

Administrative Guide

LAKES AND RIVERS IMPROVEMENT ACT



**Ministry of Natural Resources and Forestry
2017**

The *Lakes and Rivers Improvement Act* (LRIA) provides the Minister of Natural Resources and Forestry with the legislative authority to govern the design, construction, operation, maintenance and safety of dams in Ontario.

The *Lakes and Rivers Improvement Act* Administrative Guide and supporting technical bulletins provide direction regarding the administration of the LRIA and the application review and approval process. All technical bulletins in this series must be read in conjunction with the overarching *Lakes and Rivers Improvement Act* Administrative Guide (2017).

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Lakes and Rivers Improvement Act Administrative Guide

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1.0 Introduction

1.1 Purpose of this Guide

The purpose of this Guide is to provide an overview of the *Lakes and Rivers Improvement Act* (LRIA), its application and the process for seeking Ministry of Natural Resources and Forestry (the Ministry) approval to construct, alter, improve or repair dam infrastructure in Ontario, including temporary dams and other works (e.g. water crossings, channelizations, enclosures, cables and pipelines) subject to LRIA approval.

In addition to this Guide, the Ministry also produces a companion series of LRIA technical bulletins and best management practices (refer to Section 1.2.1).

Direction provided in this Guide and technical bulletins outline how the Ministry considers applications for approval and how the Ministry provides for the purposes of the LRIA.

1.2 Lakes and Rivers Improvement Act

The LRIA is administered by the Ministry. The LRIA and associated Regulation (Ontario Regulation 454/96) can be downloaded in [English](#) or [French](#).

The purposes of the LRIA are to provide for the:

- a. management, protection, preservation and use of the waters of the lakes and rivers of Ontario and the land under them;
- b. protection and equitable exercise of public rights in or over the waters of the lakes and rivers of Ontario;
- c. protection of the interests of riparian owners;
- d. management, perpetuation and use of the fish, wildlife, and other natural resources dependent on the lakes and rivers;
- e. protection of the natural amenities of the lakes and rivers and their shores and banks; and
- f. protection of persons and of property by ensuring that dams are suitably located, constructed, operated and maintained and are of an appropriate nature with regard to the purposes of clauses (a) to (e).

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. Under LRIA Sections 14 and 16 no person shall construct, alter, improve or repair a dam in any lake or river in the circumstances set out in Ontario Regulation 454/96 without prior approval for the location of the dam and/or its plans and specifications.

Ontario Regulation 454/96 prescribes dams as requiring approval where they hold 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.

In addition to dams, the regulation also further defines other types of structures or works considered a dam under the LRIA (channelizations, water crossings, enclosures, and pipeline installations) and identifies circumstances in which such structures require approval.

1.2.1 Technical Bulletins and Best Management Practices

To support the administration of the LRIA, the Ministry produces a series of technical bulletins and best management practices. These documents contain a combination of mandatory requirements as well as technical guidance and best practices to inform application review and approval.

The following list of LRIA technical bulletins outline Ministry requirements for applicants seeking approval and provide guidance, standards and criteria for the location, design, construction, operation, decommissioning, removal, maintenance and safety of dams in Ontario:

1. Classification and Inflow Design Flood Criteria Technical Bulletin
2. Dam Decommissioning and Removal Technical Bulletin
3. Seismic Hazard Criteria, Assessment and Considerations Technical Bulletin
4. Structural Design and Factors of Safety Technical Bulletin
5. Spillway and Flood Control Structures Technical Bulletin
6. Geotechnical Design and Factors of Safety Technical Bulletin
7. Location Approval for Dams Technical Bulletin
8. Alterations, Improvements and Repairs to Existing Dams Technical Bulletin
9. Maintaining Water Management Plans Technical Bulletin

The Ministry has prepared LRIA best management practices to provide voluntary guidance to dam owners seeking to adopt industry recognized best practices for dam safety and public safety around dams. The following best management practices should be referenced for further information:

1. Public Safety Around Dams Best Management Practice
2. Dam Safety Reviews Best Management Practice

The guidance provided within the LRIA technical bulletins and best management practices is not intended to replace the professional practice and judgment of the design engineer. The primary responsibility for proper infrastructure design lies with the design engineer.

The Ministry may develop additional guidance as required to support the administration of the LRIA.

1.3 Roles and Responsibilities

1.3.1 Ministry of Natural Resources and Forestry

Lakes and Rivers Improvement Act

The Ministry is responsible for administering the LRIA and its associated regulations, which includes:

1. processing in a consistent manner, applications submitted under LRIA Section 14 or 16;
2. issuing or refusing approvals under LRIA Section 14, 16, 17.2 or 23.1;
3. undertaking educational initiatives to explain the purpose of the LRIA and its associated regulations; and
4. conducting periodic compliance monitoring (e.g. inspections, selective reviews and investigations) and enforcement (including Minister's Orders) to ensure the intent of the LRIA is being met.

Other Legislative Responsibilities

The Ministry also administers a number of other statutes that may be impacted by, or triggered as a result of, works proposed for LRIA approval. For example, an authorization may be required under the *Endangered Species Act*, where activities may negatively impact a species at risk and/or their habitat. Approval under the *Public Lands Act* may be required for works proposed on Crown lands. For works proposed within the Niagara Escarpment Planning Area, a development permit may be required from the Niagara Escarpment Commission. Consistent with the provisions of the *Niagara Escarpment Planning and Development Act*, Section 24 (3) requires that development permits be issued first, before any other permit is issued and that other permits must be consistent with the permit issued by the Niagara Escarpment Commission.

Environmental Assessment Act

Proponents of some projects may be subject to requirements established under the *Environmental Assessment Act* (EA Act). For example, a disposition of a Crown resource through a work permit or occupational authority under the *Public Lands Act*, is subject to the EA Act.

LRIA approvals are not a disposition of a Crown resource and do not trigger requirements established under the EA Act.

Applicants are responsible for understanding their EA Act obligations. For more information on the *Environmental Assessment Act*, visit <https://www.ontario.ca/page/environmental-assessments> or contact the Ministry of the Environment and Climate Change Environmental Approvals Branch or local office.

Statement of Environmental Values

Under Section 11 of the *Environmental Bill of Rights*, the Ministry is obliged to take every reasonable step to ensure that its Statement of Environmental Values is considered whenever decisions made by the Ministry might significantly affect the environment.

For more information of the Statement of Environmental Values, visit https://www.ebr.gov.on.ca/ERS-WEB-External/content/index2.jsp?f0=aboutTheRegistry.statement&f1=aboutTheRegistry.statement.value&menuIndex=0_3&language=en

1.3.2 Other Provincial Ministries, Agencies and Federal Departments

There are a number of provincial ministries, federal departments and agencies which administer statute laws, regulations, and policy that have a bearing on the management of water resources including, but not limited to:

1. **Ministry of Agriculture, Food and Rural Affairs** is responsible for preserving prime agricultural land, ensuring sustainable water supplies for agricultural purposes and administering the *Drainage Act*.
2. **Ministry of Tourism, Culture and Sport** has a legislated mandate to protect Ontario's heritage.
3. **Ministry of Energy** is responsible for the development of sustainable renewable energy supplies including hydro-electric power.
4. **Ministry of the Environment and Climate Change (MOECC)** administers several pieces of legislation related to water resources. The *Ontario Water Resources Act* (OWRA) provides for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use, to promote Ontario's long term environmental, social and economic well-being. For example, requirements of the permit system for water takings are contained in the OWRA. The *Environmental Protection Act* regulates the discharge of contaminants and pollutants into the natural environment. The *Environmental Assessment Act* requires that proponents of major projects outline the details of the project and identify how construction, location and ultimate utilization will affect current and future uses of that area. The *Clean Water Act* takes a watershed based approach to protect existing and future sources of drinking water. The Ministry also maintains water related data and information such as: the Provincial Groundwater Monitoring Network, the Provincial Water Quality Monitoring Network, the Water Taking and Reporting System and water well records.

