



250 Thorold Road West, 3rd Floor  
Welland, Ontario L3C 3W2

Tel (905) 788-3135  
Fax (905) 788-1121

E-mail: npca@conservation-niagara.on.ca

## NIAGARA PENINSULA CONSERVATION AUTHORITY

### FULL AUTHORITY

WELLAND

AGENDA

December 10, 2008 – 7:00 p.m.

ROLL CALL

DECLARATION OF CONFLICT OF INTEREST

#### BUSINESS:

(1) MINUTES

(a) FULL AUTHORITY MEETING – NOVEMBER 19, 2008

Attached are the Minutes of the Full Authority Meeting held November 19, 2008.

(b) REGIONAL TREE AND FOREST BY-LAW ADVISORY COMMITTEE MEETING – NOVEMBER 20, 2008

Attached are the Minutes of the Tree and Forest By-law Advisory Committee Meeting held November 20, 2008.

(2) BUSINESS ARISING FROM MINUTES

(3) DELEGATION

Ken Gonyou of Taro Planning & Development Inc. has requested an opportunity to speak to the Board regarding 8 Giles Crescent, Fonthill. A copy of correspondence relating to this is attached.

(4) CHAIRMAN'S REMARKS

(5) CAO'S REPORT

(6) PROPOSED 2009 ANNUAL MEETING AND REGULAR MEETING SCHEDULE REPORT NO. 81-08

Attached is Report No. 81-08 regarding the above.

(7) BUDGET STATUS REPORT – REPORT NO. 82-08

Attached is Staff Report No. 82-08 and the budget status report.

**(8) REVISED REGULATION NO. 27 FOR INDEMNIFICATION - REPORT NO. 83-08**

Attached is Staff Report No. 83-08 regarding this matter.

**(9) BINBROOK DAM AND RESERVOIR - REPORT NO. 84-08**

Attached is Report No. 84-08 regarding the Binbrook Dam and Reservoir.

**(10) 50<sup>th</sup> ANNIVERSARY COMMITTEE – REPORT NO. 85-08**

Attached is Report No. 85-08 regarding setting up a Committee to deal with the Authority's 50<sup>th</sup> anniversary.

**(11) JORDAN HARBOUR DRAFT SITE PLAN - REPORT NO. 86-08**

Attached is Report No. 86-08 regarding this matter.

**(12) 2009 CONSERVATION AREAS FEE SCHEDULE – REPORT NO. 87-08**

Attached is Report No. 87-08 outlining the proposed fees for conservation areas in 2009.

**(13) PROJECT STATUS REPORT – REPORT NO. 88-08**

Attached is Report No.88-08 outlining the status of Authority projects.

**(14) IN-CAMERA**

- (a) Regulation staff matter – a verbal report will be presented at the meeting.
- (b) Complaint and Violation Status Report – Report No. CR-15-08
- (c) Tree By-Law Status Report – Report No. CR-16-08
- (d) Land Acquisitions – 2 – CR-17 & 18-08

**(15) OTHER BUSINESS**

**ADJOURNMENT**

**NIAGARA PENINSULA CONSERVATION AUTHORITY**

**FULL AUTHORITY MEETING**

**WELLAND**

**NOVEMBER 19, 2008**

**7:00 p.m.**

**MINUTES**

**MEMBERS PRESENT:**

D. Ransom, (Chairman)  
B. Baty (Vice-Chairman)  
T. Dalimonte  
C. D'Angelo  
D. DiFruscio  
A. Fevez  
D. Goulbourne  
B. Greenwood  
B. Heit  
B. Henderson  
N. Johnson  
B. Steckley

**MEMBERS ABSENT:**

B. Bentley (with regrets)  
G. Burroughs (with regrets)  
B. Butters (with regrets)

**STAFF PRESENT:**

T. D'Amario, CAO/Secretary-Treasurer  
D. Bois, Acting Recording Secretary  
D. Baker, Director, Land Management  
J. Kukalis, Director, Water Management  
T. McDougall, Executive Director Conservation Foundation

**BUSINESS:**

The Chairman called the meeting to order at 7:04 p.m., welcomed everyone in attendance and then requested that if anyone had a conflict of interest to declare it. Brian Heit declared a conflict with respect to Telus or Talk Wireless.

**(1) MINUTES**

**(a) FULL AUTHORITY MEETING – OCTOBER 15, 2008**

There were no errors or omissions with respect to the minutes. The following resolution was presented.

**FA-131-08**

**MOVED BY:** T. Dalimonte

**SECONDED BY:** B. Greenwood

**THAT:** the Minutes of the Full Authority meeting held October 15, 2008, be received and approved.

**"CARRIED"**

**(b) BALL'S FALLS HERITAGE ADVISORY COMMITTEE MEETING - NOVEMBER 5, 2008**

There were no errors or omissions with respect to the minutes. The following resolution was presented.

**FA-132-08**

**MOVED BY:** T. Dalimonte

**SECONDED BY:** B. Greenwood

**THAT:** the Minutes of the Ball's Falls Heritage Advisory Committee meeting held November 5, 2008, be received and approved.

**"CARRIED"**

**(2) BUSINESS ARISING FROM MINUTES**

There was no business arising from the Minutes.

**(3) CHAIRMAN'S REMARKS**

The Chairman gave Andy Fevez permission to address the Board.

Andy Fevez advised that he and Jim Douglas, Superintendent of Binbrook, had been invited to attend the 15<sup>th</sup> Anniversary meeting of the Hamilton Amateur Astronomy Club. They were presented with a plaque and a picture, which was passed around to the members to view. This was in thanks for making a place such as Binbrook C.A. available for public use.

The Chairman then thanked the Brian Baty for chairing the last meeting in his absence so that he could attend an NEC meeting.

The Chairman noted that he and the C.A.O. attended a meeting on October 23, 2008, of the International Joint Commission regarding their 100<sup>th</sup> anniversary in 2009.

The Chairman thanked Terry McDougall, Executive Director of the Foundation, as well as any other staff involved, for the time and effort put in to make a success of the 7<sup>th</sup> Annual Elimination Draw and Dinner which was held on November 7<sup>th</sup>.

The Chairman advised that he had attended the follow-up meeting for the Thanksgiving Festival. He thanked staff for a well run, productive meeting.

Authority Meeting - Minutes  
November 19, 2008 – continued

The Chairman reminded the members that the Conservation Achievement Awards reception is being held on Tuesday November 25<sup>th</sup> at the Four Points Sheraton on Schmon Parkway. Board members are invited to attend and should advise the office.

**(4) CAO'S REPORT**

The CAO began by advising that a past board member, June Gardner, had passed away on November 18<sup>th</sup>. He noted that June had remained active with the Authority by sitting on the Thanksgiving Festival Committee to jury participants. June will be sadly missed by family and friends.

The CAO advised that \$3,100.00 had been raised at the Elimination Draw and Dinner.

The CAO advised that he and staff would be attending a budget meeting at the Region on the 20<sup>th</sup> from 4:00 to 6:00 p.m.

The CAO reminded the board that the next Full Authority meeting will be held on December 10<sup>th</sup> because of the Christmas holidays.

The CAO noted that many calls had been received concerning the dumping of tires at Rockway. Some progress has been made and the police are involved. The positive feedback from the public was very encouraging.

The CAO announced that the Ontario Museum Corporate Service Award of Excellence has been presented to the Ball's Falls Centre for Conservation.

**(5) BUDGET STATUS REPORT - REPORT NO. 76-08**

The CAO overviewed this report noting that at this point there are no significant variances and is within the approved budget. The following resolution was presented.

**FA-133-08**

**MOVED BY:** T. Dalimonte

**SECONDED BY:** B. Greenwood

**THAT:** the Budget Status Report for the period ending October 31, 2008 be received.

**“CARRIED”**

**(6) PRELIMINARY 2009 CURRENT AND CAPITAL BUDGET UPDATE REPORT NO. 77-08**

The CAO presented this report and a brief discussion followed.

Brian Baty strongly noted that the report concerning the issue of Tree By-law Additional Cost which was to be discussed separately in-camera, should be discussed in open forum. He said that the Region appears to be going back on the agreement reached to have the Authority administer the by-law and felt this was not acceptable. The members agreed with this and the CAO will pursue the issue at the Regional budget meeting.

Authority Meeting - Minutes  
November 19, 2008 – continued

Carmen D'Angelo asked about the funding for the Watershed Report Card. The CAO clarified the issue noting that historically, even though we can submit a levy request and the municipality must comply, in the spirit of cooperation we try to meet the requested targets.

The following resolution was then presented.

**FA-134-08**

**MOVED BY:** T. Dalimonte

**SECONDED BY:** B. Greenwood

**THAT:** Report No. 77-08 regarding the Preliminary 2009 Current and Capital Budget be received.

**“CARRIED”**

(7) **NPCA SAFETY MANUAL - REPORT NO. 78-08**

The Director, Land Management overviewed this report and after a brief discussion, the following resolution was presented.

**FA-135-08**

**MOVED BY:** M. DiFruscio

**SECONDED BY:** B. Steckley

**THAT:** Report No. 78-08 regarding the NPCA Safety Manual be received; and,

That the NPCA Safety Manual, dated November 2008, be approved.

**“CARRIED”**

(8) **JORDAN HARBOUR SITE UPDATE - REPORT NO. 79-08**

The Director, Land Management briefly outlined this report and the following resolution was then presented.

**FA-136-08**

**MOVED BY:** D. DiFruscio

**SECONDED BY:** T. Dalimonte

**THAT:** Report No. 79-08 regarding the Jordan Harbour Site be received for information purposes.

**“CARRIED”**

(9) **50<sup>th</sup> ANNIVERSARY OF THE NPCA - REPORT NO. 80-08**

The CAO presented this report and a discussion followed. A report with recommendations will be presented at the December meeting. The Chairman invited the members to seek out suggestions from outside sources. The following resolution was then presented.

**FA-137-08**

**MOVED BY:** D. DiFruscio

**SECONDED BY:** B. Steckley

**THAT:** Report No. 80-08 regarding the 50<sup>th</sup> Anniversary celebrations of the Niagara Peninsula Conservation Authority be received for information and discussion purposes.

**“CARRIED”**

**(10) PROJECT STATUS REPORT - REPORT NO. 81-08**

Andy Fevez took issue with the problem of maintaining acceptable reservoir levels at the Binbrook dam. He noted that the higher level has completely undone all the erosion protection works that have been completed by the Glanbrook Conservation Committee. The Director, Water Management overviewed the problems which have occurred with hydro and frozen valves and advised that a generator has been installed. Carmen D'Angelo asked if the Board could receive a report on an operation contingency plan for the dam. The Director, Water Management said he could have one for the next meeting.

Norm Johnson had a question regarding item 7 on page 30 - Municipal Drain Maintenance Review. He wanted to know what the review consisted of. The Director, Water Management advised that the staff biologist looks at drain proposals for fisheries and/or erosion issues as part of a consultant process. Mr. Johnson advised that there should be a serious look at digging sediment traps at road allowances to mitigate the negative impact of digging out municipal drains

The following resolution was then presented.

**FA-138-08**

**MOVED BY:** D. DiFruscio

**SECONDED BY:** B. Greenwood

**THAT:** Report No. 81-08 outlining the status of Authority projects be received for information.

**“CARRIED”**

**(11) IN-CAMERA**

In accordance with Authority policy, the following resolutions were presented.

