



April 1, 2010

Stephen Maude
Senior Policy Advisor
Ministry of the Environment
Integrated Environmental Policy Division
Land and Water Policy Branch
135 St. Clair Avenue West , Floor 6
Toronto, Ontario M4V 1P5

Dear Mr. Maude,

Re: EBR # 010-8989 - Feasibility Study for Water Quality Trading in the Lake Simcoe Watershed

On behalf of Conservation Ontario (CO), thank you for the opportunity to comment on the draft EBR # 010-8989 - Feasibility Study for Water Quality Trading in the Lake Simcoe Watershed. Conservation Ontario represents the common interests of Ontario's 36 Conservation Authorities (CAs). Conservation Authorities are local, watershed management agencies that deliver services and programs that protect and manage water and other natural resources in partnership with government, landowners and other organizations. As part of the Conservation Authorities' mandate, they ensure that Ontario's rivers, lakes and streams are properly safeguarded, managed and restored. In addition to serving the public and Ontario landowners, Conservation Authorities also provide advice to all levels of government on the responsible management of water.

Conservation Ontario commends the Ontario Government's efforts at legislating a watershed plan and reiterate that Conservation Authorities are in full agreement that the best way to protect and restore the ecological health of the Lake Simcoe watershed is through the implementation of an integrated watershed management plan. Given that the implementation of watershed plans is not legislated and the science and plans are therefore only advisory to local decision-making, Conservation Ontario supports the concept of a provincially mandated watershed plan for the protection of Lake Simcoe and the ultimate approval of such a Plan by the province. There are many aspects to the Plan that, as they are further developed under the implementation of the

policies, will provide tools to assist in watershed management by Conservation Authorities across the province.

Comments from Conservation Ontario on this EBR Posting are based on submissions from South Nation Conservation, Credit Valley Conservation and Lake Simcoe Region Conservation Authority. It is noted that Conservation Authorities may also be submitting individual comments on the EBR postings. The comments included in this letter focus on high-level issues.

Conservation Authorities have a proven track record of developing and implementing programs designed to reduce anthropogenic impacts to watercourses. These programs are carried out in coordination with municipalities and other stakeholders including the province. This has resulted in a level of trust and understanding between the various stakeholders that has taken years to develop. Conservation Authorities would look forward to a greater commitment from the province to support and build on these successful initiatives.

According to monitoring from the province-wide Lake Partner Program there are many lakes, other than just Lake Simcoe that have high concentrations of phosphorous in them. Almost half the phosphorous samples collected by CA's and MOE between 1997 and 2007 were above the provincial objective. Approximately one hundred lakes, and twenty major rivers in Ontario could be classified as meso-eutrophic. Eleven of these rivers could be considered eutrophic. Evidence has shown that even the Great Lakes (Lake Erie in particular) are showing signs of cultural eutrophication (i.e. massive blue green algae plumes are observed in satellite photo's in the western portion of the lake). This indicates a need for a broader provincial phosphorous strategy (which could include water quality trading as part of a broad program) to address problems in other areas, and to prevent more lakes and rivers from becoming eutrophic.

The strengths of CAs to implement innovative watershed based programs are very evident across the province. For over sixty years Conservation Authorities have been working on watershed programs. The "Development, Interference and Alteration" Regulations (Ontario Regulations 42/06 and 146/06 to 182/06) empower CA's to regulate development and activities in or adjacent to river or stream valleys, Great Lakes and large inland lakes shorelines, watercourses, hazardous lands and wetlands. They complement municipal implementation of provincial policies under the Planning Act such as hazardous lands and wetlands. Development taking place on these lands may require permission from the CA to confirm that the control of flooding, erosion, dynamic beaches, pollution or the conservation of land are not affected. They also regulate the straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream, watercourse or for changing or interfering in any way with a wetland.

