



**Grand River Conservation Authority
Agenda - General Meeting**

PUBLIC

Friday, December 13, 2019

9:30 a.m.

Auditorium

Grand River Conservation Authority
400 Clyde Road, Box 729
Cambridge, ON N1R 5W6

Pages

1. **Call to Order**
2. **Certification of Quorum – 13 Members constitute a quorum (1/2 of Members appointed by participating Municipalities)**
3. **Chair's Remarks**
4. **Review of Agenda**

THAT the agenda for the General Membership Meeting be approved as circulated.
5. **Declarations of Pecuniary Interest**
6. **Minutes of the Previous Meetings**

THAT the minutes of the General Membership Meeting of November 22, 2019 be approved as circulated.
7. **Business Arising from Previous Minutes**
8. **Hearing of Delegations**
9. **Presentations**
 - a. **Grand River Conservation Foundation**

M.Matheson, GRCF Chair, and S.Wilbur will provide a presentation of the Foundation's programs and services.

b. Conservation Areas 2019 Wrap-Up

P.Walther-Mabee will provide a presentation of the conservation areas year-in-review.

10. Correspondence

a. Township of Amaranth - Nottawasaga Valley CA Levies 12

b. Township of Amaranth - Conservation Authority Exit Clauses 14

THAT Correspondence from the Township of Amaranth regarding Nottawasaga Valley Conservation Authority levies and Conservation Authority Exit Clauses be received as information.

11. 1st and 2nd Reading of By-Laws

12. Reports:

a. GM-12-19-127 - Chief Administrative Officer's Report 16

THAT Report Number GM-12-19-127 – Chief Administration Officer's Report be received as information.

b. GM-12-19-121 - Report of the Audit Committee 18

THAT the Report of the Audit Committee be received as information.

c. GM-12-19-120 - Per Diems and Honorariums for 2020 19

THAT Report Number GM-12-19-120 – Per Diems and Honorariums for 2020 be received as information.

d. GM-12-19-124 - Cash and Investment Status 21

THAT Report Number GM-12-19-124 Cash and Investment Status – November 2019 be received as information.

e. GM-12-19-126 - Financial Summary 23

THAT the Financial Summary for the period ending November 30, 2019 be approved.

f. GM-12-19-123 - Environmental Assessments 45

THAT Report Number GM-12-19-123 Environmental Assessments be received as information.

- g. GM-12-19-119 - Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation Permit Application 735/19 47
THAT the Grand River Conservation Authority approve permit application 735/19 by Crescent Haven Homes Inc.
- h. GM-12-19-122 - Collaborative Water Management Planning 50
THAT Report Number GM-12-19-122 – Collaborative Water Management Planning be received as information.
- i. GM-12-19-125 - Current Watershed Conditions 59
THAT Report Number GM-12-19-125 – Current Watershed Conditions as of December 4, 2019 be received as information.

13. Committee of the Whole

14. General Business

15. 3rd Reading of By-Laws

16. Other Business

17. Closed Meeting - Not required

18. Next Meetings

General Membership - Election of Officers - January 24, 2019 at 9:30 a.m.

General Membership - Annual General Meeting - February 28, 2019 at 9:30 a.m.

19. Adjourn

Regrets only to:

Office of the Chief Administrative Officer, Phone: 519-621-2763 ext. 2200

THAT the General Membership Meeting be adjourned.

BEN RYZEBOL, Director of Public Works
PUBLIC WORKS - TELEPHONE: (519) 941-1065
FAX: (519) 941-1802
email: bryzebol@amaranth.ca



374028 6TH LINE, AMARANTH, ONTARIO
L9W 0M6

SUSAN M. STONE, C.A.O./Clerk-Treasurer
TELEPHONE: (519) 941-1007
FAX: (519) 941-1802
email: suestone@amaranth-eastgary.ca



Grand River Conservation Authority
400 Clyde Road, PO Box 729
Cambridge, ON N1R 5W6

Re: Nottawasaga Valley Conservation Authority Levies

Please find below a copy of the resolution adopted by the Township of Amaranth Council, at its November 20, 2019 session, regarding Nottawasaga Valley Conservation Authority Levies:

Moved by C. Gerrits – Seconded by H. Foster

Council do hereby support the Township of Springwater's resolution, dated October 16, 2019, regarding the Nottawasaga Valley Conservation Authority Levies.

And be it further resolved that this motion be circulated to the Premier of Ontario, the Minister of Environment, Conservation and Parks, the County of Simcoe, the Township of Springwater, Conservation Ontario and all Ontario Conservation Authorities.

Carried.

Yours truly,

Susan M. Stone, A.M.C.T.
CAO/Clerk-Treasurer
Township of Amaranth

FOR

October 21, 2019

Nottawasaga Valley Conservation Authority
8195 8th Line
Utopia ON, L0M 1T0

RE: Nottawasaga Valley Conservation Authority Levy

Please be advised that at its meeting of October 16, 2019, Council of the Township of Springwater passed the following resolution:

C457-2019

Moved by: Coughlin

Seconded by: Moore

Whereas the Township of Springwater, like all municipalities in Ontario must confront fiscal limitations and re-evaluate programs, services, and the financial sustainability of each;

And Whereas the Township of Springwater is a constituent municipality in portions of the watershed under the jurisdiction of the Nottawasaga Valley Conservation Authority and is compelled to remit non-negotiable levy funding to the Authority on an annual basis;

And Whereas the Township of Springwater cannot exercise line-item scrutiny of Nottawasaga Valley Conservation Authority's budget and operations nor does the Authority itself provide detailed substantiation of the same to its member municipalities like the Township of Springwater;

And Whereas the Township of Springwater must account for all taxpayer funds it expends within its operations and that it forwards to local agencies and boards;

Therefore Be It Resolved That the Township of Springwater requests that the Nottawasaga Valley Conservation Authority provide prior to passage of its 2020 budget the following:

- (1) Its interpretation and understanding of its mandated operations as found in the current Conservation Authorities Act, 1990, R.S.O. 1990, c.C.27 and its prescribed regulations;
- (2) The costs of each as determined under (1);
- (3) Detailed definitions and determinations of what can be characterized as non-mandatory programming and service(s);

BEN RYZEBOL, Director of Public Works
PUBLIC WORKS - TELEPHONE: (519) 941-1065
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email: bryzebol@amaranth.ca



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SUSAN M. STONE, C.A.O./Clerk-Treasurer
TELEPHONE: (519) 941-1007
FAX: (519) 941-1802
email: suestone@amaranth.eastgarry.ca



November 22, 2019

Grand River Conservation Authority
400 Clyde Road, PO Box 729
Cambridge, ON N1R 5W6

Re: Conservation Authority Exit Clauses

Please find below a copy of the resolution adopted by the Township of Amaranth Council, at its November 20, 2019 session, regarding Conservation Authority Exit Clauses:

Moved by C. Gerrits – Seconded by M. Tijssen

Council do hereby support the Township of Ramara's resolution, dated October 28, 2019, regarding Conservation Authority Exit Clauses.

And be it further resolved that this motion be circulated to the Township of Ramara, Conservation Ontario, and all Ontario Conservation Authorities.

Carried.

Yours truly,

FOR: Susan M. Stone, A.M.C.T.
CAO/Clerk-Treasurer
Township of Amaranth



2297 Highway 12,
PO Box 130
Brechin, Ontario L0K 1B0
p.705-484-5374
f. 705-484-0441

November 7, 2019

Honourable Jeff Yurek
Minister of Environment, Conservation and Parks
College Park 5th Floor
777 Bay St
Toronto, ON M7A 2J3

Re: Conservation Authority Exit Clause

The Council of the Corporation of the Township of Ramara passed the following motion at their regular meeting held October 28, 2019, unanimously by a recorded vote:

WHEREAS the TOWNSHIP OF RAMARA has consistently expressed its view that its watershed conservation authorities are duplicative, financially unaccountable, in conflict with citizens and private property rights;

AND WHEREAS the TOWNSHIP OF RAMARA has encountered the regulatory obstacles to challenge the arbitrary, inefficient, non-transparent, and unsustainable municipal levy forced upon it annually by its watershed conservation authorities;

AND WHEREAS the TOWNSHIP OF RAMARA questions the efficacy and relevance of its watershed conservation authorities' programs and services and their performance in achieving the goals of conservation and environmental stewardship;

AND WHEREAS the TOWNSHIP OF RAMARA finds the current Conservation Authorities Act, 1990, R.S.O. 1990, c. C.27 and its proscribed regulations inconsistent and obsolete;

AND WHEREAS the Minister of Environment, Conservation, and Parks the Honourable Jeff Yurek signaled the province's intent to reconsider and update the Conservation Authorities Act, 1990, R.S.O. 1990, c. C.27 and its proscribed regulations;

THEREFORE BE IT RESOLVED THAT: the TOWNSHIP OF RAMARA support the province's determination that the existing Conservation Authorities Act, 1990, R.S.O. 1990, c. C.27 and its proscribed regulations require review;

Grand River Conservation Authority

Report number: GM-12-19-127
Date: November 23, 2018
To: Members of the Grand River Conservation Authority
Subject: Chief Administration Officer's Report

Recommendation:

THAT Report Number GM-12-19-127 – Chief Administration Officer's Report be received as information.

Report:

This report provides a brief overview of current activities. It covers programs and activities that are not included in monthly reports.

1. Meeting with Ministry of Environment, Conservation and Parks: On December 4, 2019 the Chair, Deputy CAO/Secretary Treasurer and CAO met with MECP Ministry and Minister's staff. Also in attendance were representatives from various watershed MPP offices. It was an opportunity to discuss the programming and services the GRCA provides to not only the watershed municipalities, but also the watershed residents. MECP staff indicated that there would be full consultation in early 2020 with various stakeholders regarding the development of the new regulations for Conservation Authorities.
2. Haldimand County Public Information Centre (PIC): On December 2, 2019, Haldimand County and the three Conservation Authorities within the County (GRCA, LPRCA and NPCA) held a PIC on Lake Erie Flooding Hazards and Preparedness. Approximately 250 residents and property owners were in attendance, and overall the event was a great success. Many residents expressed their gratitude for the opportunity to learn more about flood hazards. In addition, many commented that the event helped them to develop a better understanding of Lake Erie's historic water levels, the roles different agencies play, and how to prepare for future flood events. All of the resources shared at the PIC including the presentation slides, handouts and the Lake Erie Flood Zone Property Lookup Tool are available on the Haldimand County website. The County is planning a debrief call with the three Conservation Authorities to discuss event and share feedback from residents.
3. Provincial Flood Advisor Report: On November 28, 2019 the Ministry of Natural Resources and Forestry released the Special Flood Advisors report. Doug McNeil (Special Advisor on Flooding) was responsible for conducting an independent review of flood management and 2019 flooding events in Ontario. Several sessions with stakeholders were held throughout the province; GRCA hosted one of these sessions. A number of recommendations were

reference in the report regarding flood management in Ontario. GRCA staff are reviewing the document and will bring a report to the Board with staff recommendations.

4. Head Office roof replacement: At the request of a Board member, staff have confirmed the total budget approved for the roof replacement project at the Administration Centre. Through Resolution Number 19-55 (March 2019) a total project budget for the project was approved at \$1,180,000.

Submitted by:

Samantha Lawson
Chief Administrative Officer

Grand River Conservation Authority

Report number: GM-12-19-121
Date: December 13, 2019
To: Members of the Grand River Conservation Authority
Subject: Report of the Audit Committee

Recommendation:

THAT the Report of the Audit Committee be received as information.

Summary:

Not required.

Report:

The Audit Committee met on November 22, 2019. The Grand River Conservation Authority's auditors, KPMG, presented the 2019 Audit Plan.

The following Resolution was passed by the Audit Committee:

AUD-19-08

Moved By Vic Prendergast

Seconded By Jane Mitchell

THAT the Audit Plan for the year ending December 31, 2019, proposed by KPMG Chartered Professional Accountants be approved.

Carried

Financial implications:

Not applicable

Other department considerations:

Not applicable

Prepared by:

Karen Armstrong
Deputy CAO/Secretary-Treasurer

Approved by:

Samantha Lawson
Chief Administrative Officer

Grand River Conservation Authority

Report number: GM-12-19-120
Date: December 13, 2019
To: Members of the Grand River Conservation Authority
Subject: Per Diems and Honorariums for 2020

Recommendation:

THAT Report Number GM-12-19-120 – Per Diems and Honorariums for 2020 be received as information.

Summary:

Not applicable.

Report:

On March 23, 2018, the General Membership passed Resolution number 18-59, which included the following wording:

“...THAT Board Member Per Diems and Honorariums be adjusted each year on January 1 by the same rate as non-union positions.”

Prior to the above resolution, in accordance with a resolution passed by the General Membership in 2007, per diems and honorariums were increased annually at a rate equal to the Consumer Price Index. In accordance with the prior version of the Conservation Authorities Act, approval of the Ontario Municipal Board (OMB) was required for all expenses, allowances and salaries paid to any members of the authority. The current Conservation Authorities Act does not require Ontario Municipal Board approval for payments to Members.

At the November 22, 2019 General Membership meeting, Resolution number 19-203 was passed approving a 1.5% increase for non-union positions effective January 1, 2020. A summary of Per Diems, Honorariums and Reimbursement for Members, January 1, 2020 is attached, reflecting the 1.5% increase. At the present time, no change is recommended for mileage in the 2020 Budget (\$0.50 per km).

Financial implications:

The 2020 Draft Budget includes \$121,000 for Board Members' honorariums, per diems, mileage and expenses. The anticipated adjusted rates have been incorporated into the budgeted amount.

Other department considerations:

Not applicable

Prepared by:

Karen Armstrong
Deputy CAO, Secretary-Treasurer

Approved by:

Samantha Lawson
Chief Administrative Officer

**Grand River Conservation Authority
Per Diems, Honorariums and Reimbursement for Members - January 1, 2020**

		Chair	Vice-Chair	Other Members
(1)	General Membership/Committee of the Whole	\$151.37**	\$151.37**	\$151.37**
(2)	Other Committees - Audit, Special Recognition or Ad Hoc Committees <i>Note: A Per Diem is only paid when a Committee meets on a separate day from (1)</i>	\$91.10**	\$91.10**	\$91.10**
(3)	Other time spent on business of the Authority (pursuant to By-law Section B.14)*	\$27,430.77/year	\$ 2,743.49/year	\$91.10**/ meeting
(4)	Mileage for travel to or from any of the above***	\$0.50/km	\$0.50/km	\$0.50/km

***GRCA By-law No.1-2019, Section B.14 Remuneration of Members**

The Authority shall establish a per-diem rate from time to time to be paid to Members for attendance at General Meetings and Advisory Board or Committee meetings, and at such other business functions as may be from time to time requested by the Chair, through the Secretary-Treasurer. In addition, an honorarium will be approved by the Authority for the Chair and Vice-chair(s) as compensation for their additional responsibilities. A single per-diem will be paid for attendance at more than one meeting if they occur consecutively on the same day. The following activities shall be eligible for per diem allowance under this clause:

- Attendance at meetings of municipal councils to present the Authority's Annual budget and general levy requirement, if the member does not sit on that council and when such council presentations are scheduled through the Chair's office or at the request of the General Membership;
- Attendance at meetings of working groups or committees when appointed by the General Membership to such group or committee as an "official representative" of the Authority;
- Attendance at workshops, conferences or tours hosted by the Authority or Conservation Ontario, if participation is open to all Members and registration is made through the Chair's office;
- Any other business approved as eligible for a per diem allowance by the General Membership.

