

NIAGARA PENINSULA CONSERVATION AUTHORITY FULL AUTHORITY

WELLAND AGENDA NOVEMBER 21, 2012 – 7:00 P.M.

ROLL CALL

DECLARATION OF CONFLICT OF INTEREST

BUSINESS:

(1) MINUTES FULL AUTHORITY MEETING – October 17, 2012

Attached are the Minutes of the Full Authority Meeting held October 17, 2012.

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

A delegation from Sullivan Mahoney LLP wishes to address the Board requesting a reconsideration of a previous denied permit application.

(6) JORDAN VILLAGE STAIRCASE - TWENTY VALLEY – REPORT NO. 56-12

Attached is Report No. 56-12 regarding the funding potential for the above project.

(7) <u>CABLE WAKEBOARD PROPOSAL – BINBROOK CONSERVATION AREA – REPORT NO. 57-12</u>

Attached is Report No. 57-12 regarding this proposal.

(8) BALL'S FALLS THANKSGIVING FESTIVAL – REPORT NO. 58-12

Attached is Report No. 58-12 regarding the Thanksgiving Festival.

(9) PFOS COMPOUNDS AT THE BINBROOK RESERVOIR (update) – REPORT NO. 59-12

Attached is an update report on this matter.

(10) SUPERSTORM SANDY REPORT – REPORT NO. 60-12

Attached is a report outlining the precipitation from Superstorm Sandy.

(11) 2012 BUDGET YEAR END ESTIMATES – REPORT NO. 61-12

Attached is Report No. 61-12 regarding the year end budget estimates.

(12) PROJECT STATUS REPORT

Attached is Report No. 62-12 regarding the Project Status Report.

(13) OTHER BUSINESS

(14) <u>IN-CAMERA</u>

- (a) Correspondence Wakulich Reconsideration Delegation Report No. 16-12
- (b) Tree By-law Report No. CR-17-12

ADJOURNMENT



DATE: November 13, 2012

SUBJECT: <u>Jordan Village Staircase – Twenty Valley Trail Report No. 56-12</u>

At the September Board Meeting Conservation Authority staff were asked to contact potential funders for the reconstruction of the Jordan Village Staircase on the Twenty Valley Trail. Since that time a number of organizations were consulted to determine if funding might be available to assist with the project.

The Ontario Heritage Trust, does not have any funding to contribute towards the project, however they indicated that they would assist with writing grant proposals and soliciting funds. As the landowner, it would be a requirement to obtain their approval before making requests for funding.

NPCA staff found a number of grant programs that will be receiving applications in early 2013. The Great Lakes Guardian Community fund through the Province of Ontario, shows particular promise. In addition, the Twenty Valley Tourism Association and some of the merchants in Jordan have indicated a willingness to help with fundraising for this project.

In the period of time since the staircase was removed, many local residents have begun using the slope, in spite of signs and barricades warning of unsafe conditions. Although fencing and barriers are being maintained, staff feel that the project needs to advance in order to control this unauthorized activity.

There are funds identified for the project remaining in the 2012 capital budget. Staff recommend that these resources be used to begin preparing the site and marking out the route, as weather permits. This will show the community that the Conservation Authority is committed to restoring the link. In the meantime, staff will continue searching for funding to offset the cost of construction.

RECOMMENDATION:

That Report No. 56-12 regarding Jordan Village Staircase be received and that staff be authorized to begin work preparing the corridor for the trail project.

Prepared by: Darcy B. Baker, Director-Land Management
Respectfully Submitted by:
Tony D'Amario, CAO/Secretary-Treasurer



DATE: November 13, 2012

SUBJECT: Cable Wakeboard Proposal – Binbrook Conservation Area No.-57-12

Cable wakeboarding is a relatively new sport to Ontario. Cable tow systems have been in use around the world since the early 1960s, primarily in Europe and the Southern United States. The recent popularity of wake boarding has renewed interest in cable tow parks. The system operates using a tow rope attached to an overhead cable, supported by towers. An operator controls the speed and direction of the cable, based on a rider's level of experience and activity.

In the spring of 2012, Boarder Pass Niagara opened a cable wakeboard system at Gravelly Bay Marina in Port Colborne. This was the second such installation in Ontario for Boarder Pass. Their first system, located at the Sarnia Bay Marina, was opened in 2011. It was an instant success, bringing new business to the Sarnia Waterfront. Over the past year, Boarder Pass Niagara has had the same positive effect on the Port Colborne Waterfront.

Conservation Authority staff saw great potential for a system like this in the sheltered waters at Binbrook Conservation Area. Over the summer, staff observed the set-up and operations in Port Colborne. They also contacted representatives from Sarnia, to get feedback on the activity and its impact on marina operations. Both locations are very pleased with the Boarder Pass operators and the response from local communities. This sport is ideally suited for beginners. There are also a great number of families who do not have access to a boat and would otherwise not be able to experience wakeboarding.

NPCA staff invited representatives from Boarder Pass to Binbrook for a tour of our facilities. The group was very excited about the area and the potential for a new operation so close to Hamilton and the Greater Toronto Area. Both parties agree that this new activity can be introduced to the Conservation Area without adversely impacting the existing patrons who enjoy fishing, picnicking and swimming.

Under the proposed scenario, the NPCA would work with Boarder Pass to bring electric power to the shoreline and determine the best orientation for the cable system, based on reservoir operations and existing recreational uses. Boarder Pass would install the cable tow equipment and be responsible for operating the system throughout the summer. The NPCA would receive admission fees from everyone entering the park. In addition, Boarder Pass would pay a monthly rental fee for use of the site and hydro.

The area currently under consideration has been outlined on the attached map. The location is between the swimming beach and the children's fishing platform, close to the park store. It has good visibility from many sections of the park, yet it is separated from the splashpad and children's play area.

