

Board of Directors Meeting

AGENDA

October 18, 2018 2:00 p.m. Administration Building

1.	First Nations Acknowledgement	
2.	Call to Order	
3.	Adoption of Agenda	
4.	Disclosure of Conflicts of Interest	
5.	Approval of Previous Meeting Minutes	3
	5.1) Board of Directors Meeting Minutes, August 23, 2018 (Previously circulated)	3
6.	Business Arising from the Minutes	
7.	Presentations	7
	7.1) Ingress / Egress Issues & Mitigation project at Lighthouse Cove	7
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8.	Business for Approval	8
	8.1) Updated By-law, Code of Conduct and Conflict of Interest Report	8
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	9.9) Wheatley Two Creeks Association Minutes	61
	9.10) GM's Report	63
10	. Correspondence	65
	10.1) Special Audit of the NPCA, Auditor General's Report	65
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11	. Events Calendar	71
12	. Other Business	
13	. Adjournment	

We will begin by acknowledging that the land on which we gather is the traditional territory of First Nations people who have longstanding relationships to the land, water and region of southwestern Ontario. We also acknowledge the local lower Thames River watershed communities of this area which include Chippewa's of the Thames First Nation, Oneida Nation of the Thames, Munsee Delaware Nation and Delaware Nation at Moraviantown. We value the significant historical and contemporary contributions of local and regional First Nations and all of the Original peoples of Turtle Island (North America). We are thankful for the opportunity to live, learn and share with mutual respect and appreciation.

5. Approval of Previous Meeting Minutes

5.1) Board of Directors Meeting Minutes – August 23, 2018



Board of Directors Meeting

MINUTES

A meeting of the Lower Thames Valley Conservation Authority's Board of Directors was held at the LTVCA Administration Building in Chatham at 2:00 P.M. on Thursday, August 23, 2018. The following directors were in attendance: H. MacDonald, D. McKillop, G. Bogart, M. Bodnar, T. Thompson, J. Kavelaars, M. Smibert, R. Doane and S. Caveney. L. McKinlay and L. Leclair sent their regrets. S. Pinsonneault was absent.

- 1. Call to Order
- 2. Adoption of Agenda

 M. Smibert – R. Doane Moved that the agenda be adopted as presented.

CARRIED

3. Disclosures of Conflicts of Interest

Dan McKillop declared a conflict of interest for item 7.6.

4. Approval of Previous Meeting Minutes (Previously circulated)

2. M. Bodnar – S. Caveney

Moved that the minutes of the meeting of June 21, 2018 be approved as circulated.

CARRIED

5. Business Arising From the Minutes

None declared.

6. Presentations

6.1) Jerry De Zwart provided a Power Point Presentation to the Board of Directors on the LTVCA's Communication & Conservation Education programs

6.2) Mark Peacock provided the Board of Directors with a Power Point Presentation on the LTVCA's Risk Management Plan

7. Business for Approval

7.1) Updated Administrative By-law, Code of Conduct, Conflict of Interest Guidelines and Procedure for Election of Officers

Stan Caveney presented the modifications undertaken by the committee to the Board of Directors for the second reading of the updated Administrative By-law, Code of Conduct, Conflict of Interest Guidelines and Procedure for Election of Officers

3. D. McKillop - T. Thompson

Moved that By-law 2018-01 as amended be read for a second time and posted to the LTVCA web site.

CARRIED

7.2) Budget vs Revenue and Expenditures for the period ending June 30, 2018

Todd Casier presented the budget vs revenue and expenditures for the period ending on June 30, 2018 to the Board of Directors.

4. M. Smibert - G. Bodnar

Moved that the Board of Directors receives the Budget vs Revenue and Expenditures report for the period ended June 30, 2018.

CARRIED

7.3) 2019 Preliminary Budget

Todd Casier presented the 2019 preliminary budget guidelines to the Board of Directors.

5. J. Kavelaars – M. Bodnar

Moved that the Board direct staff to prepare the 2019 budget based on a 2% general levy increase and bring the preliminary 2019 budget back to the October meeting for review and approval.

CARRIED

7.4) Sharon Creek Dwelling

Randall Van Wagner gave a presentation to the Board of Directors on the potential for a house to be located on the Sharon Creek Conservation Area property.

6. R. Doane – S. Caveney

Moved that the LTVCA Board of Directors direct staff to move ahead with negotiations to relocate a house and draft an agreement with the Thames River Keepers. Once agreement is drafted, it will be presented back to the Board of Directors for final approval.

CARRIED

7.5) Draft Regulations and Planning Policy

7. S. Caveney - J. Kavelaars

Moved that the Board of Directors note and receive the changes made to the draft policy and that a broader circulation be initiated.

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CARRIED

7.6) A proposed or pending acquisition or disposal of land by the Authority, In Camera Session

8. M. Smibert – R. Doane

Moved that the Board of Directors move into an 'in camera' session.

CARRIED

9. J. Kavelaars - M. Smibert

Moved that the Board of Directors move out of the 'in camera' session.

CARRIED

10. J. Kavelaars - M. Smibert

Moved that the LTVCA Board of Directors direct staff to proceed with the sale of the Crane Conservation Area, have a property appraisal undertaken and negotiate a Restrictive Covenant to permanently protect the Crane forest and monument; Also, that the funds raised through the sale be placed in a reserve for improvements of other Eastern District Conservation Areas; And that the final approval of the sale come back to the Board at a later date.

CARRIED

8. Business for Information

- 8.1) Water Management
- 8.2) Regulations and Planning
- 8.3) Conservation Areas
- 8.4) Conservation Services
- 8.5) Community Relations
- 8.6) Conservation Authority Education
- 8.7) Wheatley Two Creeks Association Minutes
- 8.8) GM's Report

11. G. Bogart – T. Thompson

Moved that report 8.1) through to 8.8) be received for information.

CARRIED

9. Correspondence

- Scientists launch pilot project to warn of potentially dangerous 'meteotsunami' waves in 38 Great Lakes
 - 12. D. McKillop M. Bodnar

Moved that correspondence item 9.1) be received for information.

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CARRIED

10. Events Calendar

13. M. Smibert – G. Bogart

Moved that the Events Calendar items be received for information.

CARRIED

11. Other Business

None noted.

12. Adjournment

14. J. Kavelaars – R. Doane Moved that the meeting be adjourned.

CARRIED

eacort Mark Peacock

General Manager/Secretary-Treasurer

Hilda MacDonald, Chair

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7. Presentations

7.1) Ingress / Egress Issues & Mitigation project at Lighthouse Cove

Jason Wintermute and Mark Peacock will be providing a power point presentation on the ingress / egress (access) issues for the Lighthouse Cove community.

7.2) CA Tent at the International Plowing Match

Bonnie Carey will be providing a power point presentation on the CA's tent at the International Plowing Match event.

8. Business for Approval

8.1) Updated By-law, Code of Conduct and Conflict of Interest Report

Final Administrative By-Law

Final Code of Conduct

Final Conflict of Interest Guidelines

Final Procedure for Election of Officers - Report

Date: October 18, 2018

Memo to: LTVCA Board of Directors

Subject: 3nd and Final Reading Administrative By-law, And Approval of the Code of Conduct, Conflict of Interest Policy and Procedure for Election of Officers

1. Conservation Ontario Model By-law, Code of Conduct and Conflict of Interest Policy Review

Conservation Ontario has provided a model for an Administrative By-law (and the Best Management Practices Code of Conduct, Conflict of Interest Policy and Election of Officers Procedure) associated with the By-laws. This model provided a basis for the by-law, code, policy and procedure.

2. Process to Review and Approve By-law

The approval of the by-law followed a formal three reading process. The process was designed to meet the deadlines as defined by the act, the June meeting included the first reading, the August meeting, the second reading and the October meeting the third, final reading and approval of the by-law.

In June the Board appointed a committee of members and staff to complete a detailed review the draft document and provide recommendations to the board. Members of this committee included Chair Linda McKinley, Board member Stan Caveney, Val Towsley (staff) and Mark Peacock (staff). Meetings were held on July 18 and August 6 2018 to review the documents. The documents were then revised by staff to include the recommended wording of the committee. This formed the document that went to the board for the second reading. Changes were made to the document based on board comments. The final document for approval is a result of this process.

3. Comments From Public

The by-law was posted to the web site following each board meeting (posted 3 times). No comments were received from the public

4. Recommendation By-law 2018-01:

That By-law 2018-01 as amended and dated October 2018 be read for a third time, and

That all previous policies and by-laws referring to items found within this by-law are hereby repealed. And

That By-law 2018-01, dated October 2018 be approved

By-law number 2018-01 shall come into force on the 18th day of October, 2018

5. Additional Recommendations:

That the

Code of Conduct, dated October 2018

Final Conflict of Interest Guidelines, dated October 2018

Final Procedure for Election of Officers, dated October 2018

Be approved.

8.2) Budget vs Revenue and Expenditures for the period ending August 31st, 2018

Background:

Review the 2018 Budget to the Revenue and Expenditures for the 8 months ended August 31st, 2018.

Current Situation and Discussion:

REVENUE	2018 BUDGET	2018 BUDGET AUG PROJECTED		2018 ACTUAL TO AUG 31	\$ VARIANCE TO PROJECTED
GRANTS	893,663	595,775	*	859,823	264,048
GENERAL LEVY	1,405,668	1,405,668	۸	1,405,668	0
DIRECT SPECIAL BENEFIT	205,000	205,000	۸	205,000	0
GENERAL REVENUES	656,902	437,935	*	567,598	129,663
FOUNDATION GRANTS & REVENUES	7,000	4,667	*	0	(4,667)
RESERVES	11,204	7,469	*	0	(7,469)
CASH FUNDING	3,179,437	2,656,514		3,038,089	381,575
OTHER	0	0		0	0
TOTAL FUNDING	3,179,437	2,656,514		3,038,089	381,575

*-based on a 8 of 12 month proration of the budget

^-based on cash received to date

Grant income is greater than budget due to the reversal of deferred revenue for on going programs, the timing of grants invoiced, including several large grants for Wetland projects and several new and increased grants like an increase in the Source Water Protection grant and an Environment & Climate Change Canada and Rondeau Bay Student Conference grant not included in the budget.

Note: Grant income is based on funds received/invoiced and not matched to expenses, meaning there may be expenses outstanding and not recognized in the attached expense statement. At year-end, each grant is reviewed individually and unspent funds are reduced from grant income and deferred for future expenditures.

Levy revenue is shown on a cash basis. All municipalities are paid in full.

General Revenue is above budget due to the following factors:

• Planning and Regulations fees is above budget due to increased demand and the seasonal nature of permits; and Conservation Services and the Chatham Kent Greening Project are above budget as tree sales have been completed and the income received.

Foundation Grants and Revenues is below budget as there is normally a settlement for the memorial tree programs at the end of the year.

Reserves are zero as this account is used to balance the accounts at year-end if expenses are greater than revenues.

EXPENSES	2018	2018 BUDGET	2018 ACTUAL	\$ VARIANCE
	BUDGET	AUG PROJECTED	TO AUG 31	TO PROJECTED
WATER MANAGEMENT				
FLOOD CONTROL STRUCTURES	190,674	127,116	91,745	(35,371)
EROSION CONTROL STRUCTURES	0	0	2,314	2,314
FLOOD FORECASTING AND WARNING	156,754	104,502	145,095	40,593
TECHNICAL STUDIES	72,120	48,080	8,356	(39,724)
PLANNING & REGULATIONS	225,526	150,351	113,262	(37,089)
WATERSHED MONITORING (PGMN)	102,760	68,507	69,173	666
SOURCE PROTECTION	24,664	16,443	26,414	9,971
THAMES MOUTH DEBRIS REMOVAL	1,204	803	1,243	440
Water Management Subtotal	773,702	515,802	457,602	(58,200)
CONSERVATION & RECREATION PROPERTIES				
CONSERVATION AREAS	638,084	425,389	471,708	46,319
COMMUNITY RELATIONS AND EDUCATION				
COMMUNITY RELATIONS	172,730	115,153	93,484	(21,669)
CONSERVATION EDUCATION	114,257	76,171	86,142	9,971
SKA-NAH-DOHT VILLAGE	229,094	152,729	115,401	(37,328)
Community Relations & Education Subtotal	516,081	344,053	295,027	(49,026)
CONSERVATION SERVICES/STEWARDSHIP				
CONSERVATION SERVICES (FORESTRY)	161,243	107,495	71,841	(35,654)
CHATHAM-KENT GREENING PROJECT	673,159	448,772	251,111	(197,661)
PHOSPHORUS REDUCTION	323,678	215,785	282,429	66,644
SPECIES AT RISK	93,490	62,327	75,562	13,235
Conservation Services/Stewardship Subtotal	1,251,570	834,379	680,943	(153,436)
CAPITAL/MISCELLANEOUS				
ADMINISTRATION BUILDING	0	0	0	0
REPAIRS/UPGRADES	-	-	-	-
UNION GAS CENTENNIAL PROJECT	0	0	0	0
EMPLOYMENT PROGRAMS (FED/PROV)	0	0	0	0
Capital/Miscellaneous Subtotal	0	0	0	0
TOTAL EXPENDITURES	3,179,437	2,119,623	1,905,280	(214,343)

Water Management

Flood Control Structures and Erosion Control Structures are below budget mostly due to the human resources required in Flood Forecasting for the February Flood, some large projects not having taken place and is slightly offset due to the increase electricity expenses incurred from the February flood.

Flood Forecasting and Warning expenses are above budget due to the costs and human resources required for the February flood.

Technical Studies and Planning and Regulations are below budget due to the February flood event and not having a GIS co-op student for most of the year.

Watershed Monitoring and Source Protection are comparable to budget.

