

FULL AUTHORITY MEETING
Wednesday May 15, 2013; 7:00 PM
250 Thorold Road, 3rd Floor; Welland, ON

A G E N D A

- **ROLL CALL**
- **DECLARATION OF CONFLICT OF INTEREST**
- **BUSINESS:**
 - (1) Minutes – Full Authority Meeting – April 17, 2013
 - (2) Business Arising From Minutes
 - (3) Chairman’s Remarks
 - (4) CAO’s Remarks
 - (5) Delegation – Laura Collings – Climate Action Niagara
 - (6) Delegation – Wakulich
 - (7) Follow-up report on Wakulich submission - **Report No. 41 – 13**
 - *Location Maps (attached)*
 - *Mar.28-13 Letter/report from Coffey Geotechnics (attached)*
 - *Slope Stability Analysis by Shaheen & Peaker Ltd. (attached)*
 - *Standard Drawing Fabrack Solar Inc. dated Nov24-10 (attached)*
 - *Apr.5-13 Letter from Sullivan Mahoney (attached)*
 - (8) Budget Status Report for period ending April 30, 2013 - **Report No. 42 – 13**
 - *Budget Summary April 30, 2013 (attached)*
 - (9) Member per Diems and Chair Honourarium–Policies- **Report No. 43 – 13**
 - (10) Staff Code of Conduct - **Report No. 44 – 13**
 - *Final Draft – Proposed NPCA Staff Code of Conduct (attached)*
 - (11) Beeway Project – Agreement - **Report No. 45 – 13**
 - *NPCA Agreement (attached)*
 - *NCCF Agreement (attached)*
 - (12) Canopy for Kids Program - update - **Report No. 46 – 13**
 - *School lists (attached)*

- (13) City of Port Colborne - Operations Centre - **Report No. 47 – 13**
 - *Location Map (attached)*
 - *Letter from City of Port Colborne dated May 6-13 (attached)*
 - *Site plan (attached)*
 - *Land Use Planning Policy Document (attached)*

- (14) St. John's Centre Master Plan Consultant selection - **Report No. 48 – 13**

- (15) Provincial Offences Officer – **Report No. 49-13**
 - *Conservation Authority Act Reg. 123 (attached)*

- (16) PFOS Update Report for Binbrook C. A. - **Report No. 50 – 13**

- (17) Project Status Report – **Report No. 51 - 13**
 - *Water*
 - *Restoration*
 - *Land*
 - *Communications (with attachments)*

- (18) Other Business

- (19) **In-Camera**
 - (a) Regulations Status - **Report No. CR-52 -13**

 - (b) Tree By-law - **Report No. CR-53 – 13**
 - *Communication summary (attached)*

 - (c) Land Donation - **Report No. CR-54 – 13**
 - *letter (attached)*
 - *site plan (attached)*

- **ADJOURNMENT**



To: Chairman and Members of the Authority

Date: May 9, 2013

Re: Works under the NPCA's Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 155/06, as amended); 9 Pine Street, City of St. Catharines, Region of Niagara; valley slope of Twelve Mile Creek/Martindale Pond – Report No. 41-13

Background:

The existing valley in the subject area is very defined and rises to a vertical height of approximately 9.0 metres above the ambient water level in Martindale Pond. The bank slope at the property is relatively steep, with an incline of approximately 67 % (1.5 H:1.0 V). For context, in lieu of detailed subsurface soil analysis, a slope of no more than 33% (3.0H: 1.0V) is considered as being stable over the long term. Maps (2) showing the location of the property are appended as Attachment No 1.

In May of 2011 the NPCA was informed that construction was occurring on the valley slope at this location. The owner was issued a Notice of Violation and subsequently made application to the Board for a hearing to seek approval for the installation of solar panel arrays and associated substructure elements. In October of 2011, the Board formally refused issuance of a permit and the refusal was subsequently appealed to the Mining and Lands Commissioner. The proponent did not pursue the appeal process, but also did not proceed with restoration. As such, charges were filed in June 2012.

At the December 9, 2012 Full Authority meeting, the solicitor for the proponent appeared as a delegation. Briefly put, the solicitor requested that the NPCA consider approving the works subject to a satisfactory geotechnical study/report being provided. The proponent indicated that they could provide the geotechnical report in January of 2013. After hearing the delegation, the Board passed a resolution deferring the matter until a geotechnical study was submitted.

At the March 20, 2013 Board meeting, the geotechnical study had still not been provided and as such, the Board set a deadline that the study be provided by April 7, 2013. The proponent's solicitor was advised of this in correspondence dated March 22, 2013.

On April 5, 2013, a geotechnical letter/report was submitted to NPCA and this was distributed to the Board in the April 2013 meeting agenda package. At the April meeting, the Board directed staff to prepare a follow up report commenting on the applicability of the submitted information and to outline any additional information staff believe is missing to assess the works. Staff was also directed to provide the report to the proponent in advance of the May Board meeting.

Staff Comments:

Accordingly as directed, NPCA staff has reviewed the information provided and offer the following:

Attachment 2; Coffey Geotechnics Supplementary Letter Report, March 28, 2013

The April 5, 2013 Coffey geotechnical letter/report is 6 pages in length and the main analysis is contained in the first 3 pages. The remainder of the report consists of 3 pages of disclaimers and limitations as to use of the letter. Staff would advise that these 3 main pages of the Coffey letter/report also contain numerous statements that limit and/or nullify any reliance on the report by NPCA for building and/or stability assessment purposes.

Further, the Coffey letter/report does not analyze what has been installed and crucially does not include any information as to the as built founding elevation relative to the surficial failure/instability zones established as per the 2007 report of Shaheen and Peaker. This document is discussed further below.

Attachment 3; Shaheen and Peaker Limited; Report dated May 3, 2007 Re: Slope Stability Analysis (referenced in the Coffey letter)

This report was previously prepared for the proponent and a neighbor, in contemplation of a future development proposal. The main purpose of this report was to establish a safe/stable slope for a potential future development.