There are other benefits to a partnership with Boarder Pass. Each January, the Toronto

Boat Show has an indoor wake park set-up in the Ricoh Coliseum building on the Exhibition Grounds. Thousands of visitors are exposed to the sport, and are provided with promotional material from Boarder Pass. Since Binbrook would be the closest location to Toronto, there is a good chance that our site will stand to gain the most from exposure at the Boat Show. It will also provide information about the Conservation Area to one of our target user groups.

Staff are proposing a one-year trial, where Boarder Pass will be allowed to install and operate their cable wake boarding system at Lake Niapenco. This is the same arrangement used at Sarnia and Port Colborne. It allows the landowner a low-risk opportunity to see the system in operation without committing to a long term agreement. Port Colborne representatives are in negotiations for a multi-year agreement with Boarder Pass. NPCA Staff note that Sarnia Bay Marina has signed a 5-year agreement for the wakeboard operation with an option to renew for an additional 5-years. They were also kind enough to provide the attached letter of reference.

If the NPCA Board supports the concept, staff will work with Boarder Pass to refine a oneyear agreement for consideration at the December meeting. This will ensure that we can get maximum benefit of exposure at the 2013 Toronto Boat Show.

RECOMMENDATION:

That Report No.-57-12 regarding the Proposed Cable Wakeboard System at Binbrook Conservation Area be received;

That the proposal be approved, in principle; and,

That staff be directed to work with Boarder Pass to draft a one-year agreement for consideration at the December Board Meeting.

Prepared by: Darcy B. Baker, Director-Land Management
Respectfully Submitted by: Tony D'Amario, CAO/Secretary-Treasurer
Additional website references related to this report:
www.sarniaboarderpass.com/
www.cablewakeboard.com/pages/what-is/

www.youtube.com/watch?v=jCCYID0WOwM

www.niagarathisweek.com/sports/article/1387370--all-aboard-at-port-marina

www.youtube.com/watch?NR=1&v=BFYdtkV3vxY&feature=endscreen

www.theobserver.ca/2012/08/30/wakeboarding-on-the-rise



DATE: November 13, 2012

SUBJECT: Ball's Falls Thanksgiving Festival Report No. 58-12

The Ball's Falls Thanksgiving Festival is a four-day event, held at the Ball's Falls Conservation Area. 2012 marked the 38th year for this annual tradition that attracts visitors from across Southern Ontario and New York State.

The Ball's Falls Festival has focused on providing top-notch vendors and artisans, selected through a juried process to ensure high quality products. It is also more than a craft show. This is an opportunity for the Conservation Area to shine. The festival atmosphere is created through the use of entertainment, heritage displays, exhibits and programs geared towards children. The success of our festival has resulted in the creation of two craft shows in Vineland, one show in Campden and countless street-side vendors along Victoria Avenue.

Although the event is successful, staff are always keeping an eye out for opportunities to enhance the festival. In 2008, many visitors complained about waiting in long lines of traffic to enter the park. A new entrance configuration, implemented in 2009, eliminated line-ups and improved accessibility to throughout the site.

In 2012 some restructuring occurred in an effort to cut costs and address feedback received from vendors. The traditional layout was changed to provide space for additional exhibitors and food vendors. Further refinements in 2013 should provide the opportunity to expand numbers and reduce the set costs for the event. This year the St. Catharines Showmobile travelling stage was replaced by a tented performance area. The new facility was preferred by performers and resulted in a savings of approximately \$3,000.

The Centre for Conservation traditionally featured costly exhibits, requiring staff time for installation and supervision. This year the space was branded as the "Centre for Celebration", giving local vendors an opportunity to promote their services and provide free gourmet food samples. The space generated close to \$1,000.

All vendors participating in the event receive a questionnaire requesting feedback. Although there is no formal mechanism to get comments from visitors, staff rely on personal interactions and feedback from volunteers. Based on input from all sources, it appears that response to the change of entertainment venue was mixed. While vendors around the large tents appreciated being able to hear the music, many visitors were hesitant to cross the bridge, feeling that they were somehow "leaving the show". Staff are considering a mix of music venues for next year that provide musical atmosphere throughout the site.

Additional seating areas and resting spots were suggested to be placed around the show grounds, particularly near the heritage exhibits and along the roadway leading uphill to the parking lots.

Although the selection of food vendors for this year was more diverse and greater in number, staff have been encouraged to push for a wider range, with a focus on local foods and wine.

Overall the 2012 attendance figures were not as high as 2011. A chart showing paid attendance over the past 19 years is attached to this report for information. Many reasons have been suggested for the low numbers, including the dramatic change from the summer like conditions of the previous year. Organizers at the Vineland Craft Show and the Marshville Heritage Festival said that their numbers were also down. Staff noticed that historic attendance tends to be cyclical, and impacted by things like weather and the emergence of the Vineland festival.

The Festival budget is based on a paid attendance of 20,000, with an overall net of \$52,800. Weather plays a big factor in the attendance figures, however the set costs to operate the show (tent rentals, supplies, staffing, washroom facilities, etc.) cannot respond when poor weather is forecast for the weekend. Based on an attendance of 16,816, this year's event is expected to earn \$29,300.

Recognizing that un-predictable factors like weather and competing events come into play, staff are looking for opportunities to reduce the set-cost of operating the event. These include such measures as reducing the number of rental tents and introducing entertainment alternatives. Additional revenue sources will continue to be investigated, along with expansion of the event to the west side of the creek, up towards the Centre for Conservation.

Staff are open to any suggestions to improve operations and help keep the Ball's Falls Thanksgiving Festival one of Ontario Travel's "Top 50 Festivals & Events". Comments should be forwarded to Rob Winninger, Site Administrator at Ball's Falls.

RECOMMENDATION:

That Report No. 58-12 regarding The Ball's Falls Thanksgiving Festival be received for information purposes.

