



December 10, 2010

Amanda Warren
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Great Lakes & Water Policy Section
Ministry of Natural Resources
300 Water Street
Peterborough, Ontario K9J 8M5

RE: Technical Guidelines and Requirements for Approval under the *Lakes and Rivers Improvement Act* (EBR #011-1306)

Dear Ms. Warren,

Thank you for the opportunity to provide comments regarding the draft Technical Guidelines and Requirements for Approval under the *Lakes and Rivers Improvement Act* (draft LRIA guidelines). The attached comments are submitted for consideration by the Ministry of Natural Resources (MNR) on behalf of Conservation Ontario, which is the network of Ontario's 36 conservation authorities. Conservation authorities (CAs) administer regulations made under Section 28 of the *Conservation Authorities Act* that require permits for the construction of new dams, and collectively are one of the largest owners of dam infrastructure in the Province. The draft LRIA guidelines are therefore of great interest to CAs.

The development and implementation of updated LRIA guidelines is strongly supported; MNR is encouraged to finalize and advance this significant body of work. The LRIA guidelines will offer CAs, as dam owners, the policy certainty necessary to support investment in upgrades to improve the safety of dams.

It is noted that Joe Farwell, Chief Administrative Officer, Grand River Conservation Authority, has represented Conservation Ontario on the LRIA Advisory Panel since 2006. Conservation Ontario looks forward to participating in the development of an implementation strategy for these guidelines.

Two attachments accompany this letter: Attachment 1 outlines Conservation Ontario's comments regarding the draft LRIA guidelines; Attachment 2 recommends considerations regarding future actions to implement the guidelines. These comments and recommendations were endorsed by Conservation Ontario Council on December 6, 2010.

Thank you again for the opportunity to provide comments on the Technical Guidelines and Requirements for Approval under the *Lakes and Rivers Improvement Act* (EBR #011-1306). If you have any questions regarding these comments please contact Bonnie Fox, Manager, Policy & Planning at (905) 895-0716 ext. 223, or Natasha Leahy at ext. 228.

Sincerely,

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Don Pearson
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c.c. CA GMs/CAOs

Liz Mikel, Policy and Program Advisor, Biodiversity Branch, MNR
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Attachment 1

Comments regarding the Draft LRIA Technical Guidelines

The following comments are provided in response to the draft LRIA guidelines for MNR's consideration. General comments about the draft LRIA guidelines are presented, followed by specific comments regarding each volume.

Where specific wording has been recommended, suggested additions are bolded (**bolded**) and suggested deletions are identified with strikethroughs (~~strikethroughs~~).

General Comments

1. Section 1 of the LRIA defines a dam as “*a structure or work forwarding, holding back or diverting water and includes a dam, tailings dam, dike, diversion, channel alteration, artificial channel, culvert or causeway*”. Section 2(1)(a) of O.Reg 454/96, made under the LRIA, states that an LRIA approval is only applied to “*construct or decommission a dam that holds back water in a river, lake, pond or stream to raise the water level, create a reservoir to control flooding or divert the flow of water.*” It is understood that the application of the LRIA guidelines is therefore restricted by that definition.

Many CAs own dikes that function as a dam as per Section 2(1)(a) of O.Reg 454/96. and it is therefore of concern that the guidelines do not clarify if or how they are to be applied to these structures. In contrast, specific guidance has been included regarding most other structures listed under Section 1 of the LRIA that also require approval under O.Reg 454/96 (e.g. culverts, causeways).

It is recommended that MNR provide clarity to the LRIA requirements as to whether they apply to dikes and under what circumstances.

2. Please ensure any references to the “Conservation Authority Act” are amended to *Conservation Authorities Act* (e.g. Table 2-4).
3. It is requested that information provided throughout the guidelines about CA regulations made under Section 28 of the *Conservation Authorities Act* be reviewed and corrected/updated as required.

Many of the volumes refer to CA regulations as the “Fill, Construction and Alteration to Waterways” Regulation; however, these regulations were replaced in 2006 by the current “Development, Interference with Wetlands and Alterations to Shorelines and Watercourses” Regulations. Please correct these outdated references throughout the document.

Similarly, O.Reg 97/04 made under the *Conservation Authorities Act* is referred to throughout the guidelines as the “generic regulation”; please change these references to the correct title, which is the “content regulation”.

