



CANADIAN ENVIRONMENTAL LAW ASSOCIATION
L'ASSOCIATION CANADIENNE DU DROIT DE L'ENVIRONNEMENT

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To the Great Lakes Team
and the Annex Advisory Panel

**Submissions Regarding Consultation on the Implementation by Ontario of the
Great Lakes, St. Lawrence River Basin Sustainable Water Resources Agreement
from the Canadian Environmental Law Association**

I would like to thank the Great Lakes team who has worked so hard to determine the best path forward for Ontario in its implementation of the *Great Lakes - St. Lawrence River Basin Sustainable Water Resources Agreement* (the Agreement). You have done an exceptional job of framing the scope, complexity and interrelationship of issues that Ontario needs to resolve for its own implementation of the Agreement. This consultation will also assist Ontario with its contributions as a member of the Regional Body that will adjudicate these matters in the future.

The Canadian Environmental Law Association (CELA) has tried to strengthen the protection of the waters of the Great Lakes since the original Great Lakes Charter in 1985. As one of the Ontario members of the Advisory Panel to the Council of Great Lakes Governors during the negotiation of this Agreement we have gained an appreciation of the issues basin-wide as well as in Ontario. We have approached this consultation with two priorities with regards to how Ontario can best improve our own water protection and entrench a culture of conservation in our Province, and how we can continue to show leadership in the Region through the best practices, programs and in our regime for water allocation.

In our view the final Agreement and its companion US agreement, the *Great Lakes St. Lawrence River Basin Water Resources Compact* (the Compact) were substantially weakened by the last minute extension of access to Great Lakes water to all residents of straddling counties in the US. This political expediency has blurred the geographical surface water boundaries and made it considerably more difficult to protect and manage the Great Lakes as an ecosystem and from a watershed perspective. In times of stress that are predicted as climate change impacts the region, it will be more difficult operate with the dualities this has created.

We recognise that geography has given each of the Great Lakes jurisdictions unique perspectives on the resource. No jurisdiction has as many challenges in implementation as Ontario because four Great Lake watersheds penetrate this

Province as well as all four connecting channels. Regrettably the different points of view have led to diverse approaches to implementation of these agreements that have perpetuated the very uneven playing field among jurisdictions in the Region. While this works against an ecosystem approach it does offer opportunities for progressive jurisdictions like Ontario to act to improve upon the Agreement. We appreciate the effort that has been taken in Ontario to address the complexities and to seek made in Ontario solutions that may be stronger than the Agreement.

Our Approach to Conservation

This view of the process and the Agreement has strengthened our resolve to have Ontario do its best to achieve the original intent and purpose of the Agreement. In our response to options that you have put before us in this consultation we have largely selected options that will;

- expedite a conservation culture in Ontario,
- **prevent** future water wastage,
- use existing instruments where possible,
- encourage the best public access and participation in programs,
- improve our understanding of water use and sustainability by generating sound science, data on actual use and return flows and establish baselines for all portions of the system including groundwater, and
- allow for flexibility to make future adjustments for ecosystem and human health.

CELA and many others in Ontario were involved in a previous extensive consultation on “A Water Efficiency Strategy for Ontario” carried out by the Ministry of Natural Resources when David Peterson was Premier. To learn from the past, we suggest that some review be done of the barriers that prevented this strategy from being implemented to ensure we are successful in securing a conservation plan.

Our Approach to Intra-Basin Diversions

While it is a necessity to focus on intra-basin diversion issues in Ontario, we would hope that Ontario will not be the source of many future applications for exceptions to the Agreement. It is in everyone’s best interest to set strong precedents under the Agreement and exhaust all alternatives by finding ways first to live within our watersheds. CELA is concerned that we do not yet have adequate scientific information to make sound and sustainable decisions in regard to long-term impacts of intra-basin diversions. We have favoured options that support the advancement of sound science as soon as possible. This consultation has identified that determination of water availability is not occurring early enough in the planning and development process. Since Permit-to-Take Water (PTTW) data is not yet aggregated on a watershed or sub-watershed basis, we cannot be confident of the cumulative impacts. These concerns need to be addressed, before new intra-basin diversions and transfers are considered.

No single instrument available to us can adequately address Agreement implementation and ensure the broadest public notice and access to the decision-

making process. We favour combinations of instruments that will guarantee the public timely notice of applications, encourage their involvement in decision-making, give them resources in to be involved in the decision making and give them rights of appeal. This will likely mean that changes will be needed to all of the processes involved for effective implementation of the Agreement. There will likely lead to new scope for instruments and new sequencing of approvals for public and private applicants.

Our Approach to Information, Science and Data needs (when in doubt err on the side of more information)

In 1997 CELA and Great Lakes United published a report examining the outcomes of the original 1985 Great Lakes Charter. That report, *The Fate of the Great Lakes ~ Sustaining or Draining the Sweetwater Seas?*, reviewed the problems with the current database on water use in the Great Lakes and found that the database was not current. Today there still is a five year lag. The data was aggregated so much it was not adequate to identify trends or attribute them to causes. There were gaps in reporting as each jurisdiction collected information for some but not all sectors of users and some jurisdictions based reporting on estimates rather than actual volumes used leading to variations in accuracy. Jurisdictions were unable to report to the database as data gathering had not been a historical priority and cuts to water management resources further undermined their capacity to report and gather data.

It has been a point of pride that Ontario and Minnesota have had the most detailed information on actual use because they have been collecting information on much lower trigger levels than are still required by the Agreement (50,000 litres in Ontario). This means that these two jurisdictions will have much more accurate information about actual cumulative and consumptive use by sector. Because we have such a knowledge deficit of our use and of the sustainability of our surface waters, Great Lakes tributaries and ground water, we should encourage reporting of **all** the data we have above and below the trigger level as this will help drive and build a basin-wide understanding of our use of the resource and the value of collecting better data at lower thresholds.

