

### **NIAGARA PENINSULA CONSERVATION AUTHORITY**

### **FULL AUTHORITY**

WELLAND

AGENDA OCTOBER 20, 2010 - 7:00 p.m.

**ROLL CALL** 

**DECLARATION OF CONFLICT OF INTEREST** 

### **BUSINESS:**

# (1) MINUTES FULL AUTHORITY MEETING – September 15, 2010

Attached are the Minutes of the Full Authority Meeting held September 15, 2010.

- (2) BUSINESS ARISING FROM MINUTES
- (3) CHAIRMAN'S REMARKS
- (4) CAO'S REPORT
- (5) <u>DELEGATION</u>

Dr. Robin Davidson-Arnott, Dr. Lynda M. Lukasik and a representative from the Town of Fort Erie has requested the opportunity to appear as delegation at the meeting on a matter related to the Lake Erie Shoreline Management.

# (6) <u>LAKE ERIE SHORELINE MANAGEMENT PLAN UPDATE REPORT – REPORT NO.</u> 62-10

Attached is Report No. 62-10 regarding this matter.

### (7) BUDGET STATUS REPORT AND YEAR END ESTIMATES - REPORT NO. 63-10

Attached is Report No. 63-10 regarding the budget status and year end estimates, together with a summary copy of the operating and capital budgets.

### (8) ROTH DRAIN – DEMONSTRATION PROJECT – REPORT NO. 64-10

Attached is Report No. 64-10 regarding this project.

# (9) PROJECT STATUS REPORT - REPORT NO. 65-10

Attached is Report No. 65-10 regarding the status of Authority projects.

# (10) OTHER BUSINESS

#### (11) **IN-CAMERA**

- Complaint and Violation Status Report: Report No. CR-21-10 Tree By-Law Status Report Report No. CR-22-10 (a) (c)

# **ADJOURNMENT**



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

**DATE:** October 18, 2010

RE: <u>Lake Erie Shoreline Management Plan Update, June 2010 Report No. 62-10</u>

### Background

Since 1985, Conservation Authorities in Ontario have been delegated the Ministry of Natural Resources responsibilities for commenting on land use planning applications with respect to hazardous lands along the Great Lakes Shoreline. This responsibility initially addressed flooding and erosion hazards and later in 1995, included dynamic beaches (as a result of changes to the Provincial Policy Statement issued under the *Planning Act*). In the late 1990's, the provincial government conducted a review of the *Conservation Authorities Act* under its *Red Tape Reduction Act*. The *Conservation Authorities Act* was revised in 1998 to achieve consistency between provincial legislation (e.g. the Planning Act). As a result, the Great Lakes Shoreline was added to the list of things regulated by Conservation Authorities under Section 28 of the *Conservation Authorities Act*.

In 1992, the NPCA adopted the Lake Erie Shoreline Management Plan that was prepared by Philpott Associates in association with Sandwell Inc., Tarandus Associates and Hough Stansbury Woodland Limited. It included shoreline hazard limits for flooding and erosion based on the draft standards and guidelines established by the Ontario Ministry of Natural Resources. This report was prepared following high lake water levels in 1985 and the Provinces desire to develop a long term strategy for shoreline management. The report and mapping has been used by Conservation Authority and staff since that time to implement planning and regulations policies.

### Report

Since the 1992 Lake Erie Shoreline Management Plan was released, a number of changes have taken place in the legislation, policies and guidelines regarding shoreline hazards, including:

Changes to the Conservation Authorities Act in 1998 allows Conservation Authorities to regulate Great Lakes Shoreline Hazards (including erosion, flooding and dynamic beaches) for the first time.

Ontario Regulation 97/04 "Content of Conservation Authorities Regulations...". This regulation established the content requirements to be met in Regulations made by Conservation Authorities.

The Provincial Policy Statement (March 1995) issued under the Planning Act requiring decisions affecting planning matters "be consistent" with policy statements issued under the Planning Act (including Natural Hazards associated with the Great Lakes Shoreline). In 1996, Ministry of Natural Resources released the "Technical Guidelines for the Great Lakes – St. Lawrence System and Large Inland Lakes". These guidelines provide the technical basis and procedures for establish the hazard limits for flooding, erosion and

dynamic beaches as well as acceptable scientific and engineering practices for addressing the hazards.

In 2008, the NPCA completed the Fort Erie Creeks Watershed Plan and as part of that study, the hazard limits for flooding, erosion and dynamic beaches were updated in the watershed Plan area using current mapping, technical standards and approaches. The main purpose of the subject study was to update the hazard limits for flooding, erosion and dynamic beaches in the balance of the Lake Erie Shoreline in our jurisdiction. In 2009, Shoreplan Engineering Limited, the firm which completed the shoreline work components for the Fort Erie Watershed Plan, was retained by the NPCA to complete the update for the balance of the shoreline.

The end product is an updated Lake Erie Shoreline Management Study and digital mapping of the shoreline hazards. This information will be used by planning and regulations staff to implement the responsibilities delegated to us by the Province in the review of Planning Act applications. It will also be used by Regulations staff to implement Ontario Regulation 155/06. Electronic copies of the report and mapping will be provided to the County of Haldimand, Region of Niagara, Township of Wainfleet, City of Port Colborne and Town of Fort Erie. The report will be made available on the NPCA's website. The mapping will be used to update screening maps provided to our municipal partners.

