

#### FULL AUTHORITY MEETING

Wednesday December 18, 2013; 7:00 PM

Ball's Falls Centre of Conservation – Elgin Room 3292 Sixth Avenue, Jordan ON

## AGENDA

- ROLL CALL
- DECLARATION OF CONFLICT OF INTEREST
- BUSINESS:
  - (1) Draft Meeting Minutes Full Authority Meeting November 20, 2013
  - (2) Business Arising From Minutes
  - (3) Chairman's Remarks
  - (4) CAO's Remarks

  - (7) Permit Requirement Submission St Catharines ------ <u>Report No. 116-13</u>
     *Coffey & CVC letters attached* (8) Strategic Plan update------ <u>Report No. 117-13</u>
  - (9) Ball's Falls Fees Schedule 2014 ------ <u>Report No. 118-13</u>
     Fees schedule attached
  - (10) Proposed 2014 Hunting Permit Fees for CA's------ Report No. 119-13

(11)	Budget Status Report		<u>Report No. 120-13</u>
	<ul> <li>Nov</li> </ul>	ember 30 <sup>th</sup> budget status attached	
(12)	2014 Full Authority Mee	ting Schedule	<u>Report No. 121-13</u>
	<ul> <li>Drat</li> </ul>	ft 2014 Meeting schedule attached	
(13)	Project Status Report		<u>Report No. 122-13</u>
	• Wat	er Management	
	Wat	ershed Stewardship	
	Lan	d Management Development	
	Con	nmunity Relations	
	Prei	iminary Events Listing 2014	
(14)	Correspondence		
(15)	Other Business		
(16)	In-Camera		
	(a) Tree By-law Status I	Report	<u>Report No. CR-123-13</u>
	<ul> <li>Con</li> </ul>	nmunications Summary attached	
	(b) Regulations Status I	Report	<u>Report No. CR-124-13</u>
		ations Summary attached	
	(c) Personnel Update		

#### ADJOURNMENT



#### TO: The Chairman and Members of the Authority

DATE: December 10, 2013

#### SUBJECT: Per Diem Update - Report No. 115-13

Further to member's request that a copy of the per diem survey comparisons be provided to the Full Authority Board and Regional Councillors; attached is the survey comparison of the 36 Conservation Authorities in Ontario and a Regional survey of comparable Agencies.

#### **RECOMMENDATION:**

That NPCA staff forward a copy of the attached surveys to all Regional Councilors.

Respectfully Submitted By: Amario, P. Eng. CAO/ Secretary-Treasurer lony

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 2 of 70

#### **SURVEY - REGIONAL**

commissioned members \$398.00 /day plus			
commissioned members \$398.00 /day, plus			
1/2 day for preparation	Chair \$627	.00 / meeting day	
All volunteers			
no mileage, no per diem and no honourarium		0	
no mileage, no per diem and no honourarium		0	
Chair \$225.00 / monting Vice Chair \$175 / monting	Commissioners	\$225 Chair;	
		\$225 Chair, \$175 Vice-Chair	
Commissioners \$135.00/meeting	\$135/meeting	\$175 VICE-Criair	
Chair, Vice-Chair & Secretary Treasurer receive \$200.00 /			
	Board members	Chair & Vice Chair \$200.00	
		/ month	
·			
Board members receive an annual renumeration of			
\$6,562.69 to attend Full board meetings and for		Chair \$9,297.14 /yr ;	
committees & events.	0	Vice-Chair \$6,562.69 /yr.	
no mileage, no per diem and no honourarium		0	
Provincially Elected officials - salary based on Education	Chair (10,000 (m Vice Chair (8,400 (m.		
Act - population and pupil;	Chair \$10,900/yr ; Vice-Chair \$8,400/yr; <b>PLUS</b>		
board member base salary \$5,900/yr plus	Chair \$1 75/ADE plug		
enrolment of \$1.75 per average daily enrolment ADE	•	olus \$0.025 x sum of ADE	
	1/2 day for preparation         All volunteers         no mileage, no per diem and no honourarium         All volunteers         no mileage, no per diem and no honourarium         Chair \$225.00 / meeting;         Vice-Chair \$175/meeting;         Commissioners \$135.00/meeting         Chair, Vice-Chair & Secretary Treasurer receive \$200.00 /         month; the Board receives \$150.00/mo. Whether they         show up or not.         Board members receive an <b>annual</b> renumeration of         \$6,562.69 to attend Full board meetings and for         committees & events.         All volunteers         no mileage, no per diem and no honourarium         All volunteers         Provincially Elected officials - salary based on Education         Act - population and pupil;         board member base salary \$5,900/yr plus	1/2 day for preparation       Chair \$627.         All volunteers       All volunteers         no mileage, no per diem and no honourarium       All volunteers         All volunteers       All volunteers         no mileage, no per diem and no honourarium       All volunteers         Chair \$225.00 / meeting;       Vice-Chair \$175/meeting;         Chair \$225.00 / meeting;       Vice-Chair \$175/meeting;         Chair, Vice-Chair & Secretary Treasurer receive \$200.00 /       Board members         month; the Board receives \$150.00/mo. Whether they       Board members         show up or not.       \$150.00 / month         Board members receive an <b>annual</b> renumeration of       \$6,562.69 to attend Full board meetings and for         committees & events.       0         All volunteers       0         No mileage, no per diem and no honourarium       0         Provincially Elected officials - salary based on Education Act - population and pupil; board member base salary \$5,900/yr plus chair \$1.75/ADE plus \$	

## Agenda - Full Authority Meeting Dec 18, 2013 Page 3 of 70

Cataraqui Region         3600 km2         211,279         2,924,570.00         8         8         6         3         0         0         0,48         \$1,200.00 /r         0,00         No point           Catifish Creek         488 km2         19,750         1,049,795.00         4         3         3         2         \$42,63 /meeting         0.4         \$640.00 /r         0.00         Chai           Central Lake Ontario         627 km2         344,465         4,018,634.00         7         0         1         4         3         3         2         S50.00 /meeting         0.4         \$50.00 /yr         0.00         Chai           Credit Valley         949 km2         837,343         21.790,524.00         6         1         4         3         3         2         S50.00 /meeting         0.52         \$11,957.00 /yr         \$54,640./yr         Chai         Chai         Chai         A         3         A         D         D         A         0.00         No         A         0.00         A         0.00         A         0.00         A         A	air receives honourarium & per diem per diems paid air receives honourarium & per diem air receives honourarium only -no per diem pd.			2								
Jurisdictional autority         Jurisdictional autority         Population of approxit         Budget 2011         Jury Filter Market and approxit         Puper Ter Municipal International Autority         Puper Ter Municipal Internatintere Autority         Puper Ter Municipal In	air receives honourarium & per diem per diems paid air receives honourarium & per diem air receives honourarium only -no per diem pd.			2	2013							
Ausable Bayfield         2440 km2         45,099         2,960,934.00         12         12         4         0         82.79 / meeting         0.47         \$1,183.20 / yr         0.00         Chain           Cataraqui Region         3600 km2         211.279         2,924,570.00         8         8         6         3         0         0.48         \$1,200.00 / yr         0.00         No           Cataraqui Region         3600 km2         211.279         2,924,570.00         8         8         6         3         0         0.48         \$1,200.00 / yr         0.00         No           Cataraqui Region         3600 km2         211,279         2,924,570.00         8         8         6         3         0         0.44         \$52,500.00 / yr         0.00         Chain           Central Lake Ontario         627 km2         344,665         4.018,634.00         7         0         1         1         3         0         0.2         \$11,957.00 / yr         \$5,64.00 / yr         Chain	air receives honourarium & per diem per diems paid air receives honourarium & per diem air receives honourarium only -no per diem pd.		Chair Honourarium		r per diem	& Single		unicipali L	L		watershed area (approx)	Conservation Authority
Cataraqui Region         3600 km2         211,279         2,924,570.00         8         8         6         3         0         0         0,48         \$1,200.00 /r         0,00         No per           Cataraqui Region         3600 km2         19,750         1,049,795.00         4         3         3         2         \$42,63 /meeting         0,4         \$64,000 /r         0,00         Chai           Central Lake Ontario         627 km2         344,465         4,018,634.00         7         0         1         1         \$500.00 /meeting         0,54         \$2,500.00 / yr         0,00         Chai         Chai         Chai         3         2         \$500.00 /meeting         0,54         \$2,500.00 / yr         0,00         Chai         Chai         Chai         3         2         \$500.00 /meeting         0,54         \$2,500.00 / yr         \$50.00 /meeting         Chai         Chai         Chai         3         2         \$500.00 /meeting         0,54         \$2,500.00 / yr         \$51.600.00 /meeting         Chai         Chai         S55.00 /meeting         0,4         0.00         0.00         No         No         S55.00 /meeting         0,4         \$2,000.00 /r         \$51.00 /meeting         \$51.00 /meeting         S52.00 /meeting         S52.5	per diems paid air receives honourarium & per diem air receives honourarium only -no per diem pd.		<u> </u>				L ``		0.000.004.00	45.000		-
Catilish Creek         489 km2         19,750         1,049,795.00         4         3         3         2         \$42.63 / meeting         0.4         \$640.00 / yr         0.00         Chai           Central Lake Ontario         627 km2         344.465         4.018,634.00         7         0         1         1         550.00 / meeting         0.54         \$2,500.00 / yr         0.00         Chai           Credit Valley         949 km2         837,343         21,790,524.00         6         1         4         3         3         2         \$72.98 / meeting         0.52         \$11,957.00 / yr         \$5,464.00 / yr         No           Crowe Valley         2000 km2         11,642         633.900.00         10         5         4         3         4         3         4         3         641.00         \$72.98 / meeting         0.52         \$11,957.00 / yr         \$5,464.00 / yr         No           Crowe Valley         2000 km2         11,642         638.0192.00         10         10         4         0         Meetings less than 5 hours - \$60.00 per meeting; Meetings in excess of 5 hours - \$125.00 / pr         Chai         A         52,000.00 / yr         \$1,000.00 / y	air receives honourarium & per diem air receives honourarium only -no per diem pd.					Ū.	-					
Central Lake Ontario         627 km2         344,465         4,018,634.00         7         0         1         1         1         550.00 / meeting         0.54         \$2,500.00 / yr         0.00         Chai           Credit Valley         949 km2         837,343         21,790,524.00         6         1         4         3         Chai												



#### TO: The Chairman and Members of the Authority

DATE: December 2, 2013

#### SUBJECT: Permit Requirements 2014/2015 Proposed Rates - Report No. 116-13

As the Board will recall, the NPCA previously provided the applicant with engineering criteria required to allow for a permit at the above noted site. The NPCA recently received a report entitled 'Geotechnical Letter Report – Slope Stability Assessment #2 at 5 Pine Street, St. Catharines, Ontario" dated 19 November 2013 by Coffey Geotechnics Inc.

In the Niagara Peninsula Conservation Authority's (NPCA) Report No. 41-13, five (5) items were required to be addressed in order to satisfy the NPCA's concerns with respect to slope stability. To this end, the NPCA has reviewed the recent report intended to support of the applicant's petition for a permit.

The NPCA offers the following comments are presented to the NPCA Board:

- 1) The NPCA required confirmation from the Geotechnical Engineer that they have recently inspected the works as constructed in the field and that the previous study from 2007 included collection of sufficient field/bore samples to reliably characterize the slope including the surface and subsurface soil and groundwater conditions as of today, with respect to accommodating the constructed solar panel arrays.
  - a. There is no confirmation in the Coffey report that a geotechnical engineer has recently been out to inspect the works as constructed in the field.
  - b. The Coffey report does not explicitly state that the 2007 field/bore samples are adequate to reliably characterize the surface and surface soil and groundwater conditions as of today.
- 2) The NPCA required confirmation from the Geotechnical Engineer that the 'asconstructed' bearing elevation of the solar panel array footings is safely beyond both the surficial failure zone and the deeper rotational failure envelope identified for the slope.
  - a. In the Coffey report, 'Section 2.1 Assumptions/Limitations' indicates that:
    - i. 'Details used to model the solar panel foundations were provided by the Owner. Actual dimensions have not been verified at the site.'

ii. 'The construction of the solar panel infrastructure was not supervised by Coffey and therefore we cannot confirm the quality of the construction nor does the information provided to Coffey accurately reflect the as-built condition.

As such, the 'as-constructed' bearing elevation has not been confirmed.

b. The Coffey report does not explicitly state that the 'as-constructed' bearing elevation of the solar panel array footings is safely beyond both the surficial failure zone and the deeper rotational failure envelope identified for the slope.

# 3) The existing slope has been identified as showing signs of surficial instability. The NPCA required confirmation and/or recommendations from a Qualified Engineer to ensure that the foundation structure will not buckle in a superficial slough/slide failure.

a. The Coffey report contains neither confirmation nor recommendations regarding the issue of the structure buckling during a superficial slide failure.

## 4) The NPCA required confirmation from the Geotechnical Engineer as to how susceptible the stability of the bank/structure is to fluctuations in the groundwater levels noted in the boreholes.

a. In the Coffey report, 'Section 2.1 – Assumptions/Limitations' indicates that 'Potential fluctuations in groundwater level has not been considered.' As such, this issue has not been addressed.

## 5) The NPCA required that drawings be included in the report to reflect what has been installed.

- a. No drawings of the solar panel array installation were included with the report.
- 6) The NPCA notes that the Coffey report's 'Table B: Factors of Safety' indicates the minimum calculated Factors of Safety for four scenarios. A Factor of Safety is calculated by dividing the forces resisting slope movement by the forces driving slope movement. A typical Factor of Safety applied to slopes is 1.5 (see CVC Slope Stability Guidelines). A 1.5 Factor of Safety means that the forces resisting slope movement are 50% greater than those forces seeking to collapse the slope.

Coffey's calculated Factors of Safety range from:

- i) 1.056 for the existing slope without the solar panels,
- ii) 1.060 for 0.6m thick solar panel foundation,
- iii) 1.099 for 1.2m thick solar panel foundation,
- iv) 1.176 for 1.8m thick solar panel foundation.

Agenda - Full Authority Meeting Dec 18, 2013 Page 6 of 70

These calculated Factors of Safety indicate that the opposing forces resisting and driving slope movement are nearly balanced. Based upon the numerous assumptions and limitations undertaken in the stability analysis, the NPCA would request that Coffey explain in greater detail how it can possibly be concluded that 'the addition of the solar panel foundation structures does not adversely affect the stability of the slope.'

7) Based upon the foregoing, the NPCA staff position concludes that this geotechnical report fails to adequately address any of the additional information required as outlined in the NPCA's Report No. 41-13.

#### **RECOMMENDATION:**

That the Geotechnical Letter Report – Slope Stability Assessment #2 at 5 Pine Street, St. Catharines, Ontario" dated 19 November 2013 by Coffey Geotechnics Inc. is insufficient to address the outstanding concerns of the NPCA and,

That the requirements as previously requested be reaffirmed to the applicant.

Respectfully Submitted By: Amario, P. Eng. CAO/ Secretary-Treasurer Tony



1

19 November 2013

5 Pine Street St. Catherines Ontario

Dear

RE: Geotechnical Letter Report Slope Stability Assessment #2 at 5 Pine Street, St. Catharines, Ontario,

#### 1. INTRODUCTION AND BACKGROUND

As per your e-mailed request to James Dann, Coffey Geotechnics Inc. (hereon "*Coffey*") has carried out the following geotechnical study regarding the stability of the slope at the southeast end of your property located at 5 Pine Street in St. Catherines, Ontario.

One previous investigation has been completed at the site by Coffey (formerly "Shaheen & Peaker Ltd." as at the time of the previous investigation), the findings from which are presented in report titled "Slope Stability Analysis at 5 and 9 Pine Street, St. Catherines, Ontario", referenced SPF223A&B, and dated May 1, 2007. Since the date of the aforementioned report, solar panel systems and associated foundation structures were installed on the slope. Two lines of foundation structures with increasing thicknesses of 0.6m, 1.2m, and 1.8m run across the slope at two locations: an upper line of structures about 2.5 downslope from the crest, and a lower line of structures at the toe of the slope.

