

Class Environmental Assessment for Waterpower Projects

February 2024 – Tenth Edition

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1.0 INTRODUCTION

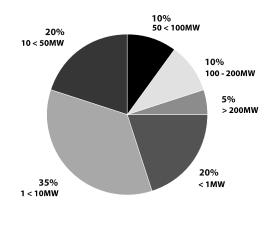
1.1 Ontario's Waterpower Resources

The province of Ontario contains more than 250,000 lakes and tens of thousands of kilometers of rivers and streams. From a hydrologic perspective, watersheds that drain to the Great Lakes, Hudson Bay and the St. Lawrence River dominate the province. The drainage patterns, topography, geology and land cover within these watersheds are important determinants of waterpower potential.

Ontario's water resources serve a wide range of environmental, social, cultural and economic objectives, including those related to waterpower generation. At a regional or provincial scale waterpower generation provides a number of important benefits. As a renewable and secure source of energy indigenous to the province, waterpower production offsets potential greenhouse gas emissions, is the most efficient method of energy conversion and best responds to changes in electricity demand.

Until the early 1950s, almost all of Ontario's electricity needs were served through falling water - waterpower is the energy engine upon which the province was built. Our history in hydro dates back well over a century, firmly embedding renewable energy production and development in the social, cultural, economic and environmental fabric of Ontario. There are almost 200 operating waterpower facilities in Ontario that, collectively, account for approximately one-quarter of the province's current installed capacity (9,000 Megawatts [MW]) and electricity generation (38-40 Terrawatt hours (TWh) annually). Facilities in the province range in size from less than 100 kilowatts (kW) to more than 1,000 MW. The most recent inventories undertaken suggest that there is the economic and practical potential to increase waterpower's contribution in Ontario by fifty percent (50%) or more. Figure 1 outlines the range in nameplate capacity of the province's current waterpower facilities.

Figure 1 Ontario's Existing Waterpower Facilities – Percentage by Nameplate Capacity



Source: OWA

The mission of the Ontario Waterpower Association (OWA) is to be the collective voice for the Ontario waterpower industry by:

- Representing the common interests of Ontario's waterpower industry in a corporate relationship with government;
- Providing an effective forum for coordinating and promoting the common interests of the waterpower industry in Ontario;
- Enhancing the competitiveness of the Ontario waterpower industry; and
- Identifying common interests and cooperative relationships with interested organizations to promote a positive image for waterpower.

Since its inception in 2001, the OWA has grown to represent the interests of more than 150 individual companies active in the waterpower industry. Members are required to either be:

- the owner of a waterpower facility in Ontario;
- involved in a business related to the Ontario
- waterpower industry; or
- support waterpower as a renewable and sustainable energy source.

Membership includes more than 95% of Ontario's waterpower generators and a number of firms specializing in engineering, the environment, law, Indigenous Communities, construction and development financing.

The OWA is the applicant for this Class Environmental Assessment (Class EA). The OWA began to pursue this Class EA with the preparation of an initial Terms of Reference (ToR) in 2002. Throughout this initiative, the Association has sought advice and input from:

- provincial and federal government agencies;
- Indigenous interests;
- resource stewardship, environmental and energy
- non-government organizations; and
- the public.

The development of the Class EA has provided the OWA with the opportunity on behalf of the waterpower industry to understand, appreciate and consider the interests of representative organizations, regulators and the public. The Class EA positions the OWA as having lead responsibility for remaining current with best practices and information of direct relevance to waterpower projects in Ontario and providing that information to project proponents. It also requires that the OWA continue to foster and maintain positive and productive relationships with those with an interest in waterpower. This role is consistent with the approach the organization has taken in working directly with government agencies, Indigenous organizations, other interests and the public in the development of the Class EA.

1.2 Waterpower's Contribution to Ontario's Electricity Requirements

Ontario's electricity system is characterized by its diversity – multiple sources, including waterpower, satisfy our electricity demands. Until the early 1950s, almost all of these needs were met by waterpower. In the decades that followed, the province turned to fossil, nuclear and alternative renewable sources including wind, biomass and solar energy. Waterpower currently accounts for approximately one-quarter of the province's installed capacity (MW) and electricity production (MWh).

Waterpower plays a particular role in the province's overall system mix. It provides base-load and peakload generation. It has proven critical to system reliability – leading Ontario's recovery from the blackout in 2003. It provides voltage support, black start and other ancillary services. Looking ahead, the province's reliance on the attributes of waterpower generation is expected to increase.

As illustrated in Figure 2, Ontario now has a "peak demand" for electricity both in the summer and winter months. Along the x-axis of the graph are the MW of electricity required. The y-axis is the hour of the day, beginning at 1:00 a.m. In terms of system operations, as important as the magnitude of the peak is it's duration as is the slope of the curve going up and down. In both summer and winter months, the system must "ramp-up" in the early morning hours. In the winter, a second peak occurs in the early evening. Conversely, the summer is characterized by an extended period of peak demand over the course of the day. Peak demands change constantly (instantly, hourly, daily, seasonally) and Ontario's diversity of electricity supply must be managed to satisfy this changing demand. It is in this context that waterpower's unique flexibility is particularly important.

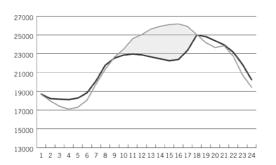


Figure 2 Ontario's Hourly Electricity Demand – Summer (grey) and Winter (black)

Source: IESO

Figure 3 provides a profile of hourly waterpower production on a summer day in 2003. The shape of the graph in comparison to **Figure 2** demonstrates the correlation between the overall provincial electricity system needs and waterpower production. As expressed in a system reliability outlook by the Independent Electricity System Operator (IESO), the organization responsible for the integrity and reliability of the province's electricity system:

"Ontario's future generation supply mix will place an increasing reliability value on the flexibility of generating assets to provide load following capability, operating reserve and automatic generation control. Preserving operating flexibility of hydro-electric generating facilities, whether old or new, should be a critical consideration."

Figure 3 Hourly Waterpower Production



1.3 Purpose of the Class EA

The Ministry of the Environment, Conservation and Parks (MECP) describes Environmental Assessment (EA) as a planning process that allows proponents to assess the potential for effects to the environment using best information available in order to make an informed decision about how or whether a project should proceed. In Ontario, this process is defined and finds its authority in the *Environmental Assessment Act (EA Act)*.

Not all undertakings subject to the *EA Act* need to go through the comprehensive EA process. There are some groups or "classes" of projects which are:

- carried out routinely; and
- have predictable and mitigable effects to the environment and therefore, do not warrant a comprehensive EA. These are known as Class Environmental Assessment (Class EA) projects.

This Class EA sets out a planning process to be followed for undertakings in respect of waterpower facilities to which this Class EA applies. The *EA Act* formally recognizes the Class EA process and sets out the requirements for undertakings to which a Class EA applies. An approved Class EA applies to the entire class of undertakings. Thus, a proponent of an undertaking included in a class of undertakings does not need to obtain separate approval under the *EA Act* for each specific undertaking, unless an order is made under Section 16(1) of the EAA declaring the undertaking to be a Part II.3 project. . The purpose of this Class EA is to fulfill the requirements of the Terms of Reference (ToR) approved in November 2005 by the then Minister of the Environment under the *EA Act*; namely to specify a planning and design process whereby impacts and benefits are considered in waterpower projects before irreversible decisions are made. The Class EA is intended to provide direction on effective project assessment and engagement processes that are appropriate for undertakings to which this Class EA applies. This will ensure that proponents take into account the potential impacts and benefits of proposed waterpower projects as well as the interests of individuals, communities, agencies and organizations, as appropriate.

It is not the proponent's responsibility to achieve consensus about whether a project should proceed or attempt to resolve issues outside of their scope. While proponents of projects should make every effort to avoid or minimize potential impacts, it may be impossible to mitigate all of them. There will be times where individuals may be affected by a project that would benefit society as a whole. There may also be instances where the proponent determines that the importance of net effects, the costs of mitigation or the significance of unresolved issues make the project unfeasible.

This Class EA applies to the undertakings described in **Section 2.1**. It applies to all proponents of these undertakings in Ontario, regardless of their affiliation with the OWA.

The objective of this Class EA is to help ensure that projects are planned in an environmentally responsible manner. An additional objective of this Class EA is to coordinate and integrate the multiplicity of environmental approvals and public involvement processes that are relevant to planning a waterpower project. Section 4.1.2 provides more guidance on coordinating the Class EA with other approvals processes. Common to all of these processes are the themes of "environmental responsibility" and "public accountability." This Class EA has adopted these themes and is designed to facilitate coordination with other directly relevant federal and provincial requirements to help ensure effective and efficient public and agency involvement.

Using the Class EA as the planning, evaluation and consultation framework does not remove the decision-making authority of agencies with legislative responsibilities related to a waterpower project. Rather it presumes that those requirements identified at the EA stage of a proposal can be dealt with through the Class EA process. In practice, use of the Class EA process should result in a diligent proponent coordinating and satisfying the information and involvement requirements relevant to the EA stage of the project.

Prior to commencing the EA process provided for under this Class EA, projects on provincial Crown land will usually have satisfied appropriate requirements of the Ministry of Natural Resources and Forestry's (MNRF) Crown land site release process. If these requirements have not been satisfied, MNRF may provide written direction to a proponent that MNRF will participate in the EA process, while the Crown land site release process is ongoing. As such, considerable initial information may already have been assembled by the proponent and relationships with government agencies and stakeholders may already have been established. Proponents must be aware of and comply with any

appropriate conditions that may result from MNRF's Crown land site release process.

A proponent that completes the Class EA process will also set the stage for the subsequent project-specific permits and approvals. For example, though broad mitigation measures to protect fish and fish habitat are outlined in the Class EA process, specific permit requirements (e.g., development of a fish habitat compensation plan for *Fisheries Act* authorization) are often completed after the Class EA process when detailed engineering design information is available. The outcome of the EA process is used to inform the more detailed project permitting and construction phases of a project. EA is neither the beginning nor the end of the project cycle. A listing of potentially relevant key legislation is provided in **Table 1**. **Section 5** provides an overview of how a proponent can facilitate the coordination and integration of the information, involvement, evaluation and documentation requirements through the Class EA process. Note that other legislation may

AGENCY	LEGISLATION	REQUIREMENT
Ministry of the Environment, Conservation and Parks	Environmental Assessment Act	Sets out a planning and decision making process to evaluate the potential environmental effects of a proposed undertaking Refer to the regulations for details.
	Endangered Species Act	Provides for the protection of endangered and threatened species and their habitat and for mechanisms to support their recovery.
	Provincial Parks and Conservation Reserves Act, 19	Generation of electricity is not permitted on lands that are part of a Provincial Parks or Conservation Reserve, subject to the exceptions noted below:
	Provincial Parks and Conservation Reserves Act, 19(1)	Facilities that existed prior to the <i>Act</i> may continue to operate and be maintained and, with the approval of the Minister, may be improved, rebuilt or altered.
	Provincial Parks and Conservation Reserves Act, 19(2)	Facilities developed for use within communities that are not connected to the IESO-controlled grid.
	Provincial Parks and Conservation Reserves Act, 19(3)	Facilities identified in a Ministry land use plan before the site where the facility is to be located was regulated.
	Provincial Parks and Conservation Reserves Act, 19(4)	Facilities for use for provincial park or conservation reserve purposes.
	Provincial Parks and Conservation Reserves Act, 54(1)(b)	The Lieutenant Governor in Council may make regulations setting apart an area as a provincial park/conservation reserve or as part of one, decreasing or increasing the area of a provincial park/conservation reserve and establishing the boundary of a provincial park/conservation reserve.

Table 1	Key Legislative Considerations for a Waterpower Project
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AGENCY	LEGISLATION	REQUIREMENT
Ministry of Natural Resources and Forestry	Lakes and Rivers Improvement Act, Section 14 (new works) 16 (Modification of existing works) 23.1 (Existing Waterpower Facilities)	Approval of the location, plans and specifications for new works. Approval of the plans, specifications for modifications to existing works. Incorporation of a facility into a Water Management Plan.
	Public Lands Act, 42	The Minister has the authority to fix the terms and conditions upon which waterpower resources and any public lands necessary for their development are disposed.
Ministry of, Citizenship and Multiculturalism	Ontario Heritage Act	Provides for conservation, protection and preservation of the heritage of Ontario. Its primary purpose is to give municipalities and the provincial government powers to protect real property of cultural heritage value or interest, including heritage buildings and structures; areas, districts or cultural heritage landscapes; and archaeological sites (land based and marine). A license is required to carry out archaeological fieldwork, or to alter or remove artifacts or other physical evidence of past human use or activity from a known land or marine archaeological site. As a term and condition of the license, consultant archaeologists are required to follow the <i>Standards and Guidelines for Consulting</i> <i>Archaeologists</i> .
Ministry of Municipal Affairs and Housing	Planning Act	Provides the basis for the "Provincial Policy Statement" that identifies matters of provincial interest, including cultural heritage, renewable energy, natural heritage etc.
Local Conservation Authority	Conservation Authorities Act, Section 28 individual CA Regulations	Permission is required for activities in and adjacent to watercourses including valleylands, wetlands, shorelines of inland lakes and the Great Lakes-St. Lawrence River System, and hazardous lands.
Fisheries and Oceans Canada	Fisheries Act 20(1)	Minister may request the owner or operator of an obstruction to complete studies, analyses, samplings and evaluations related to fish passage or harm to fish or fish habitat.