Staff note that this report characterizes the existing slope face as showing signs of erosion and surficial slope failure and the existing top of slope as not being the stable top of slope in terms of accommodating a structure. This report indicates that the stable slope is determined to be at a line extending at 2 horizontal to 1 vertical from the base or to a location approximately 8 metres inside of the physical top of bank (pg. 4). It further stipulates (pg. 5) that new structures should not be established outside an envelope extending at 3 horizontal to 1 vertical from the base of the slope, or even further beyond the existing slope face.

Staff would advise that no information has been provided by any Engineer to confirm if the solar panel structure has been founded below the surficial failure zone and/or if the structure can withstand a surficial slide of the disturbed overburden.

Attachment 4; Fabrack Solar Inc. Standard Drawing dated November 24, 2010

This appears to be a standard manufacturers shop drawing and not reflective of "as constructed" conditions.

Attachment 5; Sullivan Mahoney Letter dated April 5, 2013

NPCA staff do not believe that assurances that may be perceived to flow from this letter are supported by the geotechnical information provided.

Summary of Outstanding Geotechnical & Engineering Issues:

In summary, based on what has been submitted by the proponent, NPCA staff would conclude;

i) The existing bank slope is showing signs of instability. With reference to the 2007 report from Shaheen and Peaker Limited, a superficial slope failure zone is located above a line extending 2 horizontal to 1 vertical from the bottom of bank and the stable founding envelope for structures is located at or below a line extending 3 horizontal to 1 vertical.

- ii) The founding level of the proponent's solar panel array foundations are not known relative to the failure line determined by Shaheen and Peaker Limited. Simply put, the foundations may or may not be on unstable ground.
- iii) No reliable assurances have been provided as to the current sufficiency of the previous geotechnical information with respect to characterizing the surface and subsurface conditions, including groundwater for the purposes of supporting the solar panel infrastructure.

Information Required:

In order to determine if the works can be expected to remain stable the following engineering and geotechnical information is required:

- i) 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.
- ii) Confirmation from the Geotechnical Engineer 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.
- iii) The existing slope has been identified as showing signs of surficial instability. Confirmation and/or recommendations from a Qualified Engineer are required to ensure that the foundation structure will not buckle in a superficial slough/slide failure.
- iv) 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 and if this poses a concern, what recommendations they have to address this.
- v) Drawings included in report should reflect what has been installed.

Beyond the above geotechnical/structure issues, information with respect to the following is also needed:

- vi) The existing bank surface is poorly vegetated and showing signs of surficial erosion/slips. Measures to stabilize and vegetate the disturbed surface should be provided.
- vii) Confirmation as to the location of the structure relative to the property lines.

Attachments:

- 1) Property Location Map and Location of Work Map
- 2) Coffey Geotechnics Supplementary Letter Report dated March 28, 2013
- 3) Shaheen and Peaker Limited; Report dated May 3, 2007 Re: Slope Stability Analysis, for Mr. & Mrs. Greg Lancaster and Mr. Willie Wakulich
- 4) Fabrack Solar Inc. Standard Drawing dated November 24, 2010
- 5) Sullivan Mahoney Letter dated April 5, 2013

RECOMMENDATION

THAT: Report No. 41-13 be received for information.

Prepared by: John Kukalis, C.E.T.; Director, Water Management

Respectfully Submitted by:

Tony D'Amario, P.Eng.; CAO/Secretary-Treasurer



TO: The Chairman and Members of the Authority
DATE: May 8, 2013
SUBJECT: Budget Status Report - Report No. 42 -13

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

There are no other significant variances to report at this time.

RECOMMENDATION:

That the Budget Status Report No. 42-13 for the period ending April 30, 2013 be received.

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



TO: The Chairman and Members of the Authority

DATE: May 7, 2013

SUBJECT: Per Diem Policies – Report No. 43-13

Further to the discussions at our last Board meeting, I reviewed the records of remuneration to Board members and can confirm the amount paid to the Chair includes the honourarium plus per diems and mileage for each meeting attended.

There is no specific policy with respect to per diems and I believe we should include this in the member handbook for future reference. Accordingly, I recommend the NPCA Board adopt the following policy with respect to per diems.

- 1) All Board members including the Chairman and Vice-Chairman shall receive a per diem amount from time to time as adopted by the NPCA Board and approved time by the Ontario Municipal Board plus mileage. Such per diem shall be in addition to any approved honourariums paid to the Chairman and Vice-Chairman.
- 2) Per diem amount shall be paid on a per meeting basis. Should 2 or more meetings be attended consecutively on the same day a single per diem shall apply. Where meetings are not consecutive, separate per diems shall be payable.
- 3) Per diem and mileage record sheets shall be made available for each meeting where possible, otherwise each Board member shall be responsible for recording their attendance at meetings separately.
- 4) Per diems shall be paid for all Board meetings and meetings of Standing Committees and Special Purpose or Ad Hoc Committees and Sub-Committees as established by the NPCA Board from time to time.
- 5) Although mileage and other expenses are reimbursable, NPCA Board members shall not be paid a per diem amount for attendance at NPCA formal functions such as events, activities conferences, workshops etc.

RECOMMENDATION:

That the Report No. 43-13 regarding the Per Diem policies be approved; and

That such policy be included in the NPCA Member Handbook for future reference.

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



TO: The Chairman and Members of the Authority

DATE: May 7, 2013

SUBJECT: Proposed NPCA Staff Code of Conduct - Report No. 44 - 13

Attached is a proposed NPCA Staff Code of Conduct policy that formalizes the expected and appropriate behavior of staff. This Code is not intended to replace personal ethics, but to further guide staff and reinforce existing laws, the current policies and Personnel Regulations adopted by the NPCA by emphasizing the key areas of expected behaviour in order to serve our customers

The Code of Conduct provides a set of standards describing the expected behaviour of employees of the Niagara Peninsula Conservation Authority. It promotes a common understanding of what we consider is acceptable conduct and ensure this expectations are practiced by each of us in our professional and personal interactions when performing our functions. Our organization is committed to enhance public confidence through our integrity, transparency, procedural fairness and courtesy.

