



Leveraging The Strengths of Conservation Authorities

2011
Annual Report



www.conservationontario.ca

The Network of Ontario's 36 Conservation Authorities

Conservation Authorities are Key to Creating Efficiencies in the Management of Ontario's Natural Resources

Ontario's first source protection plans launch in watersheds across the province in 2012. This is a significant achievement accomplished by the determined efforts of Source Protection Committees, Conservation Authorities and the Ontario government (Ministry of Environment and Ministry of Natural Resources). In addition to providing specific local roadmaps on how Ontario's communities can protect their drinking water sources, these plans have a number of important additional benefits. Information gathered and tools developed through this program have improved local planning; enabled better decision-making and resource targeting; created new technologies allowing the collection of critical data; encouraged new partnerships at all levels; and created new consistencies in program development and implementation.

As Justice Dennis O'Connor pointed out during the 2002 Walkerton Inquiry, source protection plans are actually a subset of broader, comprehensive watershed management plans that are necessary for healthy, sustainable watersheds.

An integrated watershed management (IWM) approach is a process of managing human activities and natural resources on a watershed basis, taking into account the broader social, economic and environmental issues, as well as community interests, in order to manage water resources sustainably. Integrated watershed management includes source protection plans to manage the impacts on sources of drinking water, but goes much farther to incorporate natural heritage issues, land use activities, and even public behaviour and attitudes.

IWM is the kind of creative transformation that needs to happen in the environmental and natural resource sector as called for in the 2012 Drummond Report. In order to address the challenge of a shifting economy and declining rate of growth in Ontario, economist Don Drummond tabled 362 recommendations calling for a combination of program and asset cuts, restrained growth and creative transformation on how the Ontario government does business in order to create a more sustainable and adaptable provincial government.

Integrated watershed management acknowledges that there is a suite of interconnected issues and activities that impact our environment and can be addressed collectively resulting in more sustainable outcomes. Like source protection planning, the IWM process requires the involvement of all agencies that have a role in environmental management including water users, industry, and a wide range of other stakeholders. IWM establishes a collaborative process that protects important water resources and addresses critical issues such as the impacts of urbanization and climate change.

Conservation Ontario believes that an integrated watershed management approach is the most viable process for coordinating the provincial response to these challenges. Effective IWM can lead to more informed decision-making, smarter priority setting, opportunities to pool existing resources building off current assets, and increased efficiencies between a variety of stakeholders such as municipalities, Conservation Authorities, residents, provincial agencies and businesses.

Integrated watershed management is already applied – to some degree – by Ontario's 36 Conservation Authorities, but needs to be more fully realized. So, how do we move forward? We start by looking at the recent work done by Conservation Ontario, the federal Department of Fisheries and Oceans, and the Ontario government. A report entitled *"Integrated Watershed Management: Navigating Ontario's Future"* assesses the IWM experience in other jurisdictions, documents its current status in Ontario and makes recommendations on moving forward.

Just as they helped to implement the government's priorities around source protection planning, Conservation Authorities are key to successful integrated watershed management in Ontario.



Dick Hibma
Chair



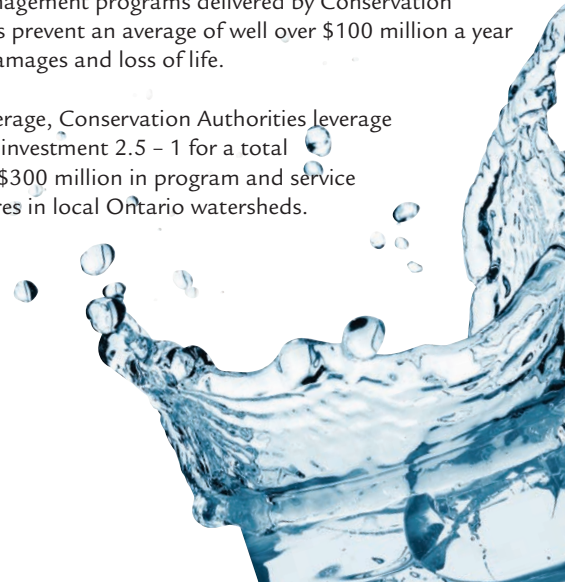
Don Pearson
General Manager

“Effective IWM can lead to more informed decision-making, smarter priority setting opportunities to pool existing resources building off current assets, and increased efficiencies between a variety of stakeholders such as municipalities, Conservation Authorities, residents, provincial agencies and businesses.”

