

**NIAGARA PENINSULA CONSERVATION AUTHORITY**

**FULL AUTHORITY**

**WELLAND** **AGENDA** **DECEMBER 9, 2009 – 7:00 p.m.**

**ROLL CALL**

**DECLARATION OF CONFLICT OF INTEREST**

**BUSINESS:**

**(1) MINUTES**

**(a) FULL AUTHORITY MEETING–NOVEMBER 18, 2009**

Attached are the Minutes of the Full Authority Meeting held November 18, 2009.

**(b) NIAGARA REGION TREE AND FOREST CONSERVATION BY-LAW  
ADVISORY COMMITTEE MEETING - NOVEMBER 19, 2009**

Attached are the Minutes of the Niagara Region Tree and Forest conservation By-Law Advisory Committee Meeting held November 19, 2009.

**(2) BUSINESS ARISING FROM MINUTES**

**(3) CHAIRMAN'S REMARKS**

**(4) CAO'S REPORT**

**(5) CORRESPONDENCE**

1) Resolution adopted by the Township of Wainfleet Council objecting to the MNR designation of a significant portion of lands within the municipality as Provincially Significant Wetlands

2) Resolution adopted by the Town of Fort Erie support the Township of Wainfleet resolution with the addition of reference to the NPCA in regards to their experience with PSW's.

**(6) HOUSEKEEPING AMENDMENTS TO THE NPCA'S LAND USE PLANNING  
POLICY DOCUMENT - REPORT NO. 78-09**

Attached is Report No. 78-09 regarding housekeeping amendments to the Land Use Planning Policy Document.

**(7) TRAVEL OVER ICE – NPCA SFETY MANUAL – REPORT NO. 79-09**

Attached is Report No. 79-09 as well as a copy of Section 24 of the NPCA Safety Manual.

**(8) 2010 CONSERVATION AREAS FEE SCHEDULE – REPORT NO. 80-09**

Attached is Report No. 80-09 outlining the proposed fees for conservation areas in 2010.

**(9) CONSERVATON AREAS REGISTRATION SYSTEM – REPORT NO. 81-09**

Attached is Report No. 81-09 regarding the above matter.

**(10) ARTIFACT STORAGE SYSTEM – REPORT NO. 82-09**

Attached is Report No. 82-09 regarding an artifact storage system at Ball's Falls.

**(11) APPOINTMENTS – BALL'S FALLS HERITAGE ADVISORY COMMITTEE – REPORT NO 83-09**

Attached is Report No. 83-09 regarding the re-appointment of April Petrie an Marion Holman to the Ball's Falls Heritage Advisory Committee.

**(12) PROJECT STATUS REPORT – REPORT NO. 84-09**

Attached is Staff Report No. 84-09 outlining the status of Authority projects and programs.

**(13) IN-CAMERA**

- (a) Complaint and Violation Status Report: No change – update not required
- (b) Tree By-Law Status Report – Report No. CR-25-09
- (c) St. John's Centre – Verbal report on progress

**(14) OTHER BUSINESS**

**ADJOURNMENT**



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## **ADVISORY COMMITTEE MEETING**

### **NIAGARA REGION TREE AND FOREST CONSERVATION BY-LAW**

#### **Niagara Peninsula Conservation Authority**

**Main Office, Welland**

**November 19th, 2009**

**7:00 p.m.**

#### **MINUTES (DRAFT)**

**Members Present:** B. Andres (NOTL municipal rep)  
C. Travis (West Lincoln municipal rep)  
D. Ransom (NPCA Board member)  
T. Platts (Lincoln municipal rep)  
J. Schonberger (Niagara South Federation of Agriculture)  
K. Stayzer (Wainfleet municipal rep)  
R. Miller (Pelham municipal rep)

**NPCA Staff Present:** D. Baker, Director, Land Management  
D. Drennan, Forester  
J. Vlasman, Forestry Technician

**Regrets:** K. Durham (Niagara North Federation of Agriculture)  
P. Robertson (Niagara Woodlot Association)  
H. Rempel (Thorold municipal rep)  
L. Campbell (Ecological and Environmental Advisory Committee)  
A. Witteveen (Agriculture Sub Committee rep)  
F. Berardi (Niagara Falls municipal rep)  
B. Baty (NPCA Board member)

#### **BUSINESS:**

1) **Call to Order**

The Chairman called the meeting to order at 7:08 p.m.

2) **Accept/Review minutes of previous meeting (Sept 17, 2009)**

**MOVED BY:** B. Andres

**SECONDED BY:** C. Travis

**THAT:** The minutes of the previous meeting, held September 17, 2009, be accepted as circulated

**"CARRIED"**

3) **Review of Action Items from previous meeting (Sept 17, 2009)**

*Action Item 1-2009: Paul Robertson to deliver comments from the woodlot association. (Carried forward)*

4) **Status and Work Report**

D. Drennan led the committee through a review of the work report. Some questions and clarifications to specific issues were discussed.

D. Baker pointed out that one item was the result of a phone-in tip on a weekend and that NPCA staff were able to respond and resolve the issue on the same day.

No other major issues or questions were raised.

5) **Other Business**

a) D. Baker reported that Tony D'Amario would be speaking this Saturday (Nov 21<sup>st</sup>) at the Niagara Chapter of the Ontario Woodlot Association. Topic will be the future vision of the NPCA for environmental issues in Niagara. Jeff Vlasman will also be attending to speak and answer questions about the Bylaw.

b) D. Baker questioned the group if it would be a good idea to adjust the frequency of the meetings in relation to the quantity and quality of the agenda items. The last two meetings have been light on topics and the committee may want to have the option to skip a meeting if there are no significant items to discuss.

J. Schonberger stated that he will support and attend whenever there is a meeting scheduled, regardless of the agenda. He suggested we could fill the agenda with more general interest presentations on forestry and woodlot management.

B. Andres commented that even if there is a decision to skip a meeting he would still like to receive the work report in the mail to keep up to date with what the NPCA is doing.

D. Baker suggested that members of the committee can also use the meetings to inform the NPCA on issues occurring in the community.

D. Drennan suggested that perhaps the NPCA restoration staff could do a presentation on their activities at the January meeting.

**Action Item 14-2009:** *Dan will inquire with NPCA Restoration staff for a possible presentation.*

- c) R. Miller asked if the committee would be open to holding the next couple of meetings in the afternoon instead of the evening. This may help with attendance from the municipality reps.

The group concurred that it would be acceptable to hold the next meeting or two in the afternoon.

- d) D. Ransom asked if there are any proposed changes coming to the Bylaw or if the NPCA has items to add to Bylaw. D. Drennan replied there are no immediate changes coming but there are items the NPCA would like to add. One being the inclusion to the definition of a woodland to account for conifer plantations/forests that are managed for the sole purpose of complete removal (clear-cut silvicultural system) at rotation in accordance with a prescription or forest management plan. These types of woodlands are not common in the region but do exist and could become an issue to deal with in the Bylaw. Presently the Bylaw only permits the selection system as a method of harvesting woodlands.
- e) D. Drennan gave a general update regarding enforcement activities and procedures regarding unqualified loggers that have been operating with a lack of regard for good forestry practices in the Niagara area this past year. Permits will not be issued until the logging crew is identified and indicated on a permit. Stop work orders will be issued if the logging crew on site is not the crew identified on the permit.

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

The next committee meeting shall take place in the boardroom at the NPCA office at **1:30 pm** on Thursday, January 21st, 2010

## 7) **Adjournment**

**MOVED BY:** J. Schonberger

**THAT:** this meeting do now adjourn. Received at 8:05 p.m.

**“CARRIED”**



NIAGARA PENINSULA  
CONSERVATION  
AUTHORITY

50  
years

CELEBRATING  
50 YEARS OF  
CONSERVATION

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

**DATE: December 3, 2009**

**SUBJECT: Housekeeping Amendments to the NPCA's Land Use Planning Policy Document - Report No. 78-09**

The NPCA's "Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Policy Document" was approved by the Board on December 12, 2007 to implement the new Ontario Regulation 155/06. This document is used by NPCA staff to administer our policies and regulations on various development applications under the Planning Act and NPCA Permits issued under the CA Act.

Over the past two years of working with this policy document several minor clerical and administrative errors have come to light and been logged. These generally involve grammatical, numerical, and punctuation errors. Reference to other legislation has been updated to reflect any changes as well. The purpose of this housekeeping update is to correct these errors. No new policy is being introduced. A definition for "Valleyland" is being included in the update as this term was inadvertently left out of the original definition section. The definition is appended to this report as schedule 1.