Prepared by: Darcy B. Baker,	Director-Land Management	
Despectfully Submitted by		
Respectfully Submitted by: _	Tony D'Amario, CAO/Secretary-Treasurer	_

Description Description District Level Management



DATE: November 09, 2012

SUBJECT: PFOS Compounds at the Binbrook Reservoir (update) – Report No. 59-12

In October there were a number of emails and media stories surrounding the whereabouts of a soybean crop, harvested from lands along a watercourse, known to have positive sediment samples for PFOS. The watercourse in question is located on Hamilton Airport Property, and drains lands around the former firefighting practice pad. The airport manager leased the lands to a local farmer, who planted soybeans in the field. Rather than maintaining a buffer, the crop was planted through the watercourse.

After the crop was harvested Dr. Joe Minor, who has been working with Environment Hamilton to raise awareness of the PFOS contamination, began making enquires about the final destination of the soybean crop. He was concerned that the beans may have accumulated the pollutant and make their way into food products.

At Dr. Minor's request, Ministry of the Environment staff looked into the matter and recently sent correspondence recommending a buffer along the watercourse for future agricultural operations. The Ministry suggested that this would help to protect the watercourse while the site remediation plan is being reviewed.

RECOMMENDATION:

That Report No. 59-12 regarding PFOS Compounds at the Binbrook Reservoir be received.

Prepared by: Darcy B. Baker, Director-Land Management
Respectfully Submitted by:
Tony D'Amario, CAO/Secretary-Treasurer



DATE: November 14, 2012

SUBJECT: Superstorm Sandy Report - Report No. 60-12

A summary of the Hurricane Sandy precipitation totals (registered at our rain gauges) are listed below.

A storm of this duration (approx. 120 hours) with the rainfall depths noted below equate to approximately a 10 year return period event. Our stream gauge readings and visual observation by NPCA staff (on Tuesday, October 30) confirm that the water levels in our major watercourses remained well below critical levels and generally correspond to calculated return period.

It may help to keep in mind that even though the precipitation totals were high at some gauges, the storm event was over a long duration. In Welland, for example, the 100 year storm will drop 99mm of rain, but the duration of the storm is 12 hours. A 24 hour duration, 100 year storm event in Welland is calculated to drop 120mm of rain, and so on... (ref. City of Welland Municipal Design Standards).

	Precipitation Total (mm) Oct 27 12am -
Station	Oct 31 11:59 pm (5 days - 120 hours)
BIG FORKS (Wainfleet)	73.4
BINBROOK (Hamilton)	73
BLACK CREEK (Stevensville, FE)	52.8
CAISTORS (West Lincoln)	55.4
CRYSTAL BEACH (Fort Erie)	47.75
DECEW (South St. Catharines)	77.4
E.C. BROWN CA (Pelham)	54
KALAR (West Niagara Falls)	99.25
LINCOLN TOWN HALL	61
NIAGARA FALLS WATER PLANT (Chippawa)	87.25
OSWEGO (Canboro, Haldimand)	30.6
PORT DALHOUSIE (St. Catharines)	64
SEAWAY (Port Colborne Waste Water Plant)	79.75
SMITHVILLE (West Lincoln)	78
VIRGIL (NOTL)	50.4
WELLANDPORT (West Lincoln)	79.6
WELLAND (Waste Water Plant)	96

RECOMMENDATION:

That Report 60-12 be received.		
Respectfully Submitted By:		
. ,	Tony D'Amario, P. Eng. CAO/ Secretary-Treasurer	



DATE: November 14, 2012

SUBJECT: <u>2012 Budget Year End Estimates - Report No. 61-12</u>

Attached are the Operating and Project/Capital Budget summary reports that outline the anticipated year end position of the NPCA. Also attached is an estimation of the reserve position of the NPCA for the year ending in 2012. Reserve allocations for the 2013 budget will be confirmed and submitted for NPCA Board Approval in 3013 once all carry forward projects are identified.

Below is a list of the variances that are projected.

Operating Budget

Corporate Services

- General Levy requirements less than anticipated due to increase in interest received on reserve funds.
- Additional expenditures as a result of continuation of the Strategic Plan and Working Groups.
- Human Resources cost increases due to dealing with human resource issues recently brought forth.
- Corporate Communication expenditures less than expected due to delays in producing exhibits and displays for the Water Smart Program (funded separately).

Resource Inventory and Environmental Monitoring

• Miscellaneous revenues and expenses in the Children's Water Festival variance is due to reduced level of support beyond the Niagara Region contribution. The additional anticipated revenue was requested through Water Smart over a 2 year period intended to enhance the Children Activities. Unfortunately the funding in this regard was not supported for 2012. The program expenditures were therefore adjusted to compensate for the reduced support.

Flood Protection Services

- Additional costs beyond the budget were experienced for the flood forecasting and warning program due primarily to unanticipated costs for gauge station maintenance in 2012.
- Legal fees for NPCA Regulations are anticipated to be \$16,000 above budget. These
 costs were compensated as anticipated revenues from permit and development review

fees significantly exceeding the budget. Overall it is anticipated that the total fees will be \$297,000 or \$97,000 more than budgeted. The above additional expenditure will result in an increase need of \$40,000 with the net result that approximately \$57,000 of permit/review fees would be available towards the permit fee reserves for future years.

Environmental Advisory Services

 Environmental Advisory Services costs and revenues are expected to fall within budget with excess review fees available for the appropriate reserve (detailed above).

Conservation Land Management

 Total costs for the tree by-law implementation are less than anticipated due primarily through a maternity leave. Staff in the regulations program undertook to fill in the resource needs of the position temporarily without the need to rehire the position for the term of the leave.