More than 12 million people, approximately 90 per cent of Ontario's population, live in the watersheds managed by Conservation Authorities.

About Conservation Authorities

- Conservation Authorities partner with municipal, provincial and federal governments, as well as landowners and other groups, to deliver community-based, practical solutions to a range of natural resource challenges.
- Flood management programs delivered by Conservation Authorities prevent an average of well over \$100 million a year in flood damages and loss of life.
- On the average, Conservation Authorities leverage municipal investment 2.5 – 1 for a total of almost \$300 million in program and service expenditures in local Ontario watersheds.



Source Protection Leading the Way in Clean Drinking Water

Clean and plentiful sources of water are vital to our daily lives, to ensure a sustainable environment and to contribute to a vibrant economy.

In 2011, Ontario's 36 Conservation Authorities coordinated and contributed significantly to the development of the final Source Protection Assessment Reports which represent the completion of a major phase of work in the Ontario Drinking Water Source Protection Program. These reports pull together the findings of technical studies about local sources of drinking water and the risks that affect them. They also provide the foundation for the

proposed source protection plans to be released in 2012.

The purpose of an assessment report is to identify areas where drinking water sources are vulnerable to contamination or overuse, and to prioritize drinking water issues and drinking water threats within those vulnerable areas. These reports are prepared in accordance with detailed technical rules set out by the Ontario Ministry of the Environment and will be updated in the future in order to reflect changing conditions within Ontario's watersheds.

The content of an assessment report includes an overview of the source protection area being protected, the water budget, a summary of issues and threats for surface and groundwater sources, and key findings and considerations for the source protection plan

Ontario is divided into 38 Source Protection Areas and each of these has an individual assessment report.

For more information and to access these reports, visit www.conservationontario.ca



What is in an Assessment Report?

- A combination of text, maps and tables
- Watershed Characterization
- Water Budget
- Delineation of Vulnerable Areas (wellhead and intake protection areas and zones, highly vulnerable aquifers, areas of significant recharge)
- Issues Identification and Evaluation
- Threats Inventory
- Risk Assessment of quality and quantity issues
- Risk Categorization which identifies significant risks

Source Protection Plans should be a subset of the broader watershed management plans
- Justice D. O'Connor

What Are We Finding About Ontario's Drinking Water?

Municipalities draw their drinking water from various sources depending on where they are in the province. This can include lakes, rivers or groundwater sources. The assessment reports map all of the locations of the municipal wells and intakes in order to find out what activities are going on that could contaminate them.

The threats to Ontario's drinking water sources vary from minor to significant. The types of significant threats that have been identified include:

- Septic (both leaky household systems and municipal sewage treatment plants)
- Chemical or fuel threats such as pesticide or home heating oil storage
- Commercial fertilizers and
- Road salt

The more serious issues are found in the more populated areas such as the Greater Toronto Area where there is more development and urbanization.

In rural areas, there are some threats from residential, commercial or agricultural operations and some of these are being addressed right now through a provincial stewardship program (Ontario Drinking Water Stewardship Program). Grants are provided to eligible homes, businesses or farming operations.

While these conditions may not be contaminating a wellhead or intake right now, the source protection plans will help us to make sure we are doing the right things to prevent possible future problems. They identify the threats and then outline the types of measures that can be taken to minimize or manage the threat.

The types of actions that municipalities will need to take varies depending on what type of threat they're facing and what they're doing now. In some cases, there are already processes or actions in place that help to manage some of these threats.

Ontario Drinking Water Stewardship Program (ODWSP)

Since 2007 Conservation Ontario and Conservation Authorities have been partnering with the Provincial government to assist in delivering the second phase of a popular drinking water stewardship program designed to protect municipal sources of drinking water in Ontario. The current ODWSP is a voluntary program, similar to the earlier phases, but addresses specific local drinking water threats identified by Source Protection Committees through the Source Protection Assessment Reports.

Close to 2,500 projects have been implemented by landowners that include well decommissioning and upgrades, septic system inspections and upgrades, runoff and erosion protection measures and additional best management practices.

Relying on Partnerships to Build Capacity

In 2011, Conservation Ontario and the Conservation Authorities continued to partner with landowners, other agencies, business and all levels of government to pool resources in order to deliver important conservation programs in the areas of rural water quality improvement, habitat rehabilitation and restoration, water supply and septic management, and tree planting.