A correction is also being made to a conflicting section (originally included in error) with respect to lands adjacent to a wetland. One section permitted development within 30m of a wetland subject to completion of an Environmental Impact Study (EIS). Another section prohibited development within 30m of a wetland. The original intention was to allow flexibility for minor development to occur within 30m subject to an EIS and to prohibit major large scale development within 30m of a PSW (ie: maintain a 30m buffer). This section has been modified to remove the conflict and clarify the original intention of the two sections. New policy is not being introduced. This reworded section is appended as schedule 2.

Re-formatting of some paragraphs in section 3.24.1 Wetland Development Policies has been undertaken to improve readability. This involved changing some "letter" references for the paragraphs to "numbered" references, and re-arranging the order of paragraphs to a more logical presentation. No new wording or policy changes have been made to this section. Schedule 3 appended represents the re-formatted section. Schedule 4 appended is the originally approved section (for comparison).

Board members will be provided with a complete revised copy of the policies (once approved) to replace the original version. Given that the changes are clerical in nature and no new policy is being introduced, staff note that there is no need for public consultation.

**RECOMMENDATION:**

That the Board approve the housekeeping amendments to the Land Use Planning Policy document and that staff be authorized to revise the policy accordingly.

Prepared by: Paul Bond, Senior Watershed Planner

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

### **Schedule 1: Definition for Valleyland**

**Valley** means a natural landform depression that contains a watercourse, has water flowing through, or contains standing water. Water features may be either permanent or intermittent. The boundaries of a valley are defined by the primary top of bank on each side of the landform depression as illustrated in Figure 3.

### **Schedule 2: Section 3.25.1 (c) 4**

Where no new development exists within 30m of any wetland:

- i) No new septic systems are permitted within 30m of any wetland.
- ii) For major development (as determined by the NPCA) including, but not limited to; plans of subdivision; extensions of draft approval for existing plans; and, major commercial, industrial, or institutional, no new development is permitted within 30m of a PSW.





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

**DATE: December 2, 2009**

**SUBJECT: Travel Over Ice – NPCA Safety Manual – Report No. 79-09**

In November 2008, the Conservation Authority approved a Safety Manual, containing policies affecting all aspects of Conservation Authority business. Section 24, dealing with travel over ice, was in a draft form at that time and was not included in the approved manual.

Over the past year, the Joint Health & Safety Committee (JH&SC) has been reviewing travel and working on ice policies from other Conservation Authorities and park agencies. There are a wide variety of policies in use, with no standard approach. The JH&SC developed the attached policy modeled on current policies in place at the Grand River Conservation Authority, the Toronto Conservation Authority and the Ministry of Natural Resources. It also incorporates a very thorough ice testing protocol that has been in place at the Binbrook Reservoir for the past three years.

The policy addresses situations where Authority staff are required to work or travel over ice. These situations could be related to Conservation Area programming, such as the ice fishing operation at Binbrook, or capital development, such as fish habitat work at St. Johns Conservation Area. In each of these examples, staff are provided with clear direction on safe procedures for accessing the ice, including Personal Protective Equipment (PPE).

The JH&SC noted that the Grand River and Hamilton Conservation Authorities are in the process of amending their policies on the use of PPE where ice conditions are known to meet or exceed guidelines for safe access. Staff will continue to monitor the progress of these proposed changes with our neighbouring Authorities and report back to the Committee.

**RECOMMENDATION:**

That Report No. 79-09 be received; and,

That the Travel Over Ice Policy (November 2009) be approved and added as Section 24 of the NPCA Safety Manual.

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

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

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**Safety Manual - Section 24**  
**Travel over Ice**  
(November 2009)

## **Introduction**

Travel over frozen bodies of water can present numerous hazards. An encounter with thin ice could result in immersion in extremely cold water with dangers resulting from effects including hypothermia and drowning. Although not addressed here, other concerns that should be considered include possible impacts from winter conditions including extremely cold weather, wind chill, frost bite, etc.

The goal of this policy is to recognize the potential hazards of work / travel on ice in a way that appropriately manages the risk of working / travel over ice when doing so is necessary.

## **Ice Safety Policy / Procedures:**

Never go out onto the ice if there is any question of its safety.

### **TYPES OF ICE:**

#### **Blue (Black) Ice / Clear Ice:**

This ice is the strongest. It is formed by a quick drop in temperature and does not contain any other particulate, air bubbles, or snow. It is clear looking, translucent and has a reflective aspect. It's colour can sometimes be described as black, green, or blue (based on the water body).

#### **Opaque (white) Ice:**

This type of ice contains a mixture of ice, air bubbles, snow or other particulates. It is milky in appearance and generally has a textured surface. It is considered to be 50% weaker than Blue Ice. Generally begins forming later in season when days get longer.

#### **Honeycomb (or candle) Ice:**

This ice is formed by repeated temperature changes. It is gray or silver in color and has a unique texture. It is generally crumbly and easily fracture into long shards (like candles). This ice is usually found in the late winter / early spring or after repeated warm/cold spells. It has minimal structural integrity and is not considered capable of supporting any load.

## **PRE – ACCESS:**

1. Anyone involved in work / travel over ice must be trained in the hazards involved, the safety precautions to be taken, basic rescue procedures, and emergency plans to be followed in the event of a breakthrough on the ice.
2. Before venturing out, a weather forecast from Environment Canada shall be obtained for the area of travel / work. The forecast should include temperature, wind speed/direction, and the probability of precipitation. Supervisors should then arrange for a “tailgate conference” to review the work plan and discuss potential hazards, strategies to mitigate risk, and the process to respond to an emergency situation. This should include:
  - Alternative to travel on ice (if any)
  - Planned travel route; & alternate travel route (if possible).
  - Work Involved
  - Estimated time on ice

- Specific known hazardous areas
  - Emergency contacts (who to call)
  - Communications options (Cell, radio, co-worker, bystander on shore, etc)
  - Procedures to manage hypothermia (nearest warm-up location)
  - PPE: Throw-lines, picks, PFD, boot cleats, sunglasses
- 3 Prior to stepping onto the ice to test it, observe the on-ice conditions and look for “inconsistencies.” Examples:
- a) Where possible, know and understand the water body prior to the winter season. This will help you better understand shoreline, vegetation, drop-offs, submerged structures, runoff influences, wind effects, current, and many other factors that can remain an unseen influence in winter.
  - b) Check the shoreline for signs of recent / significant changes in water levels.
  - c) Look for wet spots on snow covered areas.
  - d) Exercise caution where surface cover changes. Snow drifts on the ice may insulate the ice and result in either thicker OR thinner ice depending on weather, current, air / water temperatures and other factors.
  - e) Water is a natural level. “Humps” and “hollows” in the ice surface can indicate many things ranging from the fast formation of ice in cold weather to the deterioration of ice due to temperature, current or other factors.
  - f) Pressure cracks can form when “making” ice or can form when the ice is deteriorating and moving. Understand the difference and recognize the hazards associated with pressure cracks – particularly when using motorized equipment.
- 4 The number of persons required to travel / work on ice will vary, depending on mitigating factors. This includes:
- a. **Access onto “An Unknown Body of Water “Level 1”:**
    - i. ALL frozen bodies of water with ice conditions that are unknown / unfamiliar, or those that are seldom accessed to the persons involved, require testing and extra caution.
    - ii. For testing, a team of no less than TWO persons should be used. Where there are special hazards (including, but not limited to moving water/current, temperature extremes, unique work, etc), a THIRD person should be considered.
    - iii. Prior to other tasks, testing ice thickness is to be done prior to work / travel over ice. The methodology is described below.
    - iv. Never be complacent. Although some water bodies may be tested in the same spot yearly, they are to be considered an “unknown body” and must be tested to ensure they are safe. (Example: submerged conditions may change if a log has floated downstream or a sandbar has formed. Among other effects, these can create an eddy current that results in thinner ice where there was no eddy last year.)

- v. If the body of ice was deemed unsafe due to melt and or extreme changes in level fluctuation; it shall be deemed as an “unknown body of water” and re-tested before resuming access.

**b. Access onto “A Known Body of Water with No Recent Testing “Level 2”:**

- i. On “known” (due to recent / frequent access) bodies of water with ice conditions that have not been determined through recent testing / sampling and documented (within the past 72 hours), new testing / sampling is to be done prior to access / travel for other duties.
- ii. For “known” bodies of water, teams of TWO persons should be used.
- iii. Testing ice thickness is to be done prior to work / travel over ice. The methodology is described below.