The Code guides us in recognizing and resolving various issues that we may encounter in conducting the business of the NPCA. It is an important tool that will strengthen our organization and assist us in achieving a culture of integrity and serve to maintain public confidence in all that we do. With this Code and each of staff abiding by it, the NPCA will demonstrate the accountability, ethics and non-partisan behaviour expected. .

This Code of Conduct was developed from researching those from other organizations, and was distributed to all NPCA staff for their review and comments, on two occasions. Firstly in a preliminary draft form and secondly a final draft following revisions.

The endorsement and approval of the Board for this code of conduct would project a positive reinforcement to all staff employed at the NPCA.

RECOMMENDATION:

That Report No. 44-13 be received and that the NPCA approve the Proposed NPCA Staff Code of Conduct dated May 2013 for inclusion in the NPCA Staff Personnel Regulations.

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



TO: The Chairman and Members of the Authority

DATE: May 7, 2013

SUBJECT: BeeWay Project Draft Agreements – Report No. 45-13

Attached for consideration of the Board are draft agreements for the NPCA and NPCF with respect to the provision of services and funding respectively for the Niagara BeeWay project.

The NPCA has been working in partnership with George Scott and the L3K Wildlife Project for several years. To date the partnership has included the design and construction of a large open water wetland and the establishment of various naturalization treatments including tree planting. George Scott attended the March 20th, 2013 Full Authority Board Meeting requesting a partnership arrangement with the NPCA to provide support for the implementation of the “Beeway” project with an emphasis on technical advice regarding native species selection, native plant purchasing, monitoring / inventory, GIS support and the holding and distribution of funds received from donors to the program.

The Board directed staff to determine available resources to assist with the program and set out an agreement to establish a fund to receive donations to support BeeWay projects.

The attached agreements specifically outline that proceeds from any donations will be used to the sole purpose of purchasing and delivering plant materials to BeeWay project sites and that no funds will be distributed for administration, labour or other non-project specific needs.

RECOMMENDATION:

That Report No. 45-13 regarding the BeeWay Project Draft Agreements be received and;

That the CAO/Secretary Treasurer and NPCA Chairman be authorized to execute the agreements with L3K Wildlife Habitat Restoration Inc. on behalf of the Niagara Peninsula Conservation Authority and the Niagara Peninsula Conservation Foundation.

Respectfully Submitted by: _____
Tony D’Amario, P. Eng., CAO/Secretary-Treasurer

TO: The Chairman and Members of the Authority

DATE: May 7, 2013

SUBJECT: 2013 Canopies for Kids Program – Report No. 46-13

The Watershed Stewardship Division is responsible for improving water quality, and biodiversity through the implementation of projects, with the goal of protecting public interest (i.e. clean air and water). All implemented projects, whether undertaken on public or private lands, offer off-site benefits benefitting to the broader watershed community.

The Stewardship Division is also involved in outreach and awareness promotion. Programs such as Yellow Fish Road, Envirothon, and Canopies for Kids have reached thousands of children, parents and volunteers. These programs help provide a better understanding of the important role we all have in ensuring a sustainable environment for future generations. Each year, the stewardship program looks for new opportunities to expand and build on the services currently offered to watershed residents.

In the last twenty years, shade trees have been routinely removed from school grounds due to maintenance issues. In response to changing weather patterns, including extreme temperatures, school boards are realizing the value trees provide in cooling and shading playground areas. The goal of the Canopies for Kids program is to increase schoolyard shade while providing children with a hands-on learning opportunity about the benefits trees provide. Adapted for grades K-8, the program provides a deeper look at how trees improve biodiversity, water quality, air quality, and our economic and social environment.

This science-based program is available to all elementary schools in our jurisdiction. Schools are selected through an application process which opens each September and closes in January of the following year. Applications are faxed and emailed directly to each elementary school, including private schools. The application is also sent to each school board contact and posted on the NPCA website.

There is no cost to the participating schools and a maximum of 10 schools per year are selected for participation. The ultimate goal is to remediate all schools lacking shade (an estimated 5-7 year timeframe). Schools only need to apply once and are placed on a waiting list.

Applications are assessed against a set of criteria including a lack of shade around the playground areas. Typically, school with less than 5% canopy cover will be given priority, while ensuring representation (where possible) throughout our area of jurisdiction. Schools must commit to watering and caring for the trees, they must provide locates and ensure the placement of the trees will not impact future schoolyard plans such as portables, track and field, mowing, toboggan hills, phone lines, etc. The principal, facility managers, and superintendents must approve the location of the trees.

Schools selected to participate in Canopies for Kids are engaged through interactive school assemblies provided by NPCA program staff. Program information is sent home to extend the message beyond the classroom. Staff works with the selected schools to design a tree planting plan, including both large and small trees that will work with the existing features of the school playground. All trees are native to Niagara, selected for their tolerance of specific conditions. Schools are responsible for monitoring the well-being of all planted trees. Tree replacement, if required (only 1 to date), will be decided on a case by case basis.

The third year of the program has been completed; over 750 trees in 30 different schoolyards have been planted, creating lasting relations between thousands of children and the environment. The St. Catherine's Green Committee and WaterSmart Niagara have contributed substantial staff and financial resources to this program.

RECOMMENDATION:

That Report No. 46-13 regarding the 2013 Canopies for Kids Program be received for information purposes.

Prepared by: Jocelyn Baker, Manager, Watershed Stewardship

Respectfully Submitted by: _____
Tony D'Amario, CAO/Secretary-Treasurer



To: Chairman and Members of the Authority

Date: May 15, 2013

**Re: Proposed Operations Center, northeast corner of Highway 58 & Stonebridge Drive
City of Port Colborne, Floodplain of Biederman Drain – Report No. 47-13**

Background:

The City of Port Colborne has been contemplating the design and establishment of a new Operations Center at the subject location since 2009. At that time the City did complete a Class Environmental Assessment which selected the northeast corner of Highway 58 and Stonebridge Drive as the preferred location. The City currently owns this property.

