plants should occur and follow up treatments should be scheduled to reduce their recovery and regrowth.

•An aquatic plant management plan should promote a vast and diverse native plant environment providing optimal habitats for fish and other aquatic organisms. Native plants should be managed to encourage the growth of plants that support sport fishing and other recreational activities but do not impede or interfere with swimming and boating in high traffic areas. Chara should be allowed to grow throughout the lake, except in where it grows so tall as to interfere with boating and swimming.

Managing Submersed Aquatic Plants

The systemic products Triclopyr and 2,4-D are selectively designed to control Eurasian Watermilfoil (EWM), while promoting the growth of native plant community. Worldwide 2,4-D is the most widely used herbicide and is extremely effective in controlling EWM. Due to Michigan Law 2,4-D cannot be used in the vicinity of drinking water wells. Triclopyr is also extremely effective on EWM, while not subject to water well setback laws and can be used in place of 2,4-D. With the proper lake management plan and proper aquatic applicator services the amount of EWM should be reduced and become a maintenance program after it is properly controlled.

Contact herbicides, most commonly Diquat and Endothall, are broad-spectrum products used to control a vast majority of aquatic plants. Curlyleaf pondweed and other exotic species can be controlled very effectively with Diquat and Endothall. Treatments should be performed annually in the spring and maintained throughout the season. Contact herbicides are often used to control native aquatic plants. Native plants are selectively managed when they reach nuisance levels in specific locations such as beaches and developed areas.

Water Quality

Secchi Disc depth is a measure of water clarity, determined by measuring the depth to which a black and white disk can be seen from the surface.

PH is the balance of acids and the bases in the water. The PH levels should range between 6 and 9. The level of 7 is considered neutral. Excessive weed growth and algae growth can make these levels increase to 9 and above.

Conductivity estimates the amount of total dissolved salts (TDS), or the total number of dissolved ions in the water. EC is controlled by: Geology (rock types) - The rock composition determines the chemistry of the watershed soil and ultimately the lake. Higher levels typically mean a more productive lake, while lower levels typically indicate a cleaner less productive lake.

Alkalinity is a measurement of the lake's ability to "buffer" or neutralize acidity. Minerals in the soil and watershed affect a lake's alkalinity. Lakes with alkalinity between 2 and 10 mg/L are considered moderately sensitive to acid rain. Alkalinity is measured by chemical analysis

Total Phosphorus measures the total (organic and inorganic, dissolved and particulate) amount of phosphorus in the water. Phosphorus is usually the plant nutrient (i.e., fertilizer) that controls the amount of algal growth in lakes and ponds.

Fecal Bacteria (E. Coli) measurements count the number of live fecal indicator bacteria in the sample. These bacteria are considered reliable indicators of fecal contamination—when they are found in a lake, it is very likely that the water is being contaminated by animal feces. Contamination can potentially be derived from a number of sources, including failed septic systems, agricultural runoff, or waterfowl or wildlife droppings.

Recommendations

- Spring plant/vegetation survey to evaluate the condition of the River and develop best treatment methods and area.
- Late May/Early June Algae & Weed treatment of developed shoreline areas and Offshore weed treatments for exotic invasive plants using systemic selective herbicides.
- Water Quality test in spring, mid-summer and fall.
- End of July a Weed & Algae treatment for developed shoreline areas and a follow up treatment on any remaining offshore exotic invasive plants.

Monitoring Program

While Aquatic Doctors is on the Thornapple River controlling the aquatic vegetation, and collecting water quality tests we will be monitoring and documenting the condition of the river so we can provide warning of any changes in the condition of the river that may need to be addressed by additional lake management activities.



**STOP AQUATIC
HITCHHIKERS!**

Prevent the transport of nuisance species.
Clean all recreational equipment.
www.ProtectYourWaters.net



AQUATIC DOCTORS LAKE MANAGEMENT, INC. ("Aqua Docs") of P.O. Box 150247, Grand Rapids, Michigan 49515 and Thornapple River Association of Cascade, Michigan agree:

Aqua Docs will provide a professional aquatic program for the control of weeds and/or algae in **Thornapple River- Cascade SAD**. The program will consist of the following:

May/June: Weed and Algae treatment applying restrictive products such as Navigate (2,4-D), Diquat, Triclopyr, Aquathol K, Hydrothol 191, and non-water restrictive products such as copper sulfate, Cutrine-Plus, Cutrine-Ultra, Cygnet Plus, and shade as a tracer.

****3-4 weeks after initial treatment- spot treat weed beds and algae treatment.**

July and August: Algae treatments applying non-water restrictive products such as copper sulfate, Cutrine-Plus, Cutrine-Ultra, Cygnet Plus and shade as a tracer. Spot weed treatment for EWM and other nuisance plant growth.

Cost per Acre:

Navigate: Granular systemic 2,4-D herbicide to control Eurasian Watermilfoil	\$ 315.00
Triclopyr: Granular systemic herbicide to control Eurasian	\$ 560.00
Triclopyr: Liquid systemic herbicide to control EWM	\$ 285.00
Clipper: systemic herbicide to control Starry Stonewort	\$ 575.00
Harpoon: granular systemic herbicide to contro Starry Stonewort	\$ 425.00
Diquat: Liquid herbicide to control EWM, Curlyleaf, and Pondweeds	\$ 185.00
Aquathol K-Hydrothol 191: Liquid herbicide to control Pondweeds	\$ 199.00
Algaecides: Granular products to control Chara	\$ 60.00
Algaecides: Granular and liquid products to control algae	\$ 45.00
Water Quality Program:	\$ 50.00/sample

Additional Services:

Harvesting: price subject to change by harvester seasonally	\$ 600.00/acre
AVAS Survey: price for river survey and identify aquatic plants and location	\$ 1250.00

Description and Optional Services:

Weed Treatment: Milfoil, Curly-leaf, Coon-tail, Chara, and various pondweed treatments applying restrictive products such as granular Navigate (2,4-D), Aquathol K, Hydrothol 191, Diquat, Triclopyr, Komeen, Glyphosate, and Cygnet Plus.

Algae treatment: Non-water restrictive algaecides such as Copper Sulfate, Curtain-Plus, Cutrine-Ultra, Chelated Copper, Earthtech, Greenclean, and shade as a tracer. Treatments should occur monthly to prevent existing growth and prevent re-growth. Surrounding conditions (i.e. sunlight, temperature, nutrient concentration, etc...) may require additional treatments.

Muck/Enzyme Treatment: Designed to decrease levels of organic sediment in lakes and ponds while reducing odors and improving water clarity. The pellets sink quickly, targeting 'muck' on the bottom. Muck Busster does not contain pathogenic bacteria and it is fish and wildlife friendly. Contains 3 billion CFU/gram (Colony-forming units).

Water Quality Program: Water quality program consists of lake samples taken and sent to an independent laboratory (Prein & Newhof). The samples can be tested for a variety of things including; fecal bacteria (E. coli), dissolved oxygen, conductivity, total dissolved solids, pH and alkalinity. Primarily E. coli is the focus.



- Specific treatment dates will be set by Aqua Docs, in cooperation with Ben Swayze.
- Please be aware Aqua Docs can only treat weeds and algae present at the time of treatment. We have no control over future weed or algae growth based on the current chemicals registered for aquatic use in Michigan.
- Unless otherwise stated in the program, all other aquatic pest control will require a separate program (i.e. cattails, duckweed, largeleaf pondweed, lily pads, purple loosestrife, watermeal, etc...)

Aqua Docs will obtain the DEQ "Aquatic Nuisance Control permit" and post restriction signs as required. Any facility or location related permits/requirements, for example, "Discharge or Retention" permits will be the responsibility of the customer, association, resident or facility. It is your association's/group's responsibility to notify each resident within one hundred (100) feet of the treatment area at least seven (7) days in advance of the first treatment that chemicals will be applied. This notification requirement must be provided to every property owner who has consented to have their property treated. Lake boards and townships who assess the lake property owners are exempt from individual consent documentation. The property owner is responsible for removing any restriction signs ten (10) days after the conclusion of water use restrictions.

Aqua Docs carries a general liability policy of insurance for workmans comp, bodily injury and property damage with limits of \$1,000,000.00 per occurrence. Certificates of insurance will be provided upon request.

The State of Michigan requires a minimum fee of \$75.00 and increases the fee to \$1500.00 for treatment areas of 100 acres or more. Please make check to the State of Michigan. Application for the DEQ "Aquatic Nuisance Control permit" shall occur promptly after the fee is received from the customer.

Special Notes & Conditions of Treatments

- #1 – Our office must be notified of any inlets/outlets to meet specific permit requirements with the Michigan DEQ.
- #2 – If the water body is being used as a source of irrigation, please notify our office prior to any treatments.
- #3 – To minimize the possible effects on health and the environment, the treated waters MAY be restricted for such uses as swimming, bathing, irrigation, fish consumption and/or livestock.
- #4 – If an access site has not been determined or established prior to services rendered, then an access site must be determined at the discretion of the applicator at the time of treatment.