The purpose of this study was to conduct a slope stability analysis for the existing conditions at the site to determine if the construction of the solar panel foundation structures has negatively influenced the stability of the slope.

#### 2. EVALUATION

#### 2.1 Assumptions/ Limitations

This analysis has been carried out with the following assumptions and limitations:

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 8 of 70

- Soil and groundwater input parameters used for this analysis were taken from Coffey's previous investigation report SPF233A&B as referenced in section 1 of this report.
- Details used to model the solar panel foundations were provided by Mr. Willie Wakulich. Actual dimensions have not been verified at the site.
- The construction of the solar panel infrastructure was not supervised by Coffey therefore we cannot confirm the quality of construction nor that the information provided to Coffey accurately reflects the as-built conditions.
- The geometry of the existing slope used for this analysis is based upon the critical cross section from the 2007 S&P report dated May 1, 2007 and may not represent the conditions across the entire site.
- Seismic effects have not been considered
- Potential fluctuations in groundwater level have not been considered
- The purpose of this assessment is not for compliance with new construction requirements.

#### 2.2 Summary of Input Parameters

A set of analyses has been carried out to assess the stability of the existing slope for four (4) different scenarios:

- a) the pre-construction condition (i.e. without the solar panel foundations),
- b) with 0.6m thick foundations
- c) with 1.2m thick foundations
- d) with 1.8m thick foundations

For the purpose of evaluating stability, we have assumed that the design cross section of the slope is the critical cross section provided in the 2007 S&P report. The soil properties and groundwater input parameters are also the same as the previous report, namely:

Material	Colour on Figures A to D	Depth Range (m)	Unit Weight (kN/ m <sup>3</sup> )	Effective Cohesion, c' / Undrained Shear Strength for φ <sub>u</sub> =0, Cu (kPa)	Effective Internal Friction Angle φ' (degrees)
Topsoil	brown	0 - 0.15	18	5	N/A
Compact Silty Sand	blue	0.15 - 2.00	18.5	0	35
Compact Sandy Silt	orange	2.00 - 4.7	18	0	36
Firm to Stiff Silty Clay	red	4.7 - 6.2	18.5	3	28
Very Dense Silt	green	6.2 - 12.5	20	0	38
Very Dense Sand and Gravel	yellow	12.5 - 13.5	21.5	15,000	N/A

#### **Table A: Material Input Parameters**

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 9 of 70

The soil and groundwater input parameters were imported into the slope stability software Slope/W manufactured by Geo-Slope International Ltd. The evaluation of slope stability was carried out with respect to potential shallow and deep seated failure surfaces. Summaries of the analyses and the associated Factors of Safety for the four (4) scenarios listed above are presented in Figures A to D in Appendix B.

#### 2.3 Results

The following Table B provides a summary of the minimum Factors of Safety (FOS) obtained from the analyses of the four (4) different scenarios :

Figure No.	Scenario	*Minimum FOS
А	Natural Slope	1.056
В	Post-Construction condition at location of 0.6m thick foundations	1.060
С	Post-Construction condition at location of 0.1.2m thick foundations	1.099
D	Post-Construction condition at location of 0.1.8m thick foundations	1.176

Table B: Factors of Safety (FOS)
----------------------------------

\* Minimum FOS subject to the assumptions/ limitations stated in section 2.1.

Summaries of each analysis are presented in Figure A to D in Appendix B.

#### 3. CONCLUSION/ CLOSURE

Based on the performed analyses and considering the assumptions and limitations provided in section 2.1 of this report, the addition of the solar panel foundation structures does not adversely affect the stability of the slope.

The reader's attention is drawn to the document entitled "Important information about your Coffey Report" attached in Appendix A.

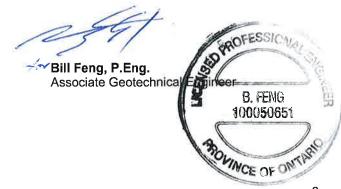
We trust that the information contained in this letter report is satisfactory for your present needs. Should you have any questions, please do not hesitate to contact the undersigned.

For and on behalf of Coffey Geotechnics Inc.

Alex Campbell, BScE Project Geotechnical Engineer

Reviewed by:

Dr. Aleksandar Spasojevic Principal Geotechnical Engineer



GEOTBURL21950AA | Coffey Geotechnics Inc. | 5040 Mainway Unit 8, Burlington, Ontario L7L 7G5 | 19 November 2013 5 Pine Street Slope Stability

Agenda - Full Authority Meeting Dec 18, 2013 Page 10 of 70

## Appendix A

#### Important Information about your Coffey Report



#### Important information about your Coffey Report

As a client of Coffey you should know that site subsurface conditions cause more construction problems than any other factor. These notes have been prepared by Coffey to help you interpret and understand the limitations of your report.

#### Your report is based on project specific criteria

Your report has been developed on the basis of your unique project specific requirements as understood by Coffey and applies only to the site investigated. Project criteria typically include the general nature of the project; its size and configuration; the location of any structure on the site; other site improvements; the presence of underground utilities; and the additional risk imposed by scope-of-service limitations imposed by the client. Your report should not be used if there are any changes to the project without first asking Coffey to assess how factors that changed subsequent to the date of the report affect the report's recommendations. Coffey cannot accept responsibility for problems that may occur due to changed factors if they are not consulted.

#### Subsurface conditions can change

Subsurface conditions are created by natural processes and the activity of man. For example, water levels can vary with time, fill may be placed on a site and pollutants may migrate with time. Because a report is based on conditions which existed at the time of subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time. Consult Coffey to be advised how time may have impacted on the project.

#### Interpretation of factual data

Site assessment identifies actual subsurface conditons only at those points where samples are taken and when they are taken. Data derived from literature and external data source review,

sampling and subsequent laboratory testing are interpreted by geologists, engineers or scientists to provide an opinion about overall site conditions, their likely impact on proposed development and recommended actions. Actual conditions may differ from those inferred to exist, because no professional, no matter how qualified can reveal what is hidden by earth rock and time. The actual interface between materials may be far more gradual or abrupt than assumed based on the facts obtained. Nothing can be done to change the actual site conditions which exist, but steps can be taken to reduce the impact of unexpected conditions. For this reason, owners should retain the services of Coffey through the development stage, to identify variances, conduct additional tests if required, and recommend solutions to problems encountered on site.

### Your report will only give preliminary recommendations

Your report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until project implementation has commenced and therefore vour report recommendations can only be regarded as preliminary. Only Coffey, who prepared the report, is fully familiar with the background information needed to assess whether or not the report's recommendations are valid and whether or not changes should be considered as the project develops. If another party undartakes the implementation of the recommendations of this report there is a risk that the report will be misinterpreted and Coffey cannot be held responsible such misinterpretation. for



#### Your report is prepared for specific purposes and persons

To avoid the misuse of the information contained in your report it is recommended that you confer with Coffey before passing your report on to another party who may not be familiar with the background and the purpose of the report. Your report should not be applied to any project other than that originally specified at the time the report was issued.

#### Interpretation by other design professionals

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a report. To help avoid misinterpretations, retain Coffey to work with other project design professionals who are affected by the report. Have Coffey explain the report implications to design professionals affected by them and then review plans and specifications produced to see how they incorporated the report findings.

#### Data should not be separated from the report

The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way.

Logs, figures, drawings, etc. are customarily included in our reports and are developed by scientists, engineers or geologists based on their interpretation of field logs (assembled by field personnel) and laboratory evaluation of field samples. These logs etc. should not under any circumstances be redrawn for inclusion in other documents or seperated from the report in any way.

#### Geoenvironmental concerns are not at issue

Your report is not likely to relate any findings, conclusions, or recommendations about the

potential for hazardous materials existing at the site unless specifically required to do so by the client. Specialist equipment, techniques, and personnel are used to perform geoenvironmental assessment.

Contamination can create major health, safety and environmental risks. If you have no information about the potential for your site to be contaminated or create an environmental hazard, you are advised to contact Coffey for information relating to geoenvironmental issues.

#### Rely on Coffey for additional assistance

Coffey is familiar with a variety of techniques and approaches that can be used to help reduce risks for all parties to a project, from design to construction. It is common that not all approaches will be necessarily dealt with in your site assessment report due to concepts proposed at that time. As the project progresses through design towards construction, speak with Coffey to develop alternative approaches to problems that may be of genuine benefit both in time and cost.

#### **Responsibility**

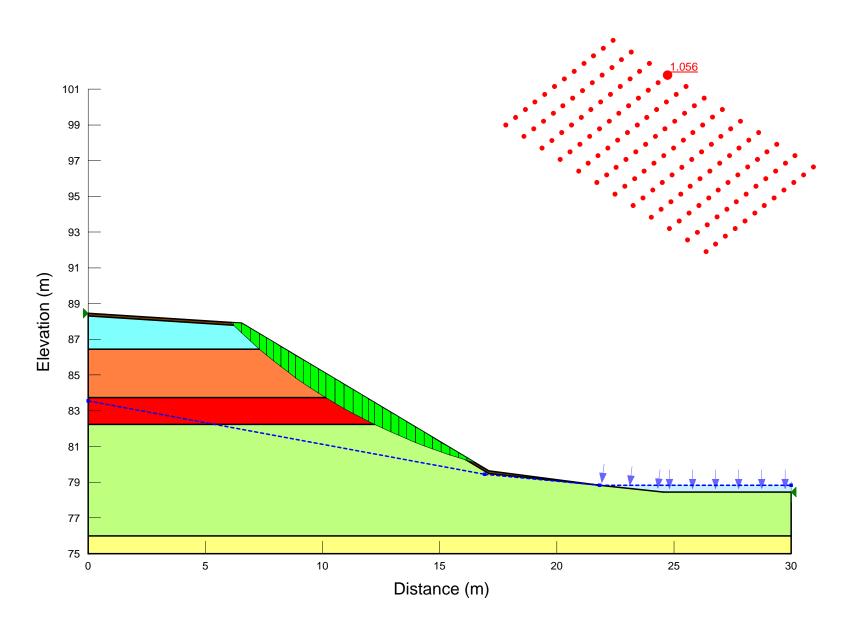
Reporting relies on interpretation of factual information based on judgement and opinion and has a level of uncertainty attached to it, which is far less exact than the design disciplines. This has often resulted in claims being lodged against consultants, which are unfounded. To help prevent this problem, a number of clauses have been developed for use in contracts, reports and other documents. Responsibility clauses do not transfer appropriate liabilities from Coffey to other parties but are included to identify where Coffey's responsibilities begin and end. Their use is intended to help all parties involved to recognise their individual responsibilities. Read all documents from Coffey closely and do not hesitate to ask any questions you may have.

Agenda - Full Authority Meeting Dec 18, 2013 Page 13 of 70

## Appendix B

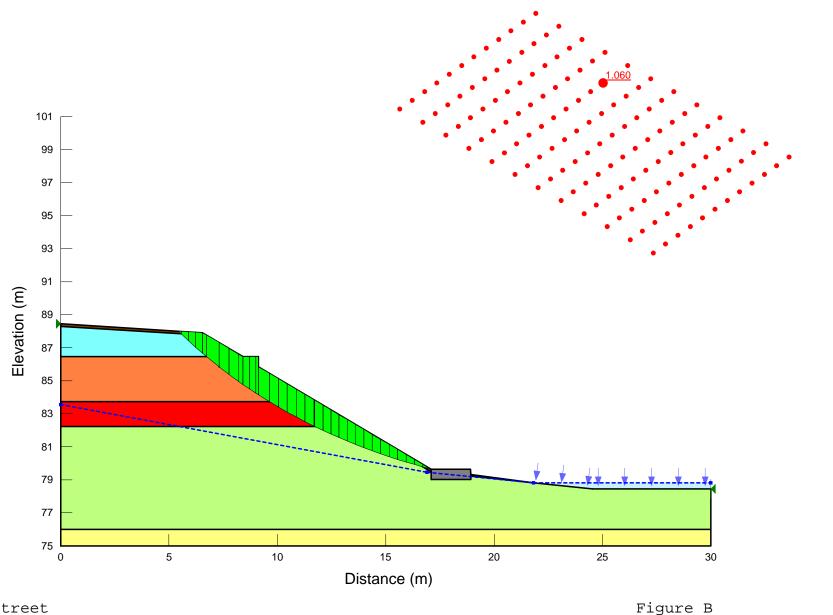
Figures A, B, C and D.

Agenda - Full Authority Meeting Dec 18, 2013 Page 14 of 70



5 Pine Street Slope Stability GEOTBURL21950AA

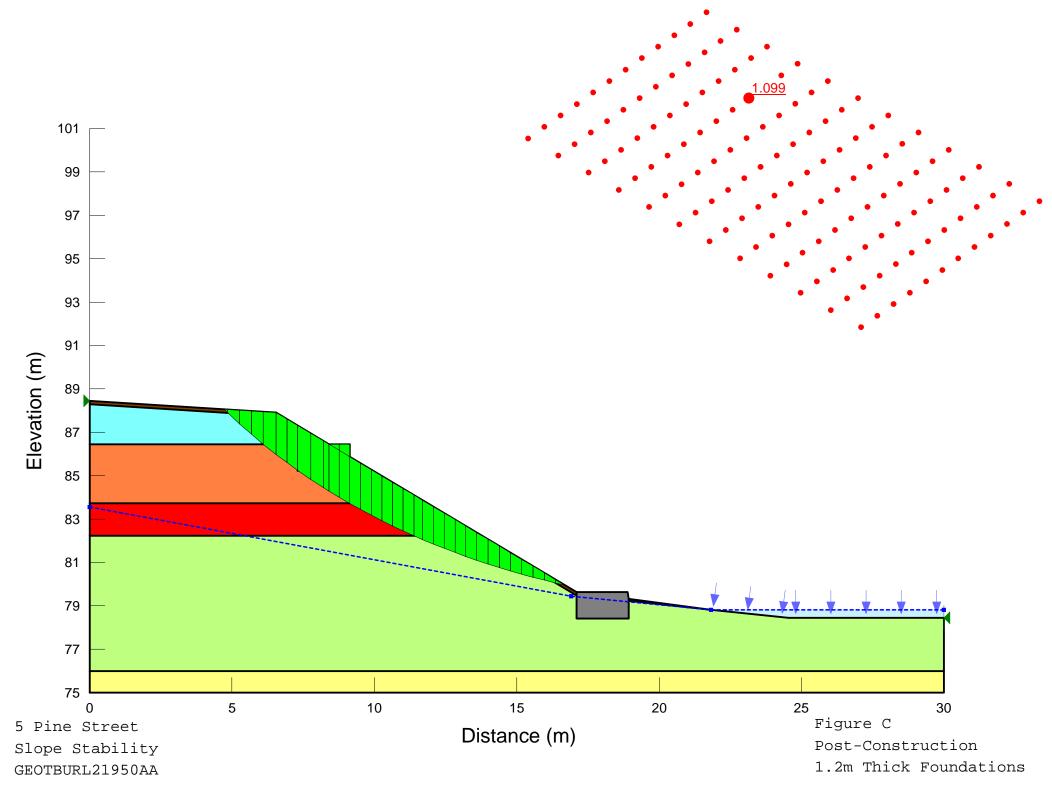
Figure A Natural Slope Before Construction Agenda - Full Authority Meeting Dec 18, 2013 Page 15 of 70