**FA-139-08**

**MOVED BY:** B. Steckley

**SECONDED BY:** B. Henderson

**THAT:** this meeting do now move in-camera.

**Received at 8:30 p.m.**

**“CARRIED”**

Authority Meeting - Minutes  
November 19, 2008 – continued

**FA-140-08**

**MOVED BY:** B. Steckley

**SECONDED BY:** B. Heit

**THAT:** this meeting do now move back into open session.

**Received at 8:40 p.m.**

**“CARRIED”**

**(12) OTHER BUSINESS**

Damian Goulbourne asked the CAO to thank the planning staff for their support and assistance with regard to a development proposal on the east side of Welland.

Brian Baty explained the concept of the Regional branding initiative (a stylized N incorporating different symbols). He advised staff to look into utilizing this program to promote Authority issues.

Norm Johnson advised that Fred High has shown an interest in allowing his land to be used for off site parking during the Thanksgiving Festival.

Carmen D'Angelo informed the CAO that the Authority's budget submission should be well received at the Hamilton Budget meeting. He also noted that there may be questions on expansion of the washroom facilities at Binbrook.

**ADJOURNMENT**

There being no further business, the following resolution was presented.

**FA-141-08**

**MOVED BY:** D. DiFruscio

**SECONDED BY:** B. Henderson

**THAT:** this meeting do now adjourn.

**Received at 8:45 p.m.**

**“CARRIED”**

**"D. Bois, Acting Recording Secretary**

**D. Ransom, Chairman"**





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**NIAGARA PENINSULA CONSERVATION AUTHORITY  
REGIONAL TREE AND FOREST BY-LAW  
ADVISORY COMMITTEE MEETING**

**Main Office, Welland**

**November 20, 2008**

**3:00 p.m.**

**MINUTES**

**Members Present:** R. Miller, Chair  
T. Platts  
D. Ransom  
H. Rempel  
J. Schonberger  
A. Witteveen  
C. Travis  
P. Robertson  
K. Stayzer

**Staff Present:** T. D'Amario, CAO/Secretary Treasurer  
D. Baker, Director, Land Management  
D. Drennan, Forester  
J. Vlasman, Forestry Technician

**Regrets:** B. Andres  
F. Berardi  
B. Baty

**BUSINESS:**

**1) Call to Order**

The meeting was called to order at 3:05 pm by the Chair. J. Schonberger and P. Robertson moved to approve agenda. Those present went around the table and introduced themselves.

**2) Accept/Review minutes of previous meeting (Sept 18, 2008)**

Correction to the spelling of Ken Weins. P. Robertson is the official representative from the NWA.

Moved by: H. Rempel

Seconded by: A. Witteveen

The minutes of the September 18, 2008 meeting be approved.

Carried

### 3) **Review of draft By-law book**

A copy of a draft by-law booklet was circulated to members with the agenda package. Dan went through the booklet and highlighted the sections included in the booklet.

A number of questions were raised:

1. What is exotic species? change to non-native species,
2. Concern about buffer size (30m)? only a recommended practice,
3. Consider including the word harvest in question 7? Cutting means the same,
4. List the 4 municipalities with woodlands <1 ha? Yes, will include the names,
5. Consider changing the word wetlands to wet areas in the GFP section? Yes, will change,
6. Definition of hardwood vs deciduous trees? Means the same, even poplar.

Members were asked to provide comments to staff by December 15, 2008.

### 4) **Status Report**

A copy of the status report was circulated to members with the agenda package. Dan Drennan asked if there were any questions about specific items rather than going through each page.

Questions or requests raised included:

1. provide the address of woodlands that are issued a GFP permit,
2. provide a number for each item rather than relying in the comment date for reference,
3. items related to clearing on a Darby Road property (Welland) and tree cutting on a Henderson Road property (Wainfleet).

### 5) **Other Business**

Paul Robertson raised a concern about a new requirement for a “non-hand-drawn” map to be included with every permit application submitted to the NPCA. Mr. Robertson’s concern was that not all landowners had access to published maps or air photos of their properties and that this requirement was not reasonable.

Staff explained that the requirement was to ensure the NPCA received good quality maps which conveyed accurate locations of harvest areas in order assess each application. It also aids the NPCA forestry staff to conduct efficient inspections. Staff agreed that this requirement may not be practical and that the NPCA would accept hand drawn maps so long as they were accurate, clear and of reasonable quality drafting.

### 6) **Scheduling of Next Meeting**

The next committee meeting shall take place on Thursday January 15<sup>th</sup>, at 3:00 PM at the NPCA Welland Office.

### 7) **Adjournment**

On motion, the meeting was adjourned at 4:00 PM

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

**DATE: December 15, 2008**

**RE: 2009 ANNUAL MEETING & REGULAR MEETING SCHEDULE REPORT  
NO. 81-08**

Provided below is the proposed schedule for Authority meetings in 2009. As in previous years, the Board of Directors meetings are proposed for the 3<sup>rd</sup> Wednesday of each month, excluding July where no meeting is scheduled and December, where the meeting date is the 2<sup>nd</sup> Wednesday due to the proximity to Christmas. As in past years, the proposed meeting start time is 7:00 p.m.

In accordance with Section 17(1) of The Conservation Authorities Act, the Authority's Annual Meeting, at which time the offices of Chairman and vice-Chairman for 2009 are elected, would be traditionally held January 21, 2009.

January 21 – Annual Meeting  
February 18  
March 18  
April 15  
May 20  
June 17  
July - no regular meeting scheduled  
August 19  
September 16  
October 21  
November 18  
December 9

**Recommendation:**

**That the 2009 Authority Meeting Schedule as outlined in Report No. 81-08 be approved; and**

**That the 2009 Annual Meeting be held January 21, 2009.**

Respectfully Submitted by: \_\_\_\_\_  
Tony D'Amario, P.Eng.  
Chief Administrative Officer/Secretary-Treasurer

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

**DATE:                December 15, 2008**

**RE:                    BUDGET STATUS REPORT - REPORT NO. 82-08**

Attached is the budget status report for the period ending November 30, 2008.

**Recommendation:**

**That the budget status report for the period ending November 30, 2008 be received.**

Respectfully Submitted by: \_\_\_\_\_  
Tony D'Amario, P.Eng.  
Chief Administrative Officer/Secretary-Treasurer

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

**DATE: November 19, 2008**

**RE: Revised Regulation No. 27 for Indemnification – Report No. 83-08**

The adoption in 2004 of Federal legislation known as Bill C45, as well as the current regulatory climate in the Province, expose both staff and Members of the Board to personal charges of criminal negligence and financial liability related to the tasks they must carry out related to their statutory responsibilities. As members are also likely aware, in recent years, there has been a shift to enforcement and penalties, as opposed to working with other tools to achieve compliance (i.e. orders). This is evidenced by the large numbers of inspection, enforcement and investigative officers hired by both the Ministry of Environment and Ministry of Labour in the last two years. In some instances (i.e. driving hours under HT Act and ES Act), the regulations have themselves been in conflict. Nonetheless, the penalties that can be levied against both staff and board members for relatively minor administrative or technical offences, can be significant (e.g. \$ 1.0 million maximum for personal violations of Regulations under the Safe Drinking Water Act).

Staff is of the opinion that the Authority's Indemnification Regulation is currently inadequate with respect to Bill C45 in a number of areas and a review of a number of other policies to deal with indemnification has confirmed this. The fundamental changes proposed to the existing Legal indemnification Regulation is as follows.

Firstly the current policy deals primarily with criminal matters with inadequate reference to the broad and undefined term of "civil" actions. The existing policy also requires that an individual Board or staff member provide their own legal council and upon being found "innocent" of a criminal offence, the Authority would provide reimbursement. The new policy provides for proactive legal defence of staff and board members, provided they have acted in "good faith" in the execution of their duties. The new policy in addition to criminal offences, also addresses provincial (non criminal) offences or human rights allegations.

In order to obtain indemnification from the Authority, in the case of staff, application must be made to the Chief Administrative Officer and in the case of Board Members, to the Chairman of the Board. The Authority upon hearing the particulars, can decide whether or not the staff or board member acted in "good faith" and if not, indemnification can be withheld. There are also provisions for the Authority to recover cost should a court, commission or other legal proceeding prove that the Board or staff member was not acting in "good faith" when indemnification was originally sought.

**RECOMMENDATION**

**That Report No. 83-08 regarding the Indemnification, dated August 20, 2008 be received and that the appended Regulation No 27 be adopted as revised.**

Prepared by: John Kukalis; Director, Water Management

Respectfully Submitted by:

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

## REGULATION NO. 27

### - INDEMNIFICATION-

#### 1. **Application of the Regulation**

- (a) This Regulation applies to any Employee or Member of the Board in respect of acts or omissions done or made by the Employee or Member of the Board, in good faith, in his or her capacity as an Employee, including while acting in the performance of any statutory duty on behalf of the Authority.
- (b) This Regulation applies to any person who was a Member of the Board or an Employee at the time a cause of action arose notwithstanding that that person has ceased to be an Employee or Member of the Board at the time that the Indemnity is sought.

#### 2. **Exclusions**

This Regulation does not apply to:

- (a) Disciplinary matters relating to Employees;
- (b) Matters wherein a Member of the Board or an Employee did not act honestly or in good faith or who carried out his or her duties in a grossly negligent manner;

#### 3. **Indemnification**

- (a) The Authority shall Indemnify and save harmless every Employee or Member of the Board from all Liability as defined in this Regulation in the circumstances described in Section 1, above, subject to the exclusions identified in Section 2, above;
- (b) Notwithstanding Section 3.(a) above, the obligation of the Authority to Indemnify Employees and Members of the Board shall be subject to the following conditions:
  - (i) Notwithstanding any other provision of this Regulation to the contrary, if Authority insurance coverage is available in respect of the issue for which the Indemnity is sought, the insurers' lawyers shall defend the Proceeding unless the Authority directs otherwise;
  - (ii) If Authority insurance coverage is not available, the choice of a lawyer to be retained in respect of the matter shall be subject to the approval of the Chief Administrative Officer/Secretary Treasurer;
  - (iii) Any application for Indemnity pursuant to this Regulation must be made, in writing, prior to, or immediately following a Member of the Board or an Employee retaining the services of a lawyer in respect of the matter for which Indemnity is sought, and such application for Indemnity shall include the nature of the Proceeding, the name of the lawyer proposed to be retained, and a schedule of fees and disbursements;

- (iv) In the case of a request for Indemnification by an Employee, the request shall be made to the Chief Administrative Officer/Secretary Treasurer.
  - (v) In the case of a request for Indemnification by a Member of the Board, such Member shall make the request in writing to the Full Authority Board and submit it to the Chairman of the Board.
  - (vi) If more than one Employee, or Member of the Board requires legal representation, one lawyer shall be retained to represent all interests unless, in the opinion of the Board, on the advice of the Authority Solicitor, a conflict of interest exists;
  - (vii) The Board shall be apprised of the status of all Proceedings on an ongoing basis by the Chief Administrative Officer/Secretary Treasurer;
  - (viii) The Board shall have the right to approve the settlement of any action or proceeding for which Indemnity is sought prior to its final disposition;
  - (ix) The Board shall be advised of the final disposition of every matter for which Indemnity is sought;
- (c) Any Employee or Member of the Board for whom Indemnification is sought shall cooperate fully with the Authority and its solicitors, where applicable, and such cooperation shall include making available all information and documents relevant to the matter as are within the Employee's or Member's knowledge, possession or control and shall include attendance at all Proceedings when required to do so.
- (d) When an Employee or Member of the Board has been Indemnified in respect of legal costs or damages, any recovery by the Employee or Member of the Board on account of legal costs or damages shall be assigned and paid to the Authority to the extent of such Indemnification provided by the Authority, save and except damages awarded to an Employee, or Member of the Board in his or her personal capacity.