In the event of a scheduled meeting being adjourned for lack of a quorum, those attending a meeting so adjourned shall be entitled to receive the standard per diem rate and expense.

The Authority shall reimburse Members' reasonable travel expenses incurred for the purpose of attending approved meetings and/or functions on behalf of the Authority, including actual cost of meals, lodging, public transportation and conference fees, as applicable.

A per-kilometre rate to be paid for use of a personal vehicle shall be approved by Resolution of the General Membership from time-to-time and shall be consistent with Canada Revenue Agency guidelines. Requests for such reimbursements shall be submitted on a Per Diem & Expense Claim Sheet monthly with the distance travelled entered for each meeting and allowable expenses shown. Each Member must sign a certification printed on the sheet that the information is correct.

The Chair may submit monthly expense claims, which will be reviewed and signed by the Chief Administrative Officer, the Secretary-Treasurer and the Vice-Chair. The purpose of this review is to ensure that the Chair's expense claims conform to any policies that have been established by the Authority, are within the approved budget and are supported with appropriate documentation.

** *Per-diems* have been adjusted by 1.50% effective January 1, 2020 *** *Mileage rate* has remained unchanged from 2019

Grand River Conservation Authority

Report number: GM-12-19-124
Date: December 13, 2019
To: Members of the Grand River Conservation Authority
Subject: Cash and Investment Status – November 2019

Recommendation:

THAT Report Number GM-12-19-124 Cash and Investment Status – November 2019 be received as information.

Summary:

The cash position included Notes Receivable of the Grand River Conservation Authority as at November 30, 2019 was \$28,771,391 with outstanding cheques written in the amount of \$75,428.

Report:

See attached.

Financial implications:

Interest rates, etc. are shown on the report.

Other department considerations:

Not applicable.

Prepared by:

Carol Anne Johnston
Senior Accountant

Sonja Radoja
Manager of Corporate Services

Approved by:

Karen Armstrong
Deputy CAO/Secretary Treasurer

**Grand River Conservation Authority
Cash and Investments Status Report
November 30, 2019**

BANK ACCOUNTS	Location	Type	Amount	Interest Rate
	CIBC	Current Account	1,709,655	2.15%
	RBC	Current Account	158,586	nil
	Wood Gundy	Current Account	28	0.20%
	CIBC - SPP Holding	Current Account	524,584	2.15%
	TOTAL CASH - CURRENT ACCOUNT		2,392,853	

INVESTMENTS	Date Invested	Location	Type	Amount	Face Value Interest Rate	Yield Rate	Date of Maturity	2019 Total Interest Earned/ Accrued
		CIBC Renaissance	High Interest Savings Account	4,258,300	1.60%	1.60%	not applicable	38,388
		CIBC Trust Savings	High Interest Savings Account	499,054	1.60%	1.60%	not applicable	11,537
		One Investment Savings	High Interest Savings Account	4,239,184	2.415%	2.41%	not applicable	101,420
	September 3, 2015	CIBC	Step up bond	2,000,000	2.30%	2.30%	September 3, 2025	46,652
	October 14, 2015	Laurentian Bank	Bond	1,996,000	2.50%	2.62%	January 23, 2020	51,814
	March 1, 2016	CIBC	Bond	1,300,000	1.70%	2.00%	March 1, 2023	25,573
	September 16, 2016	CIBC	Bond	1,184,000	1.30%	1.30%	March 13, 2020	15,868
	August 24, 2017	Bank of Montreal	Bond	1,550,000	1.61%	2.01%	October 28, 2021	30,781
	July 16, 2018	Bank of Nova Scotia	Bond	1,000,000	2.27%	2.23%	January 13, 2020	22,311
	October 11, 2018	RBC	Bond	2,000,000	2.35%	2.34%	December 9, 2019	44,005
	October 11, 2018	Bank of Nova Scotia	Bond	2,000,000	2.27%	2.399%	January 13, 2020	47,953
	May 17, 2019	Bank of Nova Scotia	Bond	800,000	1.90%	2.150%	December 2, 2021	43,337
	June 17, 2019	Cdn Western Bank	Bond	1,542,000	2.788%	2.090%	September 13, 2021	96,641
	October 23, 2019	Cdn Western Bank	Bond	2,010,000	2.800%	2.780%	September 6, 2024	11,179
		TOTAL INVESTMENTS		26,378,538				\$587,459

TOTAL CASH AND INVESTMENTS **\$28,771,391**

* Reserve Balance at December 31st, 2018 23,677,015

Investment By Institution

	% of Total Portfolio
C.I.B.C.	35%
Bank of Nova Scotia	14%
Bank of Montreal	6%
Royal Bank	8%
Laurentian	8%
Cdn Western Bank	14%
One Investment Program	16%
	<u>100%</u>

* Reserve balances are reviewed annually by the Board in November.

Grand River Conservation Authority

Report number: GM-12-19-26
Date: December 13, 2019
To: Members of the Grand River Conservation Authority
Subject: Financial Summary for the Period Ending November 30, 2019

Recommendation:

THAT the Financial Summary for the period ending November 30, 2019 be approved.

Summary:

The Financial Summary includes the 2019 *actual* year-to-date income and expenditures. The budget approved at the February 22, 2019 General Meeting is included in the *Budget* column. The *Current Forecast* column indicates an estimate of income and expenditures for the whole year. At this time a net surplus of \$140,000 at year-end is forecast.

Report:

A. Revenue increased by \$90,000

- Provincial funding increased by \$45,000.
 - Provincial funding for Outdoor Education student wages increased by \$65,000.
 - Provincial funding for Upper Grand RWQP grants decreased by \$20,000 due to fewer grants awarded. Funding is set aside for future years.
- Self-Generated Revenue increased by \$45,000.
 - Planning Revenue decreased by \$10,000.
 - Woodlot Management revenue from Timber Sales increased by \$55,000.
 - Hydro Generation Revenue increased by \$50,000.
 - Foundation Donation Revenue for the Rotary Trail special project decreased by \$50,000 due to timing of trail work.
 - Donation Revenue of \$250,000 reclassified from donations-other to Foundation donations.

B. Operating Expenditures decreased by \$185,000.

- Resource Planning expenses reduced by \$10,000.
 - Administrative travel expenses decreased by \$10,000
- Forestry expenses reduced by \$20,000

- Conservation Lands property taxes reduced by \$20,000 due to reclassification of land use.
 - Conservation Services expenses reduced by \$30,000
 - Upper Grand rural water quality program grants reduced by \$30,000.
 - Communications expenses reduced by \$30,000
 - Compensation and benefit expenses reduced by \$10,000 due to staff vacancy.
 - Printing, tours and exhibit expenses reduced by \$20,000 due to less activity.
 - Corporate Services expenses reduced by \$35,000.
 - Legal expenses decreased by \$20,000.
 - Administrative (travel and meals) board expenses reduced by \$15,000.
 - Information Systems expenses reduced by \$60,000.
 - Compensation and benefit expenses reduced by \$60,000 due to staff vacancy.
- C. Special Project Expenditures decreased by \$50,000.
- Conservation Lands expenses decreased by \$50,000 for expenses related to the Rotary Trail. Expense reduction due to carryover of project work to 2020.
- D. Net Transfer to Reserves increased by \$240,000.
- Transfer to Outdoor Education reserves increased by \$65,000 due to special grant received for student costs. This transfer is contingent on the Outdoor Education program achieving breakeven results without requiring the use of this grant.
 - Transfer to the Forestry reserve increased by \$55,000 due to Timber Sales revenue.
 - Transfer to the General Capital reserve increased by \$50,000 due to additional hydro generation revenue.
 - Transfer from Work in Progress reserve decreased by \$10,000 due to less funding required for Upper Grand RWQP grants.
 - Transfer from Information Systems reserve decreased by \$60,000 due to less funding required for staffing.

The Financial Summary is attached.

Financial implications:

The activity summarized will result in a net surplus of \$140,000 at November 30, 2019.

Other department considerations:

The management committee and appropriate supervisory staff receive monthly financial reports and advise the finance department of applicable forecast adjustments.

Prepared by:

Sonja Radoja
Manager Corporate Services

Approved by:

Karen Armstrong
Secretary-Treasurer/Deputy CAO

GRAND RIVER CONSERVATION AUTHORITY
FINANCIAL SUMMARY - FORECAST
 General Membership December 13, 2019

FORECAST - October 31st, 2019 - NET SURPLUS/(DEFICIT) \$55,000

CHANGES - November 2019

Sch 4	Resource Planning	\$10,000	Administrative Expenses decreased	\$0
		\$25,000	Enquiries and Permit Fee Revenue increased	
		(\$35,000)	Plan Review Revenue decreased	
Sch 5	Forestry	\$20,000	Property Taxes - Conservation Lands expenses decreased	\$20,000
Sch 6	Conservation Services	\$30,000	Upper Grand RWQP expenses decreased	\$0
		(\$20,000)	Provincial funding decreased	
		(\$10,000)	Funding from Reserves decreased	
Sch 7	Communications	\$10,000	Compensation and Benefit Expenses decreased (vacancy)	\$30,000
		\$20,000	Printed Literature, Tours, Exhibit Expenses decreased	
Sch 8	Outdoor Education	\$65,000	Provincial Funding increased	\$0
		(\$65,000)	Transfer to Outdoor Educaiton Reserve increased	
Sch 9	Corporate Services	\$20,000	Legal Expense decreased	\$35,000
		\$15,000	Administrative Expenses - Board Members expenses decreased	
Sch 10	Conservation Lands	\$55,000	Timber Sales Revenue increased	\$0
		(\$55,000)	Transfer to Forestry Reserve	
Sch 10	Conservation Lands	\$50,000	Rotary Trail Expenses decreased (deferred)	\$0
		(\$50,000)	Foundation funding decreased	
Sch 12	Hydro Production	\$50,000	Hydro Generation Revenue increased	\$0
		(\$50,000)	Transfer to General Capital Reserve increased	
Sch 13	Conservation Areas	\$250,000	Foundation donations increased	\$0
		(\$250,000)	Other donations decreased	
Sch 16	Information Systems	\$60,000	Compensation and Benefit Expenses decreased (vacancy)	\$0
		(\$60,000)	Transfer from IS Reserve decreased	

FORECAST - November 30th, 2019 - NET SURPLUS/(DEFICIT) \$140,000

**GRAND RIVER CONSERVATION AUTHORITY
STATEMENT OF OPERATIONS
FOR THE PERIOD ENDING November 30th, 2019**

SCHEDULE		Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
REVENUE							
Municipal							
General Municipal Levy (Operating)	various	10,302,000	10,586,000	10,586,000	10,586,000	10,586,000	0
General Municipal Levy (Capital)	various	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	0
Special Municipal Levy	various	98,571	150,000	485	150,000	150,000	0
Other	various	1,023,016	870,000	1,882,712	870,000	870,000	0
		12,473,587	12,656,000	13,519,197	12,656,000	12,656,000	0
Government Grants							
MNRF Transfer Payments	various	871,073	871,073	449,688	449,688	449,688	0
Source Protection Program-Provincial	various	1,384,626	835,000	913,292	1,175,000	1,175,000	0
Other Provincial	various	944,800	1,177,500	1,490,450	1,377,500	1,422,500	45,000
Federal	various	441,116	250,000	397,650	280,000	280,000	0
		3,641,615	3,133,573	3,251,080	3,282,188	3,327,188	45,000
Self Generated							
User Fees and Sales							
<i>Enquiries and Permits</i>	4	458,583	466,000	463,751	466,000	491,000	25,000
<i>Plan Input and Review</i>	4	450,331	453,000	401,085	453,000	418,000	(35,000)
<i>Nursery and Woodlot Management</i>	5	499,498	465,000	565,592	505,000	560,000	55,000
<i>Consulting</i>	4	0	0	3,726	0	0	0
<i>Conservation Lands Income</i>	10	58,247	71,000	57,954	71,000	71,000	0
<i>Conservation Areas User Fees</i>	13	9,160,051	8,600,000	9,322,910	9,300,000	9,300,000	0
<i>Nature Centres and Camps</i>	8	983,252	1,000,500	906,514	1,000,500	1,000,500	0
<i>Merchandising and Sales</i>	8	1,926	0	1,045	0	0	0
Property Rentals	11	2,888,225	2,875,000	2,793,324	2,875,000	2,875,000	0
Hydro Generation	12	556,736	473,000	477,600	473,000	523,000	50,000
Land Sales	10	1,166,343	0	0	0	0	0
Grand River Conservation Foundation	various	421,413	454,000	418,975	454,000	654,000	200,000
Donations	various	158,284	426,000	293,603	426,000	176,000	(250,000)
Landowner Contributions	5	199,269	200,000	192,667	200,000	200,000	0
Investment Income	14	555,037	450,000	473,126	450,000	450,000	0
Miscellaneous Income	various	17,897	48,000	13,108	48,000	48,000	0
Total Self-Generated Revenue		17,575,092	15,981,500	16,384,980	16,721,500	16,766,500	45,000
TOTAL REVENUE		33,690,294	31,771,073	33,155,257	32,659,688	32,749,688	90,000