Conservation Land Programming

- Overall the operating season started very well as our online reservations were much higher than 2011. By mid to late July, the extended heat and dry spell started to impact attendance at the campgrounds in particular. By early August all municipalities had a fire ban passed which prevented campers from enjoying camp fires. In addition, we experienced extended beach closures over a number of weekends which created a significant impact to our day use revenues at Long Beach. In addition, the bog fire resulted in a significant increase in unanticipated costs (\$28,000)
- A separate report on the Thanksgiving Festival is included in the agenda for this meeting.
- Overall, expenditures were reduced through in year savings recognizing the above issues. The budget will require an additional approximately \$48,000 of general levy and \$63,000 of Special Niagara Levy which is available from saving in other program areas. An additional approximately \$19,000 will be required from the Niagara Conservation Areas Operating Reserve.

Capital/Project Budget

Water Management

- Watershed Studies Source Water Plan expenditures and revenues significantly below budget and anticipated additional studies and revenues not realized. This program is 100% paid for by the Province and accordingly, any surpluses are carried forward into the following year.
- The expenditures and revenues in the Resource Inventory and Monitoring Program (Watershed Restoration) are generally in line with the approved budget with the exception of the OPG Project. Due to various reasons, the anticipated projects to be undertaken using the OPG funds were not completed.

Land Management

Land Acquisition – Approx. \$220,000 for Niagara land acquisitions (St. John's Centre)

- for 2012 which will result in a \$280,000 amount to be placed in the Niagara land acquisition reserve account.
- Land Acquisition No land acquisitions for 2012 in Hamilton which will result in a \$100,000 amount to be placed in the Hamilton land acquisition reserve account.
- Remaining capital/project year end expenditures are listed in for each of the Conservation Areas. The capital/project budget for 2013 will be adjusted to carry forward projects not completed in 2013, for approval of the NPCA Board early in 2013 once final costs are confirmed.

The Capital/Project budget year end expenditures will result in less usage of reserves, from a budget amount of approximately \$752,000 to an anticipated amount of approximately \$373,000.

The corresponding 2013 budget will be adjusted to carry forward projects that were not completed by year end 2012. These adjustments will be incorporated into the final budget to be approved by the NPCA Board early in 2013.

RECOMMENDATION:

That the 2012 Year End Estimates Report -Report No. 61-12 be received.		
Respectfully Submitted By:	Tony D'Amario, P. Eng. CAO/ Secretary-Treasurer	



DATE: November 20, 2012

RE: PROJECT/PROGRAM STATUS REPORT - REPORT NO. 62-12

WATER MANAGEMENT

Watershed Technical Services Division

1) Source Water Protection Plan

Source protection work included archiving reports etc. as required, and preparing for the implementation phase. Other source protection tasks included completing the Conservation Ontario Numerical Model Survey and an analysis of proposed Ministry of Transportation Signage locations.

2) Water Quality Monitoring Program

- Surface water quality monitoring continues at 72 stations in the NPCA watershed.
 Water samples are collected monthly from April to November. These samples are analysed for bacteria, metals, nutrients and general chemistry.
- Staff is continuing to monitor water levels at all Provincial Groundwater Monitoring Network (PGMN) wells. The NPCA has completed the water level correction review as part of the regular maintenance of this data. Staff has begun collecting water quality samples from PGMN wells and will complete sampling in November.
- Staff will be collecting benthic samples in the fall for the Hamilton Airport and Glanbrook Landfills biomonitoring projects.
- Two water well decommissioning projects were approved in October and will be completed in the near future. To-date 12 water well decommissioning projects have been approved or completed for 2012.
- Staff continues to assist the MOE with two projects: 1) the nutrient track down in Beaver Creek and Big Forks Creek watersheds; 2) and the Balls Falls Climate Change station.

3) Geographic Information Systems

a) Source Water Protection Support Activities

- More ARDB updates were performed due to MOE changes to the Threats/Issues data model.
- Archiving of project workspaces and organization of valuable data elements not captured in the MOE prescribed information deliverables continues when time permits.
- GIS staff has assisted with spatial calculations for a Niagara Water Smart proposal.

b) Watershed Development Services Support Activities

- Staff has been focusing more on the Property Info Summary application; technical tasks and associated programming are in full swing.
- The new toe of slope information and the resulting updated riverine erosion and valley land features have been loaded into the Niagara Atlas for Development Services staff to QA/QC
- Three watershed planning areas have been completed in a pilot project to migrate available fisheries habitat type information, drainage area, and stream ordering classifications onto our large scale 1:2000 surface water mapping base as an operational decision support framework and to help the biologist further refine where fisheries issues may apply to watercourses.
- Floodplain mapping/generic regulation updates to integrate latest CWR lines. All linework, polygon feature classes, reports and maps have been prepped for potential approval and release. Updates were also completed of the area, parcel and building footprint statistics for the new floodplain extents.

c) Corporate GIS and Information Management Support Activities

- Processing of the NOTL delivery for the Niagara Watershed's 1 meter contour supporting Digital Terrain Model Update has been conducted for further internal QA/QC purposes at both the NPCA and the Region. Niagara Falls and Fort Erie have also been delivered.
- Information on surface water feature types and the existing available assessment type of data has been compiled by staff in support and review by the technical committee for the Niagara Water Strategy 'Contemporary Mapping of Watercourses from an Environmental Risk and Management Perspective' priority project.
- The new Niagara Navigator (public web mapping tool) application that was rebranded and launched as the 'NPCA Watershed Explorer' earlier in July has been receiving several compliments.
- Processing of several graphic requests (water management and communications) – flow charting of development services workflow processes, banners, letterhead for Thanksgiving festival promotional material etc.
- Staff have been providing training, technical support/troubleshooting for water monitoring/flood control position turnover.
- Land Management tasks includes bathymetric interpolations for Binbrook based on point data provided by Lands staff, as well trail data improvements and Conservation Areas MFTIP/CLTIP mapping.
- Communications tech support for new corporate mailing lists were also provided.