**c. Access onto “A Known Body of Water with Recent Testing for “Limited” Access/Work: “Level 3”**

- i. “Limited” Access / Work on ice may be defined as work that is “limited” and minor in nature. Examples include the day-to-day ice hut operation (opening huts, re-drilling fishing holes, P/R tasks with the public, etc).
- ii. On a “known” body of water that has been recently tested / sampled / documented (within the past 72 hours) and been determined to be safe, ONE person may conduct “limited” work / travel over this frozen surface.
- iii. It is important to note here the NPCA’s “Working Alone Policy.” Of key importance is the ability of staff who are working alone to have the ability to summon help (by radio, cell phone).

**d. EXCEPTIONS:**

Notwithstanding the above, the ice should NOT be considered safe for access / work under the following conditions (and must therefore be re-tested):

- i. The temperature has risen in such a way that ice conditions may have changed.
- ii. Extreme change in water levels have taken place since the last documented testing / access that are visible at the edge of the water body.
- iii. Extremes in wind have taken place since the last documented testing / access.
- iv. Where there is a risk of changes due to unseen hazards (examples: current, snow load, sunlight, runoff, upswell/spring, etc.).
- v. There has been no testing or sampling and no documentation within the past 72 hours.
- vi. For any work that is significant; including travel with heavy loads, cutting large holes, drilling large numbers of holes, etc.

5. Personal Protective Equipment for various work / access over ice includes:

- a. An approved floater / survival suit / PFD
- b. Ice picks
- c. Bag/Throw line (15m / 50 feet)
- d. Boot cleats
- e. Sunglasses
- f. Emergency whistle
- g. Means of communication / summoning emergency assistance

6. The above PPE is required for all access / work described above.

7. Vehicle / Equipment on Ice:

Special care must be taken when considering using vehicles / equipment on the ice.

Ensure the following:

- a. Ensure ice is a type / thickness that will support the combined load.
- b. Windows should be open to allow emergency egress.
- c. Seatbelts are NOT to be worn
- d. Motorized vehicles must be operated at a slow speeds
- e. Vehicles must not remain stationary in the same location for more than 2 hours

## **ICE ACCESS:**

**1. Ice Testing Procedure:**

- a. Teams of at least TWO persons will be used to test ice prior to access / work.
- b. The first 3-5 holes should be drilled at a known shallow spot where possible
- c. The first person is to be linked to the second person by a 50m line that is secured to the first person and is held firmly by the second person.
- f. It will be the responsibility of the first person to drill holes at determined intervals.
- g. It will be the responsibility of the second person to maintain the rope connection to the first person, watch for problems, call for emergency help and pull the first person to safety. The 2<sup>nd</sup> person shall also record ice depths on a rough map to be entered into an ice log upon leaving ice surface in a timely manner.
- h. The first person on the ice will test (drill) close to shore with the second person remaining on the shore.
- i. Once the first person determines that the ice thickness in the first location is safe, subsequent test holes may be drilled at intervals (Lakes: 30m maximum) (Rivers: 15m maximum).
- j. Note: "Checking" ice thickness is also a valid means of determining ice thickness. For example, this is sometimes done by measuring thickness at an ice-fisherman's hole while doing P/R, etc. It is important to note that this type of check should only be done when there is a recent, existing documented record of ice thicknesses at this location.

- k. Note: Where site-specific conditions (examples: special hazards, completely unknown water body, etc) are such that staff feel two persons is not enough to test ice, additional staff / equipment should be considered. This includes at least one person who remains on shore to summon help and rescue.
- l. Any on ice travel or work in late winter / early spring should be monitored closely as ice conditions change quickly.

**2. Ice Standards and Load Capacity:**

The chart below represents the NPCA’s ice thickness guidelines for work / access on ice. It is adapted from similar guidelines established by a number of organizations including the TRCA, Ontario MNR, and Minnesota DNR.

It is important to note that a “light duty vehicle” is defined under US Federal Regulations as follows: “Federal regulations define a light-duty truck to be any [motor vehicle](#) having a [gross vehicle weight rating](#) ([curb weight](#) plus [payload](#)) of no more than 8,500 pounds (3,855.5 kg)...”

<b><u>BLUE ICE</u></b>		<b><u>Maximum Load Capacity</u></b>
Inches	Cm	
<4	<10	UNSAFE
4 to <6	10 to <15	One person on foot Persons must remain at least 10 feet (3 metres) apart
6 to <10	15 to <25	One person with snowmobile & equipment trailer
10 to <12	25 to <30	<u>Light Duty</u> Vehicles separated by a safe driving distance, Ice Huts
<b><u>White / Opaque Ice</u></b>		<b><u>Maximum Load Capacity</u></b>
Inches	Cm	
<8	<20	UNSAFE
8 to <12	20 to <30	One person on foot Persons must remain at least 10 feet (3 metres) apart
12 to <20	30 to <50	One person with snowmobile & equipment trailer
20 to <24	50 to <60	<u>Light Duty</u> Vehicles separated by a safe driving distance, Ice Huts

**SUPERVISOR’S RESPONSIBILITIES**

- 1. Instruct Employees that they are not to venture onto ice without the approval of their supervisor.

2. Make sure that anyone involved in work / travel over ice is trained in the hazards, safety precautions, basic rescue procedures, emergency plans and policies involved in the undertaking. All training is to be documented.
3. If it is not feasible for a supervisor to be present when the access / work is being done, a suitable employee will be appointed to take his/her place.
4. A local rescue plan must be in place. This should include plans to call for emergency access / assistance and address hypothermia for each worksite. Each employee involved is to be aware of their role.
5. Instruct employees in the procedure for testing / checking and documenting ice conditions; and maintain records of documented ice conditions.
6. Ensure employees are aware of the standards and load capacity of the various types of ice.
7. If it is determined that the ice is suitable for access / work, the supervisor is to ensure the proper PPE is available to employees; and that employees take/use the equipment as necessary.

## **EMPLOYEE RESPONSIBILITIES**

1. Do not venture out onto ice without the consent of your supervisor.
2. Participate in the required training necessary to access/work on ice. This includes training in the hazards, safety precautions, basic rescue procedures, emergency plans and policies involved in access / working on ice. All training is to be documented. This may include testing.
3. If you feel uncomfortable about working on ice, notify your supervisor immediately.
4. Take and use PPE equipment. Inform your supervisor immediately if there is defect in any equipment.
5. Inform your supervisor immediately of any unsafe conditions you observe.

## **JOINT HEALTH & SAFETY COMMITTEE RESPONSIBILITIES**

1. Review this policy on an annual basis with the assistance of appropriate / knowledgeable staff.
2. Provide assistance to the Supervisor for training as necessary.





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

**DATE: December 2, 2009**

**SUBJECT: 2010 Fee Schedule – Report No. 80-09**

Authority staff have developed the attached schedule of Conservation Area Fees for the 2010 operating season. As in previous years, the exercise involved consultation with neighbouring Conservation Authorities and private facilities offering similar services. The purpose of these consultations is to ensure the NPCA fee schedule is on par with the market rate throughout our watershed.

The Harmonized Sales Tax (HST) comes into effect on July 1<sup>st</sup>, affecting many of the services offered by the Conservation Authority. This will change the rate of tax mid-year from 5% (GST) to 13% (HST). Although the public will be expecting the change, staff are preparing for a challenging implementation process. To simplify matters, taxes will be applied on top of the proposed fees, unless otherwise stated.

#### **Membership Pass**

No change in the cost of a membership pass is recommended. The current cost for a membership is \$70.00.

#### **Day Use Fees**

The Authority's day-use fee structure reflects the varying level of services offered at our four revenue producing areas. Rates at Binbrook and Ball's Falls have been changed in recent years to reflect the level of service and facility improvements. Staff do not propose any changes to the day use rates in these areas as they are well placed in the market.

Long Beach and Chippawa Creek have not changed the day use rates in two years. Staff are recommending increases in the individual rates for adults, students and seniors. The per car maximum will remain at \$15.00.

#### **Camping Fees**

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 2010. As such, the chart contains both 2009 along with 2010 rates (where available). Particular attention should also be given to the amenities, level of service and camping season on comparison operations.

There are several changes being proposed to the fee structure for camping. A modest increase is recommended to keep pace with increasing costs to operate the facilities. An increase in the reservation fee is proposed to help offset the cost of changes to the

reservation system. In addition, the season is proposed to be extended to include the Thanksgiving Weekend. Staff believe these changes will take advantage of an increasing fall camping market.

### **Ball's Falls**

Fees for facilities at Ball's Falls remain at the high end of the wedding/event market. For the purpose of this exercise, our comparison facilities are community rental halls, service group facilities and wineries.