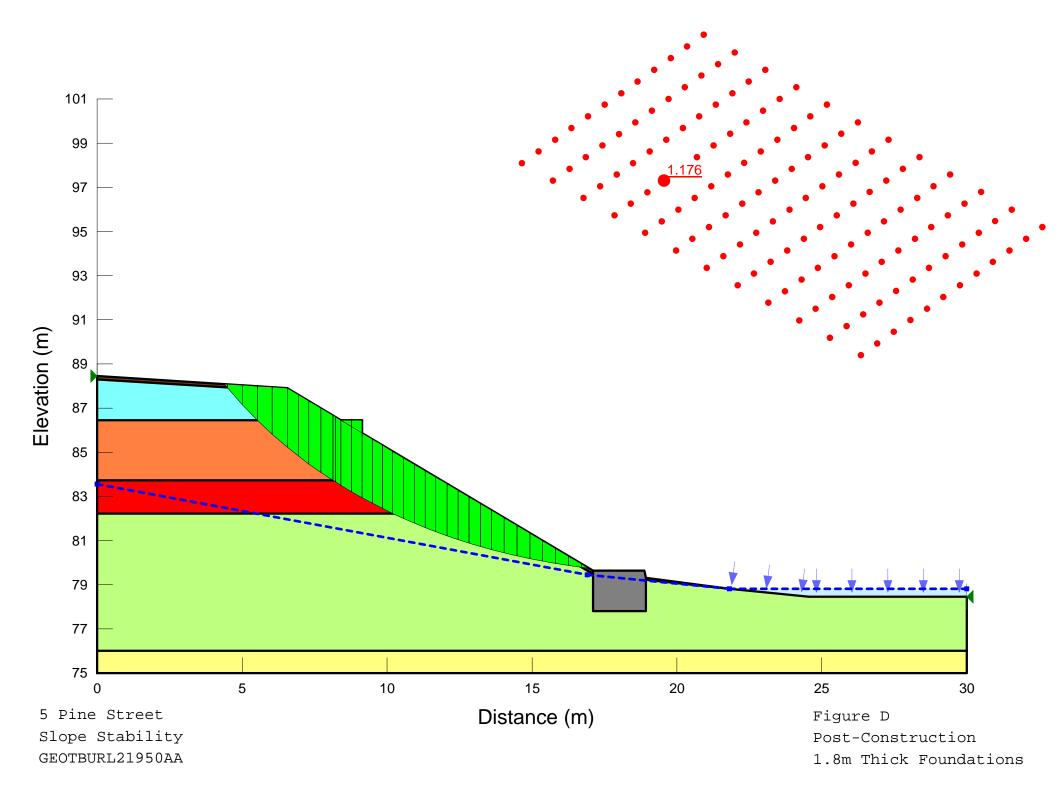
5 Pine Street Slope Stability GEOTBURL21950AA

Figure B Post-Construction 0.6m Thick Foundations





Agenda - Full Authority Meeting Dec 18, 2013 Page 17 of 70



#### Agenda - Full Authority Meeting Dec 18, 2013 Page 18 of 70



#### **SLOPE STABILITY DEFINITION & DETERMINATION GUIDELINE**

LONG TERM STABLE SLOPE LINE: consists of the Stability Component and the Erosion Component

#### STABILITY COMPONENT

**Definition**: The setback gradient line measured from the toe of the slope, or channel assuming the location of the toe remains fixed with time. (See Figures 1, 3 and 4b and 4c).

#### **Factors for Consideration:**

- soil strength
- groundwater conditions
- slope geometry

- changing load conditions
- weathering of slope face
- increases in surface runoff over slope

#### condition of vegetation Method of Calculation:

There are three methods of establishing this component. Each method is progressively more involved as indicated in Figure 2.

**Factor of Safety:** 

Minimum Factor of safety of 1.5 is required.

#### **EROSION COMPONENT**

Definition: The regression of the slope toe/channel bank due to erosion over the design life of the structure at the crest of the slope and is measured as a horizontal distance. (See Figures 1, 4b, and 4c).

#### **Factors for Consideration:**

- proximity of the slope toe to the sediment load carried by the watercourse watercourse

• fluvial geomorphological processes affecting the reach

- average and peak flow rates and velocities of the watercourse
- susceptibility of the soils to erosion
- type and extent of vegetation
- increases in surface runoff over slope •

within which the site is located.

Authority planting programme)

weathering of slope face

#### **Method of Calculation:**

As outlined in Figure 4a, the distance from the toe of the valley wall to the watercourse channel bank as well as the design erosion allowance must be determined. The erosion is measured horizontally from the top of the channel bank or the location of the bankfull flow, whichever is lower in elevation (Figure 4c).

#### DEVELOPMENT SETBACK COMPONENT

Definition: A minimum allowance from the identified slope hazard area to take into account external conditions which could have an adverse effect on the existing natural conditions of the slope. This setback distance maybe superseded by more stringent municipal or provincial requirements. For minimum allowance refer to CVC's Watershed Planning and Regulation Policies (2010).

#### **Factors for Consideration:**

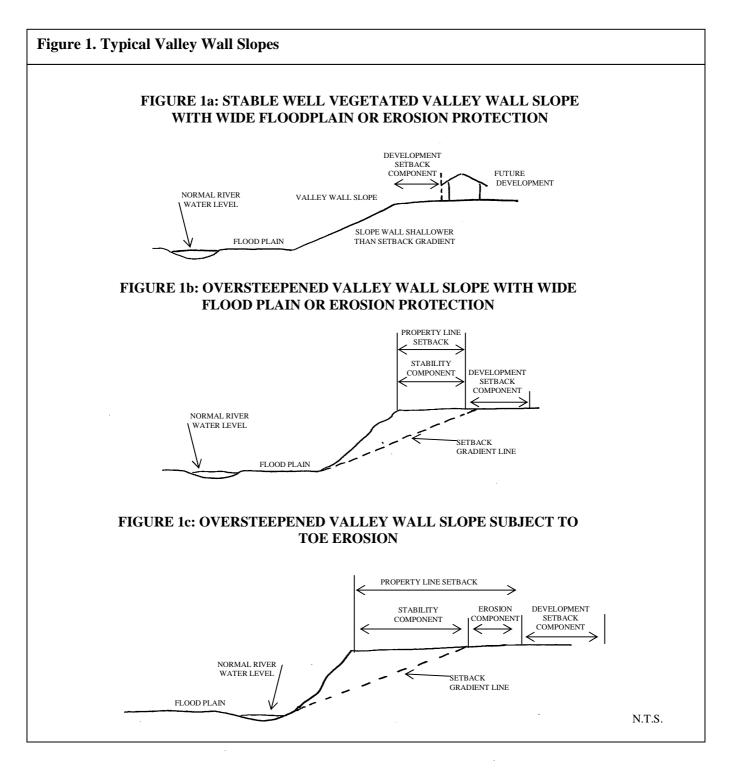
- provide an access point along the crest of the slope
- allow for the placement of sediment control measures and limit of working easement if necessary.
- keep heavy equipment away from the slope

- provide tableland area for potential future revegetation and/or reforestation (e.g. Credit Valley Conservation
- allow for the redirection of surface flows away form the slope hazard area

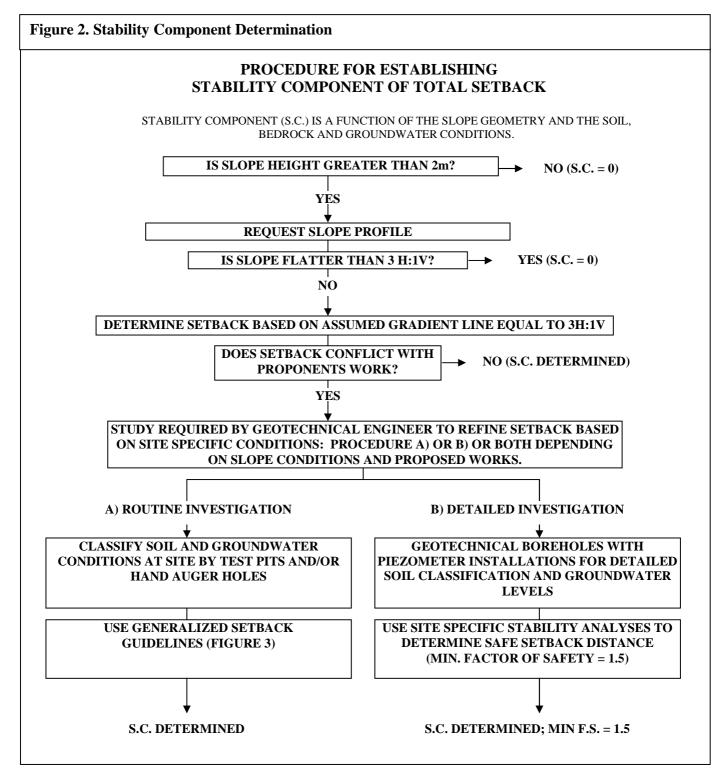
#### **Method of Calculation:**

Measured as the horizontal distance from the approved top of bank or from the combined distance derived from the Stability and Erosion Components whichever is the greater. (see Figure 1).