# **RECOMMENDATION:**

Respectfully Submitted by:

That Report No. 62–10 be received for information
That the Lake Erie Shoreline Management Plan Update, prepared by Shoreplan
Engineering Limited, June 2010 be adopted for use in the Planning and Regulations
Programs.

Prepared by: Suzanne McInnes, MCIP, RPP, Watershed Planning Coordinator

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



TO: The Chairman and Members of the Authority

**DATE:** October 13, 2010

SUBJECT: Budget Status Report and Year End Projections - Report No. 63-10

Attached is the monthly budget status report for the period ending September 30, 2010 and a summary of the operating and capital budget year-end projections. The year-end projections include the 2011 preliminary budget as approved by the Board in their meeting of September 15, 2010. The projections do not include actual revenues received from the Thanksgiving Festival or other park revenues received late in September and to date. Anticipated revenues from these activities as well as from Water Management revenues have been conservatively estimated such that the following report represents a worst case scenario for year end.

Below is a description of the major variances from those reported in September.

# **Operating Budget**

Corporate Services – Expenditures generally in line with the approved budget with notable changes including increased costs for audit services (capital asset work) and IT services with corresponding reductions in Human Resource and Communication budgets.

Resource Inventory and Environmental Monitoring - Increases Expenditures in the Water Quality Monitoring Program, Remedial Action Plan and the Children's Water Festival as a result of additional Provincial Grant and other revenues received through the course of 2010. No impact on the municipal levy.

Flood Protection Services – Significant increases in legal fees do to an unanticipated number of Authority Regulation violations that required legal services. The projected shortfall in levy from this is approximately \$22,000 and accordingly, it is envisioned that funds will be required from the Regulations and Planning Services reserve to offset this (current balance in this reserve is \$173,202).

Environmental Advisory Services – Expenses are generally in line with the budget with the exception that anticipated revenues from plan input and review fees are less than budgeted. The net impact may be an approximate shortfall of \$4,000 which if realized will require additional funds from the Regulations and Planning Services reserve.

Conservation Land Programming – As indicated above, actual revenues received from the Thanksgiving Festival or other park revenues received late in September and to date are conservative estimates. Overall, revenues are

down from 2010 budget expectations. User fees look will come close or exceed budget targets. The favourable summer weather resulted in one of our most successful camping seasons in the past ten years. The warm weather also benefitted the day use at Binbrook where budget targets have once more been surpassed. The shortfall is the result of low retail sales combined with higher than expected maintenance costs for the sewer and water systems at the parks. Each of our four major revenue producing properties has a small retail component where items of convenience, equipment rental and souvenirs are available. Three of the four parks will not meet the anticipated revenues. Staff have already implemented cost-cutting measures to compensate for this shortfall.

Efforts will continue over the next three months to further reduce operating costs at Long Beach, Chippawa and Ball's Falls. Binbrook achieved their retail revenue target by the end of September. Although this was the first year of operations for the new park store and revenues were conservative, staff are very pleased at the response to this new visitor service. For Niagara Conservation Areas, there may ultimately be a net operating loss which (estimate \$50,000 - \$70,000) which will require funding from the Conservation area capital reserve – Niagara (current balance \$247,812). For the Binbrook Conservation Area, revenues were higher than anticipated and as such approximately \$43,000 will be added to the Hamilton Conservation Areas operating reserve (2009 year end balance \$155,671).

For all operating budget programs, staff will review all cost saving and increased revenue options the remainder of the year in order to minimize the amount required from the operating reserve. The actual amounts will be subject to other expenses and/or revenues that may be incurred up to December 31<sup>st</sup>.

### **Capital Budget**

The capital budget year end estimates are consistent with that reported at the Board meeting of September 15, 2010. Attached are the summary charts previously presented for the Water and Land Management which illustrate the capital projects and their respective 2010 year end positions. Where projects have not been completed or initiated, funding has been assumed to be carried forward into 2011.

### **RECOMMENDATION:**

That the Budget Status Report for the period ending September 30, 2010 and;

That the year-end projections as outlined in the Operating and Capital Budget Summaries, be received.

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



TO: The Chairman and Members of the Authority

**DATE:** October 13, 2010

SUBJECT: Roth Drain – Demonstration Project, Report No 64-10

The purpose of this report is to request additional funds to construct an Alternative Municipal Drain demonstration project.

The Niagara-on-the-Lake Watershed Plan indentified a need to develop new measures to reduce the cost and frequency of drain maintenance. Conventional maintenance practices (i.e. channel excavation and spreading the spoil adjacent to the channel) generally have a negative impact on watercourse habitats that include natural aquatic species. The NOTL Watershed Plan Implementation Committee has recommended undertaking a Demonstration Natural Channel Design Project in Two Mile Creek, which is also an agricultural drain (i.e. Roth Drain).

The purpose of this demonstration project is to establish a section of ecologically beneficial natural channel that will also address drainage needs of the agricultural community. Although the initial construction costs are higher than that of a simple linear excavation with no vegetation or low flow channel, it is expected that reduced maintenance costs over the longer term will greatly offset this initial capital outlay.

In 2010, the NPCA in partnership with the Town of Niagara-on-the-Lake, Trout Unlimited and the Ministry of Natural Resources worked with the firm Geomorphic Solutions to develop a proposed natural channel design. The proposed section of drain to be reconstructed is approximately 300 metres in length, lies relatively close to the base of the escarpment (see attached map) and has a significant and constant baseflow. Agency approval has been obtained for this design however, a funding shortfall has stalled implementation of the project, most significantly the Ministry of Natural Resources was not able to secure any of the funds for construction that they anticipated.