Table 1 Key Legislative Considerations for a Waterpower Project

	Fisheries Act 20(2)	To ensure the free passage of fish or to prevent harm to fish, the Minister may request:
		1. Removal of obstructions or barriers;
		2. fishway construction;
		 implementation of a system of catching fish before an obstruction, transporting them beyond it and releasing them back into the water;
		4. installation of a fish stop or a diverter;
		 installation of a fish guard, a screen, a covering, netting or any other device to prevent the passage of fish into any water intake, ditch, chancel or canal;
		 maintaining the flow of water sufficient to permit the fish passage of fish; or,;
		permitting the escape of sufficient water below an obstruction for the safety of fish and fish habitat
	Fisheries Act 20(3)	The design of the dam and/or other obstruction must allow free passage of fish and prevent serious harm to fish during construction, implementation, installation, modification, repair, and operation in accordance with any specifications of the Minister.
	Fisheries Act 20(4),	Fishways must not be damaged or obstructed to prevent fish passage
	20(5)	Fish guards and other similar devices must only be
		Removed with Ministerial approval for the purposed of modification repair or maintenance.
	Fisheries Act 35(1)	No person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Indigenous fishery, or to fish that support such a fishery. Serious harm to fish is the death of fish or any permanent alteration to, or destruction of, fish habitat.
	Fisheries Act, 35(2)	Projects can be carried on so long as prescribed conditions are followed and provides the authority for the Minister to authorize the carrying on of works, undertakings or activities without contravenin subsection 35(1) of the Fisheries Act.
	Fisheries Act 38(4)	Duty to notify an authority of an occurrence or imminent danger of an occurrence that results in serious harm to fish.
Environment Canada and Fisheries and Oceans Canada	Species at Risk Act	Provides for the recovery and protection of listed wildlife species that are extirpated, endangered, threatened or of concern and secures the necessary actions for their recovery.
	Fisheries Act, 36	Prohibits deposit of deleterious substances unless authorized by federal legislation
Transport Canada	Canadian Navigable Waters Act	Approval of the site and plans, including the flows and levels that affect navigation.
Environment Canada	Migratory Birds Convention Act	Prohibits the disturbance, destruction or taking of a nest, egg, nest shelter, eider duck shelter or duck box of a migratory bird under Section 6 of the Migratory Bird Regulations, under the authority of th <i>Act</i> . Under Section 5.1, no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds.

Canadian Impact Assessment Agency (IA Agency)	Impact Assessment Act	Provides for federal assessment process.
Parks Canada	Historic Canals Regulations and National Parks Act	Any project or works in or directly adjacent to waters on these federal lands are to be referred to Parks Canada for their review and approval.
Indigenous and Northern Affairs Canada	Dominion Waterpower Act	Provides the legislative and regulatory framework for waterpower development on federal waterways.

1.4 Reasons for Using a Class EA

MECP recognizes a Class EA as an efficient and effective approach that is applied to a group or "class" of activities that have common attributes, qualities, or characteristics and have predictable effects to the environment. Projects that form part of the class of undertakings (Class EA projects) can proceed without seeking further approval if they have been planned in accordance with the planning process outlined in the approved Class EA.

When a Class EA is approved by the Minister, the approval is for both the class of undertakings defined in the Class EA and the planning process set out in the document. A Class EA is appropriate for the subset of waterpower projects because:

- This Class EA supplements the regulatory framework for electricity projects in the regulations under the EAA and deals specifically with waterpower;
- Ontario Power Generation (OPG) has successfully applied an approved Class EA for Modifications to Hydroelectric Facilities for more than twenty (20) years. This Class EA specifically includes modifications to projects;
- The Class EA has, as a first-level screen, sorted project streams based on the overall environmental context within which they will occur and the known range of waterpower potential in Ontario;
- The Class EA includes environmental evaluation and reporting processes for all waterpower projects. The OWA has taken this proactive approach considerate of the practical experience in pursuing waterpower projects in Ontario; and
- The Class EA incorporates a best practices approach in terms of public involvement, Indigenous community engagement, and project design, allowing for flexibility in adapting to and adopting new and better information.

The Class EA provides for a single document to be used for assessing all undertakings within the defined class according to their type and scale of activity, potential for effect and/or level and extent of public, Indigenous, and agency interest. Prior to this Class EA, waterpower projects were planned according to three separate self-assessment processes: one, the environmental screening process prescribed by the former Electricity Projects Regulation; two, OPG's Class EA for Modifications to Hydroelectric Facilities; and three, the Class EA for Provincial Parks and Conservation Reserves. This document is intended to provide a common process for proponents, the public, government agencies, Indigenous communities and other interests in the planning, evaluation and documentation for each category of project and each project within the categories.

This Class EA is designed to ensure that proponents of waterpower projects consistently take into account the potential effects that their proposals will have on the environment using an approved process that is specific to waterpower projects. It sets out a planning process to be followed for specific project types identified under the Class EA. The process that is followed through this Class EA enables the proponent to identify potential effects to the environment and public, agency and Indigenous concerns, along with the preferred means of addressing them.

1.5 Relationship of the Class EA to Regulations under the EAA

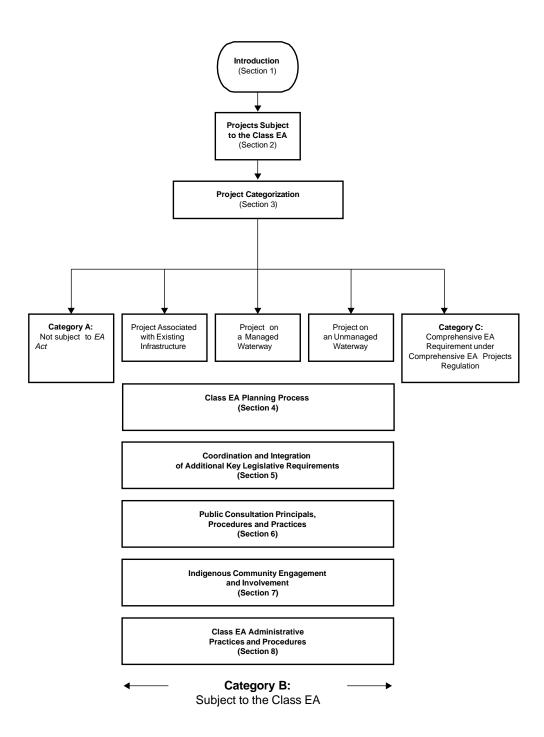
The regulations under the EAA set out the projects designated as Part II.3 projects, for which a comprehensive EA must be prepared under Part II.3 unless otherwise specified under the *EA Act* or its regulations.

Ontario Regulation 116/01 (Electricity Projects) was revoked when Part II.3 of the *EA Act* came into force in February 2024.

MECP's Guide to EA Requirements for Electricity Projects (the "Electricity Projects Guide") sets out three (3) categories of electricity projects for the purposes for the *EA Act*:

- Category A projects are not subject to provincial EA Act requirements (though may be subject to provisions of other legislation);
- Category B projects require a self-screening and may require the preparation of an environmental study report; and
- Category C projects require a comprehensive EA.

A deterministic approach to which projects fall within each category was taken in the regulations related to the designation of Part II.3 projects under the *EA Act*, largely premised on the resultant nameplate capacity of a new electricity project, with some provisions related to the magnitude of change to an existing facility. Figure 4 Structure of the Class EA for Waterpower Projects



2.0 UNDERTAKINGS SUBJECT TO THE CLASS EA

2.1 The Class of Undertakings

Projects that are planned in accordance with this Class EA do not need to obtain separate approval under the *EA Act*, unless an order is made under Section 16 (1) of the *EA Act* declaring an undertaking described in this section to be a Part II.3 project.

In this Class EA, a "waterpower facility" means a generation facility that uses waterpower as its primary power source.

The following are the undertakings to which this Class EA applies (referred to this Class EA as "waterpower projects" or "projects"):

- establishing a waterpower facility that has a nameplate capacity of less than 200 MW;
- changing a waterpower facility that has a nameplate capacity of less than 200 MW, if the change would increase the nameplate capacity of the facility by greater than or equal to 25 percent; and
- changing a waterpower facility that has a nameplate capacity of greater than or equal to 200 MW, if the change would increase the nameplate capacity of the facility by less than 25 percent.

Changing a waterpower facility includes but is not limited to upgrades, expansions, redevelopments of existing facilities, and retrofits of existing infrastructure.

A waterpower project to which this Class EA applies includes the following activities if they are ancillary to establishing or changing the waterpower facility:

- establishing or changing a transmission line that is,
 - 115 kV or greater, and
 - used to transmit electricity at the waterpower facility or from the waterpower facility to the Independent Electricity System Operator-controlled grid.
- establishing or changing a transmission station that is,
 - o 115 kV or greater, and
 - used to transform the voltage of

electricity at the waterpower facility or on a transmission line associated with the facility.

These transmission lines and transmission stations are to be evaluated using this Class EA. At the discretion of the proponent, the evaluation may be applied separately to the generation and transmission components.

Section 3 provides a description of the categories of waterpower projects.

An environmental assessment under this Class EA with respect to a waterpower project will include an assessment of the design, construction, operation, maintenance and retirement of the generation and transmission components of the project.

2.1.1 Historical Exemptions Continued

Prior to its revocation in 2024, O.Reg. 116/01 under the EAA included a grandparenting provision in section 7 that exempted certain undertakings. That exemption is continued under this Class EA.

Pursuant to s. 15.3 (1) of the EAA, the EAA does not apply with respect to a project to which this Class applies that is the changing of a waterpower facility that was constructed before April 23, 2001 if:

- No approval under section 5 of the EAA, as it read on April 23, 2001, was required to construct the facility; and
- (ii) The change, together with any other change made since the facility was constructed, is not a change that would increase the name plate capacity of the facility by greater than or equal to 25 percent.

Such a project is exempt from the EAA pursuant to ss. 15.3(2) of that Act.

2.2 Waterpower Projects

A waterpower project typically involves one or more of the components listed below. The list is not intended to be all-inclusive.

- Main dam, control dam and side dam
- Powerhouse
- Auxiliary storage
- Auxiliary block dam
- Penstock
- Diversion dam and diversion channel

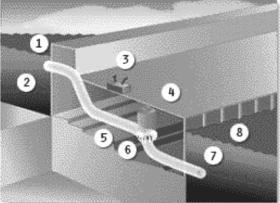
- Tunnel
- Turbine
- Canal
- Weir
- Aqueducts and pipeline
- Forebay
- Reservoir/Headpond
- Spillway/sluiceway
- Incorporation of electrical transmission lines and transmission station(s)
- Access roads and associated auxiliary structures

Most waterpower facilities use the natural drop or "head" of the river and/or build a dam to raise the water level and provide the drop needed to create a

driving force. Water at the higher level (the forebay) goes through the intake into a canal or a pipe called a penstock, which carries it down to the turbine.

The turbine is connected to a generator. When the turbine is set in motion, it causes the generator to rotate and electricity is produced. The falling water then exits the generating station through the draft tube into the tailrace. **Figure 5** depicts this process and some of the above-mentioned components.





Forebay 2. Intake 3. Transformer 4. Generator
 Penstock 6. Turbine 7. Draft tube 8. Tailrace

Source: Ontario Power Generation

Other waterpower technologies include "pumped storage," a method of storing and producing electricity to supply high peak demands by moving water between reservoirs at different elevations and "water current" systems that convert hydro kinetic energy from flowing water into electricity. These technologies are considered water-powered and, hence, are included in this Class EA.

2.3 Similarities Among Project Types

Waterpower development and re-development has taken place in Ontario for well over a century and the basis for the production of electric energy from falling water has not fundamentally changed over time. The province has gone through a number of waterpower or hydro eras, most recently from the mid-1980s to the early 1990s. Notwithstanding that waterpower is considered a relatively mature means of producing electricity, advancements in technology, efficiency, water resource management and environmental mitigation continue to be made.

The approach taken in this Class EA recognizes that potential effects on the environment and public concerns associated with a waterpower project are a function both of the nature of the project as well as the conditions and characteristics of the natural and socio-economic environment within which a project is proposed. This broader context provides the most useful means of identifying the generic similarities among projects.

2.4 Differences Among Project Types

Project types covered by this Class EA range from those that modify existing infrastructure (e.g., retrofits and expansions) to new facilities where none existed before. In addition, projects may occur in different environmental settings characterized by managed or unmanaged river systems.

Projects may also differ based on site-specific considerations related to:

- The general natural environment
- Aquatic and riparian ecosystems
- Cultural heritage resources
- Social and economic features
- Community and public interest
- Land and resource use

This Class EA recognizes these differences and sets out assessment and consultation requirements to ensure that the unique characteristics of each project can be appropriately addressed. This is further described in **Section 4**.

2.5 The Environment Affected and the Expected Range of Effects

A variety of aspects of the environment may be affected by waterpower projects. The definition of "environment" used in this Class EA is the same as that in the EA Act. "Environment" in the EA Act is broadly defined to include air, land and water, as well as natural, cultural, social and economic components. Waterpower inventories have identified new potential across the province and in a wide range of environments. The categorization is premised on the environmental context within which projects will occur, recognizes this range of environments, and provides for project-specific assessment. The matrix provided as Table 3 has been designed to help identify both positive and negative potential effects of a project, ensuring that projects are viewed as a whole. In all cases, the assessment of impacts and benefits and the projected significance of the net effect (i.e., after mitigation) will be based on site and system-specific investigations.

Subject to **Section 3.1.1**, all waterpower projects will require the preparation and review of an Environmental Report (ER). **Section 4** provides a framework for the proponent to identify and consider the environment as defined in the *EA Act*. The subsections below are intended to provide an additional emphasis on effects expected to be common and/or important to most projects. It is not the intent that this list be all-inclusive. While the other benefits of new waterpower have not been specifically itemized (e.g., flood mitigation, water supply), the application of the matrix is expected to identify these contributions for each project.

2.5.1 Fish and Fish Habitat

The vast majority of waterpower projects involving new waterpower facilities are anticipated to involve potential effects related to fish and fish habitat (as defined in the federal *Fisheries Act*). These considerations can transcend jurisdictional boundaries, either through legislative mandates **Class Environmental Assessment** and/or implementation protocols. In Ontario, the Ministry of Natural Resources and Forestry manages fisheries while Fisheries and Oceans Canada manages fish habitat. **Section 5** provides an overview of the potentially relevant requirements of the *Fisheries Act*. **Appendix C** includes information on resources available from the OWA, including information on obtaining an authorization under the *Act*.