Conservation Areas

Conservation area expenses are above budget as some of the large projects, opening and operation of the campgrounds and other large operational costs have been incurred for the camping season. Note: There are \$16,000 of expenditures related to the acquisition of a conservation property that will be capitalized with the property and \$9,000 of capital asset expenditures that will be capitalized and amortized over the useful life of the assets.

Community Relations and Education

Community Relations and SKA-NAH-DOHT Museum and Village are below budget due to the seasonal nature of large activities in these programs. Conservation Education is above budget mostly due to the Rondeau Bay Student Conference hosted by LTVCA.

Conservation Services/Stewardship

Conservation Services (Forestry) and Chatham-Kent Greening expenses are below budget due to less large tree planting projects and less Rondeau Bay and Wetland projects. Rondeau Bay and Wetland projects and expenses will increase until all projects are complete, work can no longer be performed or all funds have been expended depending on the year.

Phosphorous Reduction is above budget due to several large purchases to fully utilize funds for programs ended Mar 31 and the costs related to the Environment & Climate Change Canada Grant not included in the budget.

Note: There are \$41,000 of capital asset expenditures for the GLASI program not included in this amount. They will be capitalized and amortized over the useful life of the assets.

Species at Risk is above budget due to several large purchases to fully utilize funds for programs ended Mar 31.

Administration

Administration building is comparable to budget.

Summary:

	2018 BUDGET	2018 BUDGET AUG	2018 ACTUAL TO AUG 31	\$ VARIANCE TO
		PROJECTED		PROJECTED
TOTAL CASH FUNDING	3,179,437	2,656,514	3,038,089	381,575
TOTAL EXPENDITURES	3,179,437	2,119,623	1,905,280	(214,343)
OPERATING SURPLUS (DEFICIT)	0	536,891	1,132,809	595,918
LESS: ACQUISITION OF CAPITAL ASSET	0	0	(65,586)	(65,586)
NET CASH FUNDING SURPLUS (DEFICIT)	0	536,891	1,067,223	530,332

Note: The difference between the projected budget funding and projected budget expenditures is due to the recognition of the full General Levy and Special Levy versus all other income and expenses are prorated for the period.

At August 31st, 2018, LTVCA's operating surplus is quite favourable; however, there are several things to consider. A significant portion of the income for the year has been accounted for, there is potential for outstanding expenses or deferred revenue in the grant income and there are still four months of wages and benefits and regular operating expenses until the end of the year.

Recommendation: That the Board of Directors receives the Budget vs Revenue and Expenditures report for the period ended August 31st, 2018.

8.3) 2019 Preliminary Budget

Date:	October 18, 2017
Memo to:	LTVCA Board of Directors
Subject:	2018 Preliminary Budget and Levy
From:	Mark Peacock, P. Eng., General Manager / Secretary Treasurer

Background

The LTVCA Board approved a 2018 budget of \$3,179,437 million, resulting in a general levy of \$1,405,668 plus a special levy of \$205,000 for Chatham-Kent for Flood Control Structures and the Greening Partnership/Natural Heritage Programs.

Current Situation

For 2019, the preliminary balanced budget of \$3,205,524 requires a general levy of \$1,433,781 an increase of \$28,113 over the 2018 general levy, or 2.00% (Chatham-Kent's special benefiting levy remaining at \$205,000). The total municipal levy for 2018 is \$1,638,781. As in previous years, the annual adjustment to each municipality's assessment within the watershed varies based on the prior year current value property assessment (CVA). The CVA values are provided annually by the Ministry of Natural Resources and Forestry. The balances for the 2019 budget have been delayed but are expected prior to the October 18th, 2018 board meeting and will be walked into the meeting.

Discussion

Non-municipal revenues include grants and general revenues (user fees) and account for \$1,566,743 or 48.9% of total program revenues. Such funds are required for a number of programs, the most variable of which is the Conservation Services/Stewardship program, which is heavily dependent on the success of numerous funding applications. This year due to the change in provincial government and the review of spending that was undertaken, provincial grants have not been provided for ongoing programs. Conservative assumptions have been made regarding these grants thereby challenging staff in balancing the 2019 years budget. Staff are currently engaged in developing new sources and extending current contracts to meet the demand for services and to take advantage of emerging priorities such as phosphorus reduction.

Recommendation: That the 2019 preliminary budget totalling \$3,205,524 be adopted, and that the member municipalities be advised of the budget and their share of the proposed levy as calculated; it being noted that the Authority is required to provide 30 days' notice of its intention to adopt a final budget and levy.

PG. NO		2018 BUDGET	2019 BUDGET	2019 GRANTS	MATCHING GENERAL LEVY	DIRECT SPECIAL BENEFIT LEVY	NON MATCHING GENERAL LEVY	GENERAL REVENUES	FOUNDATION GRANTS & REVENUES	RESERVES
	WATER MANAGEMENT	e trade altre de	to a 17 a transition	Column at the t		a harristante				
2	FLOOD CONTROL STRUCTURES	190,674	212,523	43,762	43,762	125,000				
2	EROSION CONTROL STRUCTURES	0	12	6	6		0			
2	FLOOD FORECASTING AND WARNING	156,753	163,052	81,526	81,526		0			
3	TECHNICAL STUDIES	72,120	76,589	38,295	38,295		0			
3	PLANNING & REGULATIONS	225,526	238,226	14,219	14,219		109,188	100,600		
3	WATERSHED MONITORING	102,760	137,434	99,500			37,934			
3	SOURCE PROTECTION	24,664	26,911	30,000			-3,089			
3	THAMES MOUTH DEBRIS REMOVAL	1,204	0			0				
	Water Management Subtotal	773,702	854,747	307,307	177,807	125,000	144,033	100,600	0	0
	CONSERVATION & RECREATION PROPERTIES									
3	CONSERVATION AREAS	638,084	743,386				523,496	219,890		
	COMMUNITY RELATIONS AND EDUCATION									
4	COMMUNITY RELATIONS	172,730	176,941	7,150			169,791			
4	CONSERVATION EDUCATION	114,257	100,138	0			85,938	14,200		
4	SKA-NAH-DOHT VILLAGE	229.094	206,991	22,992			120,899	63,100		
	Community Relations & Education Subtotal	516,081	484,070	30,142	0	0	376,628	77,300	0	0
	CONSERVATION SERVICES/STEWARDSHIP									
5	CONSERVATION SERVICES (FORESTRY)	161,243	102,966				38,266	64,700		
5	CHATHAM-KENT GREENING PROJECT	673,158	629,289	275.000		80,000	109,289	165,000		
5	PHOSPHORUS REDUCTION	323,678	334,748	282,500		87	52,248			
5	SPECIES AT RISK	93,490	56,318	21,554			34,764			
	Conservation Services/Stewardship Subtotal	1,251,569	1,123,321	579,054	0	80,000	234,567	229,700	0	0
	CAPITAL/MISCELLANEOUS									
5	ADMINISTRATION BUILDING REPAIRS/UPGRADES	0	0							
5	UNION GAS CENTENNIAL PROJECT	0								
5	EMPLOYMENT PROGRAMS (FED/PROV)	0	0	22,750			-22,750			
	Capital/Miscellaneous Subtotal	0	0	22,750	0	0	-22,750	0	0	0
	-	3,179,437	3,205,524	939,253	177,807	205,000	1,255,974	627,490	•	

FUNDING SOURCES

				/	FUNDI	NG SC	URCE	S	
	2018 BUDGET	2019 BUDGET	2019 GRANTS	MATCHING GENERAL LEVY	DIRECT SPECIAL BENEFIT LEVY	NON MATCHING GENERAL LEVY	GENERAL REVENUES	FOUNDATION GRANTS & REVENUES	RESERVES
WATER MANAGEMENT									
FLOOD CONTROL STRUCTURES									
WAGES AND BENEFITS	122,860	112,577							
ADMINISTRATION OVERHEAD	23,814	27,046							
OPERATIONS	19,000	18,475							
ROUTINE MAINTENANCE	20,000	54,050							
PREVENTATIVE MAINTENANCE	5,000	375							
TOTAL FLOOD CONTROL STRUCTURES	190,674	212,523	43,762	43,762 (CF	125,000 ATHAM-KENT)				
EROSION CONTROL STRUCTURES					111				
WAGES AND BENEFITS	0	0							
ADMINISTRATION OVERHEAD	0	2							
OPERATIONS	0	10							
TOTAL EROSION CONTROL STRUCTURES	0	12	6	6					
FLOOD FORECASTING AND WARNING									
WAGES AND BENEFITS	104,175	121,202							
ADMINISTRATION OVERHEAD	19,578	20,750							
DATA COLLECTIONS	10,000	12,300							
FLOOD FORECASTING	4,000	2,250							
COMMUNICATIONS	4,000	3,700							
OPERATIONS CENTRE (RENT)	5,000	1,750							
FLOOD RESPONSE AND MONITORING	10,000	1,100							
TOTAL FLOOD FORECASTING & WARNING	156,753	163,052	81,526	81,526					

FUNDING SOURCES

	2018 BUDGET	2019 BUDGET	2019 GRANTS	MATCHING GENERAL LEVY	DIRECT SPECIAL BENEFIT LEVY	NON MATCHING GENERAL LEVY	GENERAL	FOUNDATION GRANTS & REVENUES	RESERVES
TECHNICAL STUDIES									
WAGES AND BENEFITS	58,113	63,662							
ADMINISTRATION OVERHEAD	9,007	9,747							
AERIAL PHOTOGRAPHY & MAPPING									
OPERATING-MATERIALS, SUPPLIES,									
AND EXPENSES	5000	3,180							
TOTAL TECHNICAL STUDIES	72,120	76,589	38,295	38,295					
REGULATIONS AND PLAN REVIEW									
WAGES AND BENEFITS	182,359	188,449							
ADMINISTRATION OVERHEAD	28,167	30,317							
OPERATING-MATERIALS, SUPPLIES,									
AND EXPENSES	15,000	19,460							
TOTAL REGS. & PLAN REVIEW	225,526	238,226	14,219	14,219		109,188	100,600	li -	
WATERSHED MONITORING									
WAGES AND BENEFITS	49,926	69,459							
ADMINISTRATION OVERHEAD	12,834	17,490							
OPERATING-MATERIALS, SUPPLIES,									
AND EXPENSES	40,000	50,485							
TOTAL REGS. & PLAN REVIEW	102,760	137,434	99,500			37,934			
SOURCE PROTECTION	24,664	26,911	30,000			-3,089			
THAMES MOUTH DEBRIS REMOVAL	1,204	0							
CONSERVATION & RECREATION PROPERTIES									
WAGES AND BENEFITS	358,391	363,647							
ADMINISTRATION OVERHEAD	79,693	94,604							
OPERATING- MATERIALS & SUPPLIES,									
STORAGE, RENTALS, INSURANCE, ETC.	200,000	285,135							
TOTAL CONS. & RECREATION PROPERTIES	638,084	743,386				523,496	219,890	ľ.	

FUNDING SOURCES

	2018 BUDGET	2019 BUDGET	2019 GRANTS	MATCHING GENERAL LEVY	DIRECT SPECIAL BENEFIT LEVY	NON MATCHING GENERAL LEVY	GENERAL REVENUES	FOUNDATION GRANTS & REVENUES	RESERVES
COMMUNITY RELATIONS AND EDUCATION									
COMMUNITY RELATIONS									
WAGES AND BENEFITS	128,157	135,248							
ADMINISTRATION OVERHEAD	21,573	22,518							
OPERATING- MATERIALS & SUPPLIES,									
SERVICES, RENTALS, INSURANCE, ETC.	23,000	19,175							
TOTAL COMMUNITY RELATIONS	172,730	176,941	7,150			169,791	8		
CONSERVATION EDUCATION									
WAGES AND BENEFITS	88,987	82,214							
ADMINISTRATION OVERHEAD	14,270	12,744							
OPERATING- MATERIALS & SUPPLIES,									
SERVICES, RENTALS, INSURANCE, ETC.	11,000	5,180							
TOTAL CONSERVATION EDUCATION	114,257	100,138				85,938	3 14,200)	
SKA-NAH-DOHT VILLAGE									
WAGES AND BENEFITS	180,481	156,224							
ADMINISTRATION OVERHEAD	28,613	26,342							
OPERATING- MATERIALS & SUPPLIES,									
SERVICES, RENTALS, INSURANCE, ETC.	20,000	24,425							
TOTAL IROQUOIAN VILLAGE	229,094	206,991	22,992			120,899	63,100)	

FUNDING SOURCES

	2018 BUDGET	2019 BUDGET	2019 GRANTS	MATCHING GENERAL LEVY	DIRECT SPECIAL BENEFIT LEVY	NON MATCHING GENERAL LEVY	GENERAL REVENUES	FOUNDATION GRANTS & REVENUES	RESERVES
CONSERVATION SERVICES									
FORESTRY									
WAGES AND BENEFITS	41,105	74,012							
ADMINISTRATION OVERHEAD	20,138	13,104							
OPERATING- MATERIALS & SUPPLIES,									
STORAGE, RENTALS, INSURANCE, ETC.	100,000	15,850							
TOTAL FORESTRY	161,243	102,966				38,266	64,700	8	
CHATHAM-KENT GREENING PROJECT									
WAGES AND BENEFITS	189,084	142,605							
ADMINISTRATION OVERHEAD	84,074	80,084							
OPERATING- MATERIALS & SUPPLIES,									
STORAGE, RENTALS, INSURANCE, ETC.	400,000	406,600							
TOTAL CHATHAM-KENT GREENING	673,158	629,289	275,000		80,000	109,289	165,000	8	
PHOSPHORUS									
WAGES AND BENEFITS	148,252	135,308							
ADMINISTRATION OVERHEAD	40,426	42,600							
OPERATING- MATERIALS & SUPPLIES,									
STORAGE, RENTALS, INSURANCE, ETC.	135,000	156,840							
TOTAL PHOSPHORUS	323,678	334,748	282,500			52,2 <mark>4</mark> 8			
SPECIES AT RISK									
WAGES AND BENEFITS	71,814	45,412							
ADMINISTRATION OVERHEAD	11,676	7,167							
OPERATING- MATERIALS & SUPPLIES,									
STORAGE, RENTALS, INSURANCE, ETC.	10,000	3,739							
TOTAL CONS. SERVICES	93,490	56,318	21,554			34,764			
CAPITAL/MISCELLANEOUS									
UNION GAS CENTENNIAL PROJECT									
ADMINISTRATION BUILDING REPAIRS/UPGRADES	0	0							
EMPLOYMENT PROGRAMS (FED/PROV)			22,750			-22,750			

5 of 5

8.4) Risk Management Plan

Risk Management Plan - Report

Date: October 18, 2018

Memo to: LTVCA Board of Directors

Subject: Lower Thames Valley Conservation Authority Risk Management Plan

Background

Traditionally the LTVCA has addressed risk issues by having insurance to cover any losses that might be incurred. The problem with this is that society is more litigative and insurance companies are looking to reduce exposure to claims. The result is that insurance companies are making organizations more responsible to address risk in their operations. The LTVCA has begun a proactive Risk Management Planning process to help limit our chances of needing to place a claim. We need to achieve our strategic objectives in a way that creates benefits and limits problems – we are not going to quit doing important things just because of risk – but we may do them differently.