Unfortunately, it appears that the Consultant completing the EA never did make contact with NPCA. As such, current City staff attempting to move the project forward was not made aware that the entire property was identified as floodplain until later in 2010. In early 2011, when new mapping for Biederman Drain was released as part of the Central Welland River Floodplain update project City staff were relieved to find out that some land was removed from the floodplain/suitable for building on the property. Still even under the updated modeling, approximately 3.8 ha of the 4.6 ha site is identified as subject to floodplain.

Since the later part of 2010, City staff has worked cooperatively with NPCA staff in an attempt to configure the site such that the necessary infrastructure (i.e. buildings, salt storage, etc.) was on the portion of the site outside the floodplain. At one point, the City staff believed that they could achieve an acceptable layout outside the floodplain however, a combination of both field verification of the floodplain elevation/location and a need for additional site infrastructure has now made the small buildable envelope freed up by the 2011 mapping insufficient.

Accordingly the City has asked to remove a portion of their lands from the floodplain via placement of suitable fill/flood proofing. The City has also exhausted any feasible options to provide offsetting cut on adjacent lands as would be NPCA's usual requirement.

Although NPCA Policy does not explicitly authorize NPCA staff to approve what the City is proposing, Senior NPCA staff concur that it can be allowed, as advanced by the letter from City staff.

The applicable Policy is Section 3.17, sub g) and sub i). Briefly put, as the use in question is for a publicly owned Operations Center that will serve the general population, staff believes that the works proposed are in conformance with section 3.17, sub g). Furthermore, given the unique nature of the use proposed, a precedence to allow general filling of floodplain as a standard is not being conceded. This would be problematic, as a general exemption would result in impact to others from cumulative effect of floodplain storage loss.

Finally, the City has advised that it will undertake the necessary hydraulic modeling to ensure the fill envelop is adjusted so that it will not increase hydraulic losses/flood levels on others. This is consistent with section 3.17, sub i). Given the characteristics of the floodplain at this location, NPCA staff believe that the City will be able to remove some of the flood prone area, albeit the exact limits and configuration will need to be confirmed by hydraulic modeling.

Attachments:

- 1) Map of Area
- 2) Letter from City of Port Colborne
- 3) excerpt section 3.17 NPCA Policy Document

RECOMMENDATION

That Report No. 47-13 be received for information; and

That NPCA support in concept, the City of Port Colborne's request to develop a Public Operations Centre as outlined above; further,

That the Chief Administrative Officer be authorized to issue a permit for the works pursuant to O.Reg 155/06, subject to the City providing staff the required detailed design and construction information.

Prepared by: John Kukalis, C.E.T.; Director, Water Management

Respectfully Submitted by:

Tony D'Amario, P.Eng; CAO/Secretary-Treasurer

TO: The Chairman and Members of the Authority

DATE: May 8, 2013

SUBJECT: St. Johns Centre Conservation Area Master Plan – Report No. 48-13

At the January 2013 Full Authority Meeting, staff were directed to request proposals for the development of a Master Plan for St. Johns Centre Conservation Area. Requests were sent to seven firms with experience in park and open space planning. Five proposals were received. Staff reviewed all proposals according to the NPCA Consultant Selection Policy, and short-listed the following three firms for interviews with the St. Johns Centre Master Plan Steering Committee:

| | | |
|----|--------------------------|----------|
| 1) | The Planning Partnership | \$31,835 |
| 2) | EDA Collaborative Inc. | \$25,020 |
| 3) | MHBC Planning | \$35,770 |

The proposal from MHBC Planning received the highest rating from the committee. The firm provides a multi-disciplinary team with a great deal of experience on similar projects throughout Ontario including Battlefield Park in Stoney Creek and Meadowlands Conservation Area in Ancaster. The committee favoured the public consultation aspects, amount of time allocated by senior consultants and the project schedule in this submission; however the budget was higher than the budget figure of \$25,000.

Only one firm provided a price of \$25,000; however that figure did not include disbursements. The other prices ranged from \$30,000 to \$39,550. The original submission from MHBC was \$35,770. Staff discussed the costing in detail with representatives from MHBC to determine if savings could be realized by combining meeting dates and reports. We believe that it is possible to reduce the price to \$29,000 without impacting the project.

Based on the above, staff recommend that the contract to develop the St. Johns Centre Master Plan be awarded to MHBC, for a contract price of \$29,000. The extra \$4,000 would be reallocated from the operating budget for the St. Johns Centre Conservation Area.

RECOMMENDATION:

That Report No. 48-13 regarding the St. Johns Centre Conservation Area Master Plan be approved; and

That the contract for the preparation of the St. Johns Centre Conservation Area Master Plan be awarded to MHBC at a cost of \$29,000.

Prepared by: Darcy B. Baker, Director-Land Management

Respectfully Submitted by: _____
Tony D'Amario, CAO/Secretary-Treasurer



TO: The Chairman and Members of the Authority

DATE: May 13, 2013

SUBJECT: Provincial Offences Officer Designation – Report No. 49 - 13

The regulatory compliance program in our Conservation Areas has an excellent reputation. It focuses on information and education that ensures visitors to our Conservation Areas have an enjoyable visit, free of disturbance from those who might not follow our rules.

Each year the NPCA hires trained individuals to support the Conservation Areas program, working in cooperation with supervisory staff to administer the rules and regulations. A copy of Ontario Regulation 123 is attached to this report for reference.

The Minister of Natural resources has provided the Niagara Peninsula Conservation Authority a Delegation of Authority to appoint Provincial Offences Officers to carry out the enforcement of Sections 28 and 29 of the Conservation Authorities Act (and the regulations made under them).

A number of staff have already been designated enforcement officers under the NPCA regulations (see attached list). Changes to the *Private Security and Investigative Services Act* require staff to now be identified as Provincial Offences Officers, rather than Security Guards. Although the difference is minor, the new designation provides staff with the necessary standing in the court process.

Designating these individuals as Provincial Offences Officers, allows us to ensure that they have received the proper training and education to so that they conduct their duties appropriately.