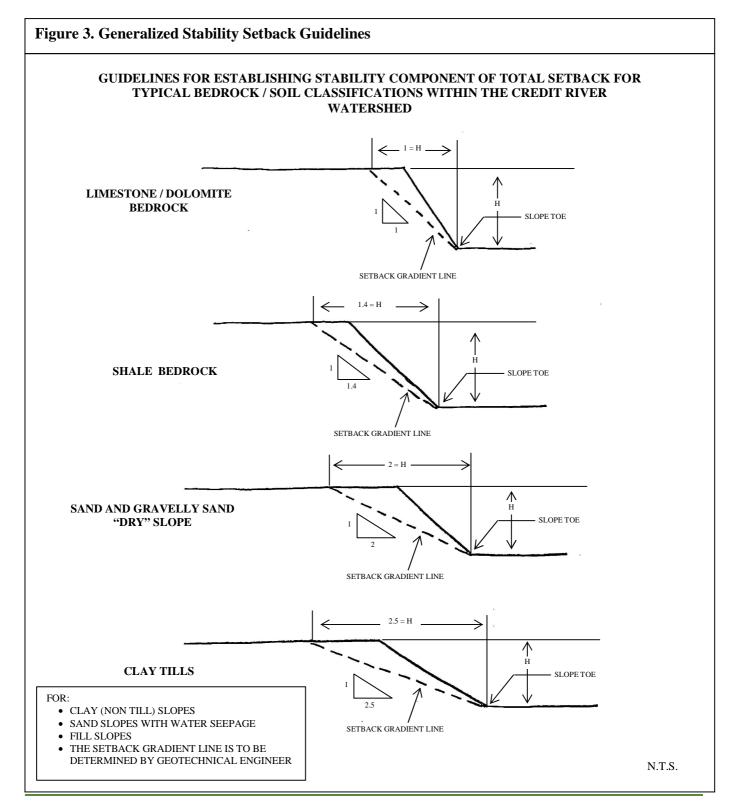






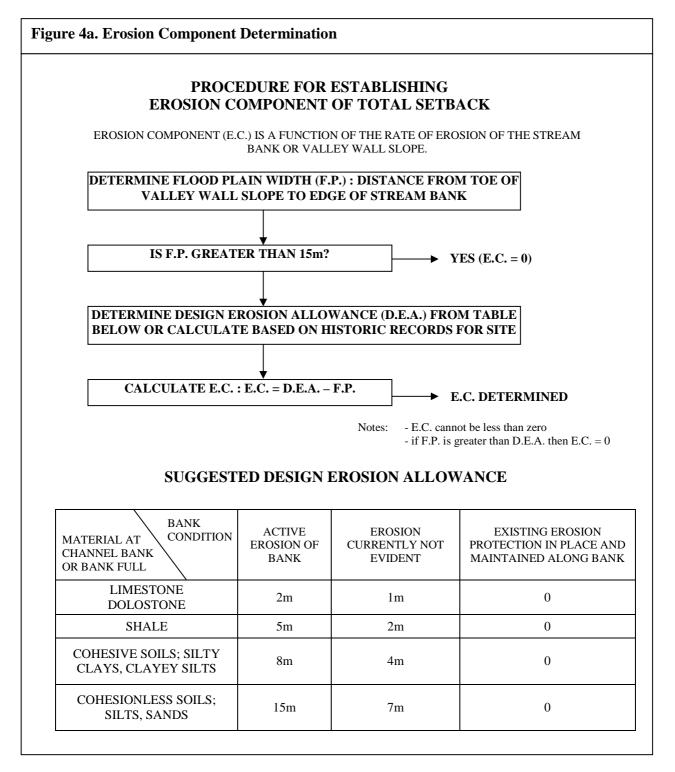




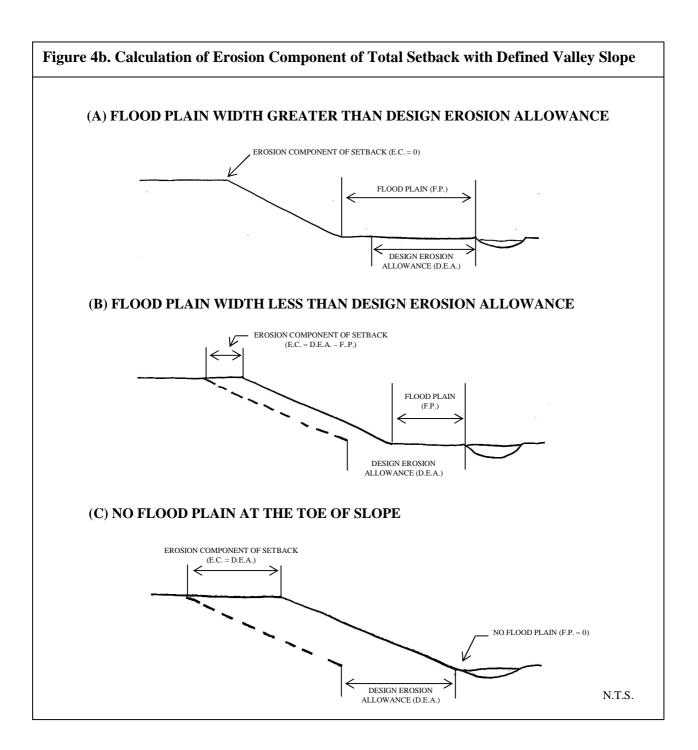


September 2011

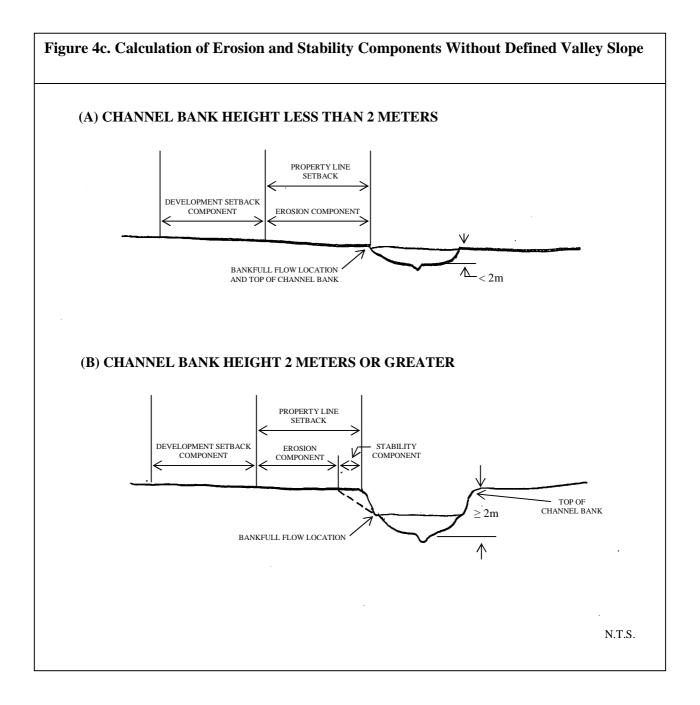




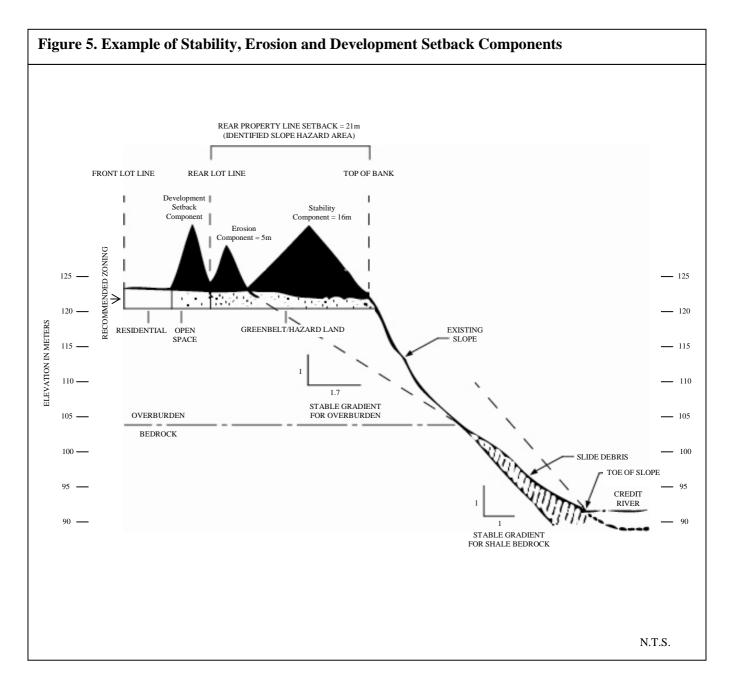




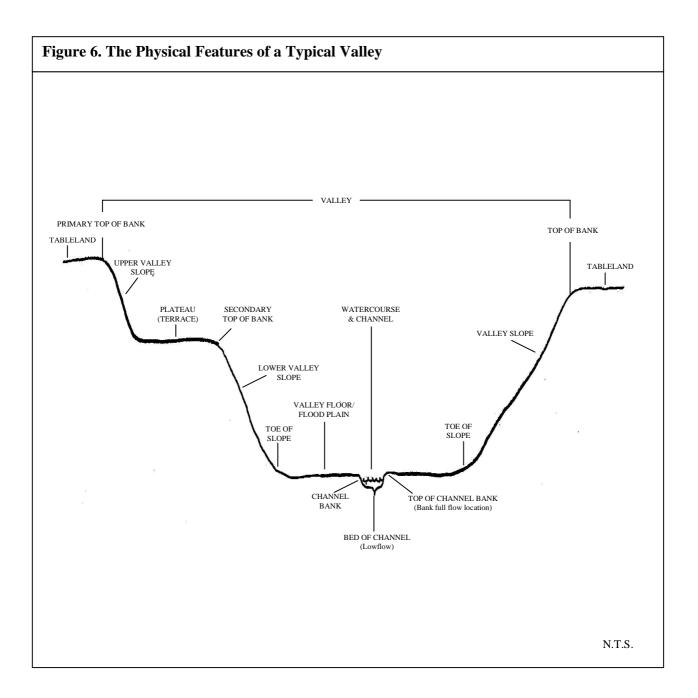














#### TO: The Chairman and Members of the Authority

DATE: December 10, 2013

#### SUBJECT: Strategic Plan Update - Report No. 117-13

As board members are aware, the Draft Strategic Plan Public Consultation meetings were held on November 12 and 13 with a total of 103 participants in attendance.

The public had until December 6<sup>th</sup> to submit comments with regards to the **Draft** Strategic Plan. A total of 42 submissions were received directly through the NPCA which have been forwarded to Todd MacDonald at Performance Concepts.

A meeting will be scheduled with the Strategic Plan Steering Committee to review the comments with the consultant within the first week of January 2014, at which time, all public comments will be discussed and the plan will be modified *if* necessary.

#### **RECOMMENDATION:**

That Report No 117-13 be received for information.

Prepared by: Mary Stack

Respectfully Submitted By: Tony D'Amariø, P. Eng. CAO/ Secretary-Treasurer

Page 1 of 1 8.0 Strategic Plan Update Report No. 117-13



#### TO: The Chairman and Members of the Authority

DATE: December 2, 2013

SUBJECT: Ball's Falls Proposed Fee Schedule 2014/2015 - Report No. 118-13

Attached are the proposed facility rental fees for the Ball's Falls Conservation Area for the fiscal period of 2014/15. As a popular location for weddings and other events it is necessary to have this information available to prospective customers in January 2014.

In the past 2 years rates have remained consistent or increased slightly. For 2015 it is proposed that the rental rates for the Barn be increased to correspond with rates of comparable facilities within the marketplace.

Of note, the Barn is fully booked for all weekends in 2014 (Fridays, Saturdays and Sundays) as of August, 2013. We are currently taking booking Barn weddings for Thursdays and Mondays. There are also an increased number of bookings for the Glen Elgin Room in the Centre for Conservation. The proposed rates would equate to a revenue increase of approximately \$18,000 in 2015.

Staff is proposing a decrease in admission rates during the winter months as the historical buildings are not open during this season. By way of comparison, the Hamilton Authority offers a lower entrance fee in the winter. A lower admission rate may attract more visitors to visit the site who might otherwise go elsewhere where there is a lesser or no admission fee.

#### **RECOMMENDATION:**

That the proposed Ball's Falls Fee Schedule for 2014/2015 be approved.

Respectfully Submitted By: D'Amario, P. Eng. CAO/ Secretary-Treasurer

#### Admission and Rental Fees Ball's Falls Conservation Area

\*HST applies to all rental fees

#### Group Camping – 2014

Site Fee \$20/night + \$4/pp/night – minimum charge \$50/night. Basic site fee increases by increments of \$20/per 25 persons – **NOTE: For conservation or organized youth camping only!** 

#### **Rental Fees for Weddings & Receptions**

Historical Church	2013	2014	2015
Church Wedding (2 hour limit)	\$577	\$577	\$577
The Big Barn (April-October)	2013	2014	2015
Reception – No Alcohol	\$625	\$688	\$890
Reception – Alcohol Permit Required	\$800	\$880	\$1,150
Set Up Only Fee (5p.m 10 pm.)if available 2 weeks prior to	\$50	\$ 50	\$ 75
All Barn Wedding Ceremonies are to be held inside only.			
No outside receptions permitted.			
REQUIRED FOR ALL BARN RENTALS			
\$500 SECURITY DEPOSIT			
Centre for Conservation Glen Elgin Room	2013	2014	2015
Reception – No Alcohol	\$1,100	\$1,100	\$1,155
Reception – Alcohol Permit Required	\$1,280	\$1,280	\$1,400
Set Up Only Fee (5p.m. – 10 pm.) if available 2 weeks prior to	\$150	\$150	\$150
Outdoor Wedding	2013	2014	2015
All outdoor wedding ceremonies to be held in	\$500	\$500	\$500
designated area only with a maximum of 25 persons,			
includes pavilion			
Rental Packages	2013	2014	2015
Church Wedding & Barn Reception – No Alcohol	\$1,185	\$1,215	\$1,420
Church Wedding & Barn Reception – Licensed (Alcohol)	\$1,320	\$1,407	\$1,675
Church Wedding & Centre for Conservation Reception-	\$1,650	\$1,650	\$1,680
No Alcohol			
Church Wedding & Centre for Conservation Reception-	\$1,820	\$1,820	\$1,925
Licensed (Alcohol)			
Outdoor Wedding & Barn Reception – No Alcohol	\$985	\$985	\$1,340
Outdoor Wedding & Barn Reception – Licensed (Alcohol)	\$1,129	\$1,129	\$1,600
Outdoor Wedding & Centre for Conservation Reception	\$1,544	\$1,544	\$1,605
– No Alcohol			
Outdoor Wedding & Centre for Conservation Reception	\$1,706	\$1,706	\$1,850
– Licensed (Alcohol)	1		

**NOTE:** Use of the Patio is included in the Centre for Conservation – Glen Elgin Room rentals, however, if you wish to have alcohol on the patio, there is an additional fee of \$250 plus HST and it is to be included in your alcohol permit.

#### NEW FOR 2015- Centre for Conservation – Glen Elgin Room

#### Wedding Ceremonies up to 175 guests 3 hour time limit (11:00 a.m. – 4:00 pm.)

Glen Elgin Room Wedding Ceremony Only	\$750
Glen Elgin Room Wedding Ceremony & Barn Reception – no	\$1,590
alcohol	
Glen Elgin Room Wedding Ceremony & Barn Reception -	\$1,850
Licensed (Alcohol)	

Day use rates – Kids 5 years and under are FREE!	2013/2014 May/October	NEW FOR 2014 November/April
Adults	\$5.75	\$5.00
Seniors/Students	\$4.25	\$3.50
Maximum per car (adults)	\$18	\$14.00
Maximum per car (when renting snowshoes) (minimum 2 rentals)		\$10.00

Membership Passes	
Membership Pass Regular	\$70 plus HST
Membership Pass Senior (65 +)	\$60 plus HST

GROUP HISTORICAL TOURS – 2014 (May 1-October 31 by reservation only)					
Organized Adult Group Tours	\$6 per person				
Organized Senior Group Tours (65+)	\$4.50 per person				
Organized School Group Tours *	\$75 minimum				
Specialized program fees may apply*					

Facility Rentals		
Barn Rentals (April-October)	2013/14	2015
Non-Wedding (Sunday-Thursday)*	\$430	\$450
Non-Wedding (Friday-Saturday)*	\$625	\$655
Education/Small Groups (weekdays only – does not include park admission fee)	\$110	\$115
Licensed Reception*	\$800/\$880	\$1,150
Non Licensed Reception*	\$625	\$810
*Plus \$500 security (damage) deposit		

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 31 of 70

Field Centre – 2014	
20 Person Maximum	\$100/day

Picnic Pavilion Rental*		2013	2014	
Weekends (Saturday/Sund	ay)	\$70	\$75	
Weekdays		\$40	\$45	
Pavilion Group Admission	1 – 50 people	\$100	\$110	
Rates				
	51-100 people	\$200	\$220	
	101-150	\$300	\$330	
	Over 150 people	Contact office		
Does not include park adm	nission fee	•		

Church Rental other than weddings (Sunday-Friday)	2013/14	2015
Church Service (up to 50 guests)	\$116	\$120
Church service (up to 100 guests)	\$173	\$180

VENUE /Elgin/Glen/Glen Elgin	2013/14	2015
Glen Elgin Non Wedding Rate (Friday/Saturday)	\$1,100	\$1,155
Glen Elgin Non Wedding Rate (Sunday-Thursday)	\$515	\$540
Glen Room (Sunday-Thursday)	\$378	\$400
Elgin Room (Sunday-Thursday)*	\$142	\$150
Glen Elgin Room Non-Profit Rate (Sunday-Thursday)*	\$378	\$400
Glen Elgin Room Licensed Reception*	\$1,280	\$1,400
Glen Elgin Room Non-Licensed Reception*	\$1,100	\$1,155
REQUIRED FOR ALL ELGIN/GLEN/GLEN ELGIN RENTALS \$1,000 SECURITY DEPOSIT		

\*\*\*\* see below for new items

NEW FOR 2014	
Administration fee for confirmed wedding booking changes	\$25.00
Administration fee for confirmed program/room changes	\$10.00



#### To: Chairman and Members of the Authority

Date: December 9, 2013

#### Subject: Proposed 2014 Conservation Areas Hunting Permit Fee- Report No. 119-13

The Niagara Peninsula Conservation Authority grants permission to hunters to use designated conservation areas for controlled hunting activities. Since 2006, the administration fee for the issuance of hunting permits has been \$25.00 inclusive.

The permit fee charged has not historically been intended as a revenue generation program, rather, it is a cost recovery initiative which assists staff in tracking hunting activities through harvest reports returned by the hunters. Information procured through the program is used to make resource management decisions.

From an administrative and safety process, information issued with the permits serves as identification that the huntsman has authorization to hunt on NPCA lands and outlines procedures and terms for hunting activities.

The program is highly successful and simple to administer. Staff is recommending that we continue with the program and maintain the fee at the \$25.00 level.

#### **RECOMMENDATION:**

## That Report No. 119-13 regarding the 2014 Conservation Areas Hunting Permit fee be approved.

Prepared by: Kim Frohlich- Ecologist

Respectfully Submitted By: mario, P Eng. CAO/ Secretary-Treasurer



#### TO: The Chairman and Members of the Authority

DATE: December 2, 2013

SUBJECT: Budget Status Report - Report No. 120-13

Attached is the budget status report for the period ending November 30, 2013.

I will provide an update on the budget status at the meeting. In addition, a preliminary year-end report outlining the final budget variances and recommended reallocations if required will be presented to the Board early in the New Year.

#### **RECOMMENDATION:**

That the Budget Status Report No. 120-13 for the period ending November 30, 2013 be received.

Respectfully Submitted By: Tony D'Amario, P. Eng. CAO/ Secretary-Treasurer

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 34 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY CURRENT BUDGET SUMMARY 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
MNR TRANSFER PAYMENTS	0.00	174,496.00	174,500.00	100.00
PROVINCIAL GRANTS-MOE	30,000.00	67,003.87	58,300.00	114.93
PROVINCIAL GRANTS-OTHER	12,000.00	12,000.00	20,000.00	60.00
FEDERAL GRANTS	0.00	30,539.86	41,000.00	74.49
MUNICIPAL LEVY-GENERAL	0.00	7,640,457.00	2,508,645.00	304.57
LEVY-SPECIAL-NIAGARA	0.00	0.00	3,086,444.00	0.00
LEVY-SPECIAL-HAMILTON	0.00	0.00	120,047.00	0.00
LEVY-SPECIAL-HALDIMAND	0.00	0.00	10,710.00	0.00
LEVY-SPECIAL-OTHER	0.00	0.00	8,300.00	0.00
USER FEES	37,218.90	1,240,122.78	1,499,395.00	82.71
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
ADMINISTRATION FEES	21,365.50	296,098.50	220,000.00	134.59
RESERVE FUNDS	0.00	0.00	90,000.00	0.00
MISCELLANEOUS	13,118.85	171,021.50	361,571.00	47.30
	113,703.25	9,631,739.51	8,198,912.00	117.48
EXPENDITURES				
CORPORATE SERVICES	121,997.48	1,162,025.85	1,292,425.00	89.91
RESOURCE INV. & ENV. MONITORING	43,691.41	448,456.89	496,877.00	90.26
FLOOD PROTECTION SERVICES	34,851.59	454,975.07	485,340.00	93.74
ENVIRONMENTAL ADVISORY SERVICES	35,695.10	451,497.07	499,189.00	90.45
CONSERVATION LAND MANAGEMENT	71,771.52	1,955,785.73	2,779,943.00	70.35
CONSERVATION LAND PROGRAMMING	163,856.81	2,122,463.47	2,438,941.00	87.02
VEHICLES & EQUIPMENT	11,053.94	149,612.18	191,940.00	77.95
	482,917.85	6,744,816.26	8,184,655.00	82.41

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 35 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY CORPORATE SERVICES - CURRENT 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
MNR TRANSFER PAYMENTS	0.00	0.00	0.00	0.00
PROVINCIAL GRANTS-OTHER	0.00	0.00	0.00	0.00
MUNICIPAL LEVY-GENERAL	0.00	7,640,457.00	1,188,324.00	642.96
LEVY-SPECIAL-NIAGARA	0.00	0.00	24,101.00	0.00
INTEREST INCOME	4,198.30	41,620.56	50,000.00	83.24
MISCELLANEOUS	143.00	9,593.45	30,000.00	31.98
RESERVE FUNDS	0.00	0.00	0.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
	4,341.30	7,691,671.01	1,292,425.00	595.13
EXPENDITURES				
CORPORATE MANAGEMENT	26,844.36	290,891.30	312,700.00	93.03
OFFICE SERVICES	35,225.03	295,643.48	373,100.00	79.24
FINANCIAL SERVICES	12,875.44	169,111.56	202,300.00	83.59
HUMAN RESOURCES	5,190.01	75,704.28	33,500.00	225.98
INFORMATION TECHNOLOGY	29,147.35	84,544.12	133,601.00	63.28
CORPORATE COMMUNICATIONS	12,715.29	246,131.11	237,224.00	103.75
CORPORATE FUNDRAISING	0.00	0.00	0.00	0.00
	121,997.48	1,162,025.85	1,292,425.00	89.91