5. **Ministry of Municipal Affairs (MMA)** sets the broad policy, legislative and regulatory framework for the land use planning system in Ontario. The Ministry administers the *Planning Act*, the Provincial Policy Statement, 2014 (PPS, 2014) and provincial plans for specific geographic areas of the province (e.g. Greenbelt Plan, Oak Ridges Moraine Conservation Plan). The decisions of municipalities, and others, when exercising any authority that affects a planning matter, must be consistent with the PPS, 2014 and shall conform to or not conflict with provincial plans. The Ministry is generally the approval authority for single and upper-tier official plans to ensure that provincial interests are reflected in municipal planning documents and local land use planning decisions. Municipal official plans and zoning by-laws may be affected by proposed works under the LRIA. Under Order in Council 1157/2009, the Ministry is responsible for any emergency that requires the coordination of extraordinary provincial expenditures. MMA has two programs that may be activated in the event of a flood or other sudden, unexpected natural disaster: Municipal Disaster Recovery Assistance and Disaster Recovery Assistance for Ontarians. In addition, MMA administers the federal government's National Disaster Mitigation Program, which offers funding for flood mapping and flood mitigation projects.
6. **Ministry of Northern Development and Mines (MNDM)** administers the *Mining Act*. Under the *Mining Act*, MNDM regulates the rehabilitation and closure of mines and mine features, including tailings dams and other containment structures, all of which must meet the requirements of the Mine Rehabilitation Code of Ontario. The Ministry also has responsibility under Order-in-Council 1157/2009, issued pursuant to the *Emergency Management and Civil Protection Act* for abandoned mine hazard emergencies and provides support for provincial management of emergencies in Northern Ontario.
7. **Ministry of Transportation (MTO)** has a mandate relating to provincial highways (Kings or secondary highways). MTO reviews projects where water levels and flows may affect roadway crossings, bridges and culverts on provincial highways.

Other Agencies:

Conservation Authorities (CAs) are authorized under Section 28 of the *Conservation Authorities Act* to regulate certain activities within their areas of jurisdiction. 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 of the local CA is also required for development activities adjacent or close to shorelines of inland lakes and the Great Lakes-St. Lawrence River System and in other hazardous lands such as floodplains and river or stream valleys and slopes if in the opinion of the CA, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land may be affected.

Federal Departments:

1. **Parks Canada** has a legislated mandate to protect representative areas of national natural and cultural significance; Parks Canada approval may be required where works will take place on, or will affect lands owned by Parks Canada.
2. **Environment and Climate Change Canada** has responsibilities related to the *Canadian Environmental Assessment Act* and the *Canada Water Act*.
3. **Fisheries and Oceans Canada (DFO)** has specific responsibilities for the management and protection of fish and fish habitat. DFO's Fisheries Protection Program reviews project proposals in and around water under the *Fisheries Act* and the *Species at Risk Act (SARA)*.
4. **Transport Canada** is responsible for safeguarding the navigability of all waters through the *Navigation Protection Act* including: coastal and inland waterways, ensuring the safety of marine navigation and protection of the marine environment.

Others:

There are also a number of other agencies and departments at various levels of government whose mandates require the issuance of approvals and permits. It is the LRIA applicant's responsibility to be aware of these requirements and to secure the necessary authorization to proceed.

1.3.3 Owners of Infrastructure Subject to the LRIA

Owners of infrastructure are responsible for the safe management of their structures and for ensuring their structures remain in compliance with the LRIA, associated regulations and approvals issued there under. Dam owners may wish to consider adopting industry recognized best practices to contribute to safe dam management.

1.3.4 The Applicant

Applicants are required to comply with the requirements of the LRIA. Applicants are responsible for ensuring that information requested by the Ministry is provided in a timely manner, well in advance of any construction season. Applicants should contact the respective Ministry Office to discuss timing and the process for application review. Applicants are responsible for ensuring that their application is complete and that all supporting documentation has been provided.

The LRIA application, review and approval process may be integrated with other regulatory agency requirements. Applicants who are seeking approval must be aware of their obligations, as well as the mandate and responsibilities of any regulatory agencies involved. Approval under the LRIA does not relieve the applicant from compliance with the provisions of any other applicable federal, provincial, municipal, or other agency's

regulatory requirements. All efforts should be made by the applicant to coordinate information requirements so that the process is as efficient and as effective as possible.

Discovery of a Burial Site

Applicants should be aware of their obligations under the *Funeral, Burial and Cremation Services Act, 2002* (FBCSA) and Ontario Regulation 30/11 made under that Act, which set out the process for responding to a burial site discovery. A “burial site” means land containing human remains that is not a cemetery.

Should construction activity or any other actions uncover a burial site, any person discovering or having knowledge of the site must immediately notify the police or Coroner. Once the Coroner has declared that foul play is not suspected, the Coroner will ensure that the Registrar with responsibility for the burial site provisions of the FBCSA is notified. The Ministry of Natural Resources and Forestry should be notified of any discovery made on Crown land.

Further information is available through Ontario’s Registrar of Burial Sites, War Graves, Closures and Abandonments at the Ministry of Government and Consumer Services.

1.3.5 The Applicant’s Engineer(s)

The majority of works submitted for LRIA approval require supporting calculations and drawings completed by a Professional Engineer licensed to practice in Ontario.

In certain situations, the construction phase must also be inspected or supervised by the Engineer or the Engineer’s representative as frequently as may be required to ensure compliance with the approved plans and specifications. Approval issued by the Ministry should specify this requirement as a condition of approval.

The design and supervision of works associated with dams, water crossings and channelization projects fall under the practice of Professional Engineering as defined in the *Professional Engineers Act*. As specified below, all final drawings, specifications, plans and reports shall be signed, sealed and dated by a Professional Engineer licensed to practice in Ontario.

Works that require a Professional Engineer to design include, but are not limited to:

1. dams with a 3.0 meter height or more;
2. dams with a 2.0 meter height or more and a reservoir surface area of 2.0 hectares or more;
3. dams with a watershed area of 5.0 square kilometres or more;
4. dams, water crossings and channelization works, where the failure of which could cause third party loss of life or property damage in excess of \$100,000;

5. a dam, water crossing or channelization to be located on a lake or stream, where the failure of which could release into a lake or stream any pollutant likely to impair the quality of the water (e.g. sediment release or structural debris);
6. channelizations that may harmfully alter fish habitat or impede the movement of fish in a stream or lake or which will significantly alter the main channel of a stream; and
7. mine tailings dams.

In addition to the works listed above, any works that affect the safety of the public may also need to be designed by a Professional Engineer.

1.4 Protection of Existing Rights

The LRIA provides for the management, protection, preservation and use of water, the protection and equitable exercise of public rights in or over the waters of the lakes and rivers of Ontario, the protection of the interests of riparian owners and the protection of persons and property.

1.4.1 Aboriginal and Treaty Rights

The Ministry respects the existing Aboriginal and treaty rights recognized and affirmed by Section 35 of the *Constitution Act*, 1982; and is committed to meeting its constitutional and other legal obligations in respect of these rights, including the Crown's duty to consult and, where appropriate, accommodate. The duty to consult is triggered when the Crown has knowledge - real or constructive, of the existence or potential existence of an Aboriginal or treaty right and there is a proposed Crown action or decision which may have an adverse impact on these rights.

Applications under the LRIA may trigger the Crown's duty to consult. The Crown may delegate certain procedural aspects of its duty to consult to LRIA applicants. Applicants are encouraged to work closely with the Ministry when seeking LRIA approvals and to engage local First Nations and Métis communities as early as possible in project planning.

1.4.2 Riparian and Adjacent Landowner Rights and Interests

A riparian owner is defined as an owner of land that fronts on to a waterbody, where the property boundary is the waters edge. Established in Common Law, riparian owners enjoy a number of rights associated with their property including:

1. right of access to the water;
2. right of drainage;
3. rights relating to the quantity (flow and level) of water;
4. rights relating to the quality of water;

5. rights relating to the use of water; and
6. right of accretion.

Applicants need to be aware of the rights of riparian owners and need to take into account the effect that the proposed work will have on these riparian rights.

Potential and predicted impacts to aquatic environments and waterfront property owner interests from various works should be considered. Where applicable, consideration of attributes such as the significance, spatial extent, scale, duration and frequency of effects from development activities should be assessed and determined and where appropriate, mitigation measures employed to reduce impacts. This may be assessed and determined through consultation with other agencies having an interest in the environmental conditions at the waterfront property, where deemed appropriate (Technical Guide – River and Stream Systems: Erosion Hazard Limit, 2002).

Not all property owners adjacent to water bodies are riparian owners. For example, a property that has a surveyed boundary fronting on the water has a fixed property line that does not move with the water's movement. If the water rises, the property boundary remains fixed, even though the property may be covered with water. If on the other hand, the water level recedes, there may be a strip of dry Crown land between the private land and the water's edge.