Payment in full is due within fifteen (15) days of each application. Any amount remaining unpaid when due shall accrue a penalty of 1.5% per month.

All materials utilized by Aqua Docs shall be of the highest quality and are registered with the U.S. Environmental Protection Agency and the Michigan Department of Agriculture.

The accumulation of dying and decomposing plants and algae can deplete the dissolved oxygen supply in the water, which may result in fish mortality. Please note that such occurrences are minimal, however, the possibility does exist. Due to their level of sensitivity, Goldfish, Coy, and Trout are more susceptible to a treatment than other fish species. During Late Spring and Summer, many NATURAL fish kills occur due to an increase in water temperature and spawning habits, primarily.

Three or five year treatment program: As an incentive to establish a multiple year agreement we will treat your lake or pond at the same price structure as 2022 for 2023! The remaining years (2024-2026) will have cost increases of three percent or less. If total chemical costs exceeds 10% from the previous year a new agreement will have to be mutually acceptable. If during the life of the contract the DNR or other regulatory agencies significantly change the approved treatment procedures or the client finds the manner in which the work is performed less than satisfactory, either party may terminate this agreement upon giving ninety (90) days advance written notice thereof.

Aquatic Doctors Lake Management, Inc.

PO Box 150247 Grand Rapids MI 49515 Office: (616) 365 1698 Fax: (501) 647 3041 www.aquaticdoctors.com



Contract:

Signature Page for “Thornapple River- Cascade SAD”

Program Option for Thornapple River- Cascade SAD:

One (1) Year Program- _____
Three (3) Year Program- _____
Five (5) Year Program- _____
(Just initial your choice)

Aquatic Doctors Lake Management, Inc.

By: MT Ryan Schauland B.S.
President

Signature

Date

For Thornapple River- Cascade SAD Representative:

Name (Print) _____

Title _____

Address: _____

Phone: _____

(Day): _____

(Eve): _____

Signature

Date

email: _____



March 3, 2022

Aquatic Doctors Lake Management, Inc.

Thornapple River- Cascade SAD - References

Attn: Lake Board

I. List of References-

a. **City of Douglas- Kalamazoo River**, Allegan County, 302 Acres, 99.90 Acres treated, Target Plants- Eurasian Milfoil, Curly Leaf & Duck Weed. Herbicides applied- Triclopyr and Flumioxazin. Permit # ANC9805982- Currently under contract
Contact- Jenny Pearson, Deputy Clerk, Contact# 269-857-1438

b. **Lincoln Lake**, Kent County, 411 Acres, 110 Acres treated, Target Plants- Milfoil, Curly Leaf, Vallisneria, Various Pondweeds, Chara & Algae. Herbicides applied- Triclopyr, Diquat, Aquathol K, 2,4-D, Nautique, Harpoon, Chelated Copper & Copper Sulfate. Permit # ANC9801152- Currently under contract
Contact- Dean England, # 616-293-5031

c. **Baptist Lake**, Newaygo County, 80 Acres, 16.5 Acres treated, Target Plants- Milfoil, Curly Leaf, Vallisneria, Various Pondweeds, Chara & Algae. Herbicides applied- Triclopyr, 2,4-D, Diquat, Aquathol K, Chelated Copper & Copper Sulfate. Permit # ANC9800548- Currently under contract
Contact- Ken Reed, #616-437-6543

d. **Lower Scott Lake**, Allegan County, 130 Acre Lake, 90 Acres treated, Target Plants- Milfoil, Curly Leaf, Vallisneria, Various Pondweeds, Chara & Algae. Herbicides applied- Triclopyr, 2,4-D, Diquat, Aquathol K, Chelated Copper & Copper Sulfate. Permit # ANC9801153- Currently under contract
Contact- Eleanor DeWeerd, #269-236-5492

e. **Duck Lake**, Muskegon County, 330 Acre Lake, 4.9 Acres treated, Target Plants- Milfoil, Curly Leaf, Vallisneria, Various Pondweeds, Chara & Algae. Herbicides applied- Triclopyr, Diquat, Aquathol K, Chelated Copper & Copper Sulfate. Permit # ANC9800933
Contact- David Pequet, #630-325-7090- Currently under contract

Please feel free to contact me with any questions. If you have trouble contacting any of the references please let me know.

Thank you,

Ryan Schauland
President

Aquatic Doctors Lake Management, Inc.

PO Box 150247 Grand Rapids MI 49515 Office: (616) 365 1698 Fax: (501) 647 3041 www.aquaticdoctors.com



CASCADE CHARTER TOWNSHIP

5920 Tahoe Dr. SE Grand Rapids, Michigan 49546

Date: March 23, 2022
To: Supervisor Lesperance and Township Board Members
From: Ben Swayze, Township Manager
Subject: Confirm Department Head Position Appointments

FACTS & ANALYSIS:

The Township currently has two Department Head positions that are being filled by interim appointments:

Director of Human Resources: This position, recently created by action of the Township Board, is currently being filled by Katie Murawski. Katie began work with the Township as the Human Resource Generalist in 2020 and has been serving as the interim Human Resources Director since October 2021. Katie has a Bachelors Degree in Business Administration from Aquinas College with a focus on Human Resources and Accounting. Prior to coming to Cascade Township Katie held several human resource positions with Holt Public Schools, Forest Hills Public Schools and East Grand Rapids Public Schools.

During her time at Cascade, Katie has proved to be a true asset for the organization. She has played a key role in recruitment efforts over the past two years and has ushered the Township through several human resource related changes. She has shown the ability to provide high level service to the employees of the organization and the community and is well liked by staff.

I am recommending Katie Murawski be appointed the Director of Human Resources.

Planning Director: This position, recently created by action of the Township Board, is currently being filled by Brian Hilbrands. Brian began work with the Township as the Planner in early 2020 and has been serving as the Interim Planning Director since September 2021. Brian has a Bachelors Degree in Geography and Business from Calvin College and a Masters Degree in Urban Planning from the University of Michigan. Prior to coming to Cascade Township, Brian served as the Coordinator for the Ada Township Downtown Development Authority for 2.5 years.

Despite coming to Cascade during the hectic beginnings of the Covid-19 pandemic, he has smoothly transitioned in to the Cascade operations. As the Interim Planning Director, he has already ushered several large development projects through the planning commission and is overseeing several current developments. Brian has proven to be a quick study of the Township ordinances and development processes and has integrated himself as a true team player. He has shown great aptitude in knowing when to make a decision and when to seek input from other resources such as the Township Attorney or Manager. Chris Noordyke, Planning Commission Chair, has endorsed Brian for the permanent position.

I am recommending Brian Hilbrands be appointed the Planning Director

Attached for your review are:

- Township Board Approved Job Descriptions for Director of Human Resources and Planning Director

FINANCIAL CONSIDERATIONS:

Both positions are classified as a Pay Grade 7 position with a 2022 salary range of \$64,940 to \$87,887. Both Katie and Brian were awarded significant raises in FY 2022 in recognition of the work they were doing in their interim positions and will be evaluated again near the end of FY 2022.

RECOMMENDED ACTION:

Confirm the Township Manager appointment of Katie Murawski as Director of Human Resources and Brian Hilbrands as Planning Director

CASCADE CHARTER TOWNSHIP

POSITION DESCRIPTION

Title: Director of Human Resources
Department: Administrative
Reports to: Township Manager
Position(s) Supervised: None
Employment Status: Full-Time; Exempt
Pay Grade: 7

BROAD STATEMENT OF RESPONSIBILITIES:

Under the direction of the Township Manager, the Director of Human Resources plans and coordinates human resource management activities of the Township to maximize the strategic use of human resources and maintain functions such as employee compensation, recruitment, personnel policies and regulatory compliance.

ESSENTIAL FUNCTIONS:

1. Maintains knowledge of legal requirements and government reporting regulations affecting human resource functions and ensures policies, procedures, and reporting are in compliance.
2. Works with the department heads and Manager to recruit, interview, test, and select employees to fill vacant positions.
3. Works with the department heads in the development and implementation of the Township Intern Program.
4. Plans and conducts new employee orientation. Reviews all benefits, policies relating to PTO, retirement, pay periods, time keeping, leaves of absence, and employee conduct.
5. Oversees the administration and record keeping of all benefit plans such as insurance and pension plans, personnel transactions such as hires, promotions, transfers, performance reviews, and terminations, and employee statistics for government reporting.
6. Assists management with issues relating to interviewing, hiring, terminations, promotions, performance review, safety, discipline and sexual harassment.
7. Acts as the primary contact for worker's compensation claims.
8. Provide guidance to department heads on personnel issues, interpretation of personnel policies, and employment laws and regulations.
9. Advises management in appropriate resolution of employee relations issues.
10. Responds to inquiries regarding policies, procedures, and programs.