Staff recommend a modest increase of 5% on all rental fees for 2010. 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**

Staff recommend that the hunting permit fee remain, unchanged at \$25.00. There are still very strong opinions in the hunting community that this is an unfair user fee that is not applied consistently to all Conservation Area users. Staff have agreed to meet with representatives from the Ontario Federation of Anglers and Hunters to discuss the permit process, hunting opportunities and habitat enhancement projects. This meeting, tentatively set for early spring 2010, will allow staff to prepare a comprehensive report on the hunting program. Staff recommend that any increase to the hunting fee be considered at that time, for implementation in 2011.

### **RECOMMENDATION**

**That the proposed 2009 Conservation Area Fee Schedule be approved.**

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

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



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

**DATE: December 2, 2009**

**SUBJECT: Conservation Areas Registration System – Report No. 81-09**

## **Background**

Over the past 12 years, the Niagara Peninsula Conservation Authority has been using the CAMIS computer system to manage their two campgrounds. This program was based on a DOS operating system, using dedicated computer stations located in the gatehouse. CAMIS was used by a number of other Conservation Authorities and the Ministry of Natural Resources, making this software program the “standard” for campgrounds in Ontario.

As computer technology advanced CAMIS was slow to adapt their program to new operating systems, such as Microsoft Windows. The program and equipment became difficult to maintain, and the level of customer service began to suffer.

After repeated complaints from customers, CAMIS began developing an updated Windows based program called Everest. The new program was released on a trial basis in 2007, with full release in 2008. In mid-2008, CAMIS sent correspondence to its clients indicating that it would not be supporting their DOS based program beyond 2009. The NPCA requested information on the new system, but were advised that our operations were too small for CAMIS to consider.

Over the past 18 months, NPCA staff have been researching reservation systems and meeting with other campground managers to find out which reservation systems best meet the requirements of our conservation areas.

## **Discussion**

There are four revenue generating Conservation Areas operated by the NPCA (Long Beach, Chippawa Creek, Binbrook and Ball’s Falls). The CAMIS system demonstrated how beneficial a computerized reservation system can be to financial reporting, reservation management and retail sales. These services are required in each of our revenue generating areas, although the preferred function varies from site to site.

Staff began the process by compiling a list of more than 12 reservation systems. These were collected from other Conservation Authorities, campground operators and larger park systems such as Ontario Parks and Parks Canada. Additional information was collected from the vendors, specifically related to the availability of software, security of information and fit within our existing operating framework. This exercise reduced the number to three suppliers:

1. CampPro
2. Sirius
3. Mediamix

A staff team, representing each of the four conservation areas then reviewed the programs with respect to their particular operation. Vendors were asked to provide demonstrations of the software and existing clients were consulted for feedback. The results of this analysis are as follows:

### **1. CampPro**

This Montreal based company developed their system specifically for campground operations. Staff found the system does not offer important levels of security for handling credit card and personal information. Shifts and records can be easily modified by any operator, making accounting between multiple shifts difficult. Staff believe this system is best suited to a small, private campground operation.

### **2. Sirius**

The Sirius system, based out of New Mexico, was designed primarily for hotel and museum use. It provides good retail and day-use functions, however it lacks the mapping options that most systems use to track campsite reservations. This is a critical shortfall for the campground operations, however it is ideally suited to operations at Ball's Falls where multiple daily bookings on a single facility and multiple facilities are common place.

### **3. Mediamix**

The Mediamix system is based out of Toronto. It provides the best fit for Binbrook and our campground operations. The system would improve the Authority's reservation service levels by allowing real-time online reservation bookings for camping. It tracks retail and day-use admissions, on work stations located anywhere an internet connection is available.

Based on the above analysis, staff recommend that a reservation system using the Mediamix system be implemented at Binbrook, Long Beach and Chippawa Creek in 2010. The Sirius system is currently being considered for use at Ball's Falls, however there are outstanding questions regarding the compatibility of this system with the Regional IT Network. Staff expect to bring a recommendation to the board in early 2010 regarding a system for Ball's Falls.

The Mediamix system was used by the Essex Region Conservation Authority in 2009, where staff found it to be very user friendly. The system will be implemented at Ontario Parks and Grand River Conservation Authority campgrounds in 2010. In addition to the above, Mediamix has a good track record of service to the National Parks System, Newfoundland Parks, New Brunswick Parks and various campgrounds under the Ontario Private Campground Association.

## **Cost of Implementation and Operations**

The CAMIS system involved an annual licensing and support fee of \$3,000 per year. This covered service on equipment at Long Beach and Chippawa Creek and a telephone based help line. The \$10 reservation fee, charged by the NPCA was retained by the Conservation Authority.

On average, the NPCA generates \$13,500 in reservation fees per year. Taking into account the CAMIS fee of \$3,000, the Conservation Authority receives an average net revenue of \$10,500 per year from reservation fees. Moving to the Mediamix system would result in a total loss of \$10,500 from the revenue stream. This would be distributed among Long Beach, Chippawa Creek and Binbrook, based on respective levels of reservation activity. An increase in camping revenue of 2.5% at the two campgrounds would translate into \$11,000, which would offset the cost of moving to the new system. The impact to revenues could be further reduced if the reservation fee was increased from \$10 to \$12 in 2010, as some other Conservation Authorities have done. The extra \$2 would stay with the Authority revenues. Staff believe these are acceptable targets, especially given that better access to reservations should result in greater campground attendance.

Under the Mediamix proposal, the NPCA would enter into a 5-year agreement with the company to supply call centre reservation service, website maintenance, financial tracking and retail sales. Visitors would benefit from real-time availability information and on-line reservations. The NPCA will be able to integrate the new system into its existing operations, including the corporate website and existing computer IT infrastructure. The Mediamix system also allows for improved financial reporting including real-time tracking of revenues and an opportunity for off-site access to accounting information.

### **RECOMMENDATION:**

**That Report No. 81-09 be received; and,**

**That staff be authorized to enter into a 5-year agreement with Mediamix Interactive Inc. to supply reservation services and systems for Long Beach, Chippawa Creek and Binbrook Conservation Areas.**

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

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



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

**DATE: December 2, 2009**

**SUBJECT: Artifact Storage System – Report No. 82-09**

During the development of the Centre for Conservation, the storage area for the artifact collection was greatly reduced to accommodate additional gallery and meeting space. This decision took into consideration that many museums have moved to compact storage systems that could be installed to make more efficient use the space available.

In early 2009, Authority staff applied for a grant from the Department of Canadian Heritage under the Museum Assistance Program, to purchase compact shelving for the artifact collections. In July, the NPCA received a grant to cover 50% of the project cost, up to a maximum of \$32,900.

In August, staff approached three known manufactures in Southern Ontario to request quotes for a compact storage system. Three firms were contacted:

1. Hurok Manufacturing (London, Ontario)
2. Smart Space Solutions (Markham, Ontario)
3. Carr-McLean Limited (Toronto, Ontario)

Although all three companies received the information package, only one company followed-through with a price. Carr McLean provided a quote of \$66,017.52 for the installation of a storage system, which includes the construction of a self-supported mezzanine and second level.

Carr McLean specializes in library, archival and museum storage. This firm comes recommended by many other museums across Ontario. Although only one price was received, staff believe that the cost is in line with similar projects recently completed in community museums.

As mentioned above, the MAP grant will cover 50% of the project cost, up to a maximum of \$32,900. The remaining cost of the project will be provided through funds raised by the Niagara Peninsula Conservation Foundation.

**RECOMMENDATION:**

**That Report No. 82-09 be received; and,**

**That Carr-McLean Limited, be awarded the contract to install a compact storage system at the Centre for Conservation, for a contract price of \$66,017.52 (incl. taxes)**

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

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



NIAGARA PENINSULA  
**CONSERVATION**  
AUTHORITY

50  
years

CELEBRATING  
50 YEARS OF  
CONSERVATION

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

**DATE: December 3, 2009**

**SUBJECT: APPOINTMENTS – BALL’S FALLS HERITAGE ADVISORY COMMITTEE –  
REPORT NO 83-09**

Ball’s Falls Heritage Advisory Committee members, April Petrie and Marion Holman will both complete their three year term of office on December 31, 2009. These individuals have both served multiple terms, contributing a great deal towards the programming and recent museum upgrades. Both have indicated they would like to continue to participate on the committee.

Traditionally appointments to the Committee have been for a 3-year period. Given their knowledge of and dedication to the programming changes now underway, these members are a valuable resource for the advisory committee and the Conservation Authority. Accordingly, staff recommend that April Petrie and Marion Holman be appointed to the Ball’s Falls heritage Advisory Committee for 3-year terms effective January 1, 2010 to December 31, 2012.