The following information about the regulations is provided for the benefit of those writing the guidelines to use as a basis to clarify the information about CAs' regulatory authority throughout the guidelines. The writers are invited to provide draft wording about CA legislation and regulations to Conservation Ontario to review prior to finalizing the guidelines, or are encouraged to consult with MNR's conservation authority policy staff.

The Conservation Authorities Act is administered by the MNR. There are 36 Conservation Authorities across Ontario.

In 1998, the Conservation Authorities Act was amended as part of the Red Tape Reduction Act (Bill 25), to ensure that Regulations under the Act were consistent across the province and complementary to provincial policies. Revisions were made to Section 28, which led to the replacement of the “Fill, Construction and Alteration to Waterways” Regulation with the current “Development, Interference with Wetlands and Alterations to Shorelines and Watercourses” Regulation.

The current individual CA regulations were approved by the Minister of Natural Resources in 2006 and are consistent with Ontario Regulation 97/04 (the “Content” regulation). Through these regulations, CAs are empowered 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 ensure conformity of wording across all CAs and 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.

4. Further to the comment above, it is of concern that the document fails to identify relevant areas of CA jurisdiction and CA regulatory responsibilities. The guidelines should clearly state the all CAs have individual regulations under Section 28 of the *Conservation Authorities Act*, the extent of CAs’ regulated areas and what activities are regulated.
5. O.Reg 454/96 as amended by O.Reg 160/07 states that LRIA approval will be needed for dams only in areas that are regulated by CAs, while all other activities (watercourse crossings, enclosures, channelization) do not require LRIA approval. It is recommended that the relationship between the LRIA regulations and the *Conservation Authorities Act* be clarified accordingly throughout the guidelines (e.g. Volume 2, Sections 2.1 and 2.2).
6. Dams approved under Section 24 of the *Conservation Authorities Act* do not require LRIA approval. It is requested that clarification be added to the document specifying whether these dams would be subject to the LRIA technical guidelines.

Volume 1 – General

7. Neither of the 2006 directives WR3.03.05.04 (Interim Policy for Administration of O.Reg. 454/96 within Conservation Authority Regulated Areas) and WR4.03.05.04 (Interim Procedure for Administration of O.Reg 454/96 within Conservation Authority Regulated Areas) concerning reduction in duplication of approvals in areas where CAs have regulations have been referenced in the draft. Clarification is requested as to how the interim policy and procedure will be applied or dealt with following the approval of the updated guidelines.
8. 1.2 (The Lakes and Rivers Improvement Act): According to Section 2(1)(a)(iv) of O.Reg 454/96, LRIA approval is required for installations with some exceptions. One of these exceptions is the installation of heat loops for private residences. Section 1.2 of the guidelines states that “Ontario Regulation 454/96 and further defines the types of structures or works requiring approval...to include...private heat loops”. Please ensure this statement is consistent with O.Reg 454/96 and clarify that heat loops for private residences do not require LRIA approval.

9. 1.3 (Roles and Responsibilities): It is recommended that this section be updated and clarified relative to the role CAs play in regulating and permitting structures such as crossings, channelizations, enclosures, pipelines, etc. In 2007, through regulation, MNR withdrew from regulating/permitting these structures where CAs regulate these activities under *Conservation Authorities Act* Section 28 regulations in order to reduce duplication in the form of government regulation. Volume 1 of the technical guidelines does not refer to the linkage between regulations made under Section 28 of the *Conservation Authorities Act* and the LRIA. It is recommended that the roles of CAs outlined in Section 1.3.2 (Other Provincial Ministries & Agencies & Other Levels of Government) be expanded or clarified with respect to structures that affect the forwarding of water for which CAs have a regulatory role (channels, crossings, enclosures, etc.) that are addressed in Volume 2.

It is suggested that the wording found in this section be revised as follows. The proposed next text is taken directly from MNR's Approval and Permitting Requirements Document for Renewable Energy Projects (2009):

~~**Conservation Authorities (CAs)** are authorized by the *Conservation Authorities Act* to undertake programs to further conservation, restoration, development and management of natural resources on a watershed basis. CAs issue permits for fill, construction and alteration to waterways within their jurisdiction and also administer generic regulations.~~

Conservation Authorities (CAs): The *Conservation Authorities Act* is administered by the MNR. There are 36 CAs across Ontario.