2.5.2 Water Level/Flow Management and Aquatic Ecology

Of particular relevance for new projects on unmanaged river systems and of possible consideration for projects on managed river systems

is the potential resultant change in the water management regime. The increasing interest in "flow" as one determinant of aquatic ecosystem integrity and the potential considerations for optimal water management regimes for electricity production warrants specific attention. Proponents should have an early concept of water availability and have the flexibility to pursue site-specific strategies. **Appendix C** lists reference material available through the OWA, including that related to water levels and flows.

2.5.3 Interests of Riparian Owners

The legal authority for a proponent to pursue a new waterpower facility in Ontario involves a riparian right in common law, related to the ownership of the bed and/or banks of the waterway. Riparian rights cannot be exercised in such a manner as to impair the similar rights of others. These interests may be the result of freehold title to the land adjacent to water upstream or downstream of a development or through authority granted by the province (or the federal government) with respect to the use of adjacent Crown lands and may include backshore property owners who abut public lands adjacent to water (e.g. Crown Shoreline Reserves or Municipal Road Allowances). By its very nature, waterpower development and water resource management must consider the interests of other riparian owners. In practice, this can result in competing or complementary interests upstream and downstream of a proposed facility, and tradeoffs that seek to balance the impacts and benefits to the extent possible.

2.5.4 Interests of Water-Resource Users

Whether interests are related to navigation, resourcebased tourism, water intakes or other forms of water resource use, it is reasonable to expect that waterresource users will be engaged in many new waterpower proposals. While many will bring individual interests and values, they can also be informed and/or represented by collectives or organizations. These potentially interested parties are an important consideration for early involvement in the proposed waterpower project.

2.5.5 Interests of Water-Related Natural Resource Uses

Interests related to the use and enjoyment of natural resources that are water or riparian dependent such as recreational fishing, fur harvesting, baitfish harvesting and wild rice harvesting are also likely to be involved in waterpower projects. An early identification of the likelihood of the project to affect such activities will help to tailor the public consultation plan to the interests identified.

2.5.6 Provincial Parks and Conservation Reserves

Waterpower projects inside or near a provincial park or conservation reserve may have effects on the unique values for which the park or conservation reserve was established. An early identification of the likelihood of the project to affect such values will help to establish any necessary mitigation measures with regard to the values identified and help to identify consultation requirements. To the extent possible, consideration must be given to ensure the maintenance of ecological integrity and the protection of cultural and recreational values.

2.5.7 Interests of Water Management Infrastructure and Waterpower Facility Owners

For projects on managed river systems there is the potential for a project associated with existing infrastructure or a new waterpower facility to impact the operation of existing infrastructure. In these circumstances it is the responsibility of the proponent to identify and assess the effects of their projects on the existing facilities and propose appropriate mitigation measures.

2.5.8 Heritage Resources

The EA Act defines environment broadly to include February $2024 - 10^{\text{th}}$ Edition

cultural conditions that influence the life of humans or a community. Cultural heritage resources are important components of those cultural conditions. Therefore, a standard aspect of EA processes in Ontario involves assessing the effects an undertaking may have on known or suspected cultural heritage resources and addressing those effects.

For cultural heritage resources, regardless of potential benefits or level of effect, any project that

may affect a built heritage resource, cultural heritage landscape, a known archaeological site, or an area of archaeological potential may require further technical heritage studies by qualified persons.

As water conveyance and generation components of waterpower projects are generally located in areas within 300 metres of historic or present-day water sources, they are considered to have cultural heritage and archaeological potential per MCM standards and guidelines. Proponents should recognize this when completing Table 3 and should consult MCM guidance when completing cultural heritage and archaeological assessments. Section 5.3.8 and Appendix C provide additional guidance on the consideration of cultural heritage values.

2.6 The Applicant and Project Proponents

This section differentiates the applicant for the Class EA (OWA) from the proponents of individual projects that are the subject of the Class EA. Direction is also provided on instances where there is more than one proponent for a project.

2.6.1 Class EA Applicant

The OWA, representing its members and the waterpower industry in Ontario, submitted a Terms of Reference for the establishment of this Class EA for approval under the *EA Act* and is the applicant for this Class EA. The OWA is not a project-specific proponent.

The OWA will have lead responsibility for communicating, supporting, monitoring, evaluating, proposing amendments to this Class EA and reporting to MECP on projects undertaken. As detailed in **Section 8.1**, the OWA is responsible for monitoring the implementation of this Class EA to ensure that it is satisfying its purpose, and that it remains relevant and current. Notice provisions will help ensure the OWA is apprised of all projects, regardless of the proponent's affiliation with the OWA.

2.6.2 Project Proponents

This Class EA applies to all proponents of waterpower projects, regardless of their affiliation with the OWA. For a project planned in accordance with the Class EA the proponent means:

 a public agency or private sector developer, and/or Indigenous community who carries out or proposes to carry out the waterpower project, or who is the owner or person having charge, management or control of the waterpower project.

Proponents may identify authorized agents to carry out the Class EA process for projects on their behalf. Notwithstanding the coordination role of the OWA, proponents will retain any associated liabilities for non-compliance.

2.6.3 Co-proponents

For undertakings subject to this Class EA, where public agencies, communities and/or private sector developer(s) jointly undertake a project for their mutual benefits, as co-proponents, all terms and conditions of this Class EA shall apply equally to each co-proponent.

For undertakings subject to this Class EA, where public agencies, Indigenous communities and/or private sector developer(s) undertake a project for their mutual benefits but select one of the parties to be the lead proponent to carry out the project planning and implementation, all proponents will be subject to the terms and conditions of this Class EA.

When carrying out an undertaking subject to this Class EA, public agencies, Indigenous communities and private sector proponents are urged to determine and clearly identify who the proponents will be early in the process and include the information in the Notice of Commencement. For further information on the potential for co-proponency related to the coordination of projects under other Class EAs, refer to **Section 5.1**. Class Environmental Assessment

3.0 PROJECT CATEGORIZATION

This section explains the categorization of waterpower projects. This Class EA differentiates waterpower projects based on the environmental context within which they occur. The categories within this Class EA:

- Build on the current regulatory framework for EA of electricity projects, which includes a proponent-led and flexible approach to address project-specific issues;
- Predetermine process, based on key differences in the environment within which projects are proposed;
- Ensure a consistent approach to evaluation, impact management and documentation;
- Provide for scaled and flexible public, agency and Indigenous involvement and evaluation/documentation; and
- Allow for the relevant range of potential impacts and benefits to be assessed for each project.

The categorization of waterpower projects includes a screening process for low-risk projects to be exempt from *EA Act* requirements.

3.1 Categorization of Undertakings Subject to This Class EA

Within this Class EA, waterpower projects have been streamed into categories as a means to match development proposals with the general scope and scale of the environmental context within which they occur. Based on inventories of Ontario's remaining waterpower potential, the array of projects that are expected to come forward in the foreseeable future include:

- Projects associated with existing infrastructure or increases in efficiency (within this category, certain projects are eligible to complete a screening process to be exempt from EA Act requirements);
- New projects on managed river systems; and
- New projects on unmanaged river systems.

As discussed in **Section 2**, waterpower projects occurring in similar environmental contexts have been assigned to categories so that the scale and scope of assessment and review for a project is matched to its potential for and nature of effects to the environment and public and/or agency concern.

These categories are intended to facilitate focused assessment and effective and efficient engagement. The following sections describe the categories to which waterpower projects have been assigned under the Class EA. **Table 3** provides a summary of the distinctions in process between categories.

3.1.1 Projects Associated with Existing Infrastructure or Increases in Efficiency on Managed Waterways

This category consists of waterpower projects that are expansions, modifications or redevelopments and are proposed at, near or around existing facilities or water management infrastructure. As an example, this could include the retrofit of an existing dam to incorporate a waterpower facility.

Note that the terms "retrofitting" or "redevelopment", as they are commonly applied to waterpower projects, are defined in this Class EA (see **Appendix A**) for additional clarity in the categorization of projects.

Projects associated with existing infrastructure are less likely to involve new significant effects and are anticipated to have localized interests. In general, this category of projects will involve relatively localized direct effects to the environment and, while project size may vary, the scope of change will often be restricted to the infrastructure itself and the zone of impact resulting from modification. However, these types of facilities may have been in existence for many years and may have built cultural heritage value or interest. These projects, therefore, have the most likelihood to affect buildings or structures of cultural heritage value or interest ("built heritage"). However, the possibility of affecting built heritage is potentially relevant to all categories.

In addition to the limitations imposed by changes to existing infrastructure, it is reasonable to expect that water management regimes are already established, either as expressed through a formal water management plan or through the identification of relevant social and environmental values and interests. Projects within the category that involve significant changes in water management regimes are likely to be more complex than those that do not.

The projects in this category include:

- Changing (including expanding) a waterpower facility with a nameplate capacity of less than 200 MW if the change would increase the nameplate capacity of the facility by greater than or equal to 25 percent; and
- Changing (including expanding) a waterpower facility with a nameplate capacity of 200 MW or more, if the change would increase the nameplate capacity of the facility by less than 25 percent;

In terms of process, the projects will include a proponent-agency coordination meeting, a mandatory public notice at the beginning of the project (Notice of Commencement) and a second public notice (Notice of Completion) to parties who have requested to be informed and engaged and/or who have participated in the consultation.

Screening Process to Exempt Low-risk Projects

Noting that, this category of projects is anticipated to include projects that involve very minimal, short term and localized effects that can be addressed through other legislative mechanisms (e.g., *Lakes and Rivers Improvement Act, Fisheries Act, etc.*), a screening process has been developed to enable those projects to be screened and, subject to the screening outcomes, exempt from the *EA Act*, and therefore remaining processes under the Class EA.

Projects that fall within this category must meet the following criteria to qualify for the Class EA Screening Process:

- Are associated with existing water management infrastructure, such as a dam, a weir, or a lock. The existing water management infrastructure may be retrofitted, or refurbished/upgraded (as defined in Appendix A); and
- Limit any increase in the footprint of the water management infrastructure to 25% or less.

In terms of process, the proponents of projects meeting both criteria above will qualify to complete a screening to confirm that there are no significant negative environmental effects anticipated from the project. As a first step in the screening process, proponents will issue a Notice of Project Screening to:

- the Ministry of the Environment, Conservation and Parks' Director of the Environmental Assessment Branch and the Regional Environmental Assessment Coordinator
- the Ministry of Natural Resources and Forestry;
- the Ministry of Energy;
- the Ministry of Citizenship and Multiculturalism
- anyone potentially directly affected by the project; and
- potentially affected Indigenous communities.

The Notice of Project Screening will be published on the OWA website and, if available, the proponent's website, and will be provided to anyone directly affected by the project by direct mail outs. The notice must include:

- The project title and name of the proponent;
- A brief description of the project and tentative category;
- A map showing project location and anticipated zone of influence;
- The project type (retrofit, or refurbishment/upgrade; or efficiency increase);
- Watercourse identification;
- Current installed capacity and proposed installed capacity;
- Anticipated % expansion of infrastructure, if any; and
- A statement that: "This project is being screened in accordance with the process outlined in section 3.1.1 of the Class EA for Waterpower Projects. For further information about the

Class Environmental Assessment

Table 2 presents the screening checklist that must be completed by the proponent for each project following issuance of the notice. If concerns are raised by an Indigenous community regarding potential adverse impacts on an established or asserted Aboriginal or treaty rights, the Crown's duty to consult may be triggered. In such instances, the proponent will seek guidance from the Ministry of the Environment, Conservation and Parks. It is the expectation of the ministry that the proponent will work with the ministry and Indigenous communities to address issues before the completion of the screening process. The proponent will document its supporting analysis and conclusions, including any mitigation or impact management measures to prevent or reduce the effects the project may have on the surrounding environment (for example, application of the OWA's Best Management Practices). If the response to any of the screening questions is "yes", the project is not successfully screened and the screening process cannot be completed. Instead, the proponent must complete the full Class EA process for the

project, which will facilitate further study and analysis. The Class EA process is further described in Section 4.0.

If the screening outcome is "no" for all the questions below, the proponent will notify the Ministry of the Environment, Conservation and Parks' Director of the Environmental Assessment Branch and the Regional Environmental Assessment Coordinator. There must be a minimum 30 days between the circulation of the Notice of Project Screening and the completion of the screening process. Any ministry that received issue of Notice of Project Screening may request a copy of the proponent's supporting documentation. Upon competition of the screening process, the project will be exempt from further assessment under the Ontario Environmental Assessment Act. Figure 5 provides an overview of the screening process.

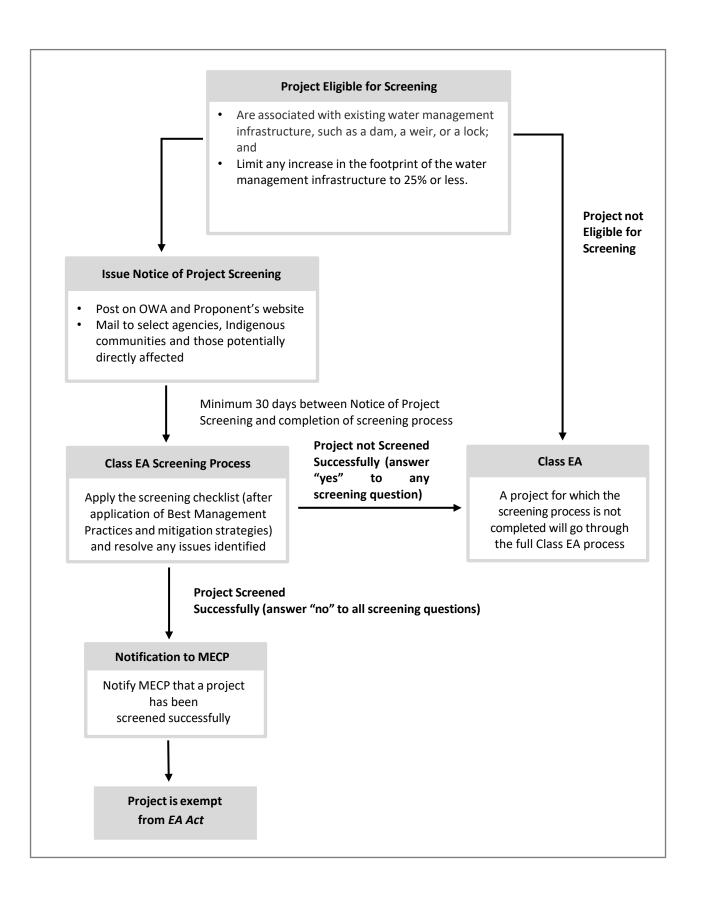
Projects that are screened out of the Class EA are subject to applicable provincial and federal legislation as outlined in Table 1.