Because each jurisdiction has different implementing legislation rather than harmonised legislation implementing the key provisions of the Compact and Agreement, some of the problems with the unevenness of the information and data reported under the Charter will likely persist. CELA concurs that more precision can be created by, for instance, using more precise consumptive use coefficients for more sectors as Ontario is suggesting. This leads to the question: Are we collecting data on enough aspects of the system to help us fill science gaps we have on groundwater influence on the Great Lakes, groundwater recharge baselines, indicators of climate change and ecological impacts of water withdrawals? Consideration needs to be given to expanding the data we are gathering to fill these gaps in anticipation of new stressors on water supply such as population growth in the Basin, as well as in the straddling counties.

Ontario's efforts to refine mapping of their Great Lakes Watersheds down to the sub-watershed level are very valuable and will be useful in communicating to the public and other water users locations of withdrawals, return flow and intra-basin diversion information. Once Ontario generates water budget information from their source protection plans this information can be integrated into the maps and consideration should be given to communicating it basin-wide to deepen understanding of ground and surface water interfaces.

Responses to the questions posed in your consultations on February 18th and 19th, 2009

Now that we have outlined our preferred approaches to these three issues, CELA will endeavour to go through each of the slide decks in the order they are set out on your agendas for the February 18 and 19, 2009 Annex Advisory Panel meetings and attempt to give answers to questions we feel are key to the best implementation of the Agreement in Ontario.

February 18th Consultation on Conservation

Possible Options for Inclusion in an Ontario Water Conservation and Efficiency Strategy

Slide 4 A. Context

CELA is concerned that the Regional Water Conservation and Efficiency Objectives are not rigorous or specific enough to result in strong actions in each jurisdiction.

There is not yet clarity on the relationship between each of the jurisdictions' programmes and the conservation yardstick that will be used by the Regional Body to determine if applicants pass the conservation test. Will Ontario be able to assess the adequacy of conservation based on their own program or on the Regional Water Conservation and Efficiency Objectives?

The definitions and interpretations of "Environmentally Sound" and "Economically Feasible" will determine the rigour of this conservation test. Ontario's conservation strategy should endeavour to give these terms more precise meaning and rigour. CELA maintains that conservation and efficiency efforts will have economic benefits over time for each sector and cumulatively for the region in avoided water use and consumption. Conservation can create more resiliencies for the ecosystem.

Slide 5 B. Principles

CELA feels that the guiding principles need to be more grounded in a problem statement whether it be put in a **mission statement** and/or added within this section. We need to strongly debunk the myth of abundance. We also need to take the blame and acknowledge that the Great Lakes Region and North Americans lead the world as the largest wasters of water. Our per capita use of water exceeds by 1/3 to 1/2 the use in other developed countries. I would include here the need to save water for future generations to come (in perpetuity) as well as for the health and well being of

all creatures dependent on these waters. Some of the climate change predictions and other stressors on water supply like pollution should be included in this rationale.

We would add a principle that reads:

Drafting conservation plans will ensure that all responsible sectors understand the contribution and benefits they can contribute.

Questions

1. The strategy needs guiding principles as well as a strong mission statement grounded in the problems.
2. Add “Drafting conservation plans will ensure that all responsible sectors understand the contribution and benefits they can contribute.”

Slide 7 & 8 Mission statement

Questions

1. Yes a mission statement is important for reasons stated above.
2. Option 1 is the best as it acknowledges our responsibility to future generations, links quality and quantity and speaks to health as well as to the environment and the economy. Target statements would help.

Slides 9 to 14 Discussions of Targets

There is a role for multiple nested targets. Targets give us something to measure against. Each option is a driver of programs and progress in different ways.

- Province-wide targets so jurisdictions can compare themselves to others in the Great Lakes (important to the one and five year reviews of conservation plans mandated in the Agreement) and to others in the world.
- Sector-wide targets can serve as a yardstick for best practices and,
- Individual user targets will yield site specific information and allow users to cost out options and benefits unique to them and the local watershed.

We can acknowledge that targets will be crude at the beginning but that they are none the less valuable as statements of intent. Targets need to be flexible as our knowledge of actual baselines and use grow over time. We will need to be adjusting and refining targets, particularly in times of shortage and stress.

Targets can be set as the outcome of water audits and the preparation of water conservation and efficiency plans for both water uses in the environment as well as in the pipe. We feel that **all PTTW users** (presuming this would catch all high volume users as well as most industrial, commercial and institutional sectors) should be **required** to do plans. Templates for what a plan should include for each sector should be developed with input from each sector. **Both** conservation and efficiency need to be components of all plans. Considerable savings can be gained from **prevention of further wastage**. CELA assumes that every sector can reduce their overall water use and this should not just be considered in times of drought but as an essential goal of each conservation plan. In PTTW reviews, new allocations should be based on conservation savings and amounts actually used. Shorter review periods (5 years)

would be preferable in this time of implementation so we can seek efficiency gains from all the permit holders.

In the interest of sound science it would be ideal to set watershed based targets for the whole province for ground and surface waters as long as conservative margins are left for the ecological needs and the needs of future generations in each sub watershed. Ontario should not encourage that 100% of any watershed be allocated as some have been in the US.

Slides 15 & 16 Timeframe of Strategy

Creating a conservation culture is not a short term endeavour and should be adopted as a long-term strategy by the Province. As our knowledge and understanding grow, new ways to use water wisely should too. Stressors on the Great Lakes - St. Lawrence River ecosystem are also likely to grow. New stressors are likely to emerge that we have not anticipated. This effort should be a continuous effort and not time limited.

Slides 18 - 24 Water Conservation and Efficiency Objectives

CELA concurs that a made-in-Ontario Conservation Strategy needs to build on the Regional Strategy to ensure that ecosystem needs are addressed. We congratulate you on your commitment to this in your suggested language changes in your consultation for Objective 1.

CELA agrees that conservation benefits and savings are compounded by linking and integrating water conservation programs and savings with parallel energy conservation efforts in Objective 1d. This linkage will compound the savings and build the case for conservation. We are gratified to see that the government has already begun this in their Green Energy Act Bill 150 released on February 23, 2009.