**RECOMMENDATION:**

**That April Petrie and Marion Holman be appointed to the Ball’s Falls Heritage Advisory Committee for 3-year terms effective January 1, 2010 to December 31, 2012.**

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

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



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

**DATE: December 9, 2009**

**RE: PROJECT STATUS REPORT - REPORT NO. 84-09**

## **WATER MANAGEMENT**

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

#### **1) Binbrook Reservoir & Gauge Stations**

Staff continue to monitor the water levels at the Binbrook reservoir on a regular basis and adjust the valve settings as required based on forecast weather. Staff also continue to monitor the water levels at our 12 gauge stations on a daily basis as part of the NPCA's routine flood forecasting/warning duties. The public is able to access this real-time information through our website.

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

##### **i) Permits**

The NPCA has approved 78 permit applications for the 2009 calendar year. The NPCA has also refused to issue approvals for 3 development proposals during this same time period. Two of the applications were voluntarily withdrawn; the third was refused by the NPCA Board.

The Board's decision to refuse issuing a permit has been appealed by the applicant to the Mining and Lands Commissioner. Both the Appellant and the NPCA have filed their respective positions and evidence with the Commissioner's Office. In this regard, the Hearing which was originally to take place November 23 to 26<sup>th</sup> in Toronto, has been rescheduled to take place from February 9-12, 2010.

##### **ii) Violations**

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

##### **iii) 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). 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. During the current calendar year NPCA staff has reviewed 65 applications under this agreement.

#### **iv) Municipal Drain Maintenance Review**

The NPCA continues to represent Conservation Authorities located in Central Ontario. on the DART Committee with 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. NPCA staff has reviewed 26 municipal drain projects during the current calendar year.

#### **3) Floodplain Mapping**

##### **i) Lyon's Creek – Cities of Welland and 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 Lyon's Creek located in the Cities of Welland & Niagara Falls.

##### **ii) Tee Creek – Cities of Welland and 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 Tee Creek located in the Cities of Welland & Niagara Falls.

##### **ii) Bearss Drain – City of Port Colborne**

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 the Bearss Drain located in the City of Port Colborne.

#### **4) NPCA Stormwater Management Guidelines**

In an effort to promote a uniform stormwater management standard across the watershed, and to take advantage of current state-of-the-art practices, the NPCA has retained AECOM to update and complete the NPCA's draft 2007 'Stormwater Management, Erosion, and Sediment Control Policies and Criteria Guidelines'. The NPCA anticipate the report to be finalized in December 2009.

## **II. Watershed Planning Division**

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

Although new site plan and subdivision submissions are lower than anticipated, plan review activity has remained brisk, with the majority of work involving either existing files of record or smaller private dwelling proposals. This is directly attributed to the Authority's expanded mandate related to protection of wetlands.

Staff are also involved in several municipal Official Plan reviews in accordance with the Province's delegated responsibilities for Natural Hazards, the NPCA's regulations and the Planning Memorandum of Understanding (MOU) with our municipal partners. The Province required municipalities to bring their Official Plans into conformity with the Provincial Growth Plan by June 2008. The Area municipalities in the Niagara Region have been given a one year extension on this deadline. The Region of Niagara's Growth Strategy Official Plan Amendment has been appealed to the Ontario Municipal Board. Currently the St. Catharines, Wainfleet, Pelham, West Lincoln and Welland Official Plans are underway. The City of Thorold is just starting their Official Plan review.

The update to the Lake Erie Shoreline Management Plan is nearing completion. The draft report was received from Shoreplan Engineering at the end of November and is currently under review by staff. The report provides up to date technical information and mapping to support the planning and regulations programs.

The update to the Lake Ontario Shoreline Management Plan is almost completed. A final report was received from the Consultants. The report will provide up to date technical information and mapping to support the planning and regulations programs.

## **2) Watershed Plan Preparation**

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

Updates have begun on the Natural Heritage Resources section of the document to incorporate the NAI information into the Phase Two of the Watershed Plan. Not all sections of the document can be updated at this time as the Watershed Plan is waiting for the completion of several studies so the results can be incorporated into Phase Two.

Erosion pin field work was completed at both sites in study area. The first site is in Bearss Drain at the Friendship Trail. All 10 pins were located (5 on each bank) and both banks experienced a minimal loss of soil from May 2009. The second site is in Eagle Marsh Drain at Cement Rd. All 10 pins were located that we were unable to find in May because of water levels being too high. Water levels in October were reduced dramatically possibly due to the flood gate at the lake being open. Significant soil loss was experienced since October 2007 when the pins were last measured.

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

Work on the Restoration Strategy has been temporarily suspended to focus on the Upper Welland River and updating the Lake Erie North Shore Watershed Plan.

Erosion pin field work was completed at all 4 sites in study area. The first site is in Biederman Drain in the Wainfleet Bog but the pins were unable to be assessed due to high water levels. The second site is also in Biederman Drain but at Mud Lake CA. All 10 erosion pins were located and the site appeared to be experiencing minimal soil loss since May 2009. The third site is in Towpath Drain at Grisdale Rd. Only found one pin out of 5. The remaining pins appeared to be covered by crushed stone from adjacent road construction. The fourth site is at Saint George St. where 2 of 5 pins were located and appeared to be experiencing minimal soil gain: the others are likely covered.

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

A public workshop was held October 6<sup>th</sup> at the Allanburg Community Centre. The purpose of this workshop was to identify any issues the community may have with the study area that should be addressed by the Watershed Plan. The purpose of this workshop was also to identify the public's objectives for the Watershed Plan. Attendance was bleak with only 6 members of the public attending the meeting.

Erosion pin field work was completed at one site in study area. All ten pins were located (5 on each bank) with a noticeable level of soil loss from the upstream string of pins. The downstream set indicated little change.

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

The first Steering Committee meeting was held on October 15. The purpose of this meeting was to review the objectives for the Watershed Plan. A second Steering Committee meeting is scheduled for November 25. The purpose of this meeting is to go over any concerns/comments the members may have about the Background Report.

A public open house was held on October 28 in Abingdon. The purpose of this open house was to inform the public about the Watershed Plan and the Watershed Planning process. Approximately 10 members of the public attended the event. Overall the open house was a positive event.

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

Erosion pin field work has been completed at all sites in study area. The first site at Baden Powell Park and the 2 locations along Grassy Brook each have 10 erosion pins. The first location had minimal soil loss from May 2009 and the second location did not experience a marked difference from spring. Three pins were not recovered due to accumulation of sediment

#### **f) 15-16-18 Mile Creeks Watershed Plan**

Erosion pin field work has been completed at both sites in study area. The first site is in 15 Mile Creek in Rockway CA where 20 pins were originally inserted. 10 pins were covered in spring 2009 due to mass bank failure and the remaining 10 could not be located. The second site is in 18 Mile Creek where all 10 pins were located and appeared to be experiencing minimal soils loss. However it was noted that severe bank slumping and undercutting is taking place along that stretch of bank.

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

The first draft of the final report for the Natural Areas Inventory is nearly complete. Staff are busy writing the introductory sections, finalizing bibliographic information, and contextual information about physical characteristics for the 107 technical summary documents. The Community Series mapping is complete and will be included with the final report. The Vegetation Type mapping is underway with staff working towards a draft of that mapping for later this fall.

The second volume of the final report includes reports on local data including a master plant list for Niagara with a list of local rarity. In addition, is a report on Birds of Niagara, Lepidoptera and Odonata of Niagara, Lichens of Niagara, Herpetofauna of Niagara, and a contextual paper outlining key Geological points of interest. These reports are in the process of being edited.

Expect to see an edited first draft the final report for the NAI in January 2010.

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

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

-NPCA staff and Niagara Region continue to meet on a regular basis to review the SP work undertaken on the Intake Protection Zones (IPZs). Stantec Consulting is working on the Threats and Issues study for Grimsby IPZ-1&2.

-NPCA SP staff have finalized the Highly Vulnerable Aquifers (HVAs) report and are working with Niagara Region on the first draft of the Assessment Report and the public consultation process.

## **2) Water Quality Monitoring Program:**

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

- Routine surface water quality monitoring the ended the last week of November .

-The NPCA continues to collect groundwater level data at 15 monitoring wells as part of the Provincial Groundwater Monitoring Network (PGMN). Water quality samples were collected from 13 PGMN wells last month and submitted to the Ministry of the Environment lab for analysis. Digital telemetry service has been established at the PGMN well located in Niagara-On-The-Lake and others are expected to follow in the coming year.

- Taxonomic identification of benthic invertebrates continues on samples collected during the spring 2009 sampling season. Plans are underway to collect benthic invertebrate samples later this month at Hamilton International Airport, as well as stations on Shriners Creek and Niagara-On-The-Lake.