What is Risk: LTVCA definition

• Consider a situation involving exposure to danger – danger to people or things or to your reputation, Risk is the understanding of the likelihood of the situation and the consequence the situation creates.

To effectively address risk an organization has to manage it. This doesn't mean that we won't accept some risks. For a Conservation Authority accepting risk occurs when we acknowledge that the potential loss from that risk is not great enough to warrant not providing the service that is for the watershed's good. In accepting risk we do not ignore it, we control that risk, and we understand its financial impacts.

Risk management is the identification, evaluation, and prioritization of risks followed by planned economical application of resources to minimize, monitor, and control the probability or impact of unfortunate events.

Risk Management Framework

The Risk Management Framework is as follows:



Preliminary Areas of Risk

After a number of meeting the following LTVCA areas of risk evaluation were defined:

- 1) Administration Governance
- 2) Administration Financial
- 3) Administration Human Resources
- 4) Administration Information Technology
- 5) Water Management including Hazard Management, Planning and Regulations
- 6) Conservation Education
- 7) Conservation Services
- 8) Conservation Lands, and Programs Camping and Group Use
- 9) Conservation Lands and Programs- Individual Use
- 10) Infrastructure -Tenant buildings
- 11) Infrastructure LTVCA owned buildings (public and staff used)
- 12) Infrastructure Flood and Erosion Control Structures

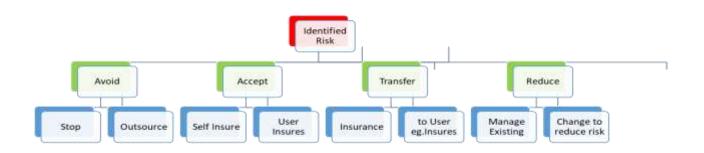
LTVCA Risk Assessment Matrix and Heat Map

Activities within each area of risk were define and then a qualitative evaluation was carried out for each activity. The following matrix was used to define an activity as a low medium or high risk activity.

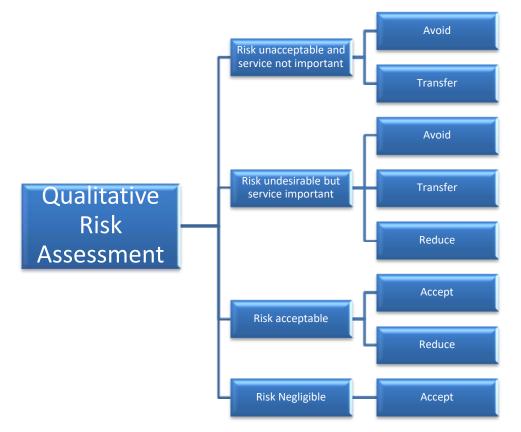
TVCA Risk As	ssessment Ma	trix		Increasing Probability							
ncreasing Conse	quence 📘			A	В	С	D	E			
Hazard Rating	People	Assets/	Reputation	Very Rare	Has Occurred in Ontario	Occurs in Conservation Authorities	Occurs in the Lower Thames Valley	Annual Occurrence			
		Finance					Conservation Authority				
1	Slight Health Effect	Slight Damage/Cost	Slight Impact								
2	Minor Health Effect	Minor Damage/Cost	Limited Impact								
3	Major Health Effect	Local Damage/Cost	Considerable Impact								
4	Permanent Disability	Major Damage/Cost	Major Impact								
5	Fatalities	Extensive Damage/Cost	Catastrophic Impact								
		1									
Legend:		LOW	Manage for Continued Improvement	MEDIUM	Incorporate Risk Reduction Measures	HIGH	Intolerable – Investigate Alternatives				

Strategies For Controlling Risk

The following chart shows the standard strategies used in controlling risks identified in the assessment phase:



The following chart shows how the strategies were used:



Example Risk Register and Analysis for one Risk Area

A form was created that shows the risk identification, qualitative assessment, strategy selection and actions to manage risk. An example is shown below:

Lower Thames Valley Conservation Authority

Risk Register – Risk Management

Risk Area: Administration – Information Technology

Date of Last Update: July 3, 2018 By: NVP

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Area of Rink	Name / Description	Probability	Созлецьевсе	Risk Score	Risk Strategy	Action	Risk Score after Mitigation	Action By	Action When
Admin IT	Inadequate IT system to meet user's needs	D	3	Med	Reduce	Develop multiyear budget through the Auset Management Plan	Low	Admin	2019
Admin IT	Cyber-attack on network	с	8	High	Reduce	Invice secure backup of all systems	Med	Admin	ongoing
Admin IT	Power outage for extended time	E	2	Med	Reduce	Ensure power backup systems in place	Low	Admin	2019
Admin IT	Business interruption due to failed IT	D		Med	Accept		Med	Admin	ongoing

Engaging staff in the develop of the Risk Management Plan

A work plan was developed that engaged staff in the development of the Risk Management Plan. It was felt that unless staff were fulling engaged in the process, the plan would not be effectively implemented The risk management work Plan included:

- 1. Risk Management Process Defined by management
- 2. Management Team develop first version of register assessment and proposed response
- 3. Managers review with staff, revise and improve
- 4. Managers review revised plan to ensure enterprise approach
- 5. Report to Board with details of Plan October 2018
- 6. Staff use Risk Management Plan for development of future Action Plans (Work Plans) and budgeting purposes

Final Results

	Lower Thames Valley Conservation Authority							
	Risk Management Preliminary Results			10	wer	Than	les	
	Last Update: October, 2018		-6	301	isei	Than V <mark>at</mark> i	iõn	
	Risk Management Area	Number of		Risks		Mi	tigated Risl	s
		Risks ID'd	High	Medium	Low	High	Medium	Low
1	Administration - Governance	41	4	12	25	0	1	40
2	Administration - Financial	17	1	11	5	0	3	14
3	Administration - Human Resources	15	5	6	4	0	6	9
4	Administration - Information Technology	4	1	3	0	0	2	2
5	Water Management	33	8	19	6	0	12	21
6	Conservation Education	17	2	13	2	0	5	12
7	Conservation Services	13	3	10	0	0	5	8
8	Conservation Lands, and Programs – Camping and Group Use	20	4	14	2	0	7	13
9	Conservation Lands and Programs-Individual Use	23	6	15	2	0	9	14
10	Infrastructure -Tenant buildings	14	0	6	8	0	0	14
11	Infrastructure - LTVCA owned buildings (public and staff used)	18	2	13	3	0	2	16
12	Infrastructure - Flood and Erosion Control Structures	16	11	4	1	3	7	6
			47	126	58	3	59	16
	Total Identified Risks	231						

The result of the draft risk identification and preliminary qualitative risk analysis are shown in the table above. The first step identified 231 risks in the 12 risk management areas. Of these, 47 were of high risk,

126 medium risk and 58 low risk. The analysis of actions designed to limit risk has been developed and with those actions in place only 3 risks remain in the high category, 59 in the medium category and 169 have been placed in the low risk category. These results show that significant reduction in risk can be obtained by a methodological approach to risk management in the Lower Thames Valley Conservation Authority. Many of the recommended actions are simple best practices and many are already being implemented.

Recommendation: That the Lower Thames Valley Conservation Authority Risk Management Plan be approved and used as a tool for planning and budgeting purposes.

8.5) 2019 Fee Schedules

Conservation Areas Fee Schedule

Staff have reviewed the Conservation Areas Fee Schedule and added two new fees. A \$200 Consultation fee for Wedding Parties-that should reflect the added staff time when dealing with bride and groom, as well as an increase in the Cleaning Fee for the rental of our buildings.

Recommendation:- That the LTVCA Board of Directors approve the 2019 Conservation Areas Fee Schedule

Conservation Services Fee Schedule

There were no changes to the Conservation Services Fee schedule for 2019.

Lower Thames Valley Conservation Authority 2019 Conservation Areas Fee Schedule

ALL PRICES INCLUDE HST

	Longwoods Road	Big Bend	CM Wilson	EM Warwick	Sharon Creek
Camping (Single Sites 4)		✓	×		
Group Camping (5 person min.)	✓	✓	✓	~	
Seasonal Camping		✓	✓		
Pavilion/Area Rental	✓	✓	✓		
Day Use Fee	×	×	×		~
2019 Day Use Vehicle Permit	✓	✓	~		~

<u>Day Use</u> Vehicle Permit	< 1.5 hrs 4.00	< 3 hrs 8.00	<i>Max per (</i> 12.00	50.001	D ay Use Permit first plate second plate	<i>Bus</i> 110.00
<u>Camping</u>	Nightly	Weekly	Monthly	Half Season (10 weeks)	Season { (Victoria Day –	Thanksgiving)
Hydro & Water	38.00	225.00	575.00	900.00	1600.00 (other	fees may apply)
Hydro Only	36.00	210.00				
Unserviced	30.00	180.00			1450.00 (other	fees may apply)
Extra Overnight Vehicle	10.00 per n	ight				
Reservation Deposit*	Deposit equa	ls first night's s	tay (Non-refu	ndable without 24	hours' notice)	
Group Camping	10.00 per per	rson (Pre-Booked;	Subject to \$50	reservation deposit*	, Non-refundable wit	thout 24 hours' notice)
Winter Storage of Camper	200.00 (Tha	inksgiving – Vict	toria Day- <u>C.N</u>	1.Wilson Only)		

Warwick ⁺	Weekends/night	Fri & Sat bundle	Sun-Thurs/night	Weekly
(Includes all buildings)				
Peak Season (May-Oct)	300.00	550.00	200.00	1000.00
Off Season (Nov-Apr)	250.00	450.00	150.00	750.00
Reservation Deposit*	100.00 (Non-refunda	ble without 30 days' i	notice)	

Pavilion Rental ⁺	Per day, excludes parking (Guests must use Pay & Display machine OR Purchase permits in advance)
Pavilion/Area Rental	100.00
Barn (CM Wilson)	250.00
Wedding Parties	200.00 consultation fee
Per 25 Vehicle Permits	50.00
Reservation Deposit*	100.00 (Non-refundable without 30 days' notice)

Firewood	Bag	Bucket (½ face cord)
	10.00	50.00
Other		
Non-Camper Sewage Disp	osal	15.00 (C.M. Wilson Only)
Cleaning Fee		50-\$150.00 (Building rentals- Pavillion & Barn, fee varies depending on clean up)
		৸ Includes one vehicle per site; limit 4 persons per site unless family unit
		† Requires \$150 Security/Damage Deposit, to be refunded if applicable
Prices are subject to change	2	* Reservation deposit applied to total bill

LTVCA Current Regulatory Fee Schedule - 2015 Comparison between surrounding CA's						2019 Fees	
Description	ERCA	SCRCA	UTRCA	KCCA	LTVCA	LTVCA	
Legal Inquiry	197.75	150.00	150.00	75.00	100.00	125.00	
Requests for Information (landowners, purchasers, or agents) (written letterhead response)	197.75	220.00	150.00	75.00	100.00	125.00	
Permit Renewal	115.00	100.00	50.00		75.00	75.00	
Placing or grading of fill	150.00	300.00	425.00	110.00	300.00	300.00	
Light repair of existing breakwalls	150.00	300.00		110.00	300.00	300.00	
Small building additions	150.00	300.00	425.00	400.00	300.00	300.00	
Small outbuildings not requiring a survey	150.00	300.00		110.00	150.00	150.00	
Small outbuilding requiring a survey						250.00	
Technical evaluations (elevation, setback survey, property evaluation for tax assessment)(will be subtracted from fees charged if a permit is obtained)	875.75					200.00	
Alterations to waterways/shorelines (breakwalls, finger docks, crossings, outlets, etc.) - not requiring engineering.	500.00	300.00	425.00	110.00	500.00	500.00	
Alterations to waterways/shorelines (breakwalls, crossings, outlets, (requring engineering)	800.00	600.00	800.00	600.00	500.00	500.00	
New building construction (away from shorelines and watercourses)	500.00	400.00	800.00	600.00	400.00	400.00	
Building construction (along shorelines and watercourses)	800.00	400.00	800.00	600.00	500.00	500.00	
Non-habitable accessory structures	250.00	300.00	425.00	110.00	150.00	150.00	
Drainage works -major (areas of environmental concern)	800.00	600.00	2150.00		500.00	500.00	

Drainage works - engineer's report	150.00	300.00	500.00		100.00	150.00
Drainage works - maintenance	200.00	200.00	150.00		100.00	100.00
Hearing		550.00			400.00	400.00
Major construction/applications for more than 1 activity/engineering/environmental studies required	1200.00	880.00		1200.00		600.00
Multi-lot construction (greater than 3 lots/units)				225/lot	300/lot	350/lot
Work undertaken without approval		100%			100%	100%
Union Gas Pipeline fee					100.00	125.00

The LTVCA Regulations and Planning department has not seen an increase in the fees that it charges for services since 2015. Staff reviewed surrounding CA's and undertook modest increases where needed to bring ourselves more in-line with our neighbouring CA's. The services that we are proposing to increase were legal inquiries, review of engineer's reports for drainage works, multi-lot construction submissions due to staff time on these projects and upping the fee charged for directional drilling of utility installations.

