

Board of Directors - *Notice of Meeting* September 21st - 10:00 a.m.,

Administration Office, Strathroy

Tentative Agenda

- 1. Chair's Remarks
- 2 Declaration of Pecuniary Interests
- Minutes
- 4. General Manager's Report
 - (i) GM's Report
- 5. Chair & Conservation Ontario Report
 - (i) CO June 26, 2017 minutes
- 6. Business Arising from last meeting
- 7. Conservation Area Reports
 - (i) Conservation Areas Update
 - (ii) Highland Glen Conservation Area & Boat Ramp
 - (iii) Lambton Children's Safety Village
- 8. Water Resources Reports
 - (i) Current Watershed Conditions
 - (ii) Shoreline Restoration Projects
 - (iii) Application to National Disaster Mitigation Program
 - (iv) Flood Innovation Project
- 9. Biology Reports
 - (i) Written permission for Drain Enclosures
 - (ii) Healthy Watershed Program Workshops
 - (iii) Healthy Watershed Program Walk the Watershed
 - (iv) Reptiles at Risk
 - (v) Moore Wildlife Management Area
 - (vi) Water Quality Monitoring
 - (vii) Natural Heritage Special Levy
- 10. Conservation Services Report
 - (i) West Nile Virus Lambton County Mosquito Control Program
 - (ii) Large Stock Tree Program
 - (ii) Conservation Services Programs
- 11. Planning & Research Reports
 - (i) Enforcement of CA Regulation 171
 - (ii) Development, Interference with Wetlands & Alterations to Shorelines & Watercourses
 - (iii) Monthly Planning Activity Summary Report
 - (iv) Draft Procedural Manual and Technical Guidelines
 - (v) St. Clair River AOC

- 12. Finance Reports
 - (i) Revenue & Expenditure Report
 - (ii) June, July, August Disbursements
 - (iii) 2017 General Levy Update
 - (iv) 2017 Preliminary Forecast Budget
 - (v) Investment Analysis
- 13. Communications Reports
 - (i) Communications, Conservation Education, Coming Events & Scholarship Reports
- 14. Delegation Jennifer Burbidge Presentation
- 15. New Business
- 16. Adjournment

Please contact Ashley (519-245-3710/ 1-866-505-3710 x 200 or e-mail <u>Afletcher@scrca.on.ca</u>) at the Administration Office by September 18, if you are unable to attend. In the event of my absence, please contact Marlene Dorrestyn at extension 257 <u>mdorestyn@scrca.on.ca</u>

Board of Directors Proposed Resolutions

- 2. It is requested that each Director declare a conflict of interest at the appropriate time, on any item within this agenda in that a Director may have pecuniary interest.
- 3.(i) Moved by: Seconded by: That the minutes of the Board of Directors meeting, held June 23, 2016, be approved as distributed.
- 4.(i) Moved by: Seconded by: That the Board of Directors acknowledges the General Manager's report, dated September 11, 2017.
- 5.(i) Moved by: Seconded by:
 That the Board of Directors acknowledges the minutes of the June 26, 2017,
 Conservation Ontario Council meeting minutes.
- 6.(i) Moved by: Seconded by: That the Board of Directors acknowledges the updates on business arising from the June 22, 2017, meeting.
- 7.(i) Moved by: Seconded by:
 That the Board of Directors acknowledges the Conservation Lands Update, dated
 August 29, 2017 on Conservation Areas, Foundation, and McKeough Lands
 including capital projects, facility improvements and camping trends in 2016.
- 7.(ii) Moved by: Seconded by:
 That the Board of Directors acknowledges the report dated August 29, 2017 on the Highland Glen Conservation Area summarizing capital improvements and revenues collected in 2017.
- 7.(iii) Moved by:

 That the Board of Directors acknowledges the report dated September 11, 2017, regarding the potential for the incorporation of the Lambton Children's Safety Village into the LC Henderson CA and further directs staff to obtain required assessments, opinions and quotations to ensure that the existing facilities can accommodate the proposed works and to ensure that any impacts on the Conservation Area, campground and campground activities or the Conservation Education program can and will be successfully mitigated.
- 8.(i) Moved by: Seconded by: That the Board of Directors acknowledges the report dated September 5, 2017, on the current watershed conditions, flood risk and Great Lakes water levels.

8.(ii) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated September 5, 2017 on the ongoing shoreline restoration projects across the watershed.

8.(iii) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated September 5, 2017, on the application to National Disaster Mitigation Program to update flood plain mapping as a pilot project in 2 municipalities (City of Sarnia (urban environment) and Township of Enniskillen (rural environment) and further that the Board approves the submission of the application and directs staff to work with the municipalities to obtain the required matching funding.

8.(iv) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated August 31, 2017 on the flood innovation project and the partnership with Lambton College.

9.(i) Moved by:

Seconded by:

That the Board of Directors acknowledges this report dated August 30, 2017, on the need for O. Regulation 171/06 written permission for drain enclosures and supplemental guidelines and directs SCRCA staff to require O. Regulation 171/06 permission for Drain Enclosures and further that fees be recuperated based on current SCRCA Regulation Fees.

9.(ii) Moved by:

Seconded by:

That the Board of Directors acknowledges the status report dated September 1, 2017, regarding the Healthy Watershed Program Workshop Update, including an OMAFRA Soil Health Workshop, GLASI Pasture Tour, and other upcoming events.

9.(iii) Moved by:

Seconded by:

That the Board of Directors acknowledges the status report dated August 31, 2017, regarding the Healthy Watershed Program - Walk the Watershed, including an update on the Walk the Watershed Program and GIS procedure for locating agricultural BMPs.

9. (iv) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated August 31, 2017, on the Reptiles at Risk Program Update, including highlights of recent collection, incubation and release of Spiny Softshell turtles and snake monitoring.

9. (v) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated September 5, 2017 regarding the projects to remove low water crossing at Moore Wildlife Management Area and further approves staff to apply for funding for this proposed potential work.

9. (vi) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated August 31 2017 regarding Water Quality Monitoring, Watershed Reporting, and Related Community Engagement.

9.(vii) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated September 21, 2017 regarding natural heritage commenting services provided to member municipalities and further _____

10.(i) Moved by:

Seconded by:

That the Board of Directors acknowledges the status report dated September 11, 20167, regarding West Nile Virus – Lambton County Mosquito Control Program.

10.(ii) Moved by:

Seconded by:

That the Board of Directors acknowledges the status report dated September 11, 2017, regarding the Authority's large stock tree programs and opportunities for municipal involvement.

10.(iii) Moved by:

Seconded by:

That the Board of Directors acknowledges the status report dated September 11, 2017, regarding conservation services programs across the watershed including approved funding from Ministry of Natural Resources and Forests Species at Risk Program, spring tree planting survival & maintenance and other vegetation control programs.

11.(i) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated September 1, 2017 on the activity levels related to the enforcement of St. Clair Region Conservation Authority Ontario Regulation 171 and further that levels continue to be monitored through 2017 for recommended action in 2018.

11.(ii) Moved by:

Seconded by:

That the Board of Directors acknowledges and concurs with the Regulations Activity Report on "Development, Interference with Wetlands & Alterations to Shorelines & Watercourses" Regulations (Ontario Regulation 171/06), dated August 31, 2017.

11.(iii) Moved by:

Seconded by:

That the Board of Directors acknowledges the St. Clair Region Conservation Authority's monthly Planning Activity Summary Reports for June, July and August, 2017.

11.(iv) Moved by:

Seconded by:

That the Board of Directors acknowledges the report on the Planning Department "Procedural Manual and Technical Guidelines", dated August 30, 2017 and further directs staff to initiate this project and further concurs with the draft Table of Contents and Chapter 1 Introduction section, and further the Board appoint a Planning and Regulations Manual Committee with the following members:

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11.(v) Moved by:

Seconded by:

That the Board of Directors acknowledges the report dated September 7, 2017, on the St. Clair River Area of Concern program.

12.(i) Moved by:

Seconded by:

That the Board of Directors acknowledges the revenue and expenditure report to July 31, 2017, as it relates to the budget.

12.(ii) Moved by:

Seconded by:

That the Board of Directors approves the June to August 2017 disbursements as presented in the amount of \$1,338,068.84

12.(iii) Moved by:

Seconded by:

That the Board of Directors acknowledges the status report on the 2017 general levy receipts to September 1 2017.

12.(iv) Moved by:

Seconded by:

That the Board of Directors acknowledges the 2018 preliminary draft budget of \$6,633,787 with a proposed municipal general levy of \$823,855 and further that this preliminary budget circulated to member municipalities for information and input based on our budget review process.

12.(v) Moved by:

Seconded by:

That the Board of Directors acknowledges the investment statements for the period ending August 31, 2017.

13.(i) Moved by:

Seconded by:

That the Board of Directors acknowledges the Communications Report, dated September 6, 2017, including information regarding Conservation Education, Coming Events and Conservation Scholarships.

14. Moved by:

Seconded by:

That the Board of Directors acknowledge the correspondence to Ms. Burbidge dated July 26, 2017, staff's verbal introduction and Ms. Burbidge's presentation and

16. Moved by: That the meeting be adjourned.

Seconded by:

The Board of Directors Meeting of the St. Clair Region Conservation Authority was held on the above date, at the A.W. Campbell Conservation Area, Petrolia, at the hour of 1:00 p.m.

Present: Steve Arnold, Chair; Andy Bruziewicz, Vice Chair; Tony Bruinink, Joe Faas, Norm Giffen, Larry Gordon, Mike Kelch, Betty Ann MacKinnon, Kevin Marriott, Don McCallum, Dan McMillan, Steve Miller, Frank Nemcek, Gerry Rupke, Jeff Wesley, Muriel Wright

Absent: Alan Broad, John McCharles, Cindy Scholten, Jerry Westgate

Staff Present: Brian McDougall, General Manager; Kevan Baker, Director of Lands; Girish Sankar, Director of Water Resources; Patty Hayman, Director of Planning; Tracy Prince, Director of Finance; Rick Battson, Director of Communications; Ashley Fletcher, Administrative Assistant/Board Coordinator; Marlene Dorrestyn, Administrative Assistant

The Chair welcomed everyone to the meeting and requested that each Director declare a conflict of interest at the appropriate time, on any item within this agenda in that a Director may have pecuniary interest.

BD-17-064

Bruinink - Wesley

"That the minutes of the Board of Directors meeting, held April 22, 2017, be approved as distributed."

CARRIED

The General Manager's Report was presented:

- Foundation Property
 - the St. Clair Region Conservation Foundation met on June 2^{nd,} and as requested by the Authority Board, has directed staff to proceed with negotiation of donation agreements for the two property reviewed at the last Board meeting in April
- On-line Payments & Donations
 - the Authority has been working towards expanding our options for payments of fees for the last several months
 - fee payees and donors have expressed concerns over providing credit card information to us over the phone, while Authority staff, as always, were looking to improve the efficiency of the payment and accounting processes
 - with a variety of fees/donations being paid for camp sites, conference registrations, planning applications, regulations permits, tree planting, memorial trees, etc., we knew we needed a system that would provide a suite of tools to not only get funds transferred but also obtain the necessary information for receipts, reports, proper accounting, etc.
 - we have built the base for the online payment system and we were able to use the donation option as our first phase of implementation
 - Beta testing was successfully completed in March and the online payment option went live in May

online fee payment will be available later this year

BD-17-065

Rupke - Wright

"That the Board of Directors acknowledges the General Manager's report, dated June 12, 2017."

CARRIED

The proposed changes to the Conservation Authorities Act as introduced in Bill 139 was discussed.

Directors' Comments:

 further information and explanation regarding draft Conservation Authorities Act 28.2, cancellation of permits was requested.

BD-17-066

Rupke - Wright

"That the Board of Directors acknowledges the proposed changes to the Conservation Authorities Act as introduced in Bill 139 – Building Better Communities and Conserving Watersheds Act (2017) as well as the associated Frequently Asked Questions backgrounder from Conservation Ontario."

CARRIED

Comments, dated May 24, 2017 submitted via Ontario's Environmental Registry were reviewed.

BD-17-067

Giffen - Bruinink

"That the Board of Directors formally approves the comments dated May 24, 2017 submitted via Ontario's Environmental Registry regarding Canada-Ontario draft Action Plan for Lake Erie EBR Registry Number 012-9971 as previously circulated for review and comments."

CARRIED

A staff report regarding business arising was reviewed:

- would like a means for feedback implemented regarding Conservation Areas, so the public can voice their concerns.
 - camper reservations receipt and seasonal Camper packages are being revised to include comments sections
 - campers will be asked to provide comments via digital media (email, website, facebook, etc.)
- staff should attend Drainage Superintendent's meeting in January.
 - 2-3 staff have attended the annual Drainage Superintendents Conferences each of the last 3 years
 - staff will continue to attend
- please add the Chatham-Kent directors to the directors expense charts for 2017.

- Chatham-Kent directors have been added to the 2016 directors expense chart for our files and will be included in 2017 and future despite showing no expense
- concern regarding one legislation contradicting another regarding drainage.
 - maintain open lines of communication with all levels of government in order to ensure projects can proceed in a timely fashion

Nemcek - MacKinnon

"That the Board of Directors acknowledges the updates on business arising from the June 7, 2017 Board of Director's meeting."

CARRIED

A Conservation Lands Update was reviewed:

- Conservation Areas:
 - the Conservation Authority owns 15 conservation areas and manages 17 properties for the Foundation
 - of those 15 conservation areas, 6 are managed by the local municipality and 9 are operated by the Conservation Authority
 - of these 9, 3 conservation areas are regional campgrounds which attract campers from primarily Southwestern Ontario
 - our three regional campgrounds have over 500 campsites and 415 seasonal campers and are financial self sufficient
 - profits obtained from our campgrounds are used to offset capital improvements
 - the camping season in 2017 runs from Friday, April 28 to Thanksgiving Day
- Warwick Conservation Area
 - a 24 x 32 ft pole type storage shed has been constructed
 - engineered wood chip playground protective surfacing has been installed under the main day use area play equipment
 - roads have been upgraded with gravel
 - the pool washroom hydro panel has been upgraded
 - 3 sections of boardwalk have been installed on the White Pine trail
 - hydro and water has been installed to two overflow campsites in the woodlot campground
 - woodlot campground laundry shed has been renovated with new appliances, flooring and plumbing
 - 550 meters of new chip and dust trail to be developed around the perimeter of the 5-acre climate change tree growth plantation (Foundation).
- L.C. Henderson Conservation Area
 - campground pool has been renovated with 2 new ladders and entrance railing
 - roads have been upgraded with gravel
 - 10 new picnic tables have been constructed
 - one shower area has been upgraded with new shower surround and ceramic tile on the floor and walls
 - a new sidewalk has been installed in front of the shower areas

- two new hydro panels have been installed, one in the main washroom building and one in the campground area
- LED lighting have been installed on the main washroom building and on 2 utility poles
- A.W. Campbell Conservation Area
 - a new concrete side walk has been constructed at the pool washroom and visitor center
 - permanent hydro (6 30 amp campsites) to be installed at the Campbell house group camp area
 - water distribution pump house has been renovated with new internal and external siding and new internal plastic water lines
 - roads have been upgraded with gravel
 - 10 new picnic tables have been constructed
 - upgrades have been completed at the main campground washroom (new concrete sidewalk and signage) and at the gatehouse and entrance area (new signage and fee box)
- Highland Glen Conservation Area:
 - approximately 40 ft of new walkway have been installed along one side of the boat ramp, this will allow for more than one boat to dock at a time
 - the existing walkway has been elevated to meet rising lake levels
 - an existing seawall has been repaired by excavation and installing new tie back supports
 - armor stone rocks have been re-positioned to provide better protection for the steel seawall
 - fees are being charged for the use of the boat ramp and vehicle entry this year
 - fees are being collected through the MacKay Pay system, where payments are collected on line or by phone.
 - revenue collect will be used to offset future repair costs to the ramp, seawalls and conservation area infrastructure
 - to date we have had 34 seasonal boat ramp passes and 7 vehicle seasonal passes purchased (the seasonal pass can also be used to enter any of our campground conservation areas for the 2017 season)
- Keith McLean Conservation Lands (Foundation Property):
 - effective April 1st, Scott O'Brien was hired as the new Superintendent
 - a new floor has been installed in the Kent Bridge Road pump house
 - a trail identification sign has been installed at the main parking lot
 - Lake Erie water levels are at a 30 year high resulting in one of the agricultural fields being partially flooded
- Other Lands Activities:
 - a 5-year tower lease has been negotiated with Cogeco Connexion Inc. for the existing tower & building (Peers Wetland CA)
 - a bench and concrete pad has been installed along the Strathroy North Valley Lands trail

- a 3-acre wetland has been constructed at property 97 in the McKeough Upstream Lands; this included a 2 acre pond and 1,000 hardwood trees (funded by Union Gas and Wildlife Habitat Canada)
- 2 benches have been installed along the trail at the Peers Wetlands (benches donated by Sydenham Field Naturalists)
- existing tennis courts to be removed and new courts constructed at the Esli Dodge Conservation Area (project of Lambton Shores)
- Marketing/Camping Statistics:
 - Our conservation areas have been marketed as follows to date in 2017:
 - Sarnia Lambton and Chatham-Kent Tourism Guide
 - camping ad has been placed on MyFm website
 - Conservation Ontario "Your Guide to Conservation Areas"
 - Central Lambton Travel Guide
 - Hayter Publication's Special Editions (4) "Cottage and Campers"
 - Sarnia Art Walk (Downtown Sarnia, June 3rd and 4th)
 - 415 seasonal campers have registered in our 3 campgrounds, up from 413 in 2016. 189 seasonal campers are registered at Warwick (188 in 2016), 119 at LC Henderson (117 in 2016) and 107 at A.W. Campbell (108 in 2016).

Gordon - McMillan

"That the Board of Directors acknowledges the Conservation Lands Update, dated June 7, 2017 on Conservation Areas, McKeough Upstream lands and Foundation properties." CARRIED

A letter from the Chippewas of Kettle and Stony Point First Nation was considered. A recorded vote was requested.

Steve Arnold – for Tony Bruinink – for Andy Bruziewicz – for Joe Faas - for Norm Giffen – for Larry Gordon – for Mike Kelch - for Betty Ann MacKinnon – for Kevin Marriott - for Don McCallum – against Dan McMillan - for Steve Miller - for Frank Nemcek – against Gerry Rupke – against Jeff Wesley – for Muriel Wright – against

Kelch - Bruinink

"That the Board of Directors acknowledges the correspondence from the Chippewas of Kettle and Stony Point First Nation dated May 24, 2017 as well as the report dated June 9, 2017 regarding a request for relief from fees for the use of Highland Glen Boat Ramp and further that 6 annual passes be provided and information exchanged on their use."

CARRIED

A staff report on water levels, current and flood conditions was presented.

- Watershed Stream Flow
 - while flow conditions remained seasonal into the month of May, two events resulted in a significant impacted on flows across the watershed in the early part of the month
 - as noted in the above hydrograph for the Wallaceburg, an initial rain event in the first week brought levels up slightly but was followed by a second significant rain event in excess of 70mm over a two-day period in some regions of the watershed bringing high flow conditions.
 - in anticipation of potential high water conditions a Water Conditions Statement was issued May 4th following by two Flood Watch bulletins on May 5th and updated again on May 6th. During that period readings at Wallaceburg continued to be at close to top of bank for almost 48 hours while the watershed continued to drain. No additional rain was received and wind conditions remained in a favourable direction from the north-east reducing the impact of wind on outflow conditions flow conditions gradually returned to normal for the remainder of May and into June.
 - data collected during the event peak for all stations identified the bank full conditions
 with several stations reporting flows into floodplain areas at Florence and Brigden
 as well as close to full conditions at most stations in the lower reaches of the
 watershed. Peaks had already subsided in the upper reaches in Strathroy, Alvinston
 and Petrolia. As noted previously, Wallaceburg remained at 99% full for a period of
 several days
 - comparison of actual monthly flows with period of record identifies significantly greater flow conditions for this May ranging from 30% to 60% higher than expected
 - with the significant rain events, regional averages are now higher moving into the summer months with the three-month average benefitting from higher May numbers at 127% of normal. Numbers for six months are slightly lower than normal due to lower amounts in the upper parts of our region. Accumulation averages for the last twelve months are right on the 100% values. This is encouraging considering the impact of drought conditions experienced during 2016
 - precipitation values logged at our hi-resolution precipitation station identify rainfall
 patterns during April and May with greater accuracy than previously possibly. New
 installations are planned at Alvinston with an a similar Ott-Pluvio device combined
 with a new weather station and automated snow measurement equipment as part
 of the second year of a program of MNRF equipment allocations to regional CA's.

Threat

based on current conditions we continue to monitor any major rain events as they
occur. River levels and weather patterns are anticipated to stabilize into the

summer months and these are expected to prevail with seasonal flows remaining in the average range. Advisories will be provided as conditions dictate.

Weather Forecast

- short term conditions indicate slightly above near normal temperatures for the remainder of June with near normal precipitation
- longer term forecasts into the summer months suggest average temperatures with below average precipitation and slightly below average

Great Lakes Levels

• The monthly comparison for May 2017 (current available data) indicates that Lake Huron levels very close (2cm) to May 2016 suggesting a slight stabilizing trend in local lake levels possibly due to reduced 2016/17 snowpack in the north and significant drought conditions in 2016. Numbers continue to remain above the 10 year average for Lake Huron by 57cm. Lake St. Clair levels are higher than last year (11cm) and 51cm above the 10 year average. Both Lake Huron and Lake St. Clair current values (May) continue to remain above the average for the entire period of record.

BD-17-070 Faas - Kelch

"That the Board of Directors acknowledges the report dated June 12, 2017 on the current watershed conditions and Great Lakes water levels."

CARRIED

A staff report on Water and Erosion Control Infrastructure Projects submitted for funding in 2017-2018.

- review of WECI applications have been completed by a committee of provincial and Conservation Authority staff representatives.
- all the Projects submitted for WECI funding has been approved
- following 9 projects were approved for 2017- 2018.

Structure	Project Name	Description of Work	Total Project Cost (\$)	Grant Requested (\$)
Courtright Park	Courtright Park Shoreline restoration	Shoreline work at Courtright Park along St. Clair River using armourstone and riprap.	\$600,000	\$300,000
Sarnia Shoreline Protection	Shoreline Repair (Helen and Kenwick St) Phase 1	Carry out construction of Phase 1 from the recommendation of engineering study.	\$600,000	\$300,000
Esli Dodge Dam	Esli Dodge Repair Project	Repair of Concrete cable/ retaining wall	\$20,000	\$10,000
L.C.Henderson Weir #1	L.C.H. Outfall Repair Project	Spillway Repair	\$30,000	\$15,000

W. Darcy McKeough Dam	Drop Structure Downstream Erosion Control	Install rip rap at outlet park	\$80,000	\$40,000
W. Darcy McKeough Dam	Vegetation Management Plan	Develop a vegetation management plan for vegetation control within the floodway channel	\$20,000	\$10,000
W. Darcy McKeough Dam	Watercourse Obstruction Removal	Vegetation and debris jam to be removed	\$16,000	\$8,000
W. Darcy McKeough Dam	McKeough Sill Repair	Crack repair to McKeough Dam sill	\$30,000	\$15,000
W. Darcy McKeough Dam	Wing wall repair	Repair cracks in the concrete Wing wall	\$30,000	\$15,000

Miller - Bruinink

"That the Board of Directors acknowledges the report dated June 7, 2017 on the ongoing Water and Erosion Control Infrastructure projects across the watershed and further acknowledges the project updates on the previously funding projects and projects submitted for 2017-2018 funding."

CARRIED

An update on Aamjiwnaang First Nation Shoreline naturalization work was discussed.

- Aamjiwnaang Shoreline Naturalization
 - the project site is located just north or Corunna, Ontario. The site includes the shoreline of approximately 2 kilometers along the Aamjiwnaang First Nation Lands fronting the St. Clair River. The bank is in the order of 10 meters high. The current shoreline of the site, for the most part is protected with rip rap or armour stone revetment. There are some steel sheet structures, docks and a launch ramp within this part of the shoreline. A walkway runs along most of the shore behind the protected shoreline.
 - the purpose of the undertaking is to develop concepts that would "soften" and naturalize the shoreline. This project will also include shoreline work that will improve shoreline access, enhance aquatic habitat and provide general improvements to the existing shore along the entire project site.
- Project Highlights
 - habitat pod
 - finger groynes
 - fishing pier
- a budget of \$155,000 has been confirmed for the project (EC 50,000, Aamjiwnaang FN -\$80,000 and MOECC - \$25,000)
- staff are coordinating with federal agencies to secure permits for the shoreline work
- 5 Tender takers for this project and 3 tenders were submitted

- tender submissions were significantly higher than the total budget for this project
- project scope was reduced to ensure 2 out of 3 features of this shoreline project can be completed
- revised bids have been received
- staff are discussing these updates with AFN to get their approval to proceed with the work.
- further information will be provided verbally at the Board meeting

MacKinnon - Gordon

"That the Board of Directors acknowledges the update report, dated June 8, 2017, on Aamjiwnaang First Nation Shoreline naturalization work."

CARRIED

A staff report regarding the Healthy Watersheds Program in Lambton Shores was reviewed.

- GIS Procedure for Locating Agricultural BMPs in a Lambton Shores sub-watershed Using a 2m resolution Digital Elevation Model (DEM), two derivative indices were created to identify areas with potential erosion. Stream Power Index (SPI) is a measure of a water body's erosion power and can be used to predict locations where gullies are likely to occur. SPI is calculated based on slope and contributing area. Topographic Wetness Index (TWI) uses similar data sets as SPI but can be used to predict areas of surface saturation.
- Walk the Watershed (WTW) is a program in which landowners voluntarily allow SCRCA staff to walk their property. Our goal is to walk with the landowner if possible so that we can understand the overland flow of water in the watershed as well as discuss potential projects. This year's Walk the Watershed will focus on the drains in the headwaters of Shashawandah Creek, focusing on the Russel Drain, Shawana Drain, and Sloan Russel Drain. Over 20 landowners have been contacted. Overall, the response has been great, some landowners already have multiple erosion control projects in mind. Walk the Watershed will happen during the 2nd week of June.
- application of SPI and TWI New to this year's WTW, staff will bring aerial maps overlaid
 with the SPI and TWI indices. This provides staff (and landowners) a good opportunity to
 ground truth the data with what they see on the land combined with the landowner's
 experience.

McMillan - Bruziewicz

"That the Board of Directors acknowledges the report dated June 5, 2017 on the Healthy Watersheds Program "Walk the Watershed" in Lambton Shores, and endorses staff efforts to engage private landowners in Best Management Practices to improve the surface water quality."

CARRIED

A staff report regarding Watershed monitoring was reviewed.

- Aquatic Monitoring and Reporting
 - Watershed report cards production is underway. A multi-departmental committee
 is pulling together data, maps, and write-up relating to groundwater, surface
 water, forest conditions. Release is scheduled for World Water Day, March 22,
 2017.
 - St. Clair River AOC Fish and Wildlife Habitat Conservation Plan A Fish and Wildlife Habitat Conservation Plan for the St. Clair River Area of Concern (AOC) is scheduled for completion in December 2017. This report is required for the eventual delisting of the AOC. The draft plan summarizes the current status of aquatic habitat, highlights successful coastal wetland projects, identifies linkages to broader initiates, identify tools for future aquatic conservation, and identifies next steps for aquatic conservation in the St. Clair River AOC.
 - Benthic Macro-invertebrates (aka river bottom critters) Benthic collection was completed through the first part of May. The assortment of invertbrates found on the river bottom are used to indicate the health of SCRCA subwatersheds. Based on the pollution tolerance of the animals at a particular site, a score can be determined and used for calculating watershed report cards grades.
 - Fish Monitoring in the St. Clair River AOC So far this spring, biology staff have performed fish sampling at eight sites in the St. Clair River Area of Concern (AOC). Our biologists caught 40 different species and a total of 4,119 fish. Fish Species at Risk (SAR) like the Blackstripe Topminnow and Spotted Sucker (pictured below) were found at four of the eight sampling sites. These fish monitoring efforts in the AOC are supported by the Ontario Trillium Foundation.
 - Ontario Community Environment Fund (OCEF) When a spill or environmental impact occurs, or when Ontario's environmental rules are not followed, environmental penalties may be issued. The Ontario Community Environment Fund uses money collected from these penalties to support environmental improvement projects in the watershed where a violation or environmental impact happened. In 2017 SCRCA was awarded funds supporting surface water quality monitoring, benthic monitoring, watercourse temperature monitoring, and tree planting. All components of this project are underway this Spring.
 - Ontario Trillium Foundation (OTF) SCRCA in partnership with the Friends of the St. Clair River are in year 2 of a 3 year grant. As well as fish monitoring, OTF funds support mussel monitoring, temperature monitoring, benthic monitoring, stewardship projects, and education programs. Mussel monitoring has just begun in 2017 and another important sighting has occurred.
 - Biological Inventories St. Clair Region Conservation staff helped Waste

Management with biological inventories to attain their Canadian Wildlife Habitat certification.

- Community Engagement
 - Ontario Nature Partnership SCRCA has partnered with Ontario Nature in relation to the stewardship of the newly acquired Sydenham Nature Reserve that is located just south of Alvinston.
 - the official opening ceremony took place May 7. SCRCA and Fisheries and Oceans Canada (DFO) hosted a mussel demonstration for the approximately 100 participants that day.
 - May 14-15 SCRCA and DFO conducted fish inventories at the property.
 - May 16-17 SCRCA, Ontario Nature and along with expert botonists, orthinologists, and malacologists conducted a Bioblitz of the property.
 Funding for the event was provided by TD Friends of the Environment Foundation
 - Art Walk Staff participated in Artwalk in Sarnia on June 3rd and 4th. Many visitors stopped by the booth and were enticed and intrigued by our Eastern Foxsnake and Snapping Turtle. Staff discussed our reptile monitoring program and other biological monitoring conducted by the SCRCA.
 - Sarnia Pond Club Talk May 2, staff were invited to do a talk at the Sarnia Pond Club. The slide presentation focused on rare species and the work SCRCA is doing to protect them.
 - Upcoming Events
 - July 14th at Warwick Conservation Area and July 28th at A.W Campbell Conservation Area staff will be conducting aquatic BioBlitz's. A BioBlitz is a detailed study of biodiversity in a specific location over a specified period of time. We'll look for fish, mussels, stream critters, and more. Registration is through our events page on the website.
 - August 25th at A.W. Campbell biology staff will also be hosting a Turtle Birthday Party. This is an opportunity to educate the community about our local turtle species and highlight our work with the Spiny Softshell Turtle and other turtle species at risk.

BD-17-074 Wright - Nemcek

"That the Board of Directors acknowledges the report dated June 5, 2017 on the Watershed Monitoring."

CARRIED

A staff report regarding the Heathy Watersheds Program Update was discussed.

- Species at Risk workshop Coldstream, May 24
 - each year, the Coldstream Public Library invites SCRCA staff to lead a wetlands/ aquatic workshop. This year, we focused on Species at Risk from mussels to turtles to fish. The evening event, geared to families, began with an in class portion led by Erin Carroll and then the group made it's way down to Coldstream CA. After Jessica Van Zwol and Erin Carroll demonstrated some of the biological monitoring techniques that staff use, children were encouraged to participate and

- find their own creek critters. We had about 30 adults and children attend the event. Only one child got completely soaked but all went home smiling and soggy!
- the event was funded through TD Friends of the Environment, Environment Canada Habitat Stewardship Program – Species at Risk stream, Ministry of Natural Resources and Forestry's Species at Risk Stewardship Fund
- Healthy Lake Huron Update meeting Tiverton, May 30
 - after 5 years of implementation, the Healthy Lake Huron committee, made up of Conservation Authorities, MOECC, Environment Canada, county planners and health units, and Lake Huron environmental NGOs, discussed the future direction of Healthy Lake Huron. The group shared highlights of how the campaign has been a success. Going forward, the group will determine how best to focus funding to priorty watersheds and Lake Huron Tributaries. The continuation of water quality monitoring was discussed and unanimously agreed upon for the creation of long term databases.

BD-17-075 Rupke - Faas

"That the Board of Directors acknowledges the report dated June 7, 2017 on the Healthy Watersheds Program Update, and endorses staff efforts to engage private landowners in Best Management Practices to improve the surface water quality and continue to work towards a Healthy Lake Huron initiative."

CARRIED

A staff report regarding spring 2017 tree planting was presented.

- Seedling/Reforestation program
 - tree seedlings arrived on April 24th as normal for spring delivery time.
 - SCRCA crews planted 95,000 trees for 33 separate projects on private and industrial lands.
 - 2000 trees were planted for MTO along Hwy 402 again this year
 - 15,000 more trees planted at the Union Gas Lobo compressor site
 - 4000 trees planted at the First Solar farm in Sarnia
 - two tractor-mounted mechanical tree planters and one 4 person hand planting crew were used to plant seedling trees during one the wettest spring planting seasons we have ever seen.
 - approximately 30,000 trees had to be planted by hand in locations where tractors could not operate or were too wet to plant with heavy equipment.
 - another 6000 trees were ordered for 40 landowners to plant on their own.
 - more than \$165,000 in federal, provincial and local grant dollars was provided to property owners this year to subsidize the cost of trees, planting services and long term vegetation management.
 - all sites were sprayed with a pre-emergent herbicide soon after planting.
 - another 200,000 trees were resprayed with herbicide this spring on sites that were planted in 2014, 2015 and 2016.
 - planting operations were delayed on several occasions this year due to the cold wet month of May. However, tree planting was completed on June 2nd – same as

last year.

- Large Stock/ Municipal tree program
 - approximately 800 large stock potted and bare root trees were purchased by landowners this spring for windbreak and roadside tree planting
 - Brooke-Alvinston purchased approximately half of the trees for municipal residents to pick up and plant plus another 100 more trees planted by SCRCA staff. Brooke-Alvinstion provides a financial incentive for landowners interested in purchasing and planting their own trees.
 - 10 other individual landowners from across the watershed purchased trees.
 - price quotes where obtained from 2 wholesale tree nurseries and trees where purchased from both nurseries.

BD-17-076

Giffen - Gordon

"That the Board of Directors acknowledges the report dated June 9, 2017 regarding spring 2017 tree planting on private, corporate and public lands."

CARRIED

A staff report regarding the larvicide program in Lambton County was explained.