**GRAND RIVER CONSERVATION AUTHORITY
STATEMENT OF OPERATIONS
FOR THE PERIOD ENDING November 30th, 2019**

SCHEDULE	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change	
EXPENSES							
OPERATING							
Water Resources Planning & Environment	1	1,981,020	2,243,200	1,940,194	2,151,815	2,151,815	0
Flood Forecasting and Warning	2	739,376	801,000	657,267	801,000	801,000	0
Water Control Structures	3	1,712,256	1,723,900	1,535,601	1,723,900	1,723,900	0
Resource Planning	4	1,942,897	2,084,600	1,623,440	1,964,600	1,954,600	(10,000)
Forestry & Conservation Land Property Taxes	5	1,422,785	1,411,400	1,219,708	1,371,400	1,351,400	(20,000)
Conservation Services	6	803,924	885,200	760,313	885,200	855,200	(30,000)
Communications & Foundation	7	613,385	733,900	519,438	648,900	618,900	(30,000)
Environmental Education	8	1,420,157	1,382,400	1,211,240	1,382,400	1,382,400	0
Corporate Services	9	2,922,538	3,797,768	3,590,018	4,292,768	4,257,768	(35,000)
Conservation Lands	10	1,897,866	2,095,700	1,630,772	2,010,700	2,010,700	0
Property Rentals	11	1,596,859	1,594,700	1,447,691	1,594,700	1,594,700	0
Hydro Production	12	134,677	133,000	101,727	133,000	133,000	0
Conservation Areas	13	7,732,014	7,585,000	7,365,569	7,835,000	7,835,000	0
Miscellaneous	14	63,754	70,000	67,030	70,000	70,000	0
Information Systems	16	1,133,065	1,243,000	1,027,480	1,243,000	1,183,000	(60,000)
Motor Pool	16	878,525	908,700	742,019	908,700	908,700	0
Less: Internal Charges (IS & MP)	16	(2,011,590)	(2,151,700)	(1,769,499)	(2,151,700)	(2,151,700)	0
Total OPERATING Expenses		24,983,508	26,541,768	23,670,008	26,865,383	26,680,383	(185,000)
CAPITAL							
Water Resources Planning & Environment	1	97,368	110,000	79,739	110,000	110,000	0
Flood Forecasting and Warning	2	161,212	190,000	131,825	315,000	315,000	0
Water Control Structures	3	1,274,516	1,500,000	2,166,856	2,900,000	2,900,000	0
Nature Centres	8	0	0	0	0	0	0
Conservation Areas	13	1,791,805	2,590,000	2,105,880	3,745,000	3,745,000	0
Corporate Services	9	0	0	0	0	0	0
Information Systems	16	229,951	200,000	103,838	200,000	200,000	0
Motor Pool	16	435,669	350,000	409,218	410,000	410,000	0
Less: Internal Charges (IS & MP)	16	(422,012)	(342,300)	(729,336)	(342,300)	(342,300)	0
Total Capital Expenses		3,568,509	4,597,700	4,268,020	7,337,700	7,337,700	0
SPECIAL							
Water Resources Planning & Environment	1	326,115	340,000	204,348	340,000	340,000	0
Flood Forecasting and Warning	2	425,964	560,000	363,107	560,000	560,000	0
Forestry	5	137,911	130,000	139,146	130,000	130,000	0
Conservation Services	6	1,082,201	921,000	888,918	921,000	921,000	0
Communications	7	0	0	0	0	0	0
Environmental Education	8	0	0	0	0	0	0
Conservation Land Purchases/Land Sale Expenses	10	269,473	0	868,309	870,000	870,000	0
Conservation Lands	10	365,863	750,000	329,404	750,000	700,000	(50,000)
Property Development	11	0	50,000	0	50,000	50,000	0
Hydro Generation	12	80,721	0	0	0	0	0
Miscellaneous	14	28,236	35,000	31,704	35,000	35,000	0
Source Protection Program	15	1,384,626	835,000	913,292	1,175,000	1,175,000	0
Total SPECIAL PROJECTS Expenses		4,101,110	3,621,000	3,738,228	4,831,000	4,781,000	(50,000)
Total Expenses		32,653,127	34,760,468	31,676,256	39,034,083	38,799,083	(235,000)
Gross Surplus		1,037,167	(2,989,395)	1,479,001	(6,374,395)	(6,049,395)	325,000
Prior Year Surplus Carryforward		412,314	469,695	469,695	469,695	469,695	0
Net Funding FROM/(TO) Reserves		(979,786)	2,519,700	(220,370)	5,959,700	5,719,700	(240,000)
NET SURPLUS		469,695	0	1,728,326	55,000	140,000	85,000

GRAND RIVER CONSERVATION AUTHORITY
 Schedule 1 - Water Resources - Planning and Environment
 FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
<u>Expenditures and Funding to Reserves</u>						
Compensation and Benefits	1,477,118	1,615,500	1,486,207	1,595,500	1,595,500	
Administration Expenses	260,556	319,300	256,458	282,915	282,915	
Insurance Expenses	103,297	113,300	96,848	98,300	98,300	
Other Operating Expenses	140,049	195,100	100,681	175,100	175,100	
Total OPERATING Expenditures	1,981,020	2,243,200	1,940,194	2,151,815	2,151,815	
Instrumentation	35,339	60,000	14,297	60,000	60,000	
Water Quality Monitoring Equipment	62,029	50,000	65,442	50,000	50,000	
Total CAPITAL Expenditures	97,368	110,000	79,739	110,000	110,000	
Grand River Water Management Plan	87,714	70,000	24,262	70,000	70,000	
Brantford Subwatershed Study	0	0	7,322	0	0	
Upper Blair Drainage	77,683	100,000	62,470	100,000	100,000	
Dunnville Fishway	0	30,000	13,584	30,000	30,000	
Natural Heritage Study-Wellington	37,887	0	0	0	0	
Waste Water Optimization Program	122,831	140,000	96,710	140,000	140,000	
Total SPECIAL PROJECT Expenditures	326,115	340,000	204,348	340,000	340,000	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	2,404,503	2,693,200	2,224,281	2,601,815	2,601,815	0
<u>Funding</u>						
Municipal						
General Municipal Levy (Operating)	2,071,100	2,137,500	2,137,500	2,137,500	2,137,500	
General Municipal Levy (Capital)	60,000	60,000	60,000	60,000	60,000	
Special Levies	98,571	150,000	485	150,000	150,000	
Municipal Other	45,887	0	0	0	0	
Government Grants						
MNRF Transfer Payments	33,200	8,200	4,200	4,200	4,200	
Other Provincial	139,993	247,500	213,345	247,500	247,500	
Federal	94,218	0	130,171	0	0	
Self Generated						
Foundation	0	20,000	0	20,000	20,000	
Funding From Reserves						
Grand River Watershed Management Plan	0	20,000	0	20,000	20,000	
Gauges	0	50,000	0	50,000	50,000	
TOTAL FUNDING	2,542,969	2,693,200	2,554,650	2,689,200	2,689,200	0
Net Surplus/(Deficit)	138,466	0	330,369	87,385	87,385	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 2 - Flood Forecasting and Warning
FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
Expenditures and Funding to Reserves						
Compensation and Benefits	428,291	457,000	370,370	457,000	457,000	
Administration Expenses	249,762	266,000	244,842	266,000	266,000	
Other Operating Expenses	61,323	78,000	42,055	78,000	78,000	
Total OPERATING Expenditures	739,376	801,000	657,267	801,000	801,000	
Hardware	129,057	88,000	115,364	213,000	213,000	
Stream Gauges	32,155	102,000	16,461	102,000	102,000	
Total CAPITAL Expenditures	161,212	190,000	131,825	315,000	315,000	
Floodplain Mapping Projects	425,964	560,000	363,107	560,000	560,000	
Total SPECIAL PROJECT Expenditures	425,964	560,000	363,107	560,000	560,000	
Total FUNDING to RESERVES	90,000	0	0	0	0	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	1,416,552	1,551,000	1,152,199	1,676,000	1,676,000	0
Funding						
Municipal						
General Municipal Levy (Operating)	547,445	523,045	523,045	523,045	523,045	
General Municipal Levy (Capital)	190,000	190,000	190,000	190,000	190,000	
Municipal Other	0	70,000	0	70,000	70,000	
Government Grants						
MNRF Transfer Payments	252,955	277,955	143,000	143,000	143,000	
Other Provincial	126,481	200,000	110,670	200,000	200,000	
Federal	280,487	180,000	0	180,000	180,000	
Funding From Reserves						
Floodplain Mapping Projects	18,996	110,000	0	235,000	235,000	
TOTAL REVENUE	1,416,364	1,551,000	966,715	1,541,045	1,541,045	0
Net Surplus/(Deficit)	(188)	0	(185,484)	(134,955)	(134,955)	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 3 - Water Control Structures
FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
Expenditures and Funding to Reserves						
Compensation and Benefits	1,125,092	1,170,200	1,049,134	1,170,200	1,170,200	
Administration Expenses	14,708	29,200	15,479	29,200	29,200	
Property Taxes	162,927	179,700	161,219	179,700	179,700	
Other Operating Expenses	409,529	344,800	309,769	344,800	344,800	
Total OPERATING Expenditures	1,712,256	1,723,900	1,535,601	1,723,900	1,723,900	
Total CAPITAL Expenditures	1,274,516	1,500,000	2,166,856	2,900,000	2,900,000	
Total FUNDING to RESERVES	115,000	0	0	0	0	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	3,101,772	3,223,900	3,702,457	4,623,900	4,623,900	0
Funding						
Municipal						
General Municipal Levy (Operating)	1,325,350	1,323,550	1,323,550	1,323,550	1,323,550	
General Municipal Levy (Capital)	800,000	800,000	800,000	800,000	800,000	
Government Grants						
MNRF Transfer Payments	400,350	400,350	207,000	207,000	207,000	
Provincial	576,318	700,000	1,030,559	900,000	900,000	
Federal	0	0	0	30,000	30,000	
Funding From Reserves						
Water Control Structures	0	0	0	1,170,000	1,170,000	
TOTAL REVENUE AND FUNDING FROM RESERVES	3,102,018	3,223,900	3,361,109	4,430,550	4,430,550	0
Net Surplus/(Deficit)	246	0	(341,348)	(193,350)	(193,350)	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 4 - Resource Planning
FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
<u>Expenditures and Funding to Reserves</u>						
Compensation and Benefits	1,597,248	1,807,400	1,362,178	1,642,400	1,642,400	
Administration Expenses	204,057	222,500	191,663	222,500	212,500	(10,000)
Other Operating Expenses	141,592	54,700	69,599	99,700	99,700	
Total OPERATING Expenditures	1,942,897	2,084,600	1,623,440	1,964,600	1,954,600	(10,000)
TOTAL EXPENDITURES AND FUNDING TO RESERVES	1,942,897	2,084,600	1,623,440	1,964,600	1,954,600	(10,000)
<u>Funding</u>						
Municipal						
General Municipal Levy (Operating)	961,932	1,051,032	1,051,032	1,051,032	1,051,032	
Government Grants						
MNRF Transfer Payments	114,568	114,568	58,988	58,988	58,988	
Self Generated						
Solicitor Enquiry Fees	60,695	58,000	58,970	58,000	63,000	5,000
Permit Fees	397,888	408,000	404,781	408,000	428,000	20,000
Plan Review Fees	450,331	453,000	401,085	453,000	418,000	(35,000)
Consulting	0	0	0	0	0	
Funding from Reserves						
Planning Enforcement						
TOTAL REVENUE	1,985,414	2,084,600	1,974,856	2,029,020	2,019,020	(10,000)
Net Surplus/(Deficit)	42,517	0	351,416	64,420	64,420	

GRAND RIVER CONSERVATION AUTHORITY
Schedule 5 - Forestry & Conservation Lands Property Taxes
FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
Expenditures and Funding to Reserves						
Compensation and Benefits	591,083	601,000	526,188	561,000	561,000	
Administration Expenses	51,767	54,300	47,528	54,300	54,300	
Property Taxes	155,946	183,200	161,117	183,200	163,200	(20,000)
Other Operating Expenses	623,989	572,900	484,875	572,900	572,900	
Total OPERATING Expenditures	1,422,785	1,411,400	1,219,708	1,371,400	1,351,400	(20,000)
Ecological Restoration	137,911	130,000	139,146	130,000	130,000	
Total SPECIAL PROJECT Expenditures	137,911	130,000	139,146	130,000	130,000	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	1,560,696	1,541,400	1,358,854	1,501,400	1,481,400	(20,000)
Funding						
Municipal						
General Municipal Levy (Operating)	669,500	704,400	704,400	704,400	704,400	
Municipal Other	14,490	0	0	0	0	
Government Grants						
Provincial	34,962	0	26,382	0	0	
Federal	1,160	0	2,534	0	0	
Self Generated						
Nursery	456,613	450,000	453,268	450,000	450,000	
Landowner Contributions (Tree Planting)	199,269	200,000	192,667	200,000	200,000	
Donations - Foundation	91,920	57,000	33,540	57,000	57,000	
Donations - Other	55,052	130,000	267,012	130,000	130,000	
Funding From Reserves						
Conservation Area Reserve (EAB)	5,000	0	0	0	0	
TOTAL REVENUE	1,527,966	1,541,400	1,679,803	1,541,400	1,541,400	0
Net Surplus/(Deficit)	(32,730)	0	320,949	40,000	60,000	20,000

GRAND RIVER CONSERVATION AUTHORITY
Schedule 6 - Conservation Services
FOR THE PERIOD ENDING November 30th, 2019

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
Compensation and Benefits	690,240	733,000	659,708	733,000	733,000	
Administration Expenses	95,351	100,200	88,283	100,200	100,200	
Other Operating Expenses	18,333	52,000	12,322	52,000	22,000	(30,000)
Total OPERATING Expenditures	803,924	885,200	760,313	885,200	855,200	(30,000)
RWQP Grants	954,884	800,000	767,268	800,000	800,000	
Brant/Brantford Childrens Water Festival	26,187	26,000	27,230	26,000	26,000	
Haldimand Childrens Water Festival	27,980	25,000	15,721	25,000	25,000	
Species at Risk	37,510	70,000	53,273	70,000	70,000	
AGGP-UofG Research-Buffers	27,741	0	23,027	0	0	
Great Lakes SHSM Event	3,004	0	0	0	0	
Great Lakes Agricultural Stewardship Initiative	4,895	0	2,399	0	0	
Total SPECIAL PROJECT Expenditures	1,082,201	921,000	888,918	921,000	921,000	
Total FUNDING to RESERVES	12,000	0	-	0	0	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	1,898,125	1,806,200	1,649,231	1,806,200	1,776,200	(30,000)
Funding						
Municipal						
General Municipal Levy (Operating)	713,000	737,200	737,200	737,200	737,200	
Municipal Other	962,639	800,000	1,475,493	800,000	800,000	
Government Grants						
Other Provincial	6,943	30,000	41,780	30,000	10,000	(20,000)
Federal	65,251	70,000	260,642	70,000	70,000	
Self Generated						
Donations - Foundation	128,278	112,000	62,284	112,000	112,000	
Donations - Other	31,207	26,000	26,591	26,000	26,000	
Miscellaneous	2,457	0	2,600	0	0	
Funding From Reserves						
Cambridge Desiltation Pond	552	1,000	0	1,000	1,000	
Upper Grand Restoration	0	30,000	0	30,000	20,000	(10,000)
TOTAL REVENUE	1,910,327	1,806,200	2,606,590	1,806,200	1,776,200	(30,000)
Net Surplus/(Deficit)	12,202	0	957,359	0	0	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 7 - Communications
FOR THE PERIOD ENDING November 30th, 2019

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
Compensation and Benefits	538,567	583,400	451,157	528,400	518,400	(10,000)
Administration Expenses	73,568	77,000	68,281	77,000	77,000	
Other Operating Expenses	1,250	73,500	-	43,500	23,500	(20,000)
Total OPERATING Expenditures	613,385	733,900	519,438	648,900	618,900	(30,000)