New services added to the list are for small outbuildings where an elevation survey is required, technical evaluations where staff attend a property for review purposes and a new fee for major construction applications where more than one type of activity is being proposed.

Recommendation: That the Board of Directors approves the 2019 Conservation Areas and Regulation and Planning Fee Schedule increases.

9. Business for Information

9.1) Water Management

9.1.1) Flood Forecasting and Operations

There have been five Watershed Condition Statements and two Flood Watches issued since the last Board of Directors Agenda was drafted. All the messages were issued for the Lake Erie shoreline. Generally speaking the Watershed Condition Statements were all targeted at Erie Shore Drive in Chatham-Kent, but areas all along the shoreline were also at risk from wave damage and erosion. The Flood Watches were related to an event with northeast winds that had a chance to impact the interior of Rondeau Bay and the Rose Beach Line area. Recently, as compared to last year, it has been much more challenging to accurately predict when the shoreline may be impacted by an event. For one event on August 21st, a Statement wasn't issued as the forecasts didn't predict the wind would get sufficiently high. However, the local Drainage Superintendent reported flooding. For several events where Statements were issued, the winds did not reach as high as predicted or ended up coming out of the wrong direction to have a significant impact. This was the case for the Flood Watches for the weekend of September 8th and 9th. The winds did not climb high enough to create the necessary lake setup, nor the waves heights required to cause the expected flooding on the interior of Rondeau Bay. However, there were a few homes impacted along Erie Shore Drive during that event. In addition it has been difficult to document any of the effects as five of the seven events were expected to see peak winds after dark. It is expected that later in the autumn or early winter that the winds will be more consistent and it will be easier to predict events.

9.1.2) Flood Control Structures

Due to the recent sale of the property at 300 Grand Ave E. (Chatham) the rain gauge at that location had to be moved. Permission has now been granted by the Municipality of Chatham-Kent to relocate the rain gauge across the road to the Public Utilities Commission property. A timeline for the installation has not been determined.

The crucial water level gauge at 300 Grand Ave E. was damaged on Friday September 21st. A gauge at that location has measured water levels in the City of Chatham since the 1920s, if not longer. The gauge is currently allowed to reside there due to an easement registered on the property. The gauge is used to measure flood levels in the city and to operate the 6th Street Dam and Pumping Station. Late that morning, high winds caused a tree to fall onto the gauge house. The gauge appears to be completely destroyed and it seems unlikely anything can be salvaged. Repairs will need to be conducted before the winter/spring flood season. Fortunately, the gauge is maintained by Water Survey of Canada who will fund and undertake most of the repairs with assistance from LTVCA staff.

Investigations and repairs to the 6th Street Dam related to the February Flood are still pending funding.



9. 1.3) Low Water Response Program

Under the Low Water Response Program, three indicators of drought are examined; 3 month total rainfall, 18 month total rainfall and monthly average flows in the river. For reporting up to the end of September, all of the indicators suggested that the Lower Thames watershed was not in any type of low water condition. During the spring, summer and autumn, brief reports outlining the watershed conditions as they relate to the program are created. Those reports are available upon request. During the winter, as demand for water across the watershed is significantly less, these reports are not created.

9.1.4) Watershed Monitoring

Surface water quality monitoring continues throughout the watershed. However, November is the last month in the autumn during which the Provincial (Surface) Water Quality Monitoring Network (PWQMN) operates. Event based sampling through the winter is considered extremely important for determining phosphorous loadings. However, that sampling was being funded by a Canada-Ontario Agreement (COA) on Great Lakes Water Quality and Ecosystem Health grant program. Due to the provincial spending freeze, that grant has not yet been renewed and it's not clear if and when it may be reinstated. Local funding from the Authority is being provided to maintain the

program as it is too important to let this program lapse. We will continue until we know more about what's happening with the GAP funding, hopefully before the end of the year.

The installation and setup of an automated water quality monitoring station at McGregor Creek and Hwy 40 is now completed. The intention was to be able to capture water quality samples throughout the duration of a large runoff event. Unfortunately, the analysis of those samples was supposed to be funded through the COA grant as well.

Every autumn, water quality sampling from seven groundwater wells throughout the watershed is conducted as part of the Provincial Groundwater Monitoring Network (PGMN) program. Sampling from those wells has started and it is anticipated to finish up in early November. Associated water level information from the wells is collected all year.

9.2) Regulations and Planning

9.2.1) Section 28 Regulations /Permitting

Planning

From the first of August through to the end of September, there have been 64 planning submissions reviewed by staff with respect to Section 28 of the Conservation Authorities Act and Ontario Regulation 152/06.

Planning Numbers	2017 totals	2018 year to date totals	2017 Aug-Sept totals
Chatham-Kent	227	133	34
Elgin	86	57	12
Essex	29	35	10
Middlesex	57	35	8
Total Numbers	399	260	64

Permitting

Since the last board update on 23 August 2018 and up to and including 30 September 2018, staff have approved an additional 53 permit applications with respect to Section 28 of the Conservation Authorities Act and Ontario Regulation 152/06. The total number of permit applications in the first nine months of 2018 was 210. In 2014, 2015, 2016, and 2017, staff had reviewed a total of 136, 151, 217, and 217 permit applications, respectively, in the same time period. It appears that the number of permit applications for 2018 will likely be within the vicinity of the numbers observed in 2016 and 2017 (both were record-breaking years).

Of the 210 permit applications, all but five have been approved by staff. The five open applications are currently considered as being "incomplete" as they are awaiting further supporting documentation from the applicants.

Below are some Section 28 Permitting statistics for 2018 up to and including 30 September 2018:

- 13 habitat/stewardship applications have been received and approved with their fees waived;
- 47 properties were surveyed for permit and official plan flood proofing requirements;
- 63% of all applications have been within Chatham-Kent and 12% have been within Lakeshore;
- 57% of the applications have been for private property owners for construction, shoreline protection repairs, and/or bank alterations;
- 33% of applications have been for municipal projects (drainage or infrastructure); and,
- Total of permit application fees = \$48,650.00 (average of \$231.67 per permit).

9.2.2) Property Inquiries

996 property inquiries (regulations technician's numbers) and 363 (resource technician's numbers) have been received and responded to. <u>Some</u> of the reasons that staff receive property inquiries include:

- Realtors looking to sell a property and wanting to know any potential restrictions for future buyers.
- People purchasing property who want to know more about the site-specific hazards and regulations.
- > Landowners wanting to learn about best management practices specific to their property.
- > Landowners wanting specific information on what is permitted in regulated areas.
- > Insurance companies looking for floodplain information.
- Municipal staff or utility companies planning future projects.

9.2.3) Section 28 Enforcement

27 additional Section 28 enforcement related complaints/violations have been received so far in 2018. They are considered "additional" as there are multiple on-going investigations and enforcement related work stemming back to 2014. Eight of the 27 complaints/violations arose in August and September. Of the 27 complaints/violations received so far in 2018, 19 are in Chatham-Kent, two are in Lakeshore, two are in West Elgin, one is in Southwest Middlesex, one is in Strathroy-Caradoc, one is in Dutton Dunwich, and one is in Southwold.

Staffing resources continue to be a problem when it comes to dealing with complaints and violations in a quick and effective manner as many enforcement files remain open. Where applicable, staff work with other municipal, provincial, and federal partners on joint investigations (where complaints or violations cover multiple laws or bylaws). Whenever another agency can handle the investigation on their own (better resources and better equipped), staff internally close the file as it relates to the Conservation Authorities Act violation.

Staff Report

O.Reg. 152/06 Permit Applications (2018)

B.D. 10/18/18

APP#	LOCATION	COMMUNITY/ TOWNSHIP	MUNICIPALITY	APP'N TYPE	DECISION
127-2018	355 Towanda Boulevard	Erie Beach	Chatham-Kent	Alteration	Granted: July 27, 2018
128-2018	385 Towanda Boulevard	Erie Beach	Chatham-Kent	Alteration	Granted: July 18, 2018
51-2018	2715 Talbot Trail	Romney	Chatham-Kent	Alteration	Granted: Aug 28, 2018
52-2018	22153 Thames Road	Ekfrid	Southwest Middlesex	Alteration	Granted: Aug 10, 2018
55-2018	18106 Erie Shore Drive	Erie Shore Drive	Chatham-Kent	Alteration	Granted: Aug 22, 2018
59-2018	Gordon Whalls Drain	Southwold	Southwold	Alteration	Granted: Aug 02, 2018
64-2018	13675 Fysh Line	Howard	Chatham-Kent	Alteration	Granted: Aug 10, 2018
65-2018	McCollum Drain & Branch "A"	Orford	Chatham-Kent	Alteration	Granted: Aug 10, 2018
66-2018	725 Lefaive Drive	Lighthouse Cove	Lakeshore	Construction	Granted: Aug 03, 2018
67-2018	Duffus Drain	Orford	Chatham-Kent	Alteration	Granted: Aug 10, 2018
68-2018	Downie Drain	Harwich	Chatham-Kent	Alteration	Granted: Aug 10, 2018
69-2018	6600 Talbot Trail	Raleigh	Chatham-Kent	Construction	Granted: Aug 02, 2018
70-2018	20 Oriole Parkway	Chatham	Chatham-Kent	Construction	Granted: Aug 02, 2018
71-2018	35 Berry Street	Chatham	Chatham-Kent	Construction	Granted: Aug 02, 2018
72-2018	305 Island Crescent	Lighthouse Cove	Lakeshore	Construction	Granted: Aug 03, 2018
73-2018	61 Railroad Street	Thamesville	Chatham-Kent	Construction	Granted: Aug 10, 2018
74-2018	22433 Thames Road	Ekfrid	Southwest Middlesex	Alteration	Granted: Aug 10, 2018
75-2018	22436 Thames Road	Ekfrid	Southwest Middlesex	Alteration	Granted: Aug 10, 2018
76-2018	Leader Drain	Howard	Chatham-Kent	Alteration	Granted: Aug 14, 2018
77-2018	8 Wolfe Street	Shrewsbury	Chatham-Kent	Construction	Granted: Aug 22, 2018
78-2018	6937 Riverview Line	Raleigh	Chatham-Kent	Construction	Granted: Sept 04, 201
79-2018	19090 Haven Avenue	Lighthouse Cove	Lakeshore	Construction	Granted: Aug 22, 2018
80-2018	15 O'Brien Drive	Chatham	Chatham-Kent	Construction	Granted: Aug 22, 2018
81-2018	New Scotland Line over Bates-Bloomfield Dain	Harwich	Chatham-Kent	Alteration	Granted: Aug 22, 2018
82-2018	27469 Marsh Line	Dunwich	Dutton Dunwich	Construction	Granted: Aug 22, 2018
83-2018	3316 Talbot Trail	Romney	Chatham-Kent	Alteration	Granted: Aug 27, 2018
84-2018	Bostwick Drain and Branches	Orford	Chatham-Kent	Alteration	Granted: Sept 04, 2018
85-2018	18370 Marine Park Drive	Rondeau Bay Estates	Chatham-Kent	Alteration	Granted: Sept 04, 2018
86-2018	18360 Marine Park Drive	Rondeau Bay Estates	Chatham-Kent	Alteration	Granted: Sept 04, 2018
87-2018	73 Wellington Street	Shrewsbury	Chatham-Kent	Alteration	Granted: Sept 04, 2018
88-2018	18506 Antrim Road	Howard	Chatham-Kent	Construction	Granted: Sept 04, 2018
89-2018	99 Legacy Lane	Chatham	Chatham-Kent	Construction	Granted: Sept 05, 2018
90-2018	Johnston Tinline Drain	Howard	Chatham-Kent	Alteration	Granted: Sept 06, 2018
91-2018	18026 Melody Drive	Lighthouse Cove	Lakeshore	Construction	Granted: Sept 12, 2018
92-2018	9531 River Line	Harwich	Chatham-Kent	Construction	Granted: Sept 13, 2018
93-2018	8536 Havens Lake Road	Aldborough	West Elgin	Alteration	Granted: Sept 12, 2018
94-2018	20971 Woodland Road	Wheatley	Chatham-Kent	Construction	Granted: Sept 13, 2018
95-2018	61 Adelaide Street	Shrewsbury	Chatham-Kent	Construction	Granted: Sept 13, 2018
96-2018	59 Brock Street	Shrewsbury	Chatham-Kent	Alteration	Granted: Sept 13, 2018
97-2018	10th Concession Rd Br of the West Ogle Drain	3444 35 3 3 7 X	Leamington	Alteration	Granted: Sept 13, 201
98-2018	Coulter Drain	Mersea	Leamington	Alteration	Granted: Sept 13, 2018
99-2018	West Ogle Drain	Mersea	Leamington	Alteration	Granted: Sept 13, 201
00-2018	87 Wellington Street	Shrewsbury	Chatham-Kent	Construction	Granted: Sept 18, 201
01-2018	54 Princess Street	Shrewsbury	Chatham-Kent	Alteration	Granted: Sept 18, 201

Staff Report

O.Reg. 152/06 Permit Applications (2018)

B.D. 10/18/18

APP#	LOCATION	COMMUNITY/ TOWNSHIP	MUNICIPALITY	APP'N TYPE	DECISION
202-2018	Jacobsen Drain	Ekfrid	Southwest Middlesex	Alteration	Granted: Sept 18, 2018
203-2018	11558 Bates Drive	Rondeau	Chatham-Kent	Construction	Granted: Sept 18, 2018
204-2018	Dieleman Drain	Ekfrid	Chatham-Kent	Alteration	Granted: Sept 18, 2018
205-2018	32242 Erin Line	Dunwich	Dutton Dunwich	Construction	Granted: Sept 18, 2018
206-2018	45 Tuscany Trail	Chatham	Chatham-Kent	Construction	Granted: Sept 18, 2018
207-2018	Silver Clay Line	Aldborough	West Elgin	Construction	Granted: Sept 25, 2018
208-2018	4189 Carriage Road	Delaware	Middlesex Centre	Alteration	Granted: Sept 25, 2018
209-2018	9433 Longwoods Road	Strathroy-Caradoc	Strathroy-Caradoc	Construction	Granted: Sept 25, 2018
210-2018	19015 Lakeside Drive	Lighthouse Cove	Lakeshore	Construction	Granted: Sept 25, 2018

Recommendation:

That permit applications #127-2018, #128-2018, #151-2018, #152-2018, #155-2018, #159-2018, and #164-2018 to #210-2018 be received for information.