Regardless of the legal status of land ownership, for the purposes of the LRIA, riparian and non-riparian owners of property adjacent to water bodies require consideration when a proposed work has the potential to impact their property. Such impacts may include:

- temporary or permanent flooding or erosion (e.g. increased water levels, loss of tree cover due to inundation, slumping of stream beds and banks, increase in normal sediment supply, fluctuating water levels); and
- impacts to the flow of water (e.g. loss of flow, fluctuating water flows and levels, reduced water levels).

Applicants must take reasonable steps to protect the interests of land owners impacted by proposed works. Applicants are responsible for demonstrating that potentially affected property owners have been consulted, and for obtaining any required legal authorities related to any private land that is required for the proposed project including flooding rights, and access and/or transmission right(s) of way(s) or releases. Approvals may be granted subject to changes or conditions deemed advisable to provide for the rights and interests of riparian and non-riparian owners of property adjacent to water bodies.

Legal authority may take the form of:

- a flooding easement;
- a lease or fee simple acquisition of the property subject to flooding; or
- a legal agreement with the land owner to compensate for any damage/loss caused by flooding.

Applicants are advised to seek legal advice in this regard.

Easements for flooding or fee simple acquisitions of affected property are generally required where the impacts to private land are expected to be significant. These documents are registered in the local Land Registry Office. Should the land be sold, the easement will remain on title.

Some conservation groups have projects with landowner agreements in place authorizing them to flood the land of private land owners in order to create or maintain a wetland.

1.4.3 Public Rights and Interests

In general, there are additional rights afforded to the public related to water bodies and waterways including the right of navigation and the right of access.

Navigation is protected by the *Navigation Protection Act*. Navigation includes all those rights necessary for the convenient passage of vessels along the waterway, including reasonable anchorage or moorage.

Other rights or interests may be tied to land tenure documents. For instance, most patents include a right to access the shore from the waterbody. The patent may also contain a 66 foot reserve around the shore.

1.4.4 Crown Land Ownership and Requirements under the Public Lands Act

The ownership or exclusive right to use water is not vested in the Crown in right of Ontario. Water in Ontario is considered a right in common and cannot be privately owned. As per the *Beds of Navigable Waters Act*, the beds of most navigable waters in Ontario are considered to be Crown land. Any occupation of or over Crown land, including either permanent or periodic flooding or where potential erosion of Crown land could occur, requires occupational authority under the *Public Lands Act* (PLA) (i.e. a Crown lease where a dam will occupy Crown land). In addition to occupational authority, a work permit may also be required under the PLA for activities such as dredging or filling on Crown land.

Applications for a work permit or occupational authority under the PLA must satisfy Ontario Regulation 239/13, “Activities on Public Lands and Shore Lands – Work Permits and Exemptions” or MNRF’s Application Review and Land Disposition Policy and Procedure, respectively.

Applications for work permits or occupational authority under the PLA are dispositions for which the Ministry has EA Act obligations. The Ministry is required to ensure that its EA Act requirements are met under the Ministry of Natural Resources and Forestry Class EA for Resource Stewardship and Facility Development (RSFD), or that EA Act requirements have been met through other instruments under the Act (i.e. Ontario Waterpower Class Environmental Assessment).

Other considerations when reviewing applications for Crown land disposition include: Crown land use planning, duty to consult with First Nations and Métis communities and other legal interest holders (i.e. another party with a Crown land lease).

1.4.5 Where Rights to Crown Land Have Been Previously Granted

In some instances, proposed works will affect Crown land and/or resources where some or all of the rights have already been granted. Occupational authority can take the effect of a flooding easement, license of occupation, lease, land use permit or mining lease.

Where rights to Crown land have been previously granted and the Ministry is aware of the same, the Ministry will advise the applicant. Applicants who wish to pursue their application shall contact the rights holder prior to submitting an application for location approval. Authorization must be obtained from the rights holder before plans and specifications approval can be granted.

1.4.6 Private Land Ownership

For projects entirely situated on private land (i.e. both the banks and the bed of the waterbody are private land), there is no disposition of Crown resources and therefore, the Class EA for RSFD does not apply.

1.5 Aquatic Ecosystems, Wildlife Habitat and Natural Amenities

The LRIA provides for the management, perpetuation and use of fish, wildlife and other natural resources dependent on the lakes and rivers, and the protection of the natural amenities of the lakes and rivers and their shores and banks.

Applicants must take reasonable steps to address impacts to aquatic ecosystems (e.g. biological components, hydrologic/sediment/thermal regimes), wildlife habitat, and natural amenities (e.g. shorelines, trees, beaches, wetlands).

Approvals may be granted subject to changes or conditions deemed advisable to address impacts to aquatic ecosystems, wildlife habitat and natural amenities.

The Ministry will provide for the management, perpetuation and use of fish through review under the *Fisheries Act* by DFO. In support of DFO decision making and the Ministry's provincial interest in fisheries management, the Ministry will where available, provide fisheries management objectives, fish and fish habitat information, and identify fish passage interests for consideration by DFO in their review.

Applicants who are seeking approval under the LRIA are encouraged to contact the respective Ministry Office, municipalities, planning authorities and/or conservation authorities for any existing information on the location of significant wetlands, significant wildlife habitat, fish populations and other natural amenity features.

1.6 Other Key Documents

A number of documents and guidelines have been developed by the Ministry in conjunction with partners. Other documents have been developed by industry associations, organizations, and other ministries and provide additional guidance and information on design, construction and operating considerations for dams. A list of these documents is included in Appendix A.

1.7 Application of the LRIA to the Crown

The LRIA does not bind the Crown. Dams and other works subject to the LRIA, but constructed by provincial and/or federal ministries, agencies and departments, may not require LRIA approval. As a matter of policy however, the Ministry has elected to apply the criteria and standards contained in this Guide and its associated technical bulletins for location approval and for plans and specifications approvals to dams and other in-water works to be constructed and maintained by the Ministry and advise other provincial and/or federal ministries, agencies and departments of the same.

Applying the LRIA and its regulations to federally regulated corporations and to federal lands (including Indian Reserves) can be complex. Each situation needs to be individually assessed by the Ministry.

2.0 Application of the Lakes and Rivers Improvement Act

According to the LRIA no person shall construct, decommission, alter, improve or repair a dam in any lake or river in the circumstances set out in Ontario Regulation 454/96, without approval for the location of the dam and/or its plans and specifications.

2.1 Types of Works Requiring LRIA Section 14 or 16 Approval

LRIA approval must be obtained from the Ministry for:

1. Dams
2. Water Crossings – Bridges, Culverts and Causeways
3. River Channels – Channelization of rivers including dredging, diverting or enclosing a channel except for the installation or maintenance of a drain subject to the *Drainage Act*
4. Enclosures
5. Buried Pipelines and Cables – installing cables and pipelines where they will hold back, forward or divert water
6. Municipal and Other Drains (not subject to the *Drainage Act*)

Work Within a Conservation Authority

Notwithstanding the above, LRIA approval is not required to undertake any of the following work within the area of a conservation authority, provided the area of the conservation authority is subject to a regulation made under the authority of Section 28 of the *Conservation Authorities Act* (Ontario Regulation 454/96):

- Construct a water crossing
- Channelize a river or stream
- Enclose or cover a length of river
- Installation of pipelines/cables
- Installation of a temporary dam for the purpose of removing water or water flow from an area during construction of any of the above described works

Applicants should seek advice from the local conservation authority if they are unsure whether work is subject to regulation under the *Conservation Authorities Act*.

2.1.1 Dams

Under Ontario Regulation 454/96, approval must be obtained from the Ministry to construct, decommission, alter, improve or repair 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.

In addition, where alterations, improvements or repairs to a dam are proposed, approval is required:

- where they may affect the dam's safety or structural integrity, the waters or natural resources.

Construction of a new dam under LRIA Section 14, or an alteration, repair or improvement to an existing dam (including decommissioning or change in dam operations) under LRIA Section 16, may require approval where the dam is located on or is proposed to be located on the bed of a river, lake, pond or stream. Additional information on LRIA approval requirements can be found in the relevant LRIA technical bulletins.

Table 1 lists the types of works to dams requiring LRIA approval. Table 2 lists the types of works that do not require LRIA approval.

If dam owners and/or applicants have any uncertainty about whether LRIA approval is required, they should complete and submit an application to the local Ministry Office. The Ministry will review the proposed work and provide a written response indicating whether or not the work is subject to LRIA approval.