Under the *Conservation Authorities Act* Section 28, the “Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Regulation”, CAs regulate development and other activities within their areas of jurisdiction (river and stream valleys, Great Lakes and large inland lake shorelines, hazardous lands, watercourses and wetlands).

Permission of the local CA is required for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland. Permission may be granted, with or without conditions, for development or other activities if in the opinion of the CA, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land is not affected by the development or activity.

10. 1.5 (Other Key Documents): It is recommended that the list of additional reference documents be expanded to include guidance documents related to Provincially Significant Wetlands (PSWs), as well as MNR's Significant Wildlife Habitat Technical Guide (2000) and *Endangered Species Act, 2007* recovery strategies.
11. 2.2.3 (Channelization in River Channels) and Table 1-6 (Channelization: Types of Works Not Requiring LRIA Approval): Table 1-6 notes that maintenance dredging is exempt from requiring LRIA approval. The period between dredging that would classify it as maintenance should be defined. Also, direction should be provided regarding considerations should landowners change.
12. Table 1-10 (Municipal Drains: Types of Works Requiring LRIA Approval): Clarity is requested regarding whether a private culvert that is being installed on a municipal drain would be subject to the LRIA.

Volume 2 – Water Crossings, Channelizations, Enclosures, Pipelines, and Cables

13. CAs also review crossings and need to address emergency access both for residents and emergency vehicles. It is recommended that MNR harmonize direction regarding safe ingress and egress with CA requirements under their Section 28 regulations, in order to ensure a consistent approach to this safety concern is put forth by the draft LRIA guidelines.
14. The document makes references to fluvial geomorphological assessments in several locations. Similar to MNR's requirements for certain submissions to be completed by a professional engineer (P.Eng), MNR may also wish to consider when they will require these types of assessments to be completed by a professional geoscientist (P.Geo) in accordance with the *Professional Geoscientists Act*, and whether a submission from a P.Geo. would be accepted instead of a P.Eng for areas of practice that could fall under both the *Professional Geoscientist* and *Professional Engineer Acts*.
15. The document makes numerous references to the use of riprap, however in many watersheds CAs often request alternative types of stone (e.g. river stone) for ecological reasons. It is recommended that the guidance regarding erosion control be expanded to include other types of soil coverings.
16. 2.3.2 (Design Floods): This section is somewhat outdated as it refers to the design of crossings only needing to address the impacts of the Regulatory storm if upstream development is scheduled within 20 years. It is suggested that the impacts (i.e. raising of flood levels) of the Regulatory storm must always be considered when designing a watercourse crossing.
17. 2.3.3 (Design Considerations) and 3.4.2 (Design Considerations for Pipelines, Water Intakes and Cables): Consideration should be given under these sections for the design of a master crossing which could accommodate all the possible types of infrastructure crossings (i.e. water, sanitary, bell, cable, gas, utility, etc., as well as pedestrian and vehicular) such that the need for future disturbance to the bed and banks are reduced.
18. 3.3.12 (By-Pass Ponds):
 - a. The discouragement of on-line ponds is supported. However, it is recommended that this direction be extended to by-pass ponds. This section states that "Generally the project should be designed so that no more than 1/3 of the natural stream flow can be diverted through the by-pass pond at any time". This direction raises concerns, as it could result in a harmful alteration, disruption or destruction (HADD) to fish habitat. The Ministry of the Environment's Permit to Take Water guidelines look at much lower levels such as 10% baseflow and only when flows exceed baseflow levels. It is recommended that the draft LRIA guidelines simply state that on-line and by-pass ponds are discouraged.
 - b. Concerns are also raised regarding the operation of valves and diversions by the landowner as there is no guarantee that such operations will be followed, nor can they be enforced. Fixed weirs that only allow diversions at higher streamflows have been supported.
 - c. Bottom draws should only be promoted if they are first shown to be feasible based on residency time of a pond and relative to stream inputs. It is noted that thermal impacts are not just related to coldwater streams as both coolwater (including Redside Dace) and warmwater communities also have thermal thresholds that are directly related to dissolved oxygen requirements.