4) Flood Control

a) Monitoring & Major Maintenance

- i) Staff continues to monitor the water levels at the Binbrook reservoir on a daily basis. With the 5 days of precipitation experienced at the end of October, the reservoir's water level has risen and is currently sitting at the normal holding level.
- ii) Staff continues to routinely monitor the water levels at our 14 stream gauge stations, climatic data at our 15 climate stations, and undertake routine maintenance, calibration, and inspections at all 25 installations, as part of the NPCA's routine flood forecasting and warning duties. The public may access this real-time water level and rainfall information through the NPCA's website.
- iii) During the Hurricane Sandy storm event, NPCA Flood Forecasting and Warning (FF&W) staff remained in close contact with Provincial, Regional, Municipal, fire, and police emergency coordinators. Utilizing our gauge station network, NPCA staff provided up-to-date forecasts of watershed flooding probabilities to these partners as well as posting the forecasts to our website. Throughout the event, FF&W staff provided technical briefs to the NPCA Communications Coordinator in order to prepare her for her 2 radio interviews during this time. After the event, NPCA staff received notes of appreciation from the Provincial and Regional emergency coordinators for our role in providing accurate and timely information.
- iv) Staff attended the quarterly Regional Flood Forecasting and Warning meeting in order to ensure that the NPCA flood forecasting and warning efforts remain consistent and integrated with our local Conservation Authorities (Hamilton, Grand River, and Long Point CAs).

5) Other

- a) Technical Services staff continues to provide on-going technical engineering support to the Development Services, Restoration, and Lands Divisions as requested.
- b) Presented at the ESRI ArcGIS Conference on "Source Water Sewage System Analysis", Toronto, Ontario
- c) Prepared and submitted a proposal to the Ontario Geological Survey to complete a study of Lake Erie's role in Groundwater Recharge

Municipal and Development Plan Input and Review

- 1) To the end of October, staff have reviewed and processed 276 planning applications (of various types/complexity) and 288 building permits.
- 2) NPCA 'Regulation of Development, Interference with Wetlands, and Alteration to Shorelines and Watercourses'
- i) Permits

The NPCA has reviewed submissions for and issued 149 work permits to date in 2012.

ii) Violations

A separate Confidential Violation Status Report has been prepared for October.

iii) NPCA-DFO Partnership Agreement

As part of the NPCA-DFO Partnership Agreement, NPCA staff work as a liaison between DFO Assessors and proponents to recommend appropriate fish habitat compensation projects. To date, NPCA's Biologist has been consulted on approximately 63 matters.

Watershed Stewardship Division

The Niagara Peninsula Conservation Authority is committed to providing exceptional stewardship to achieve and maintain a healthy and sustainable environment. The need for clean, reliable, and uncontaminated water within the NPCA Watershed cannot be overstated.

The Watershed Stewardship Program is responsible for improving water quality, water quantity and biodiversity within the NPCA Watershed. The Stewardship Program advances these areas through the implementation of a comprehensive cost-sharing program that offers local landowners financial incentives to implement water quality and habitat improvement projects on their properties. In addition to providing financial assistance to landowners, NPCA staff will conduct one-on-one site visits providing technical advice about environmental concerns and assisting landowners with hands-on water quality and habitat improvement projects. The goal of the program is to reward the private landowner who protects the public's interest, i.e., clean water. For every NPCA stewardship dollar spent, an additional 9 dollars (approximately) of matching contribution is provided through partnerships, including costs incurred by private landowners, for the implementation of water quality and habitat biodiversity projects.

Typical projects include habitat naturalization, stream-bank stabilization/bioengineering, habitat diversification and rehabilitation such as wetland and riparian buffer restoration, Best Management Practices (BMP's) for agriculture including nutrient management and various other improvement projects. To date, the stewardship division has implemented over fifteen hundred water quality, water quantity, and biodiversity improvement projects within the NPCA watershed.

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

In total, over 50 stewardship projects are approaching completion across all watershed planning areas.

1) Project Implementation – Watershed Plans

- In total 20 woodland restoration / riparian projects were implemented across the watershed this year.
- Over 20 construction projects such as wetland restoration, aquatic in-stream works, erosion and bank stabilization projects will be implemented across the watershed.
- Over 10 Best Management Practice (BMP) projects such as nutrient management projects, livestock fencing, cover crops and erosion control projects (rock chutes and check point dams) are nearing completion.

2) Project Implementation - Ontario Power Generation Welland River Partnership

• A floodplain wetland restoration project was completed with landowners living adjacent to the Welland River in the zone of flow reversal and fluctuation, east of HWY #24 in Wainfleet. The wetland will provide open water marsh habitat that is lacking in the Welland River, and provide a stable water level to facilitate successful breeding of aquatic wildlife including birds, fish and amphibians such as frogs. In addition to the wetland, staff assisted with the design and implementation of a stream crossing in order to facilitate the movement of farm equipment across a small tributary of the Welland River. The crossing will provide access to farm fields while preventing farm equipment from driving through the creek, causing erosion and sedimentation.

3) Project Implementation - Haldimand County Water Quality Program

- The overall purpose of the Rural Water Quality Program is to improve the surface water and groundwater quality in Haldimand County. This voluntary program provides financial incentives to farmers who take action to improve and protect surface water and groundwater on land that is used in agricultural production. The benefits of improved water quality include a safe secure water supply, a healthy aquatic ecosystem, increased recreational opportunities, sustainable agricultural operations and a vibrant economy. Everyone benefits when water quality is improved and protected.
- NPCA staff will be taking two water quality improvement projects to the project review committee on November 21st. Both projects are under the innovation category for nutrient recycling. Both project proponents are local greenhouse growers in Haldimand.

4) Outreach & Education

Canopies for Kids

2012 Schools

Municipality	School	Board
Niagara Falls	Cardinal Newman	Catholic
Fort Erie	St. Joseph	Catholic
	Crystal Beach	Public
St. Catharines	Applewood Public	
	Burleigh Hill	Public
	St. Anthony	Catholic
Port Colborne	St. John Bosco	Catholic
Welland	St. Mary	Catholic
Wainfleet	St. Elizabeth	Catholic
Grimsby	Lakeview	Public

 The application period for 2013 has begun. Program applications will be emailed directly to <u>All Elementary Schools</u> in our area of jurisdiction. Unsuccessful past applicants have been contacted in order to verify on-going program interest. Reapplication for those schools will not be necessary; we will simply update information changes.