Table 2 Screening Questions to Exempt Projects Associated with Existing Infrastructure or Increases in Efficiency on Managed Waterways

SCR	EENING CRITERIA	OUTCOME (YES OR NO) Please identify any Best Management Practices that will be applied related to each screening criteria. After application of appropriate Best Management Practices and mitigation strategies, is the project expected to:
1.	Change the water management regime, including (but not limited to) significant change to water flow, inundated area or, historical mean monthly maximum water level?	
2.	Release contaminants into the immediate environment that exceed regulatory thresholds?	
3.	Cause negative effects on species or their habitat for species listed under the Ontario <i>Endangered Species Act, 2007</i> ?	
4.	Cause negative effects on protected areas, such as areas of natural and scientific interest (ANSIs), environmentally sensitive areas (ESAs) or provincially significant wetlands?	
5.	Cause considerable sedimentation or erosion on or off-site?	
6.	Have negative effects on known (previously recognized) or potential built heritage resources and/or cultural heritage landscapes? (See instructions below)	
7.	Have negative effects on archeological resources and areas of archaeological potential? (See instructions below)	

Instructions:

- To respond to questions 6 and 7, proponents must notify the Ministry of Citizenship and Multiculturalism's (MCM) Heritage Planning Unit at heritage@ontario.ca for project specific advice on what technical culture heritage studies may be applicable. MCM will provide a letter to the proponent with this advice.
- Proponents are encouraged to review MCM's "Template Letter", dated January 2024 as may be amended by MCM from time to time, and posted on the Class EA page of the OWA website.



3.1.2 New Waterpower Facilities on Managed Waterways

These are new projects on waterways that have management infrastructure and/or waterpower facilities on them, regardless of whether the project is located within the zone of impact of the existing infrastructure or waterpower facility. These projects may be expected to have potential broader effects and/or public, Indigenous community and/or agency interest. However, given that projects in this category are restricted to those that take place on river systems already subject to water management, the evaluation and assessment will be primarily focused on the development site, the immediate zone of impact and the potential incorporation of the new operation into the existing water management regime. Some developments may involve changes to the existing regime and, hence, the involvement of a broader scope of interests and potentially a broader study area/zone of impact.

Proponents of projects in this category are required to convene a proponent-agency coordination meeting, issue a mandatory public notice at the beginning of the project (Notice of Commencement) and a second broad public notice (Notice of Completion), regardless of any concerns or interest that come forward as the result of the first notice or the level of participation through consultation.

These are projects involving new waterpower facilities on establishing a

waterpower facility that has a nameplate capacity of less than 200 MW on a managed waterway.

3.1.3 New Waterpower Facilities on Unmanaged Waterway

These projects occur on unmanaged waterways and can have the most potential to cause broad effects and/or are expected to have considerable public, Indigenous community and/or agency interest. These projects involve new waterpower facilities on river systems not previously subject to water level and flow management. They will not only involve consideration of the direct effects of the new infrastructure, but are also most likely to require an assessment of the implications of an introduced water management regime.

Given the potential for greater complexity, the process defined in the Class EA provides for additional public, Indigenous community and/or agency involvement.

These projects include:

 Establishing a waterpower facility that has a nameplate capacity of less than 200 MW on an unmanaged river waterway.

Table 3 provides a summary of the distinctions inprocess between projects.

	New Waterpower Facilities on managed waterways	New Waterpower Facilities on unmanaged waterways
Rationale for Categorization	Introduction of new infrastructure on a system with existing infrastructure with greater potential for localized and up and downstream effects and/or concerns.	Introduction of infrastructure on a previously undisturbed system (e.g. Far North Rivers) with potential broad scale effects and/or regional concerns.
Mandatory Notification Requirements	 Notice of Commencement Notice of Completion Statement of Completion 	 Notice of Commencement Notice of Inspection (to parties who have expressed an interest or participated) Notice of Completion Statement of Completion
Key Environmental Considerations	Environmental considerations may extend to the impacts and benefits of the introduction of new infrastructure on a segment of the waterway above and/or below existing infrastructure and existing water management regimes.	Environmental considerations may extend to the impacts and benefits of the introduction of new infrastructure and a water management regime on a system that has not been previously affected.
Involvement	Agencies, Interested Parties, Indigenous Communities, as appropriate.	Agencies, Interested Parties, Indigenous Communities, as appropriate.
Documentation	Environmental Report	Environmental Report
General Level of Detail Expected	Categorization of projects does not define or differentiate the rigor or level of the environmental evaluation required. All projects require an evaluation and assessment of the potential impacts and benefits of the project, which should be commensurate with the anticipated potential environmental effects and in consideration of the surrounding environment.	Categorization of projects does not define or differentiate the rigor or level of the environmental evaluation required. All projects require an evaluation and assessment of the potential impacts and benefits of the project, which should be commensurate with the anticipated potential environmental effects and in consideration of the surrounding environment.
Target Timelines for EA Completion*	12-18 months	12-24 months

Table 3 Distinctions Between Project Types

3.2 Waterpower Undertakings beyond the Scope of the Class EA

This Class EA does not cover all undertakings related to waterpower facilities. Some such undertakings have no *EA Act* requirements and some require approval under Part II.3 (including preparation of a comprehensive EA). This section explains in further detail how these undertakings relate to the Class EA; however, they are not in fact subject to this Class EA.

3.2.1 Electricity Projects Guide – Category A Projects: Not Subject to this Class EA

Under the Electricity Projects Guide, Category A projects are those that are either exempt from provincial *EA Act* requirements or that are not subject to the *EA Act*. By definition, they are expected to have minimal or no new effects to the environment. The minimum threshold for a new waterpower facility is a Category B project. Although Category A projects are not subject to or are exempt from the *EA Act*, if there is a related requirement for a new disposition of rights to Crown resources, the disposition may be subject to the MNRF Class EA – RSFD or the Project Evaluation Policy under the *Provincial Parks and Conservation Reserves Act*, as appropriate. **Section 5** provides detail on these requirements.

3.2.2 Electricty Projects Guide - Category C Projects: Comprehensive EA

As described in the Electricity Guide, Category C projects are determined to be major projects with the potential for significant net effects. These projects require a comprehensive EA and are not subject to the Class EA. The required process for a Category C project would be determined through the preparation and approval of Terms of Reference under Part II.3 of the *EA Act*. The following are category C projects:

- Establishing a new waterpower facility with a nameplate capacity of 200 MW or more; and
- Changing a waterpower facility with a nameplate capacity greater than or equal to 200 MW, if the change would increase the nameplate capacity of the facility by 25 percent or more.

3.3 Incorporating Waterpower Projects into the Grid

As described in **Section 2.1**, establishing or changing transmission lines and transmission stations operating at 115 kilovolts or greater that are ancillary to establishing or changing a waterpower facility are to be considered part of the waterpower project and evaluated using the Class EA process.

If the transmission lines are proposed to occupy Crown land, dispositions of rights to Crown resources may be required from the Crown (e.g., MNRF or MECP). Opportunities exist to coordinate the requirements under this Class EA for the waterpower project and any requirements or processes for the disposition needed for the transmission component of the project under the MNRF RSFD Class EA or MECP's Project Evaluation Policy under the Provincial Parks and Conservation Reserves Act, as appropriate. Proponents are encouraged to establish an approach to such situations at or before the initial co-ordination meeting with the MNRF and MECP (for projects within a provincial park or conservation reserve), the appropriate transmission company and other interested agencies.

4.0 CLASS EA PLANNING PROCESS

This section describes the steps of the Class EA planning process for all projects, other than those for which the screening process in **Section 3.1.1** has been completed. It should be noted that some components of the process may be iterative. For example, the proponent should initiate a coordination meeting early in the process however it may be beneficial to have another meeting after the completion of the matrix or prior to the publication of the Environmental Report (ER). Likewise, a project description should be prepared in the initial concept phase of the project, but a revised and more detailed project description may be prepared in the definition and assessment phases.

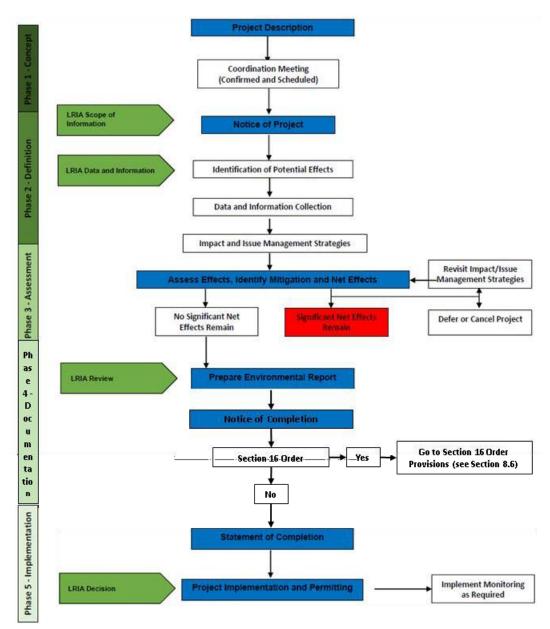
In brief, this Class EA outlines the planning process in five phases through which a project proposal moves from concept to implementation phases. These phases are described as follows for each project proposal, with certain differences noted for projects applicable under **Section 3.1.1** and depicted in **Figure 6**.

- Phase 1 Project Concept: the initial concept phase of a project proposal and the development of public engagement and consultation plans, as appropriate (Section 4.1);
- Phase 2 Project Definition: the determination of project specific considerations and the start of public engagement and consultation in the EA process (Section 4.2);
- Phase 3 Project Assessment: development of mitigation strategies to address identified key considerations (Section 4.3);
- Phase 4 Documentation: summarizing and reporting on information analyzed and collected, outcomes of consultation and engagement and reaching conclusion on the EA (Section 4.4); and
- Phase 5 Project Implementation: subsequent permits, approvals and monitoring (Section 4.5).

This planning framework is presented in **Figure 7** and key components are expanded upon throughout this section. Elements in **BOLD** denote mandatory points of public notice. Subsequent sections build on this framework, particularly with respect to the incorporation of additional legislative and regulatory planning requirements for waterpower projects that are the subject of the Class EA (**Section 5**).

The process outlined is generic and the timelines proposed within categories are targets. Project specific information and the nature of the concerns of interested parties will help determine the degree to which the process can be expanded or contracted by the proponent.





4.1 Phase 1 – Project Concept

This phase of the EA process is intended to establish the initial basis for project evaluation and public engagement. It is the foundation upon which all subsequent phases are premised and, therefore, warrants particular emphasis by the proponent. In many instances, this phase will follow on the effort and investments already made in securing access to the proposed location or, in the case of projects involving existing infrastructure, will be undertaken after initial feasibility has been established.

Key aspects of this phase include:

- Describing the Project and the characteristics of the environment within which the project is proposed;
- Establishing a project coordination approach with key provincial and federal agencies (e.g. Fisheries and Oceans Canada); and
- Developing public consultation and Indigenous engagement plans, as appropriate.

4.1.1 Project Description and Environmental Context

A detailed project description will help to ensure that all aspects of the project are accounted for in the definition and assessment stages. The project description should include, as is practical at the predevelopment stage, sufficient detail to allow for the public, Indigenous communities and agencies to provide meaningful comment when the Notice of Commencement is issued.

Key elements include:

- Purpose of the project
- rationale, location, duration of the project
- watercourse identification
- anticipated zone(s) of impact
- potential effects to the environment
- early avoidance/prevention/mitigation concepts
- proposed project phasing

Proponents should delineate the study area and baseline conditions for the project and identify the potential impact zone(s) of relevance to environmental, social, cultural and economic features. The description of the project components will facilitate the identification of those environmental, cultural and socio-economic components that, if present, could be affected either directly or indirectly and therefore require assessment. The proponent's determination of the zone of impact should be informed through early and ongoing dialogue with regulatory agencies. There may be multiple zones of impacts for any one project in order to reflect different risks to the various features being studied. The determination must be supported by methodologies and rationale appropriate for the project. The zone of impact may change throughout the planning phase in response to new information or design considerations.

Baseline conditions are used to define the environmental setting or context against which proponents assess the potential impacts of proposed waterpower developments. For the purposes of environmental assessment and permitting, proponents should assess the impacts of the proposed waterpower development against existing conditions at the time of the proposed development. In the absence of site-specific information on existing conditions; proponents may apply surrogate data from comparable systems. There may also be some cases where there is a need to concurrently assess the potential effects of multiple waterpower facilities and projects on a river system being developed over a short time period. The decision to collect surrogate data or to review multiple waterpower facilities and projects will be made during the pre- consultation meeting. With respect to project hydrology, proponents may consider assessment methodologies which extrapolate from other sites/systems in the absence of reliable site-specific data. Once identified, additional perspective on the magnitude and significance of the effects may be determined through the application of hydrologic and other assessment tools. Determinations regarding the application of assessment metrics and tools should be informed through discussions with agencies as early in the environmental assessment process as possible. The OWA Ecological Flows Toolkit (2014) provides a list of potential assessment tools, some of which consider hydrologic reference condition assessment metrics.