It is proposed that the Naturalized Drain would be constructed by the contractor that is currently under a three year contract with the Town for drain maintenance activities. In this regard, the estimated cost to complete the works is \$ 40,000. The landowner will pay for a portion of the costs assessed against them under the Drainage Act and is supportive of allowing NPCA onto his property to inspect and monitor the outcome of the project overtime. The Town and NPCA have each committed \$10,000 for the construction. As such, there is a shortfall of approximately \$ 20,000.

With respect to cost, NPCA estimates that the initial construction cost is approximately double that which would be required to establish a conventional drain and while we expect that over a 20 year timeframe, the reduced maintenance needs will compensate for some of this difference, it must be noted that the contractor is only doing a limited section of the drain to a "natural standard" and as such, costs are higher than would be expected if a larger scale contract for similar works were to be tendered.

After initial construction, monitoring of both water quality and ecological conditions will be carried out over the next decade, with the five year benchmark being the pre naturalization need for maintenance. We anticipate that this will project will ultimately help NPCA in advancing uptake for similar projects with other Municipal Drainage Superintendants. These types of designs have found to be cost effective over the longer time frame in other jurisdictions, however none have ever been constructed in a Municipal Drain in Niagara. In this regard NOTL's Drainage Superintendent should be commended for his willingness to work with NPCA to explore an approach to Drain construction that has been very contentious in the local drainage community.

Proposed funding for this project is requested from the Water management capital project reserves (2009 year end reserve amount \$154,523).

### **RECOMMENDATION:**

That the Authority Board authorize that additional funds to a maximum of \$20,000, be transfer from reserves to the Niagara-on-the-Lake Restoration budget to complete the Roth Drain demonstration project.

Prepared by: John Kukalis, Director, Water Management

Respectfully Submitted by:

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



TO: Chairman and Members of the Authority

**DATE:** October 18, 2010

RE: PROJECT STATUS REPORT - REPORT NO. 65-10

### **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 13 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 the NPCA's website.

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

### i) Permits

The NPCA has approved 65 permit applications for the 2010 calendar year pursuant to the NPCA's 'Regulation of Development, Interference with Wetlands, and Alteration to Shorelines and Watercourses' regulation (Ontario Regulation 155/06).

### 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 54 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 19 municipal drain projects during the current calendar year.

# 3) Floodplain Mapping

i) Eagle Marsh Drain – City of Port Colborne

The NPCA has completed the 100 year regulatory floodplain mapping for the Eagle Marsh Drain located in the City of Port Colborne.

### ii) Wignall 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 Wignall Drain located in the City of Port Colborne.

### iii) Beaver Dam 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 Beaver Dam Drain located in the City of Port Colborne.

# **II. Watershed Planning Division**

# 1) Municipal and Development Plan Input and Review

Staff continue to process planning applications. A considerable amount of time is being spent by the biologist and planners on preparations for the Ontario Municipal Board (OMB) hearing that is scheduled for three weeks in November 2010. In accordance with Section 3.5 of the Niagara Planning Memorandum of Understanding (MOU), "the NPCA will make provisions for staff to attend Ontario Municipal Board Hearings or similar type hearings and judicial proceedings, upon the request of the Region or Area Municipality, with respect to plan review and technical clearance services provided pursuant to this Memorandum of Agreement". NPCA staff have been requested to attend as witnesses at this OMB hearing at the request of the Town of Fort Erie.

### 2) Watershed Plan Preparation

### a) Lake Erie North Shore Watershed Plan

The Lake Erie Shoreline study and mapping has been received by NPCA staff, therefore final additions into respective sections of the Lake Erie North Shore Watershed Plan will be completed once the Central Welland River Watershed Plan is in its commenting phase. Once complete, the Watershed Plan will be submitted to the Board of Directors for approval.

### b) Central Welland River Watershed Plan

Research and writing of the Phase Two: Restoration Strategy is almost complete. Once complete, the Watershed Plan will be posted for commenting by staff and the public. In addition, a final Steering Committee meeting will be held to go over any questions, comments or concerns the Steering Committee may have regarding the final document.

The Central Welland River Geomorphic Assessment, Recommended Actions for Public and Private Lands and associated mapping are complete and have been input into the Central Welland River Watershed Plan. The Central Welland River Geomorphic Report is nearly complete.

# c) Beaverdams and Shriners Creek Watershed Plan

The Final Phase One: Watershed Characterization and Issues Identification Report is complete and has been posted on the NPCA website. Research and writing of Phase Two: Restoration Strategy will be initiated early 2011.

Geomorphology field work is complete and data input will be initiated once the Central Welland River Geomorphic Report is complete.

### d) Upper Welland River Watershed Plan

The Final Phase One: Watershed Characterization and Issues Identification Report is complete and has been posted on the NPCA website. Research and writing of Phase Two: Restoration Strategy will be initiated early 2011.

### e) Lower Welland River Watershed Plan

Research and writing of the Lower Welland River Characterization Report has been temporarily suspended to focus on finishing the Central Welland River Watershed Plan. Research and writing will resume early 2011.

### 3) Natural Areas Inventory/Heritage System

The Scenario Development Team held their first meeting on September 9<sup>th</sup>. This group of stakeholders from across the watershed is responsible for identifying constraints to the natural heritage system, and setting targets for what will be included in the system.

The first full day session of the Scenario Development Team was held on October 7<sup>th</sup>. The group spent the morning establishing the rules of engagement for this unique consensus-based approach.