- Conservation Authorities continued a successful ongoing partnership planting 1.8 million trees with Trees Ontario in the 2011 50 Million Trees Program. This represents over half of the total number of trees that Conservation Authorities plant annually (2.7 million).
- Conservation Ontario continued to partner with a range of Agricultural stakeholders including the Ontario Soil and Crop Improvement Association in the delivery of the Canada Ontario Farm Stewardship Program. Throughout this four year federal government Growing Forward Initiative Conservation Authorities provided technical assistance to agricultural producers implementing projects that enhance riparian, fish and wildlife habitat.
- Conservation Ontario developed new partnerships with Green Infrastructure Ontario (GIO) and the Ontario Network on Ecosystem Services (ONES). This work aimed to exchange knowledge, promote research, policy development, new initiatives and resources. Conservation Ontario collaborated in the delivery of a Forum entitled: **Valuing Nature's Benefits: The State of Ecosystem Services Science and Practice in Ontario.**
- Conservation Ontario also shared information on some of the Ecosystem Services and Green Infrastructure initiatives undertaken by Conservation Authorities in collaboration with others through an e-bulletin entitled the Currency of Ecology.
- Conservation Ontario participated as a stakeholder in the Business Case developed by Ducks Unlimited Canada – Ontario for Wetland Conservation in the Black River subwatershed of Lake Simcoe www.ducks.ca/blackriver2011.

What is Green Infrastructure?

Trees, plants, shrubs, wetlands and natural areas comprise some of our 'green infrastructure' and are important elements that help us to clean air and water, reduce runoff from major storm events, and keep water moving in the water cycle. Technologies such as green roofs, swales, rain gardens and healthy soils all capture stormwater, providing effective more affordable alternatives to traditional infrastructure.

New Science



Protecting Ontario's Drinking Water: Cost Benefit Analysis of Agricultural Source Water Protection Beneficial Management Practices (2011)

Conservation Ontario teamed up with the George Morris Centre, a Canada-wide, nonprofit think tank based in Guelph and published a study in 2011 examining the agronomic and environmental effectiveness, and the economic efficiency of beneficial management practices (BMPs) used to protect groundwater resources by reducing the amount of nitrogen potentially available to leach into groundwater.

The results suggest that, given enough lead time, agricultural beneficial management practices are very effective as a nitrogen management strategy for municipal wellhead protection, as well as economically efficient.

A fact sheet and full report on this project are available on Conservation Ontario's website. www.conservationontario.ca

Streamlining

Conservation Authorities' Regulatory Activities

Under Section 28 Regulations of the Conservation Authorities Act, Conservation Authorities regulate development and activities in or adjacent to river or stream valleys, Great Lakes and large inland lakes shorelines, watercourses, hazardous lands and wetlands in order to protect peoples' lives and property from natural hazards and to maintain the vitality of our watersheds. Throughout 2011, Conservation Ontario continued to support implementation of the Section 28 Regulations program, including providing assistance to the Ministry of Natural Resources in coordination of Conservation Authority review and amendments to their individual regulations. These proposed amendments will assist in providing timely review of applications. In conformity with the Content Regulation (approved by the Province in March 2011), all 36 amended regulations moved forward concurrently in the provincial approval process.

With a focus on consistency, professionalism, and good customer service, Conservation Ontario has provided technical support to the front-line staff in our watersheds who are responsible for regulatory compliance. A five day, Conservation Authority Compliance Training Level 1 session was delivered in 2011 as well as draft guidelines for staff in this program area.

Other activities undertaken by Conservation Ontario with regard to streamlining include:

- Continued work with the multi-agency Drainage Act & Section 28 Regulations Team (DART) on a protocol to ensure coordination of legislative requirements.
- Signing of a Memorandum of Agreement with Hydro One for coordination of their activities with Conservation Authorities.
- Continued participation at the multi-stakeholder Conservation Authority Liaison Committee which delivered training sessions for municipal staff and the development community on Conservation Authority roles and responsibilities in plan review and permitting. Additionally, all Conservation Authorities monitored and reported on their decision timelines for permits.