We strongly support the need to integrate conservation with climate change impacts. Considerable research has been done on climate change impacts on the Great Lakes and adaptation strategies. Conservation should be positioned as one of those adaptive strategies. Indicators should be developed as sentinels of climate change with a goal of reporting to the regional database on these indicators. CELA recommends that the Province work with the Great Lakes-St. Lawrence Environmental Adaptation Research Group Environment Canada Atmospheric Service housed at the Faculty of Environmental Studies at the University of Waterloo to develop indicators. Linda Mortsch is the contact there (519) 888-4567 ex 5495 linda.mortsch@ec.gc.ca.

Actions and Commitments

Objective

- 1. Guide programs toward long-term sustainable water-use including taking ecosystem needs for water into account**

CELA endorses the need for a permanent entity to oversee Ontario's Water Conservation Strategy. We would like to extract some lessons from our past involvement in Provincial approaches to conservation policy. We do not recommend that a model such as a secretariat that primarily relies on one person because this approach was taken as a follow-up on the Water Efficiency Strategy, a previous consultation on water conservation undertaken in the early 1990s by the Province. Following on that consultation, renowned champion of wise water use Jim MacLaren was appointed as the Province's Water Secretariat and while he had a conservation mandate, he was also given the mandate to make water and wastewater services financially self-sustaining. This additional mandate overwhelmed the conservation mission and his mission got bogged down by a debate on public versus private funding and control of these services. The Ontario Water Secretariat was replaced by the Ontario Clean Water Agency (OCWA) a Provincial Agency whose main role was to manage and run some of the smaller vulnerable systems in the Province but also had conservation mandate.

The only remaining legacies of that original Ontario Water Efficiency effort is the goal to have the Ontario Public Service keep their consumption at 1991 levels until 2011 (see Ontario Green tips <http://www.ene.gov.on.ca/cons/3783-e.htm>). OCWA still has a conservation mandate for the dwindling number of facilities they manage. The one man secretariat model for conservation (Peter Love) in our opinion is not successful in reaching and enabling all sectors to participate. Their efforts never seem to trickle down to the level that fosters the societal changes needed.

CELA prefers a model that is multi-stakeholder such as your **Option D** that centralises conservation in the Province in a way that works with an advisory council that is made up of those who are expected to implement the strategy. This would lead to solutions that best fit each individual sector's diverse needs and to more quickly capturing best practices. Part of the mandate of that office should be a requirement to couple water conservation with energy conservation policy.

In selecting options for preparation of Water Conservation & Efficiency Plans (including water audits) we prefer the preparation of plans be **mandatory for all municipalities and all private and public PTTW holders**. We observe that there has been a deluge of educational materials on the benefits of water conservation from all levels of government for decades and this voluntary approach has only resulted in a patchwork of isolated successful conservation implementation, usually where it has been necessary because of shortages in supply. Making plans necessary and conditional on the granting of permits and infrastructure funding will get long overdue results.

Timetables for completion of plans should be within the next five years. Reporting on progress on implementing plans can have a longer timeframe.

3. Adopt and implement supply and demand management

Provincial regulatory measures

1. PTTW program enhancements -

The permit system has to not only report takings but also return flows so more precise information becomes available on consumptive use and the benefits of conservation become apparent to those holding permits.

The PTTW will need refining to be used as an instrument to drive conservation. Prevention of wastage needs to become central to permit examinations. For instance there could be requirements for golf course and subdivision landscape design that captures storm water and keeps it on site to recharge aquifers rather than sending it off site.

There will need to be training for those reviewing PTTW to maximise conservation in each application as well as education of applicants.

Funds raised by charges from the PTTW program should be used for these program enhancements not only for government approvals and reporting but to assist applicants to meet new criteria.

2. Provincial water efficiency standards and labelling

CELA agrees with the need for standards and labelling for efficiency in the recommendations in this section but we feel the Province could go further. **Ontario should create blue/green jobs in carrying out water conservation as they have committed to in their Green Energy Act for energy conservation.** While water efficiency was acknowledged as an additional benefit in this Act, a rigorous analysis of how many new jobs could come from water conservation was not done. The Ontario government should encourage innovation, research and development of new jobs in the manufacturing of water efficient devices, water meters, rain sensors, and Canadian low flush toilets. Jobs should also be created in carrying out water audits for all sectors, training water conservation experts, retrofits not only of single family dwellings but of multi-unit buildings, zeroscaping and storm water management and replacement of lead distribution systems with safer alternatives. Priority should be given to leak detection and repair in municipal infrastructure grants and planning. All of this could mean a significant number of jobs could be created in Ontario as the result of a strong water conservation commitment.

3. Municipal

CELA agrees that waste minimization, metering, municipal rate structures, leak detection and repair are essential for municipalities. Procurement and the use of energy in water treatment and delivery are areas where municipal improvements should be sought. We would recommend strong measures that would make inclining block rates illegal. A level playing field will be created if all sectors are required to pay the true cost of their water and wastewater services.

That said **one solution does not fit all Ontarians**. There are exceptional circumstances in the municipal sector that must be acknowledged and addressed.

CELA has been active in a coalition, the Low-Income Energy Network in order to provide our low-income clients with **affordable services and equitable access to conservation programs**. What follows are excerpts from a report we did in 2003 *DSM for Low Income Consumers in Ontario*.

“In 2001, the lowest income quintile of Ontarians were paying 9.9% of their average income on water, fuel and electricity while high income Ontarians were paying 2%. They tend to have inefficient appliances over 10 years old and they are more likely to be heating water with electricity (the most expensive option).” In cities a large percentage of low-income residents are in rental units and over 90% of them have their utilities included in their rents and are consequently unaware of their individual energy use and are buffered from reaping the benefits of conservation. They have little incentive or power to reduce their water use. Low income home owners have little ability to be able to replace water heaters or upgrade to more efficient appliances and to pay for energy audits. These people are the most vulnerable and will need special consideration in a water conservation scheme.

Consideration should be given to affordable block rates for the amount of water needed in these households for health and safety. Programs need to be considered that create incentives for landlords to retrofit buildings with water efficient appliances, toilets and delivery systems as well as the most efficient water heating devices. Conservation savings need to be passed on to tenants. By-laws could achieve this.