Table 1 – Dams: Works Requiring LRIA Approval

Type of Dam	Types of Works	Special Considerations	Applicable Types of Watercourses
Permanent Dams	<ul style="list-style-type: none"> Construction of a dam Alteration, improvement or repair to a dam which may affect the dam's safety or structural integrity, the waters or natural resources [Note 1] 	Includes locks and weirs	<p>In all lakes and permanent rivers.</p> <p>In intermittent rivers where:</p> <ul style="list-style-type: none"> the dam is 3 meters or more above the original stream bed;
Mine Tailings Dams	<ul style="list-style-type: none"> Change in dam operations from that contemplated by approved plans and specifications Decommission of a dam 	Approval may include one or more phases of construction of a mine tailings dam over a number of years	<ul style="list-style-type: none"> the dam is 2 meters or more above the original stream bed with 2 hectares of reservoir surface area; the watershed area above the proposed site is 1.5 sq. kilometres or greater; or fisheries or other natural resources dependent on the river will be adversely affected.
Temporary Dams	<p>Construction or removal of a temporary dam.</p> <p>LRIA approval may not be required for installing a temporary dam for the purpose of removing water or water flow from an area during construction of a water crossing, enclosure, pipeline or cable, or channelizing a river within the area of a conservation authority (refer to Section 2.1).</p>	Includes coffer dams	
Emergency Dams	Construction of a dam immediately necessary to prevent injury to persons, loss of life, or loss of property.	Immediately give notice to the Ministry Office of emergency works and comply with any directions.	

Notes:

- For more information refer to LRIA Alterations, Improvements and Repairs to Existing Dams Technical Bulletin.

Table 2 – Dams: Works Not Requiring LRIA Approval

Type of Dam	Types of Works	Special Considerations
Offline Structures, not located in a lake or river	<p>Examples may include:</p> <ul style="list-style-type: none"> • storm water management impoundments; • flood control structures; • mine tailings dams; • dug-out ponds fed by groundwater or surface water; or • similar structures. 	<p>Not all dams that are constructed or altered and hold back water (or other material) are subject to the LRIA. If the dam is not constructed or altered in the circumstances outlined in Ontario Regulation 454/96, then the LRIA does not apply to the dam. Specifically, a dam does not require approval where:</p> <ol style="list-style-type: none"> a) The dam is not constructed in a lake, river, pond or stream (LRIA Section 14); and/or b) The dam does not hold back water in a lake, river, pond or stream to raise the water level, create a reservoir to control flooding or divert the flow of water (LRIA Section 14 and 16). <p>These dams are considered to be “offline structures”.</p> <p>The assessment as to whether the dam requires LRIA approval, or does not require LRIA approval as it is an offline structure, shall be made using current site conditions, regardless of any changes in a structure and the natural drainage patterns and/or features (e.g. rivers) around the structure over time. For example:</p> <ul style="list-style-type: none"> • Dams may be constructed to divert a river in order to dry out an area for future construction or water/waste storage. In such cases, LRIA approval may be required for the diversion dam and diversion channel; however approval would not be required for a dam constructed in the now dry area behind the diversion dam as this structure would not be in a river and would be considered offline. • A new dam may be constructed in a river and require LRIA approval; however if the river is diverted away from the dam after its construction the dam would no longer be located in a river and would be considered offline. Any subsequent alterations, improvements or repairs to the structure would not require LRIA approval and the structure would not be holding back water in a lake, river, pond or stream.

Type of Dam	Types of Works	Special Considerations
		<p>Where work is undertaken to connect or repair a spillway or other such outlet works associated with an offline structure to a receiving body of water (i.e. lake, river, pond or stream), the work occurring at the connection point of the receiving waterbody may be considered a channelization and may require LRIA approval.</p>
All Types of Dams	<ul style="list-style-type: none"> • Alteration, improvement or repair works that may not affect the dam's structural integrity or safety or may not affect the waters or natural resources • Where there is no change in dam operations from that contemplated by approved plans and specifications 	<p>Refer to LRIA Alterations, Improvements and Repairs to Existing Dams Technical Bulletin for more information.</p>
Temporary dams	<p>Installing a temporary dam during construction of a water crossing, channelization, enclosure, or installing a cable or pipeline</p>	<p>Where work is within the area of a conservation authority in the circumstances prescribed in Section 2.1, LRIA approval may not be required where installing a temporary dam for the purpose of removing water or water flow from an area during construction of a water crossing, channelizing a river, enclosing a length of river, or installing a cable or pipeline.</p> <p>Downstream flow should be maintained during completion of the work as a best management practice.</p>

2.1.2 Water Crossings, Bridges, Culverts and Causeways

A water crossing is defined as a bridge, culvert, or causeway that is constructed to provide access between two places separated by water. For the LRIA to apply, a water crossing must either hold back, forward or divert water.

A bridge, culvert or causeway may be classified as a dam if it forwards, holds back or diverts water by:

- altering flows and/or water levels in a lake or river, either intentionally or unintentionally;
- forwarding water causing increased velocity resulting in increased erosion and sediment downstream; or
- holding back water causing flooding and/or erosion on lands owned by others upstream.

Note: Most bridges, culverts, and causeways with fill approaches, abutments, or piers located in the river channel or its flood plain will cause some temporary hold back of water during flood periods, which may cause upstream flooding. The amount of flooding depends on the degree of restriction to flow created by the structure.

Ontario Regulation 454/96 requires LRIA approval for water crossings that drain an area greater than five square kilometres, unless the water crossing is located within the area of a conservation authority (in the circumstances prescribed in Section 2.1), or is being undertaken by a provincial Ministry, municipality, or contractors employed by a provincial Ministry or municipality on lands owned by the Crown or owned by the municipality undertaking the construction.

Water crossing works requiring LRIA approval are listed in Table 3. Works that do not require LRIA approval are listed in Table 4.

Table 3 – Water Crossings: Works Requiring LRIA Approval

Types of Works	Special Considerations	Applicable Types of Watercourses
Bridge, Culvert or Causeway	LRIA approval is required where the drainage area above the proposed site is greater than 5.0 sq. km and the water crossing is not built by a provincial Ministry or municipality on lands owned by them.	<p>In all lakes and permanent rivers.</p> <p>In intermittent rivers where:</p> <ul style="list-style-type: none"> • it may harmfully alter fish habitat or impede the movement of fish; or • other natural resources dependent on the lake or river will be adversely affected.

Table 4 – Water Crossings: Works Not Requiring LRIA Approval

Types of Works	Special Considerations
Bridges, Culverts, Causeways	<p>LRIA approval is not required where:</p> <ul style="list-style-type: none"> • construction is within the area of a conservation authority in the circumstances prescribed in Section 2.1; • the <i>Public Lands Act</i> applies including: a private water crossing spanning from one parcel of private land to another over a Crown owned river bed. If the span is greater than 3 metres, the crossing structure shall be designed by a Professional Engineer; • construction is part of a forest operation to which the Forest Operation and Silviculture Manual under the <i>Crown Forest Sustainability Act</i> applies; • the water crossing drains an area greater than 5 sq km and construction is being undertaken by a provincial Ministry or municipality, or a contractor employed by a provincial Ministry or municipality on lands owned by the Crown or the municipality; • the water crossing is a clear span bridge above the high water mark; or • the works are done under the <i>Public Transportation and Highway Improvement Act</i>.

2.1.3 Channelization in River Channels

Channelization means an alteration to the alignment, width, depth, sinuosity, conveyance, or bed or bank material of a river or stream channel which includes one or more of the following: straightening, widening, or deepening of the river channel.

Note: The river or stream channel is defined as that portion of the channel which conveys the mean annual flood and/or which lies between the high water mark on both banks, but does not include the overbank flood plain.

LRIA approval is required for a number of different types of works commonly referred to under the general heading of channelization, including:

- diversions:
 - a) river diversions and bypass channels
 - b) by-pass ponds
 - c) watershed diversions
- dredging in a river including an inlet into and an outlet from a lake;
- revetments, embankments and retaining walls in rivers; and
- interconnecting channels of the Great Lakes.

LRIA approval is required outside of the area of a conservation authority (in the circumstances prescribed in Section 2.1) for channelizing a river or stream that may harmfully alter fish habitat, or impede the movement of fish in a river, stream or lake, except for the installation or maintenance of a drain subject to the *Drainage Act*.