- our three-year contract with the County of Lambton to conduct a mosquito larva control
 program ended in 2015 but had an option to be extended an extra 2 years. This is the
 final year of the extension for catch basin larvicide treatments for the Lambton Public
 Health West Nile virus control program.
- six summer staff from the watershed services department will be treating approximately 16,000 catch basins with a mosquito growth regulator.
- four staff with be working out of the Strathroy office and 2 staff will be working out of the
 W. Darcy McKeough Dam to cover the south west end of the County.
- pre-treatment larva sampling has been scheduled for the week of June 12th to determine mosquito activity.
- results will be sent to Lambton Public Health. Mosquito activity will be used to determine
 when to start catch basin treatment. Approval from the Medical Officer of Health is
 required before treatments commence.
- applications for permits have been submitted to the London M.O.E.C.C. office and we are currently awaiting approval for permits to apply methoprene and Bti:
- Kettle Point and Aamjiwnaang First Nations will be contacted and offered the service again this year. MOECC permits are not required for these.
- Methoprene pellets will be applied to approximately 15,000 catch basins with 3 separate treatments spread out at 21 day intervals throughout the summer. Another 1500 catch basins in predetermined areas will receive a single methoprene briquette for season long control. A different colour paint mark for each separate application of larvicide is applied to every catch basin.
- costs to the County will remain the same as last year.
- treatments of methoprene pellets usually start around the week of June 25th and finish around the 15th of August.
- some efficacy testing may take place this year to monitor how well pellets and briquettes are controlling mosquito populations. SCRCA staff will conduct the sampling work.

Gordon - Kelch

"That the Board of Directors acknowledges the report dated June 9, 2017 regarding the Authority's agreement with Lambton County to undertake the application of Larvicide to catch basins as part of Lambton County Community Health Services West Nile Virus Program."

CARRIED

Regulations Summary Reports for April and May 2017 were reviewed.

BD-17-078

Miller - Marriott

"That the Board of Directors accepts the Regulations Activity Reports on "Development, Interference with Wetlands & Alterations to Shorelines & Watercourses" Regulations (Ontario Regulation 171/06), dated May 31, 2017 and includes the period April 1, 2017 to May 31, 2017, as presented."

CARRIED

Planning Activity Summary Report for April and May 201 was explained.

BD-17-079

Wright - Nemcek

"That the Board of Directors acknowledges the St. Clair Region Conservation Authority's monthly Planning Activity Summary Reports for April and May 2017."

CARRIED

A staff report updating the West Ipperwash Dynamic Beach Assessment was explained.

- at the last Board meeting, the Baird and Associates Coastal Engineers "West Ipperwash Dynamic Beach Limit Assessment" report was provided.
- following the Board meeting, the SCRCA circulated the report to the residents and posted on our website for comment by June 1, 2017. An ad was also posted in the Lakeshore Advance.
- the West Ipperwash Property Owners Association (WIPOA) assigned one resident to provide comprehensive comments to the SCRCA. This was very helpful.
- including the WIPOA submission: 4 submissions were received.
- Kettle Stoney Point First Nation have not commented or requested a consultative meeting to date. However, it is recognized this consultation process may be ongoing, dependent on KSPFN position on the assessment.
- generally, comments received are neutral and can be addressed by both the consultant and SCRCA. Responses will be provided in the comments section and re-circulated.
- this consultative phase will be presented to the Board in September.
- pending comments/revisions, the goal is to finalize the study by late Fall.

BD-17-080

Bruziewicz - Kelch

"That the Board of Directors acknowledges the update on the West Ipperwash Dynamic Beach Assessment dated June 9, 2017."

CARRIED

A staff report on DART was presented.

BD-17-081

Wright - Bruziewicz

"That the Board of Directors acknowledges the report, dated June 9, 2017 on Drainage Act and Conservation Authority Act Protocol (DART) Municipal drain activities and drain Letters of Review for April and to date June 2017."

CARRIED

Authority revenue and expenditures to April 30, 2017, were reviewed.

BD-17-082

Kelch - Miller

"That the Board of Directors acknowledges the revenue and expenditure report to April 30, 2017, as it relates to the budget."

CARRIED

April and May 2017 disbursements totaling \$905,572.74 were considered.

BD-17-083

Giffen - Kelch

"That the Board of Directors approves the April and May 2017 disbursements as presented in the amount of \$905,572.74."

CARRIED

A status report on general levy received to date was discussed.

BD-17-084

McMillan – Faas

"That the Board of Directors acknowledges the status report on the 2017 general levy receipts to May 31, 2017."

CARRIED

Directors reviewed the Investment Statements through to April 2017.

BD-17-085

Kelch - Marriott

"That the Board of Directors acknowledges the status report on the financial investments through April 2017."

CARRIED

Minutes of the Joint Health and Safety Committee meeting were reviewed.

BD-17-086

MacKinnon - McMillan

"That the Board of Directors acknowledges the March 234, 2017 meeting minutes of Health and Safety Committee."

CARRIED

A staff report including the canoe race, spring education programs, special events, and community outreach was explained.

- Canoe Race the weather couldn't have been nicer for a mid-April paddle down the Sydenham River in support of Conservation Education. 88 boats entered the Sydenham River Canoe Race on Sunday April 23, raising a total of \$3,284.00 through registration fees, pledges, and T. shirt sales. Thanks to all of the many, many people who helped out at this year's race!
- Spring Education Programs Conservation Education continues to be a popular field trip
 focus for area schools. Programs are booked daily from early April through to June 27th.
 Teachers appreciate the hands on opportunities to connect classroom learning to the
 natural world.
- New Program: POKECACHING: A Pokemon Go inspired version of Geocaching the game was created by LKDSB Enrichment Students for the SCRCA. The pilot program ran April 25th and 26th with some "snags". During the wrap up of the game, the students brainstormed ideas for improvement. It was an excellent opportunity for the organizing students to see their creation in action and to learn how to make improvements. Two more bookings for the program were requested thanks to word of mouth. The program will be offered as a part of the SCRCA's Education programming.
- Great Lakes Student Conference May 18th, 2017 approximately 70 Lambton County grade 11 and 12 students participated in this full day student conference. Outdoor education staff assisted in development and delivery of this very successful conference.
- deliver Innovation, Creativity and Entrepreneurship (ICE) training to Wallaceburg District Secondary School (WDSS) students. The students were given the challenge of 'How can St. Clair Conservation motivate youth to seek the health benefits created by spending time in nature?' As part of the training, education staff led a 2 hour 'empathy building' workshop, in which students were introduced to the health benefits of time spent in our local CA's. As a follow-up, the students participated in a formal ICE training session at WDSS. The students met the challenge with enthusiasm and creativity; some of the best ideas pitched included hosting 'volunteer youth work days' to allow the students a chance to participate in conservation projects; a youth photography contest; hosting a fundraiser 5km and 10km run; and using social media like twitter and u-tube to communicate with teens(RTL) the amazing benefits of spending time outdoors
- Special Events
 - Kid's Fun Fest Sarnia: SCRCA staff will be participating in Kids Fun Fest 2017 on Saturday June 10th in Sarnia. The booth will highlight camping and SCRCA programs. Outdoor education staff will help kids explore the world of birds and offer a hands-on activity making their own bird nests using natural materials and mud!
 - Community Partnerships: Return the Landscape: Education staff has joined Return the Landscape (RTL) Board of Directors to act as a liaison between

- SCRCA and RTL maintaining and growing this community partnership. The next meeting of the board is June 22nd, 2017.
- Sarnia-Lambton Arbour Week Committee: Education Staff continue to chair the
 committee and are helping to organize four tree plantings in the 4 corners of
 Lambton County. We will be planting a total of 150 trees to celebrate Canada's
 birthday. Sugar maple seedlings were delivered to each student in 4 winning
 classrooms in Lambton County who participated in the Arbour Week Contest.
 Students were asked to draw a comic about a 150 year old tree and some very
 creative works were received.

Nemcek - Rupke

"That the Board of Directors acknowledges the education staff report dated June 8, 2017, including the canoe race, spring education programs, special events, and community outreach."

CARRIED

A staff report regarding the Great Lakes Student Conference was presented.

- in an effort to increase Great Lakes literacy the Ministry of Environment and Climate Change funded a Great Lakes Student Conference organized by St. Clair Conservation with Lambton Kent District School Board (LKDSB) staff. Over 70 students from four LKDSB high schools attended the conference where they had the opportunity to learn about issues surrounding the Great Lakes, possible career paths, and explore cultural connections.
- the conference was a great success, in large part, because of the following workshop leaders that participated and provided their expertise:
 - Pollutech
 - Aamjiwnaang First Nation
 - Sciensational Snakes
 - Return the Landscape
 - St. Clair Conservation Biology Staff
 - Ontario Ministry of Agriculture, Food and Rural Affairs
- feedback from participating Great Lakes Secondary School Teacher,
 Craig Griffiths: "I just wanted to take a moment to give a big thank you for the Great
 Lakes Conference. I really can't say enough good things about the event. It so well run,
 interactive and informative and not just for the students. It really was a fantastic
 opportunity for all of the students, not only because they were able to learn about their
 local ecosystems, but also because they were given the opportunity to see and talk to so
 many people in our community that are highly involved in environmental issues. I realize
 that there were numerous people involved in the organization of this event and I can only
 imagine how much time and effort was put into it. Once again, thank you very much for
 the day and please pass this on to whoever else may deserve a thank you! If there is
 anything that I can do to help make this event a possibility in the future please to do not
 hesitate to ask."

BD-17-088

Wright - Gordon

"That the Board of Directors acknowledges the report on the Great Lakes Student Conference dated June 5, 2017."

CARRIED

A staff report regarding the Schoolyard Greening Program was presented.

- the Conservation Authority and Lambton Public Health partnered for a schoolyard greening initiative called "Tomorrow's Greener Schools Today Lambton." The intent of the project was to plant trees with elementary school students to increase green space and shade on playgrounds. From a health perspective, once the trees mature they will protect children from harmful UV radiation. From a conservation perspective, planting the trees with the kids encouraged environmental stewardship. An educational component regarding the benefits of trees was provided by the Conservation Authority and Lambton Public Health during each event.
- in our first year of this project, five elementary schools in Lambton County submitted proposals and all five proposals were accepted. Based on available funding, each of the five schools received eight trees and the planting events took place this May and June. A total of 40 trees were planted.
- Lambton Public Health and the Authority were successful in securing a TD Friends of the Environment Foundation grant to cover the costs of the initiative for 2017.

BD-17-089

Kelch - Giffen

"That the Board of Directors acknowledges the report on the Schoolyard Greening Program in conjunction with Lambton Public Health dated June 6, 2017."

CARRIED

A staff report regarding the Art Walk in Sarnia was reviewed.

- beautiful weather during the 14th annual Sarnia Artwalk, helped to draw in large numbers
 of people from all over the region last year the event saw over 25,000 visitors. The
 weekend-long festival was an excellent opportunity for public outreach and to raise
 awareness about the programs offered at St. Clair Conservation. We handed out free
 reusable bags with the SCRCA logo and pamphlets on our programs.
- this year, to invoke pride in the unique biodiversity found in our region, we focused on Species at Risk found in our area. Our Snapping Turtle and Eastern Foxsnake displays drew in many curious visitors and started a lot of productive conversations. People were amazed to learn about some of the endangered species that live in our area and we also had the chance to dispel misconceptions about these animals.
- Sarnia Artwalk is a vibrant and exciting event that we are very pleased to take part in every year.

BD-17-090

Gordon - McMillan

"That the Board of Directors acknowledges the report on Art Walk dated June 6, 2017." CARRIED

A staff report on the St. Clair River Area of Concern was discussed.

- Beneficial Use Impairment (BUI) Update
 - Beach Closings BUI:
 - the status assessment for the "Beach Closings" BUI for the St. Clair River AOC was presented to the Binational Public Advisory Council (BPAC) at the May 24, 2017 meeting in Sarnia, Ontario.
 - the report proposed the re-designation of this "Impaired" BUI to "Not Impaired" based on improvements to local infrastructure (e.g., combined sewers and Water Pollution Control Plants (WPCPs)) that have reduced inputs of *E. coli* into the St. Clair River along with low measurements of bacteria at local beaches and swimming areas,
 - BPAC approved the re-designation recommendation. Next steps will
 include review by the Four Agency Managers Work Group consisting of
 representatives from Environment and Climate Change Canada (ECCC),
 the Ontario Ministry of the Environment and Climate Change (OMOECC),
 United States Environmental Protection Agency (USEPA) and the
 Michigan Department of Environmental Quality (MDEQ).
- Bird or Animal Deformities or Reproductive Problems BUI:
 - on November 16, 2017, the "Bird or Animal Deformities or Reproductive Problems" BUI status assessment was presented to BPAC. The report recommends re-designation from "Requires Further Assessment" to "Not Impaired".
 - the report assessed reproductive success and deformity rates in Northern Leopard Frogs (*Rana pipiens*) and Snapping Turtles (*Chelydra serpentina*) exposed to St. Clair River water and sediment. Results were positive with high hatching and low deformity rates observed in both species.
- BPAC voted in favour of the re-designation recommendation. The status assessment is currently being reviewed by the Four Agency Managers Work Group.

Marriott - Bruinink

"That the Board of Directors acknowledges the report, dated June 8, 2017 on the St. Clair River Area of Concern."

CARRIED

A staff report regarding the Scholarship Program was presented.

- the St. Clair Region Conservation Authority offers scholarships for graduating high school students living in or attending a high school within the region under jurisdiction of the St. Clair Region Conservation Authority. Students must be pursuing an education in a conservation/environmental related course of study (eg. forestry, biology, geography, agriculture, ecology etc.) in a recognized Canadian University or College.
- the Conservation Scholarship program rewards these students based on their academic achievement and their demonstrated interest and involvement with the environment. The Scholarship is funded through trust funds with the St. Clair Region Conservation Foundation and was created through donations from individuals and organizations.
- this year, we received 9 applications. The applications were reviewed by a committee
 established by the St. Clair Region Conservation Foundation which included Steve
 Arnold, Archie Kerr, Rick Battson and Brian McDougall. The following scholarships
 were approved by the committee The scholarships will be presented in June or early
 July.
 - A.W. Campbell Memorial Scholarships \$1,000 award
 Monique Benedict, Strathroy and District Collegiate Institute
 Emily Fraser, Great Lakes Secondary School
 - Tony Stranak Conservation Scholarship \$500 award Jillian Ball, Lambton Kent Composite School
 - Mary Jo Arnold Conservation Scholarship \$500 award
 Nicole Delmage, North Lambton Secondary School

BD-17-092 Miller - Faas

"That the Board of Directors acknowledges the Scholarship Program report dated June 14, 2017."

CARRIED

An update on the Drinking Water Source Protection Program was presented.

Current Status of the Source Protection Program: the Thames-Sydenham and Region Source Protection Plan, approved in September 2015, came into effect on December 31st, 2015 and implementation of the plan policies is now well underway. For the past year and a half Conservation Authority staff from the Thames-Sydenham and Region have been supporting implementation of the local source protection plan and are monitoring local implementation progress. Additionally, UTRCA has signed agreements with seven

- municipalities in the Region provide risk management services and implement plan policies on their behalf.
- Local Progress Updates: New Source Protection Committee Chair Appointed: on March 22nd, the Source Protection Programs Branch confirmed that Mr. Dean Edwardson had been appointed by the Minister of the Environment and Climate Change as the new Chair of the Thames-Sydenham Source Protection Committee. The Committee's long-standing Chair, Mr. Bob Bedggood, indicated his intent to resign from his position once his term expired in August 2016. The Chair's position was then advertised by the Public Appointment Secretariat in June of 2016, and with support from the Source Protection Authorities, the Source Protection Programs Branch undertook a process to interview and select a candidate for appointment. We are pleased to have Mr. Edwardson, a long-standing industry representative on the committee, as the new leader for the Committee.
- Source Protection Committee Size Reduction: in May 2016 the Striking Committee (made up of the Chair and Vice Chair of each of the three Conservation Authority Boards of Directors) decided to reduce the size of the Source Protection Committee (SPC) from 21 to 15 members, largely due to the decreasing role and responsibilities of the Committee moving forward. The process to reduce the size of the Committee, however, was deferred until a new SPC Chair had been appointed. Now that Dean Edwardson has been appointed as the new Chair, the process to reduce the size of the Committee is moving forward. Committee members will be receiving letters that either offer an extension to their current appointment, or thank them for their years of service. The next Committee meeting will be held on October 19th, 2017 and all current members will be invited to attend. The reduction will take effect after the October meeting.
- 2017-2018 Budget and Work Plan: the Ministry of the Environment and Climate Change approved a new funding agreement for the Thames-Sydenham Source Protection Region which runs from April 1st, 2017 to March 31st, 2018. The objective of this grant funding agreement is to enable the Conservation Authorities to continue to support implementing bodies and maintain local awareness of source protection.
- Education Campaign Targeting Small Quantities of Hazardous Waste: the Source Protection Plan contains an education and outreach policy specifying the use of an education program to target the handling and storage of hazardous chemicals, known as Dense Non-Aqueous Phase Liquids, in concentrations typical of household use. Source Protection staff are currently preparing an educational campaign that will fulfill this policy requirement. Flyers will be delivered door to door in each wellhead protection area, and a website and promotional video are also being produced as part of the campaign.
- Risk Management Services Renewal: UTRCA has established a regional Risk Management Office on behalf of seven municipalities, including the Municipality of Chatham-Kent. SCRCA employee, Steve Clarke is acting as the Risk Management Official for Chatham-Kent under an agreement between SCRCA and UTRCA. The service agreement with the seven municipalities was for an initial period of three years (September 1st, 2014 August 31st, 2017). UTRCA has proposed an option for renewing the service agreement for an additional three years and four months covering the period of September 1st, 2017 to December 31st, 2020. The Municipality of Chatham-Kent, the City of London, the Township of Perth East, and the Town of St. Marys have formally approved the agreement renewal. Final decisions from the remaining three municipalities are still pending.

• Section 36 Work Plan: at the time that the Thames Sydenham and Region Source Protection Plan was approved in September 2015, the Minister ordered the Source Protection Authorities to prepare and submit a workplan under Section 36 of the Clean Water Act and submit it to the ministry by November 30, 2018. The workplan shall propose the detailed steps for the review of the source protection plan, including which portions of the plan are to be reviewed, the timeframes for each step of the review, the consultation that would be undertaken as part of the review, and rationale for each step. The workplan must be developed in consultation with the Source Protection Committee, participating municipalities, and the MOECC. Staff will be taking initial steps in 2017 to begin preparation on the Section 36 workplan.

BD-17-093

McMillan - Rupke

"That the Board of Directors acknowledges the report, dated June 7, 2017 providing an update on the Drinking Water Source Protection Program."

CARRIED

Under New Business the General Manager outlined the many staff changes and upcoming staff changes.

Kelly Johnson has been hired as the new St. Clair AOC Coordinator.

Donna Strang is now on maternity leave and will be returning next year as Manager of Communications

Rick Battson will be retiring the end of August

Nicole Drumm is now Communications Technician and will be filling in until Donna returns.

Ashley Fletcher has been hired as the Administrative Assistant/Meeting Coordinator

Marlene Dorrestyn will be working modified hours

The Board of Directors went in camera to discuss property and personnel issues.

BD-17-094

Miller - Bruinink

"That the Board of Directors move in-camera at 1:35 p.m. to discuss property and personnel issues with the General Manager, the Director of Lands and the Director of Finance remaining."

CARRIED

BD-17-095

Marriott - Kelch

"That the Board of Directors rise and report at 1:55 p.m.."

CARRIED

Kelch - Miller

"That the Board of Directors acknowledges the report dated June 9, 2017 and further directs staff to inform the Foundation, that the Board does not support the acceptance of the proposed donation, however, that Mr. Brandon is to be commended for his conservation ethic, but that his proposed donation should be politely and respectfully declined."

CARRIED

BD-17-097

Miller - Kelch

"That the Board of Directors approves and accepts the proposal of RWAM Insurance and directs staff to initiate the new program September 1, 2017."

CARRIED

BD-17-098

Miller - Faas

"That the Board of Directors approves the waiving of Conservation Area entrance fees for July 1, 2017 in celebration of Canada's 150th anniversary of confederation."

CARRIED

BD-17-099

Faas - Gordon

"That the meeting be adjourned."

Steve Arnold
Chair

Brian McDougall
General Manager

General Manager's Report 4.(i)



To: Board of Directors
Date: September 11, 2017

From: Brian McDougall, General Manager

Ontario Bill 139 - the Building Better Communities and Conserving Watersheds Act

- today, the government brought forward the above Bill as the Order of the Day for second reading
- the Ministers of Municipal Affairs and Housing and Natural Resources and Forestry outlined the 2 new Acts proposed and proposed changes to 17 Acts included under Bill 139, underscored the reasons for the proposed changes and the public consultation that had been completed with regard to these changes
- ❖ the presentation of the Bill 139 was followed by more than 3 hours of debate
- notable issues brought forward in debate regarding Conservation Authorities included:
 - Large Bill impacting a great deal of legislation Conservation Authorities Act update should have its own Bill
 - Provincial funding on average, Authorities receive only 10% of their revenue from the province.... approximately 54% from their municipalities, 1% from the federal government, and the remaining 35% is raised through fees and fundraising
 - SCRCA 2017 funding Provincial 6%, Provincial Grant Other 11%, Federal 1%, Municipal 14%, Municipal Special Levy 4%, Reserves 10%, Self Generated 54%
 - o Ministers powers under regulations are too great
 - Authority Officers powers of entry changed to "without warrant"
 - o appointment of Board Members special requirements
 - local decision making Conservation Authorities more provincial input & oversight / Local Planning Tribunals less provincial input & oversight
 - "Rogue" Conservation Authorities Niagara Peninsula Conservation Authority

Draft Action Plan for Lake Erie Phosphorous

subsequent to submitted our comments on the EBR posting we were contacted by the Ministry of Natural Resources and Forestry to discuss all the Conservation Authority submission as a group

- Authority comments were reviewed and streamlined at a meeting in July and a small group was appointed to continue to provide comment and input to the federal and provincial Ministries as they move toward a final draft of the Action Plan
- ❖ Jo-Anne Rzadki of Conservation Ontario, Richard Wyma, General Manager of Eseex Region CA and I have continued discussion with the Ministries throughout the summer and into the fall
- Conservation Authorities have been captured in the document as an important delivery partner
- however, many groups are being asked to contribute to the actions in the Action Plan and everyone wants to ensure that they are recognized

Chloride Issues in the Great Lakes

- understanding that the issue of Phosphorous is paramount with Lake Erie –
 Chlorides are seen as a significant concern across the Great Lakes Basin
- the SCRCA has been invited to attend the Great Lakes Chloride Forum in early October to discuss the issue and available actions
- the Forum is being hosted by the Toronto US Consulate General, Lake Simcoe Region CA, World Wildlife Fund and Gowling WLG

Conservation Ontario Council Minutes from Meeting #2/17 Monday, June 26, 2017 Black Creek Pioneer Village

Voting Delegates Present: Dick Hibma (Grey Sauble), Chair

Brian Horner, Ausable Bayfield Alan Revill, Cataraqui Region Geoff Rae, Cataraqui Region Kim Smale, Catfish Creek

Chris Darling, Central Lake Ontario

Don MacIver, Credit Valley
Deb Martin-Downs, Credit Valley
Tim Pidduck, Crowe Valley
Richard Wyma, Essex Region
Forrest Rowden, Ganaraska Region
Linda Laliberte, Ganaraska Region

Joe Farwell, Grand River Sonya Skinner, Grey Sauble Lisa Burnside, Hamilton Scott Peck, Hamilton

Peter Raymond, Kawartha Region Mark Majchrowski, Kawartha Region Elizabeth VanHooren, Kettle Creek Geoffrey Dawe, Lake Simcoe Region Mike Walters, Lake Simcoe Region Ken Boshcoff, Lakehead Region Tammy Cook, Lakehead Region Cliff Evanitski, Long Point Region John Scholten, Long Point Region

Members Absent:

Halton Region Maitland Valley

Presenting Guests:

John Dungavell, Ministry of Natural Resources and Forestry Mike Passey, Ministry of Natural Resources and Forestry Julia Holder, Ministry of Natural Resources and Forestry

Guests:

Gayle Wood, formerly Nottawasga Valley Conservation Authority Barb Perrault, Nottawasga Valley Conservation Authority

CO Staff:

Kim Gavine, General Manager Kristin Bristow Jane Lewington Nekeisha Mohammed Jo-Anne Rzadki Don Pearson, Lower Thames Jim Alyea, Lower Trent Glenda Rogers, Lower Trent Mark Burnham, Mississippi Paul Lehman, Mississippi Duncan Abbott, Mississippi

Sandy Annunziata, Niagara Peninsula Mark Bricknell, Niagara Peninsula

Lin Gibson, Nickel (Conservation Sudbury)

Brian Taylor (North-Bay Mattawa) Doug Lougheed, Nottawasaga Valley Doug Hevenor, Nottawasaga Valley

Dan Marinigh, Otonabee Frank Prevost, Raisin Region Lyle Pederson, Rideau Valley

Sommer Casgrain-Robertson, Rideau Valley

Dan Gieruszak, Saugeen Valley
Wayne Brohman, Saugeen Valley
Rhonda Bateman, Sault Ste Marie
Doug Thompson, South Nation
Steve Arnold, St. Clair Region
Brian McDougall, St. Clair Region
Brian Denney, Toronto and Region
Murray Blackie, Upper Thames River

Murray Blackie, Upper Thames River Ian Wilcox, Upper Thames River

Mattagami Region
Quinte Conservation

Matthew Millar Bonnie Fox Chitra Gowda Leslie Rich Rick Wilson

1. Welcome from the Chair

Chair Hibma encouraged members to make introductions as follows: Sandy Annunziata introduced Mark Brickell as the new CAO of NPCA. Doug Lougheed introduced Doug Hevenor as the new CAO of NVCA. Glenda Rodgers introduced Jim Alyea as the new Chair for LTC. Cliff Evanitski introduced John Scholten as the new Vice Chair of LPRCA.

Dick Hibma noted that the CA Statistical Survey was circulated by CO and issued a reminder to Council to follow up with responses if not completed already.

The meeting effectiveness survey was referred to and it was noted that it would be circulated for responses.

2. Adoption of the Agenda

#14/17 Moved by: Forrest Rowden Seconded by: Mark Burnham

THAT the agenda be adopted as circulated.

CARRIED

3. Declaration of Conflict of Interest.

There was none.

4. Approval of the Minutes of the Previous Meeting

#15/17 Moved by: Steve Arnold Seconded by: Lyle Pederson

THAT the minutes from the April 3, 2017 meeting be approved.

CARRIED

5. Business Arising from the Minutes.

There was none.

6. Motion to move from Full Council to Committee of the Whole

#16/17 Moved by: Doug Thompson Seconded by: Mark Burnham

THAT the meeting now move from Full Council to Committee of the Whole.

CARRIED

7. Discussion Items

 a. Proposed amendments to the Conservation Authorities Act as part of Bill (139), the Building Better Communities and Conserving Watersheds Act, 2017 (EBR#013-0561) and;
 Moving Forward in a Collaborative Relationship with Ministry of Natural Resources and Forestry and the Province of Ontario

A presentation was made by Mike Passey, John Dungavell and Julia Holder of the Ministry of Natural Resources and Forestry (attached to the minutes of the meeting) regarding the proposed changes to the Conservation Authorities Act. A period of questions and answers followed. Ministry staff were thanked and congratulated for their work on the proposed changes. They then left the meeting.

Kim Gavine provided an overview presentation (attached) regarding Conservation Ontario's proposed positioning on the changes to the Conservation Authorities Act. A period of questions and answers followed.

Lyle Pederson recommended that Conservation Ontario's draft letter for the EBR posting be more proactive and include reference to our support of the five key areas as identified in the "Conserving our Future" document. Council members agreed that the inclusion of the ministry's five key areas would be beneficial. Staff indicated that they would amend the letter accordingly.

C.W.#06/17 Moved by: Joe Farwell Seconded by: Doug Thompson

THAT Council endorse the draft letter, as amended, in response to "Proposed amendments to the Conservation Authorities Act as part of Bill (139), the Building Better Communities and Conserving Watersheds Act, 2017" (EBR#013-0561) and The Conservation Authorities Act Review Decision Document "Conserving our Future: A Modernized Conservation Authorities Act" (EBR#012-7583)

CARRIED

 Conservation Ontario comments on the "Proposed regulation under the Public Lands Act to enable certain occupations of public land without the need for an occupancy instrument (e.g. land use permit, lease, license of occupation) (EBR #013-0211)

Leslie Rich provided a verbal overview.

C.W.#07/17 Moved by: Rhonda Bateman Seconded by: Mark Burnham

THAT the comments on the "Proposed regulation under the Public Lands Act to enable certain occupations of public land without the need for an occupancy instrument (e.g. land use permit, lease, license of occupation)" (EBR# 013-0211) submitted to the Ministry of Natural Resources and Forestry on May 19, 2017 be endorsed.

CARRIED

 Conservation Ontario comments on "Excess Soil Management Regulatory Proposal" (EBR #-13-0299)

Leslie Rich provided a verbal overview and it was clarified that the proponent was required to have a Qualified Person complete a management plan that includes consideration of fill quality.

C.W.#08/17 Moved by: Steve Arnold Seconded by: Lyle Pederson

THAT the draft comments dated June 26, 2017 on the "Excess Soil Management Regulatory Proposal" (EBR # 013-0299) be endorsed for submission to the Ministry of Environment and Climate Change.

CARRIED

d. Gilmor Appeal

Chair Hibma asked Doug Lougheed, Doug Hevenor and Barb Perreault of the Nottawasaga Valley Conservation Authority and Gayle Wood (formerly of the Nottawasaga Valley Conservation Authority) to join him at the front of the room to acknowledge their successful appeal of the Gilmor case. A token of appreciation was provided by the CO collective. Acknowledgement was also provided to Chris Hibberd and Glenn Switzer of the Nottawasaga Valley Conservation Authority who were not present.

Geoffrey Dawe asked what happens with the building on the site. Don MacIver noted that they are working through the municipality to apply for a permit for demolition and some remediation work on the property.

Ken Boschoff asked about insurance and if there was any financial support. Doug Lougheed commented that they have to apply for costs via the court of appeal related to the legal fees. They are prepared to provide an update at the September council meeting.

C.W.#09/17 Moved by: Forrest Rowden Seconded by: Lin Gibson

THAT the Gilmor v. Nottawasaga Valley Conservation Authority Court of Appeal decision be circulated to all member municipalities.

CARRIED

8. Consent Agenda Items

C.W.#10/17 Moved by: Geoffrey Dawe Seconded by: Mark Burham

THAT Council approve a consent agenda and endorse the recommendations accompanying Items 8a – 8p.

CARRIED

a. Update on Conservation Ontario's 2017 Annual Workplan

THAT Conservation Ontario Council receive this report.

b. General Managers Report

THAT Conservation Ontario Council receives this report as information.

c. Budget Status Report (for the period ending May 31, 2017)

THAT Conservation Ontario Council receive this report.

d. Update on the Request for Proposals on Level 2 Provincial Offences Training

THAT Conservation Ontario Council receives this report as information.

e. Update Ontario Climate Advisory Committee

THAT Conservation Ontario endorse Stephanie Shifflett (Grand River CA) and Edmundo Fausto (TRCA) as Conservation Ontario representatives replacing Dwight Boyd (Grand River CA) and Ryan Ness (TRCA) on the Ontario Climate Advisory Committee.

f. Provincial Flood Forecasting and Warning (PFFW) and Ontario Hydrometric Program Coordinating Committee (OHPCC) Representatives (M.Millar)

THAT Katelyn Lynch (NBMCA) be endorsed at the Northern CA representative on the Provincial Flood Forecasting and Warning Committee (PFFWC)

AND THAT Steve Clark (SCRCA) be endorsed as the South West representative on the PFFWC and Steve Jackson (MVCA) be endorsed as an alternate representative.

AND THAT Steve Clark be endorsed as the CO representative on the Ontario Hydrometric Program Coordinating Committee.

g. Conservation Ontario Comments on the Proposed Voluntary Ontario Trails Classification System

THAT the comments on the proposed "Trail Classification System" submitted to the Ministry of Culture, Tourism and Recreation on May 18, 2017 be endorsed.

h. CO Representation on the Provincial Elevation Coordination & Consultation

THAT Dr. Clifford Patterson of Kettle Creek Conservation Authority be endorsed to represent Conservation Ontario on the Provincial Elevation Coordination and Consultation Committee along with Ian Jeffrey of Ganaraska Region Conservation Authority.

i. Status Update on Bottled Water Regulations

THAT Conservation Ontario Council receives this report as information.

j. Conservation Ontario comments on "Amendment of Procedural Rules for the Mining and Lands Commissioner"

THAT the comments on the "Amendment of Procedural Rules for the Mining and Lands Commissioner" submitted to the Office of the Mining and Lands Commissioner on April 20, 2017 be endorsed.

k. Update on the Fisheries Act and Conservation Ontario's Comments on the Standing Committee on Fisheries and Oceans report "Review of Changes Made in 2012 to the Fisheries Act: Enhancing the Protection of Fish and Fish Habitat and the Management of Canadian Fisheries"

THAT the comments on the Standing Committee on Fisheries and Oceans report "Review of Changes Made in 2012 to the Fisheries Act: Enhancing the Protection of Fish and Fish Habitat and the Management of Canadian Fisheries" submitted to the Ministry of Natural Resources and Forestry on June 16, 2017 be endorsed.

I. Canada-Ontario Draft Action Plan – "Partnering in Phosphorus Control: Achieving Phosphorus Reductions in Lake Erie from Canadian Sources" (EBR # 012-9971) and Federal Posting: "Let's Talk Lake Erie"

THAT Conservation Ontario Council endorse the attached comment letter on the Canada-Ontario Draft Action Plan – "Partnering in Phosphorus Control: Achieving Phosphorus Reductions in Lake Erie from Canadian Sources" (EBR # 012-9971) and Federal Posting: "Let's Talk Lake Erie"

m. Updated Provincial Land Use Plans & Conservation Ontario Representation on the Watershed Planning Engagement Group for the Development of Watershed Planning Guidelines

THAT Ryan Ness (Toronto and Region Conservation), Janet Ivey (Grand River Conservation Authority), Ben Longstaff (Lake Simcoe Region Conservation Authority), Heather Brooks (Central Lake Ontario Conservation Authority) and Bonnie Fox (Conservation Ontario) be endorsed as Conservation Ontario representatives on the Watershed Engagement Group to support the development of provincial Watershed Planning Guidance.

n. Program Updates

THAT Conservation Ontario Council receives this report.

- i. Drinking Water Source Protection
- ii. Marketing and Communications
- iii. Business Development and Partnerships
- iv. Information Management

o. Project Tracking

p. Correspondence

- i. Premier Wynne to Conservation Ontario re conservation flood programs
- ii. Minister of Natural Resources and Forestry to Conservation Ontario re Bill 130, Building Better Communities and Conserving Watersheds Act, 2017

9. Regional Presentation: Greater Toronto Area CAs

The presentations are attached to the minutes of the meeting.