#### **4. Bad Faith**

- (a) In respect of legal Indemnification approved relating to Provincial Offences matters or Criminal Proceedings, the Board may require an Employee or Member of the Board to reimburse the Authority in respect of any Indemnification paid in the event that the Employee or Member of the Board is found guilty of the Provincial Offence or Criminal Code Offence, as the case may be, if after considering the trial proceedings and consulting with the Authority's Solicitor, in the opinion of the Board, the Employee or Member of the Board did not act in good faith.

#### **5. Persons Served with Process**

- (a) Where an employee is served with any process issued out of or authorized by any court, administrative tribunal or other administrative, investigative or quasi-judicial body, other than a subpoena, in connection with any action or Proceeding, the employee shall:
- (i) unless he or she is the head of a department, forthwith deliver the process or a true copy thereof to the head of the department for which the employee works or



to a person designated by the department head to receive such process, who in turn shall deliver a copy thereof to the Chief Administrative Officer/Secretary Treasurer; or

- (ii) if he or she is the head of a department, forthwith deliver the process or a copy thereof to the Chief Administrative Officer/Secretary Treasurer; or
- (iii) if he or she is the Chief Administrative Officer/Secretary Treasurer, forthwith deliver the process or a copy thereof to the Chairman of the Authority Board.

## 6. Validity

- (a) Should any section, clause or provision of this Regulation be held by a court of competent jurisdiction to be invalid, the validity of the remainder of this Regulation shall not be vitiated.
- (b) Where a form of words or expression are prescribed in this Regulation, deviations there from not affecting the substance or calculated to mislead do not vitiate them.
- (c) This Regulation shall come into force and take effect on the date of adoption by the Board.

## 7. Definitions:

### **In this Regulation,**

**Board** Means the Board of the Niagara Peninsula Conservation Authority and Member of Board has a corresponding meaning.

**Employee** Means any salaried officer, or any other person in the employ of the Authority and includes:

- (1) Persons that provide their services on behalf of the Authority without remuneration, exclusive of reimbursement of expenses or honouraria

**Indemnification** Means assuming the cost of defending an Employee, or Member of the Board as the case may be, paying any damages or costs including monetary penalties awarded against such person as a result of a Proceeding, paying personal expenses of such person incurred as a result of such Proceeding or paying any sum required in connection with the settlement of such Proceeding to the extent that such costs, damages, expenses or sums are not assumed paid or reimbursed under any provision of the Authority's insurance program for the benefit and protection of such person against Liability incurred by him or her; and Indemnify or Indemnity have corresponding meanings.

**Liability** Means actual and potential legal costs, personal expenses and damages incurred, or to be incurred, in connection with any Proceeding commenced or threatened to be commenced arising out of any act or omission done or made in good faith by any Employee or Member of the Board in the course of their employment, or in the course of their duties as a Member of the Board or employee of the Authority, and including

acts or omissions done or made while acting in the performance of a statutory duty.

**Proceeding**

Means a Civil, Administrative, Human Rights, Provincial Offences or Criminal matter brought or intended to be brought before a court, tribunal, commission or board of competent jurisdiction.



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www.conservation-niagara.on.ca

Tel (905) 788-3135  
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**To: Chairman and Members of the Authority**

**Date: December 10, 2008**

**Re: Binbrook Dam and Reservoir – Report No. 84-08**

The purpose of this report is to respond to questions raised at the November 2008 Board meeting with respect to the recent electrical failure at the Binbrook Dam/Reservoir.

The initial power failure at the dam occurred on September 19, 2008. At that time, the forecast was clear and the reservoir was at the normal holding level of 198.3 metres or approximately 2 feet below the lip of the morning glory spillway. At that time both the 400 mm (16”) and 760 mm (30”) diameter low flow valves were closed, in order to maintain the optimum operating level.

On Monday, September 22, 2008, the electrical fault was traced to a portion of the underground electrical conduit and a temporary repair was completed. During the course of locating the fault, two excavations were made and it was determined that the entire underground electrical system (almost 1.0 km in length) was in a seriously deteriorated state as a result of a number of factors including age, wire size and water seepage into the conduit.

The estimated cost to replace the cable underground and on a similar alignment was estimated to be approximately \$25,000. Authority staff also reviewed lower cost alternatives in conjunction with a local electrical contractor and Hydro One, in an effort to eliminate and or reduce the length of underground cabling required. Unfortunately, the power failed again on October 13, 2008, and at this time both valves were still closed, as the reservoir was holding steady at the optimum operating level.

On October 14, 2008, staff met on-site with Hydro One in order to confirm the location of a new above ground service line to the dam control house from the road. At that time, Hydro One indicated it would complete a design by October 17, 2008, outlining the following: the extent of work Hydro One would perform; the extent of the work NPCA would require a private contractor to perform; and, estimates of the associated costs. This information was not received by NPCA until late on November 7, 2008. The estimated cost for NPCA to complete this new servicing is \$11,500 or less than half of replacing the original service configuration. The cost to rent a backup generator is \$ 1,250 a week, and given the anticipated replacement timelines, expected weather trends, and reservoir level staff did not at that time believe it appropriate to incur additional costs beyond the already significant unanticipated budget to replace the electrical service.

On November 11, 2008, NPCA authorized its contractor to complete the necessary pole and wire work on NPCA property and Hydro One indicated it would proceed with a request for locates of other underground utilities that are necessary before it could complete any works in the road right-of-way. At this time, it was noted that both valves were still in the closed position and the reservoir water level was approximately 1 foot above the optimum water level, but within the normal operating range for the reservoir.

On November 13, 2008, the long range weather forecast was checked and indicated a very small chance of showers within the next few days. In an effort to mitigate the rising water levels and avoid the public safety hazard associated with extreme levels, the reservoir was accessed by staff and both valves were manually opened and the larger of the two left partially opened to draw levels back down to optimum slowly (i.e. estimated to take approx. 5 days, assuming no large rainfalls).

Unfortunately, on November 15, 2008, the Hamilton area received an unexpectedly severe 25mm of rainfall. This resulted in elevating water levels to just below the lip of the morning glory spillway or two feet above optimum, but again still within expected operating levels.

On November 17, 2008, Hydro One was still not able to confirm a start date for their portion of the works. At that time, staff decided a temporary back up generator was required in order to manipulate the valves remotely. The system was made operational as of November 19, 2008. As of November 24, 2008, the reservoir was back down to its optimal holding level. Due to the significant fuel consumption required to run the generator, it is only turned on when bad weather is expected and the need to manipulate the valves and monitor the reservoir levels remotely is paramount.

Due to delays from Hydro One, staff currently do not expect the electrical work to be completed before Wednesday, December 17, 2008. The back up generator will remain on site until such time as the electrical system is fully repaired.

With respect to the dam/reservoir, staff would note the following.

In 2003, a thorough third party Dam Safety Review was conducted on this facility and as a result significant improvements were made to the emergency overflow spillway in 2007. With respect to the valves and morning glory spillway, no recommendations were made for modifications to the electrical supply system. As such, although staff did consider adding supplemental backup power to this facility, it had not been identified as a priority from a dam safety perspective.

Although staff monitor reservoir levels and manipulate valve settings to the extent possible, the physical limitations of the dam will result in areas below 199.2 m. (1 foot above the morning glory spillway) being periodically inundated with water. Even with both valves fully open, the maximum outflow that can be accommodated without the morning glory, is 4 cubic metres/second (141 cu. ft./sec) for the larger conduit and 0.8 cubic meters/second (28 cu. ft./sec) for the smaller conduit. Exposing the downstream watercourse to this magnitude of flow for any sustained period of time would result in significant erosion to private property, as well as negative environmental impacts. As such, in order to dampen peak outflows, extended wet weather rainfall or short but severe dry weather storm events should be expected to utilize some of the 1,000,000 cubic metres (825 acre.ft) of storage available below the morning glory spillway on at least a quarterly basis.

With respect to extreme conditions, during a 100 year event the water level in the reservoir can be expected to rise to elevation 199.6 metres or 4.3 feet above the optimum holding level and as high as 201.5 metres or 10.5 feet above the optimum holding level, under probable maximum flood conditions. As such, care must be taken in locating anything below 4.3 feet above the optimum level.

Currently, the 2009 Capital Budget, has funds included to undertake improvements to the remote water level monitoring capabilities at Binbrook and in conjunction with the planned website

updates, we anticipate having real time water level information available online for the public in 2009.

Over the past number of years, NPCA staff have diligently monitored and manipulated valve settings at the reservoir in an attempt to maintain water levels within the targeted range. For the most part, this has been successful with a number of positive results including the significant reduction of shoreline erosion, better establishment of perimeter vegetation and improved natural and fish habitat/spawning opportunities. Unfortunately the rare and unforeseen series of cumulative events created over the past 2 months resulted in a temporary increase of the water level objectives.

Staff has investigated the estimated cost to install a backup generator here and a gas system was ruled out due to the building modifications that would be required to house explosive fuels and the noise baffling that would be necessary. The preferred option would be a natural gas generator as a gas well is currently utilized to heat the control building. The estimated cost to have a suitable one installed is approximately \$30,000 - \$40,000.

**RECOMMENDATION:**

**That Report No. 84-08 regarding the Binbrook Reservoir, dated December 10, 2008 be received for information.**

Prepared by: John Kukalis; Director, Water Management

Respectfully Submitted by:

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



250 Thorold Road West, 3rd Floor  
Welland, Ontario L3C 3W2

Tel (905) 788-3135  
Fax (905) 788-1121

E-mail: [n pca@conservation-niagara.on.ca](mailto:n pca@conservation-niagara.on.ca)

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

**DATE: December 15, 2008**

**RE: 50<sup>th</sup> Anniversary Committee – Report No. 85-08**

As indicated in a previous report, 2009 will mark the 50<sup>th</sup> Anniversary of the incorporation of the NPCA. Anniversaries are a wonderful time to reflect on the past and plan for the future. The Authority has played a significant role in the environmental health and well being of the Niagara watershed. In anticipation of this event, staff has had some preliminary discussions regarding ways to commemorate and celebrate this occasion.

Staff support the idea of keeping a 'grass roots' theme to events. Specific ideas that have been put forward include a staff and board reunion/pig roast at the Long Beach Conservation Area. This was the first property acquired by the Authority in 1961. The conservation area provides public access to Lake Erie, and offers a host of activities to over 80,000 visitors per year including camping and water recreation activities as well as picnicking and nature appreciation. It is felt this would be an ideal location to host this event.

In addition, it is recommended that since the Authority already hosts several special events each year such as the opening of Trout Season at St. Johns, Fishing Derbies at Binbrook and the Thanksgiving Festival at Ball's Falls, that we take the opportunity to build and enhance these events. This will allow us to use current financial and human resources efficiently. Staff also recommends that we incorporate a Photo Contest as part of the celebrations to be held throughout the year. This is an ideal way to engage the community and the photos would be used to produce a unique commemorative calendar, and subsequently for inclusion in the many publications and displays of the Authority.

To facilitate the planning of the 50<sup>th</sup> anniversary celebration, staff is recommending that a 50<sup>th</sup> Anniversary Planning Committee be formed with the objective of assisting the Authority in the planning, organization and implementation of events. The committee will provide updates to the Board throughout the year. It is recommended that the committee's membership be comprised as follows: Director of Communications, Executive Director of the Niagara Peninsula Conservation, CAO, 2 additional members of the staff, 2 members of the NPCA Board, and 3 community members. This will be a short term working committee for the period January 2, 2009 to December 31, 2009 to oversee the development and execution of events and the appropriate timetable. Additional resources would be engaged as appropriate.