The afternoon saw the first of many discussions to decide on a list of constraints and how they will be dealt with in the modeling exercise. These sessions will be held monthly until March or April of 2011.

A project Backgrounder, Terms of Reference, Detailed Workplan, and Planning Manual are available from the Project Coordinator.

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

## 1)Source Water Protection Plan

Source protection staff recently submitted a workplan to the MOE to complete an Updated Assessment Report (UAR). The UAR would be completed and submitted to MOE by May 2011. The workplan includes tasks such as event-based contaminant modelling to delineate an IPZ-3 along the Welland Canal, and the addition of 'local threat activities' to cover the transportation of hazardous materials in the Intake Protection Zones (IPZ-1 and IPZ-2).

Source protection staff have started developing policies for the Source Protection Plan, with assistance from Niagara Region and key SPC members. Source Protection Plan (SPP) policies must be developed for approximately 240 different threat circumstances. A working group has been formed to lead the development of the source protection plan.

MOE has scheduled a Source Protection Planning workshop for SPC members to attend in November 2010.

# 2) Water Quality Monitoring Program:

### a) Routine Water Quality Work

Routine surface water quality monitoring continues at all NPCA stations until November 2010. Spot-flow monitoring, to compliment water quality sampling, is completed monthly at thirty—one (31) stations in the Welland River, Forty, Twenty, Eighteen, Sixteen and Twelve Mile Creeks until November 2010. The NPCA continues to collect groundwater level data at 15 monitoring wells as part of the Provincial Groundwater Monitoring Network (PGMN). Water quality sampling at 13 PGMN wells was postponed from September but is now scheduled for October.

Biological monitoring studies using benthic macroinvertebrate are scheduled for the Hamilton Airport, the Glanbrook Landfill, Frenchman's Creek, and Thompson Creek for October and November.

### 3) Special Projects

The Welland River Eutrophication Study: Weekly sampling and flow monitoring continues at Beaver, Big Forks and Oswego tributaries. Dissolved oxygen (DO) sensors have been collecting data at 6 locations in the summer of 2010, including the three above-noted tributaries and portions of the Welland River. These DO sensors are scheduled to be removed in October. A dedicated auto-sampler continues to capture wet weather events in Beaver Creek and is also scheduled to be removed in October.

Beaches Water Quality Study: Environment Canada staff presented the preliminary results of Phase 1 of the Niagara Beaches Water Quality Study. The NPCA Water Quality staff contributed to this project by sampling the drains and streams that are connected to the public beaches. The data from NPCA sampling is being used to determine whether the source of *E.coli* found in the beach water samples is human or animal waste. Queens Royal (NOTL), Garden City (St.Catharines) and Long Beach East (Wainfleet) had the highest concentrations of *E.coli*. and they had the highest percentage of DNA marker for human waste in this study, suggesting sewage contamination. However, when compared to the other beaches from the Greater Toronto Area these *E.coli*. levels were relatively low. Other beaches were moderately and minimally impacted with *E.coli*. Several NPCA sampling stations tested positive for human *E.coli*. but there is currently insufficient data to determine their overall impact on the beaches. Planning for Phase 2 of this project involving further investigations is scheduled to take place in January 2011.

NPCA Water Well Decommissioning Grant Program: Requests for application continue to be received for this program.

St. David's Well Decommissioning: NPCA staff continue to provide technical expertise and assistance to Niagara Region Public Works for abandoning the former St. David's municipal well field and reservoirs. The project is expected to continue into 2011.

Hydrogeology reviews completed in the last month include:

- 1 official plan review and 1 secondary plan review for Watershed Planning; and
- 1 private servicing study review for Watershed Planning.

# IV. Geographic Information Systems (GIS) Division

### 1) Source Water Protection Support Activities

Incorporation of the threats inventory into the prescribed Assessment Report Database is complete, save some last minute retrofitting to accommodate recent schema changes dictated by the province.

### 2) Watershed Planning Support Activities

MNR will be delivering the latest and greatest version of the Haldimand evaluated wetlands which will be incorporated back into the NAI ELC Community Series fabric through another the QA/QC pass of the municipality.

A professional GIS services firm has been secured to perform the NAI ELC Community fabric interpretation for the Authority's watershed within the City of Hamilton. Delivery should occur towards the end of November.

Site specific NAI ELC Vegetation Type level mapping has suspended indefinitely. Haldimand is the only municipality that was visited through the NAI that didn't get mapped to this level; however the field observation data is in the database.

The Lake Erie Great Lakes Flood and Erosion Mapping specifically and several other hazard inventory updates are being updated into the Authority's plan review and regulations screening mapping

A detailed inventory of potential social political constraints that would inform the NHS site selection process has been assembled and stakeholders have started assigning conserved, preferred and excluded statuses.

Derivatives from the base ELC Community Series fabric mapping are being developed for the NHS ecological objective/value target setting process.

# 3) Corporate GIS and Information Management Support Activities

Region of Niagara GIS Services staff have a BETA version the NPCA Niagara Atlas internal web mapping site after migrating it to the new GIS engine using an improved template designed by staff with the Authority operational spatial data.

The external web mapping site with select Authority business mapping content appropriate for the public has been developed into a BETA stage.

These include water data services, web mapping services, a near realtime radar/precipitation polling and reporting system, and webpages with content detailing how to access these new services.

The series of maps distinguishing between public vs. private land ownership along the Great Lakes Shoreline that were generated for the Niagara Water Strategy were supplemented with additional content that identifies US ownership.