10. Motion to Move from Committee of the Whole to Full Council

#17/17 Moved by: Mark Burnham Seconded by: Tim Pidduck

THAT the meeting now move from Full Council to Committee of the Whole

CARRIED

11. Council Adoption of Recommendations

#18/17 Moved by: Brian Taylor Seconded by: Lisa Burnside

THAT Conservation Ontario Council adopt Committee of the Whole (C.W.) Recommendations: C.W. #06/17 to C.W. #10/17

CARRIED

12. New Business

Deb Martin Downs noted that CAU is looking for new commitments for the next session in 2017/2018

13. Adjourn

Moved by: Mark Burnham

THAT the meeting be adjourned

6.(i)



To: Board of Directors
Date: September 7, 2017
From: Ashley Fletcher

Subject: Business Arising from June 22, 2017 meeting

- further information and explanation regarding draft Conservation Authorities Act 28.2, cancellation of permits was requested.
- Specifically if notice is required to cancel a permit what is the time frame for such a notice
 - Points of question (taken from proposed Bill 139 the Building Better Communities and Conserving Watersheds Act.)
 - Cancellation of permits
 - 28.3 (1) An authority may cancel a permit issued under section 28.1 if it is
 of the opinion that the conditions of the permit have not been met or that
 the circumstances that are prescribed by regulation exist.
 - Notice
 - (2) Before cancelling a permit, an authority shall give a notice of intent to cancel to the permit holder indicating that the permit will be cancelled on a date specified in the notice unless the holder requests a hearing under subsection (3).
 - No time frame has been provided for a notice in the proposed act
 - Additional information may be included in the accompanying regulation however, our interpretation is that the notice and the cancellation can be served at the same time

7 (i)



To: Board of Directors Date: August 29, 2017

From: Kevan Baker, Director of Lands Subject: Conservation Lands Report

Conservation Areas

- the Conservation Authority owns 15 conservation areas and manages 17 properties for the Foundation
- of those 15 conservation areas, six are managed by the local municipality and nine are operated by the Conservation Authority
- of these nine, three conservation areas are regional campgrounds which attract campers primarily from Southwestern Ontario
- our three regional campgrounds have over 500 campsites and 416 seasonal campers and are financially self-sufficient
- profits obtained from our campgrounds are used to offset capital improvements
- the 2017 camping season runs from Friday, April 28th to Thanksgiving Day

Marketing/Camping Statistics

Our conservation areas have been marketed in the following publications or events in 2017:

- Sarnia Lambton and Chatham-Kent Tourism Guide
- Camping ad has been placed on MyFm website
- Conservation Ontario "Your Guide to Conservation Areas"
- Central Lambton Travel Guide
- Hayter Publication's Special Editions (4) "Cottage and Campers"
- Sarnia Art Walk (downtown Sarnia, June 3rd and 4th)
- For 2017, 416 seasonal campers are registered at our three campgrounds, down from 421 in 2016
 - Warwick: 190 seasonal campers registered (191 in 2016)
 - o L.C. Henderson: 119 seasonal campers registered (123 in 2016)
 - o A.W. Campbell: 107 seasonal campers registered (107 in 2016)

Warwick Conservation Area

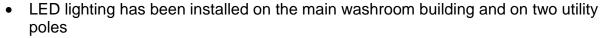
- a 24x32ft pole type storage shed has been constructed
- engineered wood chip playground protective surfacing has been installed under the main day use area play equipment
- the pool washroom hydro panel has been upgraded
- three sections of boardwalk have been installed on the White Pine trail
- hydro and water has been installed to



- two overflow campsites in the woodlot campground
- woodlot campground laundry shed has been renovated with new appliances, flooring, and plumbing
- 550-meters of new chip and dust trail have been developed around the perimeter of the 5-acre climate change tree growth plantation (Foundation)
- a fishing dock has been constructed on the main reservoir
- LED exterior lighting has been installed on two of the washroom buildings
- a mountain bike obstacle has been constructed along the bike cross trail

L.C. Henderson Conservation Area

- the campground pool has been renovated with two new ladders and entrance railing
- 10 new picnic tables have been constructed
- one shower area has been upgraded with new shower surround and ceramic tile on the floor and walls
- a new sidewalk has been installed in front of the shower areas
- two new hydro panels have been installed, one in the main washroom building and one in the campground area



video surveillance equipment has been installed in and outside the gatehouse



 a new concrete side walk has been constructed at the pool washroom and visitor center

- permanent hydro (six 30 amp campsites) has been installed at the Campbell house group camp area
- water distribution pump house has been renovated with new internal and external siding and new internal plastic water lines
- 10 new picnic tables have been constructed
- upgrades have been completed at the main campground washroom (new concrete

sidewalk) and at the gatehouse and entrance area (new signage and fee box)

 a weather station has also been installed on the property (Water Resources Department)





Keith McLean Conservation Lands (Foundation Property)

- Scott O'Brien was hired as the new Superintendent
- a new floor has been installed in the Kent Bridge Road pump house
- a trail identification sign has been installed at the main parking lot
- Lake Erie water levels are at a 30year high resulting in one of the agricultural fields being partially flooded
- a tower agreement has been negotiated with Xplornet, the tower will be installed on Kent Bridge Line later this fall



Other Lands Activities

- a 5-year tower lease has been negotiated with Cogeco Connexion Inc. for the existing tower and building at Peers Wetland CA
- a bench and concrete pad has been installed along the Strathroy North Valley Lands trail
- Property 97 in the McKeough Upstream Lands has undergone a 3-acre habitat restoration project, which involved the construction of two wetlands, the planting of a small tallgrass prairie and 1,000 hardwood trees (funded by Union Gas and Wildlife Habitat Canada)
- approximately 680 meters of randomized tile drainage has been installed on two McKeough Upstream agricultural properties
- two benches have been installed along the trail at the Peers Wetland CA (benches donated by Sydenham Field Naturalists)
- existing tennis courts to be removed and new courts constructed at the Esli Dodge Conservation Area (project of Lambton Shores)

Staff Report 7 (ii)



To: Board of Directors Date: August 29, 2017

From: Kevan Baker, Director of Lands
Subject: Highland Glen Conservation Report

Highland Glen Conservation Area

- approximately 40ft of new walkway has been installed along one side of the boat ramp, this will allow for more than one boat to dock at a time
- the existing walkway has been elevated in response to rising lake levels
- approximately 84ft of existing seawall has been repaired by excavating and installing new tie back supports
- Armour stone has been re-positioned to provide better protection to the steel seawall
- two LED solar marine beacon lights have been installed to guide boaters to the ramp and harbor area after dark
- entrance roadway has been maintained with additional gravel and grading (Plympton-Wyoming)
- beach access points have been regraded
- starting in 2017, fees are being charged for the use of the boat ramp and vehicle entry; fees are being collected through the MacKay Pay system, where payments are collected online or by phone



New walkway, on left side of boat ramp





Armour stone repositioned to protect seawall

- revenue collected will be used to offset future repair costs to the ramp, seawalls, and conservation area infrastructure
- to date, we have sold 65 seasonal boat ramp use passes (\$7,800.00); 203 day-use boat ramp passes (\$2,030.00); 9 seasonal vehicle-only passes (\$540.00); and 60 day-use vehicle passes (\$300.00) for a total revenue of \$10,670.00 before fees

7 (iii)



To: Board of Directors
Date: September 11, 2017

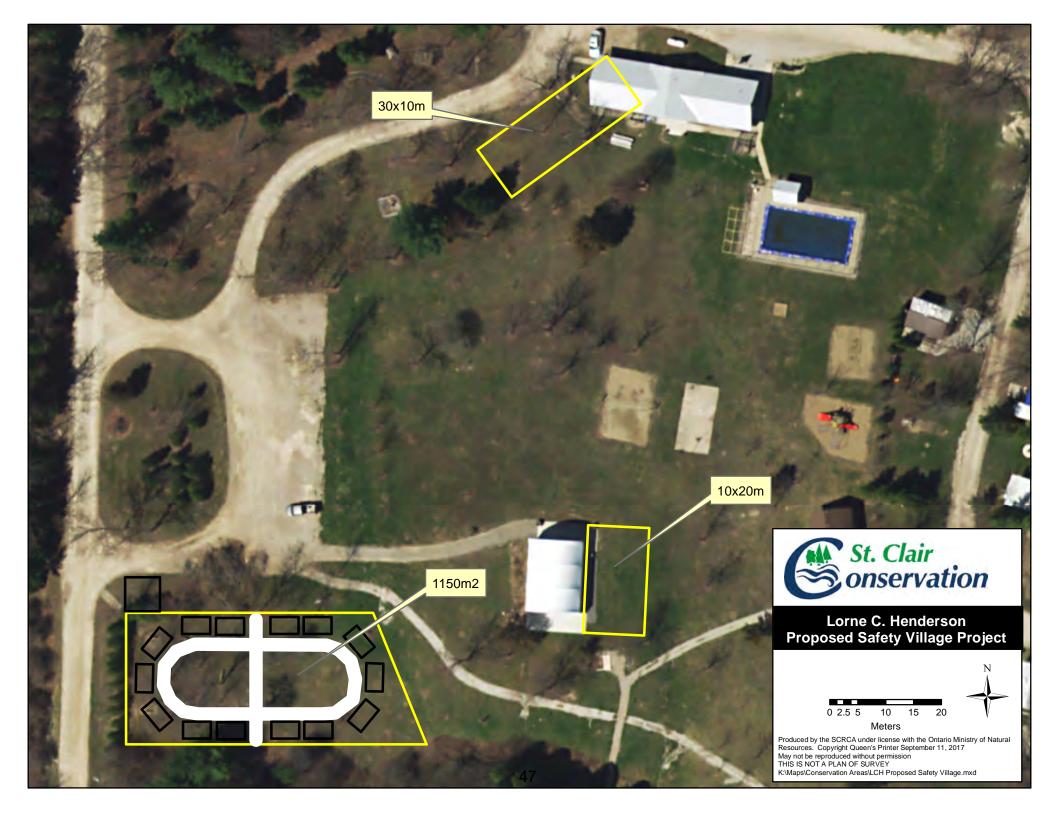
From: Brian McDougall, General Manager Subject: Lambton Children's Safety Village

- Mary Ann Buntrock (Chair) and Colleen Collins (Secretary) of the Board of Directors of the Lambton Childrens Safety Village (LCSV) met with Chair Arnold and I to discuss the potential to locate the LCSV at LC Henderson CA in early August
- The mission of the LCSV Board is to help to reduce child-related injuries in the communities of Lambton by creating a safe setting where young people will learn Safety Awareness and will be motivated to learn how to make smart choices in their daily lives



- ❖ The LCSV Board has been actively looking for a location to locate the Safety Village for some time and with Chatham-Kent and London & Area Children's Safety Villages being located on Conservation Authority properties (Chatham-Kent located at CM Wilson CA of Lower Thames Valley Conservation Authority and London & Areas located at Fanshawe Conservation Area of Upper Thames River Conservation Authority) it was only natural for the St. Clair Region CA to be investigated for potential sites for the proposed Village
- LC Henderson CA was seen as the most advantageous site due to its location and the potential to coordinate, cooperate and compliment our existing Education Programs
- ❖ Prior to the meeting, staff reviewed the potential for locating the Village at LC Henderson CA and 3 specific issues were brought forward and were shared at the August meeting
 - O Hydro we have previously been advised by Hydro One that in order to provide additional Hydro servicing to the site, an additional line from Petrolia will have to be installed and their service will be restricted to the property boundary with the Authority having to purchase the hydro service on Authority property based on the conceptual plan we propose to obtain two professional opinions one from an electrician confirming that the proposed development can or cannot be undertaking with the existing system and two from Hydro One to provide confirmation that this is still the case and to prepare a quote for the cost to implement the necessary changes

- Septic System the existing septic system is at it's maximum capacity with the existing development on site the most significant issue is whether the Village will increase the intensity of use beyond the capacity of the system will combined use of campers, existing education program and the proposed Village be too much for the system to handle if so what would the cost be to expand or replace the system proposal should be reviewed by a qualified engineer
- o Impacts on Campers Camping revenues are the sole source of income for the operation of the Conservation Area and those revenues also support the works completed at other day use Conservation Areas – as a result any negative impact on Campers is an issue – additional structures are not seen as an issue but the increased intensity of use and the proximity of the village to campsites are concerns
- ❖ The conceptual design for the Village had a footprint of more than 2 acres including structures, education areas, parking, etc.
- However, after looking at the existing facilities, and reviewing options for complimentary development, the concept for the design of the Village is seperated into 3 distinct locations
- ❖ An addition to the existing Education Centre would provide office space for Safety Village and Authority staff, as well as a classroom and kitchen as well as some renovations to the existing Centre
- The Visitors Centre would be duplicated to create additional education area and special event space
- ❖ The Safety Village would be smaller than normal with a limited footpring adjacement the parking with required storage included while maintaining as many trees as possible as and maintaining a significant buffer to the adjacent campsites
- ❖ The overall concept appears to be a win-win for both organizations, however, it will be important to understand the responses to the outlined issues
- ❖ Therefore staff recommend that opinions be sought with regards to the hydro servicing and septic system at LC Henderson CA to ensure that the suitable services exist in order further the investigation process



8.(i)



To: SCRCA Board of Directors

Date: September 5, 2017

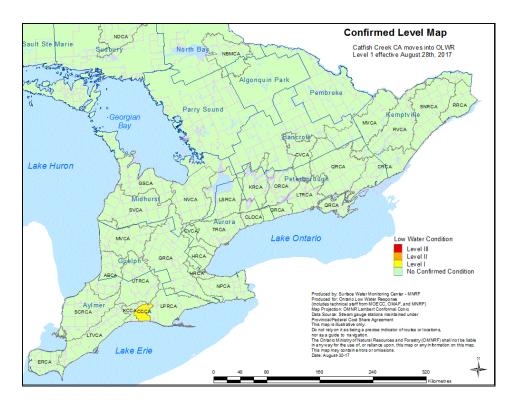
From: Girish Sankar, Director of Water Resources Subject: Current Watershed and Lake Conditions

Watershed Precipitation and Streamflow Conditions

Highlights:

Average flow conditions across watershed

Much of the province has received significantly higher amounts of precipitation over the summer to the point that all the watersheds are outside the low water levels, other than one watershed in the low water level 1. The calculation of drought conditions is statistically analyzed based on actual precipitation compared to average for the month as well as watershed flows compared to lowest average flows at select gauging stations. Within the SCRCA region precipitation has been close or slightly higher than expected averages although have often occur in a pattern of periods of significant rainfall followed by dry periods.



Flood Threat

With current weather patterns causing extensive sudden rainfall the potential for localized flood conditions may be experienced during these events. While seasonal flows remain in the average range, we continue to monitor changes in watershed conditions as they occur. As always we will continue monitor flows and any significant storm events. Advisories will be provided as conditions dictate.

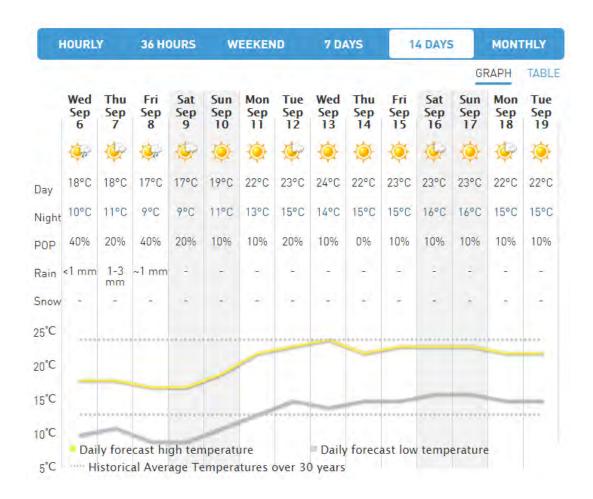
Weather Forecast (Data: Weather Network, Environment Canada, OFA)

Short Term Outlook

seasonal temperature and precipitation across the region over the next 14 days

Long Term Outlook

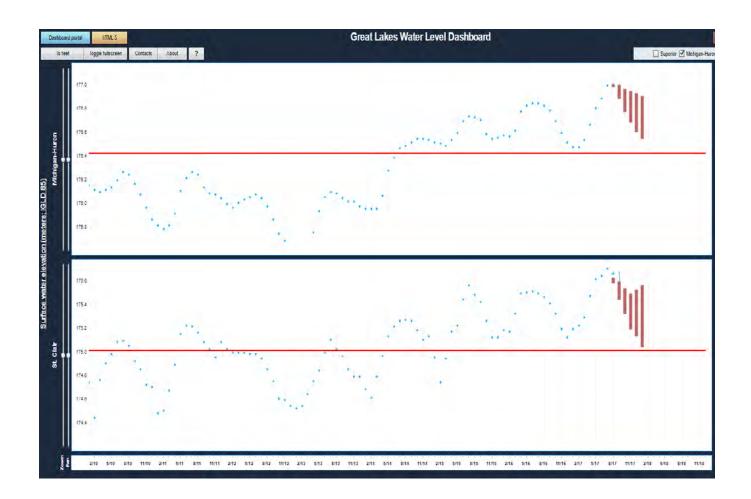
➤ Environment Canada anticipates that temperatures will be above average and precipitation will be below normal for the fall season



Great Lakes Levels (Canadian Hydrometric Service data – July)

The monthly comparison for July 2017 (current available data) indicate that Lake Huron levels have increased by **15cm** over July 2016 and continue to remain above the average (period of record) for Lake Huron at **57cm** and Lake St. Clair **69cm**.





8.(ii)



To: SCRCA Board of Directors

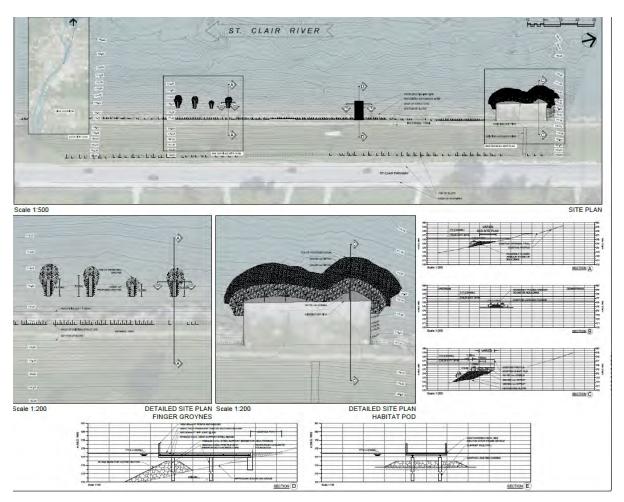
Date: September 5, 2017

From: Girish Sankar, Director of Water Resources

Subject: Shoreline Projects

<u>Aamjiwnaang Shoreline Naturalization:</u>

The purpose of this undertaking is to develop concepts that would "soften" and naturalize the shoreline. This project will also include shoreline work that will improve shoreline access, enhance aquatic habitat and provide general improvements to the existing shore along the entire project site.



Project Highlights

- habitat pod
- finger groynes
- all permits have been obtained
- construction work has started first week of September
- work is expected to be completed by end of September

Courtright Shoreline Protection

The site is located in the St. Clair Township along the east shore of the St. Clair River in the community of Courtright. The existing site is protected with concrete rubble and stone and extends approximately 400 meters along the St. Clair River shoreline. A number of sections along the exposed shore have failed. The purpose of the undertaking is to provide shore stabilization, improve shoreline access, enhance aquatic habitat and to provide general improvements to the existing shore along the entire project site.

The proposed preferred shoreline protection structure, include armour stone/rip rap revetment with aquatic planting and gravel beds incorporated along parts of the shoreline.

Draft Design



- staff reviewing design with the township and consulting engineer applications for permits have been completed construction work is expected to start this Winter (December, 2017) habitat/fish monitoring is underway ***

8.(iii)



To: SCRCA Board of Directors

Date: September 5, 2017

From: Girish Sankar, Director of Water Resources

Subject: National Disaster Mitigation Program

National Disaster Mitigation Program:

The National Disaster Mitigation Program (NDMP) was established by the Government of Canada to address the increasing dangers and costs faced by Canadian Communities as a result of flood events The program will receive \$200 million in funding over the course of five years to improve knowledge regarding flood risks and enhance current flood response programs. These improvements will help protect property and public safety by ensuring more efficient mitigation efforts and recovery procedures following flood events.

Issues/Analysis:

In Ontario, conservation authorities have been delegated the primary responsibility for risk assessments and flood plain mapping from the Ministry of Natural Resources and Forestry. In the 1970's and 1980's floodplain mapping commenced under the, Flood Damage Reduction Program (FDRP). Since that time, there has been no federal or provincial investment towards flood plain analysis.

The existing floodplain mapping of SCRCA is based on older Digital Elevation Models with coarse contour intervals of 5 meters. Floodplain elevation discrepancies are often noticed during review process, often 1 – 2 meters or more. Through the SWOOP program, our office has acquired accurate imagery (2010) that can be used to create an extremely detailed DEM with greater accuracy. A flood study using this DEM will deliver accurate floodplain mapping for the watershed.

Staff at SCRCA propose to apply for funding to complete an updated floodplain mapping study for the watershed. However, considering the resources and funding limitations, the practical approach is to consider a pilot study to be conducted over the next 2 years (2018 and 2019) focussing on 2 regions in the watershed. Staff have identified a rural watershed (Enniskillen) and an urban (Sarnia) watershed to conduct this mapping exercise.

Finance:

The total cost of this project is estimated to be \$200,000. If approved for NDMP funding, 50% of the costs have to be matched by the Municipality, of which 15% is the in-kind contribution such as labour, use of facilities and equipment, which can be readily absorbed by SCRCA. The SCRCA is seeking the remainder (\$70,000) from the

Municipalities. Staff will continue to look into other funding sources to provide matching funds for this project.

Staff are in the process of finalizing all supporting documentation for this application.

8.(iv)



To: Board of Directors Date: August 31, 2017

From: Emily De Cloet, Water Resources Technician

Subject: Flood Forecasting Innovation Project

St. Clair Conservation recently partnered with the Lambton Water Centre at Lambton College in Sarnia for an innovative project that will modernize flood forecasting in the watershed. The project, comprised of three components, is anticipated to be operational in early 2018.



Proposed location of the remote monitoring camera in Wallaceburg.

Project Highlights

- Remote monitoring camera installed near the confluence of the Sydenham River in Wallaceburg
 - The camera will provide staff the ability to instantaneously watch flood and ice conditions at the watershed's most vulnerable location while at the office
- Mobile water level logger
 - The logger will be mobile and allow staff to pick up and move anywhere within the watershed
 - Water level data will be collected for streams which are not near a stream gauge and do not have up-to-date water level data

- Mobile precipitation gauge
 - The precipitation gauge will also be mobile and will collect data in areas of the watershed not currently covered by meteorological equipment
 - o This will allow staff to monitor the movement of precipitation through the watershed and determine changes in patterns attributed to climate change

Financial Contributions

- St. Clair Conservation is contributing \$8000 the first year for the purchase of equipment, from within the current budget
- an additional \$8000 for the following year for any necessary equipment maintenance or upgrades as budgeted
- St. Clair Conservation will also be providing \$20,100 dollars in in-kind services for the project
- Through the partnership with Lambton Water Centre, the Natural Sciences and Engineering Research Council of Canada (NSERC) will be contributing \$26,280 to the project
- Total project cost is \$62,380

9.(i)



To: Board of Directors Date: August 30, 2017

From: Kelli Smith, Watershed Biologist

Greg Wilcox Watershed Technician Erin Carroll, Manager of Biology

Subject: Proposed Policy to require SCRCA permission for Drain

Enclosures (Flooding and Erosion Policy under O.R. 171/06 "Development, Interference with Wetlands & Alteration to

Shorelines & Watercourses")

The St. Clair Region Conservation Authority is concerned with the increasing number of enclosure proposals as the affected subwatershed can experience a number of negative and cumulative impacts, including:

- increased floodplain area
- downstream flooding
- upstream flooding
- overland erosion
- increased sediment loads
- degraded stream health (i.e. water quality/aquatic species)

Conservation Authorities are involved with drainage matters in the following ways:

- 1) Since 1949, drainage petitions for new drains and improvements to existing drains are circulated to CAs for comment as required under the Drainage Act S. 4 and S. 78 respectively. CAs may request an environmental appraisal for new drainage works. Once an engineer's report has been drafted for the proposed drainage works, the Drainage Act provides CAs with a right to appeal the proposed project to the Drainage Tribunal.
- 2) As some drains meet the definition of a 'watercourse' under Section 28 of the CA Act, CA written permissions (permits) may be required for new drainage works and drain improvements, maintenance and repair activities, as per the Drainage Act and Conservation Authorities Act Protocol (DART)

SCRCA's current process is not to require written permission under O.R. 171/06 for enclosures taking place under the Drainage Act. The SCRCA provides comments and advice, based on our mandate, to the *Drainage Act* process for new engineer's reports created under section 4 and/or 78 of the *Drainage Act*. Under the *Drainage Act*, the Authority is limited in the reports or studies that it can request in support of the proposed enclosure.

For those enclosures of natural watercourses or private drainage systems when not occurring under the *Drainage Act*, the proposals may require written permission under Regulation 171/06.

If municipal drain enclosures are carried out (with or without a CA Act S.28 permit) and impact regulated areas with respect to the CA's regulatory responsibilities under the CA Act the CA could be held liable for not undertaking or enforcing its regulatory responsibilities (flooding and erosion impacts).

Ontario Regulation 171/06 gives SCRCA the right to require written permission for enclosures of open municipal drains since it involves alterations to a watercourse. Drains are defined as watercourses under the Act. Requiring written permission for all drain enclosures would enable the SCRCA to seek information, as deemed appropriate, to reduce the impacts of flooding and erosion. The Authority would be seeking such information as part of an application under O.R. 171/06 and not as part of the *Drainage Act* drain review process.

Supplemental to this report, interim guidelines have been developed to be in place until policy for Inference to Watercourses is developed for SCRCA.

Administration of service:

Similar to the DART protocol review process approved by the Board April 18, 2014, Biology Section staff complete the drain enclosure review and reporting with ratification by Planning and Regulations Section/ Regulations Officer. (This administrative process was a natural transition as a result of the former Department of Fisheries and Oceans agreements). As with the DART protocol, SCRCA Ontario Regulation 171/06 "Development, Interference with Wetlands & Alterations to Shorelines & Watercourses" applies to municipal drain enclosures and a proposed Drain Enclosure Policy and guideline would be followed for streamlining purposes. The impacts to flooding and erosion studies, if required, would require review by the SCRCA Engineer. Appropriate peer review fees would apply in these cases. From experience we anticipate only a couple of reports per year.

Financial Implications: Fees will be recuperated based on current SCRCA Regulation Fee's.

Conservation Strategy

Refer to appropriate Conservation Strategy

Supports Goals 1, 2 and 3 of Strategic Plan

Other Conservation Authorities:

 Currently the ABCA, LTVCA, ERCA, UTRCA, require written permission (or permits) for drain enclosures.

^{**}This Board report has been prepared by Biology Section staff with input from Regulations staff with regard to O. Regulation 171/06 (PH/DC legal aspects) and the Director of Water Resources (GS Engineer, P. Eng) with regard to flooding and erosion impacts consideration.

DRAFT SCRCA SECTION 28 DRAIN ENCLOSURES POLICY

SCRCA Policies and Procedures of Administration of Section 28 Regulations

Drain Enclosures Policies

Drainage Act

The Drainage Act is administered by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and is implemented by the local municipality. The Drainage Act defines the terms by which a drainage project may be initiated and prescribes the various stages of the procedure (e.g. engineer's report, consultation, appeals, construction) that must be followed by municipalities in the development of municipal drainage infrastructure. The local municipality is also responsible for the maintenance, repair and management of the drainage systems that are developed through this procedure.

Since 1949, drainage petitions for new drains and improvements to existing drains are circulated to Conservation Authorities (CAs) for comment as required under the Drainage Act S. 4 and S. 78 respectively. Under section 4 of the Drainage Act, the local municipality, CAs, or Ministry of Natural resources may require an environmental appraisal for new drainage works, the cost thereof shall be paid by the party who requested it. Once an engineer's report has been drafted for the proposed drainage works, the Drainage Act provides CAs with a right to appeal the proposed project to the Drainage Tribunal.

As some drains meet the definition of a 'watercourse' under Section 28 of the CA Act, CA written permissions (permits) may be required for new drainage works and drain improvements, maintenance and repair activities, as per the Drainage Act and Conservation Authorities Act Protocol (DART)

The DART Protocol has been developed to provide provincially-approved guidance to conservation authority staff and municipal representatives (e.g. drainage superintendents) regarding the most appropriate practices and permit requirements for <u>municipal drain maintenance and repair activities</u>. The protocol includes a set of Standard Compliance Requirements for regular repair and maintenance activities that, if followed, would serve as the written permission to proceed with work under the CA Act. As such, it allows for a streamlining of the approval process from an administrative perspective.

Interference with a Watercourse

Watercourses are defined under the CA Act, as an identifiable depression in the ground in which a flow of water regularly or continuously occurs. A watercourse also includes municipal drains, and intermittent or ephemeral creeks. Watercourses are dynamic, living systems with complex processes that are constantly undergoing change.

The area along both sides of any river, creek, stream or watercourse, called the riparian zone, not only provides habitat for a wide range of flora and fauna, it also filters surface runoff before it reaches open waterways. As runoff passes through, the riparian zone retains excess nutrients, some pollutants and reduces the sediment flow. A healthy zone can also keep stream flow going even during the dry seasons, by holding and releasing groundwater back into the stream. This interface between terrestrial and aquatic environments acts as a sponge for storing water, which in turn helps to reduce flooding and shelters the banks against shoreline erosion. Alterations to the channel of a watercourse can negatively impact the hydrologic and ecological features and functions provided by riparian zones.

Watercourses may need to be confirmed by SCRCA through field investigation by considering matters such as flow assessment, channel form and aquatic habitat.

The CA Act and Ontario Regulation 171/06 use the wording "in any way" when describing change or interference with a watercourse. Activities proposed within the watercourse boundary that could interfere in any way with the watercourse, including both those activities that meet the definition of development and those that do not necessarily meet the definition of development are regulated as described in sections 5 and 6 of the regulation. An example of an activity that does not strictly meet the definition of development and could represent interference is vegetation removal. Consistent with the interpretation by MNR/Conservation Ontario Section 28 Regulation Committee (2008) interference in any way is interpreted by SCRCA as any anthropogenic act or instance which hinders, disrupts, degrades or impedes in any way the natural features or hydrologic and ecological functions of a watercourse.

To receive permission to straighten, change, divert or interfere in any way with a watercourse area under SCRCA Ontario Regulation 171/06 it must be demonstrated in an application to the satisfaction of the SCRCA, that the interference will not result in an unacceptable interference in terms of the natural features or hydrologic and ecological functions.

Implementation Guidelines for Drain Enclosures

The following outlines the specific policies for implementing Ontario Regulation 171/06 with respect to Drain Enclosures.

Enclosure – is defined as a pipe or other conduit designed to entomb a watercourse underground, but shall not include crossings. Crossings shall include but are not limited to bridges, culverts, pipelines, and channel enclosures of less than 20 metres (66 feet).

- In general, drain enclosures are discouraged, but will be permitted where there is an existing
 risk to public safety and/or potential property damage, where such works would significantly
 improve existing hydrological or ecological conditions, or where acceptable justification has
 been provided to the satisfaction of the Conservation Authority that the interference is
 acceptable on the natural features and hydrologic and ecological functions. Proposed
 enclosures should generally demonstrate that;
 - a. all feasible alternative options and methods have been explored;
 - b. the risk to public safety is not increased;
 - c. susceptibility to natural hazards is not increased and no new hazards are created;
 - d. there is no negative impact on wetlands;
 - e. there are no negative or adverse impacts on hydrologic and ecological functions,
 - f. the enclosure does not increase floodplain elevations, flood frequency, erosion rates or erosion frequency upstream and/or downstream of the enclosure;
 - g. the enclosure is designed to ensure that the storage capacity of the floodplain is maintained or improved;
 - pollution, sedimentation and erosion during construction and post construction is minimized using best management practices including site and infrastructure design, construction controls, and appropriate remedial measures;
 - i. intrusions within or adjacent to the drain are minimized and it can be demonstrated that best management practices including site design and appropriate remedial

- measures will adequately restore and enhance features and functions to the extent possible;
- j. there is no negative impact on the downstream thermal regime;
- k. there is no inhibition of fish passage and no net loss of fish habitat;
- works are constructed, repaired and/or maintained according to accepted engineering principles and approved engineering standards or to the satisfaction of the SCRCA, whichever is applicable based on the scale and scope of the project;

9.(ii)



To: Board of Directors
Date: September 1, 2017

From: Jessica Van Zwol, Healthy Watershed Specialist,

Laura Biancolin, Agriculture Outreach Technician

Subject: Healthy Watersheds Program Workshop Update

Lake Erie Conservation Authorities Stewardship Meeting – June 15 Through our OMAFRA funding, we are to work in partnership with other Lake Erie CAs (Essex, Lower Thames, Upper Thames, and Kettle) to promote voluntary adoption of BMPs to reduce nutrient loss and improve soil health with the over-arching goal of reducing phosphorus in Lake Erie.



Soil Health Workshop – July 26 In partnership with the Compost Council of Canada, St. Clair Conservation hosted a hands-on soil health workshop for local farmers. Topics



included soil food web. requirements of healthy soil ecosystems and functions, and soil health principles. Participants were asked to bring in soil from their fields to examine under microscope to see if any microorganisms could be seen. Handson excercises included identifying soil organisms, using penetrometer, slake tests, and soil infiltration tests.

Lambton Soil & Crop Improvement Assocation Twilight Tour – August 9

Almost 200 people attended Lambton Soil and Crop Improvement Association's twilight tour. OMAFRA's Christine Brown, Field Crops Sustainability Specialist, talked about seven different organic amendment products and the importance of calibration procedures. Five different manure spreaders with vertical beaters were onsite for



demonstration. Jake Kraayenbrink demonstrated and discussed the uses of a tire deflation kit with heavy farm machinery to reduce soil compaction, which compromises soil health. SCRCA Agriculture Outreach staff had a display and talked with farmers interested in undertaking projects.

MOECC Outreach Tour – August 15 Staff highlighted a newly created wetland and shared information regarding the Healthy Watersheds Program on the MOECC Outreach Tour.