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 36 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY RESOURCE INVENTORY & ENVIRONMENTAL MONITORING - CURRENT 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
MNR TRANSFER PAYMENTS	0.00	0.00	0.00	0.00
PROVINCIAL GRANTS-MOE	30,000.00	67,003.87	58,300.00	114.93
PROVINCIAL GRANTS-OTHER	12,000.00	12,000.00	0.00	0.00
FEDERAL GRANTS	0.00	30,539.86	41,000.00	74.49
MUNICIPAL LEVY-GENERAL	0.00	0.00	315,377.00	0.00
LEVY-SPECIAL-NIAGARA	0.00	0.00	0.00	0.00
LEVY-SPECIAL-HAMILTON	0.00	0.00	0.00	0.00
LEVY-SPECIAL-HALDIMAND	0.00	0.00	0.00	0.00
LEVY-SPECIAL-OTHER	0.00	0.00	0.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
RESERVE FUNDS	0.00	0.00	0.00	0.00
MISCELLANEOUS	7,387.42	97,490.04	82,200.00	118.60
EXPENDITURES	49,387.42	207,033.77	496,877.00	41.67
NIAGARA R. REMEDIAL ACTION PLAN	10,399.60	89,314.94	99,300.00	89.94
GLANBROOK LANDFILL MONITORING	667.04	8,313.57	10,000.00	83.14
JOHN C. MUNROE AIRPORT MONITORING	106.30	1,560.59	2,200.00	70.94
DRAIN CLASSIFICATION	50.50	614.40	0.00	0.00
W/S WATER QUALITY MONITORING	14,962.12	169,792.63	205,377.00	82.67
NIAGARA CHILDREN'S WATER FESTIVAL	17,505.85	177,284.09	140,000.00	126.63
WATERSHED REPORT CARD	0.00	1,576.67	40,000.00	3.94
	43,691.41	448,456.89	496,877.00	90.26

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 37 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY FLOOD PROTECTION SERVICES - CURRENT 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
MNR TRANSFER PAYMENTS	0.00	115,700.00	115,700.00	100.00
PROVINCIAL GRANTS-OTHER	0.00	0.00	0.00	0.00
FEDERAL GRANTS	0.00	0.00	0.00	0.00
MUNICIPAL LEVY-GENERAL	0.00	0.00	261,340.00	0.00
LEVY-SPECIAL-NIAGARA	0.00	0.00	0.00	0.00
LEVY-SPECIAL-HAMILTON	0.00	0.00	0.00	0.00
LEVY-SPECIAL-HALDIMAND	0.00	0.00	0.00	0.00
LEVY-SPECIAL-OTHER	0.00	0.00	8,300.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
ADMINISTRATION FEES	10,950.00	143,793.00	100,000.00	143.79
RESERVE FUNDS	0.00	0.00	0.00	0.00
MISCELLANEOUS	0.00	0.00	0.00	0.00
	10,950.00	259,493.00	485,340.00	53.47
EXPENDITURES				
FLOOD FORECASTING AND WARNING	15,143.54	191,351.56	155,770.00	122.84
FLOOD CONTROL STRUCTURES	3,742.80	59,373.73	85,932.00	69.09
FLOODPLAIN REGULATIONS	15,965.25	204,249.78	243,638.00	83.83
	34,851.59	454,975.07	485,340.00	93.74

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 38 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY ENVIRONMENTAL ADVISORY SERVICES - CURRENT 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
MNR TRANSFER PAYMENTS	0.00	58,796.00	58,800.00	99.99
MUNICIPAL LEVY-GENERAL	0.00	0.00	320,389.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
ADMINISTRATION FEES	10,415.50	152,305.50	120,000.00	126.92
RESERVE FUNDS	0.00	0.00	0.00	0.00
MISCELLANEOUS	0.00	0.00	0.00	0.00
	10,415.50	211,101.50	499,189.00	42.29
EXPENDITURES				
MUNICIPAL PLAN INPUT & REVIEW	25,666.38	325,855.41	359,628.00	90.61
DEVELOPMENT PLAN INPUT & REVIEW	10,028.72	125,641.66	139,561.00	90.03

35,695.10 451,497.07

499,189.00

90.45

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 39 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY CONSERVATION LAND MANAGEMENT - CURRENT 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
PROVINCIAL GRANTS-OTHER	0.00	0.00	0.00	0.00
MUNICIPAL LEVY-GENERAL	0.00	0.00	322,275.00	0.00
LEVY-SPECIAL-NIAGARA	0.00	0.00	2,429,743.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
BUILDING/LAND RENTAL	725.00	7,975.00	8,425.00	94.66
RESERVE FUNDS	0.00	0.00	0.00	0.00
MISCELLANEOUS	1,390.13	16,344.00	19,500.00	83.82
	2,115.13	24,319.00	2,779,943.00	0.87
EXPENDITURES				
OPERATIONS	64,189.10	1,864,487.93	2,579,943.00	72.27
LAND STEWARDSHIP-AUTHORITY LANDS	0.00	0.00	0.00	0.00
FOREST MANAGEMENT-AUTHORITY LANDS	0.00	0.00	0.00	0.00
TREE CONSERVATION BY-LAW - NIAGARA	7,582.42	91,297.80	200,000.00	45.65
	71,771.52	1,955,785.73	2,779,943.00	70.35

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 40 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY CONSERVATION LAND PROGRAMMING - CURRENT 11 PERIODS ENDED 2013-11-30

	Current	Current	Approved	% of
REVENUES	Month	YTD	Budget	Budget
PROVINCIAL GRANTS-OTHER	0.00	0.00	20,000.00	0.00
MUNICIPAL LEVY-GENERAL	0.00	0.00	0.00	0.00
LEVY-SPECIAL-NIAGARA	0.00	0.00	632,600.00	0.00
LEVY-SPECIAL-HAMILTON	0.00	0.00	120,047.00	0.00
LEVY-SPECIAL-HALDIMAND	0.00	0.00	10,710.00	0.00
MISCELLANEOUS	0.00	0.00	178,871.00	0.00
RESERVE FUNDS	0.00	0.00	0.00	0.00
USER FEES		1,232,147.78	1,490,970.00	82.64
	36,493.90	1,232,147.78	2,453,198.00	50.23
EXPENDITURES				
BALL'S FALLS	69,523.12	881,469.79	959,095.00	91.91
BINBROOK	17,427.26	311,755.82	343,100.00	90.86
	14,592.79	301,992.71	306,150.00	98.64
	13,340.26	304,465.93	336,840.00	90.39
BAIRD ESTATE	0.00	2,924.48	2,415.00	121.10
BEAMER MEMORIAL BINBROOK TRACT	335.65	13,874.10 355.05	21,450.00	64.68 2.52
CAVE SPRINGS	0.00	4,279.04	14,115.00 12,525.00	34.16
COMFORT MAPLE	0.00 316.69	4,279.04 3,006.76	7,310.00	41.13
ELM STREET PROJECT	1,767.93	18,217.66	17,246.00	105.63
E.C.BROWN	333.14	6,375.40	13,215.00	48.24
GAINSBOROUGH	3,338.29	44,130.28	51,915.00	85.00
HEDLEY FOREST	806.31	1,610.18	3,010.00	53.49
HUMBERSTONE MARSH	0.00	466.60	3,210.00	14.54
JORDAN HARBOUR	1,998.89	5,500.46	5,625.00	97.79
LOUTH	0.00	1,411.19	1,560.00	90.46
MORGAN'S POINT	1,000.05	15,732.03	21,125.00	74.47
MOUNTAINVIEW	0.00	2,116.98	8,915.00	23.75
MUD LAKE	35.44	5,961.58	14,315.00	41.65
OSWEGO CREEK	0.00	51.43	3,350.00	1.54
PORT DAVIDSON	0.00	178.32	1,710.00	10.43
ROCKWAY	0.00	4,745.83	5,710.00	83.11
RUIGROK TRACT	907.96	2,276.83	4,350.00	52.34
STATION ROAD PROJECT	651.76	8,706.18	7,014.00	124.13
STEVENSVILLE	317.75	13,039.69	14,745.00	88.43
ST.JOHN'S	1,188.78	26,089.21	22,930.00	113.78
TWO MILE CREEK	229.52	3,375.97	5,160.00	65.43
	915.77	11,525.30	16,210.00	71.10
	24,941.68	27,829.05	10,510.00	264.79
THE GORD HARRY CONSERVATION TRAIL	1,247.15	15,753.29 8,738.61	11,460.00 13,410.00	137.46
WAINFLEET WETLANDS WAINFLEET ACCESS POINT PROJECT	184.79 2,671.20	16,621.52	11,811.00	65.16 140.73
WAINFEELT ACCESS FOINT FROJECT WILLOUGHBY MARSH	189.09	1,138.81	1,310.00	86.93
WOOLVERTON	0.00	688.73	1,210.00	56.93
GLENRIDGE QUARRY PROJECT	3,808.81	37,246.87	142,800.00	26.08
WOODEND	1,786.73	18,811.79	22,115.00	85.06
		2,122,463.47	2,438,941.00	87.02
	,	_, ,	_,	

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 41 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY VEHICLES AND EQUIPMENT - CURRENT 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
MUNICIPAL LEVY-GENERAL	0.00	0.00	100,940.00	0.00
VEHICLE/EQUIPMENT SALES	0.00	5,973.45	1,000.00	597.35
RESERVE FUNDS	0.00	0.00	90,000.00	0.00
	0.00	5,973.45	191,940.00	3.11
EXPENDITURES				
WAGES	1,013.73	9,198.60	27,000.00	34.07
INSURANCE & LICENSES	0.00	5,943.51	11,340.00	52.41
GAS/OIL	5,077.42	35,976.22	41,200.00	87.32
PURCHASES	0.00	67,477.70	90,000.00	74.98
MAINTENANCE	4,798.85	29,642.27	19,800.00	149.71
TOOLS & SUPPLIES	163.94	1,373.88	2,600.00	52.84
	11,053.94	149,612.18	191,940.00	77.95

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 42 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY CAPITAL BUDGET SUMMARY 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
MNR TRANSFER PAYMENTS PROVINCIAL GRANTS-MOE PROVINCIAL GRANTS-OTHER FEDERAL GRANTS MUNICIPAL LEVY-GENERAL LEVY-SPECIAL-NIAGARA LEVY-SPECIAL-HAMILTON LEVY-SPECIAL-HALDIMAND LEVY-SPECIAL-OTHER CAPITAL RESERVE-NIAGARA CONSERVATION FOUNDATION RESERVE FUNDS MISCELLANEOUS	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 1,394.00 522,301.32 199,904.34 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 295,487.00 181,000.00 645,205.00 1,002,195.00 267,210.00 0.00 600,000.00 51,000.00 459,300.00 281,311.00 <b>3,782,708.00</b>	0.00 0.00 176.76 110.44 0.00 0.00 0.00 0.00 0.00 0.00 0.
EXPENDITURES				
WATERSHED STUDIES	20,609.31	289,127.97	265,487.00	108.90
RESOURCE INV. & ENV. MONITORING	77,488.08	1,297,134.71	1,657,335.00	78.27
FLOOD PROTECTION SERVICES	19,751.86	235,529.62	358,386.00	65.72
CONSERVATION LAND DEVELOPMENT	193,931.32	618,094.02	1,501,500.00	41.17
	311,780.57	2,439,886.32	3,782,708.00	64.50

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 43 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY WATERSHED STUDIES - CAPITAL 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
μ. L				
MNR TRANSFER PAYMENTS	0.00	0.00	0.00	0.00
PROVINCIAL GRANTS-MOE	0.00	0.00	0.00	0.00
PROVINCIAL GRANTS-OTHER	0.00	498,594.72	265,487.00	187.80
FEDERAL GRANTS	0.00	0.00	0.00	0.00
MUNICIPAL LEVY-GENERAL	0.00	0.00	0.00	0.00
LEVY-SPECIAL-NIAGARA	0.00	0.00	0.00	0.00
LEVY-SPECIAL-HAMILTON	0.00	0.00	0.00	0.00
LEVY-SPECIAL-HALDIMAND	0.00	0.00	0.00	0.00
LEVY-SPECIAL-OTHER	0.00	0.00	0.00	0.00
CAPITAL RESERVE-NIAGARA	0.00	0.00	0.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
RESERVE FUNDS	0.00	0.00	0.00	0.00
MISCELLANEOUS	0.00	0.00	0.00	0.00
	0.00	498,594.72	265,487.00	187.80
EXPENDITURES				
SOURCE PROTECTION PLANS	20,577.42	288,003.97	265,487.00	108.48
SOURCE PROTECTION-TECHNICAL STUDIES	0.00	0.00	0.00	0.00
STORMWATER MGMT. POLICY STUDY	0.00	0.00	0.00	0.00
UPPER WELLAND RIVER W/S PLAN	0.00	385.57	0.00	0.00
CENTRAL WELLAND RIVER W/S PLAN	0.00	0.00	0.00	0.00
LOWER WELLAND RIVER W/S PLAN	0.00	0.00	0.00	0.00
LAKE ERIE NORTHSHORE W/S PLAN	0.00	11.91	0.00	0.00
BEAVERDAMS/SHRINER'S CREEK W/S PLAN	31.89	726.52	0.00	0.00
-	20,609.31	289,127.97	265,487.00	108.90

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 44 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY RESOURCE INVENTORY & ENVIRONMENTAL MONITORING - CAPITAL 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES	WOnth	110	Dudget	Duuger
MNR TRANSFER PAYMENTS	0.00	0.00	0.00	0.00
PROVINCIAL GRANTS-MOE	0.00	1,394.00	0.00	0.00
PROVINCIAL GRANTS-OTHER	0.00	2,785.35	0.00	0.00
FEDERAL GRANTS	0.00	199,904.34	181,000.00	110.44
MUNICIPAL LEVY-GENERAL	0.00	0.00	416,819.00	0.00
LEVY-SPECIAL-NIAGARA	0.00	0.00	428,995.00	0.00
LEVY-SPECIAL-HAMILTON	0.00	0.00	57,210.00	0.00
LEVY-SPECIAL-HALDIMAND	0.00	0.00	0.00	0.00
LEVY-SPECIAL-OTHER	0.00	0.00	0.00	0.00
CAPITAL RESERVE-NIAGARA	0.00	0.00	292,000.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
RESERVE FUNDS	0.00	0.00	0.00	0.00
MISCELLANEOUS	1,770.59	105,505.57	281,311.00	37.50
	1,770.59	309,589.26	1,657,335.00	18.68
EXPENDITURES				
WELLAND R. WATERSHED RESTORATION				
STEWARDSHIP	4,645.81	61,815.96	65,161.00	94.87
WATERSHED GIS	2,117.85	65,710.31	86,798.00	75.70
AOC WATER QUALITY MONITORING	4,438.85	36,699.59	0.00	0.00
AGRICULTURAL STEWARDSHIP	18,120.37	188,247.46	224,560.00	83.83
E.C.BROWN WETLAND PROJECT	681.05	7,757.34	0.00	0.00
OPG PROJECTS	8,564.91	125,085.52	244,311.00	51.20
MISCELLANEOUS PROJECTS	832.38	12,784.20	21,800.00	58.64
sub-total	39,401.22	498,100.38	642,630.00	77.51
12 MILE CK WATERSHED RESTORATION				
STEWARDSHIP	5,300.16	58,976.34	63,000.00	93.61
PROJECTS	3,604.72	85,973.59	129,000.00	66.65
PCB BIODIVERSITY	0.00	0.00	0.00	0.00
	8,904.88	144,949.93	192,000.00	75.49
	10,096.20	206,821.33	236,500.00	87.45
WATERSHED WELL DE-COMMISSIONING	0.00	12,269.59	25,000.00	49.08
20 MILE CREEK RESTORATION	7,067.62	94,188.13	158,920.00	59.27
FORT ERIE CREEKS RESTORATION N-O-T-L CREEKS RESTORATION	2,066.69	50,348.72	97,743.00	51.51
	5,832.97	133,350.19	176,342.00	75.62
15,16,18 MILE CREEKS RESTORATION	4,118.50	146,676.04	128,200.00	114.41
LYON'S CREEK SEDIMENT REMEDIATION NATURAL HERITAGE AREAS INVENTORY	0.00	10,430.40	0.00 0.00	0.00 0.00
DRINKING WATER STEWARDSHIP	0.00 0.00	0.00 0.00	0.00	
UNINKING WATER STEWARDSHIP		1,297,134.71	1,657,335.00	0.00
	11,400.08	1,237,134.71	1,007,000.00	10.21