Landowner Stewardship Guide

• Staff met with the Walkers Creek Association to finalize content to be incorporated into the guide. The guide will be finalized by the end of December, with printing to occur in January. A public launch will be planned for Earth Day.

Yellow Fish Road Program

 This year is the 12th year that the NPCA has been coordinating the Yellow Fish Road (YFR) program locally on behalf of Trout Unlimited. Program information has been sent out to schools and clubs within our area of jurisdiction. Requests to participate from teachers and parents have already started coming in for the fall season.

Community Fisheries Involvement Programs

• The Niagara Peninsula Conservation Authority (NPCA) has been collecting fisheries data in the Welland River Watershed for almost a decade. There are two active programs that allow the NPCA to collect this information, the Angler Catch & Release Program, and the Angler Diary Program. Both programs rely on local anglers to support the data collection. Staff worked with MNR to identify common areas of interest for fall fisheries assessments. In August and September, staff assisted with fish seining in the Welland River. In October, staff will installed two large trap nets called Fyke nets in the Welland River near Merrit Island. Additional fish species such as rock bass and yellow perch were caught and tagged. The 2012 annual report for this program will be available in January.

5) Partnerships

Niagara Parks Commission

In late September, staff assisted MNR, NPC and the US Fish and Wildlife Service with a cross border effort to identify possible colonization of a highly invasive aquatic plant – Hydrilla. Hydrilla is considered to be among the most invasive aquatic plants in North America, and has resulted in significant ecological, recreational and economic impacts. Its biological traits enable it to out-compete native species and dominate aquatic ecosystems due to its ability to grow in a variety of environmental settings and to propagate and spread from fragments, overwintering buds and tubers. The Niagara Parks Commission provided an appropriate boat and operators to safely navigate the Niagara River waters below the falls. The NPCA and Niagara Restoration Council supplied ecologists to handle the identification and field collection if required. MNR and US Fish and Wildlife Service assessed the upper Niagara River. No evidence of colonization was found. The partners will continue to work collaboratively to keep a watch for possible colonization into Canada. This species could seriously hinder OPG operations, and other industries along the river, including water and sewage works. Dufferin Islands would be highly susceptible to infestation, negatively affecting tourism.

Niagara River Remedial Action Plan (RAP)

- a) Lyons Creek East Contaminated Sediment
 - The NPCA is the lead coordinating agency for the Lyons Creek East Administrative Controls Protocol for Monitored Natural Recovery of contaminated sediment in. Details and reports are available at: <u>www.npca.ca/planning-permits/lyons-creek-east/</u>
- b) Lyons Creek West Update
 - Transport Canada reported that there are no plans in the near future for remediation of its property at Lyons Creek West.
- b) Monitoring & Assessment
 - Assessment reports are under development for the Beneficial Use Impairments (BUIs) regarding Degradation of Fish Populations, Eutrophication & Undesirable Algae and Degradation of Benthos
 - A project funded by Environment Canada's Great Lakes Sustainability Fund is underway at Niagara Region to collect new scientific data at Queen's Royal Beach that will contribute to the *Beach Closings* BUI assessment.
 - Monitoring plans for 2013 to address the BUI Degradation of Phytoplankton and Zooplankton in the Niagara River are under development.
 - An investigation is underway through Environment Canada's Upstream / Downstream monitoring on phosphorus data for the Niagara River.

- c) Great Lakes Water Quality Agreement.
 - The Governments of Canada and the United States (the Parties) signed the Great Lakes Water Quality Protocol 2012 on September 8, 2012.
- d) Canada-Ontario Agreement (COA) Update.
 - The new COA agreement is expected to be signed next summer (2013). The Niagara River Area of Concern is highly anticipated to be considered a priority under the new agreement.

LAND MANAGEMENT

Ball's Falls Conservation Area

The 38th annual Thanksgiving Festival is now in the history books. Staff are very grateful to all who participated in making the event a success. Although we did not enjoy perfect weather like last year the results were respectable. The event maintained its devotion to quality crafters and wholesome family entertainment and education. Costs were reduced in several areas and revenues were increased by adding to the number of vendors and food services. The event enjoyed several newspaper articles and reasonable video coverage. Some structural changes were well received such as the Centre for "Celebration", reduced overlap in musical entertainment and the increased number of buses. A debriefing was held in early Nov. and thoughts are already leading to activities for next year. The temporary gallery exhibition will feature juried works organized by the Sewing and Needlework Guild. These items will go on sale during the event.

The Community Museums Operating Grant reviewers provided feedback on our application. All is well but there are areas to improve upon. Site Administrator is moving forward on how to achieve these desired results.

Staff continue to update the home page, Facebook account and Twitter feed on regular basis. Website content is modified as required with additional pictures for weddings, change in flow window, and new 2013 Thanksgiving Festival Vendor Application. Sept. and Oct. Video Newsletters will be combined this time around and will be issued in early November.

Iroquois Beadwork, a travelling exhibit from the ROM finished November 5 and was replaced by Canada at Play. This exhibit will run through the holiday season to March 25th, 2013.

Sewage bed upgrades were completed at October's end. Staff will replace barriers and seed the area shortly when weather improves. The new bed is expected to correct problems with the Biofilter treatment process and significantly reduce the cost of operating the system.

The mill stabilization project was also completed in October. With the impending threat of serious erosion said to hit Jordan the worst as a result of Hurricane Sandy, the Site Administrator had a breath of relief that this work was done a week ahead of schedule.

Historical buildings were cleaned and closed for the season. Some of the structures will be used during the Christmas school and public programming. This year Ball's Falls will once

more host the "Visit with Santa" program. This two-day event allows families to spend some private time visiting with Santa in the Ball Home. A well-rounded program of games, food and crafts will complete the event.