RECOMMENDATION:

That Report No. 49-13 regarding Provincial Offences Officer Designations be received; and
That the following individuals be identified as Provincial Offences Officers:
Moriah Harry, Chris Ruszycki, Scott Harrison and Dylan Clark

Prepared by: Darcy B. Baker, Director-Land Management

Respectfully Submitted by: _____
Tony D'Amario, CAO/Secretary-Treasurer



To: Chairman and Members of the Authority

Date: May 7, 2013

Subject: PFOS Compounds at the Binbrook Reservoir (update) – Report No. 50-13

Water samples from the beach and water system were submitted for testing. Results should be available for the June meeting.

Staff were on hand during the May 5th Fishing Derby to talk with participants about PFOS and distribute the new Sport Fish Consumption Guidelines. There were very few questions or concerns registered by the public.

Staff will be hosting a meeting with representatives from the City of Hamilton, Tradeport and the Ministry of the Environment on Wednesday, May 22nd, to get an update on the progress of remediation and to discuss plans for areas downstream of the airport.

RECOMMENDATION:

That Report No. 50-13 regarding PFOS Compounds at the Binbrook Reservoir be received.

Prepared by: Darcy Baker – Director, Land Management

Respectfully Submitted By: _____
Tony D’Amario, P. Eng.
Chief Administrative Officer/Secretary-Treasurer

TO: Chairman and Members of the Authority

DATE: May 8, 2013

RE: PROJECT/PROGRAM STATUS REPORT - REPORT NO. 51- 13

WATER MANAGEMENT

I. Watershed Development Services Division

1) Municipal and Development Plan Input and Review

i) To the end of April, staff reviewed and processed 118 planning applications (of various types/complexity) and 68 building permits. Staff continues to participate in weekly scheduled pre-consultation meetings with municipal partners. The municipalities are scheduling more pre-consultation meetings to accommodate the increasing number of applications. In addition staff responds to many general inquires both from local municipalities and the public.

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

i) Permits

The NPCA has issued 40 work permits to date in 2013.

ii) Violations

A separate Confidential Violation Report has been circulated.

iii) NPCA-DFO Partnership Agreement

As part of the NPCA-DFO Partnership Agreement, NPCA staff work as a liaison between DFO Assessors and proponents to recommend appropriate fish habitat compensation projects however, we are still awaiting clarification on implications from recent changes to the federal fisheries legislation.

In accordance with NPCA's level II agreement with DFO, 28 Letters of Advice have been provided to date this year.

II. Watershed Technical Services Division

1) Source Water Protection Plan

On May 7th the Source Protection Committee is meeting to review MOE comments on the Source Protection Plan (SPP) and discuss the proposed amendments. The SPC will also review tasks and timelines to update the Assessment Report and SPP.

Staff has been working on the IPZ-3 reporting and policy development. Some additional updates to the Assessment Report provincial database (ARDB) were also completed after MOE changed how threats are indexed and referenced in the tabular data.

2) Water Quality Monitoring Program

- Staff began water quality sampling at 80 stations in the NPCA watershed for the 2013 sampling season. Water quality sampling will be conducted from April to November and samples will be analysed for general chemistry, metals, nutrients, and bacteria.
- Staff completed the Hamilton Airport and Glanbrook Landfill Biomonitoring Reports.
- Staff is currently working on the NPCA Watershed Report Card and this should be completed by May.
- Staff is continuing to monitor water levels at all Provincial Groundwater Monitoring Network (PGMN) wells. Water quality samples will be collected from PGMN wells in the spring.
- Staff continues to assist the MOE with two projects: 1) the nutrient track down in Beaver Creek and Big Forks Creek watersheds; 2) and the Balls Falls Climate Change station.
- Four water well decommissioning applications have been received in 2013 and one project has been completed.

3) Geographic Information Systems

a) Watershed Development Services Support Activities

- Version 3.3 of the NPCA's regulation on hazard inventories and derivative screening products (Approximated Regulation Lands, Niagara Natural Environment Information Screening Layer) were updated based on the new MNR evaluated wetlands in NOTL, and a few minor site specific boundary refinements across the watershed.
- GIS staff developed a number of cartographic visual aids to help staff with policy review activities (natural heritage features in Hamilton, NOTL Wetlands, and Fort Erie Zoning By-Law).
- Staff continued work on the Property Info Summary application. The tool can now produce a table of results from programmed queries. Next steps will involve determining how to implement the information in operations.

b) Corporate GIS and Information Management Support Activities

- The vendor has completed the one-meter Digital Terrain Model (DTM) update and submitted the technical reports which confirms industry specifications have been achieved. Nevertheless, staff must render the data into existing surface imagery for operational needs. This is another necessary albeit tedious manual QA/QC step. Staff will do this by municipality.
- Staff is nearing completion of the interpretation and surface water mapping updates to the NOTL pilot study for the Niagara Water Strategy's 'Contemporary Mapping of Watercourses' project.
- GIS staff assisted in producing the NPCA Watershed Report Card.
- The Restoration Database has also been populated and digitized with the stewardship projects from the 2012 field season.

4) Flood Control

a) Monitoring & Major Maintenance

- Staff continue to monitor the water levels of the Binbrook reservoir on a daily basis. The reservoir's water level is currently sitting at the normal holding stage. Staff will continue to monitor and make adjustments as the situation warrants.
- Staff continue 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.

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 has been assisting with some 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.
- c)** NPCA received funding approval from Water Smart Niagara to complete a Private Water Supply Study in partnership with Niagara Region Public Health, the Ministry of the Environment and Brock University. The project will extend through to the end of 2013.
- d)** Staff prepared a draft Karst Screening map after attending Ontario Geological Survey Karst presentation.
- e)** NPCA staff attended the 2013 New York State Stormwater and Floodplain Manager's Conference in Buffalo. NPCA staff gained a better understanding of how stormwater management and floodplain policy differ, both technically and philosophically, between Ontario and New York State. As a result, NPCA staff can better appreciate the tools utilized by this agency in an effort to keep people and property safe from flood hazards.

In an informing session, staff was interested to find that the US is now considering moving to a more preventative approach such as the Ontario model. This is because the State subsidized flood damage insurance program is running an excessive deficit and the government subsidized rates are expected to go from as little as \$350.00/yr. to \$8,500.00/yr. for a typical residential home.