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 45 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY FLOOD PROTECTION SERVICES - CAPITAL 11 PERIODS ENDED 2013-11-30

	Current Month	Current YTD	Approved Budget	% of Budget
REVENUES				
	0.00	0.00	0.00	0.00
MNR TRANSFER PAYMENTS PROVINCIAL GRANTS-MOE	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
PROVINCIAL GRANTS-OTHER	0.00	20,921.25	30,000.00	69.74
FEDERAL GRANTS	0.00	0.00	0.00	0.00
MUNICIPAL LEVY-GENERAL	0.00	0.00	228,386.00	0.00
LEVY-SPECIAL-NIAGARA	0.00	0.00	0.00	0.00
LEVY-SPECIAL-HAMILTON	0.00	0.00	0.00	0.00
LEVY-SPECIAL-HALDIMAND	0.00	0.00	0.00	0.00
LEVY-SPECIAL-OTHER	0.00	0.00	0.00	0.00
CAPITAL RESERVE-NIAGARA	0.00	0.00	0.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	0.00	0.00
RESERVE FUNDS	0.00	0.00	100,000.00	0.00
MISCELLANEOUS .	0.00	0.00	0.00	0.00
	0.00	20,921.25	358,386.00	5.84
EXPENDITURES				
FLOOD CONTROL STRUCTURES				
BINBROOK DAM	7,060.01	70,235.44	48,386.00	145.16
SHRINER'S CREEK	0.00	0.00	0.00	0.00
sub-total	7,060.01	70,235.44	48,386.00	145.16
WATERSHED FLOODPLAIN MAPPING UPDATE	12,691.85	165,294.18	310,000.00	53.32
FLOOD FORECASTING MODELING	0.00	0.00	0.00	0.00
STREAM GAUGE & MONITORING NETWORK	0.00	0.00	0.00	0.00
	19,751.86	235,529.62	358,386.00	65.72

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 46 of 70

#### NIAGARA PENINSULA CONSERVATION AUTHORITY CONSERVATION LAND DEVELOPMENT - CAPITAL 11 PERIODS ENDED 2013-11-30

11 PERIODS ENDE	D 2013-11-30			
	Current	Current	Approved	% of
	Month	YTD	Budget	Budget
REVENUES			¥	
PROVINCIAL GRANTS-OTHER	0.00	0.00	0.00	0.00
FEDERAL GRANTS	0.00	0.00	0.00	0.00
MUNICIPAL LEVY-GENERAL	0.00	0.00	0.00	0.00
LEVY-SPECIAL-NIAGARA	0.00	0.00	573,200.00	0.00
			210,000.00	0.00
	0.00	0.00	•	
	0.00	0.00	0.00	0.00
LEVY-SPECIAL-OTHER	0.00	0.00	0.00	0.00
CAPITAL RESERVE-NIAGARA	0.00	0.00	308,000.00	0.00
CONSERVATION FOUNDATION	0.00	0.00	51,000.00	0.00
RESERVE FUNDS	0.00	0.00	359,300.00	0.00
MISCELLANEOUS	5,465.40	57,665.40	0.00	0.00
1. <del>.</del>	5,465.40	57,665.40	1,501,500.00	3.84
EXPENDITURES				
LAND ACQUISITION	542.14	542.14	600,000.00	0.09
BALL'S FALLS	0.00	7,478.97	25,000.00	29.92
BINBROOK	27,261.75	60,451.14	110,000.00	54.96
CHIPPAWA CREEK	20,759.54	185,416.34	260,600.00	71.15
LONG BEACH	7,741.11	32,025.62	70,000.00	45.75
	0.00	209.01	0.00	0.00
BINBROOK TRACT	0.00	0.00	0.00	0.00
E.C.BROWN	512.87	512.87	6,000.00	8.55
HEDLEY FOREST	0.00	0.00	0.00	0.00
HUMBERSTONE	0.00	0.00	0.00	0.00
MORGAN'S POINT	0.00	0.00	0.00	0.00
RUIGROK TRACT	0.00	0.00	9,900.00	0.00
WAINFLEET BOG	0.00	488.44	0.00	0.00
MEMORIAL FORESTS	0.00	0.00	1,000.00	0.00
ROCKWAY	0.00	0.00	0.00	0.00
TWENTY VALLEY TRAIL	0.00	10,115.83	100,000.00	10.12
GAINSBOROUGH	0.00	1,543.25	79,000.00	1.95
MOUNTAINVIEW	0.00	0.00	0.00	0.00
ST.JOHN'S	0.00	3,616.13	0.00	0.00
VIRGIL	0.00	1,145.61	30,000.00	3.82
GORD HARRY CONSERVATION TRAIL	92,013.38	92,577.21	115,000.00	80.50
WILLOUGHBY MARSH	0.00	0.00	0.00	0.00
	0.00	0.00		0.00
SMITH-NESS			0.00	
	0.00	0.00	0.00	0.00
STEVENSVILLE	0.00	373.24	0.00	0.00
WAINFLEET WETLANDS	0.00	10,293.76	25,000.00	41.18
WOODEND	(610.56)	3,663.36	3,200.00	114.48
CAVE SPRINGS	0.00	0.00	11,800.00	0.00
MUD LAKE	0.00	0.00	0.00	0.00
JORDAN HARBOUR	32,824.49	42,046.66	50,000.00	84.09
COMFORT MAPLE	0.00	18.01	5,000.00	0.36
ST. JOHNS CENTRE	12,886.60	165,576.43	0.00	0.00
1 <del>7</del>	193,931.32	618,094.02	1,501,500.00	41.17



#### TO: The Chairman and Members of the Authority

DATE: December 2, 2013

SUBJECT: <u>2014 Full Authority Meeting Schedule - Report No. 121-13</u>

Below is the proposed schedule for the Full Authority Meetings in 2014 including the Annual Meeting. As customary, F.A. meetings are proposed for the 3<sup>rd</sup> Wednesday of each month with the exception of August where no meeting is scheduled. Meeting times are typically held at 7:00 pm in the Main Boardroom at the Administration offices in Welland unless otherwise specified.

The following is the recommended 2014 Meeting schedule:

January 15 - Annual Meeting and Full Authority Meeting at Ball's Falls February 19 March 19 April 16 May 21 June 18 July 16 September 17 October 15 November 19 December 17

#### **RECOMMENDATION:**

That the 2014 Full Authority Meeting Schedule as outlined in Report No. 121-13 be approved.

**Respectfully Submitted By:** P. Eng. CAO/ Secretary-Treasurer Amarió Tony D

## **2014** FULL AUTHORITY BOARD MEETINGS

### <u>Annual General Meeting</u>: January 15, 2014

### **Board of Directors**

Board Meeting:
January 1 <i>5</i> , 2014
February 19, 2014
March 19, 2014
April 16, 2014
May 21, 2014
June 18, 2014
July 16, 2014
August 20, 2014
September 17, 2014
October 15, 2014
November 19, 2014
December 17, 2014

D. Bruce Timms	Chairman - Rep. St. Catharines
April Jeffs	Vice Chairwoman - Rep. Wainfleet

David Barrick	Member - Rep. Port Colborne
Brían Baty	Member - Rep. Pelham
Stewart Beattie	Member - Rep. Hamilton
Carmen D'Angelo	Member - Rep. Hamilton
Dominic DiFruscio	Member – Rep. Thorold
Dennis Dick	Member - Rep. NOTL
Trevor Easton	Member - Rep. Grimsby
Douglas Joyner	Member – Rep. West Lincoln
Bart Maves	Member – Rep. Niagara Falls
Barry Sharpe	Member - Rep. Welland
Tony Dalimonte	Member – Rep. Haldimand
Bob Steckley	Member - Rep. Fort Erie
Douglas Ransom	Member - Rep. Líncoln



#### TO: Chairman and Members of the Authority

DATE: December 10, 2013

RE: PROJECT/PROGRAM STATUS REPORT – REPORT NO. 122-13

#### WATER MANAGEMENT

#### A. <u>Watershed Development Services Division</u>

As of November 25, 2013, the Conservation Ontario/DFO Partnership agreement for Fish Habitat review under Section 35 of the Federal Fisheries Act ended. It is our understanding that Conservation Ontario and DFO expect to have a new partnership agreement in place by April 2014. Until there is a new partnership agreement in place, NPCA will only review fish habitat and/or aquatic resources under the Planning Act in accordance with Memoranda of Understanding (MOU) that we have with our watershed municipalities. Staff will be clear about this in our comments. We want to avoid any public confusion/perception that we are providing comments in relation to the Federal Fisheries Act. Proponents will be directed to the DFO website which includes a self-assessment tool <a href="http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html">http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html</a> to determine if they need to get DFO advice on their project. The website also includes a link for those who wish to report a violation of the Fisheries Act <a href="http://www.dfo-mpo.gc.ca/pnw-ppe/violation-infraction/index-eng.html">http://www.dfo-mpo.gc.ca/pnw-ppe/violation-infraction/index-eng.html</a>.

#### 1) Municipal and Development Plan Input and Review

To the end of November, staff reviewed and processed 288 planning applications (of various types/complexity) and 125 building permits. Staff continues to participate in weekly scheduled pre-consultation meetings with municipal partners. In addition, staff responds to many general enquires both from local municipalities and the public.

## 2) NPCA 'Regulation of Development, Interference with Wetlands, and Alteration to Shorelines and Watercourses'

#### Permits

The NPCA has issued 144 work permits to date in 2013.

Violations

A separate violations spreadsheet is provided under separate cover.

- NPCA-DFO Partnership Agreement
  - i) As part of the NPCA-DFO Partnership Agreement, NPCA staff work as a liaison between DFO Assessors and proponents to recommend appropriate

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 50 of 70

fish habitat compensation projects until November 25, 2013. We are still awaiting clarification on implications from recent changes to the federal fisheries legislation.

ii) In accordance with NPCA's level II agreement with DFO, 81 Letters of Advice have been provided to date this year.

#### B. <u>Watershed Technical Services Division</u>

#### 1) Source Water Protection Plan

- The updated Assessment Report and Source Protection Plan were submitted to the Ontario Ministry of the Environment in late October. Since then, the ministry has reviewed the Assessment Report and in their letter of November 28, 2013, they indicated have approved this document. The ministry is now reviewing the Source Protection Plan (SPP) and has indicated the SPP should be approved soon. Staff is now beginning to prepare for the implementation phase of the plan. The Source Protection Committee was honoured at the NPCA environment awards night on November 27<sup>th</sup> to show our appreciation for their dedication and the many hours of work they have given towards this program.
- With the approval of the plan, one third of the Source protection Committee (SPC) member appointments will lapse according to the Clean Water Act and regulations. New members may be appointed or existing members may request to be reappointed. The Source Protection Authority is responsible for SPC appointments.
- Other source water protection staff activities included participating in an Emergency spill training exercise with Niagara Region, City of Port Colborne and St. Lawrence Seaway Management Corporation; and updating certification training for Property Entry powers under the Clean Water Act.

#### 2) Water Quality Monitoring Program

- Staff has completed the 2013 water quality monitoring field season. Water quality sampling was conducted from April to November and samples were analysed for general chemistry, metals, nutrients, and bacteria. Data analysis will begin as lab reports become available.
- Staff has completed the fall 2013 BioMAP sampling at 24 water quality stations.
- Staff is updating all water quality databases.
- Staff is continuing to monitor water levels at all Provincial Groundwater Monitoring Network (PGMN) wells.
- Staff continues to assist the MOE with two projects: 1) the Balls Falls Climate Change station; and 2) Welland River Fish Kill at Port Davidson Weir.
- Twelve water well decommissioning applications have been received in 2013 and nine projects have been completed.

#### 3) Geographic Information Systems (GIS)

#### a) Source Water Protection

GIS staff accommodated some minor requests from MOE concerning the Assessment Report Database (ARDB).

#### b) Watershed Development Services Support Activities

- GIS staff continues with improvements to the Property Info Tool. Several additional information items are being coded into the database calculations that Development Services staff vet through the issue identification phase of a property inquiry.
- GIS Staff has been assisting with the preparation of a survey aimed at municipal planning staff in Niagara. The purpose of the survey is to provide feedback in advance of a future NPCA workshop on plan and permit review mapping. The workshop will include the Niagara Natural Environment Information Map/screening layer.
- GIS aided the calculation of potential water well setbacks for Development Services department at Niagara Region.
- Staff produced a series of regulated natural hazard maps in hardcopy for Development Services staff to use at the City of Hamilton's recent Open House sessions for its Rural Zoning By-law.

#### c) Corporate GIS and Information Management Support Activities

- QAQC activities on the Contemporary Mapping of Watercourses project for the NOTL pilot area. The project is progressing well in the next study area, Town of Grimsby. The planning analyst funded by the Region continues with the interpretation and compilation effort in the City of Niagara Falls. On Nov 25<sup>th</sup> NPCA and the Regional staff consulted with Niagara Falls City staff from various departments.
- Staff attended the Niagara College student proposal presentations for the three NPCA projects.

#### 4) Flood Control

#### a) Monitoring & Major Maintenance

 Staff continues to monitor the water levels of the Binbrook reservoir on a daily basis. The reservoir's water level is currently sitting just above the normal

> Page 3 of 13 13.0 Project Status Report Report No. 122-13

holding stage. Staff will continue to monitor and make adjustments as the situation warrants.

- Staff continues to routinely monitor the water levels at our 14 stream gauge stations, climatic data at our 15 climate stations, and undertake routine maintenance, calibration, and inspections at all 29 installations, as part of the NPCA's routine flood forecasting and warning duties. The public may access this real-time water level and rainfall information through the NPCA's website.
- In support of the Flood Forecasting and Warning program, staff has initiated the seasonal winter snow surveys. On the 1<sup>st</sup> and 15<sup>th</sup> of each month from November to April, NPCA staff measure the snowpack (should one exist) at seven set locations throughout the watershed. These measurements are then analyzed to determine the amount of water present on the ground in the snowpack and the associated potential flood risk should the watershed experience a rapid melt. The information from the NPCA's snow surveys are also routinely sent to the Ministry of Natural Resources' 'Surface Water Monitoring Centre' in Peterborough in an effort to help keep the Province apprised of local watershed conditions.
- As recommended in the NPCA's 'Binbrook Dam Safety Review' report, the NPCA has retained Genivar (through the consultant selection process) to complete a dam 'Pressure Relief and Monitoring Wells Study'. The purpose of this study is to undertake a detailed stability assessment of the dam and to determine critical water levels within the dam's 26 existing monitoring and pressure relief wells. It is noted that the NPCA was successful in obtaining a \$20,000 grant from the Province (via the Water and Erosion Control Infrastructure program) which will be used to help offset the cost of this project. The study is scheduled to be completed by the end of January 2014.
- NPCA Flood Forecasting and Warning staff has been invited to join the Region of Niagara's 'Emergency Preparedness Workshop' steering committee. The Emergency Preparedness Workshop is scheduled to take place on February 21, 2014 at the DoubleTree Hotel in Niagara Falls. The estimated audience of 250 people is anticipated to be comprised of representatives from both upper and lower tier municipalities, local police, fire, EMS and utilities staff as well as staff from federal and provincial agencies stationed in Niagara. This year's theme is 'Building a Disaster Resilient Niagara' with the focus on flooding. NPCA Flood Forecasting and Warning staff is also scheduled to give a presentation at the Workshop.
- NPCA Flood Forecasting and Warning staff has been invited to join the Region of Niagara's 'Regional Flood Information Awareness' steering committee. The goal of the committee is to develop a web page (to be added to the Region's website) which will help to inform individuals of the actions that they can take before, during, and after a flood event in Niagara. It is anticipated that this Regional web page will include links to the NPCA's Flood Forecasting and Warning section of our website.