Ontario's *Safe Drinking Water Act* now requires steps for municipalities to plan measures so that water systems pay for themselves. However, many municipalities in Ontario are moving from ground to surface water supplies in Ontario. This has potential to cause hardship because many smaller and more remote communities do not have a population base that can bear the full costs of new infrastructure. CELA receives calls all the time from distraught seniors and others who fear they will lose their homes because their municipal councils are trying to pass on all of these costs to them. **Water conservation and efficiency programs have to work for Ontario's most vulnerable**. Consideration should also be given to having high users pay more and their fees used to assist low-income users.

Many municipalities have huge historic infrastructure deficits that will never be able to be addressed from their tax base and will require grants from the Federal and Provincial governments for improvements. These grants must be tied to improving human health, such as providing First Nations with safe and sustainable water supplies and replacing lead pipes throughout the Province, and to efficiency measures like eliminating leakage.

In summation we would answer yes to all questions 1 to 6 posed on this guideline.

Objective 3.

Improve monitoring and standardize data reporting among state and provincial water conservation and efficiency programs

CELA agrees that base reporting among the States and Provinces should be consistent and comparable. We are concerned as we have said in our general discussion (pages 2-3) that in past reporting the data is so aggregated as to be of little value in improving understanding, detecting trends and supporting decision-making. Data should move to being based on actual rather than estimated use as fast as possible. Projections of future use more often than not are inflated to fulfill the desire for growth in the Region. There needs to be a way to ground truth projections with official plans etc.

New data generation needs to be considered in order to fulfill the science and information needs articulated in the Agreement for more understanding of groundwater in the Basin and of climate change.

Questions

1. Yes, conservation and efficiency indicators should be established and tracked. Climate change indicators and perhaps indicators of groundwater aquifer stress should also be developed.
2. More information on consumption should be made available to all sectors and compared with best practices. We support Ontario's plan to develop new consumptive use targets for more sectors than suggested by the Agreement and hope these can be reported to the regional database.

Objective 4. Develop Science, technology and research priorities Groundwater

We have found that this consultation has been light on discussions of closing the knowledge gaps on the groundwater portions of the watershed and its interactions with the surface water. Gaps that need to be filled, monitored and reported are:

- Identifying groundwater aquifers under stress now and concurrently which aquifers are healthy,
- Map these aquifers where possible,
- Determine the amount of rainfall needed to ensure recharge of these aquifers,
- Determine threats from pollution and overuse to these aquifers,
- Determine which tributaries to the Great Lakes are under the influence of groundwater, and
- Do conservation planning to protect groundwater that would include identifying best practices in groundwater protection.

Source Protection plans and water budgets should yield part of this information which should be publicly accessible in a web site. This will start to fill the gap in our understanding of the role of groundwater in the health of the largest source of drinking water for Canadians, the Great Lakes.

Climate Change

See paragraph 3 page 6.

Objective 5. Develop education programs and information sharing for all water users

CELA supports all of the proposals for the development of education and information sharing for all users. As we have learned there is no shortage of ideas on ways to conserve water being generated from all sectors that have been consulted. Where the work is needed is to create the political will to do it even in these hard times. Building the case for conservation is extremely important to debunk the myth of abundance. We should use tangible Ontario examples where conflicts are already developing among users, municipalities are scrambling to stake claims for water to feed potential future growth and there are real shortages to build the case. Our obligations to future generations, uncertainties of climate change and our unnecessary, profligate use compared to most of the rest of the world should be stressed in this re-education effort.

We should ensure that we have trained conservation specialists within each sector involved in PTTW reviews, and in the built environment for retrofits and designing for conservation. Key decision-making bodies that will be expected to implement conservation objectives such as the Municipal Engineers Association who directs the Class EA Process will need to fully understand the new conservation component of their work. Special educational programs will need to be directed to low-income Ontarians as well as their landlords on accessing the benefits of water conservation.

The new mapping contemplated offers an effective tool to communicate the complexities of water use decisions as they impact local sub-watersheds, regional watersheds, the connecting channels, each Great Lake and cumulatively on the whole system.

THE FINAL QUESTIONS ON TIMETABLES AND FUNDING

What should be the timetable of the Strategy?

Timetables can be yardsticks and drivers of progress. As we stated on page 5 a series of nested timetables - short term objectives to meet Agreement obligations, medium term (five years) to see if the basic program is yielding results and longer term to track progress - would be ideal. Timetables can differ for Provincial as well as individual sectors. Provincial targets will allow us to measure how Ontario is doing compared to other Great Lakes jurisdictions and other countries. Sector timetables will be beneficial to capture wise use levels with best practices. Flexibility should be anticipated so that as we learn more about what is achievable we can lower our thresholds to continuously work toward deeper conservation. Per capita information is also useful for individuals to compare their conservation culture with others.

How should the strategy be funded?

Funding should come from multiple sources. One obvious source of funding is the pool of funds created by the charges raised from the PTTW. Full cost pricing can include funding conservation efforts. However as we discussed above in the municipal section special measures need to be taken to ensure essential access to water and equitable access for low-income Ontarians to water conservation benefits. There is a role for all levels of government to fund this transition to conservation and to provide incentives for participation in these programs as well as disincentives for wasteful practices or practices that reward overuse and wastage.

Supporting Information and Science

- **Watershed boundaries and mapping**

Mapping the watershed from macro to micro will assist the public and decision-makers to understand the issues from Basin-wide to local perspectives. The government cartographers should not presume that people understand the meaning of primary and tertiary and include these definitions on the maps. For example, the Provincial Tertiary Watershed Boundary 2008 map is confusing as it includes five distinguishing colours which are indications of the data sources rather than the three primary watershed boundaries, the Nelson, James Bay and Great Lakes St. Lawrence River Basin. If the intent is to promote understanding of the watersheds then too much extraneous detail confuses. Landmarks that allow people to orient themselves are important.