Where the potential impact of channelization on fish habitat and/or fish movement is unknown, such impacts must be confirmed by DFO in consultation with the Ministry to determine whether LRIA approval is required. Where it is required, LRIA approval will not be issued until DFO has provided advice on serious harm to fish.

Diversion works may consist of channels, pipes, and conduits to convey part or all of the stream flow. Diversion works can include a diversion dam to regulate or block the flow of water in the river and/or a control dam on the diversion channel. In these instances, it is appropriate for the diversion or control dam to be dealt with separately as a dam.

Types of channelization works that require LRIA approval are listed in Table 5. Works that do not require LRIA approval are outlined in Table 6.

Table 5 – Channelization: Works Requiring LRIA Approval

Types of Channelization Works	Special Considerations	Applicable Types of Watercourses
Construction of and alteration to: <ul style="list-style-type: none"> • total river diversions and partial river diversions (permanent; and temporary) • by-pass ponds. 	Approval is required: <ul style="list-style-type: none"> • where stream flow is returned to the same river from which it was diverted; • for both permanent total and temporary total diversions and for permanent partial diversions; and • for temporary partial diversions, if a control dam on the river is involved. 	In all lakes and permanent rivers. In intermittent rivers where: <ul style="list-style-type: none"> • the watershed area above the proposed site is 1.5 sq. kilometres or greater; • it may harmfully alter fish habitat or impede the movement of fish; or • the works may adversely affect other natural resources dependent on the river.
Dredging	Approval required for the dredging of river channels including the inlet to a lake and the outlet from a lake, except for maintenance dredging.	
Revetments, Embankments and Retaining Walls	Approval required where revetments, embankments or retaining walls are to be located within, or will encroach on a river channel including into and out of a lake.	
Construction of and Alteration to Watershed Diversions	Approval is required where water is being diverted from one watershed to another of any size, or between the watersheds of two tributary streams within the same watershed.	In all rivers
Interconnecting Channels of the Great Lakes	Approval required for all types of channelization works on the interconnecting channels of Great Lakes, except for maintenance dredging.	In all connecting rivers

Table 6 – Channelization: Works Not Requiring LRIA Approval

Types of Channelization Works	Special Considerations
All types of work within the area of a conservation authority	<p>LRIA approval may not be required within the area of a conservation authority (refer to Section 2.1).</p> <p>Where construction of a diversion or by-pass channel within the area of a conservation authority is directly adjacent to a water retention pond or a dam, the work may inadvertently create a new dam or extend an existing dam. In such cases, LRIA approval may be required for the dam.</p>
Maintenance Dredging	<p>LRIA approval not required for maintenance dredging of navigable river beds or lakes of any size, or for periodic or annual removal of accumulated sediment to restore navigational channels or boat slips.</p> <p>Applications for dredging in this category may be subject to the <i>Public Lands Act</i>.</p>
Channelization in the Great Lakes Water Bodies including Lake St. Clair	<p>LRIA approval not required where channelization works including revetments, retaining walls, and embankments are located on the Great Lakes (<u>not including the interconnecting channels</u>).</p>

2.1.4 Enclosures

Works are not considered to be enclosures unless the proposed works impact the natural functions of the stream or lake by partially blocking one or more of its natural functions.

Table 7 below identifies the type of enclosure work for which LRIA approval is required. Works that do not require LRIA approval are listed in Table 8.

Table 7 – Enclosures: Works Requiring LRIA Approval

Types of Works	Special Considerations	Applicable Types of Watercourses
River or Stream Enclosures or Covers	Pipe Enclosures or Covers greater than 20m Enclosures which cover or enclose: <ul style="list-style-type: none"> • a length of river or stream greater than twenty metres in length; and • may harmfully alter fish habitat or impede the movement of fish. 	In all permanent rivers. In intermittent rivers where: <ul style="list-style-type: none"> • the watershed area above the proposed site is 1.5 sq. kilometres or greater; or • other natural resources dependent on the river will be adversely affected.

Table 8 – Enclosures: Works Not Requiring LRIA Approval

Types of Works	Special Considerations
River or Stream Enclosures or Covers	LRIA approval may not be required within the area of a conservation authority (refer to Section 2.1).

2.1.5 Installation of Pipelines, Cables and Heat Loops

Table 9 identifies where LRIA approval is required for the installation of pipelines, cables or heat loops. Table 10 lists works that do not require LRIA approval.

Table 9 – Pipelines, Cables or Heat Loops: Works Requiring LRIA Approval

Types of Works	Special Considerations	Applicable Types of Watercourses
Installation of Pipelines, Cables or Heat Loops	Where installation of a cable or pipeline into or on the bed of a river, stream or lake may result in damming, forwarding or diverting water and: <ul style="list-style-type: none"> • may harmfully alter fish habitat or impede the movement of fish; or • may cause or increase erosion. 	In all permanent rivers. In intermittent rivers where: <ul style="list-style-type: none"> • the watershed area above the proposed site is 1.5 sq. kilometres or greater; or • other natural resources dependent on the river will be adversely affected.

Table 10 – Pipelines, Cables or Heat Loops: Works Not Requiring LRIA Approval

Type of Works	Special Considerations
Installation of Pipelines, Cables or Heat Loops	LRIA approval may not be required within the area of a conservation authority (refer to Section 2.1). LRIA approval not required where installation of heat loops, water intakes and services cables are for private residences. No approval required where cable or pipeline is installed without disturbance to the bed or banks of river channel (e.g. directional drilling).

2.1.6 Municipal and Other Drains

Whether LRIA approval is required for municipal drains is based on whether or not the work relates to the installation or maintenance of a drain subject to or created under the *Drainage Act*.

Note: Municipal drains are drainage systems created under the authority of the *Drainage Act*. Private drains are essentially ditches that land owners have constructed on their own properties, to drain their land. Mutual agreement drains are private drains that have been constructed through agreement between two or more private

landowners. Award drains are ditches that were constructed under the *Ditches and Watercourses Act*, which became part of the *Drainage Act*.

Table 11 identifies situations where LRIA approval may be required for municipal and other types of drains. Table 12 outlines situations where LRIA approval is not required.

Table 11 – Municipal Drains: Works Requiring LRIA Approval

Types of Works	Special Considerations	Applicable Types of Watercourses
Municipal and Other Drains	<p>Works other than installation or maintenance proposed on municipal drains authorized under the <i>Drainage Act</i>, or proposed on other types of drains, should be referred to the Ministry to determine if LRIA approval is required.</p> <p>Note: Where LRIA approval is required, the application should be circulated to the Ministry of Agriculture, Food and Rural Affairs, the Municipality and to adjacent property owners for comment.</p>	<p>In all permanent rivers.</p> <p>In intermittent rivers where:</p> <ul style="list-style-type: none"> • the watershed area above the proposed site is 1.5 sq. kilometres or greater; • it may harmfully alter fish habitat or impede the movement of fish; or • other natural resources dependent on the river will be adversely affected.

Table 12 – Municipal Drains: Works Not Requiring LRIA Approval

Types of Works	Special Considerations
Municipal Drains	Where dams are not included, LRIA approval is not required for the installation or maintenance of a municipal drain authorized under the <i>Drainage Act</i> .

2.2 Other Types of Works Not Requiring LRIA Approval

There are some activities that may be related to works regulated under the LRIA, but **do not** require LRIA approval themselves. These activities may require approval under other legislation. The following section addresses these types of works:

1. Temporary Partial Diversions Not Involving a Dam; and
2. Fill in a Flood Plain (Flood Hazard Limit).

2.2.1 Temporary Partial Diversion Not Involving a Dam

Table 13 – Temporary Partial Diversion Not Involving a Dam: Works Not Requiring LRIA Approval

Type of Work	Special Considerations
Temporary Partial Diversion Not Involving a Dam	<p>No approval required for:</p> <ol style="list-style-type: none"> 1. A temporary or seasonal partial diversion where no dam of any type is proposed on the lake or river channel (e.g. partial diversion by pumping from a stream for irrigation use with a pump and piping which is removed from the site after use). <p>Note: This type of diversion may require a Permit to Take Water approval under the <i>Ontario Water Resources Act</i>. Ministry staff are advised to refer the applicant to the local Ministry of the Environment and Climate Change office.</p>

2.2.2 Fill in a Flood Plain (Flooding Hazard Limit)

Many CAs have enacted a Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation. Where an application involves the placement of fill in a flood plain, Ministry staff and applicants are advised that the proposal should be forwarded to the local CA for review as the placing of fill in a flood plain could cause increased flood levels on the river.