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

- Field work for the Welland River Eutrophication Study is now complete for 2009. The next meeting for the Technical Working Group has been scheduled for February 2010.

- The auto-sampler installed on Twenty Mile Creek as part of the Lake Ontario Collaborative Study has been removed for the winter. Several significant rain events were captured this year.

- The NPCA has almost completed Phase 1 of a Special Joint Project with the Region of Niagara Public Health Department. The primary objective of the Joint Project is to determine the source and extent of elevated nitrate levels in private water wells located in close proximity to a PGMN well in Pelham. Letters were sent to 60 homeowners inviting them to participate in the water well testing. To date, NPCA and Public Health staff have tested over 40 private wells and are scheduled to begin follow-up testing as part of Phase 2 later this week. The Phase 1 testing results are currently being analyzed by staff.

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

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

- Staff are incorporating the final data products from the consultants for the IPZ and Threat studies into the provincially prescribed Assessment Report Database and developing a local data management framework based on this standard for Source Water Protection information in the Authority's corporate GIS database.

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

- Several tasks supporting the Natural Areas Inventory Project are still being addressed:
- The final QA/QC pass of the Community Series ELC mapping is ongoing in Niagara Falls. Thorold, Welland, and Pelham have yet to go through this process which includes integrating the final wetland evaluation extents from MNR which are still pending. City of Hamilton has yet to be captured.

- Site specific ELC Vegetation Type mapping, based on the data collected in the field has been completed for Port Colborne and Wainfleet. This information will be incorporated with the interpreted Community Series data to maintain class integrity throughout the hierarchal ELC system. Remaining municipalities to be captured includes Thorold, Welland, Pelham, West Lincoln, and Haldimand County.

### **3) Watershed Regulation Support Activities**

- Staff continue to work on the development of the realtime radar based spatial precipitation data acquisition and archive system on the SQL database server. The application has been working and polling well so next step is to setup and calculate select 'views' of the information that will lend itself to flood forecasting and warning activities (i.e total precip spatially across the NPCA watershed in the last 5, 10 15, 30, and 45 minute, 1, 6, 12, and 24 hour, 1, 2, 3, 4, 5, 6, 7, 14, 30, 60 and 90 day intervals ). Once this is programmed and tested within the database the information will be published using the spatial web services described in the next section so that it can be accessed by our GIS system.
- In the meantime, the Authority real time flow monitoring and reporting webpage (<http://www.his.npca.ca/xcreports/ui/index.asp> ('his' stands for Hydrologic Information System)) has been deployed live on the web and just a few minor errors are still being fixed by the consultant.
- Staff are currently adding free web links and images of real time weather data from the U.S. National Weather Information System such as the radar base reflectivity from Buffalo, and local community forecast magnets/buttons from the Weather Network.

### **4) Corporate GIS Support Activities**

- Reorganization of the Authority's corporate spatial databases has been completed and will be pushed into the production environment shortly. Updates to the Niagara Atlas and development of the Niagara Navigator web mapping applications based on these new data structures will commence immediately for launch by years end.
- Staff have been busy configuring its spatial data services web server or 'Geoserver' which will distribute Authority mapping on the web using Open Geospatial Consortium (OGC) standards such as the Web Mapping, Feature and Coverage specifications. These services will allow Authority partners and customers (i.e. land developers) to consume NPCA mapping within their own GIS, CAD or mapping systems without having to physically get a copy of it by streaming it in directly from our server. First mapping services planned are the radar based Spatial Cumulative Precipitation and the Generic Regulation Hazard Inventories and Screening products.
- Web data services for Authority Water Observation data (i.e. quality and quantity monitoring values) is also working well through its test phase in the development environment. This service will be published out to production once the Observation Database is populated with all of the Authority's historic and archived monitoring information which will result from an extensive internal collection and data entry effort.
- Staff has developed a central Authority contacts database to keep a central repository of contact information for individual and organizations having some business relationship with the NPCA.

## **V. Watershed Restoration Division**

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

The following are the restoration projects that are currently being implemented:

- Excavation was completed at 2 pit and mound restoration projects in the Vineland Drain watershed, totaling approx. 6.2 acres. Native trees were planted on each site, with the more planting planned for the spring of 2010.
- A fencing project was completed in the 40 Mile Creek watershed, to keep cattle out of a the watercourse.
- A landowner that completed the first phase of a riparian buffer/habitat enhancement project in 2009 has now completed applications for a manure storage improvement, a water well decommissioning project and further riparian buffer/habitat for 2010.
- Maintenance and repairs to the deer exclosures in Short Hills Provincial Park have been completed in partnership with the Friends of Short Hills Park and the Niagara Restoration Council to prepare for the winter months.

Staff have also been meeting with landowners to discuss and develop projects for the 2010 program year. Projects for next year include;

- planting of the two pit and mound projects in the Vineland Drain watershed. Plantings will include shrubs, wildflowers and grasses, both potted and seed.

## **2) Niagara River RAP/ Welland River Restoration**

The following are the restoration projects that are currently being implemented:

- 2 riparian restoration projects including the monitoring and stabilization of 150m of Welland River shoreline to reduce erosion and improve aquatic habitat as well as the adjustment of a section of Draper's Creek to reduce erosion and protect fish habitat.
- A Conservation Tillage project to reduce runoff, erosion to improve water quality and habitat potential in Mill Creek was completed in October.
- A 7 acre pit and mound restoration project is still underway and will be planted with native trees and shrubs in the spring of 2010
- 1 Best Management Practices project involving a manure management system has just recently been completed in the Ellsworth Drain sub-watershed
- 3 wetland projects in partnership with Ducks Unlimited Canada are in different stages of completion; two have been completed recently with planting expected for the spring and another will begin within the next month. These projects will greatly benefit wildlife in the form of pairing, nesting and possibly brooding habitat. Continued planning for future projects is underway using data gathered from watershed flights in April of 2009
- Late authorization and approval from DFO delayed the start of the **Smart Center Fish Habitat Compensation** project in Pelham. Initial excavation and soil stripping of the 5 acre wetland feature well under way and is planned to continue through the fall months and into the new year.

Staff have also been meeting with landowners to discuss and develop projects for the 2010 program year. Projects for next year include:

- 2 ac woodland and a 1 ac wetland restoration project in the Coyle Creek Watershed
- A grassed waterway, cattle restriction fencing and manure management system in the Welland River West sub-watershed
- Multiple habitat restoration projects

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

The following are the restoration projects that are currently being implemented:

- A riparian restoration project has been completed in the Black Creek watershed. The project involved the use of 5 single stone bendway wiers to relocate the stream thalweg to

reduce erosion and create fish habitat. Bioengineering of this site will occur in the fall to further improve bank stabilization.

- A riparian restoration project within Black Creek sub-watershed to reduce erosion and protect/improve fish habitat is underway
- A partnership with the Niagara Parks Commission to help complete a riparian restoration project along the Niagara River; an infill planting at a riparian restoration project site completed in 2008 in partnership with the NPC.
- Staff is preparing to start up the Fort Erie Creeks Watershed Implementation Committee

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

The following are the restoration projects and initiatives that are currently being implemented:

- A 200 m long hedgerow
- Seeding of two wetland projects
- Staff participated in Hamilton ReLeaf Network's "Green Futures Workshop" on Oct. 27<sup>th</sup>. The visioning exercise will help to focus the group's work, as well as strengthen its partnerships and communicating with public and decision makers.
- Staff participated in a Hamilton Stormwater Management Stakeholder Meeting on Nov. 5<sup>th</sup>. The aim of the meeting was to provide input for the development and delivery of a unique stormwater education program across the Hamilton area.

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

The following are the restoration projects that are currently being implemented:

- Stream buffer and bank stabilization project at Kala Hardware, funding support received from the St. Catharines Green Committee.
- Stream buffer and bank stabilization at Assumption Catholic School, funding support received from the St. Catharines Green Committee. This project is a continuation of our ECO School partnership.
- Two wetland restoration projects are just nearing completion. Both incorporate riparian buffers and connective corridor tree / shrub plantings.
- Two stream crossings at Agappe Christian Ministry located in the upper headwater of the Effingham tributary. The crossings were close to failing and were located in a critical Brook Trout Spawning Bed area. The Environmental Farm Plan and Species at Risk Farm Incentive Program assisted with funding for this project.
- A cattle fencing project to protect sensitive coldwater stream resources and sensitive Carolinian forest habitat is being designed.

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

Staff are finishing up the last details of the 2009 restoration projects and continue to meet with Landowners to discuss restoration project ideas for 2010. As such applications are currently being reviewed and project plans are being developed.