Representatives from the United Nations Education, Scientific and Culture Organization (UNESCO) World Biosphere Reserve Program visited Ball's Falls to tour the facility and speak with Conservation Authority Staff. They were working their way along the Escarpment on an assessment for the Man and Biosphere Program. During the visit, a plan was suggested to develop a joint travelling exhibit featuring UNESCO sites around the world. NPCA staff will continue to follow-up with the NEC on this project.

Long Beach and Chippawa Creek

Both campgrounds are fully winterized and facilities shut-down. Contract and seasonal summer staff are now gone for the season. The remaining full time staff have been shifted to monitor the hunting program on NPCA properties, ramp up capital work, conduct off-season maintenance and repair tasks, and assist with other programs.

Gas Well Investigation – Chippawa Creek

High water resulting from the recent hurricane rains covered some of the campsites at Chippawa Creek. Staff observed that on one campsite, a large amount of bubbles in a 4-foot diameter area, was rising in one place giving the water a "boiling" appearance. This lasted for days until the water receded. This curious event was recorded with both still imagery and video; and was shown to others at the office. A review of the video led to speculation that the bubbles could be a result of natural gas.

Based on this, a local expert, Manfred Resources, was called to inspect the site. During the inspection, a Lower Explosion Limit (LEL) alarm went off within seconds, warning of the presence of gas at the site. The consultant speculated that there could be an un-sealed natural gas well. This is cause for concern, both from a Source Protection standpoint and, more importantly, because of the use of land for public camping. Natural gas seeping into tent and around campfires would be hazardous. For these reasons Authority Staff felt it was absolutely necessary to investigate this matter further.

As a matter of due diligence, the resources expert was retained for one day to dig a test pit. This is a standard procedure for this kind of thing; where a buried gas well casing is suspected. It allows the site to be properly sealed and decommissioned. NPCA conducted just such a task at the Wainfleet Bog a few years ago.

A 12'x12'x6' test pit was excavated. The ground appeared previously undisturbed and no well casing was found. A layer of water was added to the pit to check for bubbles and left for a weekend. None were found. A ground-penetrating metal detector was also used to check for casing ten feet further down with no results.

Based on this investigation, it was felt that the NPCA did their due diligence in ensuring public and environmental safety. The test pit was refilled on Nov 12 and the matter is considered closed.

Staff are still curious about the cause of the bubbling and the gas alarm. The river regularly rises in this area; and staff will continue to monitor for similar occurrences with the thought that this phenomenon might be hydraulic-related.

Comfort Station Project

A draft floor plan for the new Chippawa Creek comfort station has been received and is being reviewed. Although a few minor changes are anticipated, the overall layout of the facility will meet the needs of park visitors. Once the layout is approved, the engineer will be given the green light to continue design and specifications.

Campground staff have fenced off the workspace on the site and are beginning preliminary work including relocation of propane tank / service, installation of a driveway for site access, relocation of some service lines to facilitate construction, and establishing specifications for fixtures to be used in the facility. It is intended that building construction is to proceed as soon as permits are in place in the New Year, with the building completed during the 2013 camping season.

<u>Binbrook</u>

The beach expansion project is nearing completion, with the final spreading of sand to be completed when the ground firms up for equipment access.

Staff have been in discussions with the business partners of Niagara Boarder Pass to see if a cable wakeboard facility on the Binbrook reservoir is possible for the 2013 season. Given the success of Boarder Pass' Sarnia location and the Port Colborne facility launched this summer, this idea shows promise as a good fit for the water and recreational activities in the park. Further information on this proposal is provided in a separate report.

The waterfowl hunting program will be drawing to a close at the end of November. In December the park will be relatively quiet until January. Staff are hoping that this year will be cold enough to develop ice on the reservoir, allowing the ice fishing program to take place. Fishing World (an outdoor store in Hamilton) has generously agreed to sponsor the ice fishing derby this year. More details will follow as they develop.

EC Brown

Staff met with management of the Welland /Niagara Central Airport to discuss trail access across their property on the Welland River between our EC Brown Conservation Area and EC Brown Wetland site. These initial discussions are positive, and staff are following-up with further discussions to move towards a formal trail access agreement with the intent the trail construction would begin spring of 2013. One other option being tentatively considered at this time is whether the airport would be interested in selling their property to the NPCA. As staff gather further information an information report will be brought forward to the board for review.

20 Valley - Jordan Stairs

Staff have discussed the proposed new stair project with the property owner, Ontario Heritage Trust to explore funding options for the stair and trail construction. OHT is not able

to commit funds to the project; however they did offer assistance to NPCA in writing grant proposals for potential funding. The current stewardship agreement we have with OHT will expire in 2014, with the right to renew to 2039. OHT is willing to initiate these discussions next year to establish a new agreement before the expiration date. In the meantime, staff will continue pursuing other discussions with the business community for funding opportunities and partnerships. Another option that staff are also interested in exploring is the future plans for road infrastructure improvements in Jordan that could include sidewalks and bike lanes to link to the trails in the 20 valley.

Binbrook Conservation Area

In mid-October, willow vegetation from the beach expansion area was utilized for site restoration. A pedestrian impacted area was restored with the use of willow fascines at the slope top near the crib wall. Volunteer efforts assisted staff with cutting the willow material, making the fascines and installing them along the shoreline. The end result should be more willows growing in this area with dense rooting network to stabilize the soil and redirect pedestrians to more appropriate areas of less impact. The project will also provide wildlife habitat and shade.

St. Johns Conservation Area

Valley erosion protection measures were implemented on site to prevent further degradation of the trail. Simple, inexpensive straw check dams were installed in cooperation with an adjacent landowner's effort. Stream velocities will be reduced, groundwater infiltration increased and sediment trapped. This will help to change the gradient and reduce further erosion. Effectiveness is being monitored to ensure continued success

Wainfleet Bog Conservation Area

Restoration of the historically significant 'peat cars' is underway with a funding proposal submitted to assist in project materials and labour. Funding will enable the restoration/rebuilding of three peat cars, to exhibit an industrial narrow gauge system of transportation (possibly the last remaining intact one in the Niagara Peninsula).