19. 5.2 (Assessment of Upstream and Downstream Impacts within the Zone of Influence): It is recommended that the list of considerations staff should take into account when reviewing an application be expanded to include hydrogeological impacts.
20. 5.2.7 (Aquatic Ecosystem): Please amend the text as follows:
- Referral of LRIA Applications to DFO*
(2nd paragraph) To further improve client services in Ontario, DFO has signed agreements with many Conservation Authorities to undertake review of project proposals under Section 35 of the *Fisheries Act*. **These agreements do not obligate CAs to review LRIA applications in relation to the *Fisheries Act*.**
21. 5.2.6 (CA Generic Regulations): Please see comment #3 above.
22. 5.2.8 (Wildlife and Wildlife Habitat): Emphasis should also be placed on the protection of riparian areas as corridors for both animal and plant migration in the context of Natural Heritage System connectivity and not just the perspective of significant habitats.
23. 5.2.10 (Wetlands):
- a. The Provincial Policy Statement, 2005 (PPS), provides further guidance for the protection of PSWs, including defining negative impacts in regard to water policies, degradation to the quality and quantity of water, sensitive surface water and groundwater features and their related functions due to single, multiple or successive development or site alteration activities.
 - b. The issue of wetlands created by impoundments needs to be addressed either here or under Volume 5 (Dam Removal and Decommissioning). Decisions might be considered to restore/ improve or achieve a net benefit to the ecological integrity of a valley, riparian ecosystem including downstream wetlands and fish habitat with some negative impacts to onsite wetlands created or associated with dams.
24. Table 2.1 (MNR Minimum Design Floods for Road Crossings): This is the design table generally used by the Ministry of Transportation (2001) and does not require flood-free access during the Regulatory storm (greater of 100 year and Regional storm). It is recommended that MNR consider updating this table to require flood-free access when designing new road crossings, recognizing that alternative design standards may be needed based on project type (e.g. maintenance/repairs, reconstruction, upgrade, etc.). These improved standards are generally an effort to prevent risk to loss of life and minimize damage consistent with the Province's key goals of prevention, protection and emergency response.

Volume 3 – Life Cycle Management of Dams

25. It is recognized and appreciated that a consistent approach has been offered to determine a risk to life based on a depth and velocity relationship around a residence, as well as greater conformity with the Canadian Dam Association (CDA) guidelines in hazard classification.
26. It is recommended that a summary of the documentation requirements for dams be included in the draft LRIA guidelines. It appears that potentially a dam owner will require a Dam Safety Review, an Emergency Preparedness Plan, a Dam Safety Management Plan, a Public Safety Assessment and a Public Safety Measures Plan. It would be helpful to have a summary chart for reference that links all requirements in relation to where they apply, how often they need to be updated and how they are inter-related.

27. The proposed dam safety guidelines contain changes to hazard categories and criteria for the categories. There will be many dam safety studies completed that will not conform to these categories. MNR is requested to state whether it anticipates a phase-in period where structures classified and reviews completed under the 1999 draft LRIA guidelines can remain valid until the updated dam safety reviews are completed. For instance, a High Hazard dam classified under 1999 guidelines and reviewed in 2010 would be due for review in 2017.
28. 10.3.2 (External Notification Contact Lists) and 10.3.4 (Expected Roles During An Emergency): The Privacy Laws may prohibit the publication and distribution of information as suggested in Sections 10.3.2 and 10.3.4. It is recommended that guidance be added to the document to address this issue.
29. 13.0 (Dam Registry):
- a. Section 13.0 states that “Dam owners subject to provincial requirements must provide owner and dam related information to the DRS.” This statement suggests that if a dam does not require LRIA approval the dam owner is not required to submit information to the registry. For the safety of all on the river and to ensure appropriate environmental management of the watershed, it is recommended that all owners of dams as defined under the LRIA should be required to provide information to the DRS. At minimum, major dams should be reported on through the registry in order to assess potential cumulative impacts. This would provide an opportunity to address dam issues related to aging infrastructure and climate change impacts, as well as restoration goals in fisheries management plans and sub/watershed plans across the province. It is recommended that MNR contact all known owners of major dams directly to request this information.
 - b. CAs maintain updated information on their dams in the Water and Erosion Control Infrastructure (WECI) database. This database is provided to MNR for their use. The WECI database contains static information about the dams such as dam type, height and controls and it tracks all funded studies, major maintenance, dam safety reviews and hazard classification as well as consequences of failure. MNR is asked to clarify whether this information must be duplicated in an MNR database or whether the WECI database can be readable by the MNR database.
30. 14.2.7 (Fill, Construction and Alteration to Water Crossings and Channelizations):
- a. Please correct the reference number for this section. According to the Table of Contents it is 14.2.8, but within the body of the document it is listed as 14.2.7.
 - b. It is unclear whether this section is referencing CA regulations, or whether the title is simply referring to the subject matter. If MNR’s intent is the former, please ensure this reference is updated to the name of CAs’ current regulations under Section 28 of the *Conservation Authorities Act*, the individual “Development, Interference with Wetlands and Alterations to Shorelines and Watercourses” Regulations.
 - c. To clarify this section, please revise the first paragraph as follows:

~~Many Ontario’s Conservation Authorities (CAs) have regulations under the Conservation Authorities Act (CAA) which require persons proposing to undertake a regulated activity within a regulated area place fill in a regulated area, construct a structure (including a dam) in a flood plain, or alter a watercourse, to first obtain a permit under that regulation. Regulated areas include lands in or adjacent to river or stream valleys, Great Lakes and large inland lakes shorelines, watercourses, 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. CAs 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. The definition of “development” under the CAA includes the temporary or permanent placement of fill and the construction of structures (including dams).

- d. It is recommended that the timelines stated within this section be vetted with MNR’s CA policy staff to ensure they are not contradictory to MNR’s “Policies and Procedures for CA Plan Review and Permitting Activities” (2010).
31. 14.5.4 (Referral of LRIA Applications to DFO): This section states “It is recommended that DFO/CA and MNR staff work together to ensure than any fish habitat concerns that may affect fisheries management objectives are identified during review under the Fisheries Act.” CAs typically do not circulate MNR on the reviews they conduct under their DFO agreement, unless it is a contentious file that MNR may have an interest in (which occurs very rarely).
32. 14.8 (Assessment of Wetlands):
- a. As above, please review the reference number for this section and all the sections that follow it.
 - b. It is recommended that readers be referred to wetland guidelines and policies such as the PPS for further guidance regarding water policies, degradation to the quality and quantity of water, sensitive surface water and groundwater features and their related functions due to single, multiple or successive development or site alteration activities.
 - c. The issue of wetlands created by impoundments needs to be addressed either here or as part of the dam decommissioning section of the guidelines (i.e. Volume 5). Decisions might be considered to restore/ improve or achieve a net benefit to the ecological integrity of a valley, riparian ecosystem including downstream wetlands and fish habitat with some negative impacts to onsite wetlands created or associated with dams.
33. Table 3-2 (Range of Minimum Inflow Design Floods) shows the minimum Inflow Design Flood (IDF) and Table 3-12 (Annual Probabilities between Dam Safety Reviews) shows the maximum IDF. It is recommended that Table 3-12 be revised to state that the Moderate Hazard Potential Classification (HPC) is the 1 in 1000 year or Regional Flood (RF), whichever is greater, and a High HPC is defined as 1/2 between the 1000 year and Probable Maximum Flood (PMF). Whereas the upper limit for High Hazard Potential Classification (HPC) is 1/3 between the 1000 year and the PMF in Table 3-2, in Table 3-12 this limit is 1/2 between the 100 year flood and the PMF. MNR is asked to revisit the HPCs found in these tables, as it is believed they should be consistent.

Volume 4 – Public Safety Around Dams

34. The public safety assessments and measures plans will require some time and expense to produce. MNR is requested to consider providing a phase-in period for these requirements. For example, signage on some recently-produced CA dams follow a varying standard using red and yellow colouring, and to change them could entail significant additional cost.
35. This volume does not define “risk assessment” within the managed system approach. Risk assessment for dam safety has been covered in Volume 3 of the draft LRIA guidelines, but does not relate to specific risk assessments required for Public Safety Around Dams.