In the future CELA hopes to see mapping of groundwater aquifers in the basin, and mapping of tributaries to the Great Lakes that are under the influence of groundwater. As well, threats and stressors to ground and surface water could be mapped. Once source protection data on threats and information from water budgets is available, this information should be incorporated into both the data bases and into mapping being done for Agreement implementation. Even though source protection's focus is only on drinking water supplies, once it is reviewed through the lens of Agreement priorities this data could reveal a lot about cumulative impacts and impacts on the ecosystem. CELA and other groups have been calling for more integration and focus on Great Lake watersheds early on in source protection planning process so that this integration will occur.

- **Water Use Reporting Protocol**

Questions

1. CELA supports submission of data at a finer tertiary watershed level because this will facilitate knowledge about local impacts of withdrawals over time. It will also help us anticipate and protect watersheds under stress sooner. Local area trends will be more apparent as will ecological impacts on water dependent species. A more local focus will allow those responsible to understand their role and when they may need to take remedial action.
2. Consumptive use information reporting is important in our understanding of permanent losses to the Basin. While the method of applying one coefficient to each sector may be necessary initially, it is a crude approach. Requirements to start to report return flow by permit holders should start to generate more

actual data over time. Perhaps Ontario should grant permits over shorter periods of time and require review of historical permits soon so actual data can be generated quickly. Refined data should start to be reported as soon as possible.

3. CELA supports having more sectors reporting in Ontario and would hope we could report these refinements to the Regional data base. It should be recognized that there may be unique and diverse sectors within individual jurisdictions.
4. It is extremely important for Ontario to report information generated from our PTTW system to the Regional database. Over time the benefits of more information to sound decision-making will be demonstrated to the other jurisdictions. Ontario will likely be able to demonstrate more knowledge on cumulative impacts, groundwater, impacts of climate change and ecological impacts of withdrawals because they will have more information. This could result in earlier identification of trends and stressors for the rest of the Basin.
5. All water users should be required to report water diversions/transfers because they all will have increased risks of harm to the parts of the system deprived of those flows.

- **Consumptive Use**

- **Questions**

1. CELA supports the tiered framework because it encourages large users to conduct a site assessment of their consumptive use. This assessment could lead to better understanding of local circumstances and act as an incentive for conservation.
2. a) CELA supports that all highly consumptive water uses defined in S.5 (5) of the Water Taking Regulation undertake a site specific assessment.
b) A site specific assessment should be required in all stressed watersheds and for all diversions and transfers and for all other withdrawals over a threshold. The Province should have the powers to require site assessments of sectors they need more information from and sectors reluctant to implement conservation.

- **Additional Questions**

1. CELA supports adding categories of users to generate more specific information but do not feel comfortable to comment in depth on the adequacy of the technical approach being taken to each sector.
2. A blend of a sector specific approach and user specific in instances where individual operations seem to fall outside of sector estimates would be preferable. If a user does better than the sector average they should be studied to add to the understanding of best practices and if they fall below they should have conditions imposed to see they achieve the average.
3. Trained experts should review consumptive use with Provincial oversight. The Province should provide this additional capacity particularly when they will be relying on the outcomes to build, shape and promote policy and programs.

- **Averaging amounts**

Question

CELA prefers Option 3. We think that reporting on maximum daily use is the best and most meaningful way to continue to communicate use to the public. Given the choices we prefer to see data generated at more regular, smaller periods of time.

CELA is submitting the first series of comments on conservation now so they can be of use in early drafting efforts. We will endeavour to respond to the remaining issues outlined below next week.

February 19th and 26th Meetings

Intra-basin Transfers (Diversions)

- **Establishing the baseline -
Municipal Approvals Instruments**

The options for establishing municipal baselines are all process based rather than science based. CELA is reticent to wholeheartedly endorse a system that has not first established the “carrying capacity” and sustainability of aquifers, tributaries and lakes. We recognize that the science is not yet there and that predictability due to seasonality and climate will be variable. However we need to begin to establish water budgets for these portions of the bigger Great Lakes watersheds to have confidence that allocations we are making today will not be depriving future generations of users and water dependent creatures of water. Municipalities as well as non municipal users should have some yardstick for determining future demand not only for their own growth needs but for the needs of other users they share their water supply with. We are not confident that the official and/or master planning process now adequately does this. The scope of the considerations is up to the proponent and there is not necessarily planning that is carried out on a watershed or ecosystem basis, and allowances are not made for future needs for all who share waters.

We presume that all current instruments Master Planning, Official Plans, Places to Grow, Sewer Use and Water C of As, the *Safe Drinking Water Act*, EA and Class EA, PTTW, Provincial Plans for the Oak Ridges Moraine, Green Belt, and Lake Simcoe, and the *Clean Water Act* will all need revisions to comply and be consistent with the Agreement. Because the *Ontario Water Resources Act* and the Permits-to-take-Water are water focused instruments they should be the primary instruments used for Agreement implementation. The *Clean Water Act* (CWA) also offers a number of important provisions which could assist in determinations of future water supply. The threats assessments required in the CWA are to include threats to quality and quantity. If threats are found there are powers to impose further protective measures.

1. CELA recommends that the science and data strategy being developed for the Agreement integrate the water budgets from the Source Protection Plans and be integrated as soon as possible into decisions establishing baselines. These