Total FUNDING to RESERVES	50,000	-	-	-	-	
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TOTAL EXPENDITURES AND FUNDING TO RESERVES	663,385	733,900	519,438	648,900	618,900	(30,000)
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Funding

Municipal

General Municipal Levy (Operating)	714,900	733,900	733,900	733,900	733,900	
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TOTAL REVENUE	714,900	733,900	733,900	733,900	733,900	0
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Net Surplus/(Deficit)	51,515	0	214,462	85,000	115,000	30,000
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GRAND RIVER CONSERVATION AUTHORITY
Schedule 8 - Environmental Education
FOR THE PERIOD ENDING November 30th, 2019

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
Compensation and Benefits	1,023,545	1,000,000	878,835	1,000,000	1,000,000	
Administration Expenses	95,094	85,800	84,107	85,800	85,800	
Insurance Expense	10,637	10,300	11,114	10,300	10,300	
Property Taxes	12,135	11,000	12,002	11,000	11,000	
Other Operating Expenses	278,746	275,300	225,182	275,300	275,300	
Total OPERATING Expenditures	1,420,157	1,382,400	1,211,240	1,382,400	1,382,400	
Guelph Nature Centre	30,000	0	0	0	65,000	65,000
Total FUNDING to RESERVES	30,000	0	0	0	65,000	65,000
TOTAL EXPENDITURES AND FUNDING TO RESERVES	1,450,157	1,382,400	1,211,240	1,382,400	1,447,400	65,000

Funding

Municipal

General Municipal Levy (Operating)	354,400	331,900	331,900	331,900	331,900	
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Government Grants

Provincial	58,503	0	64,580	0	65,000	65,000
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Self Generated

Donations - Foundation	53,233	50,000	21,450	50,000	50,000	
Nature Centre Revenue - Schools	567,685	595,500	503,790	595,500	595,500	
Nature Centre Revenue - Community	46,120	34,000	31,370	34,000	34,000	
Nature Centre Revenue - Day Camp	369,447	371,000	371,354	371,000	371,000	
Merchandise Revenue	1,926	0	1,045	0	0	

TOTAL REVENUE	1,451,314	1,382,400	1,325,489	1,382,400	1,447,400	65,000
Net Surplus/(Deficit)	1,157	0	114,249	0	0	0

GRAND RIVER CONSERVATION AUTHORITY
 Schedule 9 - Corporate Services
 FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
Expenditures and Funding to Reserves						
Compensation and Benefits	1,878,053	1,897,000	1,744,293	1,897,000	1,897,000	
Administration Expenses	317,991	369,000	280,711	344,000	329,000	(15,000)
Insurance	53,378	57,000	53,968	57,000	57,000	
Other Operating Expenses	739,139	1,544,768	1,558,268	2,064,768	2,044,768	(20,000)
LESS: Recovery of Corporate Services Expenses	(66,023)	(70,000)	(47,222)	(70,000)	(70,000)	
Total OPERATING Expenditures	2,922,538	3,797,768	3,590,018	4,292,768	4,257,768	(35,000)
Building	210,000	0	0	0	0	
Total FUNDING to RESERVES	210,000	0	0	0	0	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	3,132,538	3,797,768	3,590,018	4,292,768	4,257,768	(35,000)
Funding						
Municipal						
General Municipal Levy (Operating)	2,944,373	3,043,473	3,043,473	3,043,473	3,043,473	
Government Grants						
MNRF Transfer Payments	70,000	70,000	36,500	36,500	36,500	
Self Generated						
Miscellaneous	9,049	0	108	0	0	
Funding From Reserves						
Personnel	0	15,000	0	15,000	15,000	
Building	0	450,000	0	1,000,000	1,000,000	
TOTAL REVENUE	3,023,422	3,578,473	3,080,081	4,094,973	4,094,973	0
Net Surplus/(Deficit)	(109,116)	(219,295)	(509,937)	(197,795)	(162,795)	35,000

GRAND RIVER CONSERVATION AUTHORITY
Schedule 10 - Conservation Lands
FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
Expenditures and Funding to Reserves						
Compensation and Benefits	1,107,523	1,144,800	1,013,795	1,144,800	1,144,800	
Administration Expenses	125,881	149,600	108,256	119,600	119,600	
Insurance	136,906	147,300	131,963	132,300	132,300	
Other Operating Expenses	527,556	654,000	376,758	614,000	614,000	
Total OPERATING Expenditures	1,897,866	2,095,700	1,630,772	2,010,700	2,010,700	
Land Purchases/Land Sale Expenses	269,473	0	868,309	870,000	870,000	
Emerald Ash Borer	350,184	600,000	329,361	600,000	600,000	
Trails - Capital Maintenance	15,679	150,000	43	150,000	100,000	(50,000)
Total SPECIAL PROJECT Expenditures	635,336	750,000	1,197,713	1,620,000	1,570,000	(50,000)
Forestry	42,885	70,000	0	110,000	165,000	55,000
Land Sale Proceeds	1,166,343	0	0	0	0	
Total FUNDING to RESERVES	1,209,228	70,000	0	110,000	165,000	55,000
TOTAL EXPENDITURES AND FUNDING TO RESERVES	3,742,430	2,915,700	2,828,485	3,740,700	3,745,700	5,000
Funding						
Government Grants						
Federal	0	0	4,303	0	0	
Self Generated						
Luther Misc Income	35,635	46,000	33,912	46,000	46,000	
Other Areas Income	22,612	25,000	24,042	25,000	25,000	
Timber Sales	42,885	15,000	112,324	55,000	110,000	55,000
Land Sale Proceeds	1,166,343	0	0	0	0	
Donations - Foundation	82,988	200,000	85,522	200,000	150,000	(50,000)
Donations - Other	72,025	0	0	0	0	
Funding From Reserves						
Land	197,448	600,000	0	1,470,000	1,470,000	-
Conservation Area Reserve (Dickson Trail funding)	15,679	0	0	0	0	
Forestry (EAB)/Ice Storm/Legal	350,184	0	0	0	0	
Gravel	0	1,000	0	1,000	1,000	
TOTAL REVENUE	1,985,799	887,000	260,103	1,797,000	1,802,000	5,000
Net Surplus/(Deficit)	(1,756,631)	(2,028,700)	(2,568,382)	(1,943,700)	(1,943,700)	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 11 - Property Rentals
FOR THE PERIOD ENDING November 30th, 2019

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
Compensation and Benefits	534,906	576,000	490,875	576,000	576,000	
Administration Expenses	63,787	74,500	72,043	74,500	74,500	
Insurance Expense	15,106	16,500	16,796	16,500	16,500	
Property Taxes	105,575	101,000	90,250	101,000	101,000	
Other Operating Expenses	877,485	826,700	777,727	826,700	826,700	
Total OPERATING Expenditures	1,596,859	1,594,700	1,447,691	1,594,700	1,594,700	
Property Development	-	50,000	0	50,000	50,000	
Total SPECIAL PROJECT Expenditures	0	50,000	0	50,000	50,000	
Demolitions/R&M Savings	125,000	0	0	0	0	
Total FUNDING to RESERVES	125,000	0	0	0	0	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	1,721,859	1,644,700	1,447,691	1,644,700	1,644,700	0

Funding

Self Generated

Belwood	966,845	975,000	982,893	975,000	975,000	
Conestogo	1,161,033	1,180,000	1,178,415	1,180,000	1,180,000	
Agricultural	245,279	232,300	248,785	232,300	232,300	
Residential	205,060	175,000	158,414	175,000	175,000	
Miscellaneous	310,008	312,700	224,817	312,700	312,700	

Funding FROM Reserves

Property Development	0	50,000	0	50,000	50,000	
Cottage Lot Program (Ice Storm)/Contaminated Site	203,000	0	0	0	0	
Wells/Septic/Demolitions	11,904	150,000	0	150,000	150,000	

TOTAL REVENUE	3,103,129	3,075,000	2,793,324	3,075,000	3,075,000	0
Net Surplus/(Deficit)	1,381,270	1,430,300	1,345,633	1,430,300	1,430,300	0

GRAND RIVER CONSERVATION AUTHORITY
 Schedule 12 - Hydro Production
 FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
Expenditures and Funding to Reserves						
Compensation and Benefits	59,521	43,500	45,488	43,500	43,500	
Administration Expenses	538	0	0	0	0	
Other Operating Expenses	74,618	89,500	56,239	89,500	89,500	
Total OPERATING Expenditures	134,677	133,000	101,727	133,000	133,000	
Parkhill Hydro Turbine Project	80,721	0	0	0	0	
Total SPECIAL PROJECT Expenditures	80,721	0	0	0	0	
Land Sale Proceeds	202,000	70,000	0	70,000	120,000	50,000
Total FUNDING to RESERVES	202,000	70,000	0	70,000	120,000	50,000
TOTAL EXPENDITURES AND FUNDING TO RESERVES	417,398	203,000	101,727	203,000	253,000	50,000
Revenue						
Self Generated						
Hydro Production-Belwood	330,040	240,000	211,639	240,000	240,000	
Hydro Production-Conestogo	226,696	233,000	265,961	233,000	283,000	50,000
Miscellaneous Income	0	0	10,000	0	0	
Funding from Reserves						
Land Sale Proceeds	80,721	0	0	0	0	
TOTAL REVENUE	637,457	473,000	487,600	473,000	523,000	50,000
Net Surplus/(Deficit)	220,059	270,000	385,873	270,000	270,000	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 13 - Conservation Areas
FOR THE PERIOD ENDING November 30th, 2019

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

	Actual YTD	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
Compensation and Benefits	4,301,700	4,502,000	4,156,573	4,502,000	4,502,000	
Administration Expenses	190,292	177,000	225,077	177,000	177,000	
Property Tax	61,812	62,000	54,307	62,000	62,000	
Other Operating Expenses	3,178,210	2,844,000	2,929,612	3,094,000	3,094,000	
Total OPERATING Expenditures	7,732,014	7,585,000	7,365,569	7,835,000	7,835,000	
Total CAPITAL Expenditures	1,791,805	2,590,000	2,105,880	3,745,000	3,745,000	
Future Capital Projects, Stabilization	841,000	300,000	0	750,000	750,000	
Total FUNDING to RESERVES	841,000	300,000	0	750,000	750,000	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	10,364,819	10,475,000	9,471,449	12,330,000	12,330,000	0

Funding

Government Grants

Provincial	1,600	0	0	0	0	
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Self Generated

Brant	1,144,655	1,060,000	1,130,079	1,140,000	1,140,000	
Byng Island	1,092,464	1,060,000	1,158,330	1,190,000	1,190,000	
Belwood Lake	366,083	350,000	358,752	350,000	350,000	
Conestogo Lake	546,889	510,000	556,800	550,000	550,000	
Elora Gorge	1,624,478	1,900,000	1,758,962	1,750,000	1,750,000	
Elora Quarry	412,083	260,000	321,361	320,000	320,000	
Guelph Lake	1,090,033	995,000	1,101,169	1,100,000	1,100,000	
Laurel Creek	496,185	440,000	497,105	490,000	490,000	
Pinehurst Lake	887,433	815,000	934,971	920,000	920,000	
Rockwood	1,209,044	1,000,000	1,198,301	1,180,000	1,180,000	
Shade's Mills	290,704	210,000	307,080	310,000	310,000	
Total Fee Revenue	9,160,051	8,600,000	9,322,910	9,300,000	9,300,000	
Donations-Foundation	35,749	0	177,519	0	250,000	250,000
Donations - Other	0	250,000	0	250,000	0	(250,000)

Funding From Reserves

Conservation Areas Current Year Capital Projects	1,168,000	1,625,000	0	2,780,000	2,780,000	
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TOTAL REVENUE	10,365,400	10,475,000	9,500,429	12,330,000	12,330,000	0
Net Surplus/(Deficit)	581	0	28,980	0	0	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 14 - Miscellaneous
FOR THE PERIOD ENDING November 30th, 2019

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
Other Miscellaneous	63,754	70,000	67,030	70,000	70,000	
Total OPERATING Expenditures	63,754	70,000	67,030	70,000	70,000	
Mill Creek Rangers	28,236	35,000	31,704	35,000	35,000	
Total SPECIAL PROJECT Expenditures	28,236	35,000	31,704	35,000	35,000	
Interest Income	384,461	350,000	0	350,000	350,000	
Total FUNDING to RESERVES	384,461	350,000	0	350,000	350,000	
TOTAL EXPENDITURES AND FUNDING TO RESERVES	476,451	455,000	98,734	455,000	455,000	0

Funding

Government Grants

Provincial	0	0	0	0	0	
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Self Generated

Interest Income-Operating	170,576	100,000	0	100,000	100,000	
Interest Income-Reserves	384,461	350,000	473,126	350,000	350,000	
Miscellaneous	202	48,000	400	48,000	48,000	
Grand River Conservation Foundation	29,245	35,000	25,621	35,000	35,000	
TOTAL REVENUE	584,484	533,000	499,147	533,000	533,000	0
Net Surplus/(Deficit)	108,033	78,000	400,413	78,000	78,000	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 15 - Source Protection Program
FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
<u>Expenditures</u>						
Compensation and Benefits	539,856	570,000	429,511	545,000	545,000	
Administration Expenses	63,516	65,000	45,651	60,000	60,000	
Other Operating Expenses	116,634	120,000	80,745	110,000	110,000	
Water Budget - Technical Studies	543,235	80,000	357,385	460,000	460,000	
Water Quality - Technical Studies	121,385	0	0	0	0	
TOTAL EXPENDITURES	1,384,626	835,000	913,292	1,175,000	1,175,000	0
<u>Funding</u>						
Government Grants						
Provincial	1,384,626	835,000	913,292	1,175,000	1,175,000	
TOTAL FUNDING	1,384,626	835,000	913,292	1,175,000	1,175,000	0
Net Surplus/(Deficit)	0	0	0	0	0	0

GRAND RIVER CONSERVATION AUTHORITY
Schedule 16 - Information Systems and Motor Pool
FOR THE PERIOD ENDING November 30th, 2019

	Actual 2018	Budget 2019	Actual YTD	Previous Forecast	Current Forecast	Forecast Change
How much does it cost, and who pays for it?						
Expenditures						
Information Systems						
Compensation and Benefits	907,602	1,012,300	827,367	1,012,300	952,300	(60,000)
Administrative Expenses	30,042	25,500	16,813	25,500	25,500	
Software and Hardware Maintenance	144,525	153,000	146,960	153,000	153,000	
Supplies and Services	50,896	52,200	36,340	52,200	52,200	
Total OPERATING Expenditures	1,133,065	1,243,000	1,027,480	1,243,000	1,183,000	(60,000)
Capital Expenses	229,951	200,000	103,838	200,000	200,000	
LESS Internal Charges	(1,295,315)	(1,320,000)	(1,306,818)	(1,320,000)	(1,320,000)	
NET Unallocated Expenses	67,701	123,000	(175,500)	123,000	63,000	(60,000)
Motor Pool						
Compensation and Benefits	279,211	300,800	234,641	300,800	300,800	
Administrative Expenses	19,954	26,000	18,462	26,000	26,000	
Insurance	40,159	40,000	44,736	40,000	40,000	
Motor Pool Building and Grounds Maintenance	8,095	10,200	24,858	10,200	10,200	
Equipment, Repairs and Supplies	296,130	277,700	229,082	277,700	277,700	
Fuel	234,976	254,000	190,240	254,000	254,000	
Total OPERATING Expenditures	878,525	908,700	742,019	908,700	908,700	
Capital Expenses	435,669	350,000	409,218	410,000	410,000	
LESS Internal Charges	(1,138,287)	(1,174,000)	(1,192,017)	(1,174,000)	(1,174,000)	
NET Unallocated Expenses	175,907	84,700	(40,780)	144,700	144,700	0
TOTAL EXPENDITURES	243,608	207,700	(216,280)	267,700	207,700	(60,000)
Funding						
Self Generated						
Donations-Foundation	0	0	4090	0	0	
Miscellaneous	6,189	0	0	0	0	
TOTAL REVENUE	6,189	0	4,090	0	0	
Gross Surplus (Deficit)	(237,419)	(207,700)	220,370	(267,700)	(207,700)	
Funding From Reserves	2,671,021	2,701,700	2,278,465	2,761,700	2,701,700	(60,000)
Funding to Reserves	(2,433,602)	(2,494,000)	(2,498,835)	(2,494,000)	(2,494,000)	
Net Surplus/(Deficit)	0	0	0	0	0	0

Grand River Conservation Authority – Report

Report number: GM-12-19-123
Date: December 13, 2019
To: Members of the Grand River Conservation Authority
Subject: Environmental Assessments

Recommendation:

THAT Report Number GM-12-19-123 Environmental Assessments be received as information.