Ipperwash Beach Day – August 11 St. Clair Conservation staff joined the Ipperwash Phrag Phighters (IPP) and a team of 38 volunteers on their "Phrag Spading Day" the goal was to "spade" and remove invasive *Phragmites australis* from Ipperwash Beach. The team spent 6-hours removing invasive *Phragmites* and White sweet clover from the dunes along a 2.7km stretch of beach.



Middlesex Soil & Crop Improvement Association Twilight Tour - August 22

Staff had a booth at this event and had the opportunity to share with attendees grants available and extend an invitation for the Rotational Grazing & Pasture Tour.



Rotational Grazing & Pasture Tour – August 24

SCRCA, Lambton Soil and Crop Improvement Association, and Lambton Cattlemen's Association organized a twilight pasture tour to discuss rotational and alternative cattle

grazing systems with local farmers. The event excellent had an turnout: about 100 were farmers in attendance. The tour was hosted at Tim and Tina Lehrbass' farm in Alvinston. The feature speaker, Doug Wray, an Alberta rancher, grazes



his cattle 365 days a year and has received many leadership awards from grassland and forage associations. Jack Kyle, former Provincial Grazing Specialist and Tim Prior, Brussels Agri Services lead the pasture walk.

Dunes & Gardens Coastal Stewardship Workshop – August 28 This event was cohosted with Ausable Bayfield Conservation Authority in Port Franks. Nearly 40 people

attended the event that focused on protecting dunes and improving soil health in rural gardens. Don Ρ. Lobb. Aq. (Hon), Director-At-Large of the Soil Conservation Council of Canada



spoke of the importance of applying lessons from nature in the farm field and the home garden to maintain healthy productive soil. Healthy garden plants require healthy soil. Hannah Cann, Coastal Stewardship Coordinator of Lake Huron Coastal Centre for Conservation, shared dune conservation practices that lakeshore residents could

implement on their own to protect and preserve the Lake Huron shoreline.

New Agriculture Outreach
Materials and Displays
These newsletters and
factsheets will help us
communicate with
landowners in our watershed
regarding healthy soils,



healthy water quality, and ensuring the best outcome of implemented stewardship projects

We have new displays to highlight at our events!

Staff attended these events for training and outreach as well:

June 8 – Compost Council of Canada Soil Health Workshop

June 29 – Ducks Unlimited Wetlands Workshop

July 6 – St Clair Soil & Crop Improvement Association Executive Outreach Tour

July 11 – Ausable Bayfield Conservation Authority Strip Tillage Demo Site Tour

July 27 – 4R Nutrient Stewardship Tour

August 22-23 - Soil Conservation Council of Canada Soil Summit



Upcoming Events:

September 9 – Great Canadian Shoreline Cleanup – Centre Ipperwash Beach

September 15 – The Dirt on Phosphorus (staff attending)

September 15 – Lambton Shores Ag in the Classroom

September 16 – Strathroy #TDTreeDays at Victoria Park and Cuddy Sports Complex

September 22-24 – Forest Fall Fair (staff to have booth)

September 27 – Interseeding & Cover Crop Demonstration at Lambton Shores Champion Farm

October 21 – Sarnia #TDTreeDays at Howard Watson Trail

December – GLASI workshop – speaker to be determined

February 2018 Conference

The SCRCA's Soil Health Conference is scheduled for February 15, 2018 in Chatham, ON. There will be presentations from international researchers and Certified Crop Advisors (CCAs), as well as farmer panel discussions. Farmer panel discussions will be on various tillage methods that reduce soil loss, cover crops, 4R nutrient stewardship, alternative grazing and stewardship on big acres.

9.(iii)



To: Board of Directors Date: August 31, 2017

From: Laura Biancolin, Agriculture Outreach Technician
Subject: Healthy Watersheds Program – Walk the Watershed

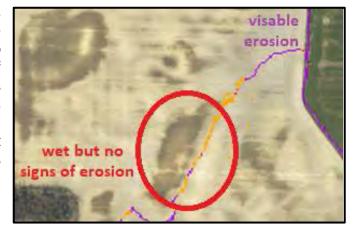


Walk the Watershed 2017: This year's Walk the Watershed (WTW) focused on the Sloan Russell drain and the Shawana Drain. Agriculture Outreach staff contacted eleven landowners, owning 26 properties. For the most part landowners were open to letting staff walk the drains on their properties. A couple landowners were curious about what services SCRCA provided and were interested in seeing a final report and recommendations for their property. Overall the buffer quality was good along the Sloan Russel and Shawana Drain. The buffer ranged from 2 m to 8 m, nonetheless there were some erosion-prone areas where the buffer was small and mostly weeds. Despite the fields being worked in preparation for planting, a couple of the areas prone to gullying were still visible. Landowners with erosion prone areas were interested

in erosion control structures. At these locations, the installation of a grassed waterway or a low-level berm would be a great solution.

GIS Procedure for Locating Agricultural BMPs SCRCA staff generated maps of the Stream Power Index (SPI, purple), and Total Wetted Index (TWI, orange). Maps were brought along on site visits and shared with landowners. Both models worked well, SPI depicted erosion potential and TWI predicted the location of surface saturated areas. After

consulting with landowners it was determined that models were standardized to a level that proved too conservative to predict the full extent of erosion and saturated areas within this target sub-watershed. This project was the first rendition of verifying the model outputs in the field. It is expected that ongoing discussion among landowners and GIS staff will continue till the model outputs fully identify the erosion potential within this target watershed.



9. (iv)



To: Board of Directors Date: August 31, 2017

From: Erin Carroll, Manager of Biology

Subject: 2017 Reptiles at Risk Program Update

Turtles

The Sydenham River Corridor within the East Branch of the Sydenham River contains one of the last remaining [inland] connected green corridors in Southwestern Ontario". This imperiled and vulnerable habitat provides refuge for the Eastern Spiny Softshell turtle, a species that was been up listed to Endangered in 2016.

The Spiny Softshell Turtle is an olive coloured flat turtle often referred to as the "pancake turtle". The leathery carapace of the spiny softshell makes it vulnerable to predators. For



Adult female Spiny Softshell turtle in the process of digging a nest.

this reason it is very shy and skittish. These turtles can get almost half the oxygen they require by breathing through their skin while in water, which allows them to hide under water for up to five hours. They are capable of staying under water voluntarily for 20-50 minutes. They can withstand forced submergence in oxygenated water for more than 100 days in experimental conditions. Most anoxia tolerant species in all of North America.

The primary threats are

- habitat and population fragmentation by infrastructure,
- alteration of the water regime (flooding of nests) by dams and changing weather patterns,
- increased recreational and agricultural use of nesting areas and adjacent aquatic habitats by humans (disturbance during nesting,
- ATV use, horseback riding, watercraft use),
- invasion of nesting areas by non-native plants (e.g., European Common Reed (Phragmites a. australis)),

- high populations of mammalian egg predators and egg poachers,
- injury and mortality from fishing and motor boating (collisions, propellers), and illegal capture of juveniles and adults.
- Cyanobacterial blooms (e.g., toxin bioaccumulation, impact on prey) may also impact the species.



Conservation Services summer staff member, Peter Mottle, helps to carefully collect Spiny Softshell turtle eggs for incubation.

Habitat loss is a major contributor to the decline of this species. In the Sydenham, individuals may move up to 30 kilometres between nesting and hibernation sites, and daily movements exceeding 4 kilometres have been observed. This movement is believed to be linked to the lack of critical habitat features. Female softshells prefer to lay eggs in sandy, sunlit areas, which appear to be in limited supply on the Sydenham.



Just a few days old, this newly hatched softshell turtle returns to the wild.

With funding from the Ministry of Natural Resources, Species at Risk Stewardship Fund, St. Clair Region Conservation Authority's recovery efforts focus on the Spiny Softshell turtle as part of our Reptiles at Risk Program. This year a significant achievement was accomplished: the collection, incubation, and release of Spiny Softshell turtles (*Apalone spinifera*) from and into the Sydenham.

Eggs that were in immediate danger were collected as soon as possible after being laid (within 24 hours in order to decrease the chances disturbance) and transported to be incubated with assistance of Salthaven Wildlife & Education Centre. Once hatched the turtles were kept for monitoring to ensure that no difficulties were being had by the newly born hatchlings before being promptly returned to us. Release of the turtles took place in a slow-water, sheltered area near the original nesting site.

So far, in 2017, **388** turtles have been released with **178** Spiny Softshells and **210** Northern Map turtles. More eggs have yet to hatch and will be released in coming days. This is up from 2016, our most successful year to date, in which 76 Spiny Softshells and 35 Northern Map turtles, were incubated and released.

Snakes

In addition to the turtle program we have also continued our snake monitoring and rehabilitation initiatives with focus on the recovery of the Eastern Foxsnake.

The Eastern Foxsnake, endangered, is the second largest snake found in Ontario. Can reach a length of up to 1.7 metres. They have a distinct reddish head and a yellowish to light brown body with dark brown blotches running down the back and alternating blotches



St. Clair Township Resident and 2016 SCRCA Conservation Award winner, Brandon Jordan helps to monitor and install artificial Eastern Foxsnake nesting structures.

on either side. When threatened, the eastern foxsnake vibrates its tail and, especially when it comes into contact with dry vegetation, makes a buzzing or "rattling" sound. This behaviour, combined with the snake's blotchy patterning, causes many people to mistake it for a rattlesnake and has led to the inappropriate name "hardwood rattler."

Eastern Foxsnakes have a very restricted global distribution, with **about 70 percent of their entire range occurring in Ontario, Canada**, where population abundance continues to decline. Causes of the species decline include wetland drainage for agriculture, impacts resulting from housing and cottage development, road mortality, human persecution and collection for the pet trade.

In order to help facilitate the recovery of this species, SCRCA's Reptile at Risk program focuses on:

Artificial Nesting Boxes:

Nesting boxes for Eastern Foxsnake are provided to landowner stewards. These structures help to protect eggs from predators. For the 3rd consecutive year SCRCA has documented hatchling success in these artificial structures.

Coverboard and Road Mortality Monitoring:

Coverboards are sheets of plywood laid on the ground in order to provide protection and an insulated heat source for snakes, attracting them to the underside of the board.

Monitoring is completed by quickly flipping the coverboard to reveal any snakes hidden underneath, identifying them to species, and getting an estimate on their length. All of these values as well as location, time of day, weather, and a variety of others are recorded and shared with Ontario Ministry of Natural Resources and Forestry for long-term monitoring.

Reptile Program Education and Outreach



Every year SCRCA staff observe road mortality of Eastern Foxsnake. The longterm impact to this population of endangered snakes is currently unknown.



Attendees at SCRCA's first turtle birthday party help excavate plastic Easter eggs from sand turtle "nests".

Past

- Turtle Birthday Party at AW Campball CA, August 25: About 50 participants learned out SCRCA's Reptile at Risk Program. A short presentation was followed by a number of activities and refreshments.
- Lambton Wildlife Field Trips, Junior Nats Program, June 30 and July 18: Participants helped with reptile stewardship by assisting with turtle and snake monitoring.
- June 2017 Species at Risk Newsletter, mailed to 65,000 residents.

Upcoming

- Perch Creek Reptile Day with Great Lakes Secondary School, September 26
- Hillside SAR Reptile Education day, October 18
- Lambton Wildlife Talk, November 27



Softshell shaped cookies for turtle birthday party.

9.(v)



To: Board of Directors Date: September 5, 2017

From: Erin Carroll, Manager of Biology

Subject: Bear Creek Low Water Crossing Removal Project at Moore Wildlife

Management Area

Background

In 2016, a metal corrugated barrier than spanned the full width of Bear Creek at the Bickford Line crossing was removed. The project included completing a mussel relocation protocol, fish exclusion, removal of the barrier, and creating a rock riffle type structure with a low flow passage at the site of the barrier. The 2016 project was funded through Fisheries and Oceans Canada's Recreational Fisheries Conservation Partnership Program (RFCPP) MNRF, HSP Prevention, and Friends of the St. Clair River (using Ontario Trillium Foundation funding).

2016 Barrier Removal on Bear Creek at Bickford Line



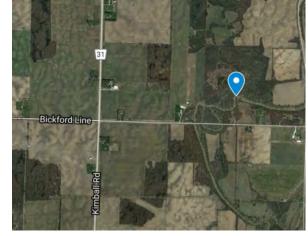


Above left: Longnose gar impeded by barrier Above right: barrier during low flows

Proposed Low Grade Crossing Removal at Moore Wildlife Management Area

Continuing St. Clair Conservation's effort to improve fish habitat in this section of Bear Creek, it is proposed that the existing low level crossing also be removed. This crossing is about 600m upstream of the barrier at Bickford Line that was removed in 2016.

Removing the crossing will restrict foot access to the trail on the north side of the property. It is proposed that the existing trail on the south side of the property would be extended to loop back to the parking lot, to continue to provide a recreational use option. Historically, the crossing



provided access to the agricultural property on the north side of the river.



Left: Approximate location of existing low level crossing on Bear Creek. Right: Low Grade Crossing at Moore Wildlife Area, photo taken March 23, 2017

This project fits with the objectives outlined in *St. Clair Region Conservation Authority's Operating Plan for Forested Properties for the period of 2013-2023* which states "The primary objective for these properties is environmental protection and the provision of wildlife habitat."

Grant funding will be sought to complete the proposed project.

9.(vi)



To: Board of Directors Date: August 31, 2017

From: Greg Wilcox, Environmental Monitoring Technician

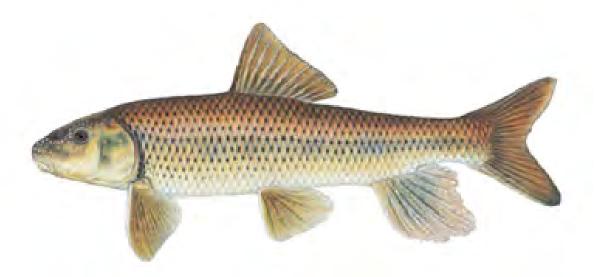
Subject: Water Quality Monitoring, Watershed Reporting, and Related Community

Engagement

Aquatic Monitoring and Reporting

Fish Monitoring (Supported by Ontario Trillium Foundation and Fisheries and Oceans Canada) - To date in 2017, biology staff have performed fish sampling at ten sites in the St. Clair River Area of Concern (AOC) and five municipal drain sites. Fish sampling in the AOC is supported by the Ontario Trillium Foundation. Funding to sample unrated municipal drains comes from Fisheries and Oceans Canada. Fish community data collected from unrated drains allows DFO to provide a class rating to the drain. Municipalities can perform works on the drain without the lengthy delays associated with site-specific reviews for unrated drains. SCRCA also had staff join DFO for 2 days of fish sampling at the Sydenham Nature Reserve.

Our biologists caught over 50 fish species totaling almost 6000 fish in 2017. Fish Species at Risk (SAR) including the Blackstripe Topminnow and Spotted Sucker (pictured below) were found at six of the fifteen sampling sites.



http://www.dfo-mpo.gc.ca/species-especes/images/identify/sucker-meunier_2.jpg

Mussel Monitoring (Supported by Ontario Trillium Foundation and Habitat Stewardship Program) – By completing mussel surveys on the north branch of the Sydenham River we will gain a better understanding of the distribution of SAR mussels in this system. The north branch currently has less data than the East branch making it difficult to

determine optimal locations to complete habitat stewardship projects.

In 2017, 4.5hr intensive timed searches were completed at 28 sites on the North Branch of the Sydenham. Half were on Black Creek and half were on Bear Creek. In addition, a 1yr follow-up survival assessment was completed on Bear Creek at the site of last year's barrier removal project.

This season we have captured and processed 5282 live mussels and 3040 dead (shell only). Twenty-one species were observed including five Species at Risk (Round Pigtoe, Salamander, Mapleleaf, Lilliput, and Rainbow).









Top Left: Lilliput (Threatened - Provincially)

Top Right: Mapleleaf (Threatened)

Bottom Left: Rainbow (Special Concern - Provincially, Endangered - Federally)

Bottom Right: Round Pigtoe (Endangered)

Wetland Evaluations – The Ministry of Natural Resources and Forestry evaluates wetlands to help municipalities, conservation authorities and others with land use planning, The wetland evaluation process defines, identifies and measures wetland functions and values. Wetlands are assessed based on their perceived values in maintaining natural processes (ecosystem values). They are also assessed on the benefits provided to society (human utility values).

SCRCA biology staff continue to conduct wetland evaluations within the watershed on behalf of the OMNRF. Fieldwork is nearing completion for the season. Six wetland

complexes will be evaluated in the field and one will be completed as a desktop update only. Of the seven wetland complexes, five are updates and two are new evaluations.



Above: Photo of Roberta Stewart Wetland

Watershed Report Cards - Watershed report cards production is underway. A multidepartmental committee is pulling together data, maps, and write-up relating to groundwater, surface water, forest conditions. Release is scheduled for 2018.

St. Clair River AOC Fish and Wildlife Habitat Conservation Plan - A Fish and Wildlife Habitat Conservation Plan for the St. Clair River Area of Concern (AOC) is scheduled for completion in December 2017. This report is required for the eventual delisting of the AOC. The draft plan summarizes the current status of aquatic habitat, highlights successful coastal wetland projects, identifies linkages to broader initiates, identify tools for future aquatic conservation, and identifies next steps for aquatic conservation in the St. Clair River AOC.

Community Engagement

Bioblitzes – Two bioblitzes were conducted at SCRCA campgrounds with the support of TD Friends of the Environment. Members of the community were invited to participate in aquatic surveys to establish species lists for fish, mussels, and benthic macro-invertebrates. The two events took place July 21st at Warwick CA and July 28th at A.W. Campbell CA. After volunteers were put to work, staff invited them to join in snacks and refreshments.



Above: Volunteers help search for mussels in Bear Creek at the Warwick Bioblitz

Upcoming Events – September 17 at Ontario Nature's Sydenham Nature Reserve, SCRCA staff will provide a freshwater mussel demonstration for members of the Sydenham Field Naturalists and Lambton Wildlife. This is in support of our continued partnership with Ontario Nature.

September 27 - Staff will provide a benthic macro-invertebrate demonstration at an agricultural focused cover crop event.

November 8-9 – Staff will participate in the 2nd Biennial Canadian Freshwater Mollusc Research Meeting in Burlington Ontario. Topics will include status and distribution, life history, genetics, species at risk, threats, outreach, and more.

10. (i)

To: Board of Directors
Date: September 11, 2017

From: Steve Shaw, Conservation Services Department

Subject: West Nile Virus - Lambton County Mosquito Control Program

- staff treated approximately 16,500 catch basins in Sarnia and Lambton towns and villages this summer.
- * four staff working from the Strathroy office and 2 staff from the Darcy McKeough Dam treated 1,500 catch basins with a single season long methoprene briquette and approximately 15,000 catch basins were treated with 3 separate applications of methoprene pellets at 21 day intervals between June 26th and August 19th.



St. Clair onservation

- * post treatment efficacy testing was conducted in the last week of August, approximately 20 days after the third and final round of catch basins treated with pellets and approximately 60 days after the catch basins that were treated with season long briquettes. Results showed very good control for the pellets and mixed results for the season long treated catch basins. Testing results were sent to the Lambton Public Health.
- * two permits for the mosquito control works were issued by the Ministry of the Environment and Climate Change in June. A report to the Ministry is required before December 1st, 2017
 - 1. Sarnia-Lambton 16,500 methoprene pellets and briquettes
 - 2. Sarnia-Lambton Bti for wetlands and emergency situations

Aamjiwnaang First Nation was also treated with methoprene pellets. A pesticide permit was not required under M.O.E.C.C for treatment of these catch basins.





10. (ii)



To: Board of Directors
Date: September 11, 2017

From: Steve Shaw, Conservation Services Department

Subject: Large Stock Tree Program Report

Large Stock Tree Program

- the large stock tree program has been part of the SCRCA tree planting program since the 1980's and was created to make inexpensive trees available to the counties and municipalities for local planting projects as well as for rural landowners wishing to plant smaller areas but with larger trees.
- these larger trees are used mainly for memorial forest tree planting, street tree planting and shelterbelt planting programs and have now attracted certain industries in Lambton County over the past several years
- native evergreen (coniferous) trees come balled and burlapped and up to 1 meter in height.
- native hardwood (deciduous) trees come in either bare root or potted containers and range between 1 m and 2.5 m in height
- prices range between \$10 and \$40 per tree based on species, size and container type
- 800 large stock trees were ordered and planted this year by muncipalites and landowners
- Shell Canada Inc., St. Clair Township is our most recent industrial corporation taking part in our large tree program
- for 2 weeks in both June and July, conservation services planted 125 very large (caliper stock) trees on Shell property along the St. Clair Parkway. More trees to following in October.
- larger stock tree planting at Warwick Landfill (Twin Creeks) screening berms will also take place in October, mostly as refilling some of the trees that have died.



 due to recent difficulties in obtaining desired stock we have changed the order deadline to December 15th 2017 for spring 2018 tree orders. All municipalities are encouraged to participate in the program in 2018.

10. (iii)



To: Board of Directors
Date: September 11, 2017

From: Steve Shaw, Conservation Services Department

Subject: Conservation Services Program Report

Tree Planting Program

- landowner site visits for 2018 tree planting program to start this month along with vegetation control retreatment for landowners under the 3 year program.
- all projects that meet specific program criteria are planned for project review in November for grant approval under one or more of the funding programs that SCRCA has available for financial incentive for 2017-2018 grant year including MNRF species at risk funds, Sydenham Habitat Stewardship, 50 Million Tree Program and the Essex - Kent - Lambton OPG fund.
- approximately \$120,000 in grants available so far, through multiple tree planting and stewardship programs.
- all of this funding is used as financial incentive and is provided to the landowner to cover more than 50% of the project costs.
- survival assessments were completed in July for a portion of 2017, 2016, 2015 and 2011 planting projects.
- tree survival counts showing over <u>90% success rate</u>.
- survival rates are only attainable at this level with landowner involvement combined with our 3-year herbicide application program.

Managed Forest Tax Incentive Program (MFTIP)

- two new managed forest tax plans were written and approved for 2018 tax year for 2 private landowners
- four managed forest tax plan renewals for 4 Authority properties and one renewal for 1 foundation property were completed in July for the 2018 to 2027 tax schedule
- we have one forest management plan approver on staff certified to write and approve forest management plans for tax purposes
- approved plans are send to MNRF and then updated information is sent to MPAC
- MPAC adjusts property taxes on the forested portion of the property equal to farm tax rates.

Vegetation Management Program

- approximately 250,000 trees require herbicide treatment this fall
- fall herbicide application for vegetation control on 2014 to 2017 tree planting sites are scheduled to start in the 2nd week of September will continue into November after the deciduous seedlings go into dormancy and drop their leaves and ends after the first heavy frost.

Seed Collection Program

- this year's tree seed collection will start the first week of October.
- Enbridge has provided SCRCA conservation services department with a significant donation towards a tree seed collection mentoring/training course (early October) to train local, interested individuals how to forecast, collect, clean and store tree seed. People will earn money doing it as well and provide this area with a much needed service.
- currently there are no collectors in this area.
 Without people collecting tree seed to ship to the tree growers/nurseries there will not be any genetically suitable trees available for us purchase trees for the future.
- the province as also recently announced that they will be closing the Angus tree seed plant. It is one of the last remaining provincially run operations.



Updated: Province closing Angus Seed Plant, seed customers upset

By <u>AWARE Simcoe</u> In <u>Council Watch</u> Aug 28th, 2017

Technician John White at the Angus Tree Seed Facility in 2013, explaining the operation to AWARE Simcoe members Scroll down for other posts on this topic 'Corner stone of tree planting' to be shut down in 2018

Roger Klein CTV News Barrie August 28 2017

A major seed distribution plant in Angus is being shut down by the provincial government.

The Angus Seed Plant once provided all of the seeds used in reforestation efforts

across the province. It currently operates at 20 per cent capacity.

But come next year, Ontario's Ministry of Natural Resources and Forestry plans to shut it down.

"We are going to be moving out of an industrial size plant to a native tree seed genetic archive," says Ken Durst, regional services manager for the MNRF. "That's going to be focused on biodiversity and climate change science."



11(i)



To: Board of Directors

From: Patty Hayman, Director of Planning

Dallas Cundick, EP and Regulations Officer

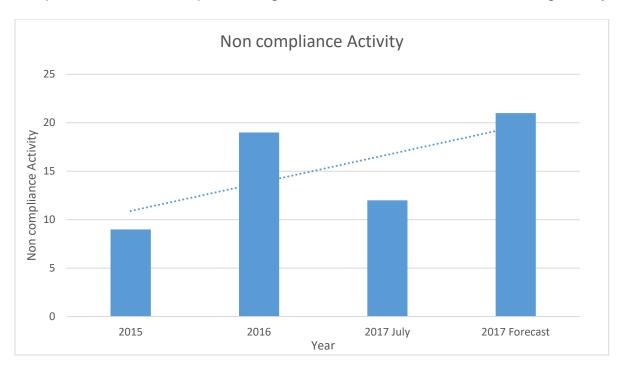
Report Date: September 1, 2017

Subject: SCRCA Regulation 171 Enforcement

BACKGROUND

The fundamental provincial role for all CAs is to focus on water related natural hazard prevention and management. To accomplish this, one of our legislative mandated activity is the CA Regulatory Authority under Section 28 of the CA Act. SCRCA's Regulatory Authority stems from Ontario Regulation 171/06 "Development, Interference with Wetlands & Alterations to Shorelines & Watercourses".

In a review of activity numbers, staff are noting an alarming increase in numbers of non-compliance matters in respect to Regulation 171. Below is a chart indicating activity levels.



In a review of the non-compliance activities for 2016 – 2017 to date, the following is noted:

- > 100% increase in activity from 2015 to date.
- 67% of the activities are on the Lake Huron shoreline
- 41% of the activities are on the L. Huron shoreline in Plympton Wyoming
- 25% of the activities involve dune/beach alteration in Ipperwash, Lambton Shores

An increase in non-compliance is partially due to the high lake levels and landowners undertaking works without permission under Regulation 171. The non-compliance matters listed are significant compliance matters and are not easily remedied. We have not counted the matters that are easily solved via the application and permit process.

Recommendation

SCRCA staff will continue to monitor and may be investigating means to assist with high activity levels for 2018.

ST. CLAIR REGION CONSERVATION AUTHORITY REGULATIONS ACTIVITY REPORT

August 31, 2017

TO: SCRCA Chair and Board of Directors

SUBJECT: Administration - Section 28 Status Report - Development, Interference of Wetlands and Alteration to Shorelines

Watercourses Regulation

FROM: Dallas Cundick, Environmental Planner / Regulations Officer

Melissa Deisley, Regulations Officer

A summary of staff activity related to the Conservation Authority's *Development, Interference of Wetlands and Alterations to Shorelines and Watercourses Regulation* (Ontario Regulation 171/06 under Ontario Regulation 97/04) is presented below. This report covers the period from June 1, 2017 to August 31, 2017.

June 1, 2017 to June 30, 2017

Application No.	Applicant and Subject Property	Proposed Works Permissions may be granted where in the opinion of the CA, the control of Flooding, Erosion, Dynamic Beach, Pollution, or the Conservation of Land will not be affected by the	Submission Complete:
		development.	Permit Issued:
	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	06/04/2017
11260F		 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	16/06/2017
	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	06/04/2017
11260J	9246 Union Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	16/06/2017
11260K	North Kent Wind 1 LP 8433 Cedar Hedge Line	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System Part of North Kent Wind Energy Project 	06/04/2017
	Mun. Chatham-Kent	Plans prepared by AECOM, Engineered floodproofed	16/06/2017

		design		
	North Kent Wind 1 LP	Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System	06/04/2017	
9876 Oldfield Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	15/06/2017		
	North Kent Wind 1 LP	Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System	06/04/2017	
11260M	9055 Cedar Hedge Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	16/06/2017	
	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	06/04/2017	
9055 Cedar Hedge Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	16/06/2017		
	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	06/04/2017	
112600 8886 Union Line Mun. Chatham-Kent			 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	16/06/2017
	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	06/04/2017	
11260S	8680 Bush Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	16/06/2017	
	North Kent Wind 1 LP	Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System	06/04/2017	
11260T	25823 Prince Albert Road Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	15/06/2017	
	North Kent Wind 1LP	Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System	06/04/2017	
11260U	25659 Prince Albert Road Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM, Engineered floodproofed design 	15/06/2017	

	North Kent Wind 1LP	Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System	06/04/2017
11260V	8485 Countryview Line	Part of North Kent Wind Energy Project	16/06/2017
	Mun. Chatham-Kent	Plans prepared by AECOM, Engineered floodproofed	10/00/2017
		design	
	North Korst Wind A. I. D.	Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System	06/04/2017
44000\\	North Kent Wind 1 LP	and Installation of Collection System	
11260W	9998 Old Field Line Mun. Chatham-Kent	Part of North Kent Wind Energy Project Plane prepared by AFCOM Engineered floodpressed.	16/06/2017
	Width Chatham-Rent	 Plans prepared by AECOM, Engineered floodproofed design 	
		Construction of Access Road, Wind Turbine Foundations,	29/05/2017
44000	North Kent Wind 1 LP	and Installation of Collection System	
11260X	9564 Greenvalley Line	Part of North Kent Wind Energy Project	15/06/2017
	Mun. Chatham-Kent	Plans prepared by AECOM, Engineered floodproofed	10/00/2017
	1360 St. Clair Parkway	designErosion Control Project – Farmer's Field	13/06/2017
11264	St. Clair Twp.	 Plans designed and engineered by R. Dobbin 	13/06/2017
	Gu Giaii 1 Wp.	Reinforce Three Pipeline Systems	
	Bentpath Line	Detailed Drawings and Plans completed by Union Gas	08/05/2017
11267	Twp. Dawn-Euphemia	Disturbed areas will be returned to original condition or	08/05/2017
	·	better	00/03/2017
11268	Churchill Line (Cty Rd. 14)	Replacement of Existing Road Culvert	11/05/2017
11200	City of Sarnia	Plans prepared by GM BluePlan	09/06/2017
	North Kent Wind 1 LP	 Installation of Collection Line within Municipal Right of 	11/05/2017
11269A	Prince Albert Line	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	
44000	North Kent Wind 1 LP	Installation of Collection Line within Municipal Right of	11/05/2017
11269B	Eberts Line	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project Part of North Ken	
11269C	North Kent Wind 1 LP Caledonia Road	 Installation of Collection Lines within Municipal Right of Way 	11/05/2017
112090	Mun. Chatham-Kent	 Part of North Kent Wind Energy Project 	06/06/2017
	North Kent Wind 1 LP	Installation of Collection Line within Municipal Right of	11/05/2017
11269D	Countryview Line	Way	_
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	06/06/2017
	1		+

	Centre Side Road	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	00/00/2017
	North Kent Wind 1 LP	 Installation of Collection Line within Municipal Right of 	11/05/2017
11269F	Claymore Line	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	06/06/2017
	North Kent Wind 1 LP	 Installation of Collection Line within Municipal Right of 	11/05/2017
11269G	Cedar Hedge Line	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	06/06/2017
	North Kent Wind 1 LP	 Installation of Collection Line within Municipal Right of 	11/05/2017
11269H	Union Line	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	00/00/2017
	North Kent Wind 1 LP	 Installation of Collection Line within Municipal Right of 	11/05/2017
112691	Green Valley Line	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	00/00/2017
	North Kent Wind 1 LP	 Installation of Collection Line within Municipal Right of 	11/05/2017
11269J	Oldfield Line	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	00/00/2017
	North Kent Wind 1 LP	 Installation of Collection Line within Municipal Right of 	11/05/2017
11269K	Darrell Line	Way	06/06/2017
	Mun. Chatham-Kent	Part of North Kent Wind Energy Project	
11270	Churchill Line (Cty Rd. 14)	Replacement of Existing Road Culvert – Waddell Creek	11/05/2017
11210	City of Sarnia	Engineered plans completed by GM Blue Plan	09/06/2017
		 Integrity Dig – Dig 3 at 1299 Plank Road 	15/05/2017
11271	1299 Plank Road	 Application package completed by Amec Foster Wheeler 	
11211	City of Sarnia	 Disturbed areas will be returned to original conditions or 	15/06/2017
		better	
		 Construction of a New Single Family Dwelling 	15/06/2017
	8011 Hillsboro Road	 Proposed dwelling is being located outside the Erosion 	10/00/2017
11274	Town of Plympton-Wyoming	hazard	
	Town or raympton-vv youning	 Confirmed in Certified Lot Grading Plan completed by 	23/06/2017
		Monteith & Sutherland	
	647 St. Clair Parkway	 Construction of a New Single Family Dwelling 	19/06/2017
11275	St. Clair Twp	Geotechnical Report completed by Terraprobe Inc.	29/06/2017
	St. Claii 1 WP	 Proposed works will be outside the long term stable slope 	29/00/2017
	3817 St. Clair Parkway	 Construction of a New Single Family Dwelling 	28/06/2017
11276	St. Clair Twp	 Floodproofing requirements are met and are a condition of 	30/06/2017
	J. Clair 111p	permit as confirmed by Certified Lot Grading Plan	30/00/2017

11277	Aberarder Line Town of Plympton-Wyoming	 Aberarder Line Bridge Repairs Detailed Engineered Design completed by BM Ross Engineering 	25/05/2017 30/06/2017	
11278	Forest Road Town of Plympton-Wyoming	 Bear Creek Bridge Repairs Detailed Engineered Design completed by BM Ross Engineering 	30/06/2017	
	First School Road	 Enbridge Integrity Dig Application package completed by Dillon Consulting 	05/06/2017	
117/9	Township of Warwick	// u	Disturbed areas will be returned to original condition or better	30/06/2017

July 1, 2017 to July 31, 2017

Application No.	Applicant and Subject Property	Proposed Works Permissions may be granted where in the opinion of the CA, the control of Flooding,	Submission Complete:
		Erosion, Dynamic Beach, Pollution, or the Conservation of Land will not be affected by the development.	Permit Issued:
	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	07/07/2017
11260AZ	9148 Cedar Hedge Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM 	12/07/2017
	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	24/07/2017
11260D	11260D 8570 Claymore Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM 	24/07/2017
4.000	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	29/05/2017
11260Y	8469 Claymore Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM 	12/07/2017
	North Kent Wind 1 LP	 Construction of Access Road, Wind Turbine Foundations, and Installation of Collection System 	30/05/2017
11260Z	8908 Oldfield Line Mun. Chatham-Kent	 Part of North Kent Wind Energy Project Plans prepared by AECOM 	12/07/2017
11272	Churchill Line	 Wetland Creation Project Project designed by the Rural Lambton Stewardship 	04/07/2017