#### 5) Other

- a) Technical Services staff continues to provide on-going engineering and hydrogeological technical support to the Development Services, Restoration, and Lands Divisions as requested.
- b) Staff continues to assist with preparations for the Ontario Geological Survey (OGS) study that will be undertaken over the next four years in Niagara. Niagara Region and Brock University are also assisting OGS with the study preparations. This may include obtaining a Water Smart Niagara grant to complete new NPCA monitoring wells.
- b) NPCA is working with Water Smart Niagara on a Private Water Supply Study of Niagara Region. Project partners include Niagara Region Public Health, the Ministry of the Environment and Brock University. The pilot project in Grimsby is expected to begin January 2014 and extend through to the end of 2014. GIS have also been assisting with maps for the project.

#### WATERSHED STEWARDSHIP

The Watershed Stewardship Division is responsible for improving water quality, and biodiversity through the implementation of projects to benefit the broader watershed community. For every NPCA stewardship dollar spent, additional contributions are made through partnerships.

#### 1) **Project Implementation – Watershed Plans**

Approximately 65 stewardship projects have been completed.

#### 2) Project Implementation – Haldimand County Water Quality Program

In 2012 Haldimand County initiated a financial incentive program for agricultural landowners to improve surface and groundwater quality. This is in partnership with The Grand River Conservation Authority, Long Point Region Conservation Authority, Niagara Peninsula Conservation Authority and the Haldimand County Agricultural Advisory Committee. The program is funded through Haldimand County and administrated through each of the partnering CA's. GRCA administers the funds. To date, the NPCA has participated in two projects.

#### 3) Partnerships

#### **Ducks Unlimited**

The Niagara Peninsula Conservation Authority and Ducks Unlimited Canada (DUC) have collaborated on projects over a 15 year period. Collectively we have restored over 60 acres of wetland habitat. This partnership agreement offers cost share funding for the implementation of qualifying wetland projects.

#### Niagara Region

 Staff is participating on a number of Committees including; the Federation of Canadian Municipalities (FCM); WaterSmart Action Coordination Team; Water Advisory Group (WAG) and assisting Technical Services Division with a private water use survey.

#### **Ontario Power Generation Welland River Partnership**

- One large-scale floodplain wetland restoration project in the Pelham area was completed this past summer. A recently completed floodplain wetland project was naturalized with native species of grasses, trees and shrubs and includes turtle basking logs and bird nesting boxes. In 2014 a floodplain wetland project will be implemented and four potential restoration sites have been identified.
- Through funding through OPG, staff continues to implement fish habitat improvement projects with MNR.

#### Landowner Stewardship Guide

Staff is working with the local chapter of Trout Unlimited to implement a Twelve Mile Creek Landowner Stewardship Guide. Partial funding has been provided through the Niagara Community Foundation and Ministry of the Environment, Environmental Fines Program.

#### Niagara Envirothon

The Steering Committee is preparing for the 7th Annual Niagara Envirothon to be held at the Stevensville Conservation Area: April 9<sup>th</sup> and April 23<sup>rd</sup>. A number of professionals will lead the various ecostations including; aquatics, soils, forestry, wildlife, and a current environmental issue; topic of which will be local sustainable agriculture.

#### 4) Remedial Action Plan (RAP)

#### 1) Niagara River Corridor Ramsar Site Designation

Staff is represented on the Niagara River Corridor Ramsar Site Working Group. The Niagara River Corridor Ramsar Site Working Group is currently researching the feasibility of designating the Niagara River Corridor as the first transboundary Ramsar Site in North America.

#### **Background**

The Ramsar Convention, also known as the Convention on Wetlands, is an international treaty that both the United States and Canada are part of. The Convention promotes the conservation and "wise use" of wetlands, and it defines wetlands broadly to include freshwater lakes and rivers, among other wetland types. A Ramsar Site is a wetland of international importance that has been designated under the terms of the Convention. A transboundary site is one that is shared by two or more countries.

The Convention establishes guidelines for designating sites, at least one of the Convention's nine criteria must be met in order to be designated. Each signatory country is responsible for nominating its own sites. The Ramsar Site designation is voluntary and nonbinding. Unlike federal or state / provincial wetlands designations, the Ramsar designation does not come with additional regulations for landowners or any entity with resource or use rights. All landowners must endorse the nomination.

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 55 of 70

#### <u>Purpose</u>

The Working Group's initial proposal is to designate the Niagara River as a Ramsar Site, from lake to lake, shore to shore. Initial research shows that the Niagara River Corridor meets nearly all of the criteria established by the Convention. The Niagara River; it's natural resources, species, habitats, and ecological services – the values that make the river worthy of the designation – are threatened. This process and the designation have the potential to be transformative, not only for the Niagara River Corridor environment, but for the people and history of the bi-national region. It coincides with the 200<sup>th</sup> anniversary of the end of the War of 1812, a celebration of two hundred years of peace between the United States and Canada. It builds on the international Important Bird Area Designation (IBA) already given to the corridor. The Ramsar designation is non-regulatory, and the process and designation will increase awareness and foster international cooperation around a shared resource.

#### <u>Goal</u>

The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world". Cooperative approaches are essential to achieve the wise use of wetlands. The establishment of a Working Group will define the recommended actions/activities required in the development of the Ramset Site designation proposal / application and will provide expertise and guidance to the process.

#### Membership

The Working Group will consist of representation from various stakeholders who have a regulatory role, landowner rights, user rights or interests in the Niagara River corridor on both the U.S. and Canadian borders.

#### 2) RAP Stage 3

- The RAP Coordinating Committee will meet in mid-January to discuss work-planning and the re-designation process for BUIs (Beneficial Use Impairment). BUI assessment reports have been prepared to include scientific evidence for re-designation of the BUIs Degradation of Benthos and Loss of Fish & Wildlife Habitat. The approved BUI assessment methodology is expected to be presented for Restrictions on Fish Consumption and an update on the BUI assessment (underway by MOE-EMRB) for Eutrophication or Undesirable Algae. A draft of MNR's BUI assessment report for Degradation of Fish Populations is expected in January 2014, as well as a statement from CWS on the status of wildlife populations for the respective BUI assessment.
- The RAP Steering Committee met with the successful applicant (i.e. LURA) for the Outreach & Engagement Strategy short-term contract in early December. The overall purpose, key RAP messages and possible engagement strategies were discussed. LURA will prepare a draft plan for review & discussion by early January 2014.
- 3) Update: Canada-Ontario Agreement Respecting the Great Lakes Ecosystem (COA). The new COA is expected to be signed in spring 2014.

#### 4) Great Lakes Water Quality Protocol 2012.

Annex 1 of the Great Lakes Water Quality Protocol 2012 is being implemented through the Niagara River RAP.

Page 7 of 13 13.0 Project Status Report Report No. 122-13

#### LAND MANAGEMENT DEVELOPMENT

Recent inclement weather has not done any damage to the areas. Throughout the winter months, staff will be assisting with projects within the watershed as needed. A 2014 waiting list for seasonal camping has been compiled. For the Chippawa Creek site, the list is longer than previous demand which is in keeping with trends in the marketplace. Visitation data for the 2011, 2012 and 2013 seasons has been complied and filtered into three seasons: spring, summer, and fall; as well as by weekday / weekend where visitation is considerably different. Data will assist in determining maintenance, campsite renewal/rehabilitation and new site development efforts. It will also give the Marketing and Community Relations team the market knowledge to assist in decision making for promotional/marketing purposes.

#### **BALL'S FALLS CONSERVATION AREA**

- Angela Wallace left her position as Program Coordinator to pursue a career opportunity as the Director/Curator of the Port Dover Museum. Program responsibilities will be realigned within the current staffing complement.
- Funding applications to Service Canada for summer students are being prepared for submission in mid- December.
- The 2014 Thanksgiving Festival vendor application has been updated and circulation to past vendors is planned to take place in December. Staff is compiling information from the 2013 event and a meeting to discuss logistics will be planned in the New Year.
- Outreach activities including exhibit scheduling are ongoing. Student interns have been working on their projects including the development of a film for the Centre for Conservation and facilities rental proposal has been developed for consideration. Staff participated in an event/volunteer coordination planning meeting on November 28<sup>th</sup> along with staff from across the corporation. Events and volunteer scheduling will be coordinated in concurrence with the Marketing and Community Relations Division. It is planned that these meetings continue to occur on a regular basis in ordered that events will run effectively.
- The Christmas with Santa and Old Fashioned Family Christmas events took place December 7 and 8<sup>th</sup>. School programs continue to run as bookings are received. The site has been decorated for the season.
- A Risk Assessment Plan and a Village Maintenance Schedule has been prepared as requested by CMOG. Site winterizing and maintenance is ongoing and repairs are being conducted as per the Master Plan. At this time repairs are required specifically related to the heat pump in the Centre for Conservation, Cabin (new roof needed), the Lime Kiln restoration and entrance gates.
- Facility rental bookings are continuing and proposed new rates for 2014 have been submitted for review and approval. A tour of the Centre for Conservation was conducted with a group involved in the construction of the New Niagara Regional Police Station which is being built to LEED specifications. The tour was well received.
- The Christmas Exhibit will run until the end of January, 2014 and will be replaced with a new exhibit on Birds. Research is being conducted by a Brock Intern.

#### **BINBROOK CONSERVATION AREA**

- Winterization was completed for park facilities, including pulling in all the docks and preparing equipment for snow removal. The new replacement playground, supplied by KSL Design, was fully installed in late November.
- The November 30<sup>th</sup> and December 2<sup>nd</sup> Waterfowl Hunt was cancelled due to ice formation on Lake Niapenco. We were able to re-open the hunt for December 7<sup>th</sup>. The final day of the Waterfowl Hunt, December 14<sup>th</sup>, was also cancelled due to expected poor weather conditions.

Waterfowl Hunting Statistics:	
Number of Hunters for 2013: 90 Note: (90 individual hunters registered and hunted at least once in the season; compared to 61 hunters in 2012 and 75 in 2011)	
Waterfowl Blind Rentals 2013: 120; 2012: 113; 2011: 121	
Birds Harvested 2013: 24 Geese & 64 Ducks 2012: 70 Geese & 76 Ducks 2011: 63 Geese & 78 Ducks	

- The annual Hard Water Derby is scheduled for February 9<sup>th</sup> with an alternate date of February 23, 2014 in the3 event of poor weather or ice conditions. Fishing World and the Glanbrook Conservation Committee are long-time supporters of this event. Tickets and posters for the event have been printed and an ad will appear in the January issue of Out of Doors magazine which is distributed through the Globe and Mail and Toronto Star. It will also be available at the Toronto Sportsman show in January.
- The Master Plan for the park is progressing well. The Public Consultation Meeting on December 4<sup>th</sup> was well attended. We had about 20 members from the public come including park neighbours, regular Park users that purchase Membership Passes, as well as members of the Glanbrook Conservation Committee.
- Contract talks are proceeding well with Multisport Canada to do their annual triathlon again at the park in 2014. A Medieval Re-Enactment Group is interested in hosting an event and campout in June. Staff has been in discussion with a number of local and area Scout Groups, Outdoors Clubs, Fishing Clubs, the Hamilton Amateur Astronomy Group, and the Glanbrook Home Support Program to plan for annual events in 2014. These activities have been discussed with the Special Events team for marketing and organizational support.

#### CHIPPAWA CREEK CONSERVATION AREA

Work is proceeding on the Chippawa Creek comfort station. Staff issued a fine for illegal hunting on the Dils Lake hiking trail.

#### LONG BEACH CONSERVATION AREA

Long Beach is closed for the winter season. Staff is completing assorted work at Chippawa Creek including plumbing, installation of vapour barrier, ceilings, door hardware, and siding. An electrical engineer is completing drawings to upgrade the Lakeside 30amp campsites electrical services. Load calculations determined these sites are under-serviced by about 25%. Because there is a risk of a blown transformer or fire when the sites are busy, it was directed that the service should be corrected. Once the drawings are received, quotes will be requested for the work and presented to the CAO.

#### GORD HARRY CONSERVATION TRAIL

Substantial completion of the Gord Harry Trail extension into Haldimand County is now achieved and the trail partners held a trail meeting and hike at the beginning of December. The contractor has completed his portion of the project and over the winter months NPCA staff will finish hazard trail clearing, grooming, and some sign installations before the trail officially opens to the public. NPCA will continue to administer the work on the trail for Haldimand County and are co-ordinating work with Haldimand County and Trans Canada Trail for the official opening.



December 3/13 Contract Completion Inspection at the Gord Harry Trail with (left to right): Marcus Steele (Steele Contracting), Kathy Smith (NPCA), Sheila Wilson (Haldimand County), Kevin Steele (Steele Contracting), Jim Paterson (Trans Canada Trail)

Page 10 of 13 13.0 Project Status Report Report No. 122-13 Agenda - Full Authority Meeting Dec 18, 2013 Page 59 of 70

#### JORDAN HABOUR CONSERVATION AREA



The open air pavilion and memorial stone are installed and staff has completed site cleanup, fine grading, and seeding to finish the area around the concrete pad. The site will be attended to in the spring by staff to prepare for the next operating season.

#### JORDAN STAIRS

Staff reviewed and approved shop drawings submitted by the contractor and the stair fabrication began off-site in November. The contractor will be on-site shortly to install one concrete footing and prepare for the complete stair installation before end of December. The installation is tentatively scheduled to be completed, weather permitting, between Christmas and New Years'. Staff is on-call to assist the contractor with site access if necessary.

Page 11 of 13 13.0 Project Status Report Report No. 122-13

#### **COMMUNITY RELATIONS**

#### **Conservation Achievement Awards**

The 22<sup>nd</sup> annual Conservation achievement awards were held on Wednesday, November 27, 2013 at Four Points Sheraton in Thorold. The event was attended by 214 guests.

#### Special Events

- A Special Event meeting was held with front-line staff to discuss events and programming/volunteer needs for 2014. A calendar of events is being produced by the Marketing and Community Relations team so give the corporation a solid overview for planning purposes and to ensure that marketing and human resources can be executed effectively. Ongoing meetings will continue.
- Moving forward, Special Events planning requires the effective tools in place to effectively manage all aspects of an event from the budgeting, reporting, scheduling, attendees, and volunteers. After researching a number of options, the Planning Pod online software will best suit our business needs. <u>www.planningpod.com</u> The program tracks contacts and leads, creates contracts and proposals for vendors, plan all event details such as itineraries, budgets, attendees, manage calendars and to-do lists, collaborate with clients and staff, and prepare reports and invoices. Options are fully customizable which allows the NPCA brand to remain consistent through the business area.

#### **Volunteer Coordination**

Volunteer records from the Ball's Falls site was conveyed to the Events and Volunteer Coordinator. In reviewing the files, it is evident that there is a need for a proper volunteer database. At present, volunteer contacts are being stored in a spreadsheet file. There is no proper way to track volunteer information, transferable skills, vulnerable sector screening, whether they are an active or inactive volunteer or conduct queries to determine volunteer availability. Staff has researched database software options and is recommending that the Authority incorporates a program called Volgistics - www.volgistics.com More than 3,200 organizations use this volunteer software which allows us to keep a full suite of information on our volunteers including who is on our sites, volunteer hours contributed, training requirements, police check information, orientation information etc.