WATERSHED RESTORATION DIVISION

The Watershed Stewardship Division is responsible for improving water quality, and biodiversity through the implementation of projects, with the goal of protecting public interest (i.e. clean air and water). All implemented projects whether undertaken on public or private lands, offer off-site benefits to the broader watershed community.

1) Project Implementation – Watershed Plans

The Stewardship Program advances water quality and biodiversity improvement through the implementation of comprehensive watershed plans. Approximately, 75 projects including construction projects, BMP's, water quality and biodiversity projects are being planned and implemented this year across all watershed planning areas.

2) Outreach & Engagement

The Stewardship Division is also involved in outreach and awareness promotion. Programs such as Yellow Fish Road, Envirothon, and Canopies for Kids have reached thousands of children. These programs help place an intrinsic value within children on the importance of a positive and active role in their natural environment. Engaging children about the important role the environment has in ensuring a healthy community will ensure a successful and sustainable environment for future generations. Each year, the program looks for new opportunities to expand and build on the services that it currently offers to watershed residents.

Canopies for Kids

This year, 28 applications from across the entire watershed from were received by the January 25th, 2013 deadline. The following 10 schools were selected by the review committee to participate in the program:

| | | | | |
|---------------|--|--|-------------------|--|
| Niagara Falls | Sacred Heart - Catholic Cherrywood Acres - Public | | St. Catharines | Carleton - Public St. Nicholas - Catholic |
| Port Colborne | DeWitt Carter - Public | | Lincoln | Senator Gibson - Public |
| West Lincoln | John Calvin - Private | | Thorold | Westmount - Public |
| Grimsby | Smith - Public | | Fort Erie | Garrison Road - Public |

Planting took place the week of April 29th – May 3rd. The program was well represented by staff and board members. Funding for this program is currently being provided by WaterSmart Niagara, St. Catharines Green Committee, and the NPCA. A schedule of schools planted to date is attached.

Earth Day

- The NPCA hosted an Earth Day event at Balls Falls on Saturday April 20th from 10 am – 3 pm. The venue was open to the public, with the price of regular park admission, the public enjoyed value added programming which included interpretive Eco tours, and the opportunity to build a bluebird nesting box, decorate it and take it home or donate it to an NPCA stewardship project. Rona (Welland) has donated the material and supplies for the nesting box kits, including the lumber, nails and hammers.

Landowner Stewardship Guide

- Building on the success of the One Mile Creek Landowner Stewardship Guide, staff are working to modify this guide to a watershed wide “How to” guide for landowners. Main topic sections will focus on improving water quality and biodiversity. The guide is currently undergoing final edits. Staff has met with the Walkers Creek Association, a passionate advocacy group located in St. Catharines committed to the restoration of the creek and its environment. The ultimate goal is to launch the document in the Walkers Creek Watershed in conjunction with a large media type event to promote the Authority and the Guide.

Niagara Envirothon

This event was held at Balls Falls Centre for Conservation. A total of 13 teams participated from 9 different schools. The Envirothon workshop was held on April 3 and the competition was held on April 17. The competition was covered by Cogeco’s the Source and aired that same week. The program has received funding from WaterSmart Niagara, Ontario Power Generation and Land Care Niagara. Students who participated in Niagara Envirothon were eligible for a \$1000.00 scholarship from Land Care Niagara and every participating team received a tree to be planted on their school grounds.

Registered schools include:

- Lakeshore Catholic (NCDSB – Port Colborne) – 2 teams
- St. Michael Catholic (NCDSB – Niagara Falls) – 2 teams
- Notre Dame Catholic (NCDSB – Welland) – 1 team
- E.L. Crossley (DSBN – Pelham) – 1 team
- Ridgeway Crystal Beach Highschool (DSBN – Ridgeway) – 1 team
- Sir Winston Churchill (DSBN – St. Catharines) – 2 teams
- Stamford Collegiate (DSBN – Niagara Falls) – 2 teams
- Denis Morris (DSBN – St. Catharines) – 2 teams
- Westlane (DSBN – Niagara Falls) – 1 team

The winning team from this year’s event was St. Michael Catholic (NCDSB – Niagara Falls). A second team from St. Michael Catholic claimed second place and Westlane placed 3rd overall. Winning team participants received a gift certificate to Outdoors Oriented as well as a book prize. All participants received a book prize and a Niagara Envirothon t-shirt thanks to generous funding from WaterSmart Niagara, Ontario Power Generation, Outdoors Oriented and Land Care Niagara.

All teams registered through the Ontario Envirothon website are invited to submit a video to the Ontario Forestry Association, based on a scenario about grassland/rangeland restoration, to qualify for the North American Canon Envirothon.

Community Fisheries Involvement Programs

- The Niagara Peninsula Conservation Authority (NPCA) has been collecting fisheries data in the Welland River Watershed for almost a decade. There are two active programs that allow the NPCA to collect this information, the Angler Catch & Release Program, and the Angler Diary Program. Both programs rely on local anglers to support the data collection. The Fish Tagging Program captures fish through netting and angling, marks the fish with an identification tag, and then relies on anglers to call in to report having caught a tagged fish. The Angler Diary program encourages anglers to record information about their recreational fishing activities. These programs were originally created to monitor the success of the Walleye Stocking Program in the Welland River (partnership with the Ministry of Natural Resources, the Conservation Authority, Fort Erie Conservation Club and the Port Colborne and District Conservation Club) and to assist with the prioritization of restoration work within the Welland River.

3) Ontario Power Generation Welland River Partnership

- Staff continues to work on multiple shoreline erosion/riparian habitat projects within the flow reversal and fluctuation zone involving the installation of BioD-Blocks - a unique bio-engineering product designed to mitigate shoreline erosion issues while improving habitat and water quality through the establishment of vegetation.
- One large-scale floodplain wetland restoration project in the Pelham area will be completed this spring. This project will be similar in scope to the E.C. Brown Wetland project, minus the trail infrastructure as it is on private land.
- Staff is working with MNR on a fish migration study in order to assess the ability of migratory fish species (white sucker) to navigate past both Welland Canal Siphon Structures.
- The Canadian Pacific (CP) Railway Bridge in Attercliffe (crossing the Welland River) was subject to a debris clean-up last August. This work was completed by CP under the direction of Transport Canada. A Water Well Decommissioning Project may be undertaken with the adjacent landowner to assist in minimizing ground water contamination.