**RECOMMENDATION:**

**That Report No. 85-08 regarding the 50<sup>th</sup> Anniversary Committee be received for information and discussion purposes.**

Prepared by: Mary Stack, Director, Communications

Respectfully Submitted by: \_\_\_\_\_  
Tony D'Amario, P.Eng.  
Chief Administrative Officer/Secretary-Treasurer



250 Thorold Road West, 3rd Floor  
Welland, Ontario L3C 3W2

Tel (905) 788-3135  
Fax (905) 788-1121

E-mail: [npca@conservation-niagara.on.ca](mailto:npca@conservation-niagara.on.ca)

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

**DATE: December 3, 2008**

**SUBJECT: Jordan Harbour Draft Site Plan – Report No. 86-08**

Conservation Authority staff completed a draft plan for the Jordan Harbour Site. Members will recall that the NPCA went to the public for proposals to redevelop this site. Although initial interest was high, applicants dropped off because the level of investment was relatively high when compared to the opportunity for payback.

The draft plan prepared by staff takes into consideration all of the proposed activities and uses recommended for this site in the Twenty Valley Tourism Strategy, specifically: boat rentals, water-based touring and environmental education.

The key elements of the plan supporting this vision include a picnic area, dock facilities, public parking and washrooms. The draft plan provides opportunities for greater private/public partnerships. The Niagara Rowing School is an existing tenant. Staff believe this activity is a good foundation upon which to build the paddle instruction and classroom activities. The renovated marina building would provide support services, and have smaller retail spaces that could be available to tour operators, retailers, food service or trades affiliated with paddle activities (such as canoe making).

One of the most significant features of the plan is a Plank Trail connecting the Jordan Harbour property to the Waterfront Trail. This would provide a vital link to Lake Ontario and a large residential development planned for lands on the north side of the Queen Elizabeth Way.

Staff believe this plan accomplishes the broad vision of the Twenty Valley Strategy and addresses the local demand for access to the Jordan Harbour. The estimated cost of this project is \$3 million. While this amount is large, staff do not anticipate using levy or tax dollars for construction or operations. The plan is structured to be implemented in phases as support and partnerships are developed. Site clean-up will begin in early 2009, however the project would only advance if funding and support have been secured. Once the plan has received Board approval, staff would begin approaching the Foundation and community partners to develop support for this project.

**RECOMMENDATION**

**That Report 86-08 regarding the Jordan Harbour Draft Site Plan, be approved and;**

**That staff be directed to consult the Niagara Peninsula Conservation Foundation and local partners to develop support for the project.**

**Prepared By: D. Baker, Director, Land Management**

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





250 Thorold Road West, 3rd Floor  
Welland, Ontario L3C 3W2

Tel (905) 788-3135  
Fax (905) 788-1121

E-mail: [npca@conservation-niagara.on.ca](mailto:nzca@conservation-niagara.on.ca)

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

**DATE: December 3, 2008**

**SUBJECT: 2009 Conservation Areas Fee Schedule – Report No. 87-08**

Authority staff have developed the attached schedule of Conservation Area Fees for the 2009 operating season. This exercise involved consultation with neighbouring Conservation Authorities and private facilities. The purpose of these consultations is to ensure the NPCA fee schedule is on par with the market rate for similar services and facilities.

#### Day Use Fees

In 2008, the Authority's day-use fee structure was modified to reflect the varying level of services offered at our four revenue producing areas. Ball's Falls and Binbrook received significant increases due to the improved facilities and infrastructure, while day-use fees at the campgrounds were increased only slightly.

For the vast majority of our visitors, day-use rates have not been an issue. Unfortunately, staff are receiving complaints at the Ball's Falls Conservation Area, where the move to a year-round operation has been questioned. Prior to the construction of the new centre, the parking area at Ball's Falls was staffed during the summer and on busy weekends in the fall. Any other time a self-pay system was in effect. Although this system was in place and clearly signed, the fee was ignored by a large number of visitors. Now that admission is being charged year-round, some visitors perceive this as a new fee, rather than implementing a fee that was always in place.

Staff recommend that day-use fees remain constant for 2009. The only change suggested is an increase in the daily car maximum at Long Beach and Chippawa Creek from \$12.00 to \$15.00.

#### Camping Fees

There were unexpected increases to operating costs in 2008, most of them associated with high fuel and associated goods/services impacts. Although the cost of fuel significantly decreased in the later months of 2008, analysts suggest a return to high prices in the summer of 2009.

In order to meet the increased operating costs at our campgrounds, a modest increase is proposed on all fee categories. The increase averages out between 2.3% and 3.8% depending on the fee category. This also ensures that we are maintaining our position in the marketplace.

Another change being recommended is an increase in the reservation fee from \$9.00 to \$10.00. Staff recommend this change to bring our fees in-line with other agencies currently using the CAMIS booking system.

A detailed chart showing the rates and comparisons is attached for reference. It is important to note that the NPCA is one of the first agencies to set rates for 2009. As such, the chart contains both 2008 along with 2009 rates (where available). Particular attention should also be given to the amenities, level of service and camping season on comparison operations.

### Ball's Falls

Comparisons with fees at similar rental facilities show that the church and barn at Ball's Falls remain at the high end of the wedding market. The NPCA were advised that some businesses in West Niagara believed the fees for the new centre were un-necessarily low, giving an unfair advantage to the Conservation Authority. Staff regularly consult the marketplace and speak with the public to ensure that our fees are realistic. While it is difficult to find exact comparisons for some of the facilities and services offered at Ball's Falls, our research shows our fees to be in the middle to high range for the local marketplace. Our comparison facilities are community rental halls, service group facilities and wineries.

Staff recommend modest increases to most fees for 2009. The levels are in keeping with increased operating costs and other marketplace drivers. We will continue to offer significant discounts for educational and not-for-profit groups using our facilities.

### Hunting Permits

In 2008, the NPCA began charging a \$25.00 administration fee for hunting permits. This was not well received by the hunting community and staff handled several complaints, including some from the Ontario Federation of Anglers and Hunters. The primary concerns were that hunters were not consulted before the charges were implemented, and that fees were not being applied to other user groups (hikers, bird watchers, cyclists)

When compared with the hunting programs at other Conservation Authorities, the NPCA fees are in the middle to high range. Staff recommend maintaining the fee at the current rate for 2009.

### **RECOMMENDATION**

That the proposed 2009 Conservation Area Fee Schedule be approved.

**Prepared By: D. Baker, Director, Land Management**

**Respectfully Submitted By:**

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

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

**DATE:                December 15, 2008**

**RE:                    PROJECT STATUS REPORT - REPORT NO. 88-08**

## **WATER MANAGEMENT**

### **I. Watershed Regulation Division**

#### **1) Binbrook Reservoir – City of Hamilton (Glanbrook)**

The reservoir water levels for the last 30 days have generally fluctuated between 652.5 feet and 650.5 feet. For reference, the dam holding level is 650.5 feet. The reservoir water level currently sits at 650.5 feet. NPCA staff continue to monitor the reservoir water levels daily.

On October 9, 2008, the primary underground hydro service to the dam control house failed. NPCA staff coordinated the repair work. Upon undertaking work on the underground hydro service, it was noted that the cable was in poor condition. The electrician undertaking the repairs indicated that it would only be a matter of time until the underground cable failed again. As such, the NPCA is commissioning the installation of a new overhead hydro service from Harrison Road to the dam control house. Work has been completed on NPCA property by the NPCA's contractor. Hydro One work on Harrison Road is expected to be completed by mid December. Until such a time, a portable generator has been installed at the control house.

#### **2) Rain Gauges**

In an effort to provide for a better flood forecasting and warning program, the NPCA have recently installed 2 additional rain gauges at our surface water gauge stations at Smithville (20 Mile Creek – W. Lincoln) and DeCew (12 Mile Creek – St. Catharines). A total of 5 rain gauges have been installed at NPCA surface water monitoring stations. The others are located at Canborough (Oswego Creek - Haldimand), Caistor (Welland River – West Lincoln), and Virgil (Four Mile Creek - NOTL).

#### **3) Spring Garden Creek – City of St. Catharines**

The NPCA has completed undertaking the necessary calculations, field work, and map analysis to accurately determine the extent of the 100 year flood elevations for Spring Garden Creek in the City of St. Catharines.

#### **4) Hunter's Drain – City of Niagara Falls**

The NPCA is presently undertaking the necessary calculations, field work, and map analysis to accurately determine the extent of the 100 year flood elevations for Hunter's Drain in the City of Niagara Falls.

### **5) Usshers Creek – City of Niagara Falls**

The NPCA is presently undertaking the necessary calculations, field work, and map analysis to accurately determine the extent of the 100 year flood elevations for Usshers Creek in the City of Niagara Falls.

### **6) NPCA ‘Regulation of Development, Interference with Wetlands, and Alteration to Shorelines and Watercourses’ Permits**

The NPCA regulates construction around watercourses, wetlands, valley lands, shorelines, and floodplains. The NPCA has approved 48 permit applications for the 2008 calendar year.

### **7) Violation of the NPCA’s ‘Development, Interference with Wetlands, and Alteration to Shorelines and Watercourses’ Regulations**

Please refer to the associated Report under “in camera” section of agenda.

### **8) NPCA-DFO Partnership Agreement**

The NPCA is under agreement with the Department of Fisheries and Oceans (DFO) to review works in or near water to determine whether the work is likely to result in the harmful alteration, disruption or destruction of fish habitat (HADD). During the current calendar year NPCA staff has reviewed 74 applications and proposals under this 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. NPCA staff is currently working on the following fish habitat compensation projects:

- Niagara Health Services hospital project in St. Catharine’s. To date, staff have been able to work collaboratively with DFO to address the majority of the compensation required. Nonetheless, a minor amount of compensation remains outstanding and staff had provided DFO with a number of sites thought to be suitable. In late fall, DFO representatives expressed conceptual support for habitat enhancement works adjacent to the Authority’s Shriner’s Creek facility proposed by the Aquatic Biologist. This design was subsequently refined and approved by the DFO in November. Staff anticipate commencing earth work at the Shriner’s facility shortly.

### **9) Municipal Drain Maintenance Review**

Through the NPCA-DFO Partnership Agreement, as well as policies adopted to administer the NPCA Regulation of Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses, NPCA staff work cooperatively with staff from local municipalities to review and assess proposed municipal drainage projects. NPCA staff has reviewed 30 municipal drain project during the current calendar year.

The NPCA continues to represent Conservation Authorities located in Central Ontario on the DART Committee. Other members of the DART include representatives of the Ontario Federation of Agriculture, Drainage Superintendents Association of Ontario, Ontario Society of Professional Engineers(Land Drainage Committee), Association of Municipalities of Ontario – Rural Caucus, OMAFRA, MNR and Conservation Ontario. The purpose of the DART is to develop a consistent approach and technical direction with regard to municipal drainage project review under Conservation Authority Regulations.

## **II. Watershed Planning Division**

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

On Friday, November 14, 2008 a workshop will be put on by the Planning Department at Ball Falls Center for local area Planning and Building Officials in order to outline the new responsibilities and information flow under the joint Memorandum of Undersigning that has been executed between the NPCA, RMON and the Tier One municipalities. The Source Water Protection Division will also be giving a presentation on what will be coming into effect in the next two years pursuant to the Clean water Act.

### **2) Watershed Plan Preparation**

#### **a) Fifteen-Sixteen-Eighteen Mile Creeks Watershed Plan**

The final version of the Watershed Plan has been printed and delivered. A mailing list for stakeholders to receive the document is being compiled and once complete the Watershed Plan will be delivered. Early 2009, a copy of the final publication will be presented to the members of the Steering Committee as a token of appreciation for their efforts on the project.