	Geographic Township of Brooke	 Network Sediment and Erosion control will be installed, excess fill will be removed, no in-water works 	04/07/2017
11273	29792 Mandaumin Road Mun. Chatham-Kent	 Bridge Replacement – Mandaumin Road over Drummond Creek Drain Detailed Engineered drawings prepared by Dillon Consulting Hydrology/Hydraulic Analysis prepared by Dillon Consulting 	05/07/2017
11280	Oil Heritage Road Township of Enniskillen	 Wetland Creation Project Project designed by the Rural Lambton Stewardship Network Sediment and erosion control will be installed, excess fill will be removed, no in-water works 	04/07/2017
11281	2819 Bickford Line St. Clair Twp.	 Wetland Creation Project Project designed by the Rural Lambton Stewardship Network Sediment and erosion control will be installed, excess fill will be removed, no in-water works 	01/06/2017 25/07/2017
11283	Ravenswood Line & Lakeshore Road & Ipperwash Road Mun. Lambton Shores	 Install 6" Main and NPS 4" PE Main via HDD Sediment & Erosion control will be installed, disturbed areas will be rehabilitated to original conditions 	29/06/2017 05/07/2017
11284	1741 Watterworth Road Township Dawn-Euphemia	 Replace Pool & Construct Deck Works will be greater than 15m from wetland (No closer than existing), grades/elevations will be maintained 	06/07/2017 10/07/2017
11285	1010 Plank Road City of Sarnia	 Pipeline Replacement and Decommissioning Line 7 Disturbed areas will be stabilized upon completion 	23/06/2017 12/07/2017
11286	1872 Melwood Dr Township Adelaide-Metcalfe	 Construction of a Covered Porch All proposed works will be located outside the erosion hazard No structural works completed to existing dwelling 	21/06/2017
11287	Lot 26, Concession 11 Geo. Twp. Moore St. Clair Twp.	 Replacement of Valve & Piping Works will be greater than 20m from the watercourse 	22/06/2017 21/07/2017
11288	556 First Ave Township of Enniskillen	 Construction of an In-ground Pool Supported with Slope Assessment prepared by exp Services 	26/07/2017 26/07/2017

11289	4058 Oil Springs Line Township of Enniskillen	 Construction of Access Culvert Replacement Drainage Hydrology and Detailed Engineered Drawings prepared by R. Dobbin Engineering Inc. 	14/07/2017 25/07/2017
11290	Lot E, Concession 5 Geographic Twp. Sombra St. Clair Twp.	 Baby's Point Settlement – Storm water management Facility Engineered Drawings prepared by R. Dobbin Engineering Inc. 	29/06/2017
11291	113 Pointe Line Geo. Twp. Sombra St. Clair Twp.	 Proposed Fill Placement Union Gas to provide confirmation upon completion of the works on the volume of fill and number of truck loads 	25/06/2017 31/07/2017
11292	2884 Kent Line Geo. Twp. Sombra St. Clair Twp.	 Proposed Fill Placement Union Gas to provide confirmation upon completion of the works on the volume of fill and number of truck loads 	23/07/2017 31/07/2017

August 1, 2017 to August 31, 2017

Application No.	Applicant and Subject Property	Proposed Works Permissions may be granted where in the opinion of the CA, the control of Flooding, Erosion, Dynamic Beach, Pollution, or the Conservation of Land will not be affected by the	Submission Complete:
		development.	Permit Issued:
11293	29934 Botting Road	Proposed Fill Placement Union Coa to provide confirmation upon completion of the	02/07/2017
11293	Mun. Chatham-Kent	 Union Gas to provide confirmation upon completion of the works on the volume of fill and number of truck loads 	02/08/2017
	6200 Oil Springs Line	Culvert Replacement Patrilled President Proplets Proplets	02/07/2017
11294 6200 Oil Springs Line Mun. Brooke-Alvinston	 Detailed Drawings prepared by Municipality of Brooke- Alvinston Like-for-like replacement 	02/08/2017	
11295	1366 Lakeshore Road	Minor Repair/Patch of Existing GroynePlans prepared by Gordon's Shoreline Marine	24/07/2017
	Geo. Twp. Sarnia	Like-for-like replacement/repair	02/08/2017
	Oil Springs Line Lot 26, Concession 2	Construct a Nom. 300 MW Power Plant (Green Electron	21/07/2017
Geo. Twp. Moore St. Clair Twp.	Power Project) • Extension of Permit that was expiring	17/08/2017	

	2182 Dawn Valley Road	Construction of an Addition	14/07/2017
11296	Twp. Dawn-Euphemia	 No alteration to Minimum lowest openings to existing house, addition appropriately floodproofed 	11/08/2017
11297	9709 Cedar Hedge Line Mun. Chatham-Kent	 Proposed Fill Placement Union Gas to provide confirmation upon completion of the works on the volume of fill and number of truck loads 	02/08/2017 09/08/2017
11298	1077 Downie Road Geo. Twp. Euphemia Township of Dawn-Euphemia	 Construct a Storage Building Proposed location grater than 15m from top of bank, and will be appropriately wet-passive floodproofed 	04/08/2017 09/08/2017
11299	28596 Dolphin Road Township of Adelaide- Metcalfe	 Construction of a New Dwelling Dwelling and all construction works will be located greater than 6m from Top of Bank 	01/08/2017
11301	Sexton Road & Murphy Drive Township of Adelaide- Metcalfe	 Minor Creek Rehabilitation/Clean Out No in-water works, clean out of built up sediment 	26/07/2017 15/08/2017
11302	681 St. Clair Parkway Geo. Twp. Moore St. Clair Twp	 Construction of New Single Family Dwelling Supported with Geotechnical Investigation by Terraprobe Inc. 2 Phases to be completed- Phase 1 subgrade inspection, Phase 2 construction of dwelling 	16/08/2017
11304	22901 Springfield Road Mun. Southwest Middlesex	 Construction of Non-Habitable Accessory Structure Shed to be appropriately wet-passive floodproofed above road 	15/08/2017 17/08/2017
11305	Fleming Road Town of Plympton-Wyoming	 Culvert Replacement Hydrology and Engineered Drawings prepared by R. Dobbin Engineering 	20/07/2017 21/08/2017
11306	Fleming Road Town of Plympton-Wyoming	 Culvert Replacement Hydrology and Engineered Drawings prepared by R. Dobbin Engineering 	20/07/2017 21/08/2017
11307	6228 Base Line Geo. Twp. Dover	 Proposed Fill Placement Union Gas to provide confirmation upon completion of the works on the volume of fill and number of truck loads 	26/07/2017 28/08/2017
11308	7620 Langstaff Line Mun. Chatham-Kent	 Proposed Fill Placement Union Gas to provide confirmation upon completion of the works on the volume of fill and number of truck loads 	08/08/2017 28/08/2017
11309	1621 Charlemont Line Geo. Twp. Sombra	Proposed Fill Placement	24/08/2017 30/08/2017

	St. Clair Twp.	•	Union Gas to provide confirmation upon completion of the works on the volume of fill and number of truck loads	
11310	4040 Englehart Drive	•	Construct a Shed	14/08/2017
11310	Geo. Twp. Enniskillen	•	Shed will be moveable by design	30/08/2017

Total No. of Application = 69

Average No. of Days for SCRCA to Issue Permit = 24 Days

Permit Review Timelines are outlined in the document "Policies and Procedures for Conservation Authority Plan Review and Permitting Activities" Final Version May 2010, completed by the Conservation Authority Liaison Committee (CALC). In this document it states;

• CAs are to make a decision (i.e. recommendation to approve or referred to a Hearing) with respect to a permission (permit) application and pursuant to the CA Act within 30 days for a minor application and 90 days for a major application.

Recommended and Approved by:	
Dallas Cundick, Environmental Planner/Regulations Officer	Melissa Deisley, Regulations Officer
Patty Hayman Director of Planning	

ST. CLAIR REGION CONSERVATION AUTHORITY REGULATIONS ACTIVITY REPORT- VIOLATIONS AND CORRECTIVE ACTIONS

August 31, 2017

TO: SCRCA Chair and Board of Directors

SUBJECT: Enforcement- Section 28 Status Report – Development, Interference of Wetlands and Alterations to Shorelines

and Watercourses Regulation

FROM: Dallas Cundick, Environmental Planner/Regulations Officer

File	Background
FV # 201604 Lot 8, Con Front, Plympton Town of Plympton-Wyoming County of Lambton	 Unauthorized New Groyne Construction; On Crown Land, MNRF requiring permit under <i>Public Lands Act</i>; SCRCA working with landowner on application for works undertaken;
FV # 201605 Lot 7, Con 10, Plympton Town of Plympton-Wyoming County of Lambton	 Unauthorized Deck Construction; SCRCA working with landowner on application for works undertaken;
FV # 201606 Lot 7, Con 10, Plympton Town of Plympton-Wyoming County of Lambton	 Unauthorized Deck Construction; SCRCA working with landowner on application for works undertaken;
FV # 201610 Lot 39, Con Front, Plympton Town of Plympton-Wyoming County of Lambton	 Unauthorized Shoreline Protection Works; SCRCA is investigating further with solicitor; Notice of Violation sent to Contractors;
FV # 201701 Lot 6, Con 19, Bosanquet Lambton Shores County of Lambton	 Unauthorized Dune Grading Works; SCRCA working with MNRF; SCRCA to send violation notice;

Recommended and approved by:	
Dallas Cundick, Environmental Planner/Regulations Officer	Melissa Deisley, Regulations Officer
Patty Hayman, Director of Planning	

SCRCA Planning Activity Summary for the month of June 2017

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File Ref.	Municipality	Geographic Twp	Lot	Concession	Street	Page 1 of 1
FI 2017	ADELAIDE-METCALFE	ADELAIDE	LOT 26	CON 3 SER	SECOND STREET	
SEV B11/2017	ADELAIDE-METCALFE	ADELAIDE	LOT 18	CON 5 SER	PIKE ROAD	
LL 2017	ADELAIDE-METCALFE	ADELAIDE	LOT 19	CON 5 SER	NAPPERTON DRIV	Έ
LL 2017	BROOKE-ALVINSTON	BROOKE	LOT 24	CON 12	LASALLE LINE	
FI 2017	CHATHAM-KENT	CAMDEN	LOT 4	CON 4 GORE	HOLT LINE	
LL 2017	CHATHAM-KENT	CHATHAM	LOT 12	CON 2 GORE	WALLACE STREET	
FI 2017	CHATHAM-KENT	CAMDEN	LOT 4	CON 4 GORE		
FI 2017	DAWN-EUPHEMIA	DAWN	LOT 20	CON 1	LANGBANK LINE	
FI 2017	DAWN-EUPHEMIA	DAWN	LOT 24	CON 8	OIL HERITAGE RO	AD
GI 2017	ENNISKILLEN	ENNISKILLEN	LOT 1	CON 9	ROKEBY LINE	
SEV B003/17	ENNISKILLEN	ENNISKILLEN	LOT 21	CON 5	COURTRIGHT LINE	Ξ
FI 2017	MIDDLESEX CENTRE	LOBO	LOT 6	CON 8	ASHLEY LANE	
VAR A06/17	PETROLIA	ENNISKILLEN	LOT 13	CON 9	FIRST AVE	
SUB	PETROLIA	ENNISKILLEN	LOT 14	CON 10		
VAR A08/17	PLYMPTON-WYOMING	PLYMPTON	LOT 50	CON FRONT	FORSYTH TRAIL	
FI 2017	PLYMPTON-WYOMING	PLYMPTON	LOT 20	CON FRONT	BEVERLY GLEN	
GI 2017	SARNIA	SARNIA	LOT 13	CON 6	BLACKWELL SIDER	ROAD
GI 2017	SARNIA	SARNIA	LOT 12	CON 7	UBE DRIVE	
GI SARNIA	SARNIA	SARNIA	LOT 9	CON 9	FRANKLIN AVE	
LL 2017	ST. CLAIR	MOORE	LOT 26	CON 1	BICKFORD LINE	
FI 2017	ST. CLAIR	MOORE	LOT 12	CON 1	WAUBUNO ROAD	
VAR A17/17	ST. CLAIR	SOMBRA	LOT 16	CON 14	BLACK CREEK LINE	Ī
EA-01-2017	ST. CLAIR	SOMBRA	LOT 20	CON 14		
FI 2017	ST. CLAIR	SOMBRA	LOT C	CON 10	WEST HOLT LINE	
FI 2017	STRATHROY-CARADOC	CARADOC	LOT 8	CON 4	SUTHERLAND DRI	VE
FI 2017	STRATHROY-CARADOC	ADELAIDE	LOT 19	CON 4 SER	SAULSBURY DRIVI	Ē
SUB 39T-SC050	1 STRATHROY-CARADOC	ADELAIDE	LOT 23	CON 3 SER	S OF THORNE AVE	<u> </u>
FI 2017	STRATHROY-CARADOC	CARADOC	LOT 8	CON 4	SUTHERLAND ROA	AD
SEV B13/2017	STRATHROY-CARADOC	ADELAIDE	LOT 23	CON 3 SER	CONNER AVE	

SCRCA Planning Activity Summary for the month of July 2017

	•			•	
File Ref.	Municipality	Geographic Twp	Lot	Concession	Street
SEV B14/17	ADELAIDE-METCALFE	METCALFE	LOT 6	CON 14	INADALE DRIVE
FI 2017	ADELAIDE-METCALFE	METCALFE	LOT 9	CON 14	MAYFAIR ROAD
FI 2017	DAWN-EUPHEMIA	DAWN	LOT 25	CON 3	BENTPATH LINE
FI 2017	DAWN-EUPHEMIA	DAWN	LOT 34	CON 2	DAWN VALLEY ROAD
FI 2017	MIDDLESEX CENTRE	LOBO	LOT 7	CON 9	ILDERTON ROAD
FI 2017	PETROLIA	ENNISKILLEN	LOT 11	CON 11	PARKSIDE STREET
FI 2017	PETROLIA	ENNISKILLEN	LOT 14	CON 10	FIRST AVE
GI 2017	PLYMPTON-WYOMING	PLYMPTON	LOT 45	CON FRONT	LAKSIDE STREET
FI 2017	PLYMPTON-WYOMING	PLYMPTON	LOT 40	CON FRONT	BLUEPOINT DRIVE
SEV B11/2017	SARNIA	SARNIA	LOT 15	CON 9	OLD LAKESHORE ROAD
LL 2017	SARNIA	SARNIA	95 LOT 54	CON 9	MICHIGAN AVE

FI 2017	SARNIA	SARNIA	LOT 46	CON 9	MODELAND ROAD
GI 2017	SARNIA	SARNIA	LOT 1	CON 1	
FI 2017	ST. CLAIR	SOMBRA	LOT 27	CON 8	TULLOCH LINE
SEV B07/17	ST. CLAIR	SOMBRA	LOT B	CON 8	WEST WARD LINE
LL 2017	STRATHROY-CARADOC	ADELAIDE	LOT 22	CON 4 SER	PANNELL LANE
LL 2017	STRATHROY-CARADOC	ADELAIDE	LOT 25	CON 2 SER	SECOND STREET
LL 2017	STRATHROY-CARADOC	ADELAIDE	LOT 25	CON 2 SER	ADAIR
SUB 39T-SC170	2 STRATHROY-CARADOC	CARADOC	LOT 17	CON 2	
SEV B04/2017	WARWICK	WARWICK	LOT 11	CON 1 NER	EGREMONT ROAD

SCRCA Planning Activity Summary for the month of August 2017

File Ref.	Municipality	Geographic Twp	Lot	Concession	Street
FI 2006	ADELAIDE-METCALFE	ADELAIDE	LOT 27	CON 2 SER	HOEFNAGELS CRESCENT
VAR A04/17	ADELAIDE-METCALFE	METCALFE	LOT 20	CON 12	WALKERS DRIVE
LL 17236-01	ADELAIDE-METCALFE	METCALFE	LOT 13	CON 5	CALVERT DRIVE
FI 2017	BROOKE-ALVINSTON	BROOKE	LOT 9	CON 14	LITTLE IRELAND ROAD
FI 2017	CHATHAM-KENT	CAMDEN	LOT 1	CON 1 GORE	CONNECTION ROAD
FI 2017	CHATHAM-KENT	CAMDEN	LOT 3	CON 5 GORE	WATER STREET
SEV B06/17	DAWN-EUPHEMIA	DAWN	LOT 15	CON 2	LAMBTON LINE
LL 2017	ENNISKILLEN	ENNISKILLEN	LOT 21	CON 13	LASALLE LINE
LL 2017	ENNISKILLEN	ENNISKILLEN	LOT 14	CON 13	LASALLE LINE
FI 2017	ENNISKILLEN	ENNISKILLEN	LOT 24	CON 14	WANSTEAD ROAD
FI 2017	LAMBTON SHORES	BOSANQUET	IPPERW	FRONT	WILLIAM STREET WEST
ZBA ZO-08-201	7LAMBTON SHORES	BOSANQUET	LOT 5	CON 19	WEST PARKWAY DRIVE
FI 2017	LAMBTON SHORES	BOSANQUET	IPPERW	FRONT	JUNIPER LANE
FI 2017	PETROLIA	ENNISKILLEN	LOT 13	CON 9	FIRST AVE
FI 2017	PLYMPTON-WYOMING	PLYMPTON	LOT 14	CON 8	EGREMONT ROAD
FI 2017	PLYMPTON-WYOMING	PLYMPTON	LOT 19	CON 11	HILLSBORO ROAD
FI 2017	PLYMPTON-WYOMING	PLYMPTON	LOT 40	CON FRONT	LAMBTON LANE
FI 2017	PLYMPTON-WYOMING	PLYMPTON	LOT 45	CON FRONT	LAKESIDE STREET
FI 2017	SARNIA	SARNIA	LOT 27	CON 9	TELFER ROAD
FI 2017	SARNIA	SARNIA	LOT 23	CON 9	OLD LAKESHORE ROAD
FI 2017	SARNIA	SARNIA	LOT 9	CON 9	FRANKLIN AVE
FI 2017	SARNIA	SARNIA	LOT 1	CON 9	LAKEVIEW TRAIL
FI 2017	SARNIA	SARNIA	LOT 69	CON 9	KENDALL STREET
LL 2017	ST. CLAIR	MOORE	LOT 55	CON FRONT	BUNKER STREET
VAR A27/17	ST. CLAIR	MOORE	LOT 45	CON FRONT	ST. CLAIR PARKWAY
FI 2017	ST. CLAIR	SOMBRA	LOT 21	CON 11	PRETTY ROAD
ZBA 12-2017	STRATHROY-CARADOC	CARADOC	LOT 22	CON 10	GLENGYLE DRIVE
FI 2017	STRATHROY-CARADOC	CARADOC	LOT 17	CON 6	MCEVOY ROAD
LL17241-01	WARWICK	WARWICK	LOT 24	CON 6 SER	CHURCHILL LINE

File Reference Codes:

CZ - Comprehensive Zoning ZBA - Minor Zoning Bylaws and Amendments OP (A)-Official Plan (Amendments) TC-Tree Cutting SEV - Severances
VAR - Variances
EA/PLEA-Environmental Assessments
SUB-Subdivision

GI - General Inquiry
LL - Legal Inquiries/Letters
SP-Site Plan
DAR-Development Assessment Review

FI – Regulations Inquiry NM – Nutrient Management PTTW- Permit to Take Water SPA-Site Plan Approval

Meetings

June

- June 5 343 & 369 Metcalfe Street Meeting with Developer -P. Hayman, E. Ogden
- June 8 conference call LS planner re ZBA W. Parkway Ipperwash P. Hayman
- June 8 Glenview Estates B.McDougall, P. Hayman, S. Hodgkiss, D. Cundick
- June 14 CA Coastal Working Group D. Cundick, P. Hayman
- June 17 ABCA SMP Engineering design public mtg in Thedford P. Hayman
- June 20 Sun-Canadian Pipeline Emergency Preparedness and Response Consultation S. Hodgkiss
- June 21 Level 2 Regulatory Compliance Training Course D. Cundick
- June 26/27 CA University D.Cundick
- June 28 Berger/Modeland preconsultation mtg #2 City of Sarnia P. Hayman, L. Nicks, G. Sankar

July

- July 11 Strathroy Middlesex Hospital Medical Office Building, M. Deisley, S. Hodgkiss, E. Ogden
- July 12 10284 Ilderton Rd, Municipality of Middlesex Centre, M. Deisley, E. Ogden
- July 17 OPA 32 flood study mtg with B. Zantingh P. Hayman
- July 18 4606 Lakeside St, P-W J Burbidge property W. Barlett consulting, P. Hayman
- July 27 4839 Pond Trail, Township of Plympton-Wyoming, D. Cundick, E. Ogden
- July 28 Conference call Devonshire groyne with F. Duckett, Baird P. Hayman, D. Cundick

August

August 25 – City of Sarnia Tree Cutting By-law – P. Hayman, S. Hodgkiss, E. Ogden

11. (iv)



To: Board of Directors

From: Patty Hayman, Director of Planning

Dallas Cundick, EP and Regulations Officer

Erica Ogden, Planner

Report Date: August 30, 2017

Subject: Planning and Regulations Procedures and Technical Guidelines Manual

RECOMMENDATIONS

1) That staff be directed to initiate the task of formulating the Planning and Regulations manual.

2) The Board of Directors consider appointing a Procedures and Technical Guidelines (Planning and Regulations) Manual Committee for the duration of the project to facilitate the review of the Manual. The Committee would be a sunset committee of the Conservation Authority.

BACKGROUND

Purpose

The purpose of the Manual is to provide a comprehensive guidelines and procedures document for SCRCA development and site alteration review, which will take guidance from Provincial Policy, Conservation Ontario policies/procedures and SCRCA's existing policies. The procedures and technical guidelines manual is a local guidance document of current procedures and practices.

The Manual is a "living document" that will be updated on a periodic basis to reflect procedural issues related to updated technical practices, technical information or legislative changes (ie. Conservation Authorities Act changes). In addition to being used by SCRCA staff, it is envisioned that the reference document can be utilized by member municipalities, landowners/proponents, the development community, and the general public.

Benefits of a Comprehensive Manual

- Increased transparency to the public
- Improved consistency for application review
- Further *clarity* on the Authority's role in the review of development and site alteration
- Improved efficiency in staff time
- Serve as a central resource of information
- Assist with successional planning

Why now?

Conservation Ontario has provided guidelines for the development of policy and procedural manuals and highly recommends Conservation Authorities ensure comprehensive guidance documents are developed for their watersheds.

For successional purposes at the SCRCA, it will greatly assist new staff in administering the program. The Lower Thames Valley Conservation Authority, in which the SCRCA shares over half its inland watershed boundary, recently completed public consultation with regard to a comprehensive Regulations and Planning Policy and Procedure Manual 2016. The document is available at LTVCA website http://www.lowerthames-conservation.on.ca/wp-content/uploads/2016/08/LOWER-THAMES-VALLEY-CONSERVATION-AUTHORITY-draft-policy-doc-edit.pdf. To aid in CA consistency, it is appropriate to utilize LTVCA's document template, in moving forward with this initiative. In the last several years, SCRCA staff have been meeting with LTVCA, ERCA, KCCA and UTRCA planning staff to discuss procedure manuals, content of manual sections, and common issues.

Level of Difficulty

To date, the Board of Directors have approved various policies for the administration of Municipal Plan Review and SCRCA Ontario Regulation 171/06 "Development, Interference with Wetlands & Alterations to Shorelines and Watercourses". The Manual will bring together the technical guidance/policies and procedures into one central resource. The works are largely a housekeeping measure.

Consultation

- Sections of the draft manual and progress will be brought forward to the Board of Directors.
- There are advantages to having a Board of Directors subcommittee or a sunset committee review the sections of the manual as they are completed. It is requested that the Board consider appointing a Planning and Regulations Manual Committee for this purpose with 3-4 meeting per year (held immediately following Board meetings).
- Following completion of draft Planning and Regulations sections, public consultation will be undertaken with feedback brought back to the Board.
- Final approval by the Board of Directors based on the feedback will be sought for the Planning and Regulations Sections of the manual.

Anticipated Timeline

The anticipated timeline for the completion of the draft Planning and Regulations Manual is 2018; with additional consultation being carried over into 2019.



Draft Table of Contents & Introduction

Enclosed is a draft Table of Contents outline for the Manual. Support in principle for the Manual is requested of the Board of Directors.

Chapter 1 – Introduction has also been included in draft form. This is good background information.

Financial implications

No financial implications. To be done in house as time permits but will be given a higher priority.

Conservation Strategy

This initiative meets Goal 1 and 2 of the 2016 SCRCA Strategic Plan and Mission statement for the SCRCA.

Goal 1 – Develop and maintain programs that will protect life and property from natural hazards such as flooding and erosion

Goal 2 – Protect, manage, and restore our natural systems including woodlands, wetlands, waterways, and lakes

Mission - "The St. Clair Region Conservation Authority has as its mission, to provide leadership through <u>coordination of watershed planning</u>, implementation of resource management programs and promotion of conservation awareness, in cooperation with others."

Planning and Regulations Procedures and Technical Guidelines Manual

Draft Table of Contents

1. Introduction

- Provide an overview of the Conservation Authorities and SCRCA role as it relates to development approvals including site alteration.
- Discussion of Watershed approach

2. Environmental Areas of Interest

Discussion of Natural Hazards, Natural Heritage and Water features

3. Municipal Planning

- Guidance regarding the Authority's areas of interest when comments are required under the Planning Act.
- Reference Conservation Ontario "Policies and Procedures for Conservation Authority Plan Review and Permitting Activities.
- Authority role and guidance in stormwater management.
- Natural Hazard delegation by the Province and Municipal agreement for services pertaining to all other features.
- Chapter based on existing manuals of neighbouring Conservation Authorities

4. SCRCA Regulation

- Guidance and reference to existing Board approved policy on the Administration of Ontario Regulation 171/06.
- Reference Conservation Ontario "Policies and Procedures for Conservation Authority Plan Review and Permitting Activities".
- Reference Conservation Ontario "Guidelines to Support CA Administration of the "Development, Interference with Wetlands & Alterations to Shorelines & Watercourses" Regulation".
- References accepted procedures and practices.

5. Review & Approval Processes

- Description of the review and approval processes the Conservation Authority undertakes.
- Describes other technical review processes and guidance documents.

6. Definitions

- This Chapters provide definitions to ensure clarify throughout the manual.
- All definitions will be taken from existing approved documents

7. Appendices

- Key reference document links
- Mapping
- Consultation documentation
- Etc.



1. INTRODUCTION

The need to prepare a comprehensive Planning and Regulations Procedures and Technical Guidelines Manual for the St. Clair Region Conservation Authority (SCRCA) is in response to the amendments to the Conservation Authorities Act in 2004 and further amendments in 2013, along with the implementation of the Generic Regulation O. Reg. 94/04, for the "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation. An updated Provincial Policy Statement was also released in 2014.

The purpose of the Planning and Regulations Procedures and Technical Guidelines Manual, taking guidance from Provincial Policy, is to provide local watershed policies which will guide development and site alteration while protecting, preserving and enhancing the natural environment. The procedures are based on the interrelationship between environmental, physical and social factors that impact land use planning and development in the watershed.

This manual, to be approved by the St. Clair Region Conservation Authority's Board of Directors, will be implemented by SCRCA staff through the Conservation Authority's Planning and Regulations program. The manual will identify the requirements that will need to be met when seeking planning, regulatory or other forms of approval from the SCRCA. It is envisioned that this Manual will be a valuable tool for the SCRCA Board of Directors and staff as well as for the watershed municipalities, the land development industry and the public.

This manual will be reviewed periodically and revised by the General Manager, with input from staff. The General Manager may revise and update this document to keep it current with changes in legislation or technical practices. The manual shall be reviewed on a regular cycle with staff recommendations for changes brought forward to the Board of Directors for approval.

Public consultation will be an important aspect to the development of the Procedures and Technical Guidelines Manual. The final manual will be made publically available on the SCRCA website and comments will be accepted from the public and incorporated in the document as necessary. The final document will remain a public resource to help provide further transparency to the SCRCA development and site alteration review process.

1.1. History of Conservation Authorities

Conservation Authorities (CAs) have a long and important history in Ontario. The Conservation Authorities Act was created in 1946 in response to concerns with erosion, flooding and drought, recognizing that these and other natural resource issues are best managed on a watershed basis. The Act was initiated in response to prevailing concerns with poor land, water and forestry practices that had taken place in the 1930s and 1940s. Organizations dedicated to conservation and wise resource use were becoming collectively concerned with drought, extensive soil loss, deforestation and flooding and called for a more enlightened and integrated approach to resource management using natural watershed boundaries. While the responsibility for natural resource management lay with the Province, the scale of erosion and water concerns was such that it required a new and different approach and when a number of municipal councils agreed to become involved, it led to the passage of the Conservation Authorities Act (CA Act) in 1946. The CA Act provided the legislative framework for collaborative action by the province and watershed municipalities for the management of natural hazards and those early beginnings paved the way for a number of legislative amendments over time.

In 1956, in response to severe economic and human losses associated with Hurricane Hazel (1954), changes were made to the Conservation Authorities Act to empower CAs to make Regulations to prohibit filling in floodplains. These Regulations were broadened in 1960 to prohibit or regulate the placing or dumping of fill in defined areas where, in the opinion of the CA, the control of flooding, pollution or the conservation of land may be affected. In 1968, amendments to the CA Act further extended the Regulations to prohibit or control construction and alteration to waterways, in addition to filling.



In April of 1995, a Memorandum of Understanding with the Ministry of Municipal Affairs and Housing and the Ministry of Natural Resources clarified the role of Conservation Authorities under the One Window Planning System. Conservation Authorities were delegated natural hazard responsibilities. Natural hazards include: floodplain management, hazardous slopes, Great Lake shoreline and connecting channels as well as erosion. This Memorandum of Understanding delegated the review of applications under the Planning Act related to Section 3.1 – Natural Hazard of the Provincial Policy Statement to Conservation Authorities.

Since that time, the CA Act has been amended, in 1998 as part of the Red Tape Reduction Act (Bill 25) to ensure that Regulations under the Act were consistent across the province and complimented provincial policies. Revisions were made to Section 28 which led to the "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation" (97/04).

In 2006, the Minister of Natural Resources approved the individual "Development, Interference and Alteration" Regulations for all CAs consistent with Ontario Regulation 97/04. The St. Clair Region Conservation Authority's individual regulation stemming from this process is Ontario Regulation 171/06. Through these regulations, CAs are empowered to regulate development and activities in or adjacent to river or stream valleys, Great Lakes and large inland lakes shorelines, watercourses, hazardous lands and wetlands. These regulations ensure conformity of wording across all CAs, and complement municipal implementation of provincial policies under the Planning Act. Development taking place on lands that meet the definitions in the Act and text of the Regulation may require permission from individual Conservation Authorities to confirm that the control of flooding, erosion, dynamic beaches, pollution or the conservation of land are not affected. They also regulate the straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream, watercourse or the changing or interfering in any way with a wetland.

1.2. Conservation Authorities Act

The Conservation Authorities Act bestows regulatory responsibilities on CAs under Section 28 of the Act. Under Section 28, CAs are empowered to prepare Regulations, commonly referred to as the "Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses". These Regulations are subject to the approval of the Minister of Natural Resources. Section 28 of the Conservation Authorities Act empowers an authority to make regulations applicable in the area under its jurisdiction:

- 1. Restricting and regulating the use of water in or from rivers, streams, inland lakes, ponds, wetlands and natural or artificially constructed depressions in rivers or streams;
- 2. Prohibiting, regulating or requiring the permission of the authority for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;
- 3. Prohibiting, regulating or requiring permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land may be affected by the development:
- 4. Providing for the appointment of officers to enforce any regulation made under this section:
- Providing for the appointment of persons to act as officers with all of the powers and duties

The following objectives provide the basis for the decision making process for implementing the Authority's regulation and permit process:

- Prevent loss of life,
- Minimize property damage and social disruption



- Reduce public and private expenditure for emergency operation, evacuation and restoration,
- Minimize the hazards and unnecessary development of riverine flood plains and flood and erosion susceptible shoreline areas which in future years may require expensive protection measures,
- Regulate works and development which, singularly or collectively, may reduce riverine channel capacities to pass flood flows resulting in increased flood levels, and creating potential danger to upstream and downstream landowners,
- Control filling and/or drainage of natural storage areas such as wetlands and valleylands,
- Encourage the conservation of land through the control of construction and placement of fill on existing or potentially unstable valley slopes or shoreline bluffs,
- Reduce soil erosion and sedimentation from development activity,
- Control pollution or other degradation of existing and potential groundwater aquifer(s) and aquifer recharge areas, created by fill activities: and
- Control water pollution, sedimentation and potential nuisances due to floating objects and debris.

1.3. Planning Act

The Planning Act provides municipal governments, Conservation Authorities and other agencies with a broad, province-wide framework to promote the orderly development of land. It guides land use planning decisions in Ontario as well as local policy formulation that is consistent with provincial requirements. Section 3 of the Planning Act enables the Province to develop and implement detailed policies for those matters considered to be of provincial interest. Such policies are outlined within the Provincial Policy Statement (PPS).

Section 3(5) and 3(6) of the Planning Act states the following:

- (5) A decision of the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government, including the Municipal Board, in respect of the exercise of any authority that affects a planning matter,
 - (a) shall be consistent with the policy statements issued under subsection (1) that are in effect on the date of the decision; and
 - (b) shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be. 2006, c. 23, s. 5.
- (6) Comments, submissions or advice affecting a planning matter that are provided by the council of a municipality, a local board, a planning board, a minister or ministry, board, commission or agency of the government.
 - (a) shall be consistent with the policy statements issued under subsection (1) that are in effect on the date the comments, submissions or advice are provided; and
 - (b) shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be. 2006, c. 23, s. 5.

Municipalities circulate Planning Act applications to the SCRCA, as a local board, for review in accordance with circulation procedures established under the Planning Act.

1.4. Provincial Policy Statement

The Provincial Policy Statement (PPS) provides direction on matters of provincial interest related to land use planning and development; including Natural Heritage (section 2.1) and Natural Hazard policies (section 3.1). As a key part of Ontario's policy-led planning system, the PPS sets the policy foundation for regulating the development and use of land. It also supports the provincial goal to enhance the quality of life for citizens of Ontario.

The PPS provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment. The PPS supports improved land use planning and management, which contributes to a more effective and efficient land use planning system.



The policies of the PPS may be complemented by provincial plans or by locally-generated policies regarding matters of municipal interest. Provincial plans and municipal official plans provide the framework for comprehensive, integrated and long-term planning that supports and integrates the principles of strong communities, a clean and healthy environment and economic growth, for the long term.

In 1997 the Province of Ontario released the PPS replacing the previous 1988 Flood Plain Planning Policy Statement made under the Planning Act. The most recent edition of the PPS was issued under the authority of Section 3 of the Planning Act and came into effect on April 30, 2014, replacing the 2005 edition. It applies to all applications, matters or proceedings commenced on or after April 30, 2014.