CAs have delegated responsibilities to represent provincial interests regarding natural hazards encompassed by Section 3.1 of the Provincial Policy Statement, 2005 (PPS, 2005). These delegated responsibilities require CAs to review and provide comments on policy documents (Official Plans and comprehensive zoning by-laws) and applications submitted pursuant to the Planning Act as part of the Provincial One-Window Plan Review Service. In 2001, Conservation Ontario signed a Memorandum of Understanding with the Ministry of Natural Resources and the Ministry of Municipal Affairs and Housing that defined the roles of and responsibilities of each agency with respect to delegated responsibilities for natural hazards.

CAs, as ‘public bodies’ pursuant to the Planning Act, are to be notified of policy documents and planning and development applications as prescribed under the Act. CAs may comment as per their mandate to the municipality/planning approval authority on these documents and applications. In this role, the CA is responsible to represent its program and policy interests as a watershed based resource management agency. In this regard, CAs operating under the authority of the CA Act, and in conjunction with municipalities, develop business plans, watershed plans and natural resource management plans within their jurisdictions (watersheds). These plans may recommend specific approaches to land use and resource planning and management that should be incorporated into municipal planning documents and related development applications in order to be implemented.

CAs may perform a technical advisory role to municipalities, as determined under the terms of a service agreement with participating municipalities which may include, but is not limited to, matters related to the assessment or analysis of environmental impacts associated with activities near or in the vicinity of: sensitive natural features such as wetlands, river and stream valleys, fish habitat or significant woodlands; hydrogeology and storm water studies; and, in some cases, septic system reviews. By providing planning advisory services for the review of Planning Act applications, Conservation Authorities and municipalities can ensure the implementation of a comprehensive resource management program on a watershed basis.

Conservation Authorities have also successfully implemented programs with our federal partners. Many CAs have individual agreements with Fisheries and Oceans Canada (DFO) to review proposed work for its potential harmful alteration, disruption or destruction (HADD) of fish habitat pursuant to Section 35 of the federal *Fisheries Act*. Depending on the level of agreement in place, CAs may conduct the initial review of a project to identify any impacts to fish and fish habitat, determine how the proponent can mitigate any potential impacts to fish and fish habitat, issue letters of advice or work with the proponent and DFO to prepare a fish habitat compensation plan. Applications requiring an authorization for a HADD are referred to DFO by the CA for final approval.

KEY ISSUES

Stakeholder Buy-in Can be Accelerated by Building On Existing CA Programs

The 2010 feasibility study “Water Quality Trading in the Lake Simcoe Watershed” states under next steps: “It may take considerable time to obtain stakeholder buy-in” and there “would be a need to implement a suitable public engagement program that is directed specifically at the Lake Simcoe watershed”.

Lake Simcoe Region Conservation Authority (LSRCA) has been working for years to reduce phosphorous levels through stewardship, engineering and planning programs such as stream restorations, erosion and sediment control, and the Landowner Environmental Assistance Program (LEAP). Many other conservation authorities across the province also have similar programs aimed at reducing and monitoring impacts from humans (including dissolved oxygen and phosphorous) to lakes and rivers. LSRCA should play a prominent role in the broadening of any phosphorous

reduction programs within the Lake Simcoe watershed. This coordinated approach should leverage the foundation that has been built by the CA and its partners. This will require adequate support from the province.

The existing stewardship programs that are already operated by the CA could provide the implementation mechanism for the phosphorus reduction strategy; this would help to ensure that there is not a duplication of services and that the trading program would compliment existing programs. This would create a “one stop shop” for the trading program and would help to streamline program delivery to make it as seamless and as simple as possible for the landowners.

Further work should be done in terms of evaluating the agricultural community’s ability and willingness to participate in a phosphorus trading program. The local agricultural community is on record as not being supportive of the proposed strategy.

Trading Demand Needs to Be Evaluated and Should Consider Existing Programs

The feasibility study also states: “It is imperative to clearly establish and quantitatively define trading demand before investing in program development.”

LSRCA has been working for years to reduce phosphorous levels through stewardship, engineering and planning programs such as stream restorations, erosion and sediment control, and the Landowner Environmental Assistance Program (LEAP). LEAP provides landowners with funding and technical assistance for environmental projects on their land. This program includes 50% or more funding to a maximum level for projects such as planting cover crops, controlling erosion, managing manure, restricting livestock from waterways, upgrading stormwater management ponds (up to \$2500 per kg of P reduction), and upgrading on-site septic systems. Septic systems within 300 m of Lake Simcoe are eligible for additional funding.