- baselines for Great Lakes watershed sources should then become the primary consideration for both municipal as well as non-municipal takings.
2. There should also be a continuing requirement for Municipalities to secure C of A for operational standards and PTTW. We strongly agree that the assessment of the adequacy and security of the long term water availability should be made much earlier in the process and should be based on sound science. The issuing of the PTTW should also happen earlier in the process depending on adequate supplies being available. The PTTW system offers the most thorough approvals system for water allocation.
 3. As we have said, the current Municipal Class EA process for Water and Wastewater is inadequate to examine large withdrawals, transfers and consumptive uses from a basin-wide, ecosystem or regional perspective. An undertaking the scale of the current York Region projects or other regional scales are not guaranteed to be bumped up to a full EA where scoping could result in a full examination of need and alternatives. There is a continuing risk in the class EA process that small scale projects are evaluated on local impacts even though those projects are part of a larger delivery system. The full cumulative impacts of the project escape assessment.
 4. CELA has voiced our concerns during these consultations that the recommended way forward allows the greatest access by the public to Ontario decisions regarding large withdrawals, transfers and consumptive uses. The public notice for water and sewer EA projects is most commonly through advertising in local newspapers rather than on the Environmental Registry. Large takings will likely be of interest to the whole Great Lakes communities and they may well want to be involved in early comment on large Ontario transfers. Allowances will need to be made for Basin-wide notice.
 5. Even when there is a full EA it is not guaranteed that public hearings will be held or that the public would necessarily become a Party to those hearings. Even though the public has an expectation that an EA involves a hearing, there has not been a full EA hearing in twenty years in Ontario.
 6. Ontarians should have parity in practice to appeal decisions on large water takings in Ontario on par with the enforcement rights that US public has under the compact. The existing tribunal with the expertise to review these matters is the Environmental Review Tribunal. We would be concerned if these matters were considered to be primarily planning matters and would be directed to the Ontario Municipal Board.
 7. CELA is concerned that the Municipal Engineers Association has not participated in this consultation and will not have an appreciation of the context and need to reform their processes to allow for Agreement implementation.
 8. During consultations, MOE staff were concerned that there are now sequences of approvals that need to be in place prior to the issuance of a PTTW. The sequencing of those approvals will need to be reviewed in light of Agreement implementation and the recognized need to make determinations about water availability earlier in the planning process.
 9. Most of the questions on process hinge on sequencing and what approval comes first. A hierarchy will need to be determined and the first determination needs

to be based on baseline watershed or sub-watershed budgets for all current and future uses. We need to begin to assess whether all demands for growth can be met.

Non-Municipal Approval Instruments

CELA agrees that non-municipal approvals should be done under the PTTW process. However, there could be surprise requests in the future for new uses that we have not anticipated today, just as the NOVA proposal was not anticipated at the time. Consideration should be given to granting the Minister the powers to request more in-depth assessments of projects of this nature under the OWRA.

Baseline for Consumptive Use

Overall, CELA recommends that Ontario evaluate lowering the threshold in their Act for consumptive uses to offer a greater level of protection. This option is allowed by the Agreement.

CELA agrees that the refined coefficients developed for Ontario to inform decision-making on regulations are improvements as they will provide more detailed data on current uses in the Province. We agree that the use of coefficients should be blended with science and site specific information as we attempt to move from estimates to actual data. We should encourage modification of coefficients when real data becomes available. We need to be confident that amounts assigned to related transferors are as accurate as possible and should use multiple approaches if necessary to determine these amounts. We expect that as we assign these amounts, lessons will be learned about Best Practices. We will need flexibility to adopt these as they emerge.

Related Transferor

The work that has done on the related transferor issues are particularly important in Ontario where so many of the Great Lake watersheds are in close proximity, there is more opportunity for diversions and transfers of return flows and wastewater. CELA agrees that the PTTW should be amended to capture and assign responsibilities to related transferors. This will go a long way to assist the primary withdrawer in understanding the fate of the water they are distributing as well as assign responsibility to the actual user. We would recommend that the related user be required to report to both the MOE as well as to the original transferor. The increased understanding this will foster might greatly assist municipalities in capturing the costs of their services to actual users. Reporting of return flows should be a key part of the reporting required. We agree that the Director should have the authority to amend approvals related to the new or increased transfer and where there is a conflict provide the most protective term and condition. A blended but prescriptive approach focusing on a water balance will be necessary. However as we have already recommended growth allowances should not be assumed until it can be demonstrated that they are sustainable.

- **Connecting Channels**

CELA has considered the identification of connecting channels for the purposes of evaluating intra-Basin transfers and have concluded that the St. Lawrence River should be included in the considerations as a connecting channel because there is potential to take water from Lake Ontario and return it to a downstream portion of the River. This approach would not exclude the downstream users in Ontario and Quebec from seeking the same remedies as others downstream from significant takings. This would not override the recognition that the River is also a watershed within the Basin.

While federal navigable waterways are exempt from this Agreement for constitutional reasons we would expect that the Welland Canal and the Trent-Severn waterways would not become vectors for increased transfers between watersheds because the IJC has raised concerns about the impacts of diversions on the Great Lakes watersheds and favours a watershed approach for water management in the Great Lakes protection. There is a lot of public concern right now about the weakening of provisions of the *Navigable Waters Act* for environmental assessment of projects. The Federal Government has prohibited bulk water exports in their *Boundary Waters Treaty Act*. Discussions should be held with the Federal government to review what potential remains for Intra-Basin diversions, transfers or consumptive uses in federal waters of the Great Lakes-St. Lawrence River Basin. The recent exemption from posting their PTTW on the EBR given to Detroit for a historic withdrawal granted by the Federal Government from Canadian waters illustrates this potential.

Ontario's decision on this issue has the potential to show leadership on a significant issue that negotiators of the Agreement and Compact may not have understood or anticipated. Ontario's examination has determined several intra-basin transfers that already exist. In our opinion all new and increased intra-basin diversion and transfer requests should be considered and scrutinised as **diversions** for their potential to cause equivalent harm to the parts of the system deprived of the flows diverted. We presume that the degree, nature and potential for harm will increase as the distance between the withdrawal and discharge locations increases. This makes it prudent to assure that we start to build a process that will prevent these diversions between basins, mandate return flow close to the source of the intake and study impacts of existing and new proposals to move water between Basins. It would be a mistake to exempt upcoming proposals for intra-basin diversions/transfers from the full scrutiny of the Regional Body. CELA hopes that the requirement of return flow so fundamental to the protection of the Great Lakes ecosystem is pursued rigorously in Ontario at the outset. We are dismayed to discover that achieving this rests on an interpretation of and acceptance of the definition of connecting channels.