Proponents should assess projects in their entirety. It is generally inefficient to break up or "piecemeal" a

larger project into separate components or phases with each part addressed as a separate project, though phasing of project implementation may be appropriate.

4.1.2 Project Coordination

A key objective of the Class EA is to help coordinate and integrate requirements of regulatory agencies and the Impact Assessment Act (IAA) by using the Class EA as the primary vehicle for identifying environmental concerns appropriately addressed through the Class EA planning process. Of relevance to most waterpower projects are likely to be approvals related to fish and fish habitat (Fisheries Act), navigation (Canadian Navigable Waters Act), water taking (Ontario Water Resources Act), infrastructure (Lakes and Rivers Improvement Act) and land disposition (Public Lands Act /Provincial Parks and Conservation Reserves Act). Of specific relevance to waterpower projects in protected areas is fulfillment of management planning requirements (for example, amendments to management direction). The proponent-led coordination meeting with key agencies (e.g., MNRF, MECP, DFO, TC, Impact Assessment Agency of Canada (IAC), CAs, local municipality[ies], etc.) is an important tool to achieve this objective.

For all projects, once the proponent has the intent to commence the Class EA process, the proponent should initiate a meeting with relevant agencies to discuss, among other things:

- overview of project concept;
- agency mandates and how the proposed project relates to the statutes and policies administered by each agency;
- known project-specific environmental, social and economic values;
- the approach to data and information collection;
- the approach to public consultation;
- the approach to involving Indigenous interests and relative roles and responsibilities;
- expectations for future communication (e.g., when, who) and expected timelines and tasks associated with the stages of the process; and
- other potential permitting and approval requirements.

In advance of the meeting, the proponent should provide the agencies invited to the coordination meeting with the project description and environmental context prepared earlier in the process, as described in Section 4.1.1 above. In order to be effective the coordination meeting requires the timely commitment of staff and information from key regulatory agencies with an interest in the project. For the vast majority of waterpower projects involving new waterpower facilites, the window of opportunity with respect to the timing of environmental studies and surveys is seasonally dependent. In practice, this can mean that a short period of time lost at the commencement of the process can translate into an extended delay for the project. Early investment by all parties will yield efficiencies throughout the process. The inability of agencies to participate, however, will not prevent the continuation of a project through the Class EA process.

4.1.3 Developing Public Consultation and Indigenous Engagement Plans

Early and meaningful engagement of representative interests and publics that may be affected by the project is prudent business practice and a critical element of achieving the intent of the Class EA. The purpose of public consultation and Indigenous engagement is to provide those who may have an interest in the project, or those who may wish to participate with the opportunity to contribute to and inform decisions relating to a project. It provides the proponent with the opportunity to gain information and knowledge related to social, cultural, economic and environmental considerations of relevance to the project.

For projects under section 3.1.1, Indigenous consultation will be completed primarily by sending the Notice of Project Screening (see section 3.1.1), the Notice of Completion (see Section 4.4.3) and the Statement of Completion (see Section 4.5.1) to the Indigenous communities by registered mail. Public consultation will be completed primarily by direct mailings to anyone potentially directly affected by the project.

Further discussions with any potentially affected Indigenous communities or parties may be required depending on the level and nature of potential impact. For all other projects, proponents are expected to design and implement their consultation plans considerate of the context (e.g., geography, timing, needs of interested parties) most relevant to the proposal. In practice, this can mean adopting projectspecific approaches to notification and involvement or both. As with the project description, plans at this stage will be anticipatory, and may be refined as the planning process unfolds. Specific information on consultation planning and implementation is included in **Section 6**.

With respect to the engagement of Indigenous interests, some project proposals may have been developed with the direct involvement and participation of communities prior to commencing EA. In these instances, the Class EA component of Indigenous engagement will be informed by the relationships already established. Specific advice is included in **Section 7**.

4.2 Phase 2 – Project Definition

While the Class EA process is not linear, it does provide a framework that moves a proposal from the general to the specific. The evaluation of potential impacts, benefits and issues informs not only the design of the proposal but can also be used to tailor the process. In this phase proponents are expected to:

- identify potential effects on the environment;
- implement public consultation and Indigenous engagement, as appropriate; and
- address data and information collection/acquisition priorities.

4.2.1 Notice of Commencement

In order to help ensure that potentially interested parties are aware of the project, the proponent must issue a Notice of Commencement for a waterpower project not screened out under Section 3.1.1. This public notice is a mandatory point of contact and must be directly provided to:

- adjacent and potentially affected riparian landowners/tenants;
- potentially affected Indigenous communities;
- the MECP Regional EA Coordinator at the appropriate Regional Office of the MECP;

- the local MNRF office and/or park zone office (for projects within a provincial park or conservation reserve);
- the Ministry of Energy;
- other potentially interested government agencies (e.g., Municipal Affairs and Housing, Citizenship and Multiculturalism, Parks Canada etc.) as appropriate;
- potentially interested municipalities, including those hosting project-related infrastructure;
- other potentially directly affected water management infrastructure owners/operators;
- other directly interested or affected parties (e.g., local interest groups, businesses, resources licensees, members of the public that may be directly affected by some aspect of the project); and
- the President of the OWA.

A Notice of Commencement must also be published in a local newspaper having general circulation within the area of the project. Where local newspapers do not exist, the proponent should use an equivalent means of achieving the same objective of adequate notification of local interests. Additional notification methods may also be employed at the proponent's discretion. Where an internet site is employed as an additional notification technique, proponents are encouraged to submit the web address (URL) to the OWA for posting on the OWA website and/or to embed it within their notice of commencement. The OWA will post all Notices of Commencement on its website.

A Notice of Commencement must include:

- The project title;
- The name of the proponent;
- A brief description of the project and tentative schedule;
- A map showing project location and anticipated zone of impact;
- A statement that the project is subject to a defined process under the Class EA for Waterpower Projects;
- An invitation to participate in the process;
- A contact name, address, fax and telephone number and/or e-mail address to whom questions or requests for additional information should be directed or comments can be sent;

- For projects associated with existing infrastructure, an explicit statement that subsequent direct notices will be provided to those who express an interest in the project; and
- An indication of additional opportunities to be informed and/or involved in the project.

A template for a Notice of Commencement is included in **Appendix D**.

4.2.2 Identification of Potential Effects

This section, and the accompanying matrix provided as **Table 4**, is intended to provide guidance to proponents in assessing the relevance of potential impacts and benefits under individual criteria and for the project as a whole. The evaluation completed during this phase of the Class EA will assist proponents in the identification of considerations of most relevance to the project and the determination of relative priorities for investigation and investment in the creation of the ER. The evaluation, like the entire Class EA process, is proponent-led, and will help inform the proponent's approach to obtaining input and information specific to planning and assessing the project. However, it is recommended that the proponent consult with relevant federal and provincial agencies and municipal authorities, appropriately qualified persons, potentially affected and interested individuals and the public when completing the potential effects identification matrix. The results of the environmental, social, cultural and economic evaluation are to be used by the proponent to inform the subsequent consultation, data collection and assessment phases of the Class EA process.

An effect is any change to the environment, positive or negative, that could occur as a result of a project. Effects include the impact or benefit that a project could potentially have, directly or indirectly, on the environment at any stage in the project life cycle. This Class EA requires the proponent to assess the potential effects as well as any net effects after mitigation and focuses on those effects common to waterpower projects. This includes consideration of both direct and indirect effects.

For cultural heritage resources, regardless of potential benefits or level of effect, any project that may affect a built heritage resource, cultural heritage landscape, a known archaeological site, or an area of archaeological potential may require further technical heritage studies by qualified persons. In general, areas within 300 metres of a historic or present-day water source have the greatest potential for the presence of cultural heritage resources. Proponents should recognize this when completing **Table 4**. Definitions of "Qualified persons" and "Technical Heritage Studies" are included in **Appendix A. Section 5.3.8** provides additional guidance on the consideration of cultural heritage values.

Table 4 Potential Effects Identification Matrix

The proponent should view each criterion prefaced with the phrase: "This project has the potential to affect...

Criteria		Pote	Comments, Rationale				
		-L	Nil	Unk	+L	+H	
	Gene	eral Natu	ral Enviro	onment C	onsidera	tions	
Air quality, including GHG Offsets							
Water quality or quantity (surface water)							
Water quality or quantity (groundwater)							
Species at risk and their habitat							
Significant earth or life science features							
Land subject to natural or human-made hazards							
Terrestrial wildlife (including numbers, diversity and movement of resident or migratory species)							
Natural vegetation and terrestrial habitat linkages							
Soils and sediment quality							
Significant natural heritage features and areas							
Other (specify)							
	Aquat	ic and Rij	oarian Eo	osystem	Consider	ations	
Shoreline dependent species							
Wetland dependent species							
Fish Habitat							
Fish Migration							
Fisheries							
Erosion and Sedimentation							
Fish Injury or Mortality (impingement and entrainment)							
Water levels, flows and movement (surface or groundwater)							
Drainage, Flooding and Drought patterns							
Water Temperature							
Other (specify)							

Table 4 Potential Effects Identification Matrix

Criteria		Comments,					
	-Н	-L	Nil	Unk	+L	+H	Rationale
	Indi	igenous C	ommuni	ty Consid	lerations		
First Nation reserves or other Indigenous communities							
Spiritual, ceremonial, cultural, archaeological, or burial sites							
Traditional land or resources used for harvesting activities							
Employment							
Lands subject to land claims							
Economic Development							
Other (specify)							
	Lan	d and Res	ource U	se Consid	lerations		
Access to inaccessible areas (land or water)							
Navigation							
Riparian rights or privileges							
Recreational use – (land or water)							
Angling and hunting opportunities							
Trapping activities							
Baitfish harvesting activities							
Views or aesthetics							
An existing land or resource management plan							
An existing water management plan							
Protected areas							
Other (specify)							

Table 4 Potential Effects Identification Matrix

Criteria		Comments,					
	-H	-L	Nil	Unk	+L	+H	Rationale
	Cult	ural Herit	tage Reso	ources Co	onsiderat	ions	
Archaeological sites							
Buildings or structures							
Cultural heritage landscapes							
Other (specify)							
	9	Social an	d Econon	nic Consi	derations	5	
The Location of people, businesses, institutions, or public facilities							
Community character, enjoyment of property, or local amenities							
Employment							
Public health and/or safety							
Local, regional, or provincial economies							
Tourism values							
Water supply							
Aesthetic image of the surrounding area							
Other (specify)							
		Energy/	Electricit	y Consid	erations		
Reliability (e.g. voltage support)							
Security (e.g. Black Start)							
Electricity flow patterns							
Other (specify)							

4.2.3 Public Consultation and Indigenous Engagement

As outlined in **Sections 6** and **7**, respectively, effective public consultation and Indigenous engagement by the proponent is key to ensuring meaningful and reasonable participation.

Within the boundaries established in the public consultation and Indigenous engagement plans and/or processes, consultation approaches should incorporate some flexibility so the proponent can respond to circumstances that were not originally anticipated. For example, where a project creates a greater level of public concern than expected, the proponent may expand upon the process to ensure that consultation techniques employed are relative to the concerns or interest expressed. Where a project shows a lower level of public interest or concern than was anticipated, a proponent may contract the consultation approach to reflect this, provided all mandatory points of notification are made.

Interested parties have the responsibility to take advantage of opportunities provided by proponents for public involvement during the Class EA process. The interested party should bring to the attention of the proponent concerns that they may have about the potential effects of the project as early as possible. The sooner the concerns are brought to the attention of the proponent, the greater the flexibility the proponent has to attempt to accommodate these considerations in the project and in the planning process. Interested persons should make their request very clear and should focus on concerns associated with the potential effects of the project, not on previous planning decisions, broad policy or just not wanting the project in their community.

In some instances, the proponent will need to assess the likelihood of issue resolution and may wish to consider the early use of alternative dispute resolution methods (see reference in **Appendix C**). It may also be of benefit for the proponent to identify the concern(s) with MECP and/or other agencies, as appropriate. The proponent's impact and issue management strategies should document such concerns and the approach taken.

4.2.4 Gap Analysis, Data and Information Collection/Acquisition

Completion of the Potential Effects Identification Matrix will help inform the relative priorities for addressing key data and information gaps and contribute to the design and implementation of the proponents' data acquisition strategy. The proponent will also have had the benefit of the agency coordination meeting, response to the Notice of Commencement and initial advice from public consultation and Indigenous engagement, as appropriate. This evaluation of the project impacts and issues should also be undertaken considerate of other project-specific legislative requirements such the IAA. While some information may not be required until the permitting and approval stage, (i.e., after EA), early identification of these requirements will facilitate coordinated and efficient information gathering. Proponents must consider all directly relevant aspects of the environmental context within which projects will occur. The resultant ER should be complete and detailed enough to demonstrate the potential impacts of a project, and identify any potential proposed impact management measures.

4.3 Phase 3 – Project Assessment

Applicable to all projects subject to the full Class EA process, this phase focuses on prioritizing and assessing key potential impacts and issues and developing strategies and mitigation measures to manage them. All projects follow a similar project path, but reflective of the specific considerations identified through the potential effects identification and public response. At the completion of the project assessment phase, the proponent should be in a position to assess the overall environmental advantages and disadvantages of the project.

4.3.1 Assessment of Effects

At this part of the process the proponent, using the potential effects identified during the phase discussed in **Section 4.2.2** as a guide, confirms the potential effects of the project, determines the appropriate avoidance, prevention and/or mitigation strategies and assesses the net effects of the project. If the project has potential to cause negative effects, the resultant ER must provide information that summarizes:

- the potential negative effect;
- the relative level of the effect;
- the mitigation or impact management measures that will be used;
- any individual net effects (after mitigation) and their significance; and
- the overall positive, neutral and negative effects of the project.

The assessment of the significance of net effects after impact management and mitigation should consider the value of the resource affected, geographic extent of the effect, duration and frequency of the effect, irreversibility of the effect, and ecological/social context, as described below:

The importance of the value affected

Some values may be given a higher priority than others. For example, an affect on public safety would most often be of more importance than an affect on recreational use.