The Large Scale Hydrology Data Maintenance pilot project that NPCA is being funded by the MNR Water Resources Information Program (WRIP) has officially commenced and GRCA are running automated pixel correlated Digital Surface Models from the 2006 and 2010 stereo models.

The SWOOP 2010 Partnership agreement has arrived for review and once signed and returned will trigger the delivery of new aerial imagery for the watershed.

### V. Watershed Restoration Division

# 1) Project Implementation

Staff have completed the woodland reforestation and riparian planting projects. In total 32 woodland restoration / riparian projects were implemented across the watershed

through partnerships with private landowners, Land Care Niagara (funding provided through Trees Ontario Foundation and 50 Million Tree Program), Ontario Power Generation (bio-diversity and carbon sequestering funding) and the Niagara Restoration Council. Well over 100,000 trees and shrubs were planted. Over 10,000 wildflowers and grass plugs were planted and over 10 kilograms of native seed was seeded into restoration sites.

Construction projects such as wetland restoration, aquatic in-stream works, erosion and bank stabilization projects are currently in implementation. Over 15 wetland projects across the watershed are scheduled for completion this season.

BMP projects such as nutrient management projects, livestock fencing, cover crops and erosion control projects such as rock chutes and check point dams are currently being implemented. In total over 40 BMP projects are being implemented across the watershed.

In total across all watershed plan areas, over 120 restoration projects will be completed this year.

Staff are researching opportunities to work with landowners who live adjacent to the Welland River between the Old Welland Canal Siphon and HWY 24. The goal is to locate riparian wetland restoration opportunities in this location as it is the most affected by water level and flow reversal issues. These projects will advance our commitments under our OPG agreement.

# 2) Special Projects

The NPCA in partnership with the Nature Conservancy of Canada has been working to restore interior forest at the Lathrop Nature Reserve in Fonthill. Two old agricultural fields have been put back into forest habitat.

The NPCA in partnership with Ontario Power Generation and the Niagara Region has been working to restore escarpment edge forest habitat on a 14 acre old agricultural field adjacent to the Decew water treatment plant and the Bruce Trail. This year concludes the third year of the aggressive restoration plan timeframe. Two interpretative signs explaining the efforts will be installed this fall at two locations adjacent to the project on the Bruce Trail for hikers to enjoy.

The NPCA in partnership with Ontario Power Generation, the City of St. Catharines and Niagara College have been working to establish snapping turtle nesting sites in the Twelve Mile Creek valley. Lafarge Inc. donated the staff time and the material and supplies for the project. NPCA staff supplied the invasive species removal and the native plant installation. The Snapping Turtle is a <u>special concern species</u> under Ontario's Endangered Species Act, 2007. It has also been assessed nationally as a special concern species by the federal Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Funding for this project was secured from the St. Catharine's Green Committee.

The NPCA in partnership with the Department of Fisheries and Oceans and Smart Centre is undertaking a wetland restoration / compensation project on Chanlter Rd in the Coyle Creek watershed. The purpose of this wetland is to provide fisheries compensation as part of the mitigation for the Smart Centre development. This wetland project is a significant undertaking and will provide up to 8 acres of additional wetland habitat in the Welland River and the Niagara River Area of Concern (AOC).

The NPCA in partnership with Kala Hardware in St. Catharine's have been working to restore 200 metres of riparian stream buffer along a tributary of Richardson's Creek. Funding for this project was secured from the St. Catharine's Green Committee.

The NPCA in partnership with Big Valley Campground in Lincoln have been working to restore 300 metres of riparian stream buffer along Fifteen Mile Creek.

The NPCA in partnership with the City of Welland have been continuing restoration efforts along Drapers Creek within Maple Park and at Colbeck Dr. Interpretive Signage was installed at both locations in order to explain the importance of protecting and restoring water quality and biodiversity.

The NPCA in partnership with the Niagara Restoration Council have been working on a restoration plan for Landsdowne Pond in One Mile Creek in NOTL. Funding has been secured from Eco Action (\$63,000) for the implementation of various biodiversity and water quality improvements such as invasive species removal and sediment catch basins.

The NPCA in partnership with the Niagara Restoration Council and the Friends of Short Hills Park have bee working on a restoration plan for the agricultural land adjacent to Short Hills Park. The 100 year leases around the park are expiring and will be put back to natural areas. Both Eco Action and Trillium will be funding this two year restoration initiative.

# 3) ECO School Program

Naturalization plots were planted at 23 schools across the watershed in June. Watering and weeding by participants continued through summer. Site visits werre conducted at each school at the end of July/beginning of August to monitor plots. Most of the plots were doing well. Watering tends to always be an issue in the summer. A final program report will be available in November.

Program evolution – as the last year in the original five year program, staff are working with the Niagara Water Smart Program to evolve this program into a school yard tree planting initiative.

### 4) Yellow Fish Road

A grant application to Trout Unlimited Canada / Shell Canada was successful in securing \$2700.00 to further promote and enhance the delivery of the Yellow Fish Road program. This year over 170 drains have been painted thanks to the dedication of over 150 volunteers with participation from 4 different municipalities.

### 5) Community Fisheries Involvement Programs

The Angler Diary Program continues to collect data from anglers in the Welland River and Twelve Mile Creek watersheds. 2010 Angler Diaries for both watersheds have been sent out to anglers that have returned their 2009 diaries. Additional Angler Diaries are in the process of being printed.