11. Assists Township Manager and Department Heads in administering a performance review program to ensure effectiveness, compliance, and equity within organization.
12. Works with manager to ensure compliance and equity within the organization as it relates to compensation issues.
13. Administers benefits programs such as life, health, dental and disability insurances, pension plans, vacation, sick leave, leave of absence and employee assistance.
14. Assists Township Manager in investigating work related accidents and preparing reports for insurance carrier. (Workers Compensation and OSHA)
15. Administers and prepares payroll.
16. Assists Township Manager in conducting wage surveys within the labor market to determine competitive wage rates.
17. Prepares employee separation notices and related documentation, and assists in conducting exit interviews to determine reasons behind separations.

BASIC SKILLS AND KNOWLEDGE:

1. Expert knowledge of Human Resource Law (HIPPA, FLSA, FMLA, ACA, ADA, etc...)
2. Strong verbal and written communication skills.
3. Must have good administrative and organizational skills.
4. Must have good interpersonal skills.
5. Must be able to use discretion, be honest, and maintain employee confidentiality.
6. Must possess good problem solving skills

MINIMUM EDUCATION & BACKGROUND:

- Bachelor's degree in Human Resource Management, Organizational Studies, Public Administration or a related field. Master's Degree preferred.
- Minimum of five (5) years progressive experience in the Human Resource field.
- Combination of education and experience acceptable.

MINIMUM ENVIRONMENTAL EXPECTATIONS:

- Little or no exposure to noise, heavy machinery or hazardous materials.

MINIMUM PHYSICAL EXPECTATIONS:

- Position requires keyboarding, telephone work and filing.
- Position requires extensive periods of time working on the computer.
- Position requires the ability to push, pull or lift as much as 25 pounds.

REVIEW AND APPROVAL:

Position Incumbent

Date

Supervisor

Date

The above is intended to describe the general content of and requirements for the performance of this position. It is not construed as an exhaustive statement of duties, responsibilities or requirements for the position.

CASCADE CHARTER TOWNSHIP

POSITION DESCRIPTION

Title: Planning Director
Department: Planning
Reports to: Township Manager
Position(s) Supervised: Zoning Administrator; Planning Administrative Assistant
Employment Status: Full-Time; Exempt
Pay Grade: 7

BROAD STATEMENT OF RESPONSIBILITIES:

Under the direction of the Township Manager, the Planning Director is responsible for overseeing the planning administration and day-to-day operations of the Planning Department to assure community-wide compliance with applicable Township development codes and ordinances. Prepares and implements, the Township's comprehensive plan, zoning ordinance, subdivision ordinance and other land use policies. Provides technical expertise and administrative support to the Planning Commission, Zoning Board and Township Board.

ESSENTIAL FUNCTIONS:

1. Implement the Comprehensive Master Plan.
2. Oversee the interpretation and enforcement of the Township's Zoning, Sign and Subdivision Ordinances.
3. In conjunction with the HR Director, responsible for hiring, training, supervision, discipline and termination of all department staff with oversight of the Township Manager.
4. Manages assigned staff; assigns tasks, responsibilities and projects; evaluates performance, resolves workload and technical issues, and assures that goals are communicated and achieved.
5. Directs the day-to-day planning operations including site plan reviews, processing of permit applications, etc.
6. Develop budget requests and administer the annual department budget as approved by the Township Board.
7. Maintains all planning, land use and zoning maps and ensures accuracy and currency.
8. Prepare application reviews and staff recommendations for Planning Commission, Zoning Board of Appeals and Township Board.
9. Assist Township residents, developers, architects, engineers and others in understanding and applying zoning and other ordinance requirements.

10. Oversee the development and implementation of Township specific planning and land use documents (Comprehensive Master Plan, Centennial Park Master Plan, etc....)
11. Serve as the Township representative on various regional planning organizations and committees (REGIS, Grand Valley Metro Council, etc....)
12. In conjunction with other departments, coordinate Township storm water plans to ensure compliance with local, regional and State regulations and policies.
13. Assists in the implementation of the Township economic development programs and incentives, including those of the Township Downtown Development Authority.
14. All other duties as assigned.

BASIC KNOWLEDGE AND SKILLS:

1. Expert knowledge of Planning, Zoning and other governmental operations and procedures.
2. Skill in reviewing and interpreting site plans, specifics and complex construction drawings.
3. Knowledge of governmental budgeting processes.
4. Interpersonal skills to establish and maintain effective working relationships with public officials, consultants, contractors, fellow employees, residents and the general public.
5. Strong administrative, managerial, organizational and leadership skills.
6. Ability to make effective oral and written presentations to a variety of audiences
7. Ability to critically assess situations problem-solve, and work effectively under stress, within deadlines and changes in work priority.
8. Good telephone skills.
9. Good computer skills including Microsoft Office package, BSA.net software package and ArcView GIS package.
10. Ability to attend meetings scheduled at times other than normal business hours, travel to other locations and respond to emergencies outside of business hours.

MINIMUM EDUCATION & BACKGROUND:

- Bachelor's degree in Urban Planning, Public Administration or a related field. Master's degree preferred

- At least five (5) years of progressively responsible professional experience in municipal planning with at least one (1) year in a supervisory capacity.
- American Institute of Certified Planners (AICP) Certification preferred.
- Valid State of Michigan driver's license

MINIMUM ENVIRONMENTAL EXPECTATIONS:

- Little or no exposure to noise, weather conditions, heavy machinery or hazardous materials.
- Position requires occasionally reviewing projects outdoors where there can be uneven terrain in all weather conditions.

MINIMUM PHYSICAL EXPECTATIONS:

- Position requires keyboarding, telephone work and filing.
- Position requires extensive periods of time working on the computer.
- Position requires visits to current or proposed construction sites.
- Position requires the ability to push, pull or lift as much as 25 pounds.
- Position requires the ability to operate a motor vehicle.

REVIEW AND APPROVAL:

Position Incumbent

Date

Supervisor

Date

The above is intended to describe the general content of and requirements for the performance of this position. It is not construed as an exhaustive statement of duties, responsibilities or requirements for the position.

MICHIGAN STATE POLICE
CRIMINAL JUSTICE INFORMATION CENTER

Provided by the Traffic Crash Reporting Unit on 3/23/2021



CRASH DATA REQUEST

Date Range: 1/1/2016 to 12/31/2020

For questions, please contact the Traffic Crash Reporting Unit at 517-241-1699

Criteria: Kent County and Cascade Twp / Deer Involved Crash Totals by Year / Contains Preliminary 2020 Crash Data / Non-Traffic = 0

Deer Involved Crashes - Kent County

Year	Crashes	Fatal Crashes	Total Fatalities	Injury Crashes	Total Injuries
2016	1,482	0	0	48	52
2017	1,573	2	2	47	49
2018	1,838	0	0	54	58
2019	1,684	0	0	50	54
2020	1,711	0	0	73	79

Deer Involved Crashes - Cascade Township

Year	Crashes	Fatal Crashes	Total Fatalities	Injury Crashes	Total Injuries
2016	111	0	0	1	1
2017	109	1	1	4	4
2018	110	0	0	2	2
2019	128	0	0	7	7
2020	131	0	0	5	5



DEER MANAGEMENT PLAN – 2020/2021 MERIDIAN CHARTER TOWNSHIP

Prologue to the 2020/2021 Management Plan

The purpose of this plan is provide both the Meridian Township Board and the Michigan Department of Natural Resources information, justification, and an outline for conducting a deer management program in Meridian Township. Meridian Township began their Deer Management Program in 2011. The program was developed in response to numerous complaints from residents regarding deer damage to personal property; an increase in car/deer collisions; and damage to the natural ecosystems in Meridian Township's 2,000 acres of parks and land preserves.

This plan was developed based on information collected from a community survey; expert advice from the Michigan Department of Natural Resources (MDNR); sportsmen groups; garden clubs; township staff; and experts at Michigan State University. The mission of the DNR is to maintain a healthy white-tailed deer population, using sound scientific management; maximizing recreational opportunities while minimizing negative impacts on ecosystems and other wildlife species and without creating undue hardship to private interests.

2020 Summary

This Deer Management Program is currently in its tenth year and although it has received many accolades and has been deemed successful, there are still many over-population issues throughout the township and our residents continue to express their concerns. The discovery of chronic wasting disease (CWD) in 2015 affected the harvest numbers due to the fact that hunters are no longer able to bait the deer. In response, the Township continued to meet with Michigan Department of Natural Resources officials and our Police Department to explore additional ideas for an increased harvest. We believe that these additional steps taken will increase he harvest numbers. The goal of the 2020 management program is to harvest 300 deer. The intention is that these efforts will help maintain healthy deer, habitats, and outdoor recreational opportunities while achieving management goals.