Duration and frequency

Longer term or more frequent effects may be greater.

Geographic extent

While the categorization of projects is premised on the environmental context within which projects will occur, potential impacts and benefits should nonetheless be considered based on their geographic extent.

Irreversibility of the effect

Some potential effects may not be easily remedied or mitigated. Some effects can be reversed over a period of time. The potential irreversibility of an effect should be considered.

Ecological / Social Context

All potential effects should be assessed in both an ecological and social context. The potential impacts or benefits of projects may be significant. For example, impacts that occur in areas or regions that are ecologically fragile and have little resilience to imposed stresses may be of particular importance. Similarly, benefits to local communities (e.g., flood/drought mitigation) may provide value above and beyond electricity production.

4.3.2 Impact and Issue Management Strategies

A key purpose of applying this Class EA is to help proponents identify and avoid, prevent or mitigate effects that may be potentially negative. This Class EA has adopted the conceptual hierarchy of avoidance, prevention and mitigation for all projects across the categories. Where impacts cannot be avoided or prevented (e.g., project location), mitigation measures will be considered.

Mitigation measures can include:

- reducing the magnitude, duration etc. of the impact;
- repairing the situation post-impact to achieve (more of a) pre-impact state;
- offsetting the impact through other means, not necessarily directly related to that impact; and
- enhancing positive effects where possible.

While there is a suite of standard approaches to mitigation of effects associated with waterpower projects (see **Appendix B**), the state of the science(s) continues to evolve and improve and the toolbox of approaches continues to expand. As listed in **Appendix C**, the OWA will undertake to provide access to the best available information on mitigation techniques on an ongoing basis, rather than to limit the creativity of proponents through prescriptive measures.

With respect to issue management, the proponent should consider the degree to which the concerns

expressed are persistent or new and the effectiveness of investments already made in attempting resolution. It is at the discretion of the proponent to determine whether or not additional public consultation is appropriate at this stage. This determination is most likely to be made considerate of the results of previous consultation and the degree to which any outstanding issues and/or impacts could reasonably be expected to be resolved. The proponent may also wish to consider the potential effectiveness of self-directed mediation for significant outstanding issues.

If the proponent determines that net effects and outstanding issues (after mitigation) are significant and have not been resolved through the proposed impact and issue management strategies, these strategies may be revisited or revised. In terms of time and efficiency, it is in the proponent's best interest to attempt to address significant concerns associated with potential effects to the environment. This approach can help reduce the potential for such concerns to be the subject of a Section 16 Order request later in the process. The proponent may also determine that the importance of net effects, the costs of mitigation or the significance of unresolved issues make the project unfeasible.

4.4 Phase 4 – Project Documentation

The outcome of the project assessment phase of the Class EA process will be documented the Environmental Report (ER), including a description of impact management strategies, the significance of any remaining net effects, concerns or issues, and the overall project advantages and disadvantages. The following subsections describe the required contents of the ER and associated mandatory notices for all projects subject to the full Class EA process.

4.4.1 Environmental Report

After seeking input and advice from the public, agencies and Indigenous communities, as appropriate, determining the relative priorities and identifying methods to address impacts and issues, the proponent will prepare the project's ER. The report will be reflective of the relative complexity of the project, as informed through the evaluation and consultation processes. The ER includes a description of the environmental factors assessed, the potential adverse effects on these factors, details of the effects and an impact management strategy. Issues that remain outstanding and the approach taken by the proponent in attempting to resolve them must be documented in the ER. In addition, the proponent must summarize how comments received from the Notice of Commencementf and from public consultation and Indigenous engagement activities were considered, as appropriate.

The ER must contain:

- Background information (project description, purpose);
- Map of project location and study area;
- Description of the study area and the existing environmental context;
- A completed potential effects identification matrix;
- A description of potential effects (positive and negative);
- The results of the analysis, evaluation, and assessment conducted for the subject effects, concerns or issues;
- Information on public and agency consultation, including a description of the public and agency consultation program and consultation activities/events, a list of agencies contacted, summary of public and agency concerns or issues and how they have been or have attempted to be addressed;
- Information on Indigenous community involvement, including a description of the engagement program and activities/events, a list of communities contacted, summary of community concerns or issues and how they have been or have attempted to be addressed;
- Changes to the original proposal, if any, resulting from the environmental evaluation and/or consultation and engagement processes;
- Description of the net effect(s) (after mitigation), if any, including an identification of the significance of the net effect(s);
- Planned avoidance/prevention/mitigation and/or other impact management measures for any potential negative effects;

- A review of overall advantages and disadvantages of the project, including a discussion of any benefits that might offset disadvantages;
- A summary of planned construction and postconstruction monitoring programs, as required, including mechanisms for their implementation and reporting. If no monitoring is required, then reasons should be provided;
- Technical reports supporting the findings, as appropriate;
- Anticipated timelines for project implementation; and
- A listing of any other known required approvals and permits.

Projects under section 3.1.1 are also required to include how the project meets the criteria for classification in section 3.1.1.

4.4.2 Notice of Inspection for Projects on Unmanaged Waterways

The Notice of Inspection is an additional notice required for projects on unmanaged waterways. It provides participants in the process with an additional opportunity to review the ER and to comment on a proponent's proposed implementation approach. This steprecognizes the increased likelihood of complexity for these types of projects.

The manner of distribution will be at the discretion of the proponent, but the Notice must be provided to participants who have expressed an interest in the project. Participants will be given the opportunity to provide comments during the Notice of Inspection period (30 days unless otherwise extended by the proponent) and will be placed on a mailing list to be directly notified of the Notice of Completion. Proponents will collate the comments received and consider any outstanding issues. Proponents will then finalize the ER before issuing the Notice of Completion.

The Notice of Inspection should include:

- A title indicating the project name and location;
- A summary description of the project;

- A map of the location of the project and anticipated zone of impact;
- An invitation to provide comments on the ER;
- A description of how the ER can be accessed (e.g. electronically, in hard copy at convenient locations) and reviewed;
- An invitation to any additional public consultation activities (if planned), along with the date, time, location, etc.;
- A contact name, address, telephone and fax number, and email address; and
- Deadline for comment (30 days).

A template for the Notice of Inspection is included in **Appendix D**.

4.4.3 Notice of Completion

For Projects subject to the full Class EA process, the Notice of Completion will be directly issued to all Indigenous communities, agencies and other parties who expressed interest when the Notice of Commencement was issued and to those who participated in the consultation process. The Notice of Completion will also be issued to the distribution list created for the Notice of Commencement. Note that the period of time for comments is 30 days unless otherwise extended by the proponent.

The Notice of Completion must include:

- The information required for the Notice of Commencement;
- The conclusions of the ER;
- Information regarding how the ER may be accessed and reviewed;
- State the date of the beginning and end of the comment period;
- A stipulation that concerns should be addressed with the proponent, and if the issue should remain unresolved, that a written request can be made to the Minister of the Environment, Conservation and Parks (or delegate) for a Section 16 Order; and

The address of the Minister of the Environment, Conservation and Parks (or delegate). Proponents will consider comments received and any outstanding issues that may require further consultation. Further consultation is at the discretion of the proponent at this stage of the process. Input and advice received during the comment period will be discussed in the Conclusion of EA component of the Statement of Completion. **Section 8.6** provides detail on the process involved in a Section 16 Order request.

A template for a Notice of Completion is included in **Appendix D**.

4.5 Phase 5 – Project Implementation 4.5.1 Statement of Completion

Proponents will document in the project files any outstanding issues resulting from the Notice of Completion and comment period. Proponents should also contact the Environmental Assessment Branch to verify that no Section 16 Order requests (see **Section 8.6**) were received during the Notice of Completion comment period. Once comments are documented and addressed, as appropriate, and it has been confirmed that no Section 16 Order requests were received, the proponent may file the Statement of Completion and will make the final project documentation publicly available. Filing of the Statement of Completion of the Class EA process under the *EA Act* and the conclusion of the EA component of the project and the proponent may proceed with the project permitting and approvals processes.

Proponents will complete a Statement of Completion form, and file a copy with the MECP Regional EA Coordinator and the Director of MECP's Environmental Assessment Branch, with copies to the District MNRF Office, and the President of the OWA. The proponent is also required to retain a copy for a minimum of ten years.

The Statement of Completion for all projects must include the following information:

- Proponent information
 - o Proponent name
 - o Contact name
 - Proponent mailing address, telephone and fax numbers, and email address
- Site information
 - Site mailing address
 - Site survey address
- Project information
 - Project name
 - Nameplate capacity of facility (MW/kW)
 - o Category of Class EA completed
- Document Availability Information
 - Details of where records are kept and can be accessed

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- Section 16 Order Request Information
 - Describe how many Section 16 Order requests were received and basis of concern
 - If any received, a description of how they were addressed
- Statement of Proponent
 - A statement that the information contained in the Statement of Completion is complete and accurate and that it has complied with the requirements of the Class EA
- Conclusion of Class EA
 - Conclusion of the final Environmental Report
- Documentation of Indigenous engagement (as appropriate)
 - A summary of key points of engagement, issues and outcomes
- Documentation of public and agency consultation
 - A summary of key points of consultation, issues and outcomes

A template for the Statement of Completion is included in **Appendix D**.

4.5.2 Subsequent Permits and Approvals

Once the Statement of Completion has been filed and subject to any other approval requirements the proponent can proceed with the next stage of the project. As detailed in Section 5, of specific relevance to most waterpower projects are likely to be approvals related to fish and fish habitat (Fisheries Act), navigation (Canadian Navigable Waters Act), water taking (Ontario Water Resources Act), infrastructure (Lakes and Rivers Improvement Act) and land disposition (Public Lands Act /Provincial Parks and *Conservation Reserves Act*). The proponent should have satisfied the substantive environmental planning-related requirements for these subsequent permits and approvals and, through the coordination meeting and subsequent

dialogue with provincial and federal agencies, will have identified project-specific requirements.

The project must be implemented in the manner described in the ER. Any further commitments the proponent made to address concerns after the report was prepared must also be fulfilled as the project is implemented. The proponent must also comply with any additional conditions imposed in an order issued under Section 16 (3) of the *EA Act*. During implementation of the project, the proponent must undertake any effects monitoring programs outlined in the ER. As detailed below, monitoring is often necessary to ensure that the mitigation measures identified in the ER are fulfilled and are effective.

4.5.3 Effects Monitoring

Effects monitoring strategies may be required for any project subject to this Class EA. Potential monitoring requirements and the level of monitoring that is necessary for the undertaking should be considered throughout the planning process for these projects (e.g., during the project assessment stage of the Class EA process). The level and duration of monitoring required will be determined on a project specific basis. Monitoring can be relevant at all stages of a project (e.g., site preparation, construction, commissioning, operation etc.) and may also be a condition of subsequent permits and approvals.

It may be important to monitor to verify the extent of effects (and compare actual with predicted effects), effectiveness of impact management strategies and whether additional measures are warranted. This may be particularly true in cases for projects where the ER indicates that there may be significant net effects.

Monitoring programs should consider and document the following:

- Component: the environmental component or strategy being monitored and the scope of the program;
- Rationale: the reason for monitoring;
- Methods and timing/duration: the procedures that are to be used for monitoring (e.g., techniques, equipment, indicators, measurements, duration, frequency, etc.);
- Reporting: provision for reporting of data, results and action taken, including frequency and to whom results are reported; and
- Adaptive Management: provision for additional actions that may be required to mitigate an impact, including any related monitoring.

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Appendix C references resource material available from the OWA on the subject of effects monitoring.

4.5.4 Document Retention

Proponents are required to retain all Notices, a copy of the ER and any Monitoring Reports. Records of public, agency and Indigenous consultation may support subsequent approvals and permitting processes. These records must be retained for a minimum of ten years and be made available pursuant *to Freedom of Information and Protection of Privacy Act* provisions.

5.0 CO-ORDINATION WITH AND INTEGRATION OF OTHER LEGISLATIVE REQUIREMENTS AND PROCESSES

Proponents are required to retain all Notices, a copy of the ER and any Monitoring Reports. Records of public, agency and Indigenous consultation may support subsequent approvals and permitting processes. These records must be retained for a minimum of ten years and be made available pursuant to Freedom of Information and Protection of Privacy Provisions.

A key objective of this Class EA is to identify opportunities to create a process that facilitates coordination with and integration of other legislative and regulatory requirements specific to a project. The consultation, evaluation and documentation prepared through the Class EA process can help to meet the requirements of legislation that has common environmental planning and public involvement features. Adoption of the "one project-one process" model will help ensure agency, Indigenous community and public engagement is efficient and effective. This approach can also provide much of the information required for subsequent approvals. It is expected thatwhen completing permitting applications, the proponent will be able to refer to the Environmental Report prepared under this Class EA for much of the required information.

The Class EA provides an opportunity to identify potentially relevant requirements early in the process and to coordinate these requirements with appropriate agencies. The proponent-agency coordination meeting described in **Section 4** is designed to help determine project-specific legislative requirements. Of particular relevance in terms of coordination are the following:

- EA provisions of other provincial Class EAs;
- Federal requirements for waterpower projects; and
- Additional provincial approvals for waterpower projects.

5.1 Environmental Assessment Provisions of other Class EAs

There may be circumstances when there are elements of a waterpower project that could involve undertakings subject to more than one Class EA, and, potentially, more than one proponent. In such situations, both proponents or project elements would be subject to the *EA Act* and if they were each undertaken alone, would follow their respective Class EAs. However, where provided for under the relevant Class EAs, the use of one or the other Class EA in order for proponents to fulfill their *EA Act* requirements for the undertakings may be possible. This can reduce redundancy and duplication of effort, simplify the planning and development of the undertakings and eliminate confusion on the part of the public and other stakeholders.