Committee presentations were conducted to provide Tier One Councils with an overview of the plan. The Township of West Lincoln occurred on October 20<sup>th</sup>; Town of Lincoln on November 10<sup>th</sup>; and Town of Pelham on November 17<sup>th</sup>.

Erosion pin data was collected for all 3 sites in the watershed. On average, most pins gained sediment from spring of 2008 to fall of 2008.

#### **b) South Niagara Falls Watershed Plan**

The final version of the Watershed Plan has been printed and delivered. A mailing list for stakeholders to receive the document is being compiled and once complete the Watershed Plan will be delivered. Early 2009, a copy of the final publication will be presented to the members of the Steering Committee as a token of appreciation for their efforts on the project.

Committee presentations were conducted to provide Tier One Councils with an overview of the plan. The City of Welland presentation took place on November 4<sup>th</sup> and the City of Niagara Falls was presented on December 1<sup>st</sup>.

Erosion pin data was collected for all 5 sites in the watershed. On average, most pins gained sediment from spring of 2008 to fall of 2008.

#### **c) Lake Erie North Shore Watershed Plan**

The first of two public workshops was held in Port Colborne on November 25<sup>th</sup> at the Roselawn Centre. Attendance was approximately 9 people. The second workshop is scheduled for December 4<sup>th</sup> with a tentative snow date of December 9<sup>th</sup> at the Lions Club in Long Beach in Wainfleet. A positive attendance is expected for this workshop.

Fish sampling was conducted on the following watercourses in the study area: Low Banks Drain; Eagle Marsh Drain; Beaver Dam Creek; and Casey Drain. Historically little information has been available for this area therefore this information will feed directly into the watershed plan by filling this data gap.

Erosion pin data was collected for 2 sites in the watershed. On average, most pins gained sediment from spring of 2008 to fall of 2008. Geomorphic information has been collected for

Lake Erie 3 and Bay Beach Drain, concluding this year's field work. Field notes from the summer field season were reviewed and collected field data is being entered into an Access database. Analysis and writing of the Lake Erie North Shore Geomorphic Assessment has commenced for the 53 field sites within 12 of the watercourses in the study area.

A presentation was conducted by the Watershed Planning Technician on Geomorphic Assessment data to a 3<sup>rd</sup> year class at Brock University.

#### **d) Central Welland River Watershed Plan**

A public workshop was held on November 20<sup>th</sup> at the Lions Club in Welland. Attendance was very positive with 30 community members attending. Results from this workshop will be compiled and distributed to those members of the community that wish to be informed.

Erosion pins were inserted at 5 sites in the study area. In spring 2009 data from these sites will be collected to determine if the watercourse is losing or gaining sediment.

#### **e) Beaverdams and Shriners Creek Watershed Plan**

Writing and research for the Background Report continues and will not be complete until early 2009.

#### **3) Lyons Creek East Fluvial Geomorphology Study**

Minutes from the October 17<sup>th</sup> meeting with Parish Geomorphic and Phillips Engineering, the consultants conducting the study, have yet to be received. At the meeting staff reviewed concerns with the draft Phase One Report, as well as other issues that must be addressed before proceeding with Phase Two of the project. A Final Draft One Report is still pending.

The Watershed Planning Technician accompanied Parish Geomorphic in the field in November to collect some remaining geomorphic data and download the 2 data loggers in the watercourse.

#### **4) Natural Areas Inventory**

Crews have completed the field collection of natural heritage data to the Vegetation Type level of Ecological Land Classification (ELC) and Ontario Wetland Evaluation System (OWES) protocols and have begun entering the data into the project data base.

Community Series (ELC) mapping is nearing completion by the GIS team. In addition to the areas covered by the field work, all other areas of the NPCA's watershed jurisdiction will be digitized resulting in full coverage to Community Series (ELC). The Project Coordinator has completed the first draft of the introductory sections of the final report and is in the process of circulating them internally for comment.

In early November three staff members attended Data Sensitivity Training offered by Ministry of natural Resources. Staff also participated in the 15<sup>th</sup> annual A.D. Latornell Conservation Symposium.

### **III. Source Water Protection Division**

#### **1) Source Water Protection Plan**

-Regulation 385/08, which covers the Assessment Report preparation and public consultation process, was released by the province in mid-November. Also, the Director's Rules, which supersede the MOE draft guidance modules, were released November 21<sup>st</sup>. The Rules were expected to be released in September 2008.

-There will be no SPC meeting in December 2008, however on December 15<sup>th</sup> members will be attending a workshop provided by MOE that covers Regulation 385/08 and the Director's Rules. The next SPC meeting is scheduled for January 6, 2009.

-Recently, Niagara Region, their consultant (Stantec) and NPCA met with municipal public works staff for Grimsby, Thorold, Niagara Falls, Fort Erie and Port Colborne to obtain additional storm sewer and drainage information needed to refine the IPZ-2 delineations. The meetings also provided an opportunity to update municipal staff on the progress of the technical studies being completed under the Source Protection program.

-Technical staff are currently working on the Permit-To-Take-Water (PTTW) database which will be used in the Tier 1 Water Budget. NPCA staff recently met with MOE officials to verify information in the PTTW database.

## **2) Water Quality**

### **a) Routine Water Quality Work**

- The water quality team is wrapping up all water quality monitoring field work for the season.
- Routine monthly monitoring at 66 surface water stations and 15 groundwater wells has concluded for the year.
- The Fall 2008 BioMAP sampling was completed at 15 water quality monitoring stations.
- Taxonomic identification of benthic invertebrate samples collected during the spring and fall sampling season continues.
- Data entry and database management are on-going as large quantities of water quality data are generated through various monitoring initiatives.
- All temperature and dissolved oxygen loggers have been removed for the season and the data will be analyzed in 2009.

### **b) Special Water Quality Projects**

- The NPCA and the Region of Niagara's Public Health Unit are finishing a report that presents the results from the nitrate investigation on Wagg Road in NOTL.
- The NPCA has begun to work on the Hamilton International Airport and Glanbrook Landfill Bioassessment reports. These will be completed in the winter 2009.

## **IV. Geographic Information Systems (GIS) Division**

### **1) Source Water Protection Support Activities**

SWP technical efforts have switched to tasks associated with organizing the drinking water threat inventories in preparation for the risk assessment

### **2) Watershed Planning Support Activities**

- a) Several tasks supporting the Natural Areas Inventory Project are being addressed and taking up most of staffs time
  - DRAFT Community Series ELC mapping development is underway for the City of St. Catharines and Town of Niagara-on-the-Lake
  - tract code assignment on the natural area mapping which functions as a the bridge to the tabular database of survey observations data continues

### **3) Corporate GIS Support Activities**

- the 'Areas of Concern' mapping project for Environment Canada is in the final cycle of map edits
- technical work on our 1:2000 surface water spatial framework continues
- staff continues to participate in the Region of Niagara Emergency Management GIS Plan development

## **IV. Watershed Restoration Division**

### **1) General Watershed Restoration**

Areas where current watershed plans have not yet been developed continue to have priority water quality and habitat projects delivered through the general restoration program. The following projects were implemented in the past year:

- Staff continued to work with a private landowner in the 16 Mile Creek Watershed. This year the landowner planted nearly 2000 trees restoring approximately 15 acres of newly created wetland. The landowner has observed an increased amount of wildlife using the wetland facility.
- Staff worked to complete two shelterbelt projects this year. Both projects were in the 40 Mile Creek Watershed. The first project, saw the perimeter of an 18 acre agricultural field buffered with a three row shelterbelt consisting of native coniferous and deciduous trees as well as shrubs. More than 1000 trees and 500 shrubs were utilized in this planting. Also planted on the site were 60 RPM (fast growing) trees.
- The second property, also located in the 40 mile creek watershed added more than 2 acres of shelterbelt and forest habitat to the Provincially Significant Wetland on their property. This project was highly instrumental in creating wildlife corridors to adjacent properties.
- Three more landowners, all in the 40 mile creek watershed, are working together with the NPCA to complete restoration projects before year end.
- One project was plagued this year by wet weather. A fall vernal pool creation project was anticipated to take place. However the cash crop field in which the project was aimed to restore continues to be too saturated for heavy equipment to even attempt earthworks. 1600 trees were ordered in anticipation of planting simultaneously with the earthworks. Unfortunately, the lack of dry weather has postponed both the planting and the construction. The trees have been heeled in for the winter by a local greenhouse. Planting will take place in the spring of 2009.
- Another project will see a 1,000m<sup>3</sup> wetland constructed before the end of 2008. The project is highly valuable as the area is a major wildlife corridor area. An extensive Permit to Take Water Application was completed for this site. Once the earthworks have been completed the NPCA will be applying a ground cover to mitigate sediment from entering the adjacent watercourse. The earthworks for this project are expected to commence the week of December 5th. NPCA staff will be continuing to work with the Montecalvo's in 2009 to reforest the site and increase native plant cover on the wetland itself.
- The last project completed on 40 mile creek was very extensive. This project saw two vegetated filter strips installed on the farmstead. The first filter strip is mitigating the liquid manure seepage from the existing manure storage and Holstein yard, and the second is mitigating the manure seepage from the dairy barn and elevator operation. Both of the filter strips are being dispersed over a approx. 500ft x 200ft area. This area is in the process of being fenced from cattle access, with the finish date expected by the end of the week of December 5th. The second component of work completed on this property included the diversion of clean water to an existing spring fed pond. This pond will be the source of water for the more than 80 head of cattle on site. The final component of the project included a shelterbelt of 17 larger stock trees to alleviate the salt runoff into the clean water pond from the adjacent highway. The Environmental Farm Plan program is also contributing more than \$13,000 to this project. The



NPCA will be continuing to work with the Haw's family in 2009 to assist with the creation wetland habitat and reforesting a portion of the existing farmland.

## **2) Welland River Restoration**

2008 was another successful year for restoration within the Welland River watershed and the Niagara River AOC. The Water Quality Improvement Program's project implementation highlights for the year include:

- Approximately 43,300 native trees and shrubs were planted over 48.1 acres throughout the Welland River watershed in the spring of 2008. The wet weather in 2008 made for a great start for the plantings. Project partners included watershed landowners, Ontario Power Generation, Landcare Niagara and the Haldimand Stewardship Council.
- Three wetland restoration projects (over 2ac) were completed in early 2008. Two of these projects were accomplished through a partnership between the NPCA and Ducks Unlimited. Wetland restoration in the Welland River will continue with a new 3 year project partnership with Ducks Unlimited and the Ontario Trillium Foundation. Three more wetland projects will be completed before the end of 2008 with plantings and other enhancements taking place in 2009.
- Two best management practices projects were completed in 2008 within the Oswego Creek and Big Forks Creek sub-watersheds.
- Two conservation farm practices projects were completed in 2008. The projects included a 2km total windbreak to reduce soil erosion on an agricultural property and a innovative water recycling system in a greenhouse operation in the Michner Drain sub-watershed. This water conservation project will help to reduce the greenhouse water usage by 40%.
- Five riparian buffer and streambank stabilization projects, totaling 1.05km were also completed in 2008. One of these projects involved transplanting cattails (*Typha sp.*) from a donor site within the watershed to an area suffering from erosion and a lack of vegetation. The cattails will act as a wave barrier to protect the shoreline as well as providing valuable habitat. Another of these projects included the use of a new bioengineering technique never before used within the NPCA's watershed. The design involved the installation of the BioD-Block coir bioengineering system along with various other bioengineering techniques to reduce severe erosion and resultant sedimentation while increasing diversity and aquatic habitat. This project will be the site of future hands-on workshops with interested landowners to promote riparian buffer options.