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- VIII. MANAGED HARVEST PROCEDURE & PROCESSING
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- X. EXTENDED SEASON HARVEST INFORMATION
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I. INTRODUCTION

A. Community Description & Location

Meridian Charter Township is located in Central Michigan on the northern edge of Ingham County. As of the 2010 census, the township had a population of 39,688. Meridian Township is the local government unit that includes the unincorporated communities and census-designated places of Haslett and Okemos. The Township takes its name from the fact that the Michigan Meridian, the prime north-south survey line, runs along the eastern edge of the township. It is from this line that all townships were surveyed and measured.

B. General Description of Potential Deer Management Areas

1. Government Owned Property

Township Land

Potential deer management areas may include select parks, land preserves, or other township-owned properties that are not specifically designated as a parks or land preserves.

Ingham County

Ingham County owns and manages two regional parks in the north-east portion of the township: Lake Lansing North and South Parks. Ingham County began conducting managed hunts in Lake Lansing North Park in 2012. The Ingham County Housing Commission manages the Dobie Road Farm property and it is managed by the Ingham County Board. The Board allowed Meridian Township to place hunters on the County-owned Dobie Road Farm property beginning in 2014. Hunting has been conducted on both County properties each year since 2012/2014.

Michigan State University

Michigan State University (MSU) owns a natural area designated as the Dobie Reserve, located on the west side of Dobie Road and the north side of the Red Cedar River. MSU also owns large farms within the south-west portion of the township. MSU places their own pest managers on their properties.

2. Private Property

The township contains numerous private parcels of land that are greater than five acres in size. In addition, it may be possible to manage deer on several private properties that have suitable hunting property that collectively comprise five acres or more. The Township mails letters to homeowners of 5+ acres encouraging them to either hunt their property, or to allow the Township to place a hunter on the property.

II. PURPOSE

A. Reasons for the Development of a Deer Management Plan

1. The Township has documented numerous complaints of white-tailed deer (*Odocoileus virginianus*) damage from township residents.
2. Response to complaints of damage to personal property (landscaping).
3. Increased deer/vehicle accidents within the township.
4. Increase of deer/human contact.
5. Nuisance deer roaming into densely populated residential neighborhoods.
 - In urbanized areas, remnant natural areas exist as fragmented landscape.
 - Deer may become highly concentrated in remaining habitat islands.
6. There is evidence of damage to the park and land preserve's ecosystems by deer over-browsing, as noted by local biologists, park naturalists, and park stewardship managers.
 - Recognizing that parks and land preserves support ecosystem services; protect water quality; and provide wildlife habitat.
 - Recognizing that preferred native forage plants (oak, cedar, trillium, bloodroot, and trout lily) can require up to 10 years to regenerate.
 - Recognizing that deer may facilitate the introduction and spread of invasive species through preferential forage on certain plant species and serving as dispersal conduits along game trails.
 - There are a high density of game trails throughout parks and land preserves.
 - Parks and land preserves serve as a protected area for plants and animal species.
 - Impacts on native plant communities have cascading effects on associated wildlife species.

III. GOALS OF DEER MANAGEMENT PROGRAM

A. Natural Resources Management Philosophy

Land management includes an ecosystem approach to ensuring the health and function of park and land preserve's natural communities. Management methods may include the control of deer densities, removal of invasive species, application of prescribed burns, and reintroduction of native plants.

B. Michigan Department of Natural Resources (MDNR) Deer Management Philosophy

The MDNR supports deer management in urban/suburban areas to help address:

1. Damage to ecosystems
2. High vehicle-deer crash incidence rate
3. Damage to residential landscaping and gardens
4. Public Act 451 of 1994: The Wildlife and their habitats of the state are valuable public natural resources held in trust by the state, and the state has a duty as trustee to manage its wildlife and their habitats effectively for the use and enjoyment of present and future residents and for the protection of the environment.
5. Natural Resources Commission Policy #2007: The Department's goal is to manage the deer herd using management practices based on scientific research to:
 - a. Maintain healthy animals and keep the deer population within limits dictated by the carrying capacity of the range
 - b. Limit effects on native plant communities, agricultural, horticultural, and silvicultural crops and public safety.

IV. DEER POPULATION INFORMATION

A. Michigan Deer Population - Statewide Trends

According to the MDNR, in the absence of predators, unmanaged herds readily increase to abundant levels which can result in:

1. Increased propensity for disease
2. Poor individual health of deer
3. High incidence of roadside mortality (vehicle-deer collisions)

B. Deer Population Goal

Michigan Department of Natural Resources (MDNR) and Michigan Natural Features Inventory (MNFI) suggest that minimizing impacts

to natural communities and associated wildlife may require managing herds at less than 20 deer per square mile.

C. Deer Productivity

According to the MDNR, it is likely that deer productivity will increase as population is reduced. Deer management clearly needs to be a multi-year effort. It is our hope that private landowners and adjacent communities will address the over-population issues as well.

D. Deer Population Evaluation

It is difficult to obtain exact numbers of the deer herd population. Options for establishing population includes:

1. Utilization of helicopter surveys to attempt to develop base line population information. The downside to utilizing helicopters is that it can be costly.
2. Local biologists have stated that it is unnecessary to take the measure of conducting a helicopter survey, and that the damage to vegetation, incidents of deer/vehicle accidents, and simple observations provide direct evidence and measures of the impacts of deer populations intended to be managed.
3. Trail cameras are another possibility for gathering informal numbers on the deer population.

E. Michigan State University (MSU) Research Project

A major benefit of Meridian Township is its proximity to MSU and the MDNR. MSU hosts The Boone and Crocket Quantitative Wildlife Center, which is a network of University programs dedicated to attracting the brightest students to the best universities to work with the foremost faculty in North America. The program promotes the development of conservation leaders to ensure the future of our wildlife legacy. The MSU students focus on issues that are reshaping wildlife conservation: land-use change affecting habitats, emerging diseases in wildlife, shifting patterns in weather and climate, and changing conservation policy.

Johnathan Trudeau, a Ph.D. student with the MSU Department of Fisheries and Wildlife and Boone and Crocket lab, is conducting a long-term research project on white-tailed deer movement that started in January 2018. This research is part of a large-scale collaboration between Michigan State University (MSU) and the Michigan Department of Natural Resources (MDNR) aimed at characterizing deer movement across a landscape with varying human development. With the emergence of chronic wasting disease (CWD) in mid-Michigan, it is crucial to understand deer movement

patterns to best inform effective disease management practices. The study area spans Ionia, Clinton and Ingham counties. Jonathan's team successfully captured and fit global positioning system (GPS) collars on 20 adult white-tailed deer in 2018 and 39 adult white-tailed deer in 2019, of which 22 remain. The GPS collars allow Jonathan to monitor the survival and movement of each deer for up to two years. Previous studies also included the study of the spatial distribution of suburban deer and were conducted by students utilizing pellet collection and DNA analysis from select locations across Meridian Township.

The following properties are being utilized for the study: Central Park, North Meridian Road Park, Ted Black Woods, Nancy Moore Park, Towar Woods, Central Meridian Uplands, Davis Foster Preserve, Red Cedar River East Preserve, Tihart/Cornell Wetland Preserve, Legg Park, Forest Grove Preserve, North Ridge Preserve, the Transfer station, and Tihart Preserve.

V. MONITORING AND EVALUATION OF BROWSED VEGETATION

Measures will be taken to evaluate improvements in the composition and structure of native plant communities.

A. Deer Enclosures

Deer enclosures are fenced areas that exclude deer. They are generally 10-12' in height and should be approximately 10' x 20' in size. In 2011, enclosures were constructed in:

1. Lake Lansing North Park
2. Towar Woods Land Preserve

B. Observations of Composition and Structure of Native Plant Communities

The deer enclosures have allowed us to directly compare areas open for deer browsing with the area that is enclosed. We have observed visible regeneration of oak, white pine, and cedar, increased diversity of spring ephemeral wildflowers, and a reduction in under story browse line. In addition, these highly visible enclosures include educational signage stating their purpose. The enclosures are placed in parks that have a lot of visitors for the purpose of providing public education on the issue.

VI. ALTERNATIVES TO HUNTING

A. Fencing

1. Prohibits landscape connectivity, wildlife movement. Needs to be at least 10' high.

B. Translocation or trapping

1. Wildlife Division of MDNR will not allow removal of live deer. Deer may not be converted to private ownership.
2. Deer may be trapped and euthanized. Affordability depends upon source of labor, extent of local involvement.

C. Deer Immunocontraception (Birth Control)

1. Wildlife Division allows treatment under a special permit.
2. Feasibility and affordability are limited
3. Efficacy and side effects vary by treatment method
4. Annual applications are generally required to maximize effectiveness

D. Surgical Sterilization of Deer

1. Wildlife Division allows sterilization under a special permit.
2. Feasibility and affordability are limited. Capture and nearby facilities or mobile surgical procedures are required.