Summary:

To provide the General Membership of the Grand River Conservation Authority with information on Environmental Assessments being reviewed, a summary report is presented below. The report has been prepared as directed through Motion No. P44-99 (May 18/99) adopted through General Membership Res. No. 55-99 (May 28, 1999).

Report:

Report on Environmental Assessments for December 13, 2019

A. New Environmental Assessments Received

New: Environmental Assessments received by the Grand River Conservation Authority and currently under review.

1. First Notice – Ottawa Street Extension

Breslau Properties Limited has initiated an integrated Class Environmental Assessment for extending Ottawa Street between Woolwich Street and Fountain Street in the Township of Woolwich. The study will investigate alternative designs for this extension in an existing right-of-way. The study is being carried out in accordance with the planning and design process for Schedule 'C' projects under the Municipal Class Environmental Assessment, and is adopting an integrated approach with Planning Act requirements for an adjacent subdivision.

The broader study area contains the Breslau Drain and the Provincially Significant Breslau Wetland Complex. GRCA staff have provided written notice that we have an interest in this study.

B. Classification of Reviewed Environmental Assessments

Minor: Minimal potential resource impacts that can be mitigated using conventional construction methods.

Major: Significant impacts on identified resource features. Alternatives and proposed mitigation will be outlined in detail.

Minor Impacts – None for this report

Major Impacts – None for this report

Financial implications: Not Applicable

Other department considerations: Not Applicable

Prepared by:

Fred Natolochny
Supervisor of Resource Planning

Approved by:

Nancy Davy
Director of Resource Management

Grand River Conservation Authority

Report number: GM-12-19-119
Date: December 18 2019
To: Members of the Grand River Conservation Authority
Subject: Permit application 735/19, Crescent Haven Homes Inc.
310 Main Street South, Rockwood
Township of Guelph-Eramosa

Recommendation:

THAT permit application 735/19 by Crescent Haven Homes Inc. be approved for issuance.

Summary:

Permit applications that do not meet all policy requirements are required to be considered by the Members of the Grand River Conservation Authority. While this application does not meet all requirements of the policy, the risk due to flooding has been considered and addressed. Staff are recommending approval of this application.

Report:

Crescent Havens Homes Incorporated submitted permit application 735/19 to allow construction and servicing of 4 single family residences. The residences are to be built on lots severed in 2018.

The issues identified at the time of severance (July 2018) were flood plain and the valley slope. The applicant (2609350 Ontario Inc.) supplied a geotechnical report that addressed the slope issue. During the severance process it was noted that the houses would be outside the flood plain, but the access to the lots would cross a portion of flood plain. The flood plain at this location is a Two Zone Flood Plain, where development is permitted. Staff of the Grand River Conservation Authority provided comments to the County of Wellington through the severance process advising that the development acceptable based on this information.

As part of the permit application process, detailed plans were received, including survey, grading and proposed buildings. In the review of this information, it was noted that while the buildings were outside the flood plain, the proposal included a cut in the bank along the road such that the garage in buildings would be open to flooding during a regional flood. All habitable floor space would be outside the flood plain. Pedestrian access across the lots would be outside the flood plain. Safe vehicular access would not be available for all lots under regional storm conditions. The garages and access is not subject to flooding under the 100 year storm event.

So while the houses are not in the flood plain, and have pedestrian access, they would not meet the test of having vehicular access under regional storm conditions. From the furthest driveway to the edge of the flood plain is approximately 45 metres. A map showing the lot location is provided below. With this, they do not meet the policy criteria for staff approval.

In considering the risk due to flooding, it was noted that the flood plain at this location is on a side channel from the Eramosa River that spills into this area above the 100 year flood event. The Eramosa River system responds slowly, and given the location of the lots on the system, there would be significant time to provide flood warning. The site and access are subject to flooding between the 100 year flood and the regional storm event, with flooding caused by the downstream Main Street South road embankment.

Based on risk analysis and the prior comments provided which allowed the lots to be created, it is recommended that the application be approved.

Financial implications:

No financial implications were identified.

Other department considerations:

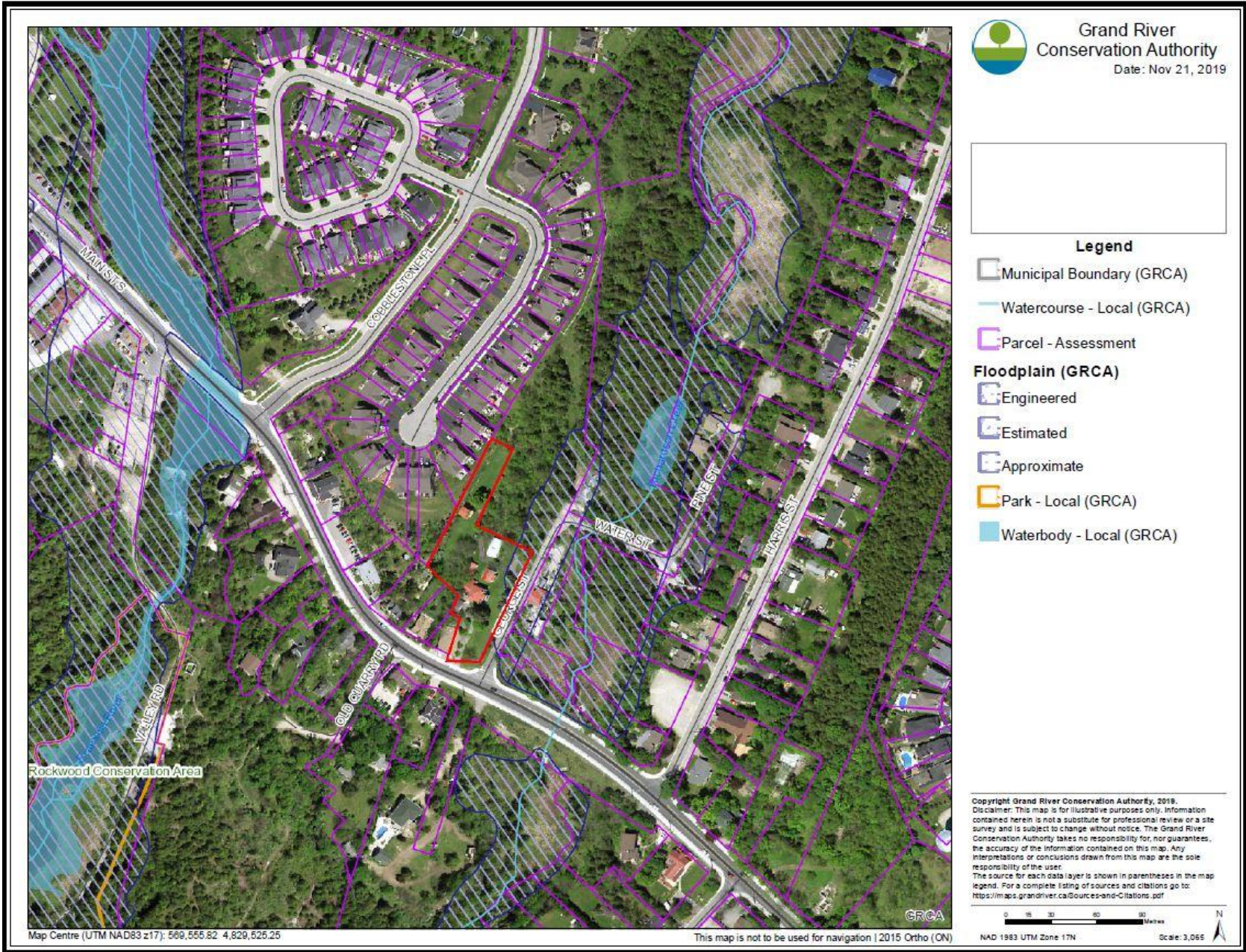
Engineering has provided input to the review of the application.

Prepared by:

Fred Natolochny
Supervisor of Resource Planning

Approved by:

Nancy Davy
Director of Resource Management



Grand River Conservation Authority

Report number: GM-12-19-122
Date: December 13, 2019
To: Members of the Grand River Conservation Authority
Subject: Collaborative Water Management Planning

Recommendation:

THAT Report Number GM-12-19-122 – Collaborative Water Management Planning be received as information.

Summary:

The Grand River watershed has a long history of collaborative water management planning. In the beginning, community business leaders supported the start of watershed scale water management planning; now, the Grand River Conservation Authority (GRCA) maintains this role and hosts a 'watershed table' to address common water management problems.

The update to the Water Management Plan was a process of engaging our partners and aligning actions toward common goals. The process started in 2009 and the update to the Water Plan was finalized in 2014. A summary report on five years of implementation was prepared earlier this year (GM-06-19-61) and highlighted that many of the actions in the Plan have been implemented. To determine whether the goals of the Plan are being achieved, a State of the Water Resources report is drafted.

Key highlights of the state of the water resources are: There are plentiful ground and surface water supplies but diligent, collaborative management is needed by all. Infrastructure investments in wastewater treatment have paid off, for instance, river water quality below the Kitchener wastewater treatment plant has improved. Water infrastructure (e.g. dams, dikes) continue to reduce peak flows effectively and hold back water effectively. We continue to learn from each large flood and implement these learnings as part of a continuous improvement process. Our climate is warming and climate extremes have occurred over the past five years.

Watershed communities depend on healthy ground water systems and river networks for their future growth and prosperity. With our changing climate, it is important now more than ever to continue to work together to enhance the resiliency of the watershed. The GRCA will continue to support the watershed approach and staff are committed to working with our partners to reach our common goals.

Report:

The Grand River watershed has had a long-history of collaborative water management. It started in the 1930s when business leaders from Fergus, Kitchener, Galt, Brantford and Caledonia realized that a healthy watershed and river system is needed to support healthy, vibrant and prosperous communities. It was the business leaders who recognized the value of working together on a watershed basis.

Today, the GRCA continues this role of drawing municipalities and other partners together around a watershed table to cooperatively address common water management problems.

Watershed-scale water management planning is done collaboratively through the Water Managers Working Group. This working group consists of municipal, provincial and federal government water managers and First Nations. While no legislative framework exists for water management planning on a watershed basis, municipal staff see value in a collaborative approach to managing water that flows across municipal boundaries. See Appendix 1 for a list of partners and staff who have participated in watershed water management planning.

The Water Managers Working Group has met consistently since the mid-1990s however, it was first formed in the 1970s for the development of the Basin study which was completed in 1982. In the mid-1990s, the Working Group compiled a report on the watershed that highlighted current and future challenges. The reports: Focus on Issues and State of the Watershed provided the foundation for advancing watershed management in the early 2000s including Source Protection Planning. In 2009, the Working Group came together again to update the information in the Basin Study and a process to renew the Water Management Plan was launched in 2010.

The updated Plan was endorsed in 2014 by watershed municipalities, government agencies and Six Nations of the Grand River. Since 2014, GRCA has hosted quarterly meetings of the Water Managers Working Group to share progress on implementing the actions in the Plan and bring new best practices to the table. 2019 marks the completion of a 10 year planning and implementation cycle with the Working Group.

We all need water to live, work, play and prosper. Water also underpins a healthy economy. Given the dependencies of the communities in the watershed on in-land water supplies and wastewater assimilation, watershed water management planning helps municipalities plan for population growth and build resiliency to deal with a changing climate. Therefore, planning for growth must be done carefully often requiring innovative yet practical approaches to achieve best-value solutions.

Water managers have been at the watershed table for the past 10 years diligently working toward improving the Grand River watershed together. Their collective actions are paying off. Since the endorsement of the updated Water Management Plan in 2014, annual reports were issued summarizing the collective progress of the partners in implementing their actions. Overall, most of the actions in the Plan have been implemented. Those that have not, have been deferred or are no longer a priority.

To check to determine whether the goals of the Plan are being achieved, a State of the Water Resources report was compiled with highlights from existing data and information. Highlights include the following under each Water Management Plan goal:

1. Ensure sustainable water supplies for communities, economies and ecosystems

There are plentiful ground and surface water supplies but diligent, collaborative management is needed by all. Many municipalities have long-term water supply plans. Source protection planning continues to advance our knowledge and understanding of municipal groundwater and surface water systems. This knowledge assists with planning for future water demands.

Water demand is decreasing through active and concerted effort to conserve water in many municipalities but careful planning and management is still needed as the population continues to grow;

The seven major water management reservoirs still service downstream river flow requirements for the Region of Waterloo, Brantford and Ohsweken water supplies as flow targets are met consistently. Water being released from the reservoirs also ensures that there is enough water in the river to assimilate the wastewater from 16 communities who depend on the river system to receive their treated wastewater.

There are areas of potential conflict as there are many users who rely on local water supplies. Therefore, it is more important than ever to continue to work together. Local water management plans are still needed in these areas.

The watershed is warming and causing extreme events to happen. Climate change demands constant attention as extreme conditions such as drought may become more common and therefore, drought contingency planning remains important.