Workhorses of Watersheds

Great Lakes Wetlands



With the support of Environment Canada and the Ontario Ministry of Natural Resources / 2007 Canada-Ontario Agreement, Conservation Ontario developed a new DVD which provides educational material about the importance of Great Lakes wetlands. This online teaching tool includes information about:

- The water cycle and watershed connections
- How wetlands work
- Characteristics of wetlands (types, benefits, stresses, relevant legislation & stewardship)

DVD Educational Tool is available on Conservation Ontario's website.



Great Lakes Connections

Conservation Ontario provided watershed level input into Great Lakes initiatives in 2011, including:

- Great Lakes Water Quality Agreement Review & Update,
- Extension of the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem,
- Great Lakes-St. Lawrence River Sustainable Water Resources Agreement and its Water Conservation and Efficiency Objectives,
- Lake Erie and Ontario Biodiversity Conservation Strategies, and,
- International Joint Commission Water Level Regulation Studies: Upper Great Lakes and Lake Ontario.

Protecting People & Property from Natural Hazards

The Water Erosion Control Infrastructure (WECI) Funding Program is designed to ensure that major maintenance projects are undertaken on aging infrastructure which was built to protect lives and property from natural hazards. The WECI committee consisting of staff from the Ontario Ministry of Natural Resources, Conservation Ontario and a number of Conservation Authorities updated the terms of reference and program guides for this funding program in 2011. The committee reviewed over 99 applications for funding and approximately 77 projects were approved for 23 Conservation Authorities. This represents a total investment of \$10 million dollars into protection of life and property; \$5 million provincial funding with matching local investment.



Guide to Ontario Conservation Areas

www.ontarioconservationareas.ca

Conservation Ontario published its new *Guide to Conservation Areas in Ontario in 2011*. This 68 page guide features maps, beautiful images from across the province, and lists of activities taking place in more than 270 conservation areas in Ontario. The guide also provides information about the important programs and services that Ontario's 36 Conservation Authorities deliver across the province, as well as key facts about many of the province's natural features such as the Oak Ridges Moraine and Niagara Escarpment.



A.D. Latornell

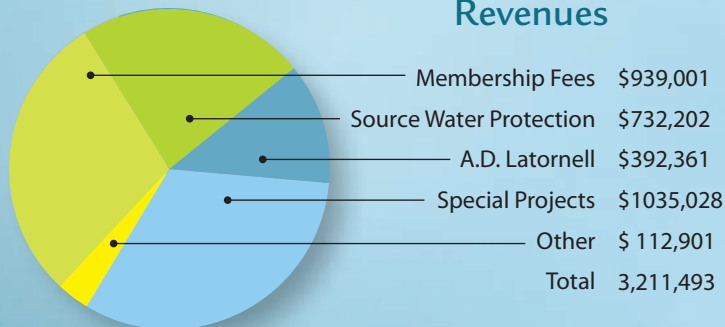
Water: The Future of the Source 2011 A.D. Latornell Conservation Symposium

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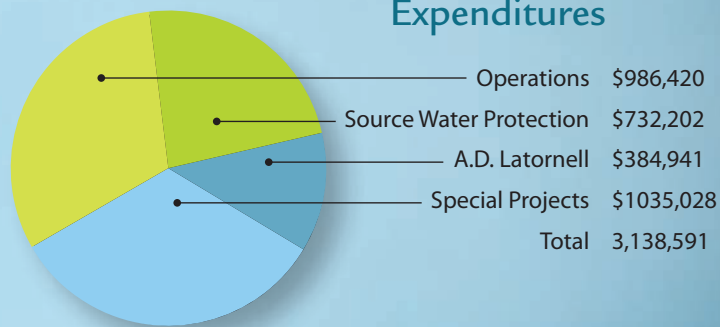
Delegates at the 2011 A.D. Latornell Conservation Symposium explored issues and challenges facing Ontario's water resources in the context of climate change, future demands, relationship of natural and built infrastructure and how it all relates to human health and water management. Keynote speakers included American Journalist, Charles Fishman, Research Chair of Water Policy & Governance at the University of Waterloo, Rob de Loe, Social Marketing Guru Doug Mackenzie Mohr, Filmmaker and activist Josh Fox, and Environmental Advocates Alexandra Cousteau and Jonathon Smith.

2011 Financial Information

Revenues



Expenditures



Conservation Ontario
P.O. Box 11, 120 Bayview Parkway
Newmarket ON, L3Y 4W3

tel: 905 895 0716
fax: 905 895 0751

info@conservationontario.ca
www.conservationontario.ca

Let's Chat!