E. Landscape Alternatives

1. Meridian Garden Club - brochure about deer-resistant plants
2. Meridian Township Website - website about deer-resistant plants
3. Managing roadside vegetation to improve visibility
 - a. Ingham County Road Commission
 - b. Meridian Township Public Works
4. Modify driver behavior - signs and reflectors , education for young drivers

F. Roadside Management Options

1. Increase distance back from road edge that would be cleared of vegetation.
2. Increase signage at deer crossings
3. Install reflectors at deer crossings

VII. GENERAL FEATURES OF A MANAGED HUNT

1. Initiate highly managed deer harvest in Township and County owned properties.
2. Encourage private homeowners to hunt or allow hunting on their property.
3. Deer harvest will be conducted during the State-regulated hunting seasons for archery and will follow all State regulations.

4. Park and land preserve properties remain open to the general public during archery season.
5. Park entrances and major trail heads are posted with information about deer management program.
6. Press releases describing program will be published.
7. Notifications mailed directly to neighbors who own property located directly adjacent to designated hunting areas.
8. Humane treatment of deer.
9. Donation of venison to the hungry.
10. Communications and record keeping of all deer management data.

VIII. MANAGED HARVEST PROCEDURE & PROCESSING

- A. All hunting will be per state laws and regulations and per Township regulations according to the deer management hunt guidelines.
- B. Top priority of a managed hunt will be to protect the safety of hunters, neighboring residences, and the general public.
- C. A managed harvest will be held regular hunting seasons.
- D. All hunting is archery only, with the exception of a special harvest conducted by the Police Department
 1. Generally speaking, there is greater public acceptance for bow hunting because of the noise and the concern for errant shots.
- E. Firearm hunting
 1. Firearms may only be utilized by Meridian Township or State of Michigan Police
- F. Establishment of deer blinds and routes, tracking
 1. MDNR safety zone regulations will be observed
 - a. One hunter is housed per blind per hunt date.
 - b. Blind/elevated tree stand locations must be reported to the Township.
 - c. Hunters must remain within 50 feet of the blind at all times.
 - d. Hunters must report to Township staff each time they enter and leave public property.
 - e. Hunters are not to shoot unless they have a deer within close range.
 - f. Tracking may not be done on private property without permission.
 - g. Map of blind/tree stand locations will be indicated on aerial photos
 - a. Park or preserve boundary
 - b. Blind locations
 - c. Park or preserve trails

F. Public notification

1. Press releases
2. Direct mailing to all property owners adjacent to township-designated hunting areas
3. Educational pieces on deer management on social media and in other township publications/magazines/newsletters
4. Park or land preserve entrances and major trail heads will be posted, notifying park users of deer management program
5. The deer management program is discussed at public meetings including the Meridian Township Board; Park Commission; and Land Preservation Advisory Board

H. Neighborhood notification

1. Notification to neighbors directly adjacent to the park boundary
2. Address information is obtained from the latest Parcel Information Layer available to staff
3. Neighbors will receive notification cards at least 14 days prior to the first scheduled managed hunt date

I. Township Police and MDNR Conservation Officer support

1. Meridian Township Public Safety and MDNR Conservation Officers are valuable partners in the deer management program and assist, as needed, with any issues that may arise.

K. Deer Management Assistance Program (DMAPs)

Meridian Township has received approval from the MDNR to conduct a managed deer harvest for the 2020 Deer Management Assistance Program:

Chapter V Special Permit Regulations

5.80 Deer management assistance (DMAP) hunting permits; definitions, criteria for issuance, validity of permits, application procedures, restrictions and requirements; unlawful acts.

Sec. 5.80

(1) The terms in this section shall have the meaning described to them in this section.

(a) "Permit" means a deer management assistance (DMA) permit.

(b) "Permittee" means a person who has applied for and been authorized to purchase deer management assistance permits by the department.

(c) "Authorized designee" means one person who has been designated by the landowner and approved by the department, to act on behalf of the landowner to apply for and implement the provisions of deer management assistance permits. The

department reserves the right to deny a person, including the permittee, the authority to personally implement the provisions of a permit if such authority would conflict with a court order, administrative rule, or law.

- (2) Permits may be issued statewide to owners or authorized designee of land located in areas where current antlerless harvest methods are insufficient to achieve department deer management objectives or where one of the following conditions exist:
 - (a) The department has documented that the property owner has significant agricultural or horticultural crop damage caused by deer.
 - (b) The department has documented that a serious disease outbreak is a threat to the deer herd, livestock, or human health.
 - (c) The department has documented a significant safety hazard from deer.
 - (d) Current antlerless regulations are insufficient to achieve landowner deer management objectives.
- (3) DMA permits are valid only during an open season for the taking of deer as established by this order and only upon the land for which issued and adjacent private property with permission of the landowner.
- (4) DMA permits are valid only for the taking of an antlerless deer. A person less than 12 years of age shall not hunt deer with a firearm. A person hunting under the authority of a DMA permit shall carry the unused permit and shall exhibit the unused permit upon the request of a law enforcement officer.
- (5) A person, or authorized designee, owning land within a qualifying area as determined by the department, may apply for DMA permits by filing an agreement with the wildlife management unit supervisor. This agreement will include an estimate of desired antlerless harvest and numbers of hunters needed to meet the desired harvest objective. This agreement, once approved, shall be signed by both the permittee and wildlife management unit supervisor. The number of DMA permits will be determined by the wildlife management unit supervisor. A minimum of 5 DMA permits shall be issued per permittee. Failure to comply with these and other rules will make the permittee ineligible to participate in the DMA permit program for a period of 1 year.
- (6) The permittee shall not purchase more DMA permits than approved by the department.
- (7) These DMA permits shall be subsequently issued by the permittee. The permittee shall issue the DMA permits only to a person who purchased a bow and arrow deer, firearm deer, combination deer, or antlerless deer hunting license for the current hunting seasons. A person shall not accept, carry afield, use or attempt to use a DMA

permit unless they had purchased a bow and arrow deer, firearm deer, combination deer, or antlerless deer license for the current hunting seasons. A permittee shall not sell a DMA permit.

Permittees shall inform hunters about rules pertaining to the use of DMA permits.

- (8) Once issued by the permittee, a person issued a DMA permit shall not sell, lend, or allow another person to use or attempt to use the person's DMA permit. Unused permits may be reissued to hunters only by the permittee.
- (9) The provisions of section 3.103 shall apply to a permit and kill tag issued under this section. In addition, unless otherwise provided in this section, a person issued a DMA permit shall comply with all rules and regulations for the taking of deer for the season in which they are hunting.
- (10) Permittees shall report by January 15 to the wildlife management unit supervisor the name and address of all hunters and the number of deer harvested under the authority of DMA permits.
- (11) Deer taken under the authority of a DMA permit shall not be included in the season limit as defined in section 3.101(8) of this order. The daily limit and season limit shall be 1 deer per DMA permit.

History: Am. 15, 1998, Eff. Sep 10, 1998; Am. 6, 2001, Eff. Jun 1, 2001; Am. 10, 2002, Eff. Jul 15, 2002; Am. 8, 2003, Eff. Jun 7, 2003; Am. 18, 2005, Eff. Sep 9, 2005; Am. 16, 2006, Eff. Aug 11, 2006.

IX. ONGOING DEER MANAGEMENT

A. Continued deer management on a multi-year basis

1. 2011 was the first year of deer management. It was a pilot program on a small scale and included 25 hunters on 7 properties. In 2020 we had 75 hunters on 2,000 acres of public land.
2. Continue to encourage hunting on private properties.
3. Possibly hold a special hunt in January or February, as permitted by the MDNR

B. Chronic Wasting Disease (CWD)

CWD is a deadly neurological disease found in the state's free-ranging deer population. Since the discovery of CWD deer in Meridian Township in May 2015, over 2,000 deer from Meridian Township have been tested for CWD in order to gauge the extent of the disease across the landscape. To date, ten deer in Ingham and Clinton counties have tested positive for the disease with five of them found in Meridian Township. To date, more than 61,000 deer in

Michigan have been tested for chronic wasting disease, and CWD has been confirmed in 120 free-ranging deer in eight Michigan counties: Clinton, Ingham, Ionia, Jackson, Kent, Gratiot, Eaton and Montcalm.

In summary, the discovery of CWD somewhat complicated the Meridian Deer Management program because the hunters are no longer allowed to utilize bait to attract the deer. This has resulted in a significant drop in deer harvested (seen from 2014 to 2015). In addition, local processors who processed the Township's deer are no longer participating in the Michigan Sportsmen Against Hunger program due to concerns over CWD. The World Health Organization has advised against consuming venison that is contaminated with CWD, although no link to harmful effects in humans has yet been proven. Many processors will not take deer within the core CWD zone to be sure they are not contaminating their equipment which would have to be thrown out if a CWD positive deer was processed. The DNR is unsure of when the CWD restrictions can be lifted but they advised it will be at least a few more years. Until that time, the closest processor that works with Michigan Sportsmen against Hunger is in Howell. However, many of our hunters donate their venison through other private programs or directly provide venison to families in need. A few local processors will still process deer in the core zone and then the hunters take it upon themselves to donate the meat to charity.