9.3) Conservation Areas

9.3.1) June 1 – September 30 Visitation / Camping Stats

Longwoods Road Conservation Area – 6,063 people (6,655 in 2017) (Includes 2 people per pay & display permit (transaction) Pay and Display Permits - 818 vehicles (944 in 2017)

E.M. Warwick Conservation Area – 1,640 people (1,290 in 2017)

Big Bend Conservation Area – 1,263 people (801 in 2017)

C.M. Wilson Conservation Area – 6,782 people (14,299 in 2017) (Includes 2 people per pay & display permit (transaction) Pay and Display Permits – 317 vehicles (712 in 2017)

Sharon Creek Conservation Area - 1,060 people

Season's Day Use Permits: 130-2018 Day Use Permits sold to Sept.30 (49 sold 2017 to Sept.30).

9.3.2) Conservation Areas

<u>Big Bend CA-</u> staff are working on properly delineating 25 campsites with posts and numbers, and adding this campground to the "Let's Camp" software which allows reservations to be booked online through our website.

<u>EM Warwick CA</u>- staff have upgraded the interior of the main Community Hall, with fresh paint, furniture, artwork, games, books and a user manual for our guests. The Antler River Guardians assisted with this along with mulching and installation of a foot bridge on the trail to Lake Erie.

<u>CM Wilson CA-</u> staff have applied to Pioneer Canada for a \$50,000 grant that would provide base funding for a splash pad for area visitors.

<u>Longwoods CA-</u> staff are getting quotes for the installation of an automatic front gate for the area, as we currently pay our tenant to manually open and close this gate each day.

<u>Rowsom CA</u>- new main signage at the trail head to be installed shortly, new logos, regulations and a map of the property.

<u>Crane CA</u>- an appraisal of the property is complete, now awaiting offers from interested parties. Final agreement to sell property to be presented at next Board Meeting.

<u>Ward CA</u>- Chatham-Kent council approved the severance of this property, which will soon mean donation of this 26 acre Carolinian Woodlot/ Wetland.

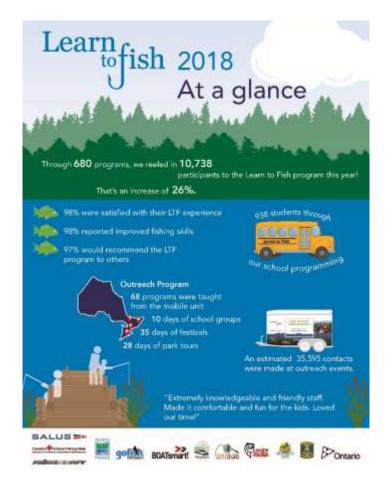
<u>Conservation Areas Annual Workshop</u>- Geneva Park, Orillia- staff will be attending this 3 day workshop to learn about new technologies, social media, equipment, and new methods of managing our lands.

9.3.3) Conservation Area Events

"Learn to Fish" – September 1st at Sharon Creek Conservation Area

Presented by the Ministry of Natural Resources and Forestry staff, this was a very well attended event - the first time held at Sharon Creek Conservation Area. An estimated 50 people participated in the morning and afternoon sessions. The LTVCA is encouraging new events at Sharon Creek, and we hope to have this one back in 2019! This was a free workshop included in a day use pass or season's pass to the conservation area.





"Spirit of the Harvest" September 30th

Our first "Spirit of the Harvest" event was a success despite the weather. Modifications in the event format were made due to rain including admission by donation. Approximately, 160 participants donated \$440 in jars strategically placed by the food and coffee. It was great to see a lot of young families and new neighbours at the event as well as returning guests from "Twilight Tuesdays". Many thanks to all the volunteers that helped to make the day a great one!











"Cross-country Running Meets" September 27 and October 3 at Longwoods Road Conservation Area

Each year the Thames Valley District School Board books the grounds and staff at the Longwoods Road Conservation Area for 2 fall cross-country running meets. The Conservation Area charges \$2 per vehicle (spectators) and \$25 per school entrance to the events.

This year, the Invitational Meet was held on September 27 with 1,200 spectators (610 vehicles) and 900 students (12 schools) attending. Gate revenue totalled \$1,521.80.

The Northwest Regional meet was held on October 3 with 2,020 spectators (1,010 vehicles) and 1,575 students (21 schools) attending. Gate revenue totalled \$2,545.50.

These 2 events require a minimum of 10 staff and volunteers to work at least 4-5 hours the day of the events - taking entrance admissions, directing traffic and parking cars. This is in addition to the staff time preparing the site days ahead. Even though the revenue generated was over \$4,000 for the 2 days, total staff time and their safety must be factored in to access whether or not these events should continue in 2019.

9.3.4) Enforcement – Section 29

<u>MEU-</u> with camping season coming to a close, MEU staff will focus on busy day use areas like Sharon Creek CA.

9.4) Conservation Services

9.4.1) Conservation Services

1. Recent Wetland Restorations:

Necent Wethana	<i>ACSIONALIC</i>					
	Total	Wetland				Wetland
Last Name	Acres	Address	Municipality	Northing	Easting	Year
		13675 Fysh				
Cruickshank	2	Line	Chatham-Kent	4710959	422223	2018
Gill	2.5	743 Quinn line	Chatham-Kent	4676870	386666	2018
		10588-10590				
Rigby	2	Sinclair Line	Chatham-Kent	4686847	424033	2018
		10511				
		Northwood				
Van Overloop	1	Line	Chatham-Kent	4702539	409769	2018
	7.5					



Figure 1 Cruickshank project before

Figure 2 Cruickshank project after

2. Recent Grant Opportunities

- a. Environment & Climate Change Canada (ECCC) Climate Action
 - *i.* Objectives are engaging indigenous peoples, youth, and students around climate action
- b. Sustainable Forestry Initiative
 - *i.* Objectives are similar to the above but more partnership and forestry focus. Both ECCC and SFI will be partners with the LTVCA in these efforts.
- c. Chatham-Kent Community Foundation
 - *i.* Objective is a pilot project for urban clean water diversion or storm water collection projects. This may be expanded to septic incentives for rural communities
- d. Wildlife Habitat Canada

i. Objective is to create a program to help fund wetland restoration.

3. Alternative Land Use Service (ALUS)

a. An information night was held for people who were interesting in becoming a member of the Partnership Advisory Committee on August 22, 2018. A presentation was made by Casey Whitelock on the responsibilities of a PAC member and time expectations.

b. To date eight people have stepped forward to be part of the PAC and 4 are farmers and 4 are industry professionals. The first ALUS Chatham-Kent PAC meeting is set for November 15, 2018 at 7 pm. We will be creating our terms of reference, voting on executive and deciding the payment amount for ALUS participants per acre.

c. ALUS Chatham-Kent also now has a web presence <u>https://alus.ca/alus_community/alus-chatham-kent/</u> that speaks about the community and the main focuses. Also, a Twitter handle @ALUSChathamKent for up to date information on the program.

d. A launch event is expected to occur in January for the public and anyone interested in being an ALUS participant.

4. Eastern District

New Conservation Partner

Lower Thames has been working with *Forest Gene Conservation Association* and watershed residents to locate and evaluate healthy butternut trees (juglans cinerea – cousin to black walnut, juglans nigra) in the hopes of reversing the widespread effects of butternut canker (Sirococcus clavignenti-juglandacearum) before this species goes into further decline. Since butternut canker was confirmed in Ontario in 1991 at least 30% of our native butternut trees have succumbed to the disease, with most of the survivors being hybrid butternut x Japanese heartnut ('buartnut'). The race is on to find the few trees exhibiting canker resistance in the hopes of re-establishing these trees across our watershed and Southwestern Ontario. Discussions are ongoing to see if FGCA and LTVCA can combine our resources to establish and operate a butternut orchard at one of our conservation areas in order to provide a gene bank from grafts taken from canker resistant trees and to provide a seed production orchard.

Canadian Chestnut Council

In late August Dr. Dragan Galic, Ron Casier, and their summer students Cole and Rob planted 25 blightresistant native chestnut seedlings at Longwoods Road Conservation Area, the first 'gene conservation planting' the Canadian Chestnut Council and Lower Thames Conservation have worked together on. That same day we planted two landowner sites in Strathroy-Caradoc and in Dutton-Dunwich. We look forward to continuing to work with landowners to locate mature trees showing blight resistance and to working with the Canadian Chestnut Council to include blight-resistant native chestnut trees in conservation projects where appropriate.

5. First Nations Partnerships

Meesingw- Delaware Nation

- a. Members are actively completing projects.
- b. A partnership presentation between LTVCA and Meesingw has been accepted for the Latornell conference in November.

Chippewas of the Thames (COTTFN)

- a. Staff and GM Mark Peacock attended a meeting with the COTTFN-Lands and Environment department, to share each organizations area of interest and discuss potential areas where we can work together. Of interest is benthic monitoring, large scale prairie and tree plantings as well as erosion control along the Thames River.
- b. Potential use of COTTFN summer students at CA properties, and restoration sites.

6. Educational events

- a. University of Guelph Ridgetown Campus tour of Devereaux CA
- b. Carolinian Seed collection workshop One day at Delaware First Nation Community

9.4.2) Aquatic Species at Risk (SAR)

1. Aquatic Species at Risk (SAR)

LTVCA staff coordinated delivery of a freshwater mussel identification workshop to First Nation communities at Delaware Nation at Moraviantown on September 26. Fisheries and Oceans Canada (DFO) staff provided in class training and in-field identification at a nearby site in the Thames River. Representatives from Delaware Nation, Chippewas of the Thames First Nation (The Antler River Guardians) and the Munsee-Delaware Nation participated. Oneida Nation of the Thames was also invited to participate.



2. Drain Classification Project

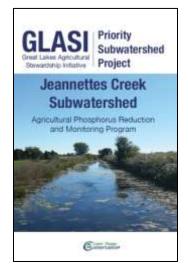
Flow assessments were completed on 15 drains and fisheries assessments were completed on six drains as part of a DFO-funded drain classification project. Final reporting will be completed by December 2018.

9.4.3) OMAFRA & Phosphorus Reduction

Phosphorus Reduction Updates

1. ECCC - McGregor and Jeannettes Creek Phosphorus Reduction Program

The LTVCA was successful in acquiring \$600,000.00 from the Environment and Climate Change Canada (ECCC) Great Lakes Protection Initiative for the project entitled the "McGregor and Jeannettes Phosphorus Reduction Program." The project will occur from June of 2018 to March of 2022. The funding acquired from ECCC will be used to extend the monitoring and research activities that began through the GLASI Jeannettes Creek Priority Subwatershed Project form 2015-2018. The new project will be geographically expanded and will offer financial contributions to agricultural producers within the entire catchment areas of McGregor and Jeannettes Creek to implement Best Management Practices (BMPs). Some additional monitoring activities will also occur within McGregor Creek over the duration of the project. The main of goal of the project is to improve soil health and reduce the amount of agriculturally sourced phosphorus entering the Thames River, Lake St. Clair and ultimately the Western Basin of Lake Erie.



LTVCA project staff are currently working on proposals to leverage the ECCC dollars to secure additional funds to launch this project in its designed entirety. The LTVCA intends to launch the Jeannettes and McGregor Creek BMP incentive program during December of 2018 or January of 2019. Limited resources and uncertainty regarding provincial ministry support for LTVCA phosphorus reduction initiatives have hindered our capacity to launch the program at an earlier date.

The LTVCA has continued to maintain the Jeannettes Creek study area monitoring network and BMP verification sites during this time period. The LTVCA has observed and collected water quality data during flow events at the Jeannettes Creek pump stations during the months of September and October. Minimal volumes of flow have been observed at the edge of field sites during this time period. Staff are actively preparing LTVCA monitoring resources for the Fall, Winter, and Spring, when the vast majority of agricultural runoff will occur.



Environment and Climate Change Canada Environnement et Changement climatique Canada

2. Phosphorus Reduction Initiative – Research Reports

1. Soil and Water Assessment Tool (SWAT) Model – Jeannettes Creek Study Area

 All data collected from the Jeannettes Creek study area during the GLASI-Priority Subwatershed Project has been submitted to the University of Guelph Water Resources Engineering team. The data is being used to calibrate the SWAT model that is being developed for the study area. The SWAT model will simulate base nutrient loads from the study area pump schemes and will quantify nutrient reductions that resulted from the implementation of agricultural BMPs. The report should be complete by January of 2019.