Since there is already a well established funding program within the watershed there may not be a large demand for selling of pollutant credits by some stakeholders, such as farmers. Any new programs would have to be built in a way that complements and coordinates with existing programs. Past experience has shown that landowners will only participate in a program if it is simple to apply for. It is recommended that the approach South Nation Conservation uses for their program be adopted where the delivery agency works closely with the landowners providing technical support, explaining and clarifying the eligibility requirements and providing assistance in completing the application form for program funding. Employing individuals who can relate to and communicate well with the target audience for the program is also recommended, as there will be more of a willingness of the audience to work with them.

The feasibility study only addresses best management practices for cropping. We feel that this is short sighted and should include other agriculture best management practices (BMPs) such as manure, milkhouse waste water, and livestock access restriction to water courses, which is where the most reductions can be generated. Some studies are starting to show that no-till cropping may not be effective in reducing soluble phosphorus loading from agricultural fields, which could further

reduce the expected number of credits that could be generated from cropping best management practices. The feasibility study should also focus on non-farm projects, such as faulty septic systems and stormwater management.

Based on the feasibility study the trading ratio, will need to be high to achieve the aggressive 44 t/yr target. If it is not possible to set a high trading ratio it may not be feasible to achieve the target. In addition based upon the projected timelines it will take approximately 5 years to establish the phosphorus trading program which will leave only 16 years for it's implementation.

Establish Credits for the Maintenance and Rehabilitation of Previously Constructed Phosphorous Reduction Projects

Many projects have been carried out in the Lake Simcoe Watershed to reduce phosphorous pollution. These projects require maintenance so that they can continue to operate efficiently. This includes buffer strips, oil and grit separators, stormwater management ponds, protected lands, constructed wetlands, etc. Increased financial motivation is needed to prevent these historic works from deteriorating to the point that they do not function properly. The strategy should include a requirement for maintenance of such infrastructure to ensure that they continue to operate at a high rate of efficiency. We also request clarification regarding whether credits can be generated by upgrading aging ineffective infrastructure.

Include Climate Change Impacts in Analysis and Improve Scale of Target Areas

Unfortunately the feasibility study did not address the potential impacts of climate change. The larger, less frequent, more intense storms which are predicted to increase with climate change will significantly increase large pulses of phosphorus to Lake Simcoe

The feasibility study should also look at the differences between soluble and particulate phosphorus entering Lake Simcoe. Because soluble phosphorus is readily available for plant uptake and particulate phosphorus is not, an accounting of both will help to identify potential sources of each and the watersheds that should be targeted for reductions. The trading program if implemented should be based on trading of soluble phosphorus for soluble and particulate phosphorus for particulate due to the difference in bioavailability.

We recommend that phosphorus trading be implemented on a sub-watershed basis. If trading is allowed between subwatersheds this may achieve the overall lake goals but may result in local impairment of subwatersheds and some nearshore areas of Lake Simcoe. Therefore, trading boundaries should be established for the phosphorus reduction strategy.

In order for the phosphorus reduction strategy to be successful the roles and responsibilities of the lead/ delivery agency need to be clearly identified. This includes the ultimate authority/ power that agency will have in the Lake Simcoe watershed. In addition funding for the strategy was not

addressed in the feasibility study, and this funding will need to be stable for the strategy to be successful.

Conservation Ontario thanks you for the opportunity to provide comments. If you have any questions please contact myself (ext. 224) or Scott Lister (ext. 229).

Yours truly,



Jo-Anne Rzaeki, M. Sc.
Watershed Stewardship Coordinator

c.c. Gayle Wood, CAO, LSRCA
Conservation Authorities, CAOs/General Managers
Don Pearson, General Manager, CO
Scott Lister, Source Protection Technical Liaison, CO
Matthew Millar, Provincial Groundwater Monitoring Network Liaison, CO