X. DEER CULLING INFORMATION

A. Deer Culling

This technique is sometimes used near human-populated areas to safely, humanely, and efficiently remove deer. Deer culling is an intensive method of deer removal by competent marksmen and should not be considered or mistaken for a form of hunting.

This deer management plan provides the details for culling for the Wildlife Biologist's approval. This management plan strives to reasonably attempt to resolve the problem on a localized scale (per MDNR's discretion) for an extended period of time. The plan must include:

B. Goal

The long-term objectives of the deer culling plan are to reduce the nuisance deer within the residential neighborhoods of Meridian Township.

C. Alternatives

The alternatives to deer culling are listed above. The plan is to continue to utilize volunteer hunters during the regular archery season (October 1 – January 1).

D. **Logistics**

- 1. Number of deer to be culled:** The goal is to harvest 150 deer through targeted culling. The deer could be male or female of any age. The police department plans to have shooters out ten times per month and hope to cull five deer per time. The goal is 50 deer per month.
- b. Timing** – culling will be conducted within the hours of 6 pm and midnight.
- c. Personnel** – culling will be conducted by select Meridian Township Police. The selections are made at the discretion of the Chief of Police.
- d. Methods, Equipment and Locations** – The officers selected to cull the deer will be equipped with suppressed firearms of various calibers. They will be permitted to use other specialized equipment including: night vision optics; thermal imaging equipment; rifle scopes; and other useful items. There will be two officers per cull (a spotter and a shooter), along with a Department of Public Works staff member who will drag out the deer. The police will have trail cams on each bait pile that will notify the police of the deer's presence. The police are hoping to work over 4-5 bait piles in 4-5 various locations. The police will either be in a set location or will be standing in a vehicle. The culls will be in targeted neighborhoods that are not currently part of the management program. We will focus on the areas in the maps above that are near the areas that are most affected by deer/car collisions. The plan is to get a minimum of four contiguous private properties that agree to allow the police cull. Most of our residential areas are subdivisions with fragmented natural areas. The deer go back and forth between the backyards and the natural areas. Their range is very small and they are essentially, “nuisance deer.”
- e. Safety Issues** – The officers involved in the deer culling program will be assigned as teams of two. One officer will check the backdrop of the site using thermal imaging equipment to determine that it is clear of people. Officers will pay particular attention to the angle of the shot taken, what their backdrop is, certainty of a well-placed shot. If there is any uncertainty of the safety of the shot either team member has the authority and responsibility to call off the shot.
- f. Utilization plan** – the culled deer will be field dressed by Township Department of Public Works staff and will be brought to the cooler at Meridian Township. The deer will then be taken to a processor and the venison will be donated to local food banks.
- g. Long Term Management Plan** – it is recognized that deer management techniques will likely need to be employed on a long-term basis. The plan will be assessed each year utilizing

information on deer/car collisions along with anecdotal evidence regarding nuisance deer in neighborhoods.

h. Public Information Plan – Neighborhood associations will be notified of the deer culling programs dates and times. Letters will be mailed directly to each property owner.

i. Lead Contact – Sgt. Andrew McCready

j. Process for Approval from the DNR:

The Wildlife Biologist will forward this plan to the Deer Specialist/Biologist, Regional Supervisor, and District Lieutenant for review. Upon consensus agreement, a Damage and Nuisance Animal Control Permit will be issued by the Permit Specialist.

XI. PERSONAL LIABILITY

- A. The hunters will be required to sign a release of liability form for participation in a deer management program.

XII. PUBLICITY OF ARCHERY PROGRAM

- A. Public Opinion Survey
 - 1. A survey regarding deer was conducted in 2010 and was readily available through the township website, www.meridian.mi.us or paper copies were be mailed to residents upon request. A follow-up survey will be conducted in 2020.
 - 2. Articles in the local newspaper notified residents about the online survey and postcards were mailed directly to each household.
- B. Letter to residents with greater than five acres of property
 - 1. Promotion of private hunting, within DNR regulations and season
- C. Park or preserve property closed notification signs with hunt dates and times
- D. Township meetings
 - 1. The deer management plan is discussed each year at the Township Board meetings, generally held on the second and fourth Tuesdays of each month
- E. Social Media
- F. Newspaper
- G. Local Television

XIII. COSTS AND BENEFITS

COSTS

- A. Printing/postage

BENEFITS

- A. Donated venison

- | | |
|--|---|
| B. Neighborhood and volunteer notification | B. Improved herd health = intrinsic value |
| C. Park signage | C. Habitat benefits = intrinsic value |
| D. MDNR Licenses | |
| E. Supporting equipment | |
| F. Staff time | |
| = TOTAL MANAGED HUNTS COST | |

XIV. TECHNICAL CONSULTANTS, OTHER EXPERT SUPPORT, ENDORSEMENT & OVERSIGHT

- A. Michigan Department of Natural Resources**
 - 1. Chad Fedewa, Wildlife Habitat Biologist, Rose Lake District Office
 - 2. Chad Stewart, Deer Specialist, MDNR 517-641-4903 x 248
- B. Michigan Natural Features Inventory**
 - 1. Steve Thomas, stevet4@sbcglobal.net
- C. Michigan Sportsmen Against Hunger**
 - 1. Neal Easterbrook, 248-585-1415
 - 2. Dean Hall
- D. Safari Club International – Lansing Chapter**
 - 1. Jim Leonard, JRLeonard54@gmail.com
- E. Meridian Garden Club**
 - 1. Jean Goetz, President, jeangoetz88@yahoo.com
- F. Clinton/Ionia branch of the QDMA (Quality Deer Management Area) and Stoney Creek Habitat Specialists**
 - 1. Chad Thelen, chad@stoneycreekoutdoors.net
- G. Ingham County Parks**
 - 1. Tim Morgan, Director, tmorgan@ingham.org
 - 2. Coe Emens, Lake Lansing Manager, cemens@ingham.org
- G. Michigan State University**
 - 1. Dr. William Porter
 - 2. Jonathan Trudeau, Ph.D. student, Boone and Crockett Fellow, jtrudeau@msu.edu

XV. SUMMARY

Meridian Township's Deer Management Plan strives to focus on an ecosystems approach by creating co-existence among wildlife, citizens and our suburban/natural communities in a safe and efficient manner.

This deer management plan recognizes that the use and enjoyment of deer by residents is highly variable. Selection of deer management methods requires consideration of general concepts and location-specific deer dynamics.

According to the Michigan Department of Natural Resources, nearly one million Michiganders go to the woods and fields every fall to hunt and otherwise experience wildlife and open lands. Michigan has a proud and vibrant hunting tradition and a well-deserved reputation for responsible and innovative conservation. Hunting and hunter-conservationists are leading advocates for Michigan's strong natural resource economy, and at the center of their interests and enthusiasm is the management of white-tailed deer.

Meridian Township takes their role as an environmental steward seriously and as such, recognizes the need to implement science-based management of our fragile natural resources so that they may remain in perpetuity for future generations.

2020 DEER MANAGEMENT ARCHERY PROGRAM INFORMATION

1. **Volunteers:** archery season runs October 1, 2020 - January 1, 2021.
 - a. **75 hunters total hunting 40 township properties and 15 private properties.**
2. **Meat Donation:** Hunters are required to donate the first deer harvested. Hunters can donate as many deer as they wish or may keep them for personal use. Donations of venison will be given to local food banks. The Michigan Sportsmen Against Hunger program will pay the processing fee of all donated deer.
3. **2020 Hunting Permits:** DMAP permits used are only for antlerless deer in hopes to increase the amount of does harvested, reducing trophy hunting, decreasing numbers of future deer generations.
4. **Meat Storage and Processing:** A walk-in cooler has been installed at the Service Center for hunters to store harvested deer. Deer will be taken to a USDA certified processor by DPW employees once to twice a week. This decreases the amount of time hunters spend taking deer, and more time toward hunting the township properties.
5. **Additional Private Properties:** 15 private properties in the township have been added to the list for hunting. Two of the properties will be hunted by homeowners. Homeowners hunting on directly adjacent properties to township property will receive DMAP permits. All other properties have been assigned to volunteer

hunters. Two key properties are Delta Dental and the East Lansing Meridian Water & Sewer Authority. Private properties will be added throughout the season.