Our 9<sup>th</sup> annual Angler Derby was held on Saturday July 10<sup>th</sup> as part of Family Fishing Weekend. This year we hosted it with the City of Niagara Falls, the Welland River Keepers and Land Care Niagara at George Bukator Park located on the Welland River near Chippawa. Our intent was to encourage new participation and obtain fisheries information from a different part of the Welland River.

### 6) Landowner Stewardship Guide

Building on the success of the One Mile Creek Landowner Stewardship Guide, staff are working to modify this guide to a watershed wide "How to" guide for landowners. Main topics sections will focus on improving water quality and biodiversity. It is anticipated to be completed in December

### 7) Source Water Protection Stewardship

Staff are working with several producers in the Decew Source Water Protection Area on early Action projects such as farm runoff and buffer projects.

# VI. Remedial Action Plan (RAP)

### 1) Lyons Creek East

The next Contaminated Sediments Technical Advisory Group (TAG) meeting is scheduled for mid-October and it will be the final meeting of the committee. The dissolution of TAG will be discussed as well as the roles of the new committee for the sediment management strategy for Lyons Creek East. The agenda includes an update on the Sediment Transport Study and the Lyons Creek East Contaminated Sediment Long-Term Monitoring Plan.

The Administrative Controls Protocol and Guidance Documents are complete. Next steps for Lyons Creek East involve establishing a Management Framework Agreement between the stakeholders and the NPCA and a public communication strategy.

# 2) Stage 2 RAP Update

The Niagara River (Ontario) RAP Stage 2 Update report & Update 2010 fact sheets are posted on the NPCA web site.

The RAP Coordinating Committee met in mid-September and discussed plans for the next Implementation Committee workshop (November) and the timeframe and requirements for a workshop to address the BUI: Loss of Fish & Wildlife Habitat. The RAP Assessment & Monitoring Plan and composition of the RAP Science Committee is under review. The next meeting is scheduled for mid-October.

### 3) 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 (COA) Respecting the Great Lakes Ecosystem 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). The current COA is in effect until March 2011.

#### 4) International Liaison

The RAP Coordinator attended the Healing Our Waters Great Lakes Restoration Conference in Buffalo, NY, September 22-24, 2010.

The next meeting of the U.S. Niagara River RAC is scheduled for October 28 in Buffalo.

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

The current GLWQA is the revised Agreement of 1978 as amended by Protocol in 1987. A review of the Agreement and its Annexes has been underway since 2006. 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.

During the Healing Our Water conference in September, Great Lakes United reported that the federal government approval process in Canada for the new GLWQA could be delayed by elections next year. It's anticipated that 2 public meetings will be held, one on each side of the border, when the respective federal governments have reached agreement on the new GLWQA.

# **LAND MANAGEMENT**

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

The sound system has been installed in the multipurpose room at the Centre for Conservation and will be a positive addition to the amenities available for rentals.

Warner Bros. Canada has generously partnered with the Centre to promote the release of their film in 3D, "Legend of the Guardians, The Owls of Ga'Hoole", in conjunction with "Northern Owls", the travelling exhibit from the ROM. The Exhibit is at the Centre from September 18 – November 14. Andrea Wilson worked tirelessly to successfully confirm Warner Bros. participation. The collaboration has resulted in a wealth of educational materials for our school programs, give-aways for visitors on opening day of the exhibit and an invitation to promote our exhibit at the September 24 media event of the screening at the Pen Centre. Warner Bros. chose the Pen Centre location because of their partnership with our exhibit. More than 1000 visitors have been to the Centre since the exhibit opened.

In September, Ball's Falls partnered with the Jordan Museum and the TVTA to produce a series of banners that will promote key elements of the site to visitors in Jordan Village. Under the common banner heading of Ball's Falls, a combination of archival and current images, featuring the themes Natural Heritage, Cultural Heritage, Historic Grist Mill, Early Settlement and Thanksgiving Festival will be featured on colourful banners along Main Street in Jordan.

Application has been made to the Department of Canadian Heritage for funding under the Museums Assistance Program; MAP- Exhibit Circulation Fund for a traveling exhibit from the Canadian Museum of Nature entitled "Our Feathered Friends". This exhibit is scheduled for the spring of 2011.

Linda Vickers, our intern from Mount St. Vincent University, continues to monitor the Ball's Falls Blog. This project, which has been up and running for almost 2 months, has introduced Ball's Falls to interactive social media marketing.

Referral Sites include Facebook.com; Google.ca; npca.ca; Twitter.com and Blogger.com Page views are records used to track readers and their location. Numbers have increased from 153 in July to 308 by the end of August. Our audience is distributed as follows:

- 1. Canada- 329
- 2. United States- 185
- 3. Germany, Indonesia, Philippines, Russia- all 3 each

# Top blog postings included:

- 1. Centre for Conservation is a LEED building
- 2. Time Travelers Day Camp
- 3. Water Festival
- 4. Count Your Pennies
- 5. About me & Bluebirds (1st post)
- 6. CFC
- 7. Daredevil Ducks
- 8. You Wanted to know (Facts)
- 9. Nesting box Draw
- 10. How the settlers lived (historical buildings)

Some of the comments in the Visitor Book this month: Come Back frequently, Loved the rock & falls, We'll be back to spend some time – lots to see- interesting, beautiful day & place, Beautiful setting, beautiful, wonderful!, Great Place For Kids to Learn about New things, beautiful, What a beautiful spot! We will return, Learned a lot about our local area!, Amazing scenery!, Beautiful walking trails, so perfect a pleasant change, will come again,

Visitors heard about us through: family, Atherton House, Online, friends, paper, local's, stumbled upon while biking, sign on QEW, road sign, nature told us, childhood, return visit, our B+B, friends, or co-worker.