Site visits with interested Welland River watershed landowners will continue as staff discusses a wide range of project possibilities for the 2009 program year.

## **3) Fort Erie Creeks Watershed Restoration**

The Fort Erie Creeks Watershed Plan has been received by restoration staff for implementation. Staff are reviewing the recommendations and assembling the Implementation Committee. Staff are building the communications in the watershed with landowners and community groups in order to promote project interest. The following are some of the implementation highlights from the 2008 program year:

- A shoreline stabilization project was completed along the Niagara River in partnership with the Niagara Parks Commission. The 90 meter stretch suffered from severe erosion and a lack of vegetation. Large armour stone was installed to stabilize the bank. Fish habitat improvement will be accomplished through the spring planting of a riparian vegetated buffer along the project length.
- A riparian restoration project was completed in the spring through the installation of livestock restriction fencing along a 200m stretch of Six Mile Creek. A vegetative buffer was planted within the fenced riparian area in partnership with the Friends of Fort Erie's Creeks. The fencing and buffer will reduce sedimentation and erosion, thereby improving water quality as well as increasing habitat potential.

-Consultation with staff and residents from Black Creek Leisure Homes in Stevensville has resulted in a riparian buffer project to be completed in the spring of 2009. The project goal is to improve the water quality of the tributary of Black Creek as well as the online pond within the park. Work began in 2008 with monitoring of the algae within the pond and the education and outreach to the residents.

- A restoration plan is being developed for the owners of the well known Marcy's Woods property in Fort Erie. Staff are in contact with various Species at Risk Recovery Teams to draft a restoration plan that considers the needs of several species of plants and animals considered "at risk" or "of special concern" at the site.

#### **4) Twenty Mile Creek Restoration**

- The following are the program accomplishments from the 2008 implementation year:

- In 2008 staff reforested three high priority restoration sites which encompassed more than 17 acres of private land and translated into more than 8000 trees planted!

-The first site restored a marginal agricultural field into woodland habitat. Over 6000 trees were planted on the 12 acre field. The landowner has already reported an increase in the number of wildlife viewing opportunities. Initial site inspection shows the trees doing very well. Staff noted a survival rate of close to 80%. Quite obviously the increased amount of precipitation over the course of the year assisted with this achievement. The site was restored to a moist Oak-Maple-Hickory Deciduous Forest.

-The second site saw a smaller 2 acre parcel in-filled with 250 native trees and 250 native shrub species. In the past the landowner had planted various non-native conifer species and was losing the non natives because of their inability to thrive in our climate. This project engaged more than 50 volunteer elementary students to plant the trees. The trees at this site are being heavily browsed by deer. The NPCA and landowner are working together to determine options to help alleviate this issue.

-The remaining project site was planted in June of 2008. More than 1500 trees were machine planted over 4 acres of marginal farmland which was completely surrounded by provincially significant wetland. Trees were selected based on the Ecological Land Classification system and their ability to thrive in swamp conditions. The landowner has reported an 80% survival rate of the trees. Some infilling may need to take place in 2009 to replace those trees lost.

- A 230m riparian restoration project was also executed at the second site along the very headwaters of the Twenty Mile Creek system. This planting saw an area of 230m X 12m taken out of cash crop farming practices and returned to nature in the form of a naturalized stream buffer. The planting consisted of the addition of 500 shrubs, 300 trees and 200 native wildflower plugs. To date the planting is doing well, with the exception of the extensive competition from exotic species such as Giant Ragweed.

- Three manure storages are also underway within the watershed. The first manure storage is anticipated to be completed on December 15. This manure storage is located in Hannon on the headwaters of the Twenty. A second manure storage in Grassie, is also expected to be completed on December 15. This manure storage will alleviate excess nutrients from entering the headwaters as well. The remaining manure storage, is being completed in partnership with EFP funding.

-Staff continue to visit with landowners interested in habitat projects on their properties. To date, 12 acres of habitat reforestation projects for 2009 are confirmed.

- Three nutrient management projects have been completed in conjunction with the Environmental Farm Plan (EFP). Beef cattle farmers near Caistor Centre have expressed

interest in fencing livestock from a tributary of Twenty Mile Creek. As a best management practice, cattle restriction fencing offers an extremely economical and effective means of restoring riparian habitat. This project, which would be implemented in 2009, would protect and restore approximately 600 meters of riparian habitat that is identified as a priority restoration option in the Twenty Mile Creek Watershed Plan.

- Staff have been contacting and visiting previous landowners with reforestation projects to determine infill tree needs for 2009. The very liberal amount of rainfall in Niagara over the 2008 growing season resulted in very high post-planting survival rates for the majority of this year's plantings.

-The restoration program was presented with an Environmental Hero award from College Street Public school for its efforts in completing a tree planting with one of the school students.

### **5) Twelve Mile Creek Restoration**

- 2008 Twelve Mile Creek projects (and three others in adjacent subwatersheds) addressed a wide range of concerns:

- a) nutrients in farm run-off,
- b) urban stream pollution,
- c) floodplain erosion,
- d) thermal pollution of cold-water headwaters (Brook Trout habitat),
- e) degraded warm-water fish habitat,
- f) forest degradation due to deer over-population,
- g) excessive headwater drainage,
- h) sensitive headwater habitat and associated species at risk, and
- i) the need to buffer our most significant woodlands.

All of which paints a picture of the problems facing this diverse area.

Stakeholders in the Twelve Mile Creek Watershed Plan were active partners in carrying out these projects, and we hope for even better things in the future. The summary below coincides with the issues listed above. Partners are listed in { }:

#### **a)Lockey**

About an acre of juice grapes was retired to make room for an integrated collection trench, dispersion sandwich biofilter, and wetland installation. This project is designed to collect runoff from a manure composting area and vineyard. The dispersion sandwich will reduce nitrates, while the wetland will clean the water further, and reduce some phosphorus. Intensive planting and seeding of wetland shrubs and herbaceous plants will hasten the development of the wetland ecology, as well as provide perennial habitat for beneficial native insects. {Farmer}

#### **Creekside Greenhouses**

In partnership with the Environmental Farm Plan (EFP), we assisted this greenhouse business with the installation of a new recycling system, which will prevent about 1,000,000 gallons of water per year (along with fertilizer) from leaching into the ground, and potentially into the groundwater and creek below (or think of it as wasting about 0.021 GPM per sq ft of greenhouse per annum). {Farmer, EFP, Ontario Soil and Crop}

#### **b)Dick's Creek Stream Clean-Up**

This portion of Dicks Creek has species at risk and is under pressure from erosion and garbage dumping. Suggested by a local resident, this clean-up project grew to include a new volunteer group convened by Brock University. Masses of waste was gathered by students and residents,

and sorted for recycling or disposal by the city. {City of St. Catharines Public Works Dept., Brock University, Pendale Plaza management}

**c)Mason**

About 7 acres of floodplain in Fifteen Mile Creek was planted with about 6,000 trees and shrubs this spring. This area had been rented as pasture. However, frequent flooding of this part of Fifteen Mile Creek has been scouring away soil, so the landowner decided to retire it and reforest, to protect the remaining natural areas. {Rural residential landowner}

**d)Karner**

This landowner had worked with NPCA a few years back to fence cattle out of a significant cold-water headwater stream. This spring we enhanced the "healed" stream banks with larger stock Carolinian tree species to accelerate the shading of the water, to reduce stream heating in summer. Such "thermal" pollution threatens Brook Trout, which cannot survive in waters warmer than 24 degrees. {Farmer, NPCA Water Quality Monitoring}

**e)Piper**

For many years these landowners noticed fish in their field during spring flooding, so they decided to offer them something better. A wetland/fish habitat creation project was carried out on this tributary of Twelve Mile Creek, west of Shorthills. The design involved excavating an "off-line" pond beside the stream, which will fill during periods of high flow. A shallow area was designed to filter run off from agricultural land uphill, with appropriate vegetation, restoring a more natural hydro-period and connection with the floodplain. {Rural residential landowner}

**f)Shorthills**

Building on some the Friends' work in preserving White Wood Aster, this project incorporated deer exclosures to protect a sensitive gully area of Short Hills Provincial Park. About 1200 trees and shrubs were planted in a 2 acre area to buffer a watercourse. Without the exclosure, all the buffer plant material would be browsed, and the project would fail. A second area of heavily browsed, naturally regenerating forest edge was also fenced. The two areas will be monitored over the next few years, and the observations incorporated into future reforestation practices. This is in anticipation of Ontario Park's end to all leases in 2010, when a few hundred acres will be taken out of cultivation. {Friends of Short Hills, Ontario Parks}

**g)Bering**

Originally a slough forest headwater for Fifteen Mile Creek, this former farm had a network of very deep drainage ditches for a horse track, now decommissioned. The abandoned fields were thick with dogwoods. So the property posed some challenges. The project recreated 13 vernal pools to reinstate headwater capacity and amphibian habitat. 6 acres of scrub were direct seeded with 50 kg or about 12,000 oak and hickory nuts. 5 acres were machine planted with about 5,000 bareroot trees and shrubs. About 600 wetland plugs were planted around the new pools. The design included a plan to reinstate about 4 acres of agriculture near the road for rental. {Rural residential landowner}

**h) Lathrop Property - Nature Conservancy of Canada**

This project brings together research by many students and ecologists over the past few years to ensure appropriate plantings for this important headwater natural area, home to a surprising number of listed species. The old-field areas will be planted to increase natural habitat and protect water quality. NPCA staff are carrying out the implementation of the reforestation part of the project, which continues in 2009. In partnership with NPCA and those listed below, NCC successfully applied for Species at Risk (SAR) funding from the Ministry of Natural Resources.

The grant will fund removal of exotic invasive plants, signage, and community outreach initiatives. Staff facilitated donated herpetology research by OPG, and assisted with volunteers to gather data on Salamander populations in April.

{Nature Conservancy of Canada, Ontario Ministry of Natural Resources (SAR), LandCare Niagara, Niagara Restoration Council, OPG Niagara Plant Group}

#### **i) Marlene Stewart-Streit Park**

Staff initiated an on-site meeting with Town of Pelham and Region of Niagara operational staff at this Fonthill site near Highway 20 to discuss solutions for a terrible erosion problem caused by a stormwater outfall. This situation has been noted by NPCA staff for a few years in erosion reports etc. The sediment poses a significant threat to Brook Trout reproduction a short distance downstream.

#### **j) Decew Escarpment Tablelands Restoration Project**

This three-year project with multiple partners aims to buffer significant forest areas in Decew Gorge and Shorthills Provincial Park. The work will restore about 12 acres of OPG and Regional land. This year the soil was worked up three times. 16 plots were solarized or otherwise prepared then planted with larger stock to offer accelerated (nucleic) regeneration. Two vernal pools were excavated to collect runoff. Last March OPG research staff found a population of Jefferson x Blue Spotted hybrid Salamanders reproducing in pools a short distance away. This is great opportunity to restore habitat for these rare creatures. Work continues in 2009 with direct-seeding of the main field areas. {OPG Carbon Sequestration & Biodiversity Program, OPG Niagara Plant Group, Region of Niagara, City of St. Catharines Green Committee, Niagara Restoration Council, Niagara College, Bruce Trail Conservancy, Friends of Short Hills}

### **6) Niagara-on-the-Lake Restoration**

- Niagara-on-the-Lake (NOTL) has seen many successes in its first year Watershed Plan Implementation. Staff have been building relationships throughout the watersheds with Town and Municipal partners as well as Community groups. The initial meeting for the NOTL Watershed Plan Implementation Committee will be held in January 2009 to discuss partner responsibilities and priority projects.