2. Improve water quality to improve river health and reduce the river's impact on Lake Erie

Water quality has significantly improved downstream of the Kitchener wastewater treatment plant due to infrastructure upgrades. Efforts through the wastewater optimization program have also shown improvements in effluent quality.

The central urban river region remains challenged due to road salt and unmanaged stormwater; many municipalities have stormwater utilities and are actively implementing their master plans to improve both quality and quantity in local streams

Rural river regions remain stressed with a lot of phosphorus and nitrogen getting into streams. Many of these same streams have very low summer flows. A long-term commitment to the Rural Water Quality program is more important now than ever.

Water quality in the Grand River in Dunnville is considered 'marginal' due to cumulative inputs from the entire 6,800 km² watershed. The Grand River tends to have high sediments, nutrients, and chloride at the long-term monitoring site.

The Grand River's plume contributes to Lake Erie's nearshore issues as it contains high nutrient concentrations and the along-shore currents makes the plume hug the nearshore. Scientists are still uncertain as to how much the Grand River contributes to nuisance algal growth along the nearshore when looking at all of the stressors including invasive mussels and off-shore phosphorus levels. Consequently, a phosphorus reduction target has not yet been set for the Grand River for the Great Lakes Water Quality agreement.

3. Reduce flood damage potential

Water infrastructure (e.g. dams, dikes) continue to reduce peak flows effectively. Peak flows are reduced by 20-80% depending on time of year and amount of storage available in the reservoir.

Reducing the potential for floods means proactive action. Improved floodplain mapping, permitting and regulations continue to help to prevent or limit flooding in the first place.

A changing climate demands diligence as extreme conditions and flood flows can occur throughout the year; constant monitoring, forecasting and preparedness is required

4. Increase resiliency to deal with climate change

Our climate is warming, over the past 30 years there has been an increase in the mean annual temperature of about ½ degree and an increase in the average temperature during the winter season of about 1 degree.

Climate extremes have occurred over the past five years, most notable was in 2017 with the highest recorded rainfall in one day at Luther dam; the warmest year on record was 2012, the coldest winter on record was in 2015 and the driest winter was in 2016

A changing climate will affect both high flows and drought conditions in the watershed and will require careful and deliberate planning to maintain, improve and manage our built infrastructure. It will also require a concerted effort to protect and enhance our natural infrastructure, like wetlands, and identify areas of opportunity to reclaim these valuable natural assets.

All of our communities depend on healthy ground water systems and river networks in the Grand River watershed for their future growth and prosperity. With our changing climate, it is important now more than ever to continue to work together to enhance the resiliency of the watershed.

GRCA continues to support the watershed approach and are committed to working with our partners to reach our common goals.

Financial implications:

Since 2015, GRCA has received a total of \$257,000 in government funding to support collaborative water management planning.

A number of GRCA staff from the Engineering and Resource Management Divisions support watershed water management planning which is aligned with the Water Management Plan. These staff also provide technical support to watershed municipalities which is also consistent with the Water Management Plan.

GRCA provides support to coordinate watershed water management planning with our partners. Coordination of the plan has averaged about 0.50 FTE per year over five years, amounting to \$50,000 per year.

Programs that are outcomes of the collaborative water management planning process, such as the Watershed-wide Wastewater Optimization Program have also received funding.

Other department considerations:

Staff from the Engineering and Resource Management Divisions support the Water Management Plan through information and knowledge development.

Prepared by:

Sandra Cooke
Senior Water Quality Supervisor

Approved by:

Dwight Boyd
Director, Engineering

Appendix 1: List of Plan Partners

Township of Centre Wellington	Dino Masiero
City of Guelph	Wayne Gallaher, Tim Robertson
Regional Municipality of Waterloo	Nancy Kodousek
City of Waterloo	Todd Chapman
City of Kitchener	Nick Golan
City of Cambridge	Sarah Austin
County of Brant	Alex Davidson, Matt D'Hondt
City of Brantford	Ron Lynes, Selvi Kongara
Haldimand County	Jim Matthews
Six Nations of the Grand River	Paul General (retired)
Ontario Ministry of the Environment, Conservation and Parks	Dan Dobrin
Ontario Ministry of Natural Resources and Forestry	Al Murray, Tom MacDougall
Ontario Ministry of Agriculture, Food and Rural Affairs	Rebecca Shortt, Dan Carlow
Environment and Climate Change Canada	Sandra George, Luca Cargnelli

Appendix 2: 2019 Summary of Collection Actions and Accomplishments

The Grand River Watershed *Water Management Plan*

2019 Summary of Collective Actions and Accomplishments

Water is a shared resource and collaboration is essential to carefully manage it.

Water in the Grand River watershed is valued for supplying drinking water to our communities, sustaining habitat for fish and wildlife and helping our communities grow and thrive.

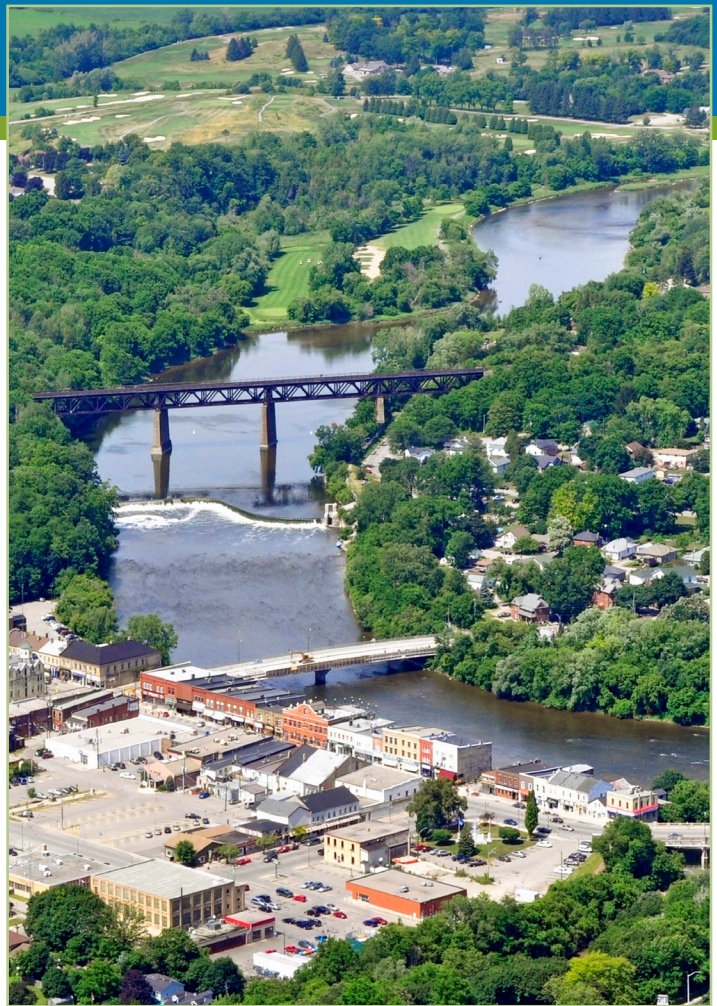
The Grand River watershed has a long history of integrated water management planning dating back to 1932. Initiatives such as: The Basin Study (1982), The Grand Strategy (1994), and the Grand River Water Management Plan Update (2014) and its implementation (2014-2019), have provided the framework for collective and collaborative action on water management that transcends municipal boundaries.

The Grand River Conservation Authority (GRCA) facilitates a collaborative *Water Management Plan* with municipalities, provincial and federal government agencies and First Nations through the Water Managers Working Group by providing an avenue to collaborate on water management challenges and develop best-value solutions. The GRCA has supported this working group since the mid-1970s, facilitating many co-benefits across municipal boundaries.

The goals of the Water Management Plan are to:

- ensure water supplies;
- improve water quality to improve river health and reduce the river's impact on Lake Erie;
- reduce flood damage potential; and
- build resilience to deal with climate change.

These goals support communities, economies and ecosystems.



Our Partnership

County of Brant
City of Brantford
City of Cambridge
City of Kitchener
City of Waterloo
City of Guelph
Region of Waterloo
Haldimand County
Township of Centre Wellington
Township of Southgate
Oxford County
Dufferin County
Ministry of Agriculture, Food and Rural Affairs
Ministry of Environment, Conservation and Parks
Ministry of Natural Resources and Forestry
Six Nations of the Grand River
Mississaugas of the Credit First Nation
Environment and Climate Change Canada



Photo: Grand River through Paris, ON

Summary of collective actions and accomplishments

The following section highlights key actions completed by the partners to advance the goals of the Grand River Watershed Water Management Plan.

Ensure water supplies for communities, economies and ecosystems

- Most municipalities have long term water supply plans. Some municipalities have set demand management objectives and overall, the results are encouraging – they are showing a decrease in demand over time.
- The province's Water Taking Reporting System has been greatly improved as reporting has shifted from permitted to actual water takings.
- Integrated surface and ground water (Tier 3) models have improved our understanding of the reliability of water supply for municipalities, and have helped to quantify groundwater recharge.
- Through active GRCA reservoir operations, reliability of meeting operational river flow targets are achieved



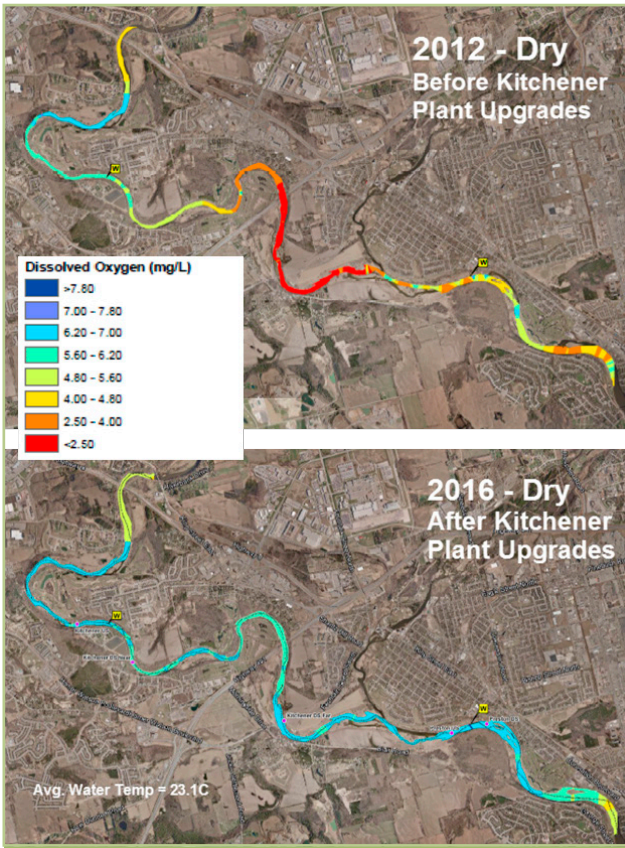
[TOP] Grand River through Cambridge (Galt) in the 1930s when there were no reservoirs to help keep water flowing.
[BOTTOM] The Grand River at Cambridge (Galt) today. River flow targets are achieved more than 95 per cent of the time.

consistently over 95 per cent of the time, which is the design standard for the reservoirs.

- Local areas of water constraint include Whitemans Creek and the Eramosa River. While local water management plans have not yet been developed, new Tier 3 water budget models were developed through Source Protection Planning and will support local water management decisions.
- A drought contingency plan (2014) and a Low Water Response Program continue to be tools for managing low water conditions, such as those experienced in 2016.
- The Grand River Source Protection Plan continues to advance Tier 3 water budgets in collaboration with watershed municipalities.

Improve water quality to improve river health and reduce the Grand River's impact on Lake Erie

- A number of wastewater treatment plants have been upgraded and their effluent quality improved, which is showing huge benefits to the river.
- Improved treatment plant performance through optimization efforts has been demonstrated at many plants in the watershed. Nine plants are achieving voluntary effluent targets for phosphorus and 16 plants are achieving voluntary effluent targets for ammonia.
- Many municipalities have sewer use by-laws. Some municipalities are able to actively enforce these by-laws. Where they are enforced they've proven to be very effective.
- Several subwatersheds in the central region have been characterized to better inform municipal land use planning. Characterization reports were prepared for the Fairchild, McKenzie, upper Grand and Conestogo subwatersheds to support local needs and wastewater assimilation studies.
- The GRCA collects data to support municipal wastewater master planning, and continues to maintain the Grand River Simulation Model to support decisions.
- Between 2014 and 2018, \$5.6 million in grants were provided to rural landowners to support 1,985 projects through the Rural Water Quality Program. An audit of projects implemented since 1998 when the program began, shows that 96 per cent of the structures were still in place up to 20 years later. These projects keep an estimated 19,700 kg of phosphorous on the land annually.
- Stormwater management efforts to improve both quantity and quality of runoff have advanced significantly. Some municipalities have dedicated funding sources to address these needs.



Significant investments in wastewater treatment by the Region of Waterloo have shown tremendous improvements in the quality of the Grand River through Blair.
(Maps courtesy of Region of Waterloo)

- Reducing road salt use is the focus of active awareness programs in some municipalities, and most municipalities have road salt management plans.
- Data collection continues by all plan partners and data management systems are slowly being implemented to improve decision making and for sharing data.

Reduce flood damage potential

- Numerous dam and dike safety studies were completed between 2014 and 2018 to maintain the critical water management infrastructure that helps to reduce riverine flood damages.
- Some municipalities are evaluating their minor and major storm systems to determine if their storm water infrastructure is able to deal with extreme weather events.
- The province's acquisition of airborne topographic LiDAR in southern Ontario now provides the basis for many land-water planning initiatives, and is assisting the GRCA with the development of mapping products that support flood damage reduction and emergency preparedness.

- Inundation mapping has been completed for a few key flood damage centres, including West Montrose, Grand Valley, the Village of Conestogo, some specific reaches between the Irvine River and the Village of Conestogo, and the Conestogo River from the Grand River to the Conestogo Dam. The acquisition of bathymetric LiDAR (detailed riverbed elevation data) was completed for the Grand, Conestogo, Irvine and Speed rivers, as well as Willow Brook and Moorefield creeks.

- The GRCA hosts annual meetings of the Emergency Municipal Flood Coordinators and other emergency response personnel.

- Many permits for development in the floodplain are evaluated to protect people and minimize property damage. Policies and applications are reviewed to help municipalities assess land use changes in or near the floodplain.

- Provincial and GRCA river flow gauge stations continue to be the data upon which flood forecasting and warning are based. This data is critical to public safety.

- Watershed conditions continue to be monitored 24/7, and when warranted, flood messages are issued.

- Follow-ups, debriefing meetings and public meetings were undertaken following the June 2017 and February 2018 flood events. Learnings from these floods have been incorporated into municipal emergency preparedness plans.

- Shoreline flood zone mapping was prepared in the fall of 2017, and an emergency preparedness exercise was completed with Haldimand County staff to improve awareness and preparedness for Lake Erie surge event flooding.