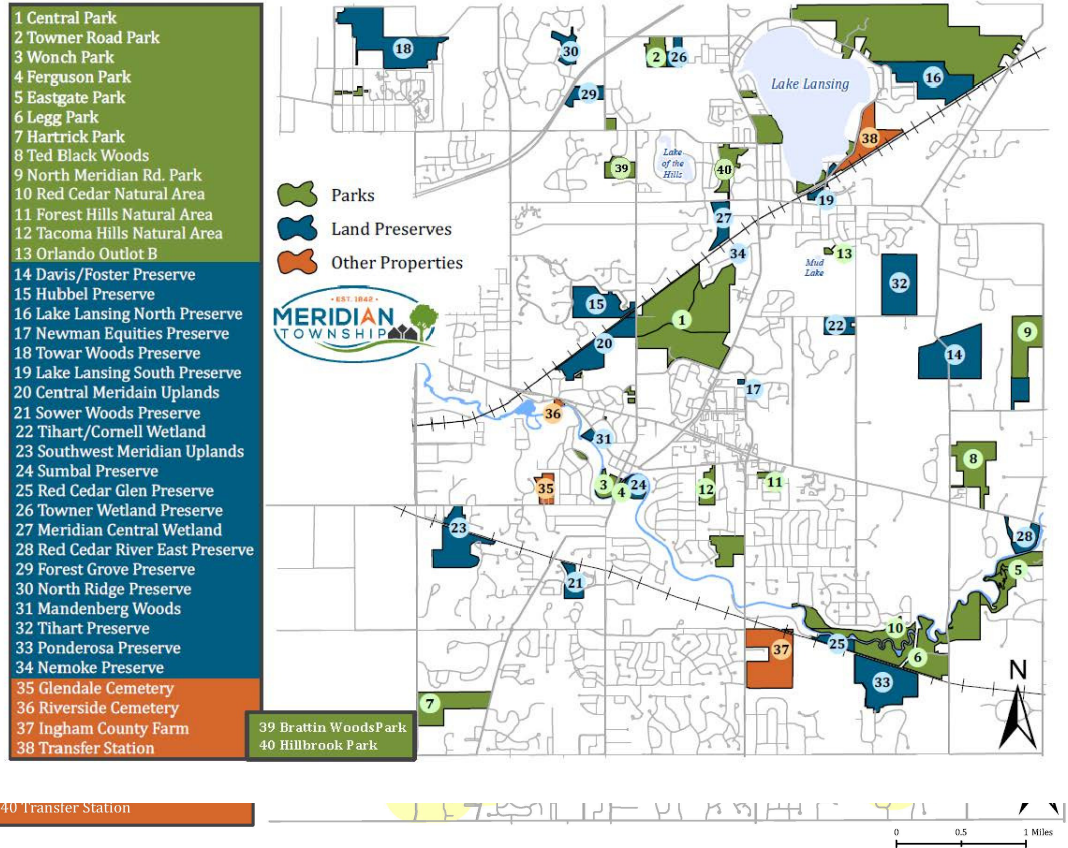
6. **Permit Reimbursement:** Hunters hunting on private properties in the township will be reimbursed for any permits used to harvest deer, decreasing the financial burden on the hunter and increasing incentive to harvest.
7. **Better Coverage:** Hunters with more time to hunt received more properties to hunt, ensuring better coverage of the township. Property assignments will also remain flexible throughout the season and may be adapted to cover any absences by assigned hunters.

Deer Management Program Statistics

(Collision based on data provided on the MSP "Traffic Crash Reporting System – Crash Statistics Report Selection Criteria")

	Total Hunters	Properties Hunted	Deer Harvested	Reported Deer/Car Collisions
2011	25	7	43	152
2012	50	18	90	153
2013	60	20	127	180
2014	73	21	150	137
2015	30	19	63	144
2016	73	31	73	164
2017	66	30	80	129
2018	74	38	57	129
2019	84	38	88	153
2020	84	40 (2300 acres)	145 (as of 12/12/20)	-----

Meridian Township Deer Management Areas 2020



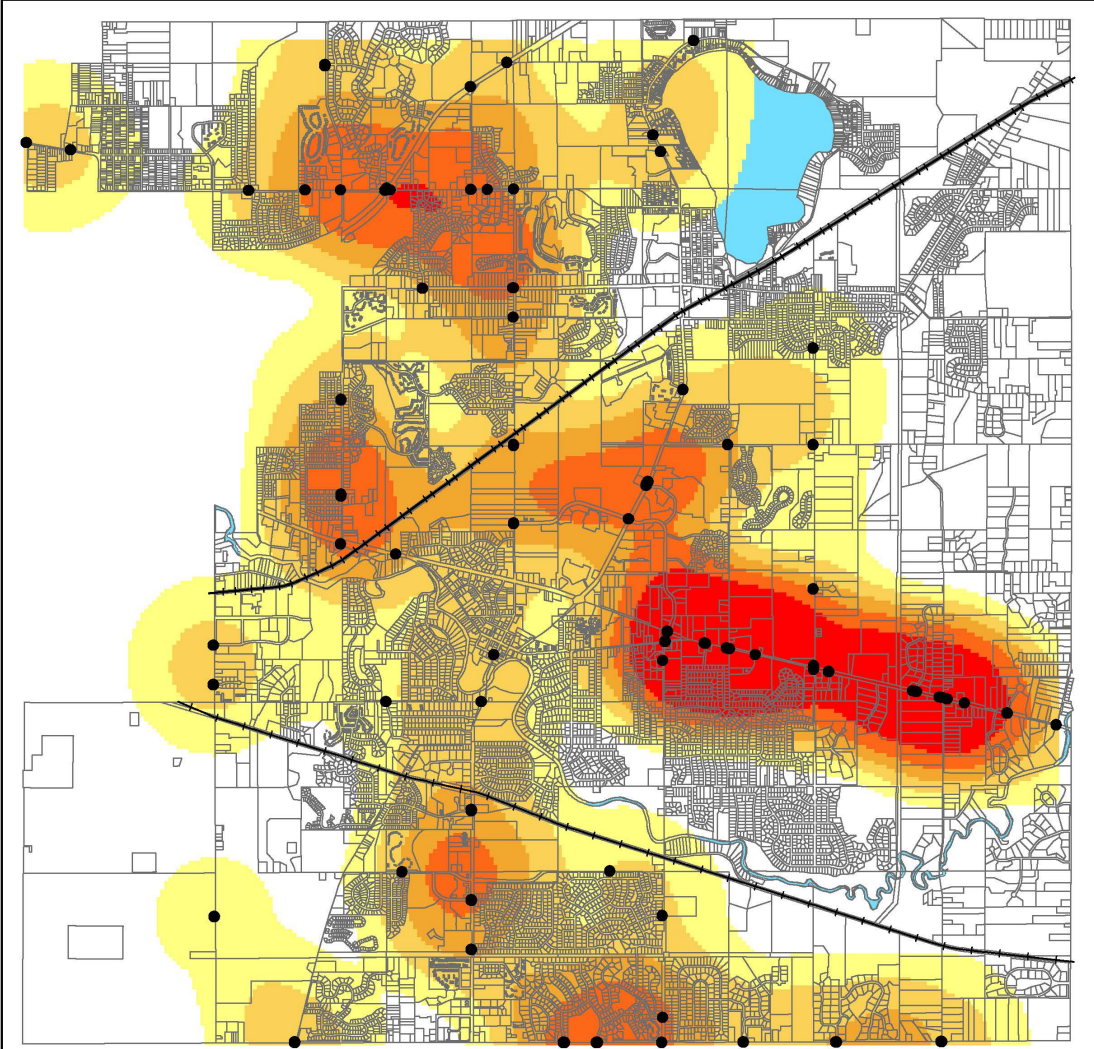
- 1 Central Park
- 2 Towner Road Park
- 3 Wonch Park
- 4 Ferguson Park
- 5 Eastgate Park
- 6 Legg Park
- 7 Hartrick Park
- 8 Ted Black Woods
- 9 North Meridian Rd. Park
- 10 Red Cedar Natural Area
- 11 Forest Hills Natural Area
- 12 Tacoma Hills Natural Area
- 13 Orlando Outlot B
- 14 Davis/Foster Preserve
- 15 Hubbel Preserve
- 16 Lake Lansing North Preserve
- 17 Newman Equities Preserve
- 18 Towar Woods Preserve
- 19 Lake Lansing South Preserve
- 20 Central Meridain Uplands
- 21 Sower Woods Preserve
- 22 Tihart/Cornell Wetland
- 23 Southwest Meridian Uplands
- 24 Sumbal Preserve
- 25 Red Cedar Glen Preserve
- 26 Towner Wetland Preserve
- 27 Meridian Central Wetland
- 28 Red Cedar River East Preserve
- 29 Forest Grove Preserve
- 30 North Ridge Preserve
- 31 Mandenberg Woods
- 32 Tihart Preserve
- 33 Ponderosa Preserve
- 34 Nemoke Preserve
- 35 Glendale Cemetery
- 36 Riverside Cemetery
- 37 Ingham County Farm
- 38 Transfer Station

- 39 Brattin Woods Park
- 40 Hillbrook Park

- 40 Transfer Station



Meridian Township Deer-Vehicle Collisions (2019)