In respect to the exercise of any authority that affects a planning matter, Section 3 of the Planning Act requires that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act.

The PPS is more than a set of individual policies. It is intended to be read in its entirety and the relevant policies are to be applied to each situation. A decision-maker should read all of the relevant policies as if they are specifically cross-referenced with each other. While specific policies sometimes refer to other policies for ease of use, these cross-references do not take away the need to read the PPS as a whole.

1.5. The Planning Act & the Conservation Authority Regulation

It is important to understand the difference between regulatory approvals issued by the CA under Section 28 of the Conservation Authorities Act (CA Act) and approvals that are issued by municipalities and other planning authorities under the Planning Act. The principle of development is established through the Planning Act approval process; this principle details where and what types of development should occur in a municipality.

Concerns regarding the principle of development are conveyed to the municipality during the preparation of municipal land use policies and planning documents (Official Plans, Secondary Plans and comprehensive Zoning By-laws) or during the Planning Act approval process. In contrast, the CA permitting process pursuant to Section 28 of the CA Act is site specific, by individual application for a technical decision on a proposed development or activity that is based in considerations related to public safety, natural hazard prevention and management. Concerns regarding the principle of development are not normally addressed through the CA permitting process. If however, a CA has concerns that a Section 28 permit cannot be issued, they should identify the concern when commenting on the Planning Act application or process.

The Planning Act provides the framework for the development of municipal policy documents which establish the 'principle of development'. Any concerns regarding the establishment of the principle of development will be conveyed to the municipality/planning approval authority during the Planning Act approvals process and not addressed through the CA permitting process. Planning Act approvals are to be secured first; permit approvals follow.

Applicants who are contemplating development in the watershed are advised to check with the local and/or regional municipality to determine the requirements contained in Official Plans, Secondary Plans and Zoning By-laws as well as the latest requirements prescribed under the PPS and related planning initiatives prior to any consultation with the CA. In addition, applicants are also advised to contact the Municipal Building Official or By-law Enforcement Officer.

1.6. SCRCA Approach to Watershed Management

In 1961 the municipalities within the drainage area of the Sydenham River formed the Sydenham Valley Conservation Authority. In 1972 the watersheds from Hickory Creek on Lake Huron west



to the beginning of the St. Clair River and south to Rankin Creek on Lake St. Clair joined the region which was renamed the St. Clair Region Conservation Authority (SCRCA). In 2005, the watersheds between the Hickory Creek and Ausable River watersheds joined the SCRCA.

The SCRCA's area of jurisdiction includes portions of Middlesex County, Lambton County, and the Municipality of Chatham-Kent. The Sydenham River drains 2,751 square kilometers of land, which outlets to the Chenal Ecarte. Hickory Creek, Cow and Perch Creeks, Clay Creek and over ten other creeks drain 1,378 square kilometers of land toward Lake Huron, the St. Clair River or Lake St. Clair. SCRCA's watershed is surrounded by Lake Huron to the north, the Ausable River to the northeast, the Thames River watershed to the south, and the St. Clair River and Lake St. Clair to the west.

The surface of this region was shaped by glaciers during the Pleistocene ice age 10,000 years ago. Glacial deposits on top of the limestone, dolostone, sandstone and shale bedrock determines the soils, contours and natural drainage patterns of the landscape. The dominant feature of the St. Clair Region is the former glacial lake bottom which is now the relatively flat and featureless clay plains. Sand plains from Caradoc to Bothwell in the southeastern area of the watershed were deposited as river deltas and beach dunes and ridges. Till soils, which are a mixture of clay, silt, sand, and pebbles, are found in the northeastern parts of the watershed in the low ridges and hummocks of the Wyoming Moraine. The shorelines along Lake Huron include shale bedrock outcrop at Kettle Point, bluffs to the south toward Blue Point and low sandy beaches nearer to Sarnia. The St. Clair River shoreline is largely developed but includes some beaches and narrow wetlands. Along the delta of the St. Clair River and beside Lake St. Clair the shoreline ranges from extensive coastal wetlands to earthen dykes and hardened shorelines.

Within the St. Clair Region there are over 6,000 kilometres of watercourses. Over the past 125 years, drainage works have modified the natural drainage for agriculture, residential and industrial development. Within the St. Clair Region, the three largest urbanized areas are Sarnia, Wallaceburg and Strathroy.

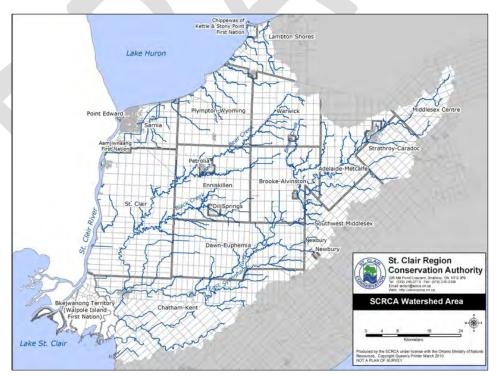


Figure 1 - SCRCA Watershed Area



1.7. Role of the Conservation Authority

Governed by a 20-member Board of Directors, SCRCA is accountable to its member municipalities and has responsibility for the conservation, restoration, development and management of the natural resources in the watershed.

SCRCA derives its authority from the CA Act and its associated Regulations, and indirectly, from the Planning Act. In keeping with these legislative parameters, SCRCA performs a number of specific roles across the watershed:

- 1. Regulatory Authority SCRCA is the approval authority for development and/or activity applications submitted for approval under the "Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses" (O. Reg 171/06) under the CA Act within SCRCA's area of jurisdiction. Applications are granted approval in the form of a permission (permit) with, or without, conditions or may be denied.
- 2. Delegated Responsibilities in Municipal Plan Review with Respect to Natural Hazards SCRCA has delegated responsibilities to review and comment on planning issues for conformity with Section 3.1 of the Natural Hazard Policies contained in the Provincial Policy Statement. The technical basis for this commenting role derives from the Ministry of Natural Resources Natural Hazard Technical Guides.
- **3. Resource Management Agency** SCRCA is a local watershed-based natural resource management agency that has and is committed to developing various programs reflecting local resource management needs within SCRCA's jurisdiction.
- **4. Public Commenting Body** Pursuant to the Planning Act, watershed municipalities are required to provide SCRCA notice on municipal policy documents and planning and development applications. SCRCA may comment on these documents and applications to the municipality or planning approval authority as per the Provincial Policy Statement and their Board approved policies as local resource management agencies. SCRCA also has a role as a public commenting body under other legislation (e.g., Clean Water Act (CWA), Environmental Assessment Act (EAA), etc.)
- **5. Service Provider** SCRCA provides technical advisory services and planning advice to municipalities in keeping with the memorandums of understanding that are in place with its member municipalities. The SCRCA provides advisory services to member municipalities related to Natural Heritage planning under Section 2.1 of the Provincial Policy Statement.
- **6. Landowner** SCRCA owns a number of properties (Conservation Areas, forests, wetlands and heritage properties) within its jurisdiction for which SCRCA undertakes a number of programs.

1.8. Natural Heritage Memorandum of Understanding

A natural heritage system includes all of the hydrologic and ecological "systems" that make up the natural features and areas of the *watershed*. These can include *valleyland*s, areas of natural and scientific interests (ANSIs), woodlands, wildlife habitat, *wetland*s, *watercourses*, and Great Lakes shorelines, to name a few. Natural heritage systems can include lands that have been restored or have the potential to be restored to a natural state (PPS, 2014).

The emphasis is on system integrity and the importance of a holistic or systems-based approach. Linkages are a key element of a natural heritage system as there is a natural movement pattern of plants and animals that is necessary for biodiversity conservation and long-term sustainability. A systems approach considers features as well as functions.



The CA encourages a natural heritage systems approach to *watershed* management. Traditional conservation approaches have focused on protecting individual natural features and areas and as a result, failed to adequately *protect* the ecological integrity of the *watershed* as a whole. Protecting and/or restoring features alone is not sufficient to maintain critical *ecosystem* functions. In addition, a natural heritage systems approach to *watershed* planning upholds the PPS which states:

"Ontario's long-term prosperity, environmental health, and social well-being depend on protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits." (Provincial Policy Statement, 2014)

As per our understanding with the municipalities within the St. Clair watershed, SCRCA provides advisory comments representing the provincial interest on natural heritage encompassed by Section 2.1 of the Provincial Policy Statement, 2014. SCRCA is working with our member municipalities to formalize our natural heritage services in memorandums of understanding.

Staff Report

11.(v)



To: Board of Directors
Date: September 7, 2017

From: Kelly Johnson, Remedial Action Plan (RAP) Coordinator

Subject: St. Clair River Area of Concern (AOC)

Beneficial Use Impairment (BUI) Update

Beach Closings BUI:

The status assessment for the "Beach Closings" BUI for the St. Clair River AOC was presented to the Four Agency Managers Work Group at the June 29, 2017 meeting. Comments have been received from members of the committee as well as the Walpole Island First Nation Heritage Committee. These comments will be considered in the preparation of the final *Status of the Beach Closings Beneficial Use Impairment* report.

Restrictions on Dredging Activities BUI, Bird or Animal Deformities or Reproductive Problems BUI, Beach Closings BUI:

Meetings are being coordinated between Environment and Climate Change Canada and Walpole Island First Nation Council to discuss the re-designation of BUIs: Restrictions on Dredging Activities, Bird or Animal Deformities or Reproductive Problems, and Beach Closings. Next steps in the re-designation process will be determined upon the completion of these meetings.

2012 – 2017 Accomplishments Report

The 2012 – 2017 St. Clair River Area of Concern Work Plan concluded in March 2017. The 2012 – 2017 Accomplishments Reports is currently being developed based on activities completed for the work plan. The Accomplishments Report is scheduled to be finalized in the fall of 2017 and available for public distribution soon after.

Recent and Future Meetings:

Canadian Remedial Action Plan Implementation Committee (CRIC):

• September 20, 2017 – Sarnia, Ontario

Binational Public Advisory Council (BPAC):

- July 20, 2017 Port Huron, Michigan
- September 20, 2017 Sarnia, Ontario

Fish and Wildlife Habitat and Population Subcommittee:

October 2017 – location to be determined

Presentations and Events:

Presentations were delivered and/or St. Clair River AOC information was displayed at recent meetings and events including:

- St. Clair Region Conservation Authority Bus Tour June 22, 2016
- American BUI Removal Celebration Event, Port Huron, Michigan August 3, 2017
- Ministry of Environment and Climate Change Watershed Tour August 15, 2016
- Envirofest, Aamjiwnanng First Nation August 22, 2016

Prepared By: Tracy Prince September 5, 2017

ST CLAIR REGION CONSERVATION AUTHORITY Statement of Revenue and Expenditure For the Seven Months Ended 31/7/2017

12.(i)

Flood Control & Erosion Control
Capital Projects/WECI
Conservation Area's Capital Development
IT Capital
Equipment
Planning & Regulations
Technical Studies
Recreation
Property Management
Education and Communication
Source Water Protection
Conservation Services/Healthy Watersheds
Administration/AOC Management

Actual To Date			Annual Budget		Variance from Budget	
Revenue	Expenditures	Surplus(Deficit)	Revenue	Expenditures	Revenue	Expenditures
\$785,938	\$342,273	\$443,664	\$557,420	\$557,420	\$228,518	(\$215,147)
\$285,792	\$13,893	\$271,899	\$30,000	\$30,000	\$255,792	(\$16,107)
\$80,000	\$68,169	\$11,831	\$71,000	\$71,000	\$9,000	(\$2,831)
\$11,284	\$1,064	\$10,220	\$19,200	\$19,200	(\$7,916)	(\$18,136)
\$41,300	\$28,753	\$12,547	\$72,000	\$72,000	(\$30,700)	(\$43,247)
\$358,335	\$259,979	\$98,356	\$502,933	\$502,933	(\$144,598)	(\$242,954)
\$414,394	\$159,020	\$255,374	\$297,137	\$297,137	\$117,257	(\$138,117)
\$1,197,791	\$584,691	\$613,100	\$1,301,890	\$1,301,890	(\$104,099)	(\$717,199)
\$146,351	\$121,944	\$24,407	\$248,430	\$248,430	(\$102,079)	(\$126,486)
\$106,522	\$161,147	(\$54,626)	\$193,821	\$193,821	(\$87,299)	(\$32,674)
\$112,955	\$59,541	\$53,414	\$175,000	\$175,000	(\$62,045)	(\$115,459)
\$795,772	\$456,730	\$339,042	\$555,605	\$555,605	\$240,167	(\$98,875)
\$623,390	\$516,590	\$106,800	\$1,115,204	\$1,115,204	(\$491,814)	(\$598,615)
\$4,959,823	\$2,773,794	\$2,186,029	\$5,139,640	\$5,139,640	(\$179,817)	(\$2,365,846)

Notes:

- 1. The 2014 MNR Operating grant of 310,000 is recorded in the actual revenue reported above.
- 1. Municipal matching, non-matching, 3-D Special and Recreation levies totaling \$823,855 have been invoiced and are recorded in the actual rever reported above. See General Levy Report for amounts outstanding.
- 2. The significant variances from budget to actual is reflective of the nature/timing and uniqueness of the particular projects. The variances will reduce and disappear as the year progresses.

ST. CLAIR REGION CONSERVATION AUTHORITY DISBURSEMENTS FROM June to Aug 2017

12. (ii) Sarah Kellestine

CHQ.#	DATE	VENDOR	DESCRIPTION	AMOUNT
18910		ARMSTRONG CONSTRUCTION	WWK Shed Construction	\$ 14,933.68
18912		BUFFETT, TAYLOR & ASSOCIATES I	Group Benefits	\$ 11,544.95
18923	6/1/2017	Golder Associates	Consulting - Water Resources	\$ 5,650.00
18926	6/1/2017	JOHNSTON BROS.(BOTHWELL) LTD.	Gravel	\$ 9,043.99
18936	6/1/2017	ONTARIO MINISTER OF FINANCE	Employer Health Tax	\$ 6,503.67
18962	6/19/2017	Avanti Insight Consulting	Consulting - RAP	\$ 6,589.00
18964		BF ENVIRONMENTAL CONSULTANTS	Wetland Construction	\$ 12,781.98
19001		SOMERVILLE NURSERIES INC.	Trees	\$ 53.887.88
19024		BUFFETT, TAYLOR & ASSOCIATES I	Group Benefits	\$ 12.160.77
19027		CONSERVATION ONTARIO	Levy	\$ 14,512.50
19034		JOHNSTON BROS.(BOTHWELL) LTD.	Gravel	\$ 6.033.13
19038		K & H DISTRIBUTING	Fireworks	\$ 6,832.63
19044		Neil VanDerkruk Holdings Inc.	Trees	\$ 8.322.45
19049		PODOLINSKY FARM EQUIPMENT	John Deer Tractor	\$ 28,937.10
19057		STRATHROY WELDING AND REPAIRS	Highland Glen repairs Larvacide	\$ 8,446.75
19068		WELLMARK INTERNATIONAL LBX 910	Group Benefits	\$ 7,108.38
19134		RWAM Insurance Administrators Inc	Group Benefits	\$ 11,025.22
19135		BUFFETT, TAYLOR & ASSOCIATES I	Consulting - Water Resources	\$ 11.918.22
19187		Golder Associates	Trees	\$ 36,825.80
19195		Neil VanDerkruk Holdings Inc.	Highland Glen repairs	\$ 14,588.30
19209		BABCOCK SUPPLY LIMITED	AWC Electrical Upgrade	\$ 25,856.66
19240	8/24/2017	STEWART ELECTRIC OF WYOMING INC.	71110 Lieotiloai Opgiade	\$ 5,507.49

\$ 319,010.55

TOTAL CHEQUE DISBURSEMENTS - BANK #1 -

INTERNET BANKING June to Aug 2017

TRANS#	DATE	VENDOR	DESCRIPTION	AMOUNT
8692	6/30/2017 HYD	RO ONE Networks Inc.	Hydro	\$ 22,207.34
8693	6/30/2017 MAS	TERCARD	Misc Expenses	\$ 7,378.49
8694	6/30/2017 OME	RS	Pension	\$ 38,374.96

8696	6/30/2017 RECEIVER GENERAL	Source Deductions	\$ 67,024.50
8700	6/30/2017 Township of St. Clair - Property Taxes	Property Taxes	\$ 17.524.86
8702	6/30/2017 WORKPLACE SAFETY & INS. BOARD	WSIB	\$ 7,197.18
8706	7/31/2017 Canada Revenue Agency - HST	HST	\$ 72,462.04
8712	7/31/2017 HYDRO ONE Networks Inc.	Hydro	\$ 24,296.99
8713	7/31/2017 MASTERCARD	Misc Expenses	\$ 7,015.99
8716	7/31/2017 Municipality of Chatham-Kent - Property Taxes	Property Taxes	\$ 5.812.16
8717	7/31/2017 OMERS	Pension	\$ 36,371.84
8719	7/31/2017 RECEIVER GENERAL	Source Deductions	\$ 65,913.46
8725	7/31/2017 WORKPLACE SAFETY & INS. BOARD	WSIB	\$ 7,323.42
8737	8/31/2017 HYDRO ONE Networks Inc.	Hydro	\$ 37,377.79
8743	8/31/2017 OMERS	Pension	\$ 34.937.60
8745	8/31/2017 RECEIVER GENERAL	Source Deductions	\$ 59,701.13
8751	8/31/2017 WORKPLACE SAFETY & INS. BOARD	WSIB	\$ 6,984.74

\$ 517,904.49

TOTAL INTERNET DISBURSEMENTS - BANK NO. 1 -

PAYROLL RUNS

\$ 81,595.84
\$ 79,929.87
\$ 97,190.13
\$ 79,501.45
\$ 80,784.35
\$ 82,152.16
\$ \$ \$ \$

TOTAL PAYROLL RUNS -

\$ 501,153.80

TOTAL DISBURSEMENTS -

\$1,338,068.84

2017 GENERAL LEVY SUMMARY

GLYSUM2017 Sarah Kellestine 1-Sep-17

MUNICIPALITY	-	GROSS LEVY	PAID TO DATE	_	OUTSTANDING
Sarnia	\$	308,381.00	\$ 231,285.75	\$	77,095.25
Chatham-Kent		102,822.00	102,822.00		0.00
Brooke-Alvinston Twp.		12,305.00	12,305.00		0.00
Dawn Euphemia Twp.		18,819.00	9,409.50		9,409.50
Enniskillen Twp.		13,372.00	13,372.00		0.00
Lambton Shores M.		38,420.00	38,420.00		0.00
Oil Springs V		1,529.00	1,529.00		0.00
Petrolia T		18,883.00	18,883.00		0.00
Plympton-Wyoming T		40,012.00	20,006.00		20,006.00
Point Edward V		18,483.00	18,483.00		0.00
St. Clair Twp.		85,473.00	85,473.00		0.00
Warwick Twp.		15,875.00	15,875.00		0.00
Adelaide Metcalfe Twp.		13,552.00	6,776.00		6,776.00
Middlesex Centre Twp.		16,494.00	16,494.00		0.00
Newbury V		1,190.00	1,190.00		0.00
Southwest Middlesex M		8,829.00			8,829.00
Strathroy-Caradoc M.		64,417.00	48,312.75		16,104.25
TOTAL	\$	778,856.00	\$ 640,636.00	\$ =	138,220.00

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ST. CLAIR REGION CONSERVATION **AUTHORITY** 205 MILL POND CRES STRATHROY ON N7G 3P9

Account Number: 460-16010

Account Type: Regular Account For the Period: August 1 to 31, 2017

July 31, 2017 Last Statement:

Address Information

148 Fullarton Street

Suite 1801 London ON N6A 5P3



Phone: (519) 679-9490

Website: www.scotiawealthmanagement.com

Matt Berry Branch Manager:



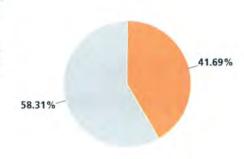
Your Wealth Advisor

(519) 660-3259 Craig Emptage craig.emptage@scotiawealth.com

CANADIAN Account Overview

Currency: CANADIAN DOLLAR

Asset Class Summary	Aug. 31, 2017 Market Value	% of Total Assets
Fixed Income	309,249	41.69
Other	432,516	58.31
Total Value of Account	\$741,765	100.00
Total Value on Last Statement, July 31, 2017	\$735,854	



Details of Your Account Holdings

Туре	Security Description	Quantity	Average Cost	Adjusted Book Value	Market Price	Market Value
Fixed In	ncome					
CASH	MANULIFE STRATEGIC INCOME FUND CL F NL (659)	5,881.161	12.774	75,129	12.812	75,349
CASH	PIMCO MONTHLY INCOME FUND (CANADA) CL M (505)	16,153.298	14.487	234,017	14.480	233,900
	See Endnote 1					
Total Fi	ixed Income					\$309,249
CASH	MACKENZIE GLOBAL TACTICAL INVESTMENT GRADE BD FD SERIES PWF (6526)	22,049.69	9.990	220,292	9.870	217,630
CASH	SIGNATURE CANADIAN BOND CORP CLASS EF NL (15137)	21,707.863	10.282	223,202	9.899	214,886
Total O	ther					\$432,516
Total	Account Holdings			\$752,640		\$741,765

The average cost and adjusted book value displayed on this statement incorporates re-invested dividends and/or mutual fund distributions and does not necessarily reflect your original purchase price. Please see Average Cost & Adjusted Book Value in the Statement Notes for more information.

Monthly Activity

Date Type Activity	Description	Quantity Price Credit/Debi
Opening Cash Balance		\$0.0
Aug. 01, 2017 CASH DIVIDEND	PIMCO MONTHLY INCOME FUND (CANADA) CL M (505) REINVEST 07/31/17 @ \$14.4147 PLUS FRACTIONS OF 0.711 BOOK VALUE \$730.99	50
Aug. 21, 2017 CASH DIVIDEND	MACKENZIE GLOBAL TACTICAL INVESTMENT GRADE BD FD SERIES PWF (6526) REINVEST 08/18/17 @ \$9.8532 PLUS FRACTIONS OF 0.122	49

Monthly Activity - continued

Date Type Activity	Description	Quantity Price Credit/Debit(-
	BOOK VALUE \$484.01	
Aug. 28, 2017 CASH DIVIDEND	MANULIFE STRATEGIC INCOME FUND CL F NL (659) REINVEST 08/25/17 @ \$12.7994 PLUS FRACTIONS OF 0.490 BOOK VALUE \$147.07	11

Closing Cash Balance

\$0.00



Summary

Income Summary			
	This Period	Year-to-Date	
Total Income	\$0	\$0	



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Terms and Conditions

Terms and Conditions are applicable to your account(s). For further details of these terms and conditions go on-line or speak to your Investment Advisor. http://www.scotiabank.com/ca/common/pdf/scotiamcleod/TandC.pdf

Average Cost & Adjusted Book Value

Adjusted book value is average cost times the number of shares that you hold of a security. The average cost and adjusted book value displayed on this statement may represent: 1) your total cost, including commission and fees, of acquiring the security, 2) the value at the time the security was transferred into the account, 3) the effect of subsequently re-invested dividends and/or mutual fund distributions, 4) revisions as a result of security reorganizations and other corporate actions, 5) values which you have provided and requested that we reflect, or a combination of the foregoing. A statement message will advise you that an adjustment has been made in the month it occurs. This information has been calculated to the best of our ability unless provided by you. This information should not be used for the purposes of tax reporting.

Statement Frequency

Statements are issued whenever there has been activity in the account during the past month; otherwise statements are issued on a quarterly basis.

Relationship with TMX Group Limited

Scotia Capital Inc. (or an affiliate thereof) owns or controls an equity interest in TMX Group Limited ("TMX") (and has a nominee director serving on the board thereof). As such, Scotia Capital Inc. may be considered to have an economic interest in the listing of securities on an exchange owned or operated by TMX, including the Toronto Stock Exchange, the TSX Venture Exchange and the Alpha Exchange. No person or company is required to obtain products or services from TMX or its affiliates as a condition of Scotia Capital Inc. supplying or continuing to supply a product or service.

Leverage / Margin Risk Disclosure Statement

The use of leverage may not be suitable for all investors. Using borrowed money (whether through a margin account or any other method of borrowing) to finance the purchase of securities involves greater risk than using cash resources only. If you borrow money to purchase securities, your responsibility to repay the loan and pay interest as required by its terms remains the same even if the value of the securities purchased declines.

Wealth Advisor Information

Details of the individual representative who accepted your order(s) are available upon request. Please contact the Branch Manager.

Cash Balances

This section shows the balance in your account, including all transactions that have settled. A debit balance is indicated by "-" and represents an amount owed to Scotia Capital Inc. ("ScotiaMcLeod"). Free credit balances in Regular accounts represent funds payable on demand which, although properly recorded in our books, are not segregated and may be used in the conduct of our business. Cash balances in Registered accounts are held in trust by the trustee.

Asset Class Summary

Asset classes you hold will be displayed under the Asset Class Summary section in the statement. Only the asset classes of securities you hold in your account will be displayed on your statement. The classification "Other" includes Principal Protected Notes, Principal at Risk Notes, and some Exempt Market products. Please speak directly with your Wealth Advisor to ensure you understand the products held in your account. The term "Total Value of Account" refers to the total market value of priced securities within your account, by currency, including cash balances at the close of the date indicated.

Income Summary (Regular Accounts Only)

Dividend and/or interest income that has been credited to your account this month and year-to-date are summarized in this section. Accrued or deemed interest on debt or discount securities purchased or sold is not included.

Payment Information (RIF and LIF Accounts Only)

The information displayed reflects our records as of the statement date. Minimum Annual Payment refers to the minimum annual amount required from your RRIF account by Canada Revenue Agency. If, according to our records, you have elected to receive an annual amount greater than the minimum payment, then this amount will be displayed as the Elected Payment Amount. Withholding tax will be charged for amounts withdrawn in excess of the Minimum Annual Payment. The Year to Date Payment amount displayed is the total amount of the payments sent to you, after withholding tax has been deducted, if applicable.

Monthly Activity

This section shows all the activity in your account during the month. The Date column refers to the settlement date in the case of executed trades, or processing date in the case of other entries. Direct Funds Transfers made to your account on the last business day of the month may not appear on your month end statement until the following month.

Short Account

Proceeds from declared short sales have been segregated into a SHORT account and market increases and/or decreases from the original sale price are marked to the market. Such increases and or decreases are transferred to your margin account weekly. Transfers are reflected with the description "Mark to Market."

Details of Your Account Holdings

The market valuation information has been obtained from sources believed to be reliable; however, we cannot guarantee their accuracy. Our best efforts have been made to price all securities; however, in some circumstances, we may be unable to obtain valuations. A current market quotation can be made available upon request.

Segregated Quantity

Securities regulations stipulate that all fully paid and excess margin securities must be promptly segregated and are not available for use in the general conduct of our business. All security positions displayed under the account holdings section are segregated unless otherwise indicated. Should there be a security in which the account holds a portion of the quantity segregated and a portion registered in your name, this will be indicated under the security description column.

Remuneration for Order Flow

In connection with certain trades in securities that are executed for you in the U.S. marketplace, ScotiaMcLeod will receive remuneration for directing orders to a particular broker-dealer or market center for execution. The source and amount of any such remuneration received by ScotiaMcLeod in connection with any transaction executed on your behalf shall be disclosed to you upon request.

Member - Canadian Investor Protection Fund

Customers' accounts are protected by the Canadian Investor Protection Fund within specified limits. A brochure describing the nature and limits of coverage is available upon request.

Endnotes

- 1. There has been an adjustment made to this book value during the statement period.
- 2. There is no active market for this investment, and therefore the market value has been estimated.
- There is no active market for this investment, and the market value cannot be determined.
- 4. If this position is sold, a sales charge may be applied to the proceeds.
- Some or all of the book value of this position has been determined using a market value calculation.
- The book value of this position cannot be determined.

Other Information

Employees of The Bank of Nova Scotia ("Scotiabank") and/or ScotiaMcLeod are not authorized to provide tax or legal advice. Please consult your accountant or lawyer on such matters.

The financial statement of Scotiabank and Scotia Capital Inc. as at the close of the last financial year and a current list of directors and officers will be furnished upon request. Clients in British Columbia are entitled to certain additional information about ScotiaMcLeod, including information about commissions and fees that we charge, and about any administrative proceedings that may relate to the firm or its staff.

This statement reflects all obligations of the firm to you. Please examine this statement of account promptly. Any errors or omissions or unauthorized discretionary transactions must be reported in writing within 60 days as of the date of this statement to: Director, Compliance Department, 1 Adelaide Street East, 7th floor, Toronto, Ontario, Canada MSC 2V9 or you will be precluded from asserting that errors or omissions have occurred.

T: 1-800-377-0065 F: 416-350-3088 em:scotiamcleodcomplaints@scotiabank.com

Non-registered account #440-17189-13

August 31, 2017



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ST. CLAIR REGION CONSERVATION AUTHORITY 205 MILL POND CRESCENT STRATHROY ON N7G 3P9



Your Investment Report

07226



Account Summary

This table provides an overview of your account; including the opening and closing balance for the reporting period.

Your Investments	Opening Value Jul 1, 2017	Closing Value Aug 31, 2017	Balance on Aug 31, 2017 (CAD\$)
Canadian Dollar Investments			
Cash Account	1,407,875.70	1,411,375.70	1,411,375.70
	1,407,875.70	1,411,375.70	1,411,375.70
Grand Total (CAD\$)			1,411,375.70
		Last Statement Jun 30, 2017	1,407,875.70

You can access your up-to-date account information online through BMO Nesbitt Burns Gateway at:

https://gateway.bmonesbittburns.com. If you have not yet registered for Gateway access, please contact your Investment Advisor.

We're here to help

Our team is dedicated to helping you succeed in meeting all of your wealth management goals. Please call any member of the team referenced below if you have questions about Your Investment Report. Visit bmo.com/nesbittburns for the latest information on investing and wealth planning.

JONATHAN BATCH Investment Advisor 519-646-3044

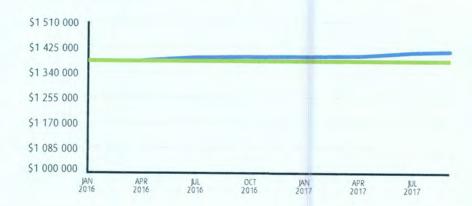
Batch Investment Group www.batchinvestmentgroup.com Assistant: Sharon Tingley sharon.tingley@nbpcd.com

DAVID HAAK Branch Manager (519) 672-8560

Changes to your account

This table provides a summary of the change in value of your account, including all deposits, withdrawals and the change in market value of your investments, for both the current year and as of the start of reporting. Where applicable, balances have been converted to Canadian dollars, see page 1 for exchange rates.

- * - In	This Year (2017)	Since January 1, 2016
Opening Value	1,393,615.14	1,379,179.68
Deposited	+ 0.00	+ 0.00
Withdrawn	- 0.00	- 0.00
Net Invested	= 0.00	= 0.00
Change In Market Value	+ 17,760.56	+ 32,196.02
Closing Value on Aug 31, 2017	1,411,375.70	1,411,375,70



Non-registered account #440-17189-13

Net Invested is the value of total deposits less the value of total withdrawals.

MARKET VALUENET INVESTED

The Change in Market Value of your account since January 1, 2016 is \$32,196.02.

This amount includes gains, losses and income received with respect to the investments held in your account.

Summary of your investments in Canadian dollars

Non-registered account #440-17189-13

Your Investor Profile

Investment Objective Income Time Horizon 10 yrs and more **Investment Category** Amount Target % Holdings % Cash and Short-term 1,061,375.70 10.00 75.30 Investments Fixed Income 350,000.00 90.00 24.70 Equities 0.00 0.00 0.00 Total 1,411,375.70

Fixed Income 24.70% Cash and Short-term Investments 75.30%

100.00

The investments in your account have been chosen based on the investment objectives you selected on the Client Account Agreement. As your life circumstances change, it is important to talk to your Investment Advisor about updating these objectives as may be applicable.

Your Canadian Dollar Investments

All amounts are reported in Canadian Dollars.

Income you received

Type of Income	Current Month	Year to Date	
Interest	3,500.00	17,760.56	
Total	3,500.00	17,760.56	

Your investment details

			Cost	Market Value on	August 31, 2017
	Quantity	Per Unit	Total	Per Unit	Total
Cash Account					
Cash and Short-term Investments					
CASH			25.70		25.70
BANK OF MONTREAL GIC 30 DAY CASHABLE ANNUAL DUE 11/20/2017 0.850%	243,615	100.000	243,615.00	100.000	243,615.00
VANCITY GIC ANNUAL DUE 02/20/2018 1.350%	301,935	100.000	301,935.00	100.000	301,935.00





Non-registered account #440-17189-13

Your Canadian Dollar Investments (continued)

All amounts are reported in Canadian Dollars.

▶ Your investment details (continued)

			Cost		on August 31, 2017
	Quantity	Per Unit	Total	Per Unit	Total
CONCENTRA BANK GIC ANNUAL DUE 06/08/2018 1.550%	87,000	100.000	87,000.00	100.000	87,000.00
PEOPLES TRUST GIC ANNUAL DUE 06/08/2018 1.800%	88,000	100.000	88,000.00	100.000	88,000.00
VANCITY GIC ANNUAL DUE 06/08/2018 1.250%	87,000	100.000	87,000.00	100.000	87,000.00
BMO TRUST COMPANY GIC ANNUAL DUE 08/20/2018 1.400%	153,800	100.000	153,800.00	100.000	153,800.00
LAURENTIAN BANK GIC ANNUAL DUE 08/20/2018 1.460%	100,000	100.000	100,000.00	100.000	100,000.00
Subtotal			1,061,375.70		1,061,375.70
Fixed Income					
Fixed Income					
CANADIAN WESTERN BANK GIC ANNUAL DUE 05/13/2019 2.200%	100,000	100.000	100,000.00	100.000	100,000.00
EQUITABLE BANK GIC ANNUAL DUE 05/13/2019 2.200%	100,000	100.000	100,000.00	100.000	100,000.00
HOMEQUITY BANK GIC ANNUAL DUE 05/13/2021 2.220%	50,000	100.000	50,000.00	100.000	50,000.00
PRESIDENT'S CHOICE BANK GIC ANNUAL DUE 05/13/2021 2.360%	100,000	100.000	100,000.00	100.000	100,000.00
Fixed Income Subtotal			350,000.00		350,000.00
Subtotal			350,000.00		350,000.00
Total for Cash Account			1,411,375.70		1,411,375.70
Total Canadian Dollar Investments			1,411,375.70		1,411,375.70

Average cost and market price indicator descriptions can be found in Important information about your account at the end of this statement.