Staff have met with the NOTL Drainage Superintendent and consulting firm hired to prepare the natural channel design for the demonstration site within the NOTL municipal drain system. The consultant report is expected to be completed by December. Project implementation is expected early in 2010.

Staff organized a creek clean up event for 2 Mile Creek on October 24<sup>th</sup> based on interest from the community. The event was well attended with 10 members of the Niagara Environmental Corps (NEC) and 10 local residents. The volunteers were able to gather the following:



- 30 Bags of garbage
- 28 Tires
- 1 Bike
- 1 Propane tank
- 4 Lawn chairs
- 10 Metal tubs/plastic buckets

Staff attended the launch of the Niagara Environmental Sector Team (NEST) portal website on Oct 27<sup>th</sup>. *“NEST is a collaboration of environmental organizations established to connect, support and expand the capacity of environmental groups in the Niagara Peninsula and surrounding communities.”* The event was well attended and should be of great assistance to the conservation authority and restoration department.

The NOTL Watershed Study Implementation Committee met on November 6<sup>th</sup>. Topics of discussion at the meeting included:

- The NOTL Natural Channel Design Demonstration Project
- Water quality and restoration activities for 2009, including in the ground projects, education, and water quality monitoring.
- Water quality and restoration activities for 2010

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

The following are the restoration projects that are currently being implemented:

- Excavation was completed on a wetland project in the 16 Mile Creek watershed. An existing pond will be connected to a newly created wetland to create a larger wetland complex
- Plans are being finalized for a large riparian project in the 16 Mile Creek watershed, just at the base of the escarpment, part of which is scheduled to take place this winter

Staff have also been meeting with landowners to discuss and develop projects for the 2010 program year. Projects for next year include:

- Planting of the new wetland in the 16 Mile Creek watershed. A small area around the wetland will be planted with trees; wildflowers, grasses and shrubs
- Planting of a large riparian project in the 16 Mile Creek watershed
- A livestock fencing project in the 16 Mile Creek watershed
- Creation of a windbreak and a grape pumice storage facility (nutrient management project) at a greenhouse in the 18 Mile Creek watershed

### **8) Niagara Envirothon**

The NPCA will be participating as a partner in the 2010 Envirothon. Advertisements and registration packages for 2010 have been sent out to 42 different schools across the watershed. Staff are assisting Land Care Niagara with implementing a scholarship accessible to Envirothon participants. Funding has been secured from Land Care Niagara for the purchase of educational kits to be lent out to Envirothon participants to help them prepare for the competition.

### **9) Community Fisheries Involvement Programs**

The Angler Diary Program continues to collect data from anglers in the Welland River watershed. Letters were sent out to all anglers in November to return their diaries so that the data can be collected and added to the diary database.

## **10) Community Outreach Program**

A presentation was given to The Woodlands of Sunset staff and residents explaining the nature and significance of the Provincially Significant Wetland (PSW) on their property. The presentation was well received.

Following the success of the Sharing Experiences workshop in March of 2009, staff are working with partners in planning the 2<sup>nd</sup> annual Sharing Experiences workshop for March 27<sup>th</sup>, 2010. The focus of the one day workshop for members of community based environmental groups will be to share ideas and experiences and bring new and exciting projects back to their communities. The goal is to link like-minded people so that they can work together to effectively preserve and improve our local natural environment.

Three presentations on backyard naturalization and the use of native plants have been scheduled for the beginning of 2010 with local Master Gardening Clubs.

## **vi) Remedial Action Plan (RAP)**

### **1) Lyons Creek East**

The Niagara River AOC Contaminated Sediment Technical Advisory Group (TAG) is currently reviewing the draft of the Administrative Controls Guidance Document for Lyon's Creek East. There is a commitment by Environment Canada (EC), the Ontario Ministries of the Environment (MOE) and Natural Resources (MNR) to implement a comprehensive ongoing monitoring program to ensure continued natural recovery and sediment stability. EC, MOE and MNR will monitor each of the lines of evidence used to evaluate the environmental risk posed by the creek sediment, i.e. sediment chemistry; sediment toxicity and invertebrate community structure; bioaccumulation/biomagnifications; PCBs in sport fish and in snapping turtle eggs; fish community structure; and, sediment stability. The Sediment Transport Study involves examination of the physical properties and stability of the creek sediment by Golder & Associates (2009 – 2011).

The most recent TAG meeting was held on November 30, 2009.

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

The RAP Coordinating Committee convened in late October and invited representatives from Niagara Region Health, National Water Research Institute and the Town of Niagara-on-the-Lake (engineering) to discuss new findings and concerns for Queen's Royal Beach, NOTL, one of the four beaches within the Area of Concern. It was agreed that an investigation of the nature of the flow through the outfall near the beach will be undertaken to address the status of impairment for the Beneficial Use Impairment (BUI): *Beach Closings*. Other BUIs for re-designation consideration, following review of new scientific reports, are *Fish Tumours* and *Bird or other Animal Deformities & Reproduction Problems*. All new data and rationale of BUI re-designation will be included in the draft Stage 2 Update report. The draft Stage 2 Update report is currently being reviewed by the RAP Coordinating Committee.

- The next RAP Coordinating Committee is expected to re-convene in late November.

### **3) International Liaison**

- The RAP Coordinator attended the Remedial Advisory Committee (RAC) meeting at the NYSDEC office in Buffalo in mid-October. A discussion is underway on the status of impairment of Fish & Wildlife Populations and Fish & Wildlife Habitat. The next RAC meeting date is to be determined.

The State of the Lakes Ecosystem Conference (SOLEC) is one of the primary venues to report on ecological health of the Great Lakes ecosystem. SOLEC is now a triennial event and next scheduled for 2011 in the U.S.

#### **4) Update: Canada-Ontario Agreement Respecting the Great Lakes Ecosystem (COA).**

Since 1971, the Parties (Canada and Ontario) have worked together through a series of Canada-Ontario Agreements Respecting the Great Lakes Ecosystem (COA) that have guided their efforts to improve the environmental quality of the Basin and contributed to meeting Canada's obligations under the Canada-United States Great Lakes Water Quality Agreement (GLWQA). Each of the previous COAs were in effect for a 5-year term.

The current COA is a three-year agreement, in effect until March 31, 2010. Annex 1 of the agreement addresses initiatives that directly support the restoration and protection of environmental quality and beneficial uses in Areas of Concern. It is anticipated that a new COA will not be negotiated until there is a better idea of the content of the updated GLWQA. One option might be to extend the term of the existing COA to March 31, 2011, while waiting for the official word on the status of the GLWQA negotiation. However, to date there has been no decision on interim plans from the higher tiers of government.

#### **5) Update: Great Lakes Water Quality Agreement.**

The current GLWQA is the revised Agreement of 1978 as amended by Protocol in 1987.

In 2006, the Binational Executive Committee initiated a review of the Agreement and its Annexes. The process included extensive stakeholder and public consultation efforts, culminating in the submission of a report to the governments of Canada and the United States in December 2008. Salient points from the IJC Biennial meeting will also be taken into consideration during the negotiation process, which may take up to two years.

### **LAND MANAGEMENT DIVISION**

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

Only one quotation was received for invitation to quote on the compact shelving units in the Centre storage area. Funding for 50% of this project was received through the Museums assistance Program (MAP). The project will phase into 2010.

The second card-making workshop will be presented by volunteer, Ann Adam on Sunday, December 6.

The last Blacksmithing Workshop for 2009, a beginner's session, was held on November 8. This series of workshop was almost doubled due to visitor demand.

Weekend activities continue to be offered in conjunction with the "Hands on Nature" travelling exhibit.

The temporary gallery hosts "Everyday Attire"; an Exhibit of working Clothing from 1820 – 1920 from November 21 – January 18, (closed December 24 – January 1). This exhibit is on loan from the Fashion History Museum of Cambridge, Ontario and incorporates some photos and artifacts from our own site collection. Cogeco Cable has been to the Centre to interview Andrea Wilson and film the exhibit.

Volunteers assisted over a 4 day period in providing close to 250 international students from Brock University with a demonstration-focused education program including blacksmithing, quilting and weaving.

Alex Brown, our intern from Brock University has been assisting Authority staff with the installation of the temporary exhibit.

On December 5<sup>th</sup> from 7-9 pm, the 5<sup>th</sup> Annual public reading of Charles Dickens' "*A Christmas Carol*" will be held at the Centre for Conservation. The event is being coordinated by Janet Foxcroft and Margaret Cliff, with proceeds going to a designated charity. This year, Anna Olsen is one of the guest readers this year. To date more than 70 tickets have been sold for this event

Work is underway on re-siding the blacksmith shop. This project is expected to be completed before the end of 2009.