2. BMP Verification Sites – Preliminary Results Report

Dr. Merrin MacRae and Dr. Janina Plach from the University of Waterloo have received all of the LTVCA collected data from the Merlin BMP edge of field verification research sites. A preliminary results report is being drafted to assess the effectiveness of the two different cropping systems at retaining nutrients on the two Brookston Clay fields. The Initial report will be complete by January 19th of 2019. We do not expect to have conclusive findings at this time, however the report will provide an update on preliminary research findings from the sites.

3. Phosphorus Filter Tank Site

The LTVCA continues to monitor water quantity and quality at the new phosphorus filter tank site. No significant flow events have been sampled or observed during the period of August-September.

The LTVCA is working alongside OMAFRA, and the Thames River Phosphorus Reduction Collaborative (TRPRC) to monitor the phosphorus filter tank and Filtrexx NutriLoxx P sorption text material to determine if it is a cost-effective practice that can be implemented to reduce phosphorus loads from subsurface tile drainage systems on fields with high soil P test values.





9.5) Community Relations

9.5.1) Media releases

Media releases are written as needed to focus attention on Conservation Authority programs and services. They are emailed to local print and radio media, watershed politicians, LTVCA and LTVCF Directors, member municipalities of the LTVCA (Clerks, Councils, CAO's), Ska-Nah-Doht Village Advisory Committee, LTVCA staff, neighbouring Conservation Authorities and Conservation Ontario.

Two media releases were written/distributed between August 3 and September 30, 2018.

- 1. (September 4) "Outdoor Education Programs at Longwoods"
- 2. (September 4) "Spirit of the Harvest at Ska-Nah-Doht"

All Directors are emailed a copy of the above media releases and as well, they are posted on our website, Facebook and Twitter accounts. Local watershed media contacts (daily and weekly print, television and radio stations) database update is ongoing.

9.5.2) Displays and Exhibits

Displays and Exhibits are created to update programs and information for the public.

• The **2018 International Plowing Match (IPM)** was held September 18-22, in Pain Court, Chatham-Kent. The LTVCA, St. Clair Region and Essex Region Conservation Authorities created a tent exhibit around the theme "Be a Watershed Hero and what the CA's are doing to protect the Great Lakes". This theme incorporated components of our Conservation Authority programs and services including phosphorus reduction, wetlands, stewardship/BMPS etc. The tent also incorporated components of the Children's Water Festival which was not be held as a stand alone festival in 2018 due to obvious conflicts of time and resources. Nearly 6,000 visitors toured our tent!

(PowerPoint presentation at meeting.)



The new **Virtual Reality Sandbox** was a huge hit at our IPM tent! It was built by Fisher Flying Products and funded by Union Gas, The Friends of the St. Clair River, Chatham-Kent Children's Water Festival, LTVCA, SCRCA and ERCA. This unique teaching tool can be used to demonstrate a multitude of watershed concepts and issues such as erosion, wetland dynamics, flooding, stewardship projects, regulated areas and much more to a wide audience. It will be shared between the 3 Conservation Authorities and their respective Water Festivals and The Friends of the St. Clair River for demonstrations at day long events, fairs, and possibly libraries and other venues. The VR Sandbox takes some considerable effort to transport and set up so we will be selective as to the longer duration events it will be taken to.



(Demonstration at meeting.)

9.5.3) Advertisements, Marketing, Branding

Paid Advertisements are taken out in the local tourist guides for Chatham-Kent, Middlesex and Elgin for C.M. Wilson and Longwoods Road Conservation Area for 2018. Staff also take out advertisements in the local print media to inform the public about workshops and seminars.

A new **Visual Identity Branding Manual** for the LTVCA is being developed. A Visual Identity Branding Policy is nearing completion.

9.5.4) Presentations

Presentations are provided to community groups upon request. Support is offered to staff for official openings, funder recognition ceremonies and community events.

9.5.5) Committees and Meetings

Staff attend meetings of the Thames-Sydenham and Region Source Protection Region's communications team as they develop communication products. Staff also participate on planning

committees, which meet regularly for the Children's Water Festival – Chatham-Kent and Lambton, St. Thomas/Elgin and the Communications Subcommittee for the Thames River Clearwater Revival. The International Plowing Match tent planning committee met regularly over the past year.

Upcoming is a conference called "The River Talks" to be held at Museum London October 18-20.



9.5.6) LTVCA Website and Social Media (YouTube, Twitter and Facebook

The LTVCA's website and social media (YouTube, Twitter and Facebook) are updated several times daily with current/relevant Conservation Authority information and events. The website address is <u>www.ltvca.ca</u>. We encourage you to check in with us daily and share with your friends! Updates highlighting LTVCA projects, events and current conservation activities relating to the watershed are posted. Photos and video clips of programs and projects are taken regularly.

The LTVCA's Twitter account has nearly 800 followers. LTVCA's Facebook page has nearly 1,300 followers and the Ska-Nah-Doht Village Facebook page has 999 followers.

9.5.7) Lower Thames Valley Conservation Foundation

The next meeting of the LTVC Foundation is scheduled for November 21st.

The Lower Thames Valley Conservation Foundation \$500 Bursary was awarded to Eddie Merks of Dutton.

The Lower Thames Valley Conservation Foundation finally received some good news regarding the **Feasibility Study application** that was submitted for Longwoods back in February. It was approved! A Request for Proposals for the hiring of a Project Manager has been advertised on the LTVCA website and Facebook page and also circulated to the CAO's and Clerks of the LTVCA's member municipalities. A Project Manager will be hired in October. The grant is for \$72,000 for one year. This project is being overseen by a subcommittee of Conservation Directors and staff and Foundation Directors.

As well, the OTF accepted a new capital grant application for cabin restoration at Longwoods through the Lower Thames Valley Conservation Foundation. We hope to find out whether or not this application will be funded in the new year.

The McKinlay Memorial Forest Dedication Service at C.M. Wilson Conservation Area on Sunday, September 9 was well attended by over 500 people. This event is supported by the McKinlay Funeral Homes Ltd. However, the threat of inclement weather played a significant role in the reduced number family and friends as this event usually has nearly 1,000 people participating. Mark Peacock welcomed everyone on behalf of the Conservation Authority and Conservation Foundation. Several large ceremonial stock trees were planted following the service and amd reception was held at the Children's Safety Village.



A Memorial Forest Dedication Service was held at the Big Bend Conservation Area on September16. This service was for those who had a memorial tree planted at Rowsoms Tilbury West, Big

Bend, Mosa and Sharon Creek Conservation Area memorial forests over the past year. Dan McKillop had agreed to bring greetings from the Conservation Authority and Conservation Foundaton and had extended an invitation to Bill Denning of Denning Funeral Home in Rodney to officiate. A ceremonial trees was planted.



The Tilbury Northside Park Memorial Forest Dedication Service was held on September 23. Over 100 people attended. Dan McKillop brought greetings on behalf of the Conservation Authority and Conservation Foundation. A ceremonial tree was planted.





9.5.8) Publications

Community Relations staff assist Conservation Authority staff with publications as needed. Publications are posted on our website for downloading.

9.5.9) Applications

Community Relations staff apply for project funding as grants become available.

9.5.10) Volunteers

Our volunteers continue to play a huge role with the LTVCA. From helping with special events to trail work, we are very grateful for their support.

Of special note is our 2017 Volunteer Hero award winner that helped out just about every day of the Conservation Authority plowing match week long tent setup, the 5 day public event and the 2 day take down. Many thanks to our friend **Don Hector** (alias Chatham-Kent and Lambton Children's Water Festival Coordinator!).



And a **Big thanks to our many volunteers that helped out at the 'Spirit of the Harvest'** event at Ska-Nah-Doht and Longwoods on September 30th. They were highlighted in pictures under our Events section of the agenda.

9.6) Conservation Authority Education

9.6.1) Conservation Youth Group Workshops

Workshops are held at Longwoods Road Conservation Area and LTVCA outreach locations to youth and their leaders. Youth groups work towards badges for various outdoor activities. There were 24 participants in August. (0 in 2017)

9.6.2) Conservation Field Trips for Students and More!

School program statistics for June and September - 505 students in 2018 . (433 in 2017) Our co-op turned summer student Eddie Merks proved a good luck charm this season as we successfully fledged 9 Eastern Bluebirds. Our Longwoods Workshop staff allowing the open areas to remain uncut may also have contributed a little bit to this success! Wonderful to see the splashes of colour flashing by in the sky! Eddie, a resident of Dutton-Dunwich, was also the recipient of this year's LTVCA Foundation Student Bursary. Offering education and practical learning experiences to young energetic minds will provide a great stewardship-stake hold in Ontario's future.

Plenty of young minds will funnel through Longwoods over the next couple of months. Outdoor learning provides students with a new take on subjects, and participating teachers know and share with us the value of getting their charges out-of-doors to enjoy learning about our natural resources and heritage. Conservation Education and Ska-Nah-Doht Village and Museum have been working together to combine and enhance our programming to reflect the regard for nature inherent within First Nations' teachings. This year will be a transitory period where teachers can still access older programs while dipping their toes into the pond of the new ones. Already there is a great positive response to our efforts from participants!

9.6.3) Chatham-Kent & Lambton Children's Water Festival

See you in 2019!

9.6.4) Ska-Nah-Doht Village and Museum Field Trips for Students

School program statistics for June and September - 638 students . (850 in 2017)

Increased awareness of Longwoods, Ska-Nah-Doht and LTVCA services was assisted this summer with the efforts of students Mila Costello and Eddie Merks (Canada Summer Jobs). At Sunfest in London, they engaged over 5,000 people over the course of 4 days. The potential increase in participation on-site could be seen at "Twilight Tuesdays" but the weather continues to work against all our good efforts. With 2 cancellations due to severe weather, our numbers were 227 compared to last year's 297. On the other hand, with the London Chapter OAS at Artifact Day (July) we looked at an all-time high of 18 collections. This not only helped the collectors and scholars but educated and brought to life the past with 47 participants. Most of the crowd stayed all afternoon because of the variety and scope of many of the collections.

This school season is starting to take off with bookings up slightly. October is now the most popular month while November was the peak last year at this time. Classes are also booking into 2019 in anticipation of a snowy winter or it is possible that school board outdoor funding may have more to do with it.

On Friday, September 28 we were host to a taping of "Future History" for the *Aboriginal Peoples Television Network* (APTN) at the village. It was the crews' first visit and all were impressed with the facility. The team took video and drone footage. The sequence features an interview with Ray John Jr., a spiritual leader from Oneida. Ray was 5 months old at the opening of the village in 1973; his picture appears in a St. Thomas news article. He has always had an affinity to Ska-Nah-Doht bringing many community members over for medicinal plant and natural healing walks. We will be notified when the show goes to air.



Left: Ray John Jr., Host – Kris Nahrgang and crew

With the retirement of Rose Nicholas, Village Education Technician at the end of this year, it is a time to reflect and a time to look ahead. It is still our hope to mentor a new person in 2018 while stepping into the next chapter for 2019. We are currently working on a job description and plan to hold job fairs at local First Nation venues to find the right person to enhance our staff.

9.6.5) Ska-Nah-Doht Village and Museum Group Workshops and Group Self-guided Tours Workshops are performed at Ska-Nah-Doht and LTVCA outreach locations for youth and their leaders. Youth groups work towards badges for various outdoor activities.

A total of 440 participants and their leaders took part in Ska-Nah-Doht Village tours and workshops from June 1 – Sept.30, 2018. (625 in 2017)

9.7) Ska-Nah-Doht Advisory Committee Minutes



Ska-Nah-Doht Advisory Committee

MINUTES

A meeting of the Ska-Nah-Doht Advisory Committee was held at the Resource Centre in Longwoods Road Conservation area at 6:30 P.M. on Thursday, April 12, 2018. The following members were in attendance: D. Fairbairn, Darcy Fallon, Bill Bruinink, Gayle Bogart, Stan Caveney, and Ron Doane. Also in attendance: Karen Mattila. Regrets: Mark Peacock, LTVCA General Manager, B. Carey, Community Relation Coordinator and A. Vriends, Clerk-Secretary.

1. Minutes of the Last Meeting

1. G. Bogart - S. Caveney

Moved that the minutes of the November 24, 2017 meeting be approved.

CARRIED

2. Business for Approval

2.1) Election of Chair and Vice-Chair

Ms. Karen Mattila assumed the chair for the elections and declared all elected offices vacant and outlined the voting procedures.

a) Chair

Ms. Mattila called for nominations for Chair of the Ska-Nah-Doht Advisory Committee.

- 5. Caveney nominated Darcy Fallon. R. Doane nominated Don Fairbairn.
- Ms. Mattila called twice more for nominations. There being no further nominations,

2. G. Bogart

Moved that nominations be closed.

CARRIED

D. Fallon declined the nomination.

Mr. Don Fairbairn was declared to be elected as Chair.

b) Vice-Chair

Ms. Mattila called for nominations for Vice-Chair of the Ska-Nah-Doht Advisory Committee.

S. Caveney nominated Darcy Fallon. R. Doane nominated Bill Bruinink.

Ms. Mattila called twice more for nominations. There being no further nominations,

1. S. Caveney

Moved that nominations be closed.

CARRIED

D. Fallon declined the nomination.

Mr. Bill Bruinink was declared to be elected as Vice-Chair.

S. Caveney – G. Bogart

Moved that Don Fairbairn and B. Bruinink be elected as Chair and Vice Chair for 2018-2019.