Non-registered account #440-17189-13

Account activity for this month

Date	Activity	Description	Quantity	Unit Price	Commission	Amount
Cash Account						
Jul 1, 2017		Opening Cash Balance				325.70
Aug 16, 2017	Redemption	HSBC BANK OF CDA GIC ANNUAL DUE 08/16/2017 INT 1.400% ISSUE REDEEMED FOR CASH	-50,000		0.00	50,000.10
Aug 16, 2017	Interest	HSBC BANK OF CDA GIC ANNUAL DUE 08/16/2017 INT 1.400% CPN INT ON 50000 BND REC 08/15/17 PAY 08/16/17	50,000		0.00	700.00
Aug 16, 2017	Redemption	ROYAL BANK OF CDA GIC ANNUAL DUE 08/16/2017 INT 1.400% ISSUE REDEEMED FOR CASH	-100,000		0.00	100,000.00
Aug 16, 2017	Interest	ROYAL BANK OF CDA GIC ANNUAL DUE 08/16/2017 INT 1.400% CPN INT ON 100000 BND REC 08/15/17 PAY 08/16/17	100,000		0.00	1,400.00
Aug 16, 2017	Redemption	VANCITY GIC ANNUAL DUE 08/16/2017 INT 1.400% ISSUE REDEEMED FOR CASH	-100,000		0.00	100,000.00
Aug 16, 2017	Interest	VANCITY GIC ANNUAL DUE 08/16/2017 INT 1.400% CPN INT ON 100000 BND REC 08/15/17 PAY 08/16/17	100,000		0.00	1,400.00
Aug 18, 2017	Bought	BMO TRUST COMPANY GIC ANNUAL DUE 08/20/2018 01.400% AUG 18 FLAT RELATED OR CONNECTED ISSUER	153,800	100.0000	0.00	-153,800.00
Aug 18, 2017	Bought	LAURENTIAN BANK GIC ANNUAL DUE 08/20/2018 01.460% AUG 18 FLAT	100,000	100.0000	0.00	-100,000.00
Aug 31, 2017		Closing Cash Balance				25.70

This report includes only activity recorded in your account since your last report. For a more comprehensive listing of your account activity, sign into your BMO Nesbitt Burns Gateway at: https://gateway.bmonesbittburns.com.

Your Year-to-Date Fees Summary

Fees you paid

This section summarizes all compensation received by BMO Nesbitt Burns with respect to your account. Our compensation comes from two sources: what we charge you directly (Operating and Transaction Charges), and what we receive through any third parties.

	CAD (\$)
Operating charges	
Total operating charges	0.00
Transaction charges	
Total transaction charges	0.00
Total fees you paid in 2017	0.00

Payments BMO received from third parties

	CAD (\$)
GIC Commission	2,090.45
Total payments BMO Nesbitt Burns received from third p	arties 2,090.45

Bulletin board

The USD/CAD conversion rate is: 1.2500, as of August 31, 2017

When securities are transferred from one currency to another within your account, they will appear as both a deposit and withdrawal in the Changes to your account section of your statement's Your Performance Report.

These values always net out to \$0 and do not impact performance calculations for the account.

Registered accounts with pre-authorized mutual fund purchases may show a difference between the amount deposited and the contribution amount.

The difference is a result of overnight valuation changes between the trade date, and when the trade was entered into the system.

Non-registered account #440-17189-13

Please see examples of standard operating charges in the Important Information about your Account section. Some fees and charges may be reported as before-tax amounts and applicable tax is being reported separately within the 'Sales Tax' line item. Where this is not possible the sales tax is included within the line item. Please contact your Investment Advisor if you have any questions about your 'Year-to-Date Fees Summary'.

Non-registered account #440-17189-13

Important information about your account

About this statement

BMO Nesbitt Burns Inc. shall assume the contents of this statement has been acknowledged as correct, approved and consented by you unless we receive written notice to the contrary within 45 days after it is sent to you.

Please let your Investment Advisor or Branch Manager know if there are any changes in your personal or financial situation so that we can ensure you are on track to meet your investment objectives.

The Average Cost and Total Cost for long positions incorporates the book cost of your investment, comprised of, the total amount paid, transaction charges, commissions and fees, adjusted for any corporate actions, reinvested distributions and return of capital. The Average Cost and Total Cost for short positions incorporates the book cost of your investment comprised of the total amount received, net of any transaction charges, commissions and fees, adjusted for distributions (other than dividends), returns of capital and corporate actions. Book cost on transferred in securities reflects the book cost provided by the transferring institution, or if not provided, the market value on the date of the transfer.

Client cash balances in non-registered accounts are held by BMO Bank of Montreal, and client cash balances in registered accounts are held by BMO Trust Company.

Legend of Average Cost indicators

M - Market Value information was used to estimate part or all of the Average Cost for this security position.

N/D - Average cost for this security holding cannot be determined.

O - Market Value information as of October 2, 2015 was used to estimate part or all of the Average Cost for this security position.

Valuations of the securities positions shown in this statement are provided by BMO Nesbitt Burns and are based on information and sources BMO Nesbitt Burns believes to be reliable. However, the market value cited may be subject to change and we cannot be held responsible if the actual market price differs from the said market price.

BMO Nesbitt Burns Inc. acted as principal in all transactions shown in this statement with the symbol " \ddagger " in the "Description" column. In all other transactions, BMO Nesbitt Burns acted as agent.

A free credit balance represent funds payable on demand which, although properly recorded in our books, are not segregated and may be used in the conduct of our business. All security positions displayed are segregated unless otherwise indicated. Should there be a security in which the account holds a portion of the quantity segregated and a portion registered in your name, this will be indicated under the security description column.

A copy of our most recent statement of our financial condition and a list of directors and senior officers are available on request. Clients in British Columbia are entitled to certain information about BMO Nesbitt Burns, including information about commission and fees, and any administrative proceedings that may relate to the firm and its staff. For Related and Connected Issuer and Conflicts of Interest Statement, please visit our website: http://www.bmo.com/nesbittburns/about/nb/bmonb/regulatory_documents/conflicts_of_interest.

Price of the securities in your accounts

We strive to provide accurate and current prices for securities. However, because we use numerous information sources for pricing, we cannot guarantee pricing accuracy for securities. Please call your Investment Advisor for the most current prices..

Legend of Market Price Indicators

E - There is no active market for this security so we have estimated its market value.

N – We are unable to obtain a relable market value for the security. Therefore, in accordance with our standard practice, the market value of the security is not determinable and has been set to zero. This does not mean that the security does not have a value but only that a value cannot be assigned at this time.

Deferred Sales Charge (DSC)

Securities with "Deferred Sales Charge" in the security description may be subject to deferred sales charges when sold.

Investor protection

Customers' accounts are protected by the Canadian Investor Protection Fund within specified limits. A brochure describing the nature and limits of coverage is available upon request.

For Preferred or Preferred Plus accounts, deposits in your Canadian dollar bank account with Bank of Montreal are insurable under the Canada Deposit Insurance Corporation Act.

Deposits in your US Dollar bank account with Bank of Montreal are not insurable under the Act and are not insured by the Canadian Investor Protection Fund.

Securities held by BMO Nesbitt Burns Inc. in your Account as well as any cash held temporarily by BMO Nesbitt Burns Inc. for subsequent credit to the chequing/savings component of your Account are not deposits which are insured under the Canada Deposit Insurance Corporation Act.

Insurance products

All insurance products, including segregated funds, are offered through BMO Nesbitt Burns Financial Services Inc. by licensed life insurance agents, and, in Quebec, by financial security advisors.

You can always reach us.

If you are unable to reach your BMO Nesbitt Burns Investment Advisor, the telephoe number indicated on the front page of this statement will connect you with your BNO Nesbitt Burns Branch.

Please record your BMO Nesbitt Burns Branch telephone number for future reference

A complete list of branches and contact information is available under "Contact Us" www.bmonb.com.

Due to space limitations on the page, we may have used some abbreviations on yo statement. These abbreviations stand for the following: NCI: Non-Certificate Issue (GIC/Mutual Funds), NVS: Non-Voting Shares, RS: Restricted Shares, RVS: Restricted Voting Shares, SUB: Subscription, SVS: Subordinate Voting Shares, WTS: Warrants; RTS Rights, DSC: Deferred Sales Charge.

Operating Charges

Client households minimum annual fee = \$500; Administration of RRSP/RRIF Fee: \$5 per year; Administration of RESP/TFSA: \$50 per year; Administration of Locked-In RR LIRA, LIF, LRIF Fee: \$62.50 per year, Transfer-out of Non-Registered or Registered Account: Fully and partial: \$135 per account; Partial withdrawal of a Registered Account: Cally and Partial RRIF): \$25 per request; Full Deregistration of a Register Account (excluding TFSA): \$100 per account. GST / PST / HST where applicable will added to these fees.

The GST/HST registration number for BMO Nesbitt Burns Inc. is 103854261RT

BMO Wealth Management is the brand name for a business group consisting of Bant Montreal and certain of its affiliates, including BMO Nesbitt Burns Inc., in providing wealth management products and services. 'Nesbitt Burns' is a registered trade-maof BMO Nesbitt Burns Inc., a wholly-owned subsidiary of Bank of Montreal. @/TM Registered trade-marks of Bank of Montreal, used under licence.

BMO Nesbitt Burns Inc. is a Member - Canadian Investor Protection Fund. Member ole Investment Industry Regulatory Organization of Canada.

BMO Nesbitt Burns refers to BMO Nesbitt Burns Inc. and your account at BMO Nesbit Burns Inc.



Staff Report

13.(i)



To: Board of Directors
Date: September 6, 2017

From: Nicole Drumm, Communications Technician

Subject: Communications Progress Report

Conservation Education

With the Conservation Education Program about to launch into its season, two promotional flyers were produced highlighting the numerous programs available to students in both elementary and high schools. The flyers were distributed to each teacher in the region highlighting the various programs provided. They have been included in this package.

Conservation Scholarships

Four scholarships were presented this June by Steve Arnold. The students and parents were all very proud and appreciative.

A.W. Campbell Memorial Scholarships – \$1,000 award:

Monique Benedict, Strathroy and District Collegiate Institute

Emily Fraser, Great Lakes Secondary School

Tony Stranak Conservation Scholarship – \$500 award:

Jillian Ball, Lambton Kent Composite School

Mary Jo Arnold Conservation Scholarship – \$500 award:

Nicole Delmage, North Lambton Secondary School

Aamjiwnaang Envirofest

SCRCA staff participated in Aamjiwnaang's Envirofest held on August 22, 2017. Information was shared with community members on a number of Conservation Authority programs including the unique and valuable wildlife found within our watershed and our programs to protect species at risk, critical habitat, and vulnerable ecosystems.





Great Lakes SHSM Student Conference Update

SCRCA staff worked with Grafiks Marketing & Communications in Sarnia to create a short video on the Great Lakes student conference held this past May. This video was a deliverable for the Ministry of the Environment & Climate Change (MOECC) grant that funded the conference.

https://www.youtube.com/watch?v=Uz7PD4NW5N0

Nature Walk with GO Project Summer Camp

This August, SCRCA staff organized a morning of educational activities and a nature walk at the Wawanosh Conservation Area for a group of children attending the GO Project summer camp.

MOECC Watershed Tour

Upon request from the Ontario Ministry of Environment and Climate Change (MOECC), SCRCA staff organized a watershed tour for representatives from the MOECC and a group of their summer students. The tour involved a presentation in the morning explaining Authority programs followed by a car tour where SCRCA staff were able to highlight current projects.





SAR Newsletter Contest Winners

SCRCA staff received 25 submissions for the Annual Sydenham River Species at Risk Newsletter contest. The winners of the SAR newsletter contest were randomly selected:

- 1. Kaelyn Mills First prize: Binoculars and a SCRCA Weekend Camping Pass
- Dave Zinkie Second prize: "A Blanding's Turtle Story" (children's picture book) and a SCRCA Weekend Camping Pass
- 3. Harvey McEwan Third prize: SCRCA Gift Bag

Union Gas Wetland Restoration Donation Event

Union Gas donated \$12,000 to the SCRCA to support a wetland restoration project on Authority property 97. To officially recognize the donation, staff organized a cheque presentation event that media were invited to attend. Steve Arnold, Authority Chair, accepted the donation from Union Gas on behalf of the SCRCA. Jessica Van Zwol, Healthy Watershed Specialist, and Steve Shaw, Manager of Conservation Services, toured the representatives from Union Gas, the SCRCA, and a member of the media around the site of the newly completed wetland restoration project. The group also went to the nearby site of a mature wetland restoration project on property 56 to see how the new wetland will transform.





Upcoming Events

Denning's Memorial Tree Dedication: Keith McLean Conservation Lands, Sunday September 17, 2pm – Greetings will be provided by Steve Arnold, Chair, St. Clair Region Conservation Authority

A Geocaching Adventure: Lorne C. Henderson Conservation Area, Sunday September 17, 9am-3pm

St. Clair Region Conservation Foundation Memorial Forest Dedication: Lorne C. Henderson Conservation Area, Sunday September 24, 2pm – Speakers: Duncan Skinner, President, St. Clair Region Conservation Foundation; and Steve Arnold, Chair, St. Clair Region Conservation Authority

"Nature Preservation Day" with Andersen Windows: Staff from Strathroy's Andersen Windows will be volunteering for a Conservation Area clean-up, Thursday September 28, 1-3pm

Chatham-Kent and Lambton Children's Water Festival: C.M. Wilson Conservation Area, Chatham, October 3-5

St. Clair Region Conservation Authority

Conservation Education Programs 2017–2018



hands-on, curriculum-based elementary and secondary school programs

For more information on elementary and secondary school programs visit us at www.scrca.on.ca



CONSERVATION EDUCATION AT ST. CLAIR

The St. Clair Region Conservation Authority provides both in-class and outdoor conservation education experiences which are closely tied to a variety of grade-specific curricula. Demand for these programs is very high, so it is recommended you book early to avoid disappointment. By visiting our website, you can find information on each program including how they relate to current curriculum and how to book a program. Many of the programs listed can be adapted to suit your specific interests. First-hand self learning is the emphasis of our program activities.

OUTDOOR PROGRAMS

Outdoor education brings classroom studies to life. We offer 21 hands-on elementary programs available at the Lorne C. Henderson Conservation Area near Petrolia. Other Conservation Areas may be available for certain programs (discuss with our staff when booking). Most programs are 2-hours in length.

Primary/Junior Programs

The Lorax (Grades JK-2)

This Dr. Seuss story introduces students to the importance of clean air, fresh water, and animal habitats through a slide presentation, hike, and nature activities.

Pond Pals (Grades JK-2)

Hands-on investigation of the pond highlights this primary wetland study. Emphasis will be placed on the needs and habitat of pond critters.

Fabulous Fall (Grades JK-4)

Preparation for winter is the job of every living organism in the autumn. Hibernation, migration, fall flowers, life cycles, and a variety of other topics will be presented to your students by a series of slides, a nature hike, and activities.

Nature in Winter (Grades JK-4)

Through nature activities and a guided hike, students are encouraged to explore natural habitats in the winter. Topics to be investigated include: how active animals meet their needs in harsh winter conditions, hibernation, and dormancy in plants. Highlights of the program include searching for animal tracks and a chance to hand-feed wild birds at the woodland bird feeder. Please note – there are no guarantees the birds will co-operate.

Spring Has Sprung (Grades JK-4)

Start your spring by studying the variety of changes that occur in nature. Flowers in blossom, budding trees, nest building, and animal habitats are all discussed.

The Circle of Life (Grade 2)

In the *circle of life* many creatures experience changes in both appearance and activity. Students will have the opportunity to role play the life cycle of a butterfly and to explore the metamorphosis of some other insects and amphibians.

Maple Syrup (Grades 2-3)

Only offered March 20, 21, 22, 2018 at A.W. Campbell C.A. Experience the sights and sounds of the Sugar Bush from the First Nations and Pioneering perspective. Weather permitting, students may taste sap straight from the tree on an interpretive walk. Hands-on displays (yoke, brace and bit) will allow students to experience some of the pioneer sugar bush traditions.



More Than Just a Bunch of Trees (Grades 2-4)

Plants fuel all food chains on earth and the relationships they have with insects and other animals form the foundation of all habitats. Students will study the needs of plants, their relationships, and become *tree detectives* as they learn tree identification skills. Butterfly-net insect collection from a tall meadow can be included upon request.

Choose Your Own Adventure Orienteering (Grades 2–5)

Students navigate through a "Choose Your Own Adventure Story" with the aid of a map and compass to locate "adventure" stations. Along the route, animal survival decisions are made which determine the main character's actions. Students earn "survival points" to determine the strongest survivor.

Slippery Soils (Grades 3–4)

Students are given a hands-on opportunity to explore a soil community, digging under leaves and logs looking to see who calls this habitat home. Soil formation, soil types, decomposition, and interconnections between soil, plants and habitats are all topics that are discussed through a guided hike and outdoor activities.

Owl Prowl (Grades 3–5)

Birds of prey by night or day, hunt their food before it strays. Students become owls and through an active simulation game learn how owls meet their needs, what specialized adaptations help them survive and the roles they play within their habitats.

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Junior/Intermediate Programs

Geocaching (Grades 3–10)

Geocaching is a high-tech treasure hunt using a Global Positioning System Receiver (GPS) and longitude and latitude coordinates to find hidden caches. During the 2 hour program, students will be taught how to mark and hide a cache. Students will then use the learned knowledge to locate hidden geocaches.

You may choose to stay for an ALL DAY GEOCACHING ADVENTURE – older grades can search for published geocaches. Following the morning program, students spend the afternoon searching for published geocaches at the 135ha Conservation Area. Two program fees apply for full day activities.

Boots, Birds and Bugs (Grades 4–6)

Aquatic food chains and adaptations are emphasized in this hands-on pond community investigation. Students dip their nets into the pond and identify the life forms they discover.

Endangered Species Game (Grades 4–6)

This active game introduces students to the Endangered Species of Ontario. A positive effect on students' value system, and attitudes towards the environment, ecology and wildlife will be instilled.



Nature in Flight (Grades 4-6)

Winged animals, insects, birds and bats are used to examine flight. Adaptations allowing these animals to fly and the unique spaces they fill within their habitats will be discussed. Properties of air and the characteristics of flight will be identified and human impacts on winged animals will be explored.

Orienteering (Grades 4–8)

With compass and map in hand, students find their way through a designated course. Students learn the basic parts of both a map and a compass and how to use them together in order to orient themselves.

Pokecaching (Grades 4–8)

Pokecaching is a "Pokemon Go" inspired geocaching game designed by LKDSB Enrichment Students that puts Geography curriculum into action. Participating students will use GPS units to locate Pokecaches. Tokens will be collected for a "Pokemon Gym Battle" at the conclusion of the 2 hour program.

Instincts for Survival (Grades 4–10)

Survival of the fittest is the harsh law required for the balance of nature. This simulation game teaches students about animal interdependencies, predator/prey relationships, disease, elements, camouflage, and the various influences of humans.



A Bug's World (Grades 6–8)

Investigation of vertebrates and invertebrates highlights this hands-on biodiversity study. Students collect and classify animals from two different habitats to observe the complex diversity of life. Examination of the organism, its community, and how the abiotic parts of the ecosystem allow a greater understanding of the animal and its role within the ecosystem is discussed.

Conservation in Crisis with GPS technology (Grades 6–8)

The state of the environment is a serious problem in our world today. Loss of habitat, pollution, erosion, and climate change are only a small portion of the problems we face. The Conservation Authority's role in finding solutions to these problems will be explored through outdoor activities and a self-guided hike using GPS receivers. A short introduction to the GPS units is included.

Wild Wild Wetlands (Grades 7–8)

What is the value of a wetland? Students will explore this question through a guided hike and a hands-on wetland ecosystem study. Students will discover that plants, animals, and abiotic factors all play a vital role in the health of the ecosystem. Habitat, flood control, erosion, pollution, climate change, and ecosystem services will all be discussed.



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CLASSROOM PROGRAMS

A Conservation Education Instructor can be made available to bring the outdoors into your classroom. In addition to programs listed below, specialized programs can be developed including animal/plant preparation for winter/spring, life cycles, soils, etc. Activities can include Power Point presentations, games and nature activities. Some activities can be played in the school yard. Please call for details. The cost for a one hour program is \$100 per class and \$75 for each additional class in the same school for the same day. There is a \$75 travel fee for programs delivered out of the St. Clair Region watershed.

The five programs below are offered free of charge thanks to our sponsors

Spring Water Awareness (Grades JK-6)

Sponsored by Union Gas

Children often don't think about the dangers of ice and waterways during the spring thaw. This program will highlight dangers to watch for – hypothermia, protecting floodplains, and the impact of climate change. An introduction to the natural world around us is also included through a power point presentation and gradeappropriate activities.

Go with the Flow (Grades JK-8)

Sponsored by the Sarnia-Lambton Environmental Association

Using an interactive Groundwater Model, this program demonstrates how interdependence links the soil, earth materials, and water, making them part of the same system needed to support life. Different activities for each Grade: Water in our Environment; Soil Erosion; Rocks and Minerals; Energy; Electricity; Ecosystems and Water Systems.

St. Clair River Bottom Critters (Grades JK-10)

Sponsored by the Sarnia-Lambton Environmental Association

Students will explore live critters from the bottom of the St. Clair River which are used to determine the quality of the environment. They will discover that a healthy environment is important to everyone – industry and residents alike. **In-class Program**

Aquatic Species at Risk (Grades 4–12)

Sponsored by Environment Canada

This program provides an in-depth look at LOCAL species at risk (including hands-on investigation of specimens). Exploration of the species, their importance, the factors that cause species decline, and the solutions available to help restore healthy populations are all discussed in the presentation.

River RAP (Grades 8-10)

Sponsored by the Friends of the St. Clair River

Learn about local threats to our watershed using a hands-on 'enviro-scape' model. Students will learn about current strategies to ensure safe, healthy water for the St. Clair River community and the plants and animals that inhabit it.

Outdoor Program Fees

\$4.50 per student for a two hour program \$8.50 per student for 4 hours (2 programs) Minimum Fee: \$60.00

In-Class Program Fees*

\$100 per class for a 1 hour program \$75 for each additional class for the same school on the same day

\$75.00 surcharge to cover mileage for schools outside the SCRCA watershed

*Some programs are sponsored and are free of charge – these are noted with the program

This program is sponsored in part by the generous contributions of:



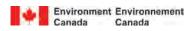












For further information on how to book a program visit our website at www.scrca.on.ca

Contacts:

Sharon Nethercott, HBOR, BSc, BEd Conservation Education Coordinator Lorne C. Henderson Conservation Area 3653 Petrolia Line, Petrolia ON NON 1RO o. 519 882-2399 c. 519 384-0735 snethercott@scrca.on.ca

Melissa Gill, HBSc

Conservation Education/Community Partnership Technician Lorne C. Henderson Conservation Area 3653 Petrolia Line, Petrolia ON NON 1RO o. 519 882-2399 c. 519 852-6037 mgill@scrca.on.ca

Administration Office:

St. Clair Region Conservation Authority 205 Mill Pond Crescent Strathroy ON N7G 3P9 p. 519 245-3710 f. 519 245-3348 stclair@scrca.on.ca www.scrca.on.ca

St. Clair Region Conservation Authority

Conservation Education Programs for Secondary Schools 2017–2018



hands-on, curriculum-based secondary school programs

For more information on elementary and secondary school programs visit us at www.scrca.on.ca



CONSERVATION EDUCATION AT ST. CLAIR

The St. Clair Region Conservation Authority provides both in-class and outdoor conservation education experiences which are closely tied to a variety of grade-specific curricula. Demand for these programs is very high, so it is recommended you book early to avoid disappointment. By visiting our website, you can find information on each program including how they relate to current curriculum and how to book a program. Many of the programs listed can be adapted to suit your specific interests. First-hand self learning is the emphasis of our program activities.

OUTDOOR PROGRAMS

Outdoor education brings classroom studies to life. We offer six hands-on high school programs that are available at the Lorne C. Henderson Conservation Area near Petrolia. Other Conservation Areas may be available for certain programs (discuss with our staff when booking). Most programs are 2 hours in length.

Forest Inventory

Using biotic and abiotic forest indicators, students analyze the health of two distinct survey sites – a mature forest and a plantation. Students explore the definition of a forest, its complexity and fragility; as well as the 'value' of a forest based upon differing perspectives. A culminating hands-on restoration activity is available on request. Topics discussed include resource management, habitat restoration, species inventories, indicators of biodiversity, the role of plants in the ecosystem, invasive species and human impact on the environment.

Curriculum Links: SNC1D, SNC1P, SBI3C, SVN3M, SVN3E, CGC1P, CGF3M, CGR4M, CGR4E



GPS Training and Geocaching

Uses and applications of GPS units allow students to develop spatial technology skills and navigate the Conservation Area while marking waypoints, elevation, and developing routes. You may choose to stay for an ALL DAY GEOCACHING adventure. Following the 2-hour morning program, students spend an additional 2 hours searching for published geocaches at the 135-hectare Conservation Area. Two program fees apply for full day activities. (4 hours)

Curriculum Links: CGC1D, CGC1P, CGO4M



NEW! Healing Hike

Research continues to grow connecting time spent in nature with human health. Studies have shown that time spent in the forest is connected to an improvement in physical health and mental health. Join us for a 'healing hike' where a nature guide leads the group through a series of awareness building, stress-reducing activities allowing students to experience these benefits first-hand. Students record heart rate, breathing rate and stress rates before and after the hike to add a measurable component to the experience.

Insects vs. Humans

Students receive an introduction to the world of insects. Hands-on specimen collection provides an opportunity to expand perspectives while teaching insect identification, classification, specialization and diversity. Emphasis on the relationships between humans and insects; links are made with agriculture, pollination, medicine, water quality, climate change, biomimicry, and ecosystem services. A discussion of both positive and negative impacts allow students to examine their own relationship with insects.

Curriculum Links: SNC1D, SNC1P, SBI3U, CRG4M, CRG4E

Instincts for Survival

'Survival of the Fittest' is the harsh law required for the balance of nature. This simulation game teaches students about animal interdependencies, predator/prey relationships, disease, food pyramids, trophic levels, adaptations for survival as well as the power and responsibility of human beings.

Curriculum Links: SNC1D, SNC1P, PPL1O, PPL20



Introduction to GIS

Spatial Technology Skills are developed through field data collection and analysis. Using a pre-set problem, students will discuss GIS criteria, build data sets, complete GIS analysis, determine output and make a final decision following their analysis. A simple introduction to QGIS programming demonstrates the use of data collection. GPS training is a prerequisite – both the "GPS Training" and "Introduction to GIS" programs can be chosen for a full day of activities.

Curriculum Links: CGC1D, CGC1P, CGO4M

Stream Assessment

Students are led through an on-site stream investigation and are taught to analyze the chemical, biological and physical characteristics of the stream. Discussion focuses on the health of the stream based upon chemistry, benthic macroinvertebrate populations, signs of erosion and streambank stability. Historical information on the stream is shared and the students learn causes for current stream conditions. They are encouraged to brainstorm potential ways to lessen human impact and improve stream health in the future.

Curriculum Links: SNC1D, SNC1P, SVN3M, SVN3E, CGC1P, CGF3M, CGR4M, CGR4E



CLASSROOM PROGRAMS

A Conservation Education Instructor can be made available to bring the outdoors into your classroom. In addition to programs listed below, specialized programs can be developed. Please call for details. The cost for a one hour program is \$100 per class and \$75 for each additional class in the same school for the same day. There is a \$75 travel fee for programs delivered out of the St. Clair Region watershed.

The three programs below are offered free of charge thanks to our sponsors

Aquatic Species at Risk

Sponsored by Environment Canada

This program provides an in-depth look at LOCAL species at risk. The river these animals depend upon for survival, the Sydenham River, is considered one of the most biodiverse rivers in Canada. Exploration of the species, their ecological importance, the current environmental stressors they face and the solutions that can help them provides students with a better appreciation of their community and their role within the system.

Curriculum Links: SNC1D, SNC1P, SVN3M, SVN3E, CGF3M, CGR4M, CGR4E

River RAP

Sponsored by the Friends of the St. Clair River

Learn about local threats to our watershed using a handson 'enviro-scape' model. Students will learn about current strategies to ensure safe, healthy water for the St. Clair River community and the plants and animals that inhabit it. Topics discussed: watersheds, water quality threats, non-sustainable agriculture, erosion and sedimentation, wetlands as purifiers, water treatment processes and Remedial Action Plans.

Curriculum Links: SNC1D, SNC1P, SVN3M, SVN3E, CGF3M, CGR4M, CGR4E

St. Clair River Bottom Critters

Sponsored by the Sarnia-Lambton Environmental Association Students will identify live river bottom critters and learn how these creatures are used as indicators of environmental health. Biological monitoring techniques and water quality improvement over the past 40 years will also be discussed in the hands-on investigation.

Curriculum Links: SNC1D, SNC1P, SVN3M, SVN3E

Specialist High Skills Major (SHSM)

Certification Programs

Conservation Authority staff can assist/facilitate a number of sector recognized certification programs for a variety of majors.

Certification programs offered to date include, but are not limited to:

- Compass/Map/Global Positioning System (GPS)
- Geographic Information System (GIS)
- Nutrient Management
- Principles of Drainage
- Project Wild & Below Zero
- Species Identification
- Tree Planting
- Watershed Management

Staff are available to work with teachers to build additional certification programs upon request.

Innovation, Creativity, Entrepreneurship (ICE) Training

Conservation Authority staff are available to partner in ICE Training sessions for SHSM students as either:

- Sector Partner providing authentic 'sector' relevant challenges for SHSM students under the guidance of a facilitating teacher
- Facilitator acting as sector partner and facilitator, ICE trained Conservation Authority staff will lead students through the three gears of ICE training: Empathy and Need Finding; Ideation and Prototyping; and Strategy and Testing

Each ICE training session is tailored to meet the needs of the SHSM major, individual students, and teachers involved. Please contact us to discuss opportunities and fees related to this type of experience.



Through funding from the Ministry of Environment and Climate Change, the SCRCA organized a Great Lakes SHSM student conference in 2017 with the Lambton Kent District School Board. The students were able to attend presentations and interactive workshops throughout the day.

Outdoor Program Fees

\$4.50 per student for a two hour program \$8.50 per student for 4 hours (2 programs) Minimum Fee: \$60.00

In-Class Program Fees*

\$100 per class for a 1 hour program \$75 for each additional class for the same school on the same day

\$75.00 surcharge to cover mileage for schools outside the SCRCA watershed

*Some programs are sponsored and are free of charge – these are noted with the program

This program is sponsored in part by the generous contributions of:



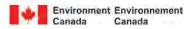












For further information on how to book a program visit our website at www.scrca.on.ca

Contacts:

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St. Clair Region Conservation Authority 205 Mill Pond Cres., Strathroy, ON, N7G 3P9 (519) 245-3710 (519) 245-3348 FAX

E-Mail: stclair@scrca.on.ca Website: www.scrca.on.ca

Member Municipalities

Township of Adelaide-Metcalfe

Township of Brooke-Alvinston

Municipality of Chatham-Kent

Township of Dawn-Euphemia

> Township of Enniskillen

Municipality of Lambton Shores

Township of Middlesex Centre

> Village of Newbury

Village of Oil Springs

> Town of Petrolia

Town of Plympton-Wyoming

> Village of Point Edward

> > City of Sarnia

Municipality of Southwest Middlesex

> Township of St. Clair

Township of Strathroy-Caradoc

> Township of Warwick

July 26, 2017

Jennifer Burbidge 4606 Lakeside Street Hillcrest Heights, Town of Plympton Wyoming Aberarder ON NON 1J6

Dear Ms. Burbidge:

Re: St. Clair Region Conservation Authority (SCRCA) site meeting at 4606 Lakeside

Street on July 18, 2017

This is to confirm points of discussion during a site meeting with the following in attendance:

Jennifer Burbidge, landowner Chris Hutt, JB acquaintance and advisor

Will Bartlett, P. Eng., Northwest Consulting Civil Engineers, Drainage Consultant for P-W

Patty Hayman, Director of Planning, SCRCA

Background

The treed valley is an outlet for an area which drains mostly agricultural lands. The valley bank on the easterly side and directly adjacent the Burbidge dwelling is experiencing slope failure and needs remediation. In 2013, with foundation work already commencing, SCRCA required geotechnical expertise due to the proximity of the valley. Helical piles were designed/recommended by the geotechnical firm LVM Consultants. According to the geotechnical firm, the piles were driven to a depth to provide long term slope stability to the foundation/dwelling. The survey indicates at one time there was approximately 10 feet of level side yard between the top of valley bank and dwelling. This west side yard has eroded and there is no longer a level side yard area.

SCRCA staff noted that J. Burbidge has for the most part directed all roof tiles/other direct outlets away from top of the valley slope and extended to bottom of slope. The northwest roof outlet tile still needs closed tile connection to the bottom of the valley or lake slope.

Future action

Following the site meeting, it was recommended by SCRCA and Northwest Consulting that the following is to be undertaken going forward: Following W. Bartletts discussion with municipal staff, you will be concurrently 1) hiring Golders for preliminary analysis on works needed to remediate slope erosion and 2) proceeding to petition for Drainage works will include remediation work in the valley. W. Bartlett's discussion with the municipality was planned within a 2 week period following our site meeting.

The SCRCA staff are supportive of engineered slope stability works in the valley and will review works under the Drainage Act in accordance with SCRCA Ontario Regulation 171/06 protocol and policies.

In a review of our files, in 2016, David Mitchell from Golders provided the following:

"The cost for us to review the information provided and prepare a letter detailing the possible causes of the slope movement together with suggested repair methodologies is \$1500 not including taxes. This cost does not include ongoing consultations and/or meetings after the letter is provided".

Should the municipality require a meeting with invited parties at the municipal office, we would be pleased to attend. SCRCA can assist with contour mapping requirements at the request of the consultant, if needed.

Regards,

Patricia Hayman Director of Planning

CC:

W. Bartlett, P. Eng. Northwest Consulting
A. Sobanski, A.ScT, P-W
C. Hutt, via Jennifer Burbidge

A. Seidler/C. Durand, SCRCA GISD. Cundick, EP/Regulations Officer



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Losing ground: Plympton-Wyoming homeowner pleads for help from town as her property slips into lake

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Posted September 6, 2017: <u>Business (http://petrolialambtonindependent.ca/category/business/)</u>, <u>Community Content (http://petrolialambtonindependent.ca/category/community-content/)</u>, <u>Featured (http://petrolialambtonindependent.ca/category/featured/)</u>, <u>Front Page (http://petrolialambtonindependent.ca/category/front-page/)</u>.



When Jennifer Burbidge moved into her lakefront home after extensively renovating it, she expected to be there for a very long time.