The bog contains the largest white-tailed deer population in Niagara so it is a popular destination for deer hunters. This site has high usage during the 'shotgun season' for deer. In order to reduce conflicts and address safety concerns, the site is posted for hunting use only during this time. All other uses will recommence at the end of the 7 day hunt.

Gypsy Moth Monitoring

Staff completed the annual gypsy moth surveys for 2012 at Chippawa Creek, Ruigrok Tract, St. Johns, Smith-Ness, Hedley Forest and Willoughby Marsh Conservation Areas. These surveys are completed annually to: forecast and assess gypsy moth populations; determine effects on forest health, and determine measures of control, if necessary. They represent the larger forest tracts, high influence areas and control sites, within reasonable efficient data needs and resources.

Summer surveys revealed minimal defoliation and little to no impacts of gypsy moth, consistent with the low forecast from the spring/winter egg mass surveys. Overall the forest

plots show general decline in gypsy moth populations since 2009. The Comfort Maple differs as a single system within a horticultural setting and can expect fluctuating moth populations with limited diversity for checks of pest increases.

Drier weather conditions experienced during 2012 are expected to result in decreased levels of the natural fungus which kills the moths. Surveys by staff continue in the winter/spring 2013, to assess egg masses and forecast forest health and needs in 2013.

NPCA Hunting Program

The 'NPCA Hunting Request Forms' are now on our website. This replaces the hard-copy form, and increases efficiency for the creation and mail out of the permits. Staff anticipate a significant reduction in the turn-around time for this service. Payments can also be made on line via credit card. Options of cheque/debit/cash and over the counter forms will continue to be provided for the non-computer clients.

Staff have issued an additional 43 hunting permits for a total of 329 hunting permits for NPCA Conservation Areas in 2012 and 3 hunting permits for the 2013 hunting season. Of this total, hunting permits are issued to 60 individuals residing outside of our administrative area.

One of the largest hunting seasons (for number of hunters) is during the deer shotgun season, occurring this month. The season runs from November 5 through 11. The second largest deer hunting season will take place December 3 through 9.

Waterfowl Hunting Program

The Waterfowl Hunting at Mud Lake Conservation Area will close November 29th. Binbrook's Waterfowl Hunting Program will be finished December 8.

Updated Conservation Area Set Fines

Much like the fines in place for speeding on public roadways, there are fines in place for rule infractions at our Conservation Areas. In both cases, it is important that fine amounts are suitable. For example, a \$20 ticket would not be a deterrent to those who might choose to exceed speed limits. The same applies for Conservation Area fines that were last updated in 1990 (generally, they are updated every ten years). In some cases, people in our Conservation Areas have asked staff if they could take the ticket and keep breaking the rules. Obviously, the fine amounts were not a deterrent to breaking our rules any longer.

A Provincial Compliance Committee made up of staff from many Authorities, have been working with Conservation Ontario to update the set fine amounts for all Conservation Areas in Ontario, including the NPCA. The key business rationale for the update was to ensure that the fine amounts, if they are needed, are a reasonable deterrent to breaking rules or damaging our parks; and that the amounts are in-line with other legislation in Ontario including the Provincial Parks and Conservation Reserves Act and the Forest Fire Prevention Act.

In general, fine amounts were increased. This covers infractions such as disturbing others, cutting growth, and setting uncontrolled fires in our Conservation Areas. In the past, we

have had prom parties show up at our campgrounds, commercial floral cutters harvesting decorative dogwood limbs, and fire bans that have needed to be addressed.

The proposal for new set fine amounts was first approved at the Conservation Ontario level, and then was vetted through MNR Enforcement Branch and MNR Legal before it was submitted to the Attorney General's office. The changes were approved by the Chief Justice and came into effect on October 22, 2012.

COMMUNITY RELATIONS

Conservation Achievement Awards

The 2012 Awards Presentation and Reception will be held on Wednesday, November 28th, at the Centre for Conservation, Ball's Falls commencing at 7:00 p.m. Invitations have been sent to all nominees. Board members are encouraged to advise staff as soon as possible if they are planning to attend and willing to assist in handing out awards.

Schools in Bloom Program

The Conservation Authority made a commitment to support this program since its inception in 2003. The program is coordinated through the City of Niagara Falls. Last year the program was able to incorporate a number of elementary schools which allowed students to learn about the environment through hands on participation in this valuable program. This year there will be 4 high schools and 5 elementary schools participating in the projects.

Strategic Plan Sub-Committees

The various sub committees formed as a result of the Strategic Planning process have been meeting on a regular basis over the last several months. These groups are comprised of a broad range of community residents who bring expertise to the process from a stakeholder perspective. The goal of the working sub-committees is provide advice to the Strategic Planning Committee which will help guide the NPCA in its various lines of business.

Delegation from China

Staff will be hosting a delegation of officials from the Henan Association for Science and Technology. The delegates are working on their visas and we expect that they will visit sometime within the next month. The group is particularly interested in learning about the structure of the NPCA, funding, and our role in natural resource management.

A.D. Latornell Symposium

The 19th Annual A.D. Latornell Conservation Symposium will be held from November 13th to 16th. The Symposium is an increasingly popular environmental conference attracting delegates from Conservation Authorities, municipalities, environmental non-governmental organizations (ENGO), federal and provincial governments, as well as businesses, consultants, teachers and students of all levels.

Recommendation:		

Report No. 62-12 outlining information.	ng the status of Authority projects/programs be received for
Respectfully Submitted by:	
, , , , , , , , , , , ,	Tony D'Amario, P.Eng. Chief Administrative Officer/Secretary-Treasurer