In areas that are outside the jurisdiction of a CA, but within municipal boundaries or on Crown land, consideration must be given to the Natural Hazards Technical Guidelines, Rivers and Streams and the Provincial Policy Statement (2014) (PPS). Applicants are advised to contact the local Ministry District Office.

Table 14 – Fill in a Flood Plain: Works Not Requiring LRIA Approval

Types of Works	Special Considerations
Fill In A Flood Plain	<p>No approval required if:</p> <ol style="list-style-type: none"> 1. Fill is to be placed in the flood plain of a lake or river, provided: <ol style="list-style-type: none"> a. Fill will be located outside of and will not encroach on a river channel as part of a channelization works; and b. Fill will not be part of a water crossing or dam across a lake or river.

2.3 Emergency Structures

Emergency work on a dam, or change in operations, may sometimes be required to address an imminent threat to life and property. Dam owners may also be required to adjust operations when requested to do so by a police service or other emergency response organization at the municipal or provincial level. The Ministry recognizes that emergency situations are a priority.

Dam owners are responsible for the safe management of their structures and may wish to consider adopting industry recognized best practices to contribute to safe dam management. Dam owners should engage with the Ministry, Community Emergency Management Coordinators at the municipal level, and other response partners to discuss emergency planning.

Where a dam owner is required to take action during an emergency, or whenever a dam owner becomes aware of an imminent or occurring threat that may impact the dam, they shall contact the MNRF Provincial Emergency Response Coordinator to discuss the emergency situation and the necessary response actions. Depending on the type of emergency, dam owners may need to activate available public warning systems, initiate emergency response plans and directly inform any potentially affected municipalities.

3.0 Application Review and Approval Process

3.1 General

Applicants seeking approval under LRIA Section 14 or Section 16 shall complete and submit an application to the Ministry.

The process for reviewing LRIA applications may differ for alterations, improvements, decommissioning or repairs to existing works than for new works. The LRIA provides for two types of approvals:

1. Location Approval Letter; and
2. Plans and Specifications Approval Letter.

Existing works require only plans and specifications approval. Both location approval and plans and specifications approval are required for new works. It is important to note that LRIA Section 14 or Section 16 applications may trigger the Crown's duty to consult and where appropriate, accommodate, existing or credibly asserted Aboriginal and treaty rights. The Crown's obligations will be assessed on a case-by-case basis.

3.2 Factors to Consider in Application Development and Review

Applicants submitting LRIA applications should consider the following:

- Applicable federal and provincial legislation and applicable municipal by-laws
- Applicable federal and provincial policy
- Constitutional, legal or other obligations that may be owed to First Nations or Métis communities
- Purposes of the LRIA, in both the construction and operation of dams
- Best available information
- Principles of adaptive management
- Principles for effective public consultation
- Timely communication between Ministry staff and applicants

3.3 Approval for New Works – Section 14 (Location Approval and Plans and Specifications Approval)

New works require both location approval and plans and specifications approval under LRIA Section 14.

Applicants seeking LRIA approval for new works must complete two separate applications – one for location approval and one for plans and specifications approval. Applicants seeking LRIA approval for new works must first complete an application for location

approval and submit it to the Ministry for review. The Ministry will confirm if LRIA approval is required and/or if additional information is required to facilitate subsequent approval decisions. Where an applicant is uncertain as to whether LRIA approval is required, they should contact the Ministry to discuss the proposed work. Location approval and plans and specifications approval are generally issued as two separate letters of approval.

For more information on location approval, refer to the Location Approval for Dams LRIA Technical Bulletin.

3.4 Approval for Existing Works - Section 16 (Plans and Specifications Approval)

An application for alterations, repairs or improvements to existing works require only LRIA Section 16 plans and specifications approval. Section 16 approval is also required before a person can operate a dam in a manner different from that contemplated by plans and specifications approved by the Minister under LRIA Section 14 or Section 16.

Applicants should be aware that in some instances where applications for alterations, repairs or improvements to existing works are submitted for LRIA Section 16 approval, the applicant may be requested to provide additional information to ensure that the purposes of the LRIA are considered. These instances may include:

- where location approval was not granted at the time of the original construction; or
- if site conditions have changed or are proposed to be changed.

Applicants considering deviations from LRIA approvals during construction are cautioned that the Ministry should be notified without delay to assess the need for approval of any proposed changes.

For more information on alterations, improvements and repairs, refer to the LRIA Alterations, Improvements and Repairs to Existing Dams Technical Bulletin.

For more information on decommissioning refer to the LRIA Dam Decommissioning and Removal Technical Bulletin.

3.5 Application and Approvals Process

It is the responsibility of the applicant to submit a complete application with the required supporting documentation. Applications may be submitted electronically or in paper format.

Applications at minimum, should include the following information:

- Applicant contact information and if known, site contractor or person in charge of the project/work

- Project details including purpose, type and description of the proposed work (e.g. new construction, alteration/improvement/repair, decommissioning or removal, change in operation)
- Location details of work and ownership of land on which work is to be located (e.g. sole proprietor, part-owner, tenant or other) including if applicant has written authorization to occupy the location
- Proposed timing of work and equipment/materials to be used
- Whether applicant previously applied to the Ministry for this work or related work, and if previous approval has been provided

The Ministry may waive approval for simple projects as there is an established process in place for minor alterations and repairs to existing structures (see the LRIA Alterations, Improvements and Repairs to Existing Dams Technical Bulletin). Certain projects (generally larger scale projects) may require an environmental assessment. Where an environmental assessment is required, applicants must comply with the requirements of the *Environmental Assessment Act*.

Where an LRIA Technical Bulletin details specific application requirements and review process, the provisions of the Technical Bulletin prevails. For instance:

- the LRIA Location Approval for Dams Technical Bulletin provides guidance for the construction of new permanent dams; and
- the LRIA Alterations, Improvements and Repairs to Existing Dams Technical Bulletin provides guidance for work on existing dams and temporary dams for the purpose of controlling water during construction.

Supporting Documentation:

Supporting documentation should be submitted to the Ministry for review with the following key considerations:

- Applications must contain complete key plans, topographical maps and general arrangement drawings provided both in plan view and in cross-section view, with dimensional data appropriately labelled (e.g. length, width, horizontal and vertical dimensions, etc.)
- Site constraints (i.e. legal, physical, socio-economic and environmental) should be noted and appropriate connection to the proposed work detailed
- Any and all constraints associated with all phases of the work should be identified up to and including construction and commissioning of the works

All analyses and investigations including input parameters and assumptions, should be presented in report format with associated computer model inputs and outputs included as appendices.

Application, Review and Approval Process:

Guidance in this section applies to all works subject to LRIA approval including dams, temporary dams, water crossings, channelizations, enclosures, cables and pipelines.

The LRIA application, review and approval process involves the following steps:

Step 1: Application

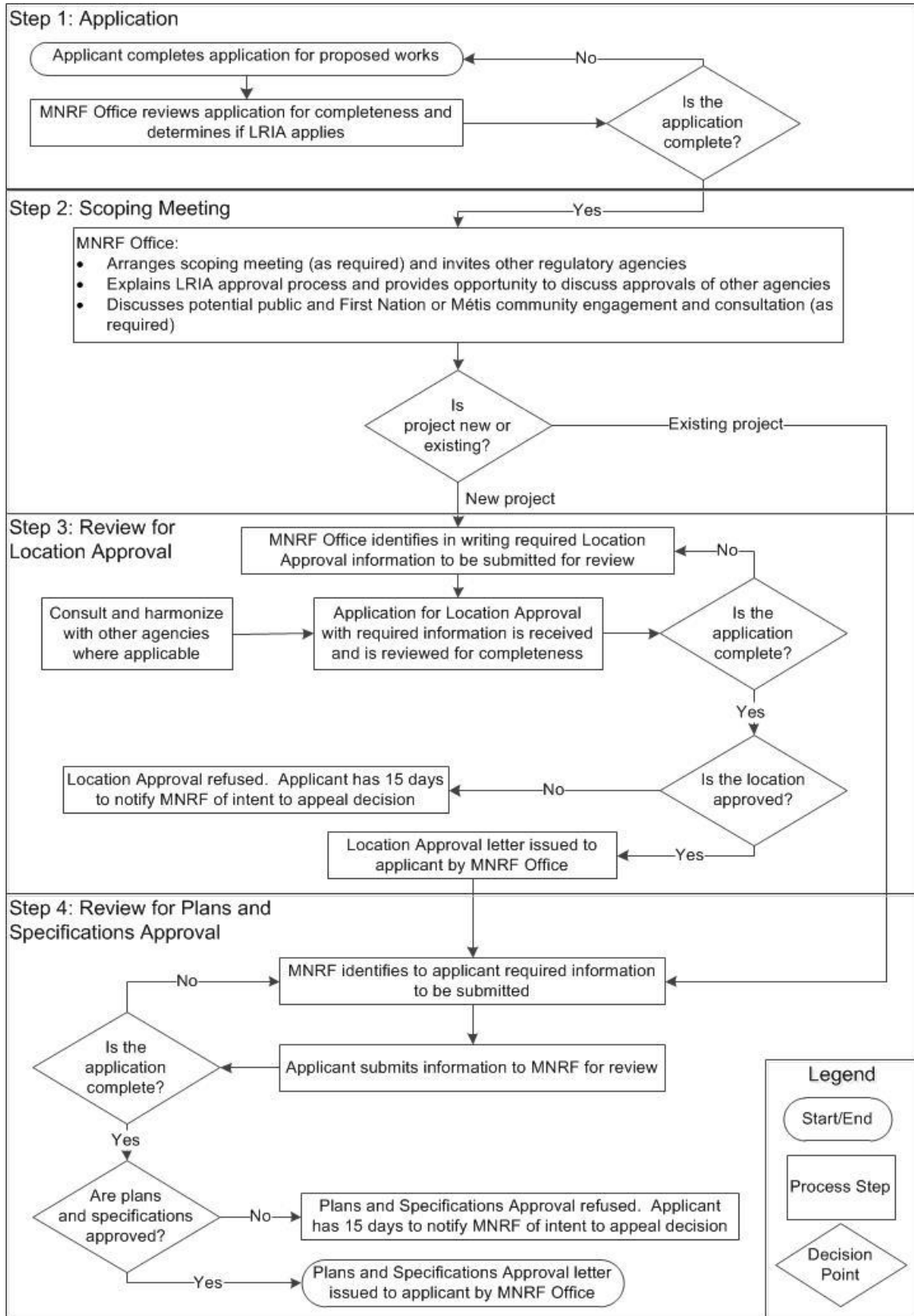
Step 2: Scoping Meeting

Step 3: Review for Location Approval (new works only)

Step 4: Review for Plans and Specifications Approval

The process for application review and approval is depicted in Figure 1.

Figure 1 – Application Review and Approval Process



3.5.1 Step 1: Application

Applicants seeking LRIA approval for both new and existing works shall complete and submit an application to the appropriate Ministry Office. The LRIA application review process commences when an application is submitted for Section 14 or Section 16 consideration. The Ministry may request additional copies of the application as required.

The process for new works involves a two stage application process. The first step involves submitting an application for location approval. If the Ministry completes its review and issues location approval, then the applicant will be advised to submit an application for plans and specifications approval. In limited circumstances, the Ministry may consider processing location approval and plans and specifications approval concurrently for some small projects (e.g. channelizations, culverts).

Submission Requirements:

Applicants shall submit the application with the requisite documentation to support the request for location approval and/or plans and specifications approval. The complexity of the proposal and its potential impacts will largely dictate the need for calculations and assessments.

3.5.2 Step 2: Scoping Meeting

Where required or requested, within 30 to 60 days of receipt of the initial application, Ministry staff will arrange a scoping meeting with the applicant to discuss the application review process, as well as any requirements for additional information beyond that contained in the application and potential opportunities for harmonization of approvals. The scoping meeting may also provide the opportunity to discuss any potential engagement and consultation that may be required with First Nations and Métis communities, stakeholders or the public.

The scoping meeting will be organized by the Ministry Office and invitations to attend will be distributed to the applicant and other Ministries and agencies who have related approval requirements (e.g. MOECC, MTO, MNDM, DFO, and Transport Canada). The purpose of the scoping meeting will be to review the submission requirements, ensure the application is complete and discuss any related approvals. The inability of another ministry or agency to participate should not unduly delay the scoping meeting. The applicant should recognize the potential requirement for subsequent participation and confirmation of additional information.

The scoping meeting will promote a coordinated approach to application review. It will allow information requirements to be discussed and integrated, so that the application can be processed efficiently and effectively. The scoping meeting offers regulatory agencies an opportunity to learn more about the project and project timeframe and at the same time, offers applicants an opportunity to better understand the review process.

The applicant should come to the scoping meeting with copies of the application and any supplementary information describing the works proposed. Copies should be available for all participants. The Ministry will comply with any formal agreements or MOUs with other regulatory agencies, when considering invitees.

Upon completion of the scoping meeting, the Ministry will confirm in writing the required information to be submitted by the applicant. The submission will then be reviewed under the location approval or plans and specifications application review process.

3.5.3 Step 3: Review for Location Approval (new works only)

In carrying out the review for location approval (LRIA Section 14) for new works, Ministry staff shall review the application in accordance with the information requirements specified. Ministry staff should also consider input received from engagement and consultation with First Nations and Métis communities, stakeholders and the public (where applicable), as well as the feasibility or practicality of implementing the location approval requirements in the subsequent plans and specifications approval. Location approval will not be provided for something that is unable to be achieved in the plans and specifications.

During and/or following a review of the application, the Ministry may request additional information. If the submission is considered to be complete and meets the requirements for submission, the Ministry will complete a detailed review and issue a location approval decision.

In issuing a decision, the Ministry may:

- approve the application;
- approve the application subject to such conditions or with such changes considered advisable to further the purposes of the LRIA; or
- refuse to grant the approval, if construction at that location would be inconsistent with the purposes of the LRIA.

Where the Ministry intends to approve the application subject to conditions or changes, a Letter of Approval will be issued to the applicant outlining the conditions or changes which must be met by the applicant to construct a new dam at the proposed location. The conditions that are part of the location approval will need to be addressed and incorporated into the application for plans and specifications approval. The letter will indicate that the location approval does not authorize construction. The applicant will be advised that construction cannot begin until the plans and specifications approval has been granted by the Ministry.

The Letter of Approval will specify that the approval will expire after 24 months from the date of issuance (or within an alternative timeframe specified in the approval should more than 24 months be required) unless an application for plans and specifications approval is made within that time. The conditions that are part of the location approval will need to be addressed and incorporated into the plans and specifications approval.

If the applicant has not applied for plans and specifications approval prior to the location approval expiry date, the applicant may seek an extension to the location approval timeframe. Extension requests must be applied for by the applicant and granted by the Ministry, in advance of the approval expiry date. Where an approval expires, the applicant is required to reapply for location approval.

Should the application be refused at any time during the application for location approval, a Letter of Intent to Refuse Location Approval will be issued to the applicant identifying the supporting rationale and any additional measures the applicant can take to address any outstanding concerns. The Letter of Intent will notify the applicant that unless the Ministry receives a request within 15 days for an inquiry, the application will be refused.

3.5.4 Step 4: Review for Plans and Specifications Approval

The application review process commences with the submission of an application for plans and specifications approval. It is the responsibility of the applicant to submit a complete application.

The Ministry Engineer is responsible for the review of applications submitted for plans and specifications approval. In reviewing the application, the Ministry will advise the applicant if additional information is required as early in the application review process as reasonably possible. As outlined in Section 3.5, it is the responsibility of the applicant to submit a complete application with supporting documentation for review.

The Ministry will acknowledge receipt of an application, review the application and advise the applicant within 30-60 days if the application is complete. If the application is incomplete, applicants will be notified in writing of additional information required. Once the application is considered to be complete and meets the requirements for submission, the Ministry will complete a detailed review and issue a decision for plans and specifications approval within 60 days.

In issuing a decision, the Ministry may:

- approve the application;
- approve the application subject to such conditions or with such changes considered advisable to further the purposes of the LRIA; or
- refuse the application.

Where the Ministry intends to approve the application for plans and specifications, the Ministry will issue a Letter of Approval indicating that the application is approved. Where the Ministry intends to approve the application subject to conditions or changes, a Letter of Approval will be issued to the applicant outlining the conditions or changes which must be met by the applicant.

Plans and specifications approval expires when construction completion dates specified in the approval are exceeded or when all conditions in the approval are not met. Where

construction completion dates are expected to be exceeded, applicants should contact the Ministry as soon as it is apparent that completion dates may not be met, and prior to expiration.