CARRIED

2.2) Appointment of Sub-Committees

Note: the Curator is an ex-officio member of all Sub-Committees

4. R. Doane – S. Caveney

Moved that the Sub-Committees be accepted as presented.

CARRIED

a) Education - S. Caveney and G. Bogart

b) Village Build - D. Fairbairn and D. Fallon

c) Policy - B. Bruinink and M. Peacock (LTVCA GM is an ex-officio member of this Sub-Committee)

d) Events/Fundraising - R. Doane

2.3) Policy Review

Review of the following policies is deferred to the next meeting -Finance Policy, Interpretation & Education Policy and Research Policy. The Policy Sub-Committee is scheduled to meet on Monday, May 8.

2.4) 2018 Committee Meeting Schedule

5. R. Doane – B. Bruinink

Moved that the 2018 Ska-Nah-Doht Committee Meeting Schedule be as follows: - May 31 at 6:00 p.m. - September 21 at 2 p.m. - November 23 at 2 p.m.

CARRIED

3. Business for Information

3.1) Brief Summary of 2017

Presentation was given.

2

3.2) 2017 Audited Statements

Section pertaining to Ska-Nah-Doht was reviewed.

3.3) Summer Student Employment Applications

Two summer positions have been applied for through Canada Summer Jobs.

3.4) Ska-Nah-Doht Fund

The Ska-Nah-Doht Fund as at the end of 2017 was negative \$5,904.97 pending the Canada 150 grant deposit. There has been no further correspondence from the Canada 150 project manager but a new deadline was announced, funding by June 30, 2018. The members will be notified as soon as confirmation is received.

3.5) Community Museum Operation Grant (CMOG) 2018/2019

The CMOG grant is due by June 30, 2018.

3.6) Ska-Nah-Doht Recognition Program

A discussion was had pertaining to the method of recognition. The events Sub-Committee will meet to bring forward ideas to the next meeting.

3.7) Volunteer Awards Program

No applications were submitted for 2017. The Volunteer Roster will have to be reviewed and updated. This task will be given to a summer staff. Suggestions for 2018 will be presented at the November meeting.

3.8) Upcoming 2017 Events

6. R. Doane - S. Caveney

Moved that agenda items 3 through 3.7 be received for information.

4. Other Business

CARRIED

4.1) Feasibility Study Update

An application has been submitted to Trillium by the Lower Thames Valley Conservation Foundation (LTVCF) in partnership with the LTVCA for funds to conduct a Feasibility Study for Longwoods/Ska-Nah-Doht. The outcome of the application will be announced in June 2018.

4.2) New Job Posting - Cultural Services Assistant

After over 30 years of service, Village Education Technician, Rose Nicholas will be retiring at the end of 2018. To ease the transition, a 6 month contracted position has been created. The *Cultural Services Assistant* will assist in the daily operations of the Ska-Nah-Doht Village and Museum; including educational programming, community engagement and co-ordinating cultural events. This is a unique entry level, mentored learning experience with an opportunity for the position to turn into a 1 year contract in 2019.

We are currently interviewing for the position.

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5. Adjournment

7. R. Doane – D. Fallon Moved that the meeting be adjourned.

CARRIED

autrain Don Fairbairn

Chair

9.8) Joint Health & Safety Committee Minutes

LOWER THAMES VALLEY CONSERVATION AUTHORITY



JOINT HEALTH AND SAFETY COMMITTEE MINUTES

WEDNESDAY, AUGUST 28, 2018

A meeting of the Lower Thames Valley Conservation Authority (LTVCA) Joint Health and Safety Committee (JHSC) was held August 28, 2018. Committee members present were: V. Towsley, T. Casier, P. Kominek and A. Vriends.

The Committee reviewed the following four procedures: Fish Sampling / Handling Safety, Musscle Sampling, Seine Sampling and Electrofishing Safety. It is recommended that a section on extreme weather be added to all four - if weather inhibits a worker from wearing the appropriate PPE the activity should not be undertaken.

Safety Procedure - Chainsaw Operations - The Environmental Project Coordinator and JHSC have reviewed and with changes to the Hydro/Power lines section find it acceptable.

Committee is compiling a Health and Safety - Needs Assessment for all LTVCA sites.

Site inspections of Merlin, Ward, Two Creeks, Big O, Rowsom, and Lighthouse were conducted. See completed Workplace Inspection Records for details.

ITEMS NOTED IN RED and BOLD are considered to need immediate attention.

LTVCA Joint Health and Safety Committee Workplace Inspection Record

LOCATION	Merlin	8:26 - 8:37 a.m.				
			Complete by (date)	Alternative Action	Required to Repair	By (Date/initials)
Item; location	Hazards Observed	Recommended Action			Action Taken/	
Inspection Location: see below Date/Time of Inspection:					August 28, 2018 / s	ee below

LOCATION	Merlin	8:26 - 8:37 a.m.		
	- none noted			
LOCATION	Ward	8:59 - 9:02 a.m.		
LOCATION		0.55 - 5.02 a.m.		
	- none noted			
LOCATION	Two Creeks	9:58 a.m.		
Large Pavilion	- trees rubbing roof of pavilion	- trim trees		
Peace Bridge	- gap from ground to bridge	- build up/level step onto bridge		
Red Trail	 hang up tree on path 3 dead trees leaning loose barbwire 	- remove - remove - cut & remove		
Yellow Trail	- 3 dead standing trees	- remove		
North Bridge	- not blocked off	- close bridge		
Last Bridge	- dead ash	- remove		
	- no handrail - pile of debris	- install - remove		
Property Line	- washout of tiles	- fix		
Trail	- culvert erosion	- fix		
Bridge east of Hike Bridge	- in disrepair	- remove		

LTVCA Joint Health and Safety Committee Workplace Inspection Record

Date/Time of Inspection: August 28, 2018 / see below

Inspection Location: see below

Item; Iocation Hazards Observed		Recommended Action	GM Response		Action Taken/	Completed
			Complete by (date)	Alternative Action	Required to Repair	By (Date/initials)
LOCATION	Big 'O'	11:05 - 11:23 a.m.				
	- none noted					
LOCATION	Rowsom	11:32 - 11:52 a.m.				
Prairie Trail	- uneven, uncut trip hazards	- needs maintenance				
Bridge	- rotted boards	- replace				
Laneway	- dead cotton woods	- remove				
NOTE	ATV's still gaining access to the park					
LOCATION	Lighthouse	2:20 p.m.				
in front of quilt sign & back of house	- 4" black PVC pipe sticking out of ground WHAT is it?					

9.9) Wheatley Two Creeks Association Minutes

WHEATLEY TWO CREEKS ASSOCIATION

Minutes of regular meeting held **August 2nd**, **2018** at Wheatley Legion

Attendance: Rick & Forest Taves, Gerry Soulliere, Ron Haley, Mike Diesbourg, Lorna Bell, Joe Pinsonneault, Pauline Sample, Bruce & Marjorie Jackson, Lee & Linda Pearce, Colleen Campbell.

Minutes: With the amendments that the Essex Kent Christian Farmers are only giving away produce and selling food and only at the Dale Butler concert. Also our Charitable Status was not a renewal but standard practice each year. The minutes as amended by Phil, were sec. by Linda.

Agenda: Moved by Mike sec. by Joe agenda be accepted as outlined (Carried)

Memorial Groves: A few of the trees have been infested with Tent caterpillars, the affected branches will be trimmed.

Prop. & Equip.: The new motor that was purchased for the Bushhog has the wrong diameter shaft. Gerry will try to return it and possibly purchase a new one. A proposal was made for safety, that directional signs be installed at the Red & Blue bridges telling any trail riders which direction to go, they will change each month. The Dance Pad has been sanded, still working on getting the Logo applied.

Concerts: Rick will introduce Winterline, Joe will introduce the warmup act. The remaining weeks have been covered for parking. Will need \$4302.29 to break even without the grant applied. \$240.00 in tickets have been sold so far for the Quilt raffle.

Financial Report: The Budget was tabled by Ron, it was moved by Linda sec. by Lorna. It is to be considered a fluid document and will not be approved till Sept. or Oct. The Account Balance as of June 30th was \$35,668.74. The account Balance as of July 31st was \$32,702.75. Balances were moved by Rick sec. by Joe.

Correspondence: None

Old Business: None

New Business: A proposal by Larry to start a Bike Club for kids at Two Creeks and to start it on the FishFest weekend will not be recognized by the Two Creeks Association . We will not take responsibility for it and our logo will not be allowed to be used on any T-shirts that will be sold.Lee motioned, Lorna sec. Job Descriptions and the duties of each position will be discussed at the next meeting.

Adjournment: Rick motioned for adjournment at 8:06 pm.

Phil Humphries, Secretary.

WHEATLEY TWO CREEKS ASSOCIATION

Minutes of regular meeting held **September 6th 2018** at the Wheatley Legion

Attendence: Rick & Forest Taves, Bruce & Marjorie Jackson, Gerry Soulliere, David & Sharon Light, Mark Peacock, Pauline Sample, Lorna Bell, Ron Haley, Don Haggith, Ray Blaine, Joe Pinsonneault.

Minutes: With the amendment that the trees in the Groves affected by Tent Caterpillars will be monitored instead of being removed the amended minutes were moved by Phil, sec. by Joe.

Agenda: Moved by Linda, sec. by Lee agenda be accepted as outlined. (Carried)

Memorial Groves: 4 people have paid for trees. The Lights will perform the music at the Memorial Service in the Groves. Derek will lead the service and it was decided that he will receive \$200.00 for doing that. Joe motioned, Rick seconded. There is still room to plant a native tree or pick an existing tree in the forest. We will try to repair the broken bench in the Groves or replace it with a new one paid for out of the Perpetual Fund.

Prop. & Equip.: It was decided to continue having Kevin Getty cut the grass but next year will ask for separate bills for the Groves and Stage area, Rick moved, Lee seconded. Don volunteered to help with repairing the equipment and anything else. Mark is working on getting the new entrance signs as well as new signs in the Conservation area stating that anyone entering it uses it at there own risk, Randall will contact us about the details. A safety tour was done recently by the LTVCA and it was determined that 2 bridges need to be repaired, especially the North bridge. The new motor for the Bushhog can be returned less the travel expenses. Gerry proposed installing a suspension bridge, Mark stated that we would need an engineer to design it and that it would need to be inspected every 5 years. Gerry and Joe took down 4 trees in front of the stage so that a walkway can be constructed down the hill, they also removed a dying Maple near the Small Pavillion. The lights for the Stage & Pavillion were taken down for storage. 6 trees have died in the Groves incl. 4 maples, 1 cherry birch and 1tulip tree, Mark stated the LTVCA may be able to help with some of them.

Concerts: We ended the year with a profit of \$1160.22. It was decided to let the main acts know who the warmup act will be to try and coordinate the music. There is a possible bee problem in the S.W. corner of the Lg. Pavillion. Bruce will get an electrition to replace a broken breaker. Linda Pearce motioned to use Brien Cobby for the sound and to ask the Comber Scouts for the food next year, Joe seconded.

Financial Report: We will defer getting the report approved. The Account Balance as of July 31st was \$32.702.75, the Account Balance as of August 31st was \$32.093.79, moved by Rick sec. by LindaP.

Correspondence: Thankyou to the Lights for removing the garbage each week and also for the press releases.

Old Business: None

New Business: Don proposed having a Xmas sing a long and marshmallow roast in the Pavillion for kids in the area in Dec. He will ask any schools in the area if they are interested and report back to us at the next meeting. Linda motioned, Lee sec.

Adjournment: Joe motioned for adjournment at 8:17pm

Phil Humphries, Secretary.

9.10) GMs Report

General Manager / Secretary Treasurer Report

Date:	October 18, 2018
Memo to:	LTVCA Board of Directors
Subject:	General Manager's Report
From:	Mark Peacock, P. Eng., General Manager / Secretary Treasurer

October 5, 2018, Meeting with Minister of Environment, Conservation and Parks

The Hon. Rod Phillips, Ontario's Minister of Environment, Conservation & Parks, participated in a breakfast roundtable on Friday, October 5th from 7:30 am to 9:30 am, in Kingsville. I was invited to attend and asked to provide a few notes on issues about which I would like to talk to the Minister. The following issues have an underlying theme that the Conservation Authorities are progressive and efficient in addressing environmental issues. The CAs work locally and in partnership to effectively deliver services that are proactive and effective. The four issues discussed are summarized below:

1. With the support of all parties the legislature passed bill 139 in its last session. This bill updates the Conservation Authorities Act and looks to modernize Conservation Authorities. The Lower Thames supports changes to conservation authorities that make us more accountable and transparent to our local communities and the provincial government. We work locally and receive continual input from residents into how we address environmental issues. These comments are both that we are too involved and that we are not involved enough. We want to make sure we protect people and the environment but don't put people through unnecessary paperwork and delays.

We are looking to the Service Delivery Review Committee to provide guidance on this issue and we also stress that we need to address local issues. A one answer fits all won't necessarily work for CAs in addressing local issues and community needs.

2. Watershed planning that involves local communities is the best approach for working with the environment. Proactive planning a watershed to improve and maintain it is significantly cheaper than responding to issues once they have become a problem. We need to engage our communities and over the long term work to improve our watersheds.

3. Phosphorus reduction is an important issue in the Lower Thames. The LTVCA currently spends over 25% of its budget on supporting projects with landowners that help address this problem. A number of local businesses NGOs and provincial and federal agencies and ministries partner in this work. The Conservation Authority works on the land with farmers and other landowners to get solutions that work with their operations and needs. It is important that the province continue in its partnering role which includes funding implementation and supporting science. International agreements that include the Province of Ontario will be hard and maybe impossible to meet without this support.

4. Species at Risk – CA role: In Ontario the MNRF and now the MOECP are the lead agencies addressing species at risk policy and permitting. CA work on to manage and improve the ecologies of their rivers. In developing and implementing watershed management plans for the Thames River the LTVCA has had to address SAR in habitat programs and river restoration work.