But, the erosion on her property is so severe, it may not happen.

In 2014, Burbidge worked with engineers to secure the cottage on her mother's property near Hillcrest Heights subdivision. Contractors secured the foundation with 12 piles. "It was a very, very expensive project," she told Plympton-Wyoming councillors.

But she was willing to do it so she could make the cottage her year-round home.

But in 2016, Burbidge noticed the ravine beside her home seemed to be deteriorating more rapidly than it had the last two years. "There were a number of people out to see it but nobody has been doing anything about it," she says. This year, the land beside her home has begun to fall into a ravine which is next door.

Burbidge showed councillors a number of photos, one of which shows much of her cement basement wall exposed. "What was a small opening, turned into a major landslide," she says.

The ravine is a drain outlet for local farmland owned by a numbered company. Burbidge says there appears to be a lot more water draining into the lake and worries some nearby homes are now using it, making the problem worse. Town staff believe only three homes are now draining into the ravine and that shouldn't cause the extensive damage. The town's drainage consultant Will Bartlett, in a report on the slope, says what is happening next to Burbidge's home is fairly common along the lakeshore in that area. "The bottom of the ravine is actively eroding due to surface water flows. As the ravine bottom and the toe of the slope erodes deeper, the side slopes become oversteepened and eventually unstable. This erosion of the ravine bottom is a natural process which has been ongoing for many years probably decades," he writes.

Burbidge wanted the town to step in and fix the problem, but Bartlett says the best way to do that is through the Drainage Act. Burbidge would apply to have the drain fixed and then a commissioner would assign the person who

would benefit the most from the fix, most of the cost. Since Burbidge's property is in peril, it's likely she would foot most of the bill.

Burbidge recently had a contractor take a look at the ravine and he said the problem would take over \$100,000 to fix – money she doesn't have.

Mayor Lonny Napper and the members of council sympathized with Burbidge but say erosion along the lakeshore has been a major problem for years. Napper says the St. Clair Region Conservation Authority, which has jurisdiction over coastal erosion, has been "telling us for years, don't build out there" because of the deterioration of the banks. "It blows me away that you got a building permit," says Councillor Ben Dekker, noting it would have come from the town acting on the advice of Burbidge's engineers who secured the home in 2014. "I can't believe that happened. We have a ratepayer coming forward doing everything right and boom – here we are."

Napper says the municipality would like to be able to help but it can't just go onto private property to repair the damage. He says the only real option is asking for the ravine's outlet to be repaired under the Drainage Act and possibly suing to help recover the cost she will incur. "I don't see anything being resolved now."

Councillor Muriel Wright suggested Burbidge go to the St. Clair Region Conservation Authority's board of directors meeting and explain what has happened and see if they will take action. "They have the authority to do it," she urged.

Burbidge says she will try to speak to the board and suggested she might file for the drain work, but by the end of the meeting she was angry and demoralized. "I have a property that is unsaleable," she says adding that for anyone to come onto her property now is "dangerous."

"Don't confuse our answers with a lack of sympathy," says Councillor Ron Schenk. "But we can't do what you want us to do...we just can't make it happen."

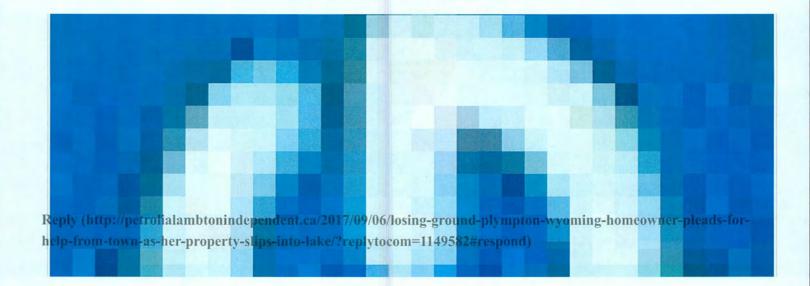
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One Response to "Losing ground: Plympton-Wyoming homeowner pleads for help from town as her property slips into lake"



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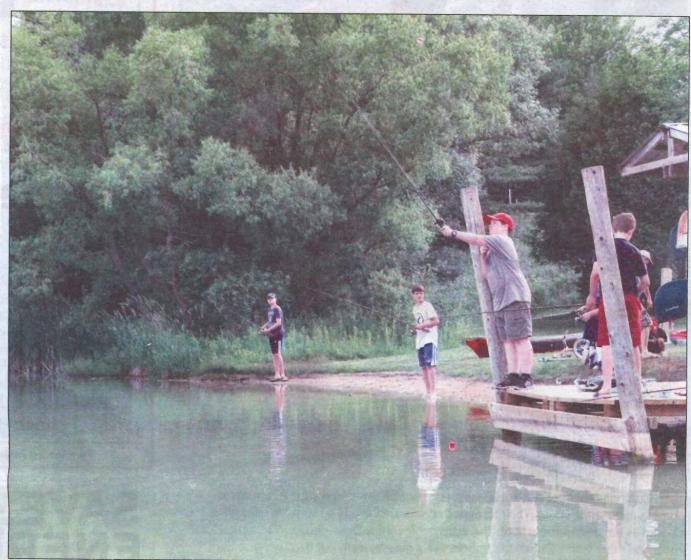
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Thursday, June 22, 2017

GONE FISHING IN ALVINSTON



Saturday was the perfect day to cast out a line and there were nearly 100 kids at AW Campbell Conservation Area near Alvinston seeing what was biting. The conservation area used to have regular fishing derbies for kids but about three years ago, park officials say, a large number of fish died off. They never found out what caused it. But this year, there are enough bass, catfish and carp to make for a fun day of fishing.

Heather Wright Photo

Vulnerable shoreline getting some attention

Bright's Grove shoreline work expected to finish in February

TYLER KULA
THE OBSERVER

One of Sarnia's most vulnerable stretches of Lake Huron shoreline is about to get a bit of protection.

Up to 150 metres of the Kenwick Street to Helen Avenue stretch north of Old Lakeshore Road – partially washed out in the massive St. Patrick's Day storm of 1973 – is in line for new armour stone protections against high waters and strong winds that have eroded up to five metres in the area in the past five years, said Girish Sankar, director of water resources with the St. Clair Region Conservation Authority.

"The shoreline is very unstable," he said.

The conservation authority has been applying for funding for repairs to the 600-650-metre stretch in Bright's Grove, he said, since a 2012 study was commissioned amid complaints about deterioration.

The authority recently received \$300,000 from the Ministry of Natural Resources' Water Erosion Control Infrastructure Program.

The City of Sarnia is matching that money for the protection work – including building revetments designed to absorb incoming waves, and groynes that extend

perpendicularly to the shore – expected to start late this year and wrap up by the end of February, Sankar said.

The new structures are to replace eroded steel protections installed in the 1970s.

"They've all failed," said Sankar.
"It's time that the shoreline work
(is) done."

Plans are to continue applying for more funding to incrementally protect the shoreline year after year, he said.

"We're hopeful."

Protections, outside the section of roadway that's been closed to traffic for years and used as a multi-purpose pathway, have been installed incrementally since the 1980s, he said.

But the area between Kenwick and Helen has been left behind.

"This is the area where there is minimum to no erosion protection," he said, estimating three to five metres of erosion since 2012.

The city has \$500,000 set aside for shoreline repairs in 2017, some of which has been used for emergency repair work at Modeland Road and Blackwell Sideroad.

See SHORELINE | A3

\$1.00



New armour stone protection planned for Bright's Grove

SHORELINE from A1

"With the water currently being up, surge events are taking a toll on these walls when they're at the end of their life," said Rob Williams, construction manager with the City of Sarnia.

News of the funding for Bright's

Grove is welcome, he said.

"It's not a road section but it is a section of public walkway; it's very, very heavily used and it does really need to be done."

Exactly where is being determined by the conservation authority and consultants, he said.



CONTRIBUTED PHOTO

Deteriorating shoreline protection in Bright's Grove, as pictured in a 2012 report making the case for repairs. The City of Sarnia is matching a \$300,000 grant from the Ministry of Natural Resources for repair work set to start later this year.

St. Clair Regional Conservation Authority awards scholarships

\$3000 was awarded across the St. Clair region this year

By Travis Poland (https://lambtonshield.com/author/travis/) June 30, 2017

Local News (/category/local-news/)



SCRCA Chairman Steve Arnold hands the award to Emily Fraser. (Photo provided)

Winners of the 2017 St. Clair Regional Conservation Authority scholarships have been named.

CourierPress

Stranak scholarship awarded

Wallaceburg Courier Press Thu Jul 6 2017

Page: A7 Section: News

Source: Wallaceburg Courier Press

Length: 0 words

Illustration: Handout, Courier Press / J illian Ball, from Lambton-Kent Composite School, received the Tony Stranak Conservation Scholarship and will be studying Environmental Management at Ridgetown College. Steve Arnold, chair of the St. Clair Region Conservation Authority, presents Ball with her award. The scholarship program rewards graduating high school students continuing their postsecondary studies in a conservation related field based on their academic achievement and their demonstrated interest and involvement with the environment. In that, \$3,000 was awarded across the St. Clair region this year.;

Canada Day celebrations at the Warwick Conservation Area



Residents from Watford, Warwick and the surrounding areas gathered at the Warwick Conservation Area last Saturday afternoon, joining campers spending the long weekend to celebrate Canada's 150th birthday. Crafts and balloon animal making, a bouncy castle, and a visit from members of the Paw Patrol were some of the activities set up for the kids to enjoy. A hotdog supper was provided along with cake. Music entertainment was provided while everyone waited for the fireworks show at dusk.Photos by Dan Morrill, The Standard Guide Advocate



Thursday, July 6, 2017

The Independent

Page 9

Warwick celebrates Canada 150 at the park

Warwick Township moved its celebrations to the Warwick Conservation Area for a cottage-like atmosphere





Heather Wright Photo

— UNION GAS DONATES TO SCRCA, UNITED SIRENS, CONCERT BAND

By aaron on September 7, 2017 Current News, Featured Stories

HOME > CURRENT NEWS > UNION GAS DONATES TO SCRCA, UNITED SIRENS, CONCERT BAND



Steve Arnold, Chair, St. Clair Region Conservation Authority; Steven Jelich, Sarnia/London District Manager, Union Gas (Submitted photo)

Union Gas donates towards SCRCA wetland project

Union Gas has donated \$12,000 to the St. Clair Region Conservation Authority (SCRCA) to fund a wetland restoration project.

The site of the newly rehabilitated wetland is on an SCRCA property adjacent to Black Creek in Wilkesport.

"Environment Canada states that we have lost 68% of our wetlands in Southern Ontario," stated Jessica Van Zwol, healthy watershed specialist for the SCRCA, in a press release.

"Beyond providing habitat for native plants and animals, wetlands reduce flooding and improve water quality. By taking on these wetland restoration projects we are able to take another step towards our goal of improving the health of our watershed."

Steven Jelich, Union Gas district manager for London/Sarnia, said Union Gas and the St. Clair Region Conservation Authority have a strong shared history together

"This new initiative builds on this further," Jelich said in a press release.

"Working together in restoring these wetlands, we will help reduce flooding, improve water filtration, and provide habitat for multiple species of aquatic and terrestrial wildlife."

Steve Arnold, chair of the SCRCA, said they are very pleased to partner with Union Gas.

"They are dedicated to giving back to the community," he said.

"Not only has Union Gas funded this wetland restoration project, they also provide generous support for our conservation education programs that are delivered to children throughout our watershed."

The St. Clair Region Conservation Authority is located in southwestern Ontario and includes the Sydenham River watershed and smaller watersheds draining directly into southern Lake Huron, the St. Clair River and northeastern Lake St. Clair.

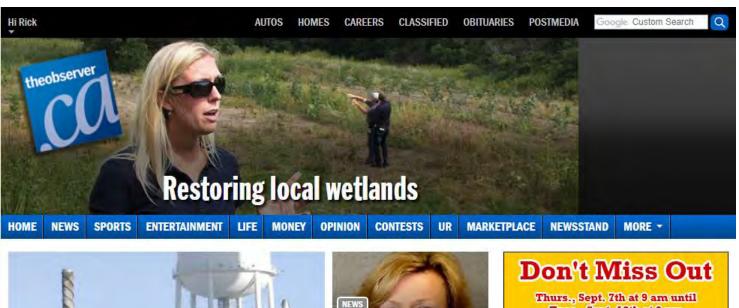
The Conservation Authority implements programs to reduce the risk to life and property from flooding and erosion; water and land stewardship; forestry; wildlife habitat creation; conservation education; and outdoor recreation.

For more information, visit their website at scrca.on.ca

Union Gas Limited is a major Canadian natural gas storage, transmission and distribution company based in Ontario with over 100 years of experience and service to customers.

The distribution business serves about 1.4 million residential, commercial and industrial customers in more than 400 communities across Ontario. Union Gas is one of Canada's Top 100 Employers for 2017, and has assets of \$8.2 billion and approximately 2,300 employees.

For more information, visit uniongas.com.









infomart



Wetlands make comeback; St. Clair Region Conservation Authority shows off latest project in Lambton County

Sarnia Observer Thu Sep 7 2017

Page: A1 / Front Section: News Byline: Tyler Kula Source: Samia Observer

Hundreds of young oak, poplar and sycamore stand in a bowled one-hectare lot behind a farm field east of Wilkesport.

A screech from a hawk, or maybe an eagle, catches Steve Arnold's ear.

"Neither species was in abundance five years ago," says the St. Clair Region Conservation Authority chairperson. "It's things like this that bring them back."

He joined a small group Wednesday checking out the authority's newest wetland restoration project along the Sydenham River watershed.

It's one of hundreds of similar projects undertaken since a system to divert floodwater from Wallaceburg was finalized in the 1980s, using floodplain spaces sporadically submerged when the W. Darcy McKeough Floodway is put into use.

"This was the way a lot of us envisioned a lot of these marginal lands would be taken out of production," said Arnold, who's also mayor of St. Clair Township.

The land in question is owned by the authority and has been tenant farmed, but the lowlying area was converted this spring.

Union Gas contributed \$12,000 to the project.

The land wasn't well suited to good cash crop yields, said Jessica Van Zwol, an authority healthy watershed specialist.

Wetland species are springing back to life from the natural seed bank alongside more than 1,000 young trees planted in the newly berned and excavated basin, she said.

Plans are to continue mowing back and spraying weeds for two or three years until the trees - which can handle being under water - can thrive on their own, she said, The vegetation helps remove harmful chemicals from water running through, even mitigating phosphorus contributing to Lake Erie algae blooms, she and Arnold said.

"Wetlands are a form of flood retention and when that water is returned, it should leave cleaner, or have an improved water quality, than when it came in," Van Zwol said.

As far as helping hawks and eagles, there's more bare ground in the area, offering better hunting for rodents than when the land was farmed, Arnold said.

Eight times since the floodway was built in 1984, the dam at Duthill has been closed to divert water that could have submerged vehicles in Wallaceburg along the Sydenham watershed, in some places boosting levels six metres, he said.

The McKeaugh floodway, which empties into the St. Clair River south of Sombra, was

last used in 2009, he said, when spring melt and rainfall pushed the icepack up and froze the Wallaceburg Hospital parking lot even after the dam was closed.

The dam was built after a 1968 flood submerged much of the northern Chatham-Kent community.

The authority acquired floodplain land in the aftermath to keep it for diversion purposes, Van Zwol said.

Meanwhile, officials are working on another 20 or so restoration projects, partnering with homeowners and private investors like Union Gas to make them happen, she said.

Union Gas's contribution to the project was a natural fit with the company's focus on the natural environment, said Steven Jelich, district manager for London and Sarnia: "We recognize we play a big responsibility in helping to conserve."

The project, which cost about \$14,000, also won funding from Wildlife Habitat Canada, Van Zwol said.

The authority always looks to partner with landowners to restore wetlands along the floodplain, she said, and seeks corporate and government funding to ease the financial burden.

"Because if (owners are) retiring cropland, that in itself is their financial contribution," she said. tkula@postmedia.com

Length: 562 words

Illustration: Tyler Kula, The Observer / Jessica Van Zwol of theSt. Clair Region Conservation Authority discusses a wetland restoration project near Wilkesport in Lambton County. The recently completed project was helped with a \$12,000 contribution from Union Gas.;



News Life Arts Business Opinion Sports E-Voice Voice H

Land of the Lotus flower





Photo country Becky Fixter

Littus plants dicesom across a pond at the Keith Maclean Conservation Lands on Kent Bridge Road just out 52 fr. Rondeau on the weekend.

The plants are expected to be in bloom until mid-August.

Phragmites war rages on

Amphibious machine battles invasive reed on Lake Huron shoreline

PAUL MORDEN Postmedia Network

A group of phragmites fighters in Lambton Shores is waging a war with one hand tied behind its back.

One area of the community where it has been working hard to beat back the invasion reed is 156 acres of wetland on the Lake Huron shoreline west of Kettle and Stony Point where rising water levels have been complicating things lately.
While the U.S. has

approved herbicides for use on phragmites growing in water, governments in Canada don't allow them, except in a few specific cases.

'When we started, it was dry," Nancy Vidler, with the Lambton Shores Phragmites Community Group, said about the shoreline off Wood Drive.

Introduced to Canada from its native Eurasia, invasive phragmites grow tall and dense, and toxins released by its roots kill surrounding plants. Once it takes hold, phragmites crowd out other species, including birds and other wildlife.

'These create dead zones," Vidler said.

'There's nothing that lives in them."

Herbicides can be used in Canada on phragmites on dry land as part of an approach designed to beat back the reeds over several years by cutting, spraying, clearing and spot treatments until they're gone.

But, water levels along the lake have been rising so the

lenge," Vidler said.

water there.

"We tried, desperately, to get included," Vidler said.

fect site to do it."

The wetland sits between the Kettle and Stony Point First Nation and the Lambton Centre United Church Camp, which are partners in the battle against the reed in the area.

row, so to speak, but they would not approve that," Vidler

Without permission to use chemicals, the group began last year sending in crews to manually cut down reeds that had returned to the wetland.

Talk about labour-intensive, but the results were really

But, it that approach on its

We don't have all the tools, and the tool we need is the chemicals to use on water," she said.

has been identified by the province as a significant wetland.

She said the group prefers

group isn't able to spray phrag-mites that have returned to the wetlands off Wood Drive.

That has been the chal-

The group lobbied the government to be included in an emergency use permit given last year for Long Point and Rondeau, allowing herbicide spraying on phragmites in

'We thought we had a per-

We had all of our ducks in a

encouraging," Vidler said.

own isn't enough on such a large site.

"If we had the chemicals to use on water, this would have been gone," she said about the phragmites still growing in what

to use non-chemical methods when it can but in a large area



Nancy Vidler, with the Lambton Shore Phragmites Community Group, stands next to a wetland on Lake Huron in Lambton Shores where equipment has been working this past week to battle the invasive reed.

like the shoreline wetland, we have no chance of getting it under control" without herbicides, Vidler said.

'We need our government to give us the tool to handle these large areas," Vidler said.

Over the years, the group has raised approximately \$400,000 from grants and other funding sources to pay for its projects, and some of that money has been used to buy barges and equipment.

This year, the group is working with wetlands ecologist Janice Gilbert and the notfor-profit Invasive Phragmites Control Centre, which brought in a Swedish-built Truxor amphibious machine able to cut down and rake phragmites growing in wetlands.

The Truxor and other equipment has been at work on the Lambton Shores wetland for the last week to provide the crew with training and work out the kinks, Vidler.

We are kind of the pilot

The phragmites the Truxor cut and gathered were loaded on the group's barges and taken to shore to be trucked to a nearby field and later burned.

Next week, the Truxor and the group's barges and equip-ment are scheduled to head north to work on phragmites sites along the lake and make their way back south again to Lambton Shores.

Lambton Shores has been fighting phragmites on several fronts in recent years, including in Grand Bend where the reed was discovered not far from its famous beach, but is now under control.

The Lambton Shores group formed in around 2008 in Port Franks where early intervention eliminated phragmites from the beach there, but there are areas where it's still growing in water.

"So, our hands are tied," Vidler said.





Standard Guide Advocate 2017-08-24

Ipperwash Beach and Dunes Phragmites Spading Day....Plus

On Thursday, August 11, 2017 a team of Ministry of Resources Natural Forestry Rangers spent the day spading Phragmites in Sunfish Bay at Port Franks.

On Friday, August 12, 2017 at team of 38 volunteers came to Ipperwash each to learn how to identify and spade invasive Phragmites. Volunteers included adults and children from the community, Ministr of Natural Resources and Forestry Rangers and students, the St. Clair Region Conservation Authority, the Lake Huron Centre for Coastal Conservation, the Lambton Shores Phragmites Community Group, and the Ipperwash Phrag Phighters.



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Thursday, August 10, 2017





NATHAN JUHA/STRATHROY AGE DISPATCH/POSTMEDIA NETWORK

Steve Shaw, manager of conservation services with St. Clair Region Conservation Authority, stands next to dead phragmites at a conservation area in the town's northeast end. Officials with conservation authorities used herbicides two years ago to treat the area where native plants are now growing, but where phragmites is also making a comeback. For more, see story on Page 4.

STRATHROY AGE DISPATCH THURSDAY, AUGUST 10, 2017 **Area conservation authorities** say more resources are needed to win battle against phragmites

JONATHAN JUHA Strathroy Age Dispatch

Despite some victorie's here and there, Southwestern Ontario conservation authorities are losing the war against phragmites because the policies and resources needed to eradicate the invasive plant are not in place,

environment experts say.
"It is something that we are trying to eliminate but it is costly, time-consuming, and it's becoming a real issue," said Randall Van Wagner, manager of conservation lands and services with the Lower Thames

Conservation Authority.

"Are we ever going to eradicate it ourselves in our properties? Probably not," he bluntly admitted.

Commonly known as Tall Reed Grass, phragmites is an invasive plant originating in Eurasia capable of displacing and killing off all native plants, creating a monoculture and dramatically altering the local ecosystem.

It was named the worst invasive plant in the country over a decade ago and it thrives in wet, damp areas. But it also has the ability to adapt to different environmental conditions and to spread exponentially, becoming a common fixture not only near lakes and beaches in the southwest but also along the 400 series highway corridors. And it is extremely hard to

eliminate.

You can cut it, spray it, roll it, burn it, and it just takes repeated application of this to stress it out," Van Wagner said.

The lack of long-term funding to exterminate the plant is one of the main factors contributing to the poor results, he added

"There's very little money out there to fight it," he said. "If you burn it, it'll still come back, and probably twice as hard.

"You need to repeatedly keep going back year after

Jay Ebel, forestry and habitat restoration technician with the Upper Thames River Conservation Authority, shared similar concerns.

"As all things, it comes down to time and money," he said. "We know what to do. We know how to do it. But unfortunately, the funds aren't really available to do this work.

"Although I think there is an end in sight, it is not around the corner. We are talking years, if not a decade, for the battle to take force and go in

our favour against it." While in Strathroy the situation isn't dramatic yet, the local conservation authority has identified some trouble spots near watersheds in town, said Steve Shaw, manager of conservation services with St. Clair Region Conservation Authority

Some of those places include what is known as the Strathroy Conservation Area behind the conservation authority's building on around the Strathroy Wetlands Marsh Walk.

While they are monitoring the situation, if no action is taken phragmites could take over all native vegetation in these areas, Shaw said.

"It could take only five to seven years for that to hap-

pen," he said. In St. Thomas, efforts to eradicate the plant from Lake Margaret have been success ful, with the city's Phragmites Control Committee declaring the area now phrag free.

But the head of the committee, David Collins, also warned during a presenta-tion on the project's progress earlier this year that the issue would never go away until the plant was completely exterminated in Ontario.

"Until Phragmites australis is totally eradicated in the p54nce of Ontario, and even though areas in our city have been and will be deemed phrag free, dil-



JONATHAN JUHA/STRATHROY AGE DISPATCH/POSTMEDIA NETWORK

Steve Shaw, manager of conservation services with St. Clair Region Conservation Authority, stands next to dead phragmites at a conservation area in the town's north-east end. Officials with conservation authorities used herbicides two years ago to treat the area where native plants are now growing, but where phragmites is also making a comeback.

igence inspection and spot spraying will be necessary on an annual basis," he said.

For Janice Gilbert, wetland biologist and founder of the Ontario Phragmites Working Group, the fact that the government hasn't come up with a uni-fied, province-wide response to eradicate phragmites makes

this an uphill battle. She also blames government unwillingness to approve a herbicide long used in the United States and successfully tested last year in the Long Point region and the Rondeau Provin-

cial Park to combat the weed. "There are a lot of projects here in the province, but we don't have the right tools to fight (phragmites) effectively in waters," she said, add-

ing that it puzzles her why the government approved to use the herbicide again in the same region but not any-

where else in the province.
"That's my frustration because we have so many areas ... that are just as important ... and we cannot use these herbicides there," she said.

Unless this policy is reversed, all gains made in dry lands will be pointless, as the plant will continue to spread, she added.

"What it is required is working collaboratively with all the partners within the watershed to deal with phragmites, not just piecemeal on each individual property," she said. But without the right tools, we are not going to win the

First Nation working to protect endangered snakes

NEIL BOWEN THE OBSERVER

A sanctuary for small docile snakes is being created by the Aamjiwnaang First Nation with the aid of a federal government grapt

The Butler Gartersnake is an endangered species with patches of Lambton County being among the few spots inhabited by the snakes in North America.

The sanctuary, a project of the First Nation's environment committee, received a \$176,790 grant for athree-year habitat stewardship program through Environment and Climate Change Canada.

"That's our responsibility, to look after nature. We take it seriously," said Aamjiwnaang Chief Joanne Rogers.

The First Nation has also received a grant from the Ontario Ministry of Natural Resources for work with the Butler Gartersnake.

Further grants for similar projects for other animals would "absolutely" be put to good use, said Rogers.

In announcing the grant Samia-

Lambton MP Marilyn Gladu commended the First Nation for their continued conservation and stewardship leadership.

The grant will aid identification and mitigation of threats to the snake from urban and industrial development.

Habitat loss for the snake has occurred during the past 30 years in the region due to urban and agricultural development

The snakes originally had a much larger range.

The habitatis confined to patches within southwestern Ontario and four Great Lake states, Wisconsin, Ohio, Indiana and Michigan. The snake is identifiable by three yellow stripes along its dark brown back. It has alength of 38 to 51 centimetres (15 to 20 inches) inches and is much more docile than other gartersnakes. It lives in dense grass and feeds on earthworms. nbowen@postmedia.com



Sarnia Observer 2017-08-03

Lambton completes official plan

Updated planning document set to be approved in September

PAUL MORDEN THE OBSERVER

After six years of studies, reports, public meetings and debate, Lambton County council finished work Wednesday on an update of its official plan, a document laying out policies on how land in its 11 municipalities can be used.

A bylaw endorsing the update is expected to be prepared for council to consider in September, and then the plan will be sent to the province for its review and final approval.

Official plans currently have to be updated every 10 years.

"I think we've had a long haul," Warden Bill Weber said about the update.

But, in the end, Weber added he believe the county has a "workable" updated official plan. "It allows growth, throughout the county," he said. "It respects farmland, it respects the farmer's right to farm and I believe the process has been good."

Weber commended county staff for being "professional and patient" during the review, and he commended his fellow country councillors for "being diligent and doing their job in asking the questions."

Councillors settled an outstanding issue with the plan update Wednesday when it turned down Plympton-Wyoming's request to designate more of its lakeshore land for residential use.

Plympton-Wyoming council had been seeking to designate what was estimated to be 120-year supply of land for future residential use, up from its current 55-year supply.

Others, including the City of Sarnia, argued granting that larger designation to its neighbour Plympton-Wyoming could impact other communities when they seek to expand their own supplies of land available for residential development.

Dave Posliff, the county's manager of planning and development, said council settled on matching what the county's updated official plan and Plympton-Wyoming's plan say about the lakeshore, "so they line up and there's no confusion between the two."

The Ontario Municipal Board said in a previous ruling that if there is confusion between Plympton-Wyoming's planning document and the county's, it should be fixed, Posliff said.

"And what county council did today, was to hopefully eliminate that confusion, make the plans line up and work together."

Weber said county council also added a statement to the update to support Plympton-Wyoming's effort to restrict new livestock farming operations near lakeshore residential lands.

"I think it does what Plympton-Wyoming was hoping for," Weber said.

"We'll see if the province accepts those amendments."

Plympton-Wyoming Mayor Lonny Napper said his municipality has been "beaten up at the OMB" and he believes what it asked the county for was "good planning."

There is a demand for development along the lake, and Plympton-Wyoming has put infrastructure in place to support it, he said.

Napper added his community has taken steps to protect farm land "where farm land should be protected."

Following Wednesday's meeting, Napper said he doesn't believe steps taken by county council solve his community's concerns.

Those concerns include seeing local planning decision overturned by the OMB, and the need to ensure new residential development along the lakeshore is protected from the impact of new livestock farms.

"People want to live out there, so let them," he said.

"We've got to protect it and the only way you can really protect it is zone it all residential, so you've got that protection today and 50 years from now."

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Mosquito Pool Tests Positive for West Nile Virus

Point Edward, ON – Test results received today by Lambton Public Health confirm Mosquitos collected from a trap located in Wyoming on August 22 have tested positive for the West Nile virus (WNV).

This is the third positive finding as part of WNV surveillance locally. A mosquito pool in Petrolia and a crow in Sarnia tested positive in July.

WNV is spread to humans through the bite of an infected mosquito. Reduce your risk.

Take precautions to avoid mosquitoes and bites; Reduce mosquito breeding areas around your home; and

Support surveillance by reporting dead birds.

For information call the West Nile virus info line

THE STAN Co Sean Dobbin at 519-Ron Van Damme at 5

at 519-383-3824 or toll-free at 1-800-667-1839 ext. 3824. Visit the webs i t e www.lambtonhealth.on.c a to learn more about precautions to remove dead birds and the prevention of mosquitoes and bites.

Standard Guide Advocate 2017-08-31

Prediction of West Nile surge prompts health unit warning

Increase in infections expected in Ontario

TYLER KULA THE OBSERVER

Keep applying insect repellant containing DEET and continue removing standing water on your own property to ward off mosquitos, Lambton Public Health says, as recent information out of Brock University predicts a surge of West Nile virus infections in Ontario this year.

"We have the potential to see that

here," said Lori Lucas, a supervisor with the Lambton health unit.

"Our messaging is although you're not hearing there's lots of cases (in Lambton), we do know there's West Nile out there and we're always messaging about the precautions people can take."

So far in 2017, the mosquitotransmitted virus has turned up twice in Lambton County - first in a mosquito pool tested in Petrolia, and then in a dead crow found in Sarnia.

No human cases have been reported locally this year.

As of the week ending Aug. 19,

there were 14 confirmed or probable human cases in the province.

The Brock research, citing wet and warm weather that's helped mosquito populations thrive this year, predicts about 340 people will have been infected by early fall.

Fiona Hunter, a medical entomologist who authored the paper – published in the open-access, peer-reviewed journal PLOS ONE – with her graduate student Bryan Giordano, predicts the total number of mosquito pools carrying West Nile virus will double in the next six to eight weeks, to about 500

About one per cent of people infected with West Nile become seriously ill and experience flushke symptoms. In very rare cases, the virus, which has no cure or vaccine, can be fatal.

"So the numbers could be higher, it's just that people might be getting West Nile and never getting tested because they're having mild flu-like symptoms and things like that," Lucas said.

It's not surprising to hear prevalence is up this year, she said.

"It's not to panic people, but it's to say be aware," she said, "Don't become complacent and just think that we're not going to get bit as much."

It typically takes a frost or two for the last mosquito populations to die off for the year, she said.

See WEST NILE | A2



\$1.00 (olus GST)

Two people in Lambton have died of the virus

WEST NILE from page A1

Public health applied its third round of larviciding to catch basins in the county last week, she said, and trapping is expected to continue until the week of Sept. 18.

In the 2002 and 2012 Ontario

outbreak years, Lambton saw one and two positive human cases respectively, Lucas said.

There has been two West Nilerelated deaths historically in the county, once each in 2005 and 2006, she said.

Hunter, speaking with

Postmedia, saidpeople in Ontario need to take the situation seriously and use insect repellant as mosquitos start to focus more on humans – now that the bird populations they relied on earlier in the year have left.

"So just because you didn't get

bitten earlier in the summer, doesn't mean you should think you cannot get bitten now," she

With files from Grant Lafleche, St. Catharines Standard tkula@postmedia.com

infomart



Your letters: What lessons can we learn from hurricane Harvey's devastation?

thestar.com Sat Sep 2 2017

Section: Opinion | Editorial Coverage | T

Re: Riding out the storm, Aug. 30

Riding out the storm, Aug. 30

No city or region on its own could hope to handle the unprecedented horrors that hurricane Harvey has unleashed on southern Texas and Houston, but we know that mitigating the effects of these severe weather events is eminently possible.

The problem is that the U.S. is notorious for underfunding infrastructure. New Orleans was warned for years before Katrina that levees were inadequate, yet nothing was done. Houston, which has experienced many major storms and is prone to flooding, was likewise warned that it needed to update its flood-prevention measures, and to do simple things like stopping the paying over of wetlands. Again, no action was taken.

(Incidentally, the Trump administration has overturned an Obama-era policy that stops federal money from being used to build infrastructure on flood-prone areas.)

In Toronto, the death and destruction caused by Hurricane Hazel in 1954 led to the creation of the Toronto and Region Conservation Authority, which has by and large prevented widespread flooding in the GTA after major rain events. This was money well spent. And of course the flood-prevention measures in the Netherlands are world-renowned and highly effective.

Mitigating the effects of catastrophic storms and climate change is well within our capabilities. What's missing, in the case of the U.S. at least, are the tax dollars - and the political will and foresight to spend them.

Andrew van Velzen, Toronto

We have family in Houston, who are safe. The home they recently moved to is above the floods. The house they used to live in is flooded. So what can we learn from Houston for our West Don Lands plan in Toronto?

Part of the challenge is that these events are infrequent. On average, once every 12 years, there is a storm that drops more than 600 millimetres of rain on Houston. Tropical storm Amelia dropped 1,200 millimetres of rain in 1978. Harvey has dropped 2-per-cent more than Amelia. Time is long and memory is short.

Another challenge is planning. Toronto prohibits construction on flood-prone land. The lower Don has a history of flooding caused by heavy rains.

Houston allows construction on flood-prone land, as long as a developer provides a flood-mitigation plan. A study of a dozen of these plans found that most were ineffective and some were not implemented at all. The Houston seniors' home that flooded is reported to have been built on flood-prone land.

If parts of the West Don Lands are inside the 100-year flood zone, will council resist pressure to allow more development there?