#### **Christmas in the Country**

- Staff assisted Ball's Falls Conservation Area program staff with volunteers and promoting this educational and special event program. 60 people attended the Breakfast with Santa event on December 7<sup>th</sup> and 35 families attended the Old Fashioned Christmas event on December 8<sup>th</sup>. Participants enjoyed the events and staff will now look to opportunities to enhance these in the future in order to increase attendance.
- TV Cogeco came out to Ball's Falls on November 26<sup>th</sup> to tape an interview on the programs as part of the broader promotional efforts including social media sites such as Facebook and Twitter.
- The YouTube to the link for TV Cogeco is; <u>http://www.youtube.com/watch?v=05osXLWY8z0</u>

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 61 of 70

#### Niagara Children's Water Festival

Staff received a report back from the Region's Special Event Recycling program about the recycling results from this year's festival. The event generated 45kgs of recyclable material and 93kgs of organic material that would have otherwise been collected as regular waste and sent to the landfill. Planning is in motion for the 2014 event. The program will take place September 16th through 19th. Many new ideas and activities are being formulated and new sponsorship opportunities are currently being explored in order to enhance next year's event.

#### **Community Outreach**

Staff was asked to be a guest speaker at a meeting of the Kiwanis Club of St. Catharines. The presentation was well received by members and included an overview of the work of the NPCA.

#### **Binbrook Master Plan Open House**

An Open House to review some preliminary concepts for the Binbrook Conservation Area took place on December 4<sup>th</sup> at the Binbrook Agricultural Society facility. The event was attended by 18 members of the public, staff, Councilor Brenda Johnson, the Chairman, member D'Angelo and the consulting team.

#### Strategic Plan Update

Public Meetings to review the DRAFT Strategic Plan were held on November 12<sup>th</sup> and 13<sup>th</sup>, 2013. Public comments were invited to be submitted until December 6<sup>th</sup>. A total of 42 submissions were received directly through the NPCA which have been forwarded to Todd MacDonald at Performance Concepts. These comments will be distributed to members of the Strategic Plan Steering Committee for review and direction/recommendations for updates to the document. A meeting of the Steering Committee will be scheduled in early January and the DRAFT document will be revised to incorporate the committee's recommended changes for submission and final approval by the NPCA Board at the January 15<sup>th</sup>, 2014 meeting.

#### Attachments: Preliminary 2014 Events

#### **RECOMMENDATION:**

That Report No. 122-13 outlining the status of Authority projects / programs be received for information.

Respectfully Submitted By: Amario, P. Eng. CAO/ Secretary-Treasurer Tony

Agenda - Full Authority Meeting Dec 18, 2013 Page 62 of 70

## **Proposed 2014 Events and Programs**

#### **Ball's Falls Conservation Area**

#### January

- Education programs available year round
  - Follow our LEED
  - The Case of the Stray Squirrel
  - Take a Hike!
- Outreach Programs
  - It's a Bee's Life
  - A Pioneer's Life
- Winter Outdoor Adventure Education Program (Available January to March)
- Exhibit: Canary in a Coalmine: Birds of Ontario January 10<sup>th</sup> to July 14<sup>th</sup>
- ➔ January 17<sup>th</sup> P.A. Day Camp

#### February

- ✤ Feb. 1<sup>st</sup> (12:30-3:30) Kissing Ball Workshop
- ✤ February 17<sup>th</sup> Family Day Event
- Bird Exhibit Program starting February 3<sup>rd</sup>

#### March

- March 10<sup>th</sup> to 14<sup>th</sup> March Break Day Camp
- ✤ March 10<sup>th</sup> to 14<sup>th</sup> March Break Mini-Adventures Camp (YMCA, Pelham Camp) 1 Day Camp
- March 10<sup>th</sup> to 14<sup>th</sup> March Break Daily Activities: Nature Hikes, Snowshoeing, Crafts (Regular Admission Fee Applies)
- March 15<sup>th</sup> Maple Day maple syrup day
- March 29<sup>th</sup> Women's Chant Earth Hour Concert (\$15 per person)

#### April

Earth Day – April 19<sup>th</sup> or April 22<sup>nd</sup> (pending – may be combined with another event) Education Programs:

- It's a Bee's Life: April 22<sup>nd</sup> to October 1<sup>st</sup>
- Amazing Amphibians: April 22<sup>nd</sup> to October 1<sup>st</sup>

#### May

- ✤ Tours May 1<sup>st</sup> to October 31<sup>st</sup>
- May 19<sup>th</sup> Community Day Victoria Day (Free Admission Day) 9-4

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 63 of 70

Education Programs:

- Spring Awakening: May 20<sup>th</sup> to June 28<sup>th</sup>
- How it Works: Ball's Mills: May 5<sup>th</sup> to October 31<sup>st</sup>
- Orienteering: May to October 31<sup>st</sup>
- Ball's Falls Rocks: May 5<sup>th</sup> to June 28<sup>th</sup>
- May 11<sup>th</sup> and 25<sup>th</sup> Level 1 Blacksmithing Workshop (ages 13 and up) (\$100) maximum of 4

#### June

- → June 13<sup>th</sup> PA Day Camp
- ➔ June 28<sup>th</sup> Green Gardening Workshop (10-1)
- ➔ June 15<sup>th</sup> and 29<sup>th</sup> Level 2 Blacksmithing Workshop

#### July

- → July 2<sup>nd</sup> to August 31<sup>st</sup> Adventure Summer Camp
- ➔ July 4<sup>th</sup> to 18<sup>th</sup> and August 11<sup>th</sup> to 15<sup>th</sup> Survivor Summer Camp
- ✤ Mini Adventure Camp
- Exhibit: Beauty of the Niagara Escarpment July 12<sup>th</sup> to October 14<sup>th</sup>

#### September

- Education Program:
  - > Welcome to our Table: Pioneer Harvest September 2<sup>nd</sup> to November 1<sup>st</sup>
- Mill included in the Water Festival

#### October

✤ October 10<sup>th</sup> to 13<sup>th</sup> Thanksgiving Festival

#### November

- November 2<sup>nd</sup> Soap Making Workshop (12:30 to 3:30)
- Education Program:
  - Christmas in the Country November 24<sup>th</sup> to December 15<sup>th</sup>
- Exhibit: Thiessen Artwork November 1<sup>st</sup> to January 31<sup>st</sup> (Tentative)

#### December

December 6<sup>th</sup> and 7<sup>th</sup> Christmas with Santa/Christmas in the Country (Details TBD)

Agenda - Full Authority Meeting Dec 18, 2013 Page 64 of 70

#### **Chippawa Creek Conservation Area**

- ✤ May 19<sup>th</sup> Grand Opening (The Royal Flush/Flush the Kids)
- Canada Day Weekend (Summer Children's Programs Start)
- Canada Day Events
- ➔ July 5<sup>th</sup> Douglas E. Elliott Bass Derby
- Russian Folk Festival (outside group event July)
- Star Gazing Events (Dates To be determined) (Day Use Fee Applies)
- Float Flyers Events

#### Long Beach Conservation Area

- May 19<sup>th</sup> Grand Opening
- Canada Day Weekend (Summer Children's Programs Start)
- Canada Day Events
- 4<sup>th</sup> of July Event
- Bowlerama (outside group July)

#### **Conservation Areas Division**

- ✤ April 26<sup>th</sup> St. Johns Trout Opening
- April 18<sup>th</sup> Hawkwatch Open House
  - Hawkwatch opens March 1<sup>st</sup>
- Hunting Program (signage for Shotgun hunt)
- Stevensville Butterfly Festival (Tentatively September 20<sup>th</sup>) partnership
- Jordan Harbour Garbage Derby (Second weekend in September Date To be Determined)
- May 10<sup>th</sup> Garlic Mustard Removal
- Jordan Staircase Grand Opening
- Gord Harry Trail opening Ceremonies of the new link (Date To Be Determined)
  - Promote Conservation Areas along the Trail

#### **Stewardship**

- Earth Day Event (Date and Location To be Determined)
- National Yellow Fish Road Day (beginning of June)
- Great Canadian Shoreline Clean-up (April-June) (dates TBD)
- Twelve Mile Creek Garbage Derby (August)
- Scouts Canada Camp Conservation Camp (August 11<sup>th</sup>-14<sup>th</sup>)
- Envirothon (April) by invitation only
- Canopies for Kids (May/June)

Agenda - Full Authority Meeting Dec 18, 2013 Page 65 of 70

#### **Binbrook Conservation Area**

- Need more recognition with the Welland River Keepers
- Ice Fishing Program (January March)
- February 9<sup>th</sup>Ice Fishing Derby (Rain Date February 23<sup>rd</sup>)
- ✤ February 15<sup>th</sup> to 17<sup>th</sup> Family Fishing Weekend
- May 1<sup>st</sup> Park Opens for the Season
- May 4<sup>th</sup> Spring Fishing Derby Glanbrook Conservation Club
- Wakeboarding (beginning in June)
- → June 7<sup>th</sup> Multi-Sport Canada Triathlon
- Medieval Group (camping weekend after June 7<sup>th</sup>)
- June or July (triple crown wakeboarding event)
- Day Camp July and August (Dates TBD)
- Movie Night (July in support of Glanbrook Home Support Program) Date TBD
- ✤ July 5<sup>th</sup> to 13<sup>th</sup> Family Fishing Week
- ➔ August 10<sup>th</sup> to 13<sup>th</sup> Hamilton Amateur Astronomers Club open to public
- ✓ Last weekend of September (BBQ Brodown) to benefit Big Brothers and Big Sisters
- September December Water Fowl Hunting
- Proposed
  - Fall Bass Derby third weekend of September
    - Allow overnight camping
    - Promote through Outdoor Show Toronto and Niagara
  - Guided Wildflower Walk end of September
  - Kayak Day
  - Geocaching Event
  - Seminar for Children's intro to Fishing (tie it in to movie night)
  - Memorial Forest program

#### Other Events

- Niagara Children's Water Festival September 16<sup>th</sup> to 19<sup>th</sup>
- Conservation Achievement Awards November 26<sup>th</sup>

#### Foundation

- Memorial Bench Program
- Bob Welch Memorial Golf Classic
- Thanksgiving Festival Raffle
- Ongoing Management of Donor Relations

## Correspondence

# December 18, 2013

#### Agenda - Full Authority Meeting Dec 18, 2013 Page 67 of 70



DEC 6/13/m10/26

November 27, 2013

Tony D'Amario, CAO/Secretary Treasurer Niagara Peninsula Conservation Authority 250 Thorold Road West; 3rd Floor Welland, ON L3C 3W2

Dear Mr. D'Amario:

RE: Appointment of Members to Niagara Peninsula Conservation Authority

Please be advised that on November 25, 2013, Haldimand County Council adopted the following resolution:

AND THAT Councillor Tony Dalimonte be appointed to the Niagara Peninsula Conservation Authority, for a term commencing December 1, 2013 and ending November 30, 2014;

Should you require further information, please contact Evelyn Eichenbaum, Clerk at 905-318-5932 extension 6349.

Yours truly,

ichenba,

Evelyn Eichenbaum Clerk

EE/ps

Agenda - Full Authority Meeting Dec 18, 2013 Page 68 of 70

Ministry of Natural Resources

Box 5000 4890 Victoria Ave. N. Vineland Station, Ontario LOR 2E0

Tel: (905) 562-4147 Fax: (905) 562-1154 Ministère des Richesses naturelles

C.P. 5000 4890 avenue Victoria Nord Vineland Station, Ontario LOR 2EO

Tél : 905-562-4147 Téléc.: 905-562-1154



December 2, 2013

**Guelph District** 

NFD 9 113 - 12450

Niagara Peninsula Conservation Authority 250 Thorold Road W, 3<sup>rd</sup> Floor Welland, ON L3C 3W2

Attention: Tony D'Amario, P.Eng CAO/Secretary Treasurer

Dear Mr. D'Amario:

Subject: September 18, 2013 NPCA Board of Directors meeting.

At the September 18, 2013, NPCA Board of Directors meeting, Ontario Power Generation and Welland Recreational Canal Corporation presented information to the Board. During the discussions, a couple questions/comments were posed regarding the overall management of the Welland River. A MNR staff member was present at the meeting, and we would like to provide some clarification to those questions/comments from MNR's viewpoint. Specifically:

1. We have a big siltation problem in the Welland River.

Through the Niagara River RAP process, MNR has studied the fish community in the Niagara River watershed. The presence and amount of fish provides us with an excellent indication of the current water quality and habitat conditions of the Welland River, west of the City of Welland. These results clearly show significantly low numbers of fish upstream of the old Welland Canal siphons, and the species that are present are ones that can tolerate poor water quality with a substrate dominated by loose, clayey sediments. These results indicate there is a sediment transport problem in the Welland River upstream of the Old Welland Canal. Sediments are not transported out of the river but rather tend to accumulate upstream of the siphons<sup>2</sup>.

This office does not provide access to direct services. To meet with our staff please be sure to call ahead and make an appointment. Visit us at our website: www.gov.on.ca

<sup>&</sup>lt;sup>2</sup> Yagi, A. R. and C. Blott. 2012. Niagara River Watershed Fish Community Assessment (1997 to 2011). Ontario Ministry of Natural Resources unpublished report 168pp + appendices.

We attribute the fish community, the turbidity and the siltation in the Welland River West as symptoms of the problem that the old siphons act as a dam on the river and do not allow the system to adequately flush the amount of material entering the river from the surrounding watershed and from bank erosion.

While we recognize that the back water effect from Niagara River water diversion exacerbates the symptoms of turbidity and erosion in the Welland River, we believe that the root of the problems in the Welland River West are due to the siphon structure and that a much better river system could be created by replacing the river/old canal crossing with a structure that would better transport these accumulating sediments.

In addition to MNR fisheries work, we find elements from The Welland River Fluctuation study support our findings that indicate the old siphon structure contributes to insufficient flushing and a long term buildup of loose fine sediments upstream of the structure:

"Data suggest that a net deposition of sediment likely occurs between Wellandport and the Welland Airport" pg 23.

"Generally though, the "O'Reilly" and "Beckett" sections indicate long-term deposition." Pg 22

"The inefficient inlet and outlet design of this structure reduces the potential for self-scouring to occur during higher flow conditions." Pg 50

The 'self-scouring' applies to the siphons and also to the upstream reaches of the river because the siphons act to disrupt downstream flow in the system, similar to the effects of a small dam on the river.

When entering the river on foot at the Chippawa Conservation Area, for example, MNR staff found across the entire width of the river a layer of dense, semi-suspended solids hanging in the lower half of the water column.

The semi-suspended nature of these particles may not allow for their presence to be detected by standard bathymetric comparisons to older river cross sections to point out how much accumulation has occurred, but a net deposition upstream of the old siphon structure has likely been occurring since installment of the old siphons (i.e. more material entering the river than leaving the river for > 80 years).

Given that we are likely to have to work within the context of continued fluctuation and backwater effects, it becomes relevant to look at other contributing factors to address the siltation and turbidity in the Welland River West. Reconfiguring the Welland River crossing at the Canal to a linear river crossing would likely improve the river flow regime to allow for better flushing and improved water clarity. Engineering studies need to be done to fully assess this potential.

#### 2. Are the old siphons necessary?

It is necessary to isolate Welland Canal water from the Welland River because of differences in elevation - i.e.- canal water is at a higher elevation than the Welland River. However, a system of siphons is not necessary to maintain this separation. For example, it may be possible to reconstruct the old aqueduct similar to the original canal design<sup>4</sup> to carry the Welland Canal water over top of the Welland River and still maintain recreational boating/rowing use in the Welland Canal. However engineering studies still need to be completed.

An aqueduct would result in a more linear river crossing and eliminate the disruption of flow, sediment transport and fish movement that the siphons currently affect.

Thank you for consideration of these comments. Should you wish to discuss further, please do not hesitate to contact me.

Yours truly,

Joad Durst Niagara Area Supervisor Guelph District 905-562-1175

<sup>&</sup>lt;sup>4</sup> An aqueduct carried the Welland Canal water over the Welland, from 1833 to 1932, until larger boat traffic made it necessary to deepen the Canal beyond the natural depth of the river.