For example, two proponents of undertakings that are subject to different Class EAs may want to jointly proceed with the undertakings. Under the EA Act, the proponents would be authorized to proceed with their undertakings in accordance with their respective Class EAs. However, it would be logical to work together under one Class EA or the other. For this to be possible, the Class EAs must have corresponding provisions providing for coproponency under one or the other Class EA. In the absence of such provisions, proponents of waterpower projects pursuant to this Class EA are encouraged to establish a coordination approach with the proponent(s) of the other Class EA(s) and ensure that the approach is made clear to MECP and in all Notices and public consultation initiatives.

5.1.1 Class EA for Transmission Facilities (Hydro One)

The Class EA for Transmission Facilities, as prepared by Hydro One, sets out a planning process for undertakings that involve certain transmission facilities projects, as does this Class EA when establishing or changing transmission facilities described in **Section 2.1** that are ancillary to a establishing or changing a waterpower facility to which this Class EA applies (see **Section 3.3**) Providing a single EA process for assessing a waterpower project that involves a generation component and associated transmission facilities increases efficiency and transparency. This provides good rationale to have such proposals evaluated under this Class EA.

In instances wherein the generation and transmission proponents are different parties, a cooperative approach may be arranged and should be communicated to MECP Regional EA Coordinator prior to the issuance of the Notice of Commencement. In cases of common transmission facilities for multiple generation facilities, proponents may develop a cooperative approach or proceed individually, at their discretion. Again, the approach should be communicated to MECP Regional EA Coordinator prior to the issuanceof the Notice of Commencement.

5.1.2 Class EA for MNRF Resource Stewardship andFacility Development Projects

The Ontario Ministry of Natural Resources and Forestry's (MNRF) Class EA for MNR Resource Stewardshipand Facility Development Projects (Class EA-RSFD) sets out requirements for MNRF undertakings (including undertakings not initiated by MNRF) involving an application for the disposition of certain or all rights to a Crown resource.

Proponents of electricity sector projects may be required to fulfill their *EA Act* requirements before applying to the MNRF for the disposition of certain or all rights to Crown resources through such means as permits, land sales,licenses, approvals, permissions or consents. For waterpower projects, this may include dispositions such as:+

- A waterpower lease agreement;
- An easement; or
- Any other authorization that involves the disposition of certain or all rights to Crown resources.

Proponents should contact MNRF early in

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the planning process about any requirements related to the Class EA-RSFD and dispositions.

Proponents are also encouraged to engage MNRF early in the process to allow MNRF to bring forward information. MNRF retains decision-making and approval authority for all dispositions regardless of a project being authorized to proceed under the *EA Act*.

5.1.3 Projects in Provincial Parks and Conservation Reserves (MECP)

The Project Evaluation Policy under the *Provincial Parks and Conservation Reserves Act*applies to certain MECP projects planned within a **provincial park or conservation**

reserve. This includes dispositions of Crown land or other resources to third parties, such as granting certain rights by means of a permit or other authorization. Proponents should contact MECP (Ontario Parks) early in the planning process. Similarly, it should be noted that other projects associated with or which support waterpower facilities such as roads and transmission lines, that are not for protected area objectives, may be addressed under other EA mechanisms, such as another Class EA.

Where proposed projects are not for the purpose of the protected area MECP (Ontario Parks) may participate in any required EA process and may have information to help ensure that protected area values are properly identified and considered. As such, where waterpower projects are proposed in a protected area, the proponent will proceed in accordance with the Class EA for Waterpower Projects and MECP (Ontario Parks) may participate in any process. In such instances, proponents are advised to consult with MECP (Ontario Parks) early in the project planning process.

5.1.4 Class Environmental Assessment for Remedial Flood and Erosion Control Projects (Conservation Ontario)

The Class Environmental Assessment for Remedial Flood and Erosion Control Projects applies to certain remedial flood and erosion control projects carried out by conservation authorities.

While the Class Environmental Assessment for Remedial Flood and Erosion Control Projects does not stipulate an approach for the coordination of EA processes, it is reasonable to expect that, in some instances, a waterpower project may coincide with work being proposed under the Class Environmental Assessment for Remedial Flood and Erosion Control Projects. Where such intersection occurs, coordination and cooperation is encouraged.

5.1.5 Other Class EAs

The specifics of some projects may also involve overlap with an undertaking subject to another Class EA, such as the Municipal Engineers Association Municipal Class EA. Where such overlap does occur, proponents of waterpower projects will be expected to consult with proponents of projects under other Class EAs and are encouraged to review project details with the MECP Regional Office.

5.2 Federal Requirements for Waterpower Development Environmental Assessment Processes in Ontario

5.2.1 Federal Assessment Legislation

It is possible that a project subject to this Class EA is also subject to a federal assessment process. In this case it is likely a coordinated environmental assessment will be conducted. The intent of coordination is to avoid duplication in processes for the same project, address information and consultation requirements of both the Class EA and the federal process, and to ensure that the project receives the appropriate level of review.

In such cases, this Class EA process should be coordinated with other applicable formal approval processes as effectively as possible to avoid duplication. The intent of these coordinating efforts is to produce a single body of documentation of environmental impacts and mitigation measures that will meet the information needs of both the federal and provincial governments.

5.2.2 Fisheries Act (Fisheries and Oceans Canada)

Under the *Fisheries Act* no person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreation or Indigenous fishery, or to fish that support such a fishery. Where serious harm is the death of fish or any permanent alteration to, or destruction of, fish habitat. Paragraph 35(2)(b) provides the authority for the Minister to authorize the carrying on of works, undertaking or activities. Proponents of development activities should take measures to avoid and mitigate impacts to the extent possible and request authorization from the Minister and abide by the conditions of any such authorization, when it is not possible to avoid and mitigate impacts of projects that are likely to cause serious harm to fish. When it has been determined that a Ministerial power will be exercised, such as the issuance of a Subsection 35(2) authorization, the four factors is Section 6 of the *Fisheries Act* must be considered by the Minister. These factors establish a clear structure for the regulatory review process. The four factors in Section 6 are:

- the contribution of the relevant fish to the ongoing productivity of commercial, recreational or Indigenous fisheries;
- b. fisheries management objectives;
- whether there are measures and standards to avoid, mitigate or offset serious harm to fish that arepart of a commercial, recreational or Indigenous fishery, or that support such a fishery; and,
- d. the public interest.

In particular, the following requirements of the *Fisheries Act* are of potential importance in the context of the planning process through the Class EA:

- Section 20: Provisions of sufficient water flows, screening of water intakes and other measures to ensure the free passage of fish or to prevent harm to fish;
- Section 35(1): Prohibition against any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Indigenous fishery, or to fish that support such a fishery;
- Section 35(2): Provides the authority for the Minister to authorize the carrying on of works, undertakings or activities; and
- Section 36: Prohibition to deposit deleterious substances unless by regulation (administered by Environment Canada).

Based on the above provisions, a waterpower project will almost always involve review and possible Authorization under the federal *Fisheries Act* and studies conducted under this Class EA should involve collection of appropriate information on fish and fish habitat. The completion of an undertaking under this Class EA does not remove Fisheries and Oceans Canada's decision-making authority under the *Fisheries Act*, but it is expected that a proponent using this Class EA will satisfy the substantive planning requirements related to completing a *Fisheries Act*

authorization.

Additional information regarding the requirements of an Application for Authorization is available in "An Applicants Guide to Submitting an Application for Authorization under Paragraph 35(2)(b) of the Fisheries Act" available at: https://www.dfo-mpo.gc.ca/pnw-ppe/reviewsrevues/applicants-guide-candidats-eng.html#108

5.2.3 Canadian NavigableWaters Act (Transport Canada)

During the preliminary design of a project under this Class EA, a proponent must determine whether the waterpower facility involves navigation. To determine whether or not a waterway or watercourse is considered to be navigable, proponents should contact Transport Canada – Coast Guard. It is expected that a proponent using this Class EA will satisfy the substantive planning requirements related to obtaining a permit under the *CNWA*, but completion does not remove the decision-making authority under the *CNWA*.

5.2.4 Historic Canals Regulations and National Parks Act (Parks Canada)

The protection of natural and cultural resources is an important objective of the Historic Canals Regulations, while protection of ecological conditions is an important part of managing Canada's national parks. The beds of lakes, rivers, streams and other water bodies within these sites are owned by the federal government and administered by the Parks Canada Agency. Any projects or works in or directly adjacent to waters on these federal lands are to be referred to the Parks Canada Agency for their review and approval. Proponents are advised to determine as early as possible and with the assistance of MECP whether the *EA Act* and subsequently this Class EA applies to projects that have implications with or components on federal lands.

5.2.5 Species at Risk Act (Environment Canada, Fisheries and Oceans Canada)

The purposes of the Species at Risk Act (SARA) are to:

 prevent Canadian indigenous species, subspecies, and distinct populations from being extirpated or becoming extinct;

- provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity; and
- manage species of special concern to prevent them from becoming endangered or threatened.

Two federal Ministers are responsible for the administration of *SARA*. The Minister of Fisheries and Oceans Canada is responsible for aquatic species at risk. The Minister of Environment (through the Parks Canada Agency) is responsible for species at risk found in national parks, national historic sites or other protected heritage areas. The Minister of the Environment is also responsible for all other species at risk, and for the administration of the *Act. SARA* gives these Ministers the authority to make decisions in their areas of responsibility.

In particular, the following requirements of *SARA* are of potential importance in the context of the planning process through the Class EA:

- Section 32: It is an offence to kill, harm, harass, capture or take an individual of a wildlife species that is listed as Extirpated, Endangered or Threatened.
- Section 33: Prohibits damage or destruction to the residence of one or more individuals of a wildlife species that is listed as an endangered species or threatened species.
- Section 58(1): Prohibits the destruction of critical habitat of species at risk.
- Section 79(1): Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.
- Section 79(2): The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans.

For materials on the methodology of determining whether adverse effects on listed wildlife species maybe significant under the *CEA Act*, please see **Appendix C**.

5.2.6 Dominion Waterpower Act (Indigenous and Northern Affairs Canada)

For waterpower projects proposed on federal lands (e.g., Trent-Severn Waterway, Rideau Canal, Indian Reserves), the provisions of the *Dominion Waterpower Act* will generally apply. This legislation and the accompanying regulations provide for, among other things, the opportunity for the public to request a hearing to consider the project proposal. Specifically, the regulations stipulate that:

"(5) Where a protest or objection is filed within the period specified in subsection (4), or when for other reasons, the Minister considers that a hearing should take place before action is taken, he shall designate a time and place for the hearing and shall name a person to preside over and conduct the hearing."

While it is expected that the federal EA process will be applied to these projects, in situations involving both federal and provincial EAs, it is expected that the substantive objectives of such a hearing will have been satisfied though the evaluation, public involvement and reporting requirements of the Class EA process. Proponents are advised to determine as early as possible and with the assistance of MECP whether the *EA Act* and subsequently this Class EA applies to projects that have implications with or components on federal waterways.

5.3 Relationship of Projects within the Class EA to Other Provincial Legislation

A key objective of coordinating assessment and approval processes is to achieve an efficient process where information required for other approvals is identified at the beginning of a project, so that one program of data and information collection can be designed and carried out. As outlined in Section 1, Table 1, the planning and development of a waterpower project in Ontario can involve legislative requirements beyond EA. In many cases, such legislation has objectives and process requirements shared with the Class EA – providing for the consideration of the effect of the proposed project on the environment and ensuring that interested parties have an opportunity to participate. To the extent possible, the Class EA has been designed to allow for proponents to coordinate common process elements. As is the case with provincial/federal EA coordination,

these can generally be described to include:

- Preparation of Project Descriptions;
- Communication;
- Scoping/Evaluation;
- Public and Indigenous Consultation;
- Technical Studies and Assessments; and
- Documentation.

Proponents with a plan that identifies the potential for requirements of other legislation specific to their project can determine which of these elements are most effective in satisfying those requirements. In addition to the legislation featured in this section, **Appendix C** includes a reference to the array of other legislative requirements that may be associated with a waterpower project.

5.3.1 Lakes and Rivers Improvement Act (MNRF)

The Lakes and Rivers Improvement Act (LRIA) is an important piece of legislation of direct relevance to almost all waterpower facilities. Dams, diversions, works in water and improvements thereto are the key focus of the Act. TheMNRF administers the Act, and as such is the lead ministry for regulating siting, construction, operation and maintenance of dams.

The *LRIA* has broad purposes, as set out in Section 2 of the *LRIA*, including the:

- management, protection, preservation and use of the water of Ontario's lakes and rivers and the land under them;
- protection and equitable exercise of public rights in or over the waters of the lakes and rivers of Ontario;
- protection of the interests of riparian owners;
- management, perpetuation and use of the fish, wildlife and other natural resources dependent on the lakes and rivers;
- protection of the natural amenities of lakes and rivers and their shores and banks; and
- protection of persons and of property.

All new or redeveloped waterpower facilities that involve the construction of a dam or modification to a dam require approval under Section 14 or 16 of the *LRIA* (O. Reg. 454/96 sets out the projects that require approval under Sections 14 and 16). The requirements for approvals under the *LRIA* are summarized in **Table 4** and are described in detail in the LRIA Administrative Guide and LRIA Technical Bulletins (see **Appendix C**).

In most cases, construction of a new dam will be subject to requirements established under the *EA Act*. Where an EA is required, applicants must provide MNRF with a copy of the documentation prepared during the course of satisfying requirements under the *EA Act* such as, but not necessarily limited to: the Final Environmental Report (ER); the Statement of Completion; any other supporting material deemed pertinent to the project; and any modifications to the project made after the Statement of Completion (addendum provisions).

Additional details, including how any Section 16 Order requests were addressed should also be disclosed. Documentation prepared during the EA will be the Ministry's primary tool for identifying the range of potential effects associated with construction and operation of the dam and determining whether additional changes or conditions are required for approval to construct a new dam at the proposed location.

Where an EA is not required, MNRF will identify in writing any additional information required by the Ministry to complete its review for location approval. For additional information, refer to MNRF's Technical Bulletin: Location Approval for Dams, 2015.