The One Mile Creek Implementation Committee met twice in 2008 to discuss:

- the replacement of undersized culverts,
- the creation of storm water management ponds,
- the remediation of the old William Street landfill site,
- the ownership of Lansdowne pond and the parcel at the corner of King and John Streets in NOTL,
- as well as the development of the One Mile Creek Stewardship Manual for residents along the creek.

Staff also attended 12 meetings with the Friends of One Mile Creek (FOMC) including two where representatives of the NPCA's Natural Areas Inventory and Source Water Protection programs gave presentations to the public relating their work to NOTL. Furthermore in cooperation with the FOMC, staff organized and led 2 public creek clean up events where over 12 bags of garbage and multiple large items were removed from the creek. Staff have completed a first draft of the One Mile Creek Stewardship Guide. It has been reviewed by the Restoration Team and is currently under revision. A second draft should be completed in January 2009.

The following is a list of Water Quality Improvement Program projects completed within NOTL this year:

- 5 riparian and naturalization projects establishing 200 m of native vegetation along riparian areas using over 300 tree and shrub seedlings, 3000 wildflower and grass plugs and 8 kg of wildflower, grass and sedge seed. The average success rate of these projects was very good at just below 80%.
- 1 forest restoration project was completed using over 600 tree and shrub seedlings with an overall success rate of 75%

The above projects were completed with the assistance of volunteers from St. Michaels Catholic Elementary School, Blessed Trinity Catholic Secondary School and the FOMC.

Further highlights within NOTL include:

- 2 nutrient management systems using water recycling technologies within greenhouse operations. These projects are successfully recycling over 1.5 million litres of water per year and preventing various nutrients from entering local watercourses through runoff. Some of the nutrients within these systems measured in excess of the provincial guidelines include: phosphorus, nitrates, suspended solids, copper, iron, zinc and lead.
- 1 compost storage project holding over 5000 tones of grape pomace and manure. This is the first project in the world to utilize grape pomace as an energy source to fuel anaerobic digesters for the purpose of producing energy for greenhouse operations.

Water Quality Improvement Program project highlights within general restoration areas of the region include:

- 1 woodland planting including 2490 native tree seedlings over 4 ac
- 2 conservation farm practice projects using 864 wildflower plugs and 41 kg of pure native wildflower and grass seed over 11 ac of vineyards. The vineyards are using the native vegetation:
  - to attract beneficial insects thereby reducing pesticide use,
  - to break up the hard clay soils thereby reducing compaction and increasing biomass and water infiltration,
  - to increase nitrogen and biomass accumulation thereby reducing the need for frequent fertilization, and
  - since the cover crop is native and perennial it prevents erosion of the top soil from the fields.

## **7) 15,16,18 Mile Creeks Restoration**

-In anticipation of the finalized 15,16, 8 Mile Creek Watershed Plan, staff spent several days touring / analyzing Arial Photography of the 15, 16 18 mile creeks watershed, identifying properties where restoration opportunities exist.

- More than 60 properties were identified as having some form of environmental impairment, such as livestock access to watercourse, manure storage problems, lack of riparian buffers, wetland restoration, etc.

- Staff have compiled a list of target properties from the watershed tour, which took place in late October.

-Landowners will be mailed a letter discussing restoration program opportunities in January of 2009

-Staff anticipates contacting potential steering committee members in January of 2009.

- Several project in this watershed have been completed under the general restoration program two noteworthy projects include:

-Over 350 feet of shoreline stabilization was completed at the south end of Sixteen Mile Pond. Using a combination of shrub cuttings and rock placement, this project will significantly reduce

the amount of erosion and sediment loading into the adjacent wetlands and important fish habitat.

- A  $\frac{3}{4}$  acre wetland project was completed in the upper Sixteen Mile Creek watershed. This project increases flood storage in a crucial headwaters area and significantly increases wetland wildlife habitat.

### **8) E.C. Brown Wetland Project**

-Staff will be working with Niagara College students to develop a long-term restoration, monitoring and outreach plan for the site.

### **9) Yellow Fish Road**

-In its third year as an NPCA program, Yellow Fish Road has seen many successes. This year over 221 children were engaged in this program and a total of 309 storm drains were painted across Niagara. Areas covered during the 2008 season include Grimsby, Fort Erie, Crystal Beach, Thorold, St. Catharines, and Port Colborne. Since 2006, 654 drains have been painted and approximately 2100 door hangers have been handed out.

There was a great deal of media attention surrounding the program this year, including coverage of a YFR event at Fort Erie Elementary School appearing on Cogeco's The Source. In addition, many local newspapers came to events at various schools to take pictures and ask students questions about the program and what it means to them. On one occasion in Fort Erie a neighbor saw students painting Yellow Fish and came out to ask about the program. He thought it was so great that he decided to call the local newspaper who sent someone out right away. This kind of media attention is great for the program and will continue to raise awareness about the impacts of runoff. Staff have already been taking YFR bookings for next spring and are hoping to host at least 5 community events in Niagara in 2009.

### **10) ECO School Program**

- 2008 was the third year for the ECO School program. It was the first year staff received more applications than they could schedule in, so a waiting list for 2009 was created. 29 schools from 12 different municipalities participated in the 2008 program, involving more than 400 students. Site visits and preparation were completed in May and plots were planted by staff and students in June. Staff conducted site visits in July and August to ensure schools were watering and weeding as agreed. Plaques will be awarded to participating schools in the New Year. A year end report has been written and is available for anyone interested.

Two workshops were hosted by NPCA staff in March and April at Nelles Public School in Grimsby and Glynn A Green Public School in Fonthill. Various staff from the NPCA lent their expertise to make the workshops fun and informative. Displays included; bluebird nesting box construction, native wildflower seed planting, Restoration Program, Natural Areas Inventory, RAP, benthic invertebrates and water quality.

Staff have noticed increased interest for this program, as environmental programs are becoming more important in schools. Staff have already received 13 applications for the 2009 program. Staff are also creating a fall component for this program which will include harvesting and growing of seeds from the plots by students. This will link with the science curriculum's for both elementary and secondary schools, and help promote the use of native plants. An elementary school in Smithville was a "test" school for this program this fall. Staff will follow up with them in the spring to talk about their successes, failures and recommendations.

To date the program has reached more than 1200 students at 72 school in all 14 municipalities across the Niagara Watershed, helping to educate a significant amount of school communities on the important role in which green spaces play in our lives.

### **11) Niagara Envirothon**

-The NPCA helped to organize and deliver the first annual Niagara Envirothon at Heartland Forest in 2008. Three local schools competed and the event brought many local professionals together to educate the students about the wonderful nature of Niagara. The event was documented by Cogeco and appeared on The Source.

The Canon Envirothon is a North American wide competition that gets highschool students in an outdoor setting to learn about soils/landuse, aquatics, forestry and wildlife, as well as a current issue. Teams start at the local level and the winning team moves on the Provincial level. From there the winning team goes on to compete on an international level at the Canon Envirothon.

The winning team from the Niagara Envirothon in 2008, Lakeshore Catholic Highschool, went on to win the "Rookie of the Year" award at the Ontario Envirothon and placed 2nd overall for their presentation on "the impacts of recreation on the environment". Lakeshore finished 12th overall.

In 2009 the NPCA will take the leading role as coordinator of the Niagara Envirothon which will be held at the Ball's Falls Centre for Conservation in April.

### **12) Angler Diary/Angler Derby and Fish tagging**

-The Angler Diary Program continues to collect data from anglers in the Welland River watershed. A total of 32 diaries were distributed in the Welland River Watershed in 2008. Local anglers record the date and time they were fishing and the species of fish caught, their length and whether they were released or kept.

In 2008, St. Catharines Game and Fish helped the NPCA re-introduce the Twelve Mile Creek Angler Diary Program by handing out the diaries to local anglers on behalf of the NPCA. Letters were sent out to all anglers in both watersheds in November to return their diaries so that the data can be collected and added to the diary database. The information collected from local anglers is valuable in order for the NPCA to make the best possible fisheries restoration decisions. Anglers who return their diary before the December 15th deadline will qualify for a draw for three Canadian Tire gift certificates.

The Welland River Fish Tagging Program was active again in 2008. Fish were tagged at the annual Merrit Island Fishing Derby in partnership with the City of Welland and the Welland River Keepers. Biotactic Fish and Wildlife Research came out to the Derby to tag fish (over 150mm in length) caught by anglers in the Welland River. In addition to the Derby, Biotactic came out to tag fish that were caught using a seine net in the Welland River watershed on two separate days in September and October 2008. A total of 27 fish were tagged in 2008. Unfortunately only 2 recaptures were recorded. Since the tagging program inception in 2003, a total of 499 fish have been tagged and a total of 54 recaptures have been recorded. The information gathered helps us to better understand how fish are moving through the Welland River watershed, the species that occur and where there may be barriers to migration. A young of the year Northern Pike was captured in lower Drapers Creek, downstream of the stream restoration project and culvert replacement at Colbeck Drive. The presence of this fish indicates that pike are able to successfully migrate past the culvert into the critical spawning habitat upstream in



Drapers Creek (documents the success of the stream restoration project and the value of the upstream wetland habitat).

In addition to the fish that were tagged during the seining events in the Welland River, two Grass Pickerel (*Esox americanus vermiculatus*) were caught and identified by Biotactic staff in Wilson's Creek. The fish were released without being tagged because they were small and listed as "Special Concern" both provincially and federally. Photos were taken of both fish and the information about their capture locations was submitted to the NPCA Aquatic Specialist.

### **13) In-School Outreach Program**

-This year, NPCA staff continued the in-school conservation outreach program. In the Fall 2007 – Summer 2008 school year NPCA staff visited 25 schools across Niagara reaching approximately 3000 students promoting Conservation Programs. Students were educated about simple lifestyle changes they could make to lessen their impact on the environment, while improving local water quality and habitat value. In addition, NPCA staff spoke about some of the NPCA's conservation efforts across Niagara, including the wetland restoration work at the E.C. Brown Conservation Area and the construction of the LEED-certified Centre for Conservation at Balls Falls. Included in the 25 schools visited were 5 French schools which were given a French presentation about the same topics as the English schools.

The In-school Outreach Program reaches students in both elementary and secondary schools in all areas across NPCA jurisdiction. Staff went to schools in Fort Erie, Port Colborne, Welland, Niagara Falls, St. Catharines, Grimsby, Hamilton, Haldimand, Pelham, and Thorold. Although the Niagara Catholic District School Board continues to show the greatest interest in the Conservation Programs, schools from all school boards are being reached. This program has continued in the 2008/2009 school season and all dates have been booked until the end of April.

### **14) Native Plant Guide**

- The third addition of the "Guide to Celebrate Niagara Peninsula's Native Plants" is hot of the press. Another 2000 copies have been produced to use as a restoration and education tool within our various program areas. The new and improved version offers colour coded headers (groupings of plants) to assist with locating varieties by conditions, i.e. plants for sunny conditions.

## **IV. Remedial Action Plan (RAP) Division**

### **1) Lyons Creek**

The Contaminated Sediments Technical Advisory Group (TAG) hosted a Public Open House on the evening of November 25, 2008, at the Fire Hall on Schisler Road. The preferred option for Lyon's Creek East – Monitored Natural Recovery – was presented to the community. The decision-making process that led to the selection of monitored natural recovery as the recommended sediment management strategy, the key study findings and the options evaluation criteria were also presented. Aspects of long-term monitoring were discussed. Consultants involved in the project were present and responded to questions during the evening. There were no objections to the recommended sediment management option. Attendees were asked to provide any written comments.