Visitors were from: Guelph, Cold Lake, Ab., Germany, Winnipeg, Winsdor, Norfolk (UK), Hampton (NB), Andrews (TX), London (ON), Netherlands, Derby (UK), Peterborough, Hamilton, St. Jacobs, Fontaizo, (Brazil), Walkerton, Durham, Sudbury, Victoria (BC), Bastrop (TX), Orillia, Calgary (AB),

Two more blacksmithing Workshops were held in September. These continue to be popular programs, selling out in advance.

Approximately 350-400 people visited the mill during the free admission Water Festival Open House day.

The Christmas program is in need of more volunteers. Many of them come for  $\frac{1}{2}$  days, once a week. The result is a need for approximately 30 volunteers a week to implement the program. Staff have been out in the community and networking with other groups and organizations. At this time there could possibly be 1-2 new volunteers.

### Ball's Falls Thanksgiving Festival

Attendance was good and the weather cooperated for most of the Thanksgiving Festival, with more than 19,000 paid adults recorded and close to 25,000 on site over the four day event. Parking ran smoothly with the additional lands available and the much improved access and exit points. Visitors were enjoying the many exhibits, demonstrations and entertainment and most artisans seemed pleased with their sales. The Centre did see more visitors this year with more than 3000 visitors recorded which is up significantly from last year. Chris Hayward, Festival Convenor, did several pre-event interviews with local media. CHCH TV visited on Friday and Sunday to film.

Ball's Falls will be participating in "Doors Open Niagara" on October 16 & 17 from 10 am – 4pm with free admission. Greg Redden (MZE Architects) will be presenting talks on the LEED facility throughout the day in the Multi Purpose Room.

### Long Beach and Chippawa Creek

2010 was one of the best camping seasons on record for the NPCA. The good weather resulted in lots of visitors to both sites. This year our camping season was extended to Thanksgiving Weekend. Visitation at Chippawa exceeded our expectations, while Long Beach did not see much use over the long weekend.

The shoulder season has been busy with a number of special events at Chippawa Creek. Several Cross-Country meets and cadet exercises have taken place. This market seems to be growing each year, especially now that we are operating our washrooms later in the season to accommodate the campers.

Staff are in the process of winterizing parks and shutting down for the season. Capital works are being wrapped up and should be completed by mid-November.

### **Binbrook**

Cooler than normal temperatures have had a definite impact on business. Membership sales have noticeably slowed as we approach the winter. Staff are now preparing the park for winter by stacking tables and storing other items. The number of membership sales at Binbrook now stands at 511 for year. Fall remains a very popular season and visitors are rewarded with unique viewing opportunities. A Bald eagle spotted on the lake Monday September 27<sup>th</sup> during the hunt.

The waterfowl hunting program started September 25<sup>th</sup>. Although participants in this program have continued to decline we have noticed the return of hunters who previously used the site 20 years ago. Many suspect that an increase in the field hunting on private lands around the park may be contributing to the decline. Staff are speaking with the hunting community to determine if there are any improvements that would make the program more successful.

With the assistance of the Glanbrook Conservation Committee, the Hyslop Bay Pike Spawning Bed was planted with additional native, aquatic plant species. All plants were suitable for the site conditions and shown through other studies to be preferred pike spawning. Funding for the planting material was generously provided by the OMNR through the Community Fisheries and Wildlife Involvement Program.

### **Twenty Valley Trail**

Trail improvements to the twenty valley trail south of the Butterball's restaurant in Jordan are now complete. Two sets of wooden stairs in hazardous condition were removed from the escarpment and the area restored to a natural condition. Replacing the stairs is a new reinforced packed trail descending gently across the slope face. The trail condition will be reviewed in the spring to determine if further trail works in this area are required.

# **Rockway Conservation Area**

The trail conditions at the south portion of our property near the Rockway Community Centre were reviewed by staff, upon receiving concerns from the public on hazardous conditions at the gorge. Staff mapped the hazardous footpaths and lookout areas that have been created by the public walking behind the fencing at the Community Centre. It was discovered, however, that most of the area of concern is not on conservation authority property. Discussions with the Region and the Rockway Community Centre members have been initiated by staff to present our findings and to offer our assistance with site design solutions.

#### **Mud Lake Conservation Area**

Staff have been working on the development of a new information sign for Mud Lake Conservation Area. The new sign will replace an existing sign, which has become weathered and fallen into disrepair. The project is a joint partnership with Ducks Unlimited, who have been working with the NPCA to improve waterfowl habitat through active management of water levels at Mud Lake.

#### Two Mile Creek Conservation Area

The asphalt trail at Two Mile Creek is receiving more use and starting to show wear and breakdown. Staff have been patching the asphalt for the past few years, but recently called for quotes from paving contractors to replace the entire asphalt surface this fall. This trail is almost one thousand feet long so is a significant paving project. The heavy workload of all paving contractors this fall resulted in poor response submitting quotations. Staff are recommending this project be deferred to next season when more competitive bids can be obtained.

### **Beamer Conservation Area**

Trail improvements have been completed at Beamer to provide a new granular walking loop at the lookout tower, and surface improvements to the main walking trail from the lookout tower to the escarpment lookout platforms.