- In 2018, a study was completed to investigate the February 2018 ice jam event through the City of Brantford that resulted in overtopping of the flood walls through a portion of the City. This study investigated the cause of the 2018 ice jam and ice jams in general through the Brantford reach, as well as potential mitigation options to reduce the risk of ice jams in the future.



Shand Dam/Belwood Reservoir.

...continued..

Summary of collective actions and accomplishments

Build resiliency to deal with climate change

- Maintaining the key hydrologic processes provided by watershed features ensures the physical resiliency of the watershed. Effort is ongoing to build resilience in the watershed, including many of the actions implemented through the Rural Water Quality Program such as stream buffer preservation, tree planting and erosion control measures, as well as stream restoration projects implemented by municipalities.
- Green infrastructure and low impact development continue to be used by local municipalities to maintain the water balance in new developments.
- Literature regarding climate change often cites having a plan as being one of the most important adaptive management actions to prepare for climate change or natural variability. The Water Management Plan and municipal emergency preparedness plans for flooding are examples of proactive planning that provide the foundation for adapting to a changing climate. Municipal response plans are maturing as digital flood zone mapping is becoming available and learnings from recent floods are integrated into the warning and response plans.
- Efforts continue to maintain knowledge networks among the partners in the watershed to share information and learn from one another. This builds resilience in the people that need to deal with change, whether it be changing staff or changing conditions that require new approaches. The GRCA continues to support these networks, including the Community Emergency Flood Coordinators, the Water Managers Working Group, Wastewater Managers, the Source Protection Implementation Committee and the Rural Water Quality Advisory Committee, among others.



Showing the effect of fencing cattle from a stream and creating a vegetated buffer. The Rural Water Quality Program is strengthening the resiliency of the watershed by helping to maintain key hydrologic processes.

More information, including a detailed summary of the actions and accomplishments of the Grand River Watershed Water Management Plan (2014-2018) is available at: www.grandriver.ca/WMP

Continuous improvement through collaboration

We are beginning to see the watershed-wide benefits of the Water Management Plan. A complete State of the Water Resources Report is being completed, and will be available by the end of 2019. It is through the process of collaborating across boundaries where benefits both locally and for the watershed are being realized. The GRCA plays a unique and important role in the Plan, by providing a watershed-wide view and helping to align efforts among the many agencies working together to best manage our water resources.



Grand River Conservation Authority
400 Clyde Road, Cambridge, N1R 5W6
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Contact: Samantha Lawson, CAO Email: slawson@grandriver.ca

Grand River Conservation Authority

Report number: GM-12-19-125

Date: December 13, 2019

To: Members of the Grand River Conservation Authority

Subject: Current Watershed Conditions as of December 4, 2019

Recommendation:

THAT Report Number GM-12-19-125 – Current Watershed Conditions as of December 4, 2019 be received as information.

Report:

Precipitation

2019 is on track to being a wetter than average year. As of December 4th, all climate stations in the watershed are above 95% of the long term yearly average and many climate stations already have precipitation totals well above the long term average.

The first six month of the year saw precipitation over 120% of the long term average. Precipitation in January and February was approximately 35% snow and 65% rain. By March most precipitation changed to rain. High rainfall in April and May, coupled with low temperatures, resulted in a delay to the planting season for agriculture. The summer months were a bit drier than normal. July was the driest month for most of the watershed with some stations recording less than half of the normal rainfall for the month. October was the wettest month of 2019 with the watershed receiving one and a half times the normal precipitation for the month. Snow returned to the watershed in early November along with freezing rain and mixed precipitation.

Table 1 includes monthly and recent precipitation trends for select watershed climate stations. Monthly precipitation at the Shand Dam climate station from 2015 to 2019 is shown in **Figure 1**.

Table 1: Precipitation Averages at Watershed Climate Stations

Station	Monthly Precipitation		Percentage of Long Term Average					
	4-Dec (mm)	Long Term Average (mm)	Current Half Month	Last Full Month	Last 3 Full Months	Last 6 Full Months	Last 12 Full Months	Last 15 Full Months
Shand	9.7	74.2	26%	109%	110%	100%	116%	110%
Conestogo	6.2	84.8	15%	82%	104%	94%	99%	95%
Guelph	10.7	70.2	31%	89%	119%	110%	119%	116%
Luther	5.3	78.9	13%	95%	105%	88%	103%	100%
Woolwich	3.8	69.5	11%	90%	97%	88%	97%	105%
Laurel	3.8	74.1	10%	83%	97%	87%	100%	104%
Shades	4.8	70.6	14%	80%	116%	114%	116%	114%
Brantford	15.9	57.6	55%	68%	115%	109%	119%	113%

Environment Canada precipitation gauge at Brantford Airport is offline, values in the table are from the Burford Tree Nursery

Air Temperatures

2019 was a colder than average year in the Grand River watershed. Temperatures in the first half of the year averaged around a degree below the long term average. The March to June period was particularly cold, which coupled with wet conditions delayed the planting season in much of the watershed.

July was the hottest month of the year. Watershed temperatures were about 2 degrees above the long term average in July. Temperatures in the early fall months were close to normal, although there were some very hot days in mid-September. Temperatures dropped starting in November and have remained below the long term average into early December.

Figure 2 presents recent mean monthly air temperature departures from the long term average recorded at Shand Dam.

Lake Erie Water Levels

Lake Erie was at very high levels throughout 2019. The average water level at Port Colborne from May to August was at or above 175m, which is only 0.5m below the critical level when flooding starts. Mean monthly Lake Erie levels for May, June, July and August set new all time highs. The average lake level has dropped a bit since the summer and was 174.67m in the first few days of December. Forecast lake levels from Canadian Hydrographic Survey from December 1st indicate that the lake level will likely increase again in January.

There were two Lake Level Warning messages issued in November both for the event on November 27th. Levels peaked in the evening of November 27th within Zone 2. Some flooding and road damage was reported.

Figure 3 presents current and forecast Lake Erie level from the Canadian Hydrographic Service.

Groundwater Levels

Groundwater levels in the monitoring well near Burford began the year close to the long term average. Wet conditions in the first half of the year resulted in high recharge to the groundwater system and the water level increased to a peak in June which was well above the normal range for this monitoring well. Dry conditions in the summer months resulted in a sharp decline between July and September. The water level has since followed the higher end of its normal range.

Water levels in this overburden aquifer respond to high water use in this region as well as to changes in precipitation.

Figure 4 shows the average monthly water level data for the Burford monitoring well for the current year, previous year and extreme years, against the long term average.

Reservoir Conditions

The large reservoirs were used for both of their main purposes in 2019: flood damage reduction and low flow augmentation. Water was taken into storage in early February to manage a mid-winter melt and then water levels were lowered gradually over the rest of the month. Filling of the reservoirs was started in mid-March when snow melt and rainfall resulted in a large runoff event. Water levels were actively managed through the wet spring months.

The augmentation season began in June and water was released from the reservoirs through to September to maintain low flow targets. Low rainfall through late June and

most of July reduced inflows to the reservoirs and as such water levels declined rapidly through August and September. Wet conditions returned to the watershed in October and water levels recovered in all of the reservoirs by the end of the month. Water levels are currently being stabilized near the winter holding level.

Reservoir levels are shown in **Figures 5** and **6** for the four large reservoirs.

Long Range Outlook

The three month forecast for December through February from Environment Canada is for above normal temperature and precipitation. The Ministry of Natural Resources and Forestry is predicting near normal temperatures and above normal precipitation for December and January.

Flood Preparedness

Conditions are being monitored closely. Staff continue to hold weekly meetings as part of overall succession planning initiatives, dam operations and flood emergency preparedness.

The GRCA along with its neighboring CA's, Long Point Region CA and Niagara Peninsula CA, assisted Haldimand County with a Public Information Centre regarding high Lake Erie levels. The public information session was held on December 2nd in the community of Dunnville. It was well attended with 225-250 property owners attending. Presentations focused on explaining Lake Erie levels and the new flood zone mapping created by the three CA's and on emergency preparedness. Haldimand County has implemented the ability through their web site for a property owners to determine what zones affect their property. Information was provided to assist residents to prepare for future Lake Erie surge flood events along with information regarding recovery after events. Municipal and CA staff remained after the presentations to answer questions from residents.

A presentation was delivered to the Provincial Dam Owners advisory committee on December 2nd explaining the on going project to integrate the emergency preparedness plan for Conestogo Dam with municipal emergency preparedness plans. The presentation focused on how preparedness for smaller floods is being consolidated with preparedness for extreme floods. This work is currently being completed with Waterloo Region and Wellington County community emergency co-ordinators.

Financial implications:

Not applicable

Other department considerations:

Not applicable

Prepared by:

Stephanie Shifflett, P.Eng.
Water Resources Engineer

Approved by:

Dwight Boyd, P.Eng.
Director of Engineering

Figure 1: Precipitation at Shand Dam 2015 to November 30 2019

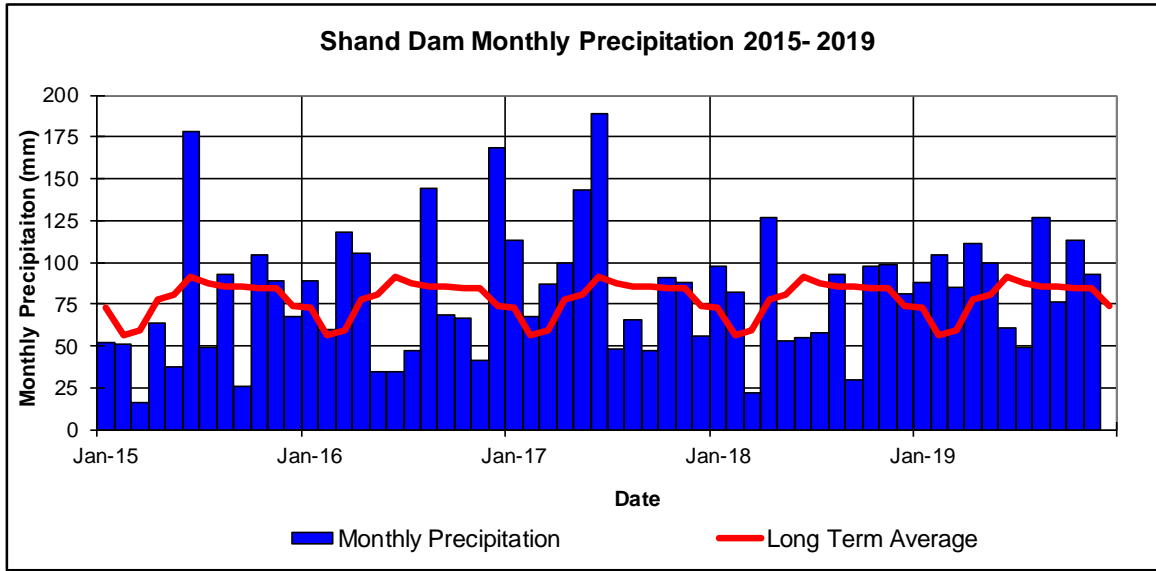


Figure 2: Departures from Average Air Temperatures at Shand Dam

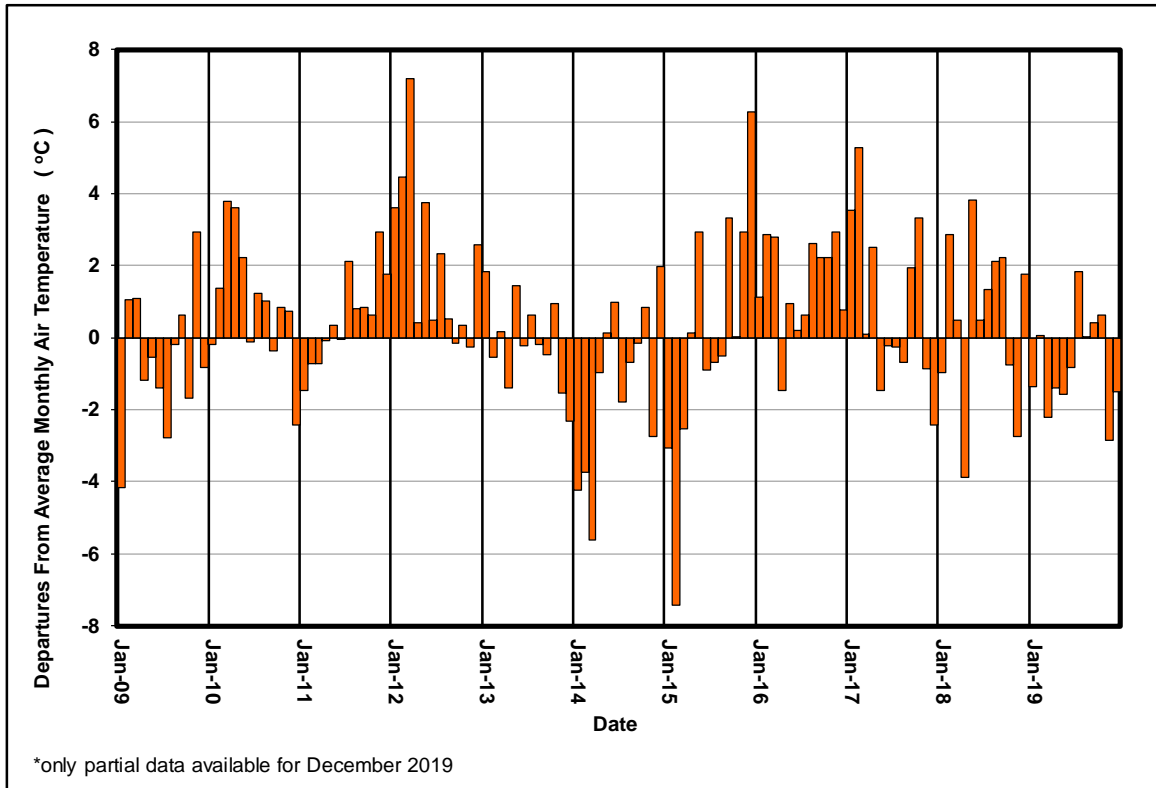


Figure 3: Forecasted Lake Erie Levels

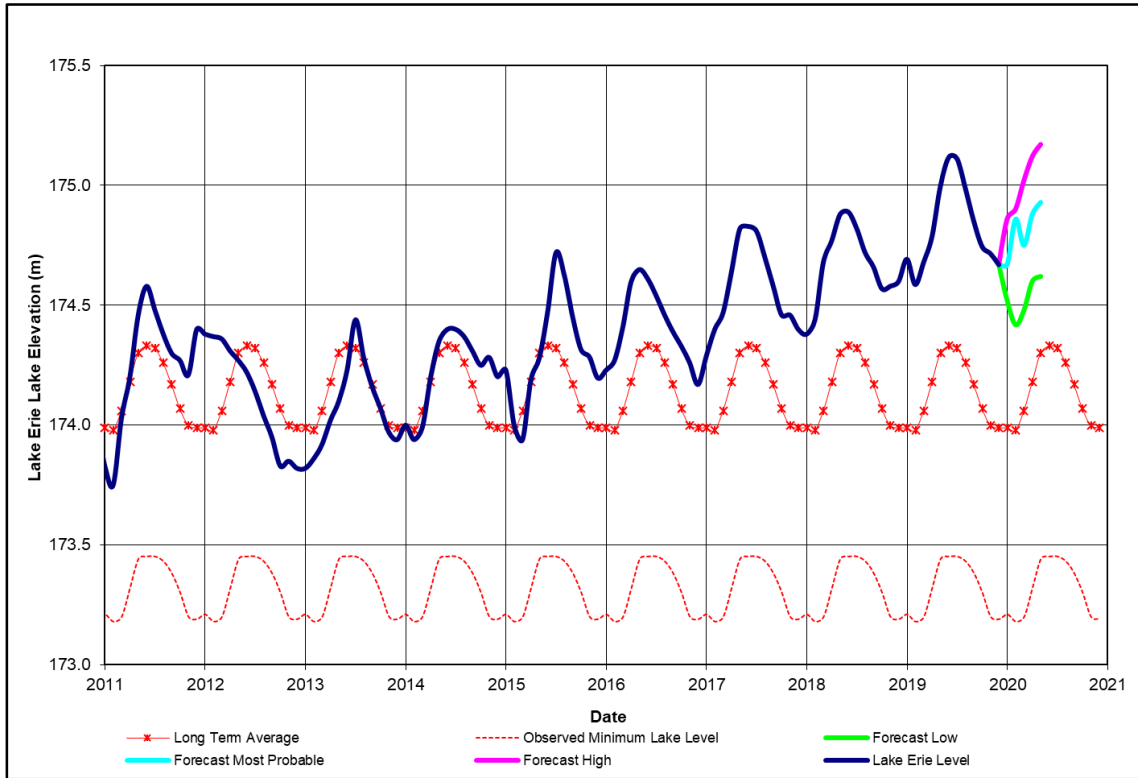


Figure 4: Groundwater Monitoring Levels

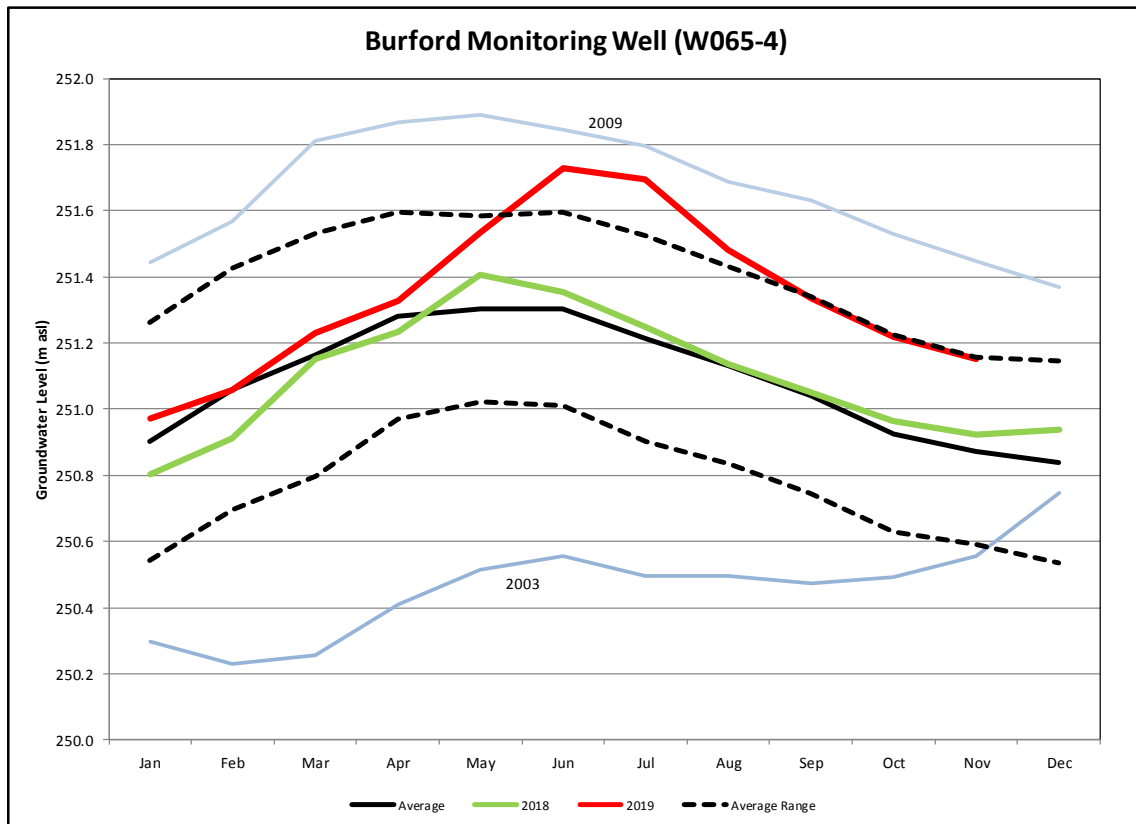


Figure 5: Shand and Conestogo Reservoir Elevation Plots

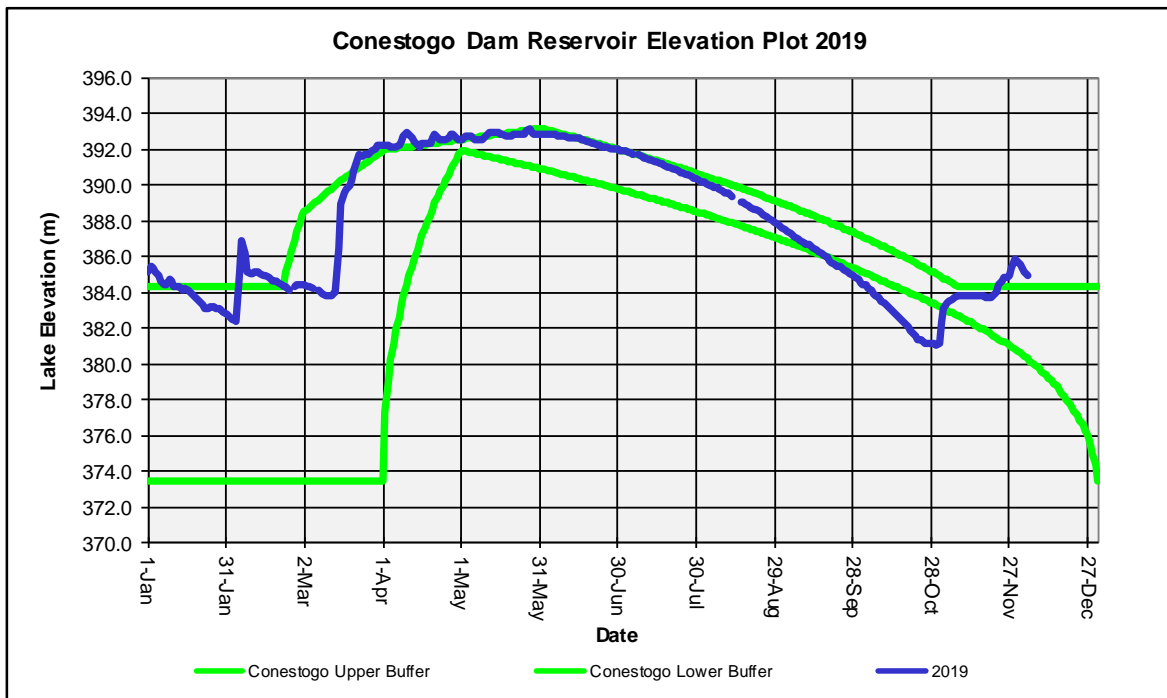
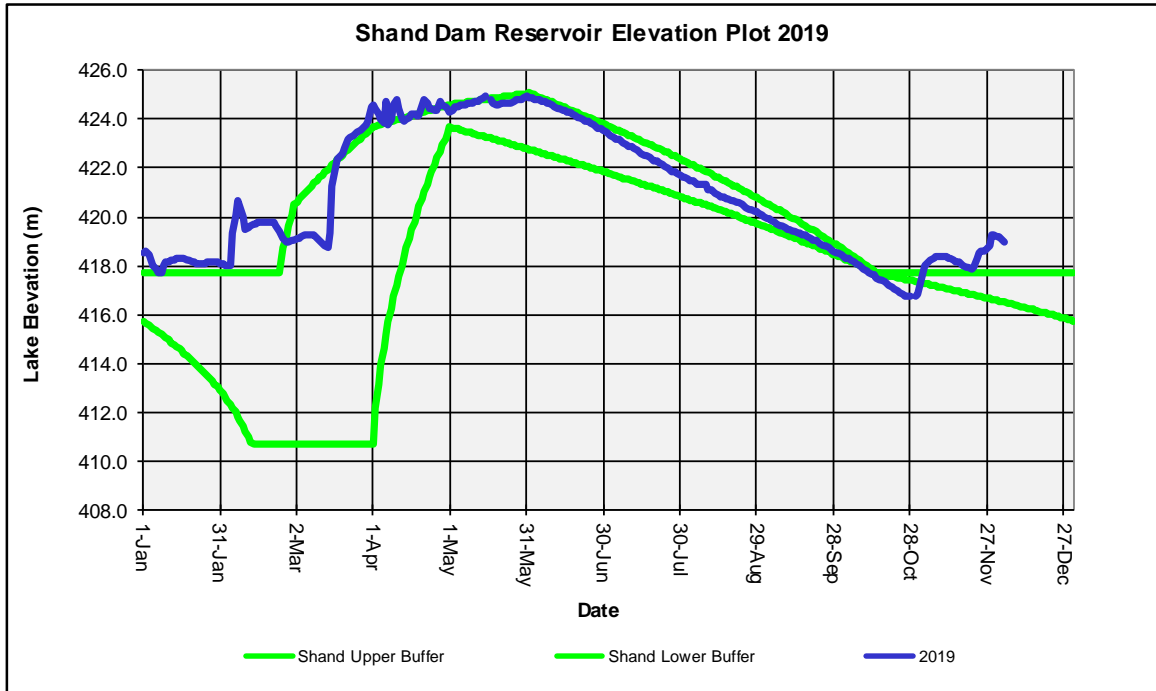
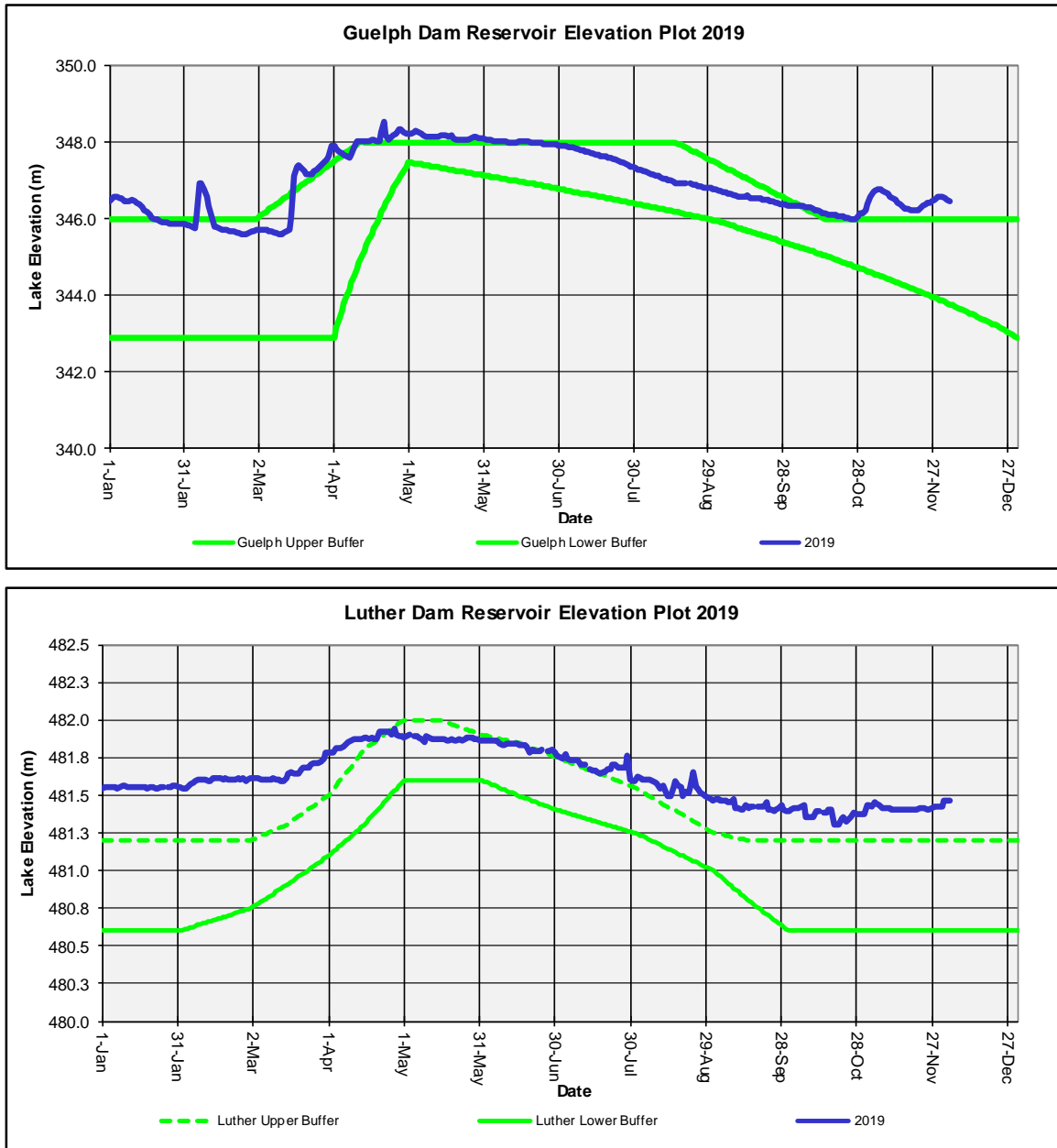


Figure 6: Guelph and Luther Reservoir Elevation Plots



Luther Dam Operating Curves

Luther Dam primarily provides a flow augmentation function to the upper Grand River and to Shand Dam. While it does provide some benefits from a flood control perspective, these benefits are limited due to the small drainage area regulated by Luther Dam.

The buffers between March 1st and September 30th define the operating range to meet downstream low flow targets. The lower buffer defines the lowest operating range for flow augmentation before reducing downstream flow augmentation targets. The earlier winter (January 1st to March 1st) and late fall (October 1st to December 31st) upper buffer curve is defined from ecologic considerations from the Luther Marsh Master Plan.