1. CELA strongly recommends that Ontario refine the definition of connecting channel for the purposes of evaluating proposals for new or increased diversions, consumptive uses or withdrawals in Ontario. This definition should be based on hydrology and flows through the ecosystem. Priority should be given to options that maintain rather than detract from those flows. For this

reason we favour **Option 2 Only including upstream connecting channels in each Great Lake Watershed.**

2. Additionally CELA recommends that Ontario make representations to the Regional Body and to States that might have enshrined another approach in their legislation to refine their definitions in formal amendments to the Compact and the Agreement to State and Provincial legislation so that we can have a consistent approach Basin-wide. Ontario should be congratulated for identifying and publicly discussing stricter protections for proposals that are most likely to originate within their boundaries.
3. The issue of return flow to a tributary that flows to a connecting channel is a challenge. To determine our position we considered how we would want to see the current London diversion evaluated. We would want the cumulative impacts of their two withdrawals from Erie and Huron to be evaluated with the needs to return the flows as close as possible to the point of withdrawal to avoid impacts of loss of flows to the system. More likely than not these return flows will be waste water and will have greater impacts on tributaries than on larger connecting channels and individual Lake watersheds. For these reasons we prefer the third option which discourages return flow to a tributary to a watershed of a connecting channel.
4. Travel time from the point of taking to the point of return should be a factor in deciding the degree of harm that could occur.
5. Ontario should make special representation to Michigan and other States who might discover they have similar transfer opportunities to consider closing this loophole.

- **Technical Bulletin**

CELA has made previous submissions on our preference for a short moratorium on any Ontario proposals for intra-basin transfers and diversions in this interim period to allow for the full development of new regulations to implement the *Great Lakes St. Lawrence River Basin Sustainable Water Resources Agreement*. We feel that the full scope of the Agreement including Ontario's new conservation strategy should be operable before all large withdrawals, diversions and consumptive use proposals over trigger levels are considered. The delay of a few years should not be that significant. In this interval these municipalities could get started on extending supplies through conservation practices. We appreciate that this Technical Bulletin informs Municipalities of the current expectations under the Great Lakes Charter as well as the process under development in regards to the Agreement. It has sparked interest in this consultation from areas where such proposals are under consideration like London, Collingwood and Kitchener-Waterloo. While the York Region proposal's Environmental Assessment is already well underway, we have all benefited from their participation in the Annex Advisory Panel dialogue and they are making efforts to comply with the spirit of the Agreement.

We were glad to see that the Ontario Government is already seizing opportunities to insert Agreement implementation into new legislation in their recent Bill 150 *Green*

Energy Act by prohibiting energy projects from transferring water from the three watersheds in the Province.

Regulating new and increased transfers

- **Regional Review Process**

During Annex negotiations, CELA was on an Advisory Panel to the Council of Great Lakes Governors and in that capacity was involved in a number of discussions on the Regional Review Process. As well, we worked closely on submissions with our US counterparts and gained an appreciation of the differences in our systems that led to there being two separate documents the Agreement and the Compact. One thing we hope for is that despite our different systems that there will be equitable public access to decision-making. We have concluded that the opportunities for public involvement may come at different junctures in the process for Ontarians.

Our primary opportunity for input in the process outlined in the diagram on page 5 is at the time that Ontario does its Technical Review of applications that originate in Ontario.

It is less clear if and how Ontarians could be involved in Ontario applications once they go to the Regional Body and after the Regional Body makes its Declaration of Findings.

It is also unclear how effectively Ontarians can be involved in decision-making on applications originating in other Great Lakes jurisdictions. This was made abundantly clear when Ontario negotiators sought to have more influence over the most prominent diversion in the Great Lakes, the Chicago Diversion. This diversion has been exempted from both Agreements because it is regulated by the US Supreme Court. It is unlikely that the US Supreme Court would give Ontario standing in future matters considering this diversion. The outcome of the discussions of Ontario's role was inconclusive. US members of the Regional Body did state they would endeavour to represent Ontario's interests in US courts.

Conversely, Ontario will need to consider how other Great Lakes jurisdictions and the public from other jurisdictions can be involved in Ontario's process at an appropriate time to make submissions on proposals that will go to review. How and when others will be given notice of these projects will be important.

Once a project goes to Regional Review public written comments will be considered in that review. The other avenue for input from the Ontario public to that review would be to continue to involve the Province's Annex Advisory Panel (AAP). The Panel could work through positions that Ontario takes on the Regional Review of those projects prior to each review. This forum was very effective during the negotiation of these Agreements. However, the Regional Body has chosen a consensus building process for decision making on applications. This means that their review of projects will involve negotiations. This may make it difficult for the Ontario representatives to use their AAP once they have commenced those review sessions. It is still unclear what

timetables will be set for regional review and how this could influence public participation.

Under the US compact any person has the right to appeal a Compact Council decision or to ask for judicial review in US District Courts. There are **not** parallel powers in the Agreement to seek legal remedies on a decision made by the Regional Body. It is also unpredictable whether Ontario would ever be granted standing in US courts if they were to voice similar objections.

All of these matters of access of the government and of the public in the Great Lakes to the full application review and Regional Review decision-making are critical. Those participating in the drafting of Regional Review Procedures should try to give as broad access at all stages of consideration when possible.

Questions Immediate and Critical Priorities

Coming into Effect

CELA raised the concern during the consultation that we do not yet know the timetables (see page 7) for key implementation commitments because the date that commitments come into effect is “after the last Party notifies others that measures are in place.” Quebec’s legislation has been delayed and needs to be reintroduced because of their election. That legislation is omnibus legislation and includes other water measures other than implementation of the Agreement. Not knowing their legislative schedule is making it difficult to work to Agreement timetables for regulations. Ontario agreed to make efforts to determine when this might occur. We are concerned that we might lose momentum if there is too much delay.

Regional Procedures

The Regional Procedures Committee needs to map the stages where the public can have access to review of proposals within their jurisdictions and in decisions in other jurisdictions. They need to scope their own procedures and timetables for Regional Review and the mechanisms they will utilise to resolve disputes and reach consensus. They will need to determine procedures if they do not reach consensus. Good educational materials will be needed to inform applicants, governments and the public of key opportunities to access decision-making.