Where the Ministry refuses an application, a Letter of Intent to Refuse Plans and Specifications Approval will be issued to the applicant identifying the supporting rationale and any additional measures the applicant can take to address any outstanding concerns. The Letter of Intent will notify the applicant that unless the Ministry receives a request within 15 days for an inquiry, the application will be refused.

3.6 Inquiry Process

Where the Ministry intends to refuse an approval, a Letter of Intent to Refuse Approval must be issued to the applicant before the approval is refused. The Letter will identify the supporting rationale and any additional measures the applicant can take to address any outstanding concerns. The Letter will notify the applicant that unless the Ministry receives a request from the applicant for an inquiry within 15 business days, the application will be refused.

Request of Inquiry

If an LRIA application is refused, the applicant may request that an inquiry be held.

Person Appointed To Carry Out the Inquiry

If an inquiry is requested by the applicant, the Minister will refer the matter to the Office of the Mining and Lands Commissioner for hearing. The Minister may specify the particulars of the inquiry (e.g. mandate, scope). The Office of the Mining and Lands Commissioner is an independent adjudicative body with expertise in hearing matters relating to natural resource and environmental concerns. The Ontario Mining and Lands Commissioner reports to Cabinet through the Ministry, but operates arm's length from the Ministry.

Procedures for the Inquiry

All logistical details concerning the inquiry will be handled by the Office of the Mining and Lands Commissioner, including identifying the time, place, location and procedural directions for the inquiry. At least 20 days prior to the inquiry, each party will participate by fully disclosing to other parties, a statement indicating the grounds and documents on which it intends to rely. Any relevant material or documents will be made available for inspection by the parties. The Office of the Mining and Lands Commissioner may require additional circulation of documentation between the parties and may conduct mediation where appropriate. Notice of the inquiry is issued by the Office of the Mining and Lands Commissioner.

Inquiry

In conducting the inquiry hearing, the Ontario Mining and Lands Commissioner or appointed delegate will consider whether the refusal was fair, sound and reasonably necessary to achieve the purposes of the LRIA.

Report of Inquiry

Once the hearing concludes, the Office of the Mining and Lands Commissioner issues a report to the Minister. The Report summarizes the evidence presented at the inquiry and makes a recommendation to approve or refuse the application. Copies of the final Report are provided to all parties attending the hearing.

Minister's Decision

Upon receipt of the Mining and Lands Commissioner's Report, the Minister considers the Report and issues a decision with supporting rationale. The Minister may grant the approval requested, a modified version of it, or refuse to grant the approval. Notice of the Minister's decision is provided to all parties.

Glossary of Terms

Abutment: The end of a dam, or other structure, consisting of a wall or natural formation. An abutment wall is similar to a wing wall.

Adaptive Management: A process for continually improving management policies and practices through a formal, systematic and rigorous program of learning from the outcomes of new studies and operational programs.

Causeway: A road or railway elevated by a bank over a body of water.

Channelization: Altering the alignment, width, depth, sinuosity, conveyance, or bed or bank material of a river or stream channel. Channelization does not include penstocks, raceways, canals and other works normally associated with hydroelectric development.

Clear Span Bridges: Clear Span Bridges do not have piers or abutments located in any portion of the full bank flow natural channel section or stream banks channel section. The stream banks channel section is defined as the full bank flow boundaries, not the flood boundaries, of a stream channel. The channel section does not include the flood plain located in the over bank areas.

Culvert: A conduit for carrying water through an embankment as related to a type of water crossing or discharge facility at a dam.

Dam: For the purpose of the administration of the LRIA, a dam is defined as a structure that is constructed which forwards, holds back or diverts 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.

Dam Owner: The owner of a dam, structure or work and includes the person constructing, maintaining, or operating the dam, structure or work.

Decommissioning: To retire, abandon, dismantle, or remove from active service, working order, or operation.

Dredging: Removal or displacement of any material from the bottom of a lake or stream.

Environmental Assessment: A planning and decision making process set out in the *Environmental Assessment Act* that ensures potential environmental effects are considered before a project begins.

Fish: Includes parts of fish, shellfish, crustaceans, marine animals, and any parts of shellfish, crustaceans or marine animals and the eggs, sperm, spawn, larvae, spat, and juvenile life stages of fish, shellfish, crustaceans, and marine mammals.

Fish Habitat: Spawning grounds and any other areas, including nursery, rearing, food supply, and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

Groundwater: Sub-surface water or water stored in the pores, cracks, and crevices in the ground below the water table.

Heat Loop: A loop of pipe extending from a building into a body of water for the purpose of transferring heat from the water to the building.

Height of a dam: The height of a dam is the vertical distance between the downstream toe of the dam in the streambed and the upper most point of the top of the dam.

High Water Mark: A visible demarcation mark made by the action of water under natural conditions on the shore or bank of a body of water which action has been so common and usual and so long continued or that it has created a difference between the character of the vegetation or soil on one side of the mark and the character of the vegetation or soil on the other side of the mark.

Intermittent River: Where surface water flows for some portion the year under average annual precipitation conditions.

Lake: Includes a pond and similar body of water (e.g. swamp, marsh, bog) if located on a river.

Lock: A chamber separating two reaches of a river or canal at different elevations. Locks are intended for the passage of boats.

Permanent River: Where surface water flows throughout the year under average annual precipitation conditions.

Retaining Wall: A wall built to hold back earth along a river.

Revetments: A wall or facing of stone, or concrete, or other materials placed on a stream bank to prevent erosion.

Riparian: Adjacent to a river or lake.

Riparian Owner: A landowner whose property has boundaries defined on one or more sides by a waterbody or a waterbody runs through the property. In any case, the boundary between the waterbody and the property must be the water's edge where it is from day to day.

River: Includes a creek, stream, brook or similar watercourse with defined bed and banks of a permanent nature.

River Channel: The river or stream channel is defined as that portion of the channel which conveys the mean annual flood and/or which lies between the high water mark on both banks but does not include the overbank flood plain.

Sinuosity: The meandering pattern of a stream or river (wavy form).

Tailings Dam: A dam constructed to impound an area for the capture of mine waste and process water. These dams may be constructed of mine waste material.

Total Diversion: Refers to those situations where all stream flow is diverted from one point to another in the same river; the river channel is relocated, usually involving the construction of a new channel (or pipe); a section of the natural channel is blocked off from further flow by either temporary or permanent works (e.g. channel relocation).

Water Crossing: A bridge, culvert or causeway that is constructed to provide access between two places separated by water but that also holds back, forwards, or diverts water.

Weir: Means a structure in a watercourse intended to raise the water level to partially or totally divert its flow.

Wetlands: Lands that are seasonally or permanently flooded by shallow water as well as lands where the water table is close to the surface; in either case the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic or water tolerant plants.

List of Acronyms

CA	Conservation Authority
DFO	Department of Fisheries and Oceans Canada
EA	Environmental Assessment
LRIA	Lakes and Rivers Improvement Act
MNDM	Ministry of Northern Development and Mines
MNRF	Ministry of Natural Resources and Forestry
MOECC	Ministry of the Environment and Climate Change
MTO	Ministry of Transportation
PPS	Provincial Policy Statement

Appendix A: Other Key Documents

The following documents provide additional guidance and information on design, construction and operating considerations for dams:

1. Adaptive Management of Stream Corridors in Ontario (MNRF, 2001)
2. Technical Guide – River and Stream Systems: Flooding Hazard Limit (MNRF, 2002)
3. Technical Guide – River and Stream Systems: Erosion Hazard Limit (MNRF, 2002)
4. Technical Guide for Large Inland Lakes, Flooding, Erosion and Dynamic Beaches (MNRF, 1996)
5. Temperate Wetlands Restoration Guideline (MNRF, 1998)
6. Ontario Provincial Policy Statement (MMA, 2014)
7. Ontario Drainage Management Manual (MTO, 1997)
8. Fish Habitat Referral Protocol for Ontario (DFO/MNRF/CO, 2009)
9. Ontario Significant Wildlife Habitat: Technical Guide (MNRF, 2000)
10. Recovery Strategies prepared under the Endangered Species Act, 2007
11. Water Taking and Transfer User Guide: Clarifications and Exemptions (MOECC, 2016)
12. Permit To Take Water Application Guide (MOECC, 2005)
13. Canadian Dam Association guidelines and technical bulletins