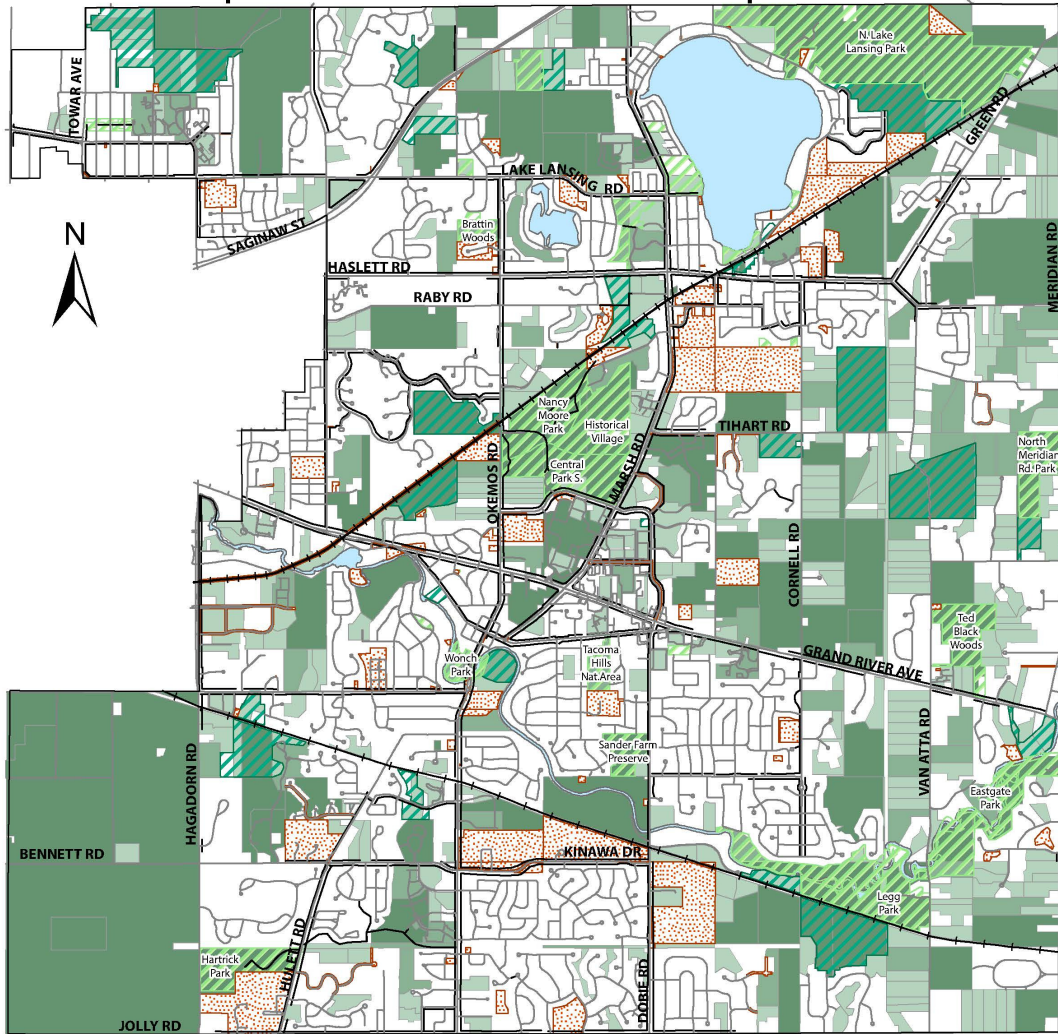


Legend

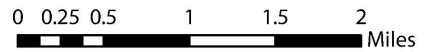
- Deer-Vehicle Collisions
- High
- Medium
- Low

0 0.3 0.6 1.2 1.8 2.4 Miles

Deer Management Analysis Properties in Meridian Township > 5 Acres



Parcels > 5 Acres	— Street
Acreage	+ + Railroad
0-4	— Pathway
5-14	■ Government Owned
15-24	■ Park
25+	■ Land Preservation
	■ Water





2021 - Deer Management FAQ's

1. How can I participate in the Meridian Township Deer Management Program?

To submit your name for the waiting list please call or visit the Meridian Township Service Center at 2100 Gaylord C. Smith Court Haslett, MI 48840 to fill out an application, view hunting maps, rules, and regulations.

2. What are the requirements to hunt in the Deer Management Program?

Placement in the program is **limited to Meridian Township residents**. All hunters must submit to a background check, and pass a proficiency test and equipment check. There are also minimum participation requirements throughout the hunting season.

3. When and where does the hunt take place?

The deer management program coincides with the archery season, running from October 1, 2021 through January 1, 2022. Hunting occurs seven days a week from ½ hour before dawn to ½ hour after dusk. All participating properties are posted at obvious points of entry.

4. What safety precautions has the township taken to prevent hunting related incidents?

Hunting is limited to **archery only**. Designated properties have a predetermined number of hunters based on the property size, huntable area, and public use. All hunters are required to have a background check, pass a proficiency test, and pass an equipment check. Hunter participation is reported as far as property entrance and exit times, their stand locations, and deer in process of being tracked.

5. Can I hunt on private property in Meridian Township?

Yes, be sure to obtain written landowner permission and follow all State rules and regulations. **Meridian Township parks and land preserves are not open to public hunting.**

6. What do the hunters do with the venison?

Hunters are allowed to keep the meat themselves, but are encouraged to donate the deer through Michigan Sportsman Against Hunger (MSAH), so that the meat can be donated to local food banks. **The first deer harvested within the Meridian Township Deer Management Program must be donated and placed in the cooler.**

7. How many reported deer car collisions occur in Meridian Township?

2018: 129	2013: 180
2017: 129	2012: 152
2016: 164	2011: 152
2015: 145	2010: 138
2014: 137	

8. Who can I call to report a dead deer along the roadway?

Meridian Township at 517.853.4600.

9. How can I remove a dead deer from my yard?

Call Meridian Township at 517.853.4600.

10. I believe someone is poaching on my property or illegally feeding deer, who do I call?

Michigan Department of Natural Resources RAP line (Report All Poaching) 800.292.7800

WAYNE

5-night deer cull starts on University of Michigan-Dearborn campus



Elissa Welle

Detroit Free Press

Published 7:44 p.m. ET Feb. 26, 2022 | Updated 6:54 p.m. ET Feb. 27, 2022

An effort to reduce the deer population on the University of Michigan-Dearborn campus by up to 50 deer began Saturday evening and will continue through March 6.

The deer cull will take place from roughly 4 p.m. until 10 p.m. in the Environmental Study Area, or ESA, a 300-acre forested region on campus east of the Rouge River in Dearborn. Five sessions of the cull are scheduled for the next two weekends and one weekday.

The purpose of the deer population cull is to "protect the biodiversity of the ESA, to help reduce health risks ... due to tick exposure and to reduce car-deer collisions near campus," according to a statement released Tuesday by the university.

This is the third deer population cull ordered by the university. Similar to the culls in 2015 and 2018, the university's plan states sharpshooters from Berg's Animal & Bug Control will use rifles with silencers, shot exclusively from elevated positions, to cull the deer population.

More: Decatur man faces jail time for shooting 9 trophy bucks

More: Dearborn is going after dangerous drivers after 10,000 traffic complaints

University spokesperson Ken Kettenbeil said the guns will be pointed down and all bullets will be accounted for at the conclusion of each session.

The goal is to reduce the deer population from 86 deer to 36, significantly more than the 5-10 deer recommended by the Michigan Department of Natural Resources for a 300-acre habitat.

Kettenbeil said the university chose to maintain a larger deer population in response to requests from residents.

"Residents have expressed the desire to see deer in the area," Kettenbail said. "We work to just strike the right balance for the ESA, which is a real resource to the community. Safety is the No. 1 priority."

Deer populations rebound quickly after culls, a criticism often leveled at those who use the practice, Kettenbeil acknowledged. However, the university has stated they explored alternatives, such as contraception and relocation, but found them to be ineffective or not permitted.

Kettenbeil said U-M Dearborn police are overseeing the effort and keeping the Dearborn Police Department and Wayne County Sheriff's Department in the loop with daily briefings.

Residents may see an increased presence of officers in the area for the next week as officers will be posted around the ESA perimeter. Trails and entrances will be closed with caution tape.

Over 400 nearby residents on the west side of the ESA, past the Rouge River, received information in the mail regarding the cull.

Not all residents are happy with the university's decision to cull the deer population. Kettenbeil said the university received three emails and one phone call expressing concern over the deer management plan, as well as one thanking them for their efforts to reduce the number of deer, which feast on backyard vegetation.

Achieving a sustainable deer population in urban parks requires a delicate balance involving many factors. The elimination of certain tree species is one of the university's concerns with an overly large deer population.

"It's very unique to have this type of forest in an urban area and it's only natural that this is where the deer would be," Kettenbeil said. "They do graze on saplings and trees when they're young."

Deer can also carry ticks, which may pass Lyme disease to humans bitten when walking through deer-inhabited areas. Car-deer collisions are also more common in areas with a high deer population.

Kettenbeil said other communities in southeast Michigan with urban forests, such as the Huron-Clinton Metroparks, have made similar moves.