Volunteers and staff have been busy decorating the buildings and grounds and preparing materials for the upcoming the "Christmas In the Country" education program. To date, more than 800 students are booked to attend.

Planning for the 2010 schedule of programs and exhibits is underway.

Staff are in discussion with Town of Lincoln roads department on contemplated changes to the fencing and landscaping in front of the Ball Home. Off-road parking on 6<sup>th</sup> Avenue in the lower park area near the bridge continues to be an issue, and the road shoulder in front of the Ball Home has been enlarged by vehicle parking causing turf damage. Staff are proposing to bring the fencing out in front of the Ball home and change the service gate location to restrict off-road parking. Work on this area is tentatively scheduled for spring 2010 to coincide with restoration work on the road bridge by the Town.

Based on trail improvements this past summer, and feedback from visitors entering the park from the Centre parking lot, staff are planning for the installation of new map boards and trail signs. The location and graphic layout for the signs are currently under review by staff, with anticipated roll-out of the new signage in the park by this spring.

### **Binbrook Conservation Area**

Work on the new park pavilion and store this past month saw window shutters installed and the stockpiling of building supplies to complete the interior work over the winter months. The City of Hamilton building department has also been advised we wish to close out the building permit for the project, final inspections with the City still to be determined.

The Glanbrook Conservation Committee will be partnering with the NPCA for additional emergent plantings in the recently constructed pike spawning bed. Plantings of water plantain, Canada rush, water lily will provide suitable coverage and surface for pike eggs. Funding for materials is being sought to complete the project.

The waterfowl hunting program will finish on December XX, 2009. Parking on Tyneside Road remains a problem when the lot is closed during the waterfowl hunt. City of Hamilton By-law officers have been made aware of the situation and will be enforcing where possible. Once the waterfowl hunt is finished, staff will be getting the area ready for the ice fishing season, starting in early 2010. Ice hut rentals are now listed with Ontario Out of Doors ice hut directory and will be published in an upcoming issue. A corporate sponsor has been secured for the annual ice fishing derby will be held on February 7, 2010. More details will follow in January.

### **Long Beach and Chippawa Creek Conservation Areas**

Capital work at Long Beach is coming to a close. The comfort station in the north campground has been completely renovated. Improvements include new washroom stalls, lighting, shower walls and roof. The building was also modified to remove a confined space access for plumbing service and repair.

Both campsites have been cleaned and winterized. Some minor tree work will be required prior to leaving the site for the winter months. In January, campground staff will be reporting to and operating out of the Central Workshop at Gainsborough Conservation Area.

### **Stevensville Conservation Area**

The bridge replacement project has been reviewed with the Town of Fort Erie and they can see the urgency in replacing the old bridge in the park. The Town has accepted our bridge plans as submitted, and agree that the new clear span bridge shouldn't interfere with any future maintenance on the creek. The bridge order is now placed with our supplier in Kitchener and fabrication has started. Construction schedule to be confirmed pending the fabrication schedule from the bridge manufacturer.

### **Virgil Conservation Area**

Staff have been working on trail improvements at Virgil this past month. Overgrown vegetation along the trails has been trimmed, and hazard vegetation is pruned. A new trail loop was added near the south end of the trail to improve access for our trail maintenance vehicles. Staff have graded the pathways and added new granular surfacing. Staff are also working with the municipality to implement improvements to the trail connection into the site near the road bridge at Niagara Stone Road.

### **Rockway Conservation Area**

This past month saw staff back at the property to complete the trail improvements for this season. A small area of the bank along the creek eroded, taking out a portion of the old trail system. Staff are planning to build a new trail into the hill with wood cribbing and hand rails to take trail users around this hazard area. Construction access in this area near the old dam on the creek is difficult; all materials are planned to be brought in by hand using an old logging road behind the residences on Ninth Street.

### **Wainfleet Bog Conservation Area**

Six existing water table wells were replaced with larger wells to accept automated data loggers. These wells have standing water and are more difficult to access on a monthly basis due to recent beaver activity at the site. The data will continue to be used to monitor and track the effects of the restoration work. Funding contributions for the majority of this project was provided by OMNR Community Fisheries Wildlife Involvement Program. In-kind contributions of 2 data loggers were provided by OMNR Peterborough.

Recent beaver dam activity is resulting in water levels being held higher in the interior of the bog, as well as a recent dam in the south municipal drain affecting lands outside of the Conservation Area. Interior water levels to the east are affecting sphagnum moss growth and assisting sphagnum moss growth to the west. Staff are addressing the exterior drain dam and have established a partner meeting in January to engage all necessary agencies on the NPCA remediation techniques related to the beaver dams and beaver.

An educational display has been created to increase the understanding of the Massasauga Rattlesnake and the bog ecosystem. A permit was obtained to house a rattlesnake which had

died of natural causes and have it taxidermied for educational purposes. This snake 'Fred' has been preserved to its original markings and near size, in a non-threatening position. The skull was also preserved and mounted for comparison and structural information. The snake will be on display and used in educational programming at the Ball's Falls Centre for Conservation. It will help in highlighting the how snakes function, how to identify them, their habitat needs and similarity to other animals.

Staff will be working on a joint land stewardship contact with OMNR next year. Information on the bog restoration efforts and results will be extended and information on any changes in exterior animal movement will be exchanged.

### **Morgan's Point Conservation Area**

Staff have completed the review of the sand dune fencing project. This project was designed to restore the dunes by using natural process to accumulate sand. The project was installed in Jan 2005. It underwent vandalism on several occasions including complete and partial removal of the fence. Lake sand sources were found insufficient to accumulate significant amounts of sand. The project is now complete and the fencing has been removed and other measures will be implemented.

### **Property Assessments**

Our property assessment notices are arriving in the mail from the municipal property assessment corporation (MPAC). Staff are currently reviewing the information as it arrives. A status report will follow for the January board meeting. We have until March 2010 to appeal our current property assessments.

### **Capital Asset Inventory**

Staff are preparing a capital asset inventory for our properties and are currently gathering and compiling information for our records. Items in the inventory include information on our land holdings, land improvements, buildings and building improvements, machinery, equipment and vehicles.

### **CA Highway Signage**

An inventory of all of our conservation area highway signs was completed by staff earlier this year and signs that are worn and/or damaged were itemized for replacement. Staff held a meeting with Niagara Region Public Works staff and representatives of Canadian TODS (Tourism –Oriented Directional Signage) to discuss our signage needs in Niagara Region. Our revenue generating areas in Niagara Region that depend on these signs include Ball's Falls, Long Beach and Chippawa Creek. The Region is reviewing all highway signs and will be reporting back to us in the new year with a strategy for new sign installations.

Highway signs for Binbrook CA, are subject to approval by the City of Hamilton. The signs currently installed have been in place for many years and weathering has taken its toll. Staff have attempted to initiate discussion with the City on sign replacements with limited success. Efforts will continue to be made by staff to open this topic for discussion with the City.

## **COMMUNITY RELATIONS**

### **Conservation Achievement Awards**

The 2009 Conservation Achievement Awards reception was held on Wednesday, November 25, 2009 at the Centre for Conservation, Ball's Falls with over 200 people in attendance. Thanks

to members and staff who assisted to make this a great event for our volunteers. Feedback from those in attendance was very positive and.

### **Media Relations**

Staff has worked with the Welland Tribune to produce a 50<sup>th</sup> Anniversary Supplement which was distributed as an insert in all the daily newspapers. A number of businesses supported this by purchasing an advertisement.

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

In honour of the Authority's 50<sup>th</sup> Anniversary Cave Spring Cellars produced 2 special label wines which are available for purchase at the Cave Spring Cellars retail store located on Main St. in Jordan. Proceeds from the sale of this wine will be donated to the Authority for the Jordan Harbour re-development project. Members are encouraged to support this effort by purchasing the products.

### **Source Water Protection**

A number of Public Open Houses are being planned in February/March 2010 to roll out the Assessment Reports.

## **NIAGARA PENINSULA CONSERVATION FOUNDATION**

### **Nevada Ticket Program**

Since the early 1990's, the Niagara Peninsula Conservation Foundation has been involved in the sale of Nevada, or break-open, tickets through area convenience stores. To date, more than \$160,000 has been directed to the Authority's conservation projects as a result of this program. The Foundation has recently acquired a new site at the Always Convenience store in Vineland, bringing the total number of sites throughout our watershed to eight (Vineland, Niagara Falls, Welland, Niagara-on-the-Lake, Pelham, Caledonia, Wainfleet and Port Colborne). Staff continues to look for new opportunities in other areas of our watershed.

### **Recommendation:**

**Report No.84-09 outlining the status of Authority projects be received for information.**

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

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