36. The guidelines refer to a Public Safety Measures Plan (PSMP). The PSMP contains more details than public safety 'measures', as it incorporates a managed system. It is therefore recommended that MNR consider renaming this as a "Public Safety Plan", such as it is referenced in the CDA Guidelines for Public Safety Around Dams, or as a "Public Safety Management Plan".
37. A large portion of Volume 4 focuses on what information to include in a PSMP and little information about how to conduct risk ratings during safety assessment. A sample risk assessment matrix would help the reader understand this process.
38. 3.2 (Assumptions for Public Safety Assessments): Winter activities (snowmobiling, ice fishing, ice skating, etc.) should be included in the public safety assessment as these activities may have potential risks associated with them, similar to the activities listed under bullet 3.
39. 4 (Public Safety Measures Plan): Please revisit and correct the heading numbers in this chapter.
40. 4.1.9 (Incident Reporting & Dam Registry): It is recommended that a sample Incident Reporting form be included in an appendix.
41. 4.2 (What Must the Public Safety Measures Plan Contain?): It is recommended that this section include Incident Reporting & Dam Registry in the list of components of a PSMP (as it is described in the following subheadings).
42. 5.3.1 (Signage): This section refers to signage (portage and danger signs) being located within the dam owner's property. This may not always be feasible as the dam owner may only own property directly abutting the dam. In many instances, signs and physical devices should be located a greater distance from the structure, notably for boaters. The dam owner should take reasonable steps to coordinate the location of physical devices/control measures with adjacent land owners.
43. 5.3.2 (Sirens and Warning Lights): This section discusses the use of sirens and warning lights to warn the public of an impending hazard. It is also important to install signs to inform the public of the meaning of the alerts and give direction as to how to appropriately respond. This is discussed briefly under Section 5.3.1 (Signage) but should be reiterated in 5.3.2.
44. 5.3.4 (Safety Booms and Buoys):
 - a. Under the "Approvals" heading, the last paragraph should indicate that approvals may be required by the local CA.
 - b. A statement regarding the use of "keep out" buoys should be included here to indicate that this control measure requires approval under the Vessel Operation Restrictions Regulations of the *Canada Shipping Act*.
45. Figure 4-1 (The Public Safety Wheel): This figure refers to *CDA Public Safety Around Dams Guidelines* as the source, however this has been removed from CDA Guidelines and another model is now being used.

Volume 5 – Dam Removal and Decommissioning

46. This volume is considered to be very well written.

Attachment 2

Considerations regarding the implementation of the LRIA Technical Guidelines

The following recommendations are provided for MNR's consideration, regarding additional considerations and future actions related to the implementation of the LRIA guidelines. These recommendations are not intended to delay the finalization or implementation of the LRIA guidelines.

1. Further to comment #1 in Attachment 1, as a separate exercise MNR is requested to develop standards and guidelines specific to the safe construction and management of dike systems and is encouraged to establish a dedicated working group to accomplish this. Further discussion and consideration is needed as to whether different standards and guidelines may be appropriate for different situations (e.g. shorelines of Great Lakes, connection channels, inland lakes, along inland watercourses). Standards are also important for secondary interior dikes not directly on shorelines, which may hold back water in the event of a failure of the primary dikes directly on the shorelines of water bodies. Standards should also be developed for dikes constructed under the *Drainage Act*, where public safety may be a substantial concern. Many CAs have a great deal of technical knowledge and experience in this area that may be of assistance to MNR; MNR is encouraged to engage Conservation Ontario in this working group.
2. Conservation Ontario looks forward to working with MNR to develop a long term strategy to respond to climate change and advance the implications of climate change in terms of dam safety. It is believed that the development of standards such as those outlined in the draft LRIA guidelines to address dam safety will assist Ontario in adapting to climate change.
3. The Minister is requested to continue to support the CA Water Erosion Control Infrastructure (WECI) program.
4. The updated draft LRIA guidelines include significant requirements for public safety assessments and management plans. The cost of implementing these assessments and plans are anticipated to be quite high, and will be quite financially burdensome for some CAs. Conservation Ontario looks forward to implementing the public safety measures and may look to MNR for additional funding to assist us in doing so through the WECI program.
5. It is recommended that consideration be given to the existing environmental impacts of some dams. As part of the implementation of the guidelines, MNR may wish to consider providing incentives to encourage the removal or upgrading of dams to mitigate these impacts.
6. These guidelines contain a large volume of information that dam owners will need to be aware of. It is therefore noted that a significant amount of outreach and training for dam owners will be required following the finalization of these guidelines. Conservation Ontario looks forward to working with MNR in this regard.
7. Further to #6 above, to implement the guidelines it is believed that an enhanced stewardship incentive program is needed (versus "guidance" under an approvals process), beginning with educating dam owners about their responsibilities and the risks that may be posed by their dams. Dam owners should also be made aware of a wide range of options for mitigation (e.g. bottom draws, fish ladders/ramps, bypass channels) and partial removal. To achieve this, MNR is encouraged to further explore partnerships with CAs and NGOs such as Ducks Unlimited Canada.
8. It is recommended that MNR share data collected through the dam registry related to flood management risks with CAs.