Remedial Action Plan (RAP)

1) RAP Stage 3

The Niagara River RAP is in the final stage and all work plan actions to lead to delisting the Area of Concern are to be completed within the timeframe of the new COA. The subsequent actions will be to delist the Area of Concern.

Assessments of the remaining environmental problems (referred to as Beneficial Use Impairments or BUIs, and described in the Stage 2 Update report (2009) are underway.

A RAP Implementers Session took place on April 10, 2013 at Niagara College. Updates on RAP initiatives on both sides of the Niagara River, as well as projects underway that address RAP BUIs and measure progress towards delisting the AOC, were presented. The presentations were well received. Outcomes of the NPCA Stewardship presentation, staff were invited to attend the MOE's annual staff meeting at Balls Falls to present our nutrient reduction program (BMP work). Staff will continue to work cooperatively with MOE staff to promote creative compliance with a focus on greenhouse operations.

The RAP Coordinating Committee will meet in Mid-April to discuss and plan budgets & activities for 2013/2014.

2) Update: Canada-Ontario Agreement Respecting the Great Lakes Ecosystem (COA).
The new COA is expected in Spring 2013.

3) Great Lakes Water Quality Protocol 2012.
The new Protocol came into effect in February, 2013. It defines the "Waters of the Great Lakes" to which Remedial Action Plans apply and on which BUI assessments must now focus.

LAND MANAGEMENT DEVELOPMENT

Ball's Falls Conservation Area

The volunteer coordinator has been active in the community, making presentations to local groups such as the retired teachers association.

Community Museums Operating Grant Strategic Plan requirements were submitted to the Province and surveys for community information have already been conducted at two events. The Heritage Advisory Committee will meet on May 15th to discuss the next steps in the development of a strategic plan for the museum.

Staff required at Ball's Falls under the Provincial and Federal Summer Student Grant Applications have been interviewed and hired. The Site Administrator participated and followed up in the installation of the March Bee exhibit, Earth Day, and Nature Fest, and several other upcoming events and exhibits for 2013-14.

Ball's Falls continues to build July's Nature Fest into a bigger event. A free quarter pages ad has been submitted to Niagara Escarpment Views. The event will feature musicians Jude Johnson and David Gilles, over 35 nature groups, children's inflatables and a variety of displays (ie. Bird Kingdom). The Hamilton Conservation Authority submitted a grant application to the Green Belt Foundation for a variety of projects including a Niagara Escarpment Biosphere exhibit at Ball's Falls. The exhibit includes media for the main gallery (ie. TVs to replace slide projectors). A new sign promoting the Niagara Escarpment Festival has been placed on Victoria Avenue.

Thanksgiving Festival planning and preparations are underway. Applications have been received, a new jury has been organized and the selection process has been completed. Maps have been organized and notifications have been made. Tents, stage, and generators have all been ordered.

The Site Administrator and staff worked with the NPCA marketing department to get rate cards, posters, and Public Service Announcements prepared for special events, lure brochure and school programs brochure.

General maintenance of trails is going on and all trails are now open. Historical buildings have been cleaned and opened on May 1st.

Bee Exhibit and Earth Day (April 20th): The Official opening took place during the April 20th, Earth Day celebration at the Centre. Special thanks to Jocelyn Baker and her crew for participating.

Community Day (May 20th): Program staff are moving forward on this free admission day. The Department of Immigration will once again hold its swearing in ceremonies for new Canadians here at Ball's Falls. Additional activities are being prepared including a book launch.

The staff is working hard to participate in teachers meetings and invite them to the site to share program information. New programs are being developed and camps are being prepared so it is important to get the word out.

Long Beach and Chippawa Creek Campgrounds

Staff completed Formal wood chipper safety training was held for campground operations staff. For a machine that can eat a tree, this was a pretty important certification to have.

Grass is growing fast. Some seasonal staff has been brought in to run mowers and prepare the grounds for the arrival of campers on May 13.

Water systems are on and are undergoing required bacteriological testing. This includes support for the system at Morgan's Point. No major breaks or repairs required (so far). Public Health has been formally notified of startup date as per legislative requirements.

Sewage systems are up and running. The Engineering Assessment for the Long Beach lagoon system is well underway; with good operation management practices having stretched out our usual "every second year" for alum treatment to three years; an operational savings of about 3500 for this year. The Chippawa wetland disposal system is entering its' third year of successful operation; and it is expected that we will be able to apply to MOE for a reduction in annual testing requirements in 2014.

We now have the building permit for our new comfort station at Chippawa campground and site work is starting up. Staff is circulating the building plans to various trades for quotations and a concrete contractor has been retained for the foundation work. We should be breaking ground this month for the building foundation.

Binbrook

The park opened on May 1st, and has been receiving lots of visitors thanks to the great weather. Summer staff is being trained on equipment and operations during the quieter start-up period.

In the weeks preceding the opening, staff installed docks, cut grass and brought park systems back on line. The water system is up and running and the water was test for bacteriological contamination and came back clean. Staff is still waiting for results of the PFOS samples.

Pavilion rentals are increasing, including the “open air pavilions”, adjacent to the old parking area. The Glanbrook Conservation Committee Fishing Derby went well. The event, held on May 5th, enjoyed good weather and good crowds. Approximately 400 people attended the derby. Special guests were children from Hamilton’s Eva Rothwell Center. Once again the event was sponsored by Fishing World on Barton Street in Hamilton. This year the park offered overnight camping on Saturday night for derby participants. Approximately 35 people took advantage of this opportunity. The Hamilton Astronomy Group set up scopes for viewing and the GCC had a communal bonfire and roast hot dogs and marshmallows. Staff had very positive reviews, and will consider this for next year’s event as well. The Hamilton Spectator and the Glanbrook Gazette were on-site for interviews.