Species

- Over 90 species of fish found in the entire Thames River
- Historically there were approximately 35 mussel species in the Thames River as a whole
- Today there are 31 aquatic SAR found in the lower Thames River

- 17 fish species
- 14 mussel species

Why care about the mussels:

- Freshwater mussels are filter feeders and can clean / filter / process up to 40 L of water per day
- Different mussel species in the Thames can live from 10 80 years, with the possibility that some may live up to 100 or 200 years of age
- In some areas of the Thames River densities of freshwater mussels can reach in excess of 100 animals/m2
- This means that a single animal could filter 2.9 Million litres of water in their lifetime and 1 m2 of mussels in could filter 1.46 million litres of water in a single year!
- Freshwater mussels rely on one or more fish hosts to complete their life cycle, some of which are also species at risk. Larval mussels, called glochidia, must attach to the gills, fins or body of a fish in order to develop organs and mature into juveniles. Without these fish, the glochidia will die. They are an important part of the ecosystem and a water quality solution.

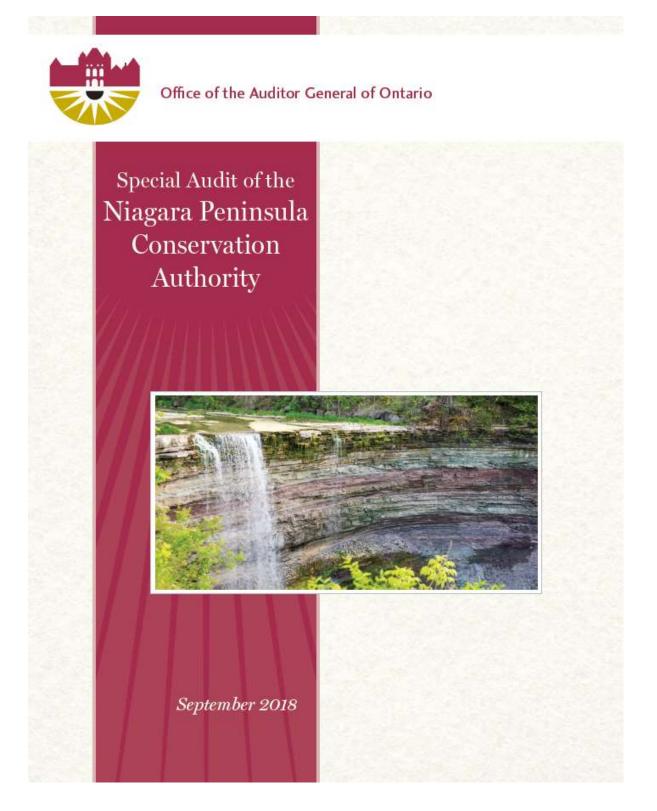
Recommendation: The General Manager / Secretary Treasurer Report be received for information.

Respectfully Submitted Mark Peacock, P. Eng. General Manager / Secretary Treasurer

Recommendation: That the above reports, 9.1) through to 9.10) be received for information.

10. Correspondence

10.1) Special Audit of the Niagara Peninsula Conservation Authority, Office of the Auditor General of Ontario



Special Report

Report Special Audit of the Niagara Peninsula Conservation Authority

1.0 Reflections

In light of mounting criticisms of the Niagara Peninsula Conservation Authority (NPCA), the Standing Committee on Public Accounts of the Legislative Assembly of Ontario requested on October 25, 2017, that our Office conduct an audit of the NPCA. In Canada, conservation authorities are unique to Ontario and were created by the *Conservation Authorities Act* (Act) almost 75 years ago. The Act and its regulations lay out the mandate of conservation authorities and their governance through boards of directors that are largely composed of municipal mayors and councillors.

During our audit, we found significant operational issues specific to the NPCA. Many of these issues stem from a broader governance issue relevant to all conservation authorities that will need clarification and guidance from the Province to overcome. The Act states that conservation authority board members have the authority to vote and generally act on behalf of their respective municipalities. However, employees and the public have the different expectation that board members will act in the best interests of the conservation authority they represent.

In the case of the NPCA, Board members have been involved in day-to-day operations and other situations where they have put, or have been perceived to have put, the interests of their municipality ahead of the interests of the conservation authority. This has contributed to internal and external criticisms of the NPCA over the last few years.

Our report includes recommendations directed to both the NPCA and the Province. The NPCA needs to restore community trust by making improvements in the areas of human resources, procurement, capital planning, flood mapping, restoration programming, complaint follow-up and violation enforcement, review of development proposals and permit applications, and performance measurement and public reporting. The NPCA Board and management have responded positively to these recommendations. As well, the Ministry of the Environment, Conservation and Parks (Ministry) has committed to work with the NPCA and monitor its progress on implementing them. It is also committed to working with municipalities to establish clear and consistent expectations for conservation authority roles and responsibilities.

In closing, we appreciate the opportunity to have worked with those both directly and indirectly involved in municipal governance. NPCA Board members, management and staff engaged in productive discussions with us throughout the audit. We thank them for their co-operation. We also value the input we received from the Ministry and Conservation Ontario, which represents the 36 conservation authorities in Ontario.

2.0 Summary

The Niagara Peninsula Conservation Authority (NPCA) is one of 36 conservation authorities in Ontario. Each of them delivers programs and services to manage natural resources and protect people and their properties from natural hazards such as floods and erosion.

The Conservation Authorities Act (Act) establishes the legislative framework for the creation, funding and operation of conservation authorities in Ontario. It is administered by the Ministry of the Environment, Conservation and Parks (Ministry, previously the Ministry of Natural Resources and Forestry). The Act requires that conservation authorities undertake activities to "further the conservation, restoration, development and management of natural resources."

On October 25, 2017, in light of mounting criticisms of the NPCA, the Standing Committee on Public Accounts of the Legislative Assembly requested that our Office conduct a value-formoney audit of the NPCA.

Our audit covered the areas noted in Figure 1. As Figure 1 shows, there were no issues in the NPCA's management of its flood-control structures, water quality monitoring, and operation of its conservation areas to deliver recreational and educational programs to the public. For example, NPCA staff regularly monitor surface and groundwater quality across the watershed and publicly report the results of their monitoring annually. In addition, the NPCA delivers environmental education programs that highlight the importance of sustainable environmental management. This report focuses on areas for improvement.

The NPCA serves about half a million people in the Niagara Peninsula, encompassing the entire Niagara Region (made up of 12 local municipalities), 21% of the City of Hamilton and 25% of Haldimand County. The Board of Directors that governs the NPCA comprises 15 members who are appointed by the municipalities within the NPCA's jurisdiction (Niagara Region, Hamilton and Haldimand County). In 2017, the NPCA received about \$8.9 million (or 71% of its total revenues of about \$12.5 million) from municipalities, about \$380,000 from the Province, and the rest through federal funding, fees charged for specific services, and donations from individuals and organizations.

Overall Conclusion

Over the last few years, the NPCA has taken steps to improve its business functions and has several initiatives under way. In 2011, the NPCA Board identified the need to make operational changes and, in 2014, began implementing such changes. For example, the NPCA developed its first Strategic Plan in 2014 and in 2017 assessed its progress against the goals outlined in the plan. At the time of our audit, the NPCA was also developing its 2018-21 Strategic Plan, which was approved by the NPCA Board in July 2018. The 2018-21 Strategic Plan identifies the four areas where the NPCA will focus its efforts: using science and evidence to support watershed management decisions; planting trees and native plants to rebuild the canopy; creating more parks; and investing in its parks to meet public demand.

However, in our audit of the NPCA, we identified a number of opportunities for further improvement. We found that the NPCA needs to improve its processes to ensure that it delivers programs and services economically, efficiently and in accordance with relevant legislation, regulations, agreements and policies, and that the impact of human activities, urban growth and rural activities in the lands within the NPCA's jurisdiction is effectively managed.

We also found that the NPCA does not have effective processes to measure, assess and publicly report on the operational effectiveness of its programs and services. As a consequence, the NPCA has not been able to fully demonstrate, and the Ministry and municipalities could not fully assess, how well the NPCA was fulfilling its legislative mandate to further the conservation, restoration,

Figure 1: Areas Covered in Our Audit

Prepared by the Office of the Auditor General of Ontario

	No Issues Noted	Issues Noted"
Activities NPCA Must Undertake as a Conservation Authority		
Control, alter or divert watercourses with infrastructure (e.g., dams) to reduce adverse effects of floods	×	
Forecast floods and issue flood alerts		S.6.1
Advise municipalities on where development is allowed	Í.	S.6.2
Approve or deny applications from landowners for work permits		S.6.2.1, 6.2.3
Activities NPCA May Undertake as a Conservation Authority		
Develop maps of flood- and erosion-prone lands and wetlands		S.6.1
Develop policies for where to allow development and other changes to the environment		S.6.2.1
Inspect sites for compliance with the Conservation Authorities Act and investigate complaints about suspected prohibited activities		S. 6.3
Monitor water quality	1	
Work with landowners on projects to restore ecosystems on their properties		S. 6.4
Acquire lands for parks and protection		S. 6.5
Operate conservation areas and deliver recreational and educational programs	1	
Other Areas		
Measurement of the impact of NPCA's programs and services	í .	S.6.6
Management of human resources, including hiring, promotion and restructuring	1	S. 6.2.3, 7.1
Management of financial and capital resources		S.7.2
Board governance		\$.5.1, 5.2, 5.3, 5.4
Ministry's and municipalities' role in overseeing conservation authorities in general	1	S.8.1, 8.2, 8.3

* The section numbers refer to the sections of this report that describe issues noted.

development and management of natural resources within its jurisdiction. And, given that the Ministry only requires conservation authorities to submit their audited financial statements and information about provincially funded activities, the Ministry also cannot assess how well any of the 35 other conservation authorities across the province are fulfilling their legislative mandate.

This report contains 24 recommendations with 75 action items. See Appendix 1 for a summary of recommendations to the NPCA and the Ministry.

The following sections describe more detailed findings in the areas of governance and the NPCA's operations.

10.2) New method to remove phosphorus from wastewater

Date:August 15, 2012Source:Michigan State UniversitySummary:Researchers are developing a new method of removing phosphorus from wastewater -- aproblem seriously affecting lakes and streams across the United States.



Steve Safferman (r), associate professor of biosystems and agricultural engineering, and student Hayley Betker are working to develop a new method of removing phosphorus from wastewater. Phosphorus runoff into lakes and streams can seriously affect the health of the water.

Credit: Photo by Kurt Stepnitz

A professor at Michigan State University is part of a team developing a new method of removing phosphorus from wastewater -- a problem seriously affecting lakes and streams across the United States.

In addition, Steven Safferman, an associate professor of biosystems and agricultural engineering, and colleagues at Columbus, Ohio, based-MetaMateria Technologies, are devising a cost-effective way of recovering the phosphorus, which then can be reused for fertilizer products.

Although its use is regulated in many states, including Michigan, in items such as detergents and fertilizer, phosphorus is part of all food and remains a critical problem as it is always present in human and animal wastes.

Discharge from human and industrial wastewater and runoff into lakes and streams can cause what is known as eutrophication -- making the water unsuitable for recreational purposes and reducing fish populations -- as well as causing the growth of toxic algae.

What MetaMateria Technologies and Safferman have figured out and tested over the past 10 years is how to produce a media, enhanced with nanoparticles composed of iron, that can more efficiently remove larger amounts of phosphorus from water.

"Phosphorus that is dissolved in wastewater, like sugar in water, is hard to remove," Safferman said. "We found that a nano-media made with waste iron can efficiently absorb it, making it a solid that can be easily and efficiently removed and recovered for beneficial reuse."

Safferman added there are indications that their method of phosphorus retrieval is much more cost effective than processing phosphate rock.

"Research suggests that it is significantly cheaper to recover phosphorus this way. So why would you mine phosphorus?" he asked. "And, at the same time, you're helping to solve a serious environmental problem."

The material should be commercially available for use within two years, said J. Richard Schorr, MetaMateria CEO.

"Phosphorus is a finite material," Schorr said "Analyses show that the supply of phosphorus may become limited within the next 25 to 50 years. This is an economical way to harvest and recycle phosphorus."

This research is funded, in part, by a National Science Foundation Small Business Innovative Research Grant.

Story Source:

Materials provided by Michigan State University. Note: Content may be edited for style and length.

Michigan State University. "New method to remove phosphorus from wastewater." Science Daily. Science Daily, 15 August 2012. <u>www.sciencedaily.com/releases/2012/08/120815112243.htm</u>.

11.Events Calendar

October 13, 9 am-12pm	TD Detroit Drive Greenspace, Volunteer Tree Days Event, 150 Trees to Plant https://www.tdtreedays.com/en-ca/events/915-detroit-drive-greenspace		
October 21, 9:30am-4:30pm	Seed Collection Workshop, Moravian First Nation by Meesingw and LTVCA Please note: RSVP required		
Nov 21	Lower Thames Valley Conservation Foundation Directors' Meeting		
Nov 25	Season's Greetings Event at Longwoods Road Conservation Area		

Ongoing Events

First Thursday of month	Wheatley Two Creeks Association Meetings
7:30 pm	Royal Canadian Legion, Erie Street N., Wheatley
7 days a week	Ska-Nah-Doht Village & Museum
9:00 am – 4:30 pm	Longwoods Road Conservation Area
Sept – Dec 2018	Fall Education Programming at Longwoods Road Conservation Area

For more information contact: LTVCA Administration Office: 519-354-7310 Longwoods Road Conservation Area: 519-264-2420 C.M. Wilson Conservation Area: 519-354-8184 www.ltvca.ca

12.Other Business