Standing Advisory Committee to the Regional Body

CELA supports that this Committee be renewed. It will be important to continue to engage sectors involved in the previous Advisory Committee for continuity. However, we would like to see some more balance of interests reflected on this Committee. It is difficult to balance Canadian and American interests because there are 8 States and 2 Provinces. That has meant that there is a concentration of large US industrial associations on the Advisory Committee. We would hope to see at least one equivalent Canadian representative. Much of the Agreement and Compact implementation falls on municipalities. For that reason CELA would like to see

municipal leaders have a place on this committee. This could be accomplished if the Great Lakes Cities Initiative moved from being observers to participants.

The Tribes and First Nations should determine how they wish to be engaged. We have always asked that they be part of this Committee from the onset and would certainly welcome their voice around the table. Perhaps they could continue to have a parallel process and participate here as well. Now that we are enshrining practices and proposals which will impact generations to come, their wisdom is needed.

We think that the Ontario representatives on the Regional Advisory Committee should report back to their Annex Advisory Panel and in turn take the Panel's advice back to the Regional Advisory Committee where possible.

Draft Procedural Manual

CELA always regretted that the Draft Procedural Manual was not carried forward with the Agreements after they were released. The Manual was a part of the package released with the first draft of the Agreement. This manual was drafted and based on a considerable amount of work that was done by the Great Lakes Commission (GLC) and by other studies sponsored by the Great Lakes Protection Fund to support decision-making. CELA was involved in some of that work with the GLC and found that the detail and specificity of this work was very helpful in framing the next steps to implement the Agreement and Compact recommendations in practical programs. CELA recommends that Ontario encourage the Regional Body to use this manual in their implementation process and evaluation of proposals. This might result in a more harmonised system basin-wide.

- **How to apply the exception criteria**

No one existing process in Ontario is adequate to address the full scope, alternatives to and the individual and cumulative impacts of exception proposals at the appropriate scale. The process selected will need to be as thorough and transparent as possible and allow for full public participation. Timing, scoping, proposal scale, and public participation all have to be factors in determining how to apply the exception criteria.

Questions

Process Options for Individual and Cumulative Impacts

CELA recommends OPTION 2 for both individual and cumulative impacts because it allows us to improve existing instruments to address new requirements in ways that will improve Ontario's water management regime and our own understanding of water use.

Additional Requirements

A means to determine and evaluate return flow applicability to proponents that request an exception should be developed in the PTTW. The cost recovery for return flow infrastructure will become more feasible if it is projected over a longer timeframe.

Cumulative impact assessments should be required on a sub-watershed, watershed and basin scale.

Conservation Options

Questions

1. CELA supports the principle that water conservation requirements for **new or increased** transfers should go beyond the Ontario Conservation and Efficiency Strategy.
2. While it is difficult to determine now if Ontario's pending Conservation Strategy will have adequate measures for existing transfers, CELA recommends that these users be asked to demonstrate how their historic transfers measure up to the current tests for new transfers. This should include requirements to carry out conservation planning, measure actual return flow, environmental harm and economic feasibility not only of infrastructure cost but of harm as well. Some cumulative assessments should be done to combine historical with increased requests for transfers. Proponents should be asked to determine economic feasibility over a longer timeframe so they can determine if their infrastructure investments are sustainable.
3. All options suggested should be used in combination.

- **When to apply the exception criteria**

Options page 10

CELA prefers Option 2, requiring the PTTW application for new or increased applications before the Class EA. We would suggest that all permit applications for municipal and other takings over Agreement thresholds be subject to all Part II requirements of the EBR.

Options page 14

CELA prefers Option 2 because the water evaluations under the PTTW evaluation occur earlier in the process. An early notification is given to the Regional Body. There also needs to be a way to broadly notify others in the Great Lakes that might want to have input on a proposal in Ontario early on in the consideration process.

Ensuring adequate public notification of applications

Prior notice EBR Posting of Permits to Take Water for Agriculture

CELA has found the issues pertaining to agriculture in the Agreement and the Compact very challenging because they do not easily fit into solutions and requirements for other sectors. Agricultural use for irrigation is seasonal and confined to 90 days of the growing season in the Great Lakes. Approvals threaten delays that could result in the loss of whole growing seasons with serious economic consequences for farmers.

Many of the stresses and perceived continental threats to the Great Lakes come from presumptions that we can always move water to grow crops in more arid areas. If logic prevailed, this assumption would be derailed and food would be grown closer to water supplies. This shift could lead to growth in food production and the agricultural

economy in the Great Lakes. Many consumers are now also endeavouring to buy their food locally so Great Lakes farmers will likely be serving more local markets. These trends are both more sustainable. Few individual agricultural proposals in Ontario would trigger Agreement thresholds. However, in the interest of efficiency and conservation some farm operations are banding together to create cooperative irrigation systems that could draw water volumes larger than Agreement thresholds. One such system in the tender fruit lands of the Niagara Region endeavoured to respond to the expectations of the Agreement by responding to all of the criteria with costly technical studies. The time it took to do these studies led to delays that meant this cooperative lost funding from the Federal Government to assist in the construction of their system. This was a regrettable outcome since their efforts were being made to achieve conservation.

CELA recommends that all of the provisions of the Agreement and other recent water requirements arising from Source Protection and other water management environmental requirements for farms be integrated in a way that makes water management requirements transparent and achievable for farmers. Not having to report on these requirements piecemeal but in one report would be one way there could be integration and time savings for farmers.

Questions: Page 10

While we are uncomfortable in giving one sector exemption from appeal, we do think steps should be taken to ensure that agricultural permits are submitted well in advance of growing seasons so that all approvals including appeals are dealt with prior to the growing season. Perhaps a special timeframe for Agricultural permit applications, postings to the EBR and response deadlines and appeals could be set out. Some means should be considered to ensure that there are the resources to meet deadlines for agriculture.

Please feel free to contact us if any of our comments need clarification. Thank you for the opportunity to be part of this consultation.

Yours truly,
Canadian Environmental Law Association

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