### St John's Conservation Area

The benches and tables at the pond area are well used by the public and will eventually need to be replaced due to wear. Staff and our Foundation saw an opportunity here to create a new memorial bench programme for the pond area at St John's Conservation Area. A site inventory and map were prepared by staff showing that fourteen benches and two wheelchair tables could be installed around the pond as memorial items. The existing benches and tables would be replaced as donors come forward. Overwhelming response to this idea has already poured in to the Foundation, with commitments from four donors in place for new benches to be installed. The four new memorial benches are anticipated to be in place before the opening of the 2011 trout season.

# **Regional Facilities Management**

In Mid-September, the NPCA began managing Regional Facilities at the former Elm Street and Station Road Landfill Sites. The agreement for these facilities is modeled after the Glenridge Naturalization Site, which our staff have been maintaining for the past four years.

The Elm Street site incorporates a public "leash-free dog park", which is a new challenge for Authority Staff. This facility is very popular with the local residents and requires more frequent maintenance than other Regional sites.

This maintenance program is funded entirely by the Region of Niagara.

# **Conservation Land Tax Incentive Program (CLTIP)**

Seven properties had their CLTIP eligible acreage amended due to recent MNR district mapping updates, these include Wainfleet Bog, Two Mile Creek, Shriners Creek (2 parcels), Willoughby Marsh, Smith-Ness Forest, and the EC Brown Wetland.

We received our 2010 Minutes of Settlement for these sites and have signed them back to MNR. MNR will issue the information to MPAC for the municipalities to make adjustments to our tax status.

# **Gypsy Moth Program**

Staff have been working on the annual assessment of gypsy moth in permanent plots located throughout our NPCA properties. Data is being assessed and a summary will be provided on the 2010 findings. This annual monitoring assists in tracking the level of infestation and potential threat to forest health on NPCA properties.

### **NPCA Hunting Program**

Staff have issued an additional 48 hunting permits for the NPCA Conservation Area. To date 258 hunting permits have been issued for 2010. Of these, 40 permits are issued to individuals residing outside of our administrative area.

### **Town of Lincoln Communities in Bloom**

As a contributing member of this program for the past three years, we pleasantly received a successful report from the Town of Lincoln on the judging results. Final results of the judging were presented to the Town of Lincoln at the Communities in Bloom fall conference in Sarnia. Courtesy of all of the work that the Communities in Bloom committee did this summer, the Town of Lincoln is now a 5 Bloom Community. This is the highest rating in the program, representing a score of 82% or more of the judging criteria. The Town also received a special mention for Charles Daley Park and won the Special Award for Community Involvement.

### **COMMUNITY RELATIONS**

### **Ball's Falls Thanksgiving Festival**

The 36th Annual Festival took place October 9 -12, 2009. Staff was on hand to provide general information and promote the Authority's various programs and membership opportunities. This year we found that many visitors both locally and from outside the watershed were first time attendees. The TVTA had a licensed area with the NPCA 50<sup>th</sup> Anniversary wine for sale by the glass.

#### **Conservation Achievement Awards**

The Awards reception will be held at the Centre for Conservation on Wednesday, November 24<sup>th</sup>. The format will be similar to last year as this appeared to work well and allowed more time for recipients to have some social time together.

### **Annual Report**

The Annual Report highlighting the Authority's 50<sup>th</sup> Anniversary along with the NPCF Newsletter has been distributed.

### **Source Water Protection**

A working group has been established to deal with particular subject matters and topics. The composition of the working group includes NPCA and Niagara Region staff, as well as, the Chair and a member of the Source Protection Committee.

### **GLSLCI** Conference

The 2011 Conference will be hosted through Niagara Region, and is scheduled for June 15 – 17, 2011. The Steering Committee has been very active in program planning and is excited about the number of keynote topics that will form part of the program. NPCA staff is assisting as part of the steering committee. The conference will bring together municipalities, NGO's, practitioners and academia, as well as, private sector partners to address issues surrounding the following themes: Beaches and Shorelines; Governance; Invasive/Rare species; Economy and Tourism; Shipping and Navigation.

### Niagara Children's Water Festival

The Steering Committee met to discuss this year's event. A number of high school student volunteers commented how pleased they were to be able to participate in their capacity, many of whom were actual attendees at the first water festival in 2003. Teachers, parents, partner agencies and lead presenters are very pleased with the program. Several new initiatives are being explored for the 2011program.

### **NIAGARA PENINSULA CONSERVATION FOUNDATION**

### Thanksgiving Festival

The Niagara Peninsula Conservation Foundation hosted its annual raffle at this year's Thanksgiving Festival from October 8<sup>th</sup> through 11<sup>th</sup>. Prizes included a handmade quilted wall hanging donated by Marion Holman, as well as numerous items from Thanksgiving Festival artisans that were incorporated into gift baskets as in previous years. As a result \$2,600 was raised to be directed to the Jordan Harbour redevelopment project. Many thanks to Board members who helped staff the area and encouraged ticket sales as well as to those who attended the event.

#### **Reflections Newsletter**

The latest edition of the Foundation's newsletter has been distributed along with the annual report of the NPCA.

### War on the Lakes Raffle

As part of the *War on the Lakes, the War of 1812*, exhibit at the Centre for Conservation, a framed print by renowned artist Peter Rindlisbacher, known for his Great Lakes and War of 1812 subjects, will be raffled off at an event in conjunction with this exhibit at the Centre on November 27<sup>th</sup>.

# **Recommendation:**

Report No. 65-10 outlining the status of Authority projects be received for information			
Respectfully Submitted by:_	Tony DiAmorio D Fra		
	Tony D'Amario, P.Eng. Chief Administrative Officer/Secretary-Treasurer		