Borderpass will begin installation of the cable wakeboarding system during the week of May 13th. Staff will be on hand to observe the work and ensure the site is secured from public access.

On July 20th, Binbrook Conservation Area will host another Community Night to benefit the Glanbrook Home Support Program. The Hamilton International Airport has agreed to support the event for another year.

A portion of the Tyneside Trail was closed due to a number of hazardous trees along the trail route. NPCA staff from the Central Workshop will be starting to go in to clean up the dead and falling trees. The trail will be re-opened when all of the hazard trees have been removed.

Staff is working with the Glanbrook Conservation Committee to complete a second pike spawning bed and nursery habitat project. This will include plantings for pike to lay their eggs and cover for the young fish to hide and grow. Work is expected to start in 2013 and finish in 2014.

Gord Harry Conservation Trail

We are waiting on the committee review and granting of our funding application to Trans Canada Trail for the trail project. In the meantime a draft copy of the trail tender documents have been prepared by staff and circulated to Trans Canada Trail and Haldimand County for review.

Comfort Maple Conservation Area

A number seeds were propagated in fall 2011 and continue to be tended by a nursery until NPCA planting in 2014. Low seed generation rates were obtained as expected due to the age and health of the tree. Propagation continues however to increase the number of the generated material from this well-known parent source.

St. Johns Conservation Area

The Trout Pond was officially opened at noon on Saturday April 27. Approximately 250 people attended the site during opening day. Mayor Ted Luciani from Thorold was on hand to open the season, and NPCA Board Member Mickey DiFruscio made the first cast.

NPCA staff was on site welcoming and reminding the visitors of park recreational resources, rules and site habitat significance. A concessionaire was also on site for opening day to address public demand and assist with park funding.

A new memorial bench was installed at the pond this month for the Groves family.

Jordan Harbour

We have submitted a minor variance application to the Town of Lincoln planning department to permit building the proposed picnic pavilion on the property. Staff will appear at the committee of adjustment later in May in support of the application, once the application clears the building permit will be granted for construction to proceed. The site is ready to go for construction, and our staff is beginning to prepare the boat ramp area to install the floating docks for the summer.

Volunteer Activities

On Saturday May 11 from 9:30 –noon volunteers will assist staff in removing the invasive garlic mustard from a native forest community at the Bailey Bridge in the Twenty Valley area. Information and uses of garlic mustard will also be provided to the public. More information is available on the NPCA website for participants.

Gypsy Moth Survey

Staff completed the initial egg mass survey for the annual gypsy moth monitoring on several NPCA Properties. This survey helps to forecast the moth populations and provides an indicator of forest health. Sites monitored annually include Chippawa Creek, Comfort Maple, Hedley Forest, Ruigrok Tract, St. Johns, Smith-Ness and the Willoughby Marsh.

The forecast for 2013 is nil to light defoliation. All populations were nil to very low. The cooler spring weather also suggests low populations for 2014. As a result, no spraying for gypsy moth is deemed necessary as part of forest ecosystem management.

The surveys continue in the summer, when staff check for defoliation rates and monitor populations. These surveys continue each year as part of overall property and ecosystem management.

Hunting Program

Over the past month, staff issued an additional 37 hunting permits for a total of 161 hunting permits issued for the NPCA Conservation Areas for 2013. Of this total, 26 individuals residing outside of our administrative area have received permits.

Staff and visitors are being advised of the spring Wild Turkey Season, which opened April 25 and continues through May 31.

COMMUNITY RELATIONS

Earth Day Activities

The Authority held a successful Earth Day at Ball's Falls on April 20. Visitors were treated to a number of activities including building bird boxes. A number of other community groups held events with the support of outreach materials provided by NPCA. This year we incorporated the

use of Social Media as an outreach tool. The great thing about the use of Social Media tools is that it reaches a broad audience at no cost. A brief report highlighting the Twitter and Facebook activities using the example of our Earth Day event is attached.

St. Johns Conservation Area Trout Season Opening

Mayor Ted Luciani and member Mickey DiFrusco were on hand for the opening day of Trout Season On April 27th. About 250 visitors participated in the event. The weather was perfect and visitors had a wonderful day.

Source Water Protection

Following a brief hiatus the Committee is scheduled to meet on May 7th in order to respond to the MOE's requests for some minor adjustments to the proposed plan submitted in 2012.

Niagara Children's Water Festival

Planning for the 2013 program is ongoing. The demand for attendance continues to grow and the committee is devising a number of new activities to accommodate increased numbers. Registration packages are being sent in the next couple of weeks.

A.D. Latornell 2013 Symposium

The Latornell Symposium will take place at November 20-22, 2013 at the Nottawasaga Inn and Conference Centre, Alliston, ON. The theme is *Resilience – The ability to adapt to change* and the Steering Committee is developing the program which will be announced shortly.

Bob Welch Memorial Golf Tournament

The tournament is taking place on June 13th at Whirlpool Golf Course in Niagara Falls. We have a great need for more golfers in order for the event to be a success.

Binbrook Fishing Derby

The annual Crappie Derby was held on a glorious weather day, Saturday May 5th. The event is organized by the Glanbrook Conservation Committee and was well attended.

Citizenship Ceremony

A Citizenship Ceremony at Ball's Falls on Monday, May 20th. The event is organization by staff from the Citizenship office. Invitations have been sent to all board members. The Chairman will be on hand to bring greetings on behalf of NPCA. The event is a FREE community day. Following the citizenship ceremony there will be a brief reception, a book launch at 1 pm - the book is *The Buzz about Bees* by children's author Kari-Lynn Winters.

Welland River Floodplain

The Welland River Floodplain Association hosted a meeting on May 1st in the Township of Wainfleet. The Chairman and staff were in attendance and the event was well attended. Presentations were made by the Association and Dr. Simonovic who has been retained as their peer reviewer. A number of questions were asked. Staff will be following up with stakeholders as there were a number of questions which were raised as a result of the information that was presented.

There are no other significant variances to report at this time.

RECOMMENDATION:

That Report No. 51-13 outlining the status of Authority projects / programs be received for information.

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