The next TAG meeting is scheduled for February 3, 2009.

In the meantime, an update on the activities at Lyon's Creek West was provided in a fall season newsletter drop. The newsletter included contact details for Transport Canada and the City of Welland for further details.

## **2) Niagara Water Strategy (NWS)**

The next NWS Water Advisory Group meeting is to be determined. In the meantime, the RAP Coordinator assisted at the Central Welland River Watershed Public Workshop on November 20, 2008.

## **3) Stage 2 RAP Update**

An inaugural RAP Implementers meeting was held on November 27, 2008 at the Ball's Falls Centre for Conservation with the purpose to establish the RAP Implementers Team (that will meet biannually or annually to report on progress); obtain input on the draft RAP Stage 2 Update report (comments requested by Feb.1/09) and the draft RAP work plan (updates requested by March 1/09); and, develop the RAP work plan to include projects that focus the RAP towards delisting.

Attendees were from the NPCA, Niagara Region, Environment Canada, MOE, MNR, NPCA, NPC, Niagara College, Land Care Niagara, Niagara Restoration Council, City of Welland, and the Town of Fort Erie. Representatives from OMAFRA, Brock University and Niagara Falls confirmed their interest.

The RAP Science Committee met in mid-November to review and discuss updates on the monitoring projects, including initial data from the Eutrophication and Water Quality Assessment project (i.e. field data from April to July, 2008 only) and water quality data from the City of Hamilton for Binbrook Beach for the swimming season periods during 2006 - 2008. Due to mitigative measures undertaken by the NPCA, the beach closings have been dramatically reduced. The updated data will be included in the revised version of the report: *Technical Review of Impairments and Delisting Criteria (June 2007)*. The Science Committee has recommended that the beneficial use impairment for "Beach Closings" (currently designated as "Impaired" due to Binbrook Beach from the Stage 2 review process) now be designated as "Not Impaired".

The deadline for proposals to the Great Lakes Sustainability Fund is December 12/08.

The Welland River Eutrophication Study Technical Working Group is scheduled to meet at the end of January 2009.

The next RAP Science Committee meeting will be held during the week of March 23, 2009.

## **4) International Liaison**

- The U.S. Niagara River RAC is developing delisting criteria for their Niagara River RAP and plans to complete the process by December 2008. The New York Power Authority recently announced that construction work has been completed on the first installation of underwater structures as part of a pilot program to create artificial reefs to enhance the aquatic environment of the Upper Niagara River.

- The NPCA and the Niagara River RAP were represented at the State of the Lakes Ecosystem Conference (SOLEC) held in Niagara Falls, Ontario, in October, 2008.

- The International Joint Commission's Centennial celebration of the International Boundary Waters Treaty are planned to be held in multiple locations within the Niagara Region in June 2009. The week-long celebration kick-off date is June 13, 2009.

## **5) Niagara River Toxics Management Plan (NRTMP)**

- Future issues and challenges for the NRTMP program were presented at SOLEC. Discussions are underway between the NRTMP agencies on the future role of the NRTMP and public consultations are anticipated.

- A NRTMP "State of the Niagara" conference will be included in the Centennial celebrations next year.

## **Land Management Division**

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

Twenty volunteers representing the individuals and organizations nominated to receive a Conservation Achievement award for Ball's Falls programming and events attended the awards ceremony on November 25.

The Christmas education program is underway until December 11<sup>th</sup>. Close to 800 students are currently registered to participate, down slightly from 944 students in 2007. As always, this program relies heavily on volunteer assistance with decorating the buildings and grounds and with interpretive programming.

The "free" public Christmas Open House was not held this year. Staff were unable to confirm enough volunteers to organize and adequately promote the event. Traditionally 50 to 100 visitors frequented this afternoon event.

Author Kenneth Oppel's books, sold in conjunction with the "Bats" exhibit and his presentation were a hit, generating \$500 in revenue. Only 4 books remain for sale.

The temporary gallery is currently featuring the exhibit, "Canadian Feed Bag Quilts - Recycled then & Now" (November 15 to January 4<sup>th</sup>). Eight people participated in a full day quilt workshop in the Centre on November 22. Approximately 150 have visited the Centre since the exhibit opened in mid November. Nina Stahlschmidt's book, "Canadian Feed Bags - Recycled Then & Now", is on sale at the Centre.

The "Fly Through" video is up and running again. The projector was replaced under warranty.

The Niagara Handweavers and Spinners Guild held a workshop in the Centre in November to celebrate their 160<sup>th</sup> anniversary.

The NPCA received just over \$26,000 from the Summer Jobs Service program towards wage subsidies for eligible seasonal staff. Staff will be submitting an application this month to participate in the 2009 program.

The Department of Canadian Heritage has acknowledged receipt of our request for MAP (Museums Assistance Program) funding of approximately \$65,000 at 50% funding to assist with the Collections Storage project for the Centre.

Winterizing the heritage buildings and the artifacts on display will be completed once the education program ends.

Planning for 2009 exhibits and programs is underway. The first exhibit for 2009 is the “Niagara Heritage Collection“, historical architecture of Niagara by the Peninsula Needle Arts Guild” on loan from the St. Catharines Museum from January 15 -

There are currently 22 wedding receptions booked for the Centre and 26 for the barn in 2009. Approximately 50% of these rentals have also booked a church wedding. In comparison, there were 32 barn wedding receptions held in all of 2008. Staff recommend that if a targeted advertising campaign is implemented early in the new year Centre facility rentals will likely increase.

### **Ball’s Falls Site Improvements**

The Town of Lincoln Roads Department has started digging new ditches and installing culverts along 6<sup>th</sup> Avenue in the lower park area near the heritage buildings. New split rail cedar fencing is on order to replace the old wood fence along the roadway, complementing the heritage buildings and defining new pedestrian crossings between park areas. Spring restoration of the turf and landscape areas will coincide with completion of the fencing and berming along 6<sup>th</sup> Avenue; development of a marked and signed pedestrian crossing in partnership with the Town; and a new entrance island and gate improvements into the lower parking area.

We have received the highway sign permit from the Region and negotiated with a supplier to manufacture and install one sign at the highway and one entrance sign at the Centre. The sign locations are being marked in the field in preparation for sign foundation work to commence shortly. The sign company has advised the signs will be installed by mid-January.

New bike racks, benches, and recycling containers have been purchased from a Simcoe supplier and shipments are being received for staff installation. These furnishings address basic needs for exterior site furnishings, and one of the recycling containers will be placed indoors for public use. Furnishing needs will continue to be evaluated by staff as bookings and public use of the Centre increase.

### **Binbrook CA**

Park operations and capital projects are being reviewed by staff for the 2009 season. Staff reviewed boat rental operations at neighbouring parks in the Hamilton area and are working with the Conservation Planner to improve boat rental opportunities in the park masterplan.

### **Ruigrok Tract**

Work is continuing on upgrading the main trail on the property. Staff were on site over the past few weeks grading and hauling stone over the trail to extend the improved trail into the middle of the property. The overall goal is to improve the central trail to the back property line. The Conservation Planner will be updating the masterplan to map these improvements for our reference and file.

### **Property Assessments**

MPAC’s valuations of our property assessments are just starting to come into the office the first week in December. The staff will be reviewing the data over the month of December, there will

be more to report in January once staff have reviewed all information in detail. The NPCA has until March 2009 to file any appeals on our property assessments.

### **Wainfleet Bog Conservation Area**

The Wainfleet Bog Restoration Project was highlighted in several presentations at the Latornell Conference. MNR and Conservation Ontario presented the work on ecosystem recovery to date and the efforts for securing these significant areas.

### **NPCA Hunting Program**

Staff have issued an additional 51 hunting permits. To date, staff have issued 291 hunting permits for 2008 and three for 2009. Of these, 14 permits are issued to individuals residing outside of our administrative area.

The 2009 List of NPCA Hunting Opportunities is being finalized. As in previous years NPCA hunting information will be provided with waterfowl hunting dates to be included in late June when the federal dates are publicized.

Binbrook 2008 Waterfowl Hunting Season to be completed Saturday December 13. Following this, the information on waterfowl season will be tabulated and reviewed with program staff.

### **Binbrook Conservation Area**

The water system and splash pad are winterized. The controlled waterfowl hunt is underway, ending December 13<sup>th</sup>.

The last of the landscaping activities are nearing completion. Work continues on improving the overflow parking areas and improving drainage throughout the park. Staff have been working with Enbridge to address drainage issues on the Tyneside Trail, created from the construction of an access road on neighbouring property.

Park operations and capital projects are being reviewed by staff for the 2009 season. Staff reviewed boat rental operations at neighbouring parks in the Hamilton area and are working with the Conservation Planner to improve boat rental opportunities in the park masterplan.

With colder weather on the scene, Area staff focus will be shifting to ice fishing season. This year's ice fishing derby will be held on Sunday, February 8<sup>th</sup>. As in previous years, Fishing World will be sponsoring the event.

### **Woodend Conservation Area**

Staff completed work to improve access to the Woodend Conservation Area for emergency vehicles. Over the past few years, this access road became over-grown with vegetation, reducing the clearance and creating potential problems for emergency services. The access road now meets the Ontario standards for clearance.

Staff will be reviewing other Conservation Areas to ensure compliance and unobstructed access for emergency vehicles.

## **COMMUNITY RELATIONS**

### **Conservation Achievement Awards**

The 2008 Conservation Achievement Awards reception was held on Tuesday, November 25, 2008 at the Four Points Suites with over 185 people in attendance. The Award of Merit was presented to Douglas E. Elliott, a founding member of the NPCA and past Chairman. Thanks to the members who were able to assist at the event.

### **A.D. Latornell Symposium**

Over 1200 participants attended this year's symposium which focused on Local Solutions for Global Challenges. The keynote speakers delivered some very powerful messages and encouraging participants to continue to meet the challenges in the spirit of making a difference in the world.

### **Twenty Valley Tourism Association**

The Association will be hosting an ice wine festival as part of the Niagara Wine Festival on January 17 and 18, 2009 in Jordan Village.

### **Boundary Waters Treaty Centennial Celebrations**

The NPCA is taking an important role in the planning of this event which will bring together Canadian and U.S. Federal Government Leaders. Staff is participating on the planning committee of this event scheduled for June 13, 2009.

### **50<sup>th</sup> Anniversary**

Staff are developing preliminary ideas to celebrate the 50<sup>th</sup> Anniversary. It is anticipated that a working committee will be formalized and begin meeting in the early New Year to plan the execution of the events.

## **NIAGARA PENINSULA CONSERVATION FOUNDATION**

### **Recognition Wall at Centre for Conservation**

Since the Authority and/or Foundation currently have no permanent installations to recognize donors and encourage future support of our programs, it was felt that the new Centre provided an ideal opportunity to recognize contributions to this and other conservation projects, inspiring others to make gifts and strengthening our relationship with donors and potential prospects that could lead to significant gifts in support of our Foundation and the Authority in the future. With the Foundation Board's approval and direction, staff has been working with Octopus Design to develop an opportunity for recognition that is sincere and appropriate to our organization and this unique LEED project. Fine-tuning on the design is continuing and the unveiling will be scheduled in late April or early May to coincide with the anniversary celebrations of the Authority and Foundation.

### **Recommendation:**

**Report No.88-08 outlining the status of Authority projects be received for information.**

Respectfully Submitted by: \_\_\_\_\_

Tony D'Amario, P.Eng.  
Chief Administrative Officer/Secretary-Treasurer