5.3.2 Public Lands Act (MNRF)

The *Public Lands Act* provides the legislative framework for, among other things, the disposition of rights to provincial Crown (public) lands. As the authority to develop and produce waterpower in Ontario is founded on a "riparian right" in common law, tenure to the beds and banks over which water flows is a legal requirement. MNRF grants a short- term Crown lease during the construction of a waterpower facility and a long term rolling waterpower lease agreement for the occupation of the land by the capital works after construction. Ancillary dispositions of rights to Crown resources in the form of easements and/or land use permits may also be issued for other land occupation required (e.g., access roads). While registerable tenure (Crown Lease) is granted subsequent to the completion of the Class EA process, the proponent should have satisfied the appropriate requirements under relevant legislation related to the decision to dispose of Crown land. Applying the same conceptual

framework as the integration of EA and *LRIA* requirements, the Statement of Completion under the Class EA should provide the basis for MNRF to make a disposition decision.

5.3.3 Provincial Parks and Conservation Reserves Act (MECP)

The Provincial Parks and Conservation Reserves Act (PPCRA) generally prohibits electricity projects in provincial parks or conservation reserves (including waterpower), with the following exceptions:

- facilities located in a provincial park or conservation reserve that existed prior to the *Act*'s coming into force (2007) may continue to operate and be maintained and, with the approval of the Minister, may be improved, rebuilt or altered;
- facilities for the generation of electricity may be developed in provincial parks and conservation reserves for use within communities that are not connected to the IESO-controlled grid;
- facilities specifically identified in a Ministry land use plan before the site where the facility is to be located was regulated as part of a provincial park or conservation reserve; or
- facilities for use for provincial park or conservation reserve purposes.

See also **Section 5.1.3**. In addition, the Project Evaluation Policy under the PPCRA applies to certain MECP projects planned within a provincial park or conservation reserve. Proponents should contact MECP (Ontario Parks) early in the planning process.

5.3.4 Endangered Species Act (MECP)

In 2007, the government of Ontario introduced a new *Endangered Species Act*. Compared to Ontario's previous legislation, the new act provides broader protection provisions for species at risk and their habitats, greater support for volunteer stewardship from private landowners and partners, a stronger commitment to recovery of species and more effective enforcement provisions.

Ontario's Endangered Species Act's purpose is to:

- identify species at risk based on the best available scientific information, including information obtained from community knowledge and Indigenous traditional knowledge;
- protect species that are at risk and their habitats, and to

promote the recovery of species that are at risk; and

- promote stewardship activities to assist in the protection and recovery of species that are at risk. The Act establishes a general prohibition against harming listed extirpated, endangered, or threatened species and damage or destruction to their habitat. Habitat is broadly defined to include:
 - a) with respect to a species of animal, plant or other organism for which a regulation is in force, the area prescribed by that regulation as the habitat of the species; or
 - b) with respect to any other species of animal, plant or other organism, an area on which the species depends, directly or indirectly, to carry on its life processes, including life processes such as reproduction, rearing, hibernation, migration or feeding, and includes places in the area described in clause (a) or (b), whichever is applicable, that are used by members of the species as dens, nests, hibernacula or other residences.

The Act also includes a suite of "tools" (permits, agreements, regulation) that provide for the integration of human activities with the objectives of the legislation.

It is expected that listed species and their habitat and strategies (avoidance/prevention/mitigation/ offsetting) to address these important values will be identified and addressed early in a waterpower project proposal and that, as relevant, such strategies will become key components of the approach to construction and planned facility operation. Further, as described in Section 5.3.1, Section 23(1) of the LRIA provides for the Ministerial authority to require an owner of a dam to develop a "management plan" in accordance with approved guidelines. It is the expectation that a proponent using this Class EA will meet the intent of water management planning, as expressed through the resultant Dam Operating Plan. As such, with respect to considerations of direct relevance to the purposes of the Endangered Species Act, the approved Water Management Plan will provide the basis for any ongoing monitoring,

evaluation, assessment, and actions specifically related to endangered species. Plans may also provide important contributions to broader species recovery plans and initiatives. As is the case with other "best practices," the OWA will provide proponents with state of the knowledge information through the suite of guidance included in or added to **Appendix C** of this Class EA.

5.3.5 Conservation Authorities Act (MNRF)

Ontario's 36 conservation authorities are empowered by the *Conservation Authorities Act* to undertake programs to further the conservation, restoration, development, and management of natural resources on a watershed basis. Under Section 28 of the *Conservation Authorities Act* and O. Reg. 97/04 "Development, Interference with Wetlands, and Alteration to Shorelines and Watercourses,' each conservation authority has an individual regulation approved by the Minister of Natural Resoueces and Forestry. Section 28 regulations require CAs to grant permission (or not) for certain activities in and adjacent to watercourses (including valley lands), wetlands, shorelines of inland lakes and the Great Lakes-St. Lawrence River System, and hazardous lands.

Subsection 28(1) (b) speaks to "prohibiting, regulating or requiring the permission of the authority 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."

Subsection 28(1)(c) speaks to "prohibiting, regulating, or requiring the permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development."

Section 28 (25) of the *Conservation Authorities Act* defines development as:

- a) the construction, reconstruction, erection, or placing of a building or structure of any kind,
- any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,

- c) site grading, or
- the temporary or permanent placing, dumping, or removal of any material originating on the site or elsewhere.

A proponent should contact the local conservation authority for information on the application process early in the planning process.

LRIA Approvals	Applicable Project types	Requirements			
Section 14	New works	 Location Approval ensures that in the location of the works, operational requirements/ constraints, flooding rights, mitigation to reduce impacts, compensation measures to address impacts and monitoring requirements havebeen identified to provide for the purposes of the LRIA. 			
		2. Plans and Specifications Approval ensures that the requirements identified during the location approval phase have been addressed and incorporated into the plans and specifications, including safe design, construction, operation and maintenance practices to provide for all of the purposes of the <i>Act</i> .			
Section 16	Modification, alteration, improvement or repairs to existing works	A dam operating plan (DOP), as part of the plans and specifications approval, willaddress all flow and level conditions for the individual waterpower facility as a whole, as well as for each appurtenance and/or discharge facility under expectedand possible adverse operating conditions. Plans and Specifications Approval (outlined above)			

Table 5 Lakes and Rivers Improvement Act Provisions

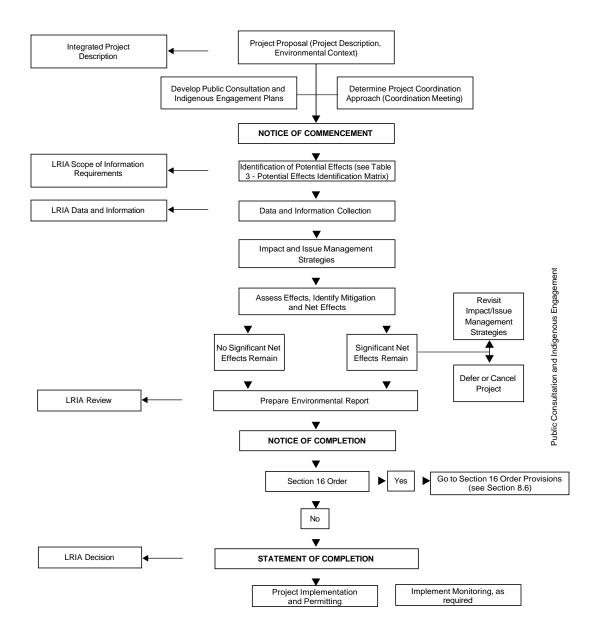
MNRF has identified that an integrated project description that meets the requirements for consideration under Section 14 of the *LRIA* includes the following:

- Multi-Use Work Permit Application
- Basic stream information
- Ownership of work site
- Purpose of work
- Description of the work
- Temporary or permanent
- Specific project information (dam, water crossing, channelization, etc.)
- Quantity of water to he held
- Rate of flow of water that may be diverted
- Any other information deemed necessary to further the purposes of the Act

Figure 8 outlines the potential relationship between the Class EA and decision-making pursuant to the *LRIA*. Note that in most instances, projects undertaken at existing infrastructure may not require a location approval decision to be made (i.e., the structure is already there). In such instances, *LRIA* approvals may be restricted to Plans and Specifications. However, data and information collected and evaluations undertaken through the EA process can be used to support subsequent approvals.

In addition Section 23(1) of the *LRIA* provides for the Ministerial authority to require an owner of a dam to develop a "management plan" in accordance with approved guidelines. To date, this provision has been applied only to waterways with existing waterpower facilities. It is the expectation that a proponent using this Class EA will meet the intent of water management planning, as expressed through the resultant Dam Operating Plan and that Section 23(1) will be applied to confirm the water management compliance requirements under the *LRIA* for newly constructed facilities.

Figure 8 Incorporation of LRIA Requirements



5.3.6 Clean Water Act (Ministry of the Environment, Conservation and Parks)

The Clean Water Act's intent is to ensure communities are able to protect their municipal drinking water supplies through developing collaborative, locally driven, science-based Source Water Protection Plans. Communities will identify potential risks to local water sources and take action to reduce or eliminate these risks. Should a project under this Class EA have the potential to impact municipal water supplies, consideration of the Source Water Protection Plan would be required. This potential would be expected to be identified early in the process (e.g., coordination meeting).

5.3.7 Ontario Heritage Act (Ministry of Citizenship and Multiculturalism)

The Ministry of Citizenship and Multiculturalism (MCM) is responsible for the administration of the *Ontario Heritage Act* and is responsible for determining policies and programs for the conservation of the cultural heritage of Ontario. Cultural heritage resources encompass buildings and structures of cultural heritage value or interest (built heritage), cultural heritage landscapes and archaeological resources, which include artifacts, archaeological sites and marine archaeological sites. The *Act* provides powers for cultural heritage resource identification and protection, the chief of which are heritage designation by municipalities and "automatic" protection for all archaeological sites.

Additionally, the Minister may designate property that is of provincial heritage significance within any municipality or in unorganized territory.

MCM is responsible for licensing archaeological workin Ontario, including archaeological fieldwork required of proponents under the *Planning Act* and the *EA Act*. As a condition of their license, archaeologists must comply with the standards and guidelines established by MCM.

Cultural Heritage Resources

Per Part III.1 of the *Ontario Heritage Act*, MCM has developed Standards and Guidelines for Conservation of Provincial Heritage Properties for the identification and protection of heritage properties owned or managed by the Crown or prescribed bodies. Ontario Power Generation (OPG) is designated as a prescribed body under the "Guidelines".

Regulations under the Ontario Heritage Act set out the criteria for determining the value and significance of cultural heritage resources. If a potential heritage resource is present, the proponent should complete appropriate heritage assessments and evaluations to confirm the existence of heritage resources. Cultural heritage value or interest is determined through application of criteria found in Ontario Regulations 9/06 and 10/06 under the Ontario Heritage Act. Underlying the legislation are some basic principles. These principles apply equally to proponents of projects which may impact Cultural heritage resources as well as to decisions by municipalities or other designated bodies to apply the provisions of the Act which may affect the development or operation of a project.

Cultural heritage resources should be identified and evaluated based on research and documentary evidence. Also, decisions that affect heritage resources should be made in an open, accountable way, taking into account the views of interested persons and communities. Assessment of the impact of proposed activities on the cultural heritage value of heritage resources should inform the decisions that may affect them.

As reflected in Table 1. the Ontario Heritage Act empowers municipalities and the provincial government to protect real property of cultural heritage value or interest. Across Ontario many properties of cultural heritage value have been identified and protected. However, many more are not clearly identified. Since waterpower projects may occur in areas of Ontario without municipal organization, it is important for proponents to recognize potential cultural heritage resources and attempt to address possible effects to them. For example, projects adjacent to a designated property, an Ontario Heritage Trust easement property or heritage conservation district may have cultural heritage value. Similarly, a cultural heritage landscape may be present when, for example, the project is within a designated Canadian Heritage River watershed.

Archaeological Resources

Archaeological assessment must be carried out by a licensed consultant archaeologist as defined in O. Reg. 8/06 under the Ontario Heritage Act. There are up to four stages of archaeological work that can be carried out, depending on the presence of archaeological resources and their cultural heritage value or interest. Every potentially impacted property will need at least a Stage 1 assessment. A Stage 1 Assessment will determine the archaeological potential of a property, based on factors such as proximity to water and other resources as well as known archaeological sites. Areas of a property that are determined to have potential will require a Stage 2 assessment. Stage 1 and Stage 2 work can be combined into one study. The Stage 2 assessment involves testing the property to determine if archaeological resources are present. If present,

the Stage 2 report will make recommendations for further work (Stage 3) or no further work, depending on the level of cultural heritage value or interest of the resources. Areas documented as disturbed and recommended for no further concerns in a Stage 1 report will not require further assessment. A determination of potential for the presence of marine archaeological sites can only be made by a licenced archaeologist. Projects on any body of water have the potential to require further assessment, as per the recommendations made in a Stage 1 report by the licenced archaeologist. Appendix A includes the definition of some important heritage terms. Advice on approaches to mitigation is included in Appendix B. Information on approaches to considering cultural heritage through the Class EA process and resource material (e.g. proponent checklists) are referenced in Appendix C.

6.0 EFFECTIVE PUBLIC INVOLVEMENT

Early and meaningful engagement of representative interests and publics that may be affected by or have an interest in the project is prudent business practice and a critical element of achieving the intent of the Class EA. The purpose of public consultation is to provide those who may wish to participate the opportunity to contribute and inform decisions relating to a project. It provides the proponent with the opportunity to gain information and knowledge related to social, cultural, economic and environmental considerations of direct relevance to the project as well as the means to inform and explain the approach to and value of the proposal. Proponents are expected to design and implement their consultation activities considerate of the context (e.g., geography, timing) most relevant to the proposal. In practice, this can mean project-specific approaches to notification and involvement.

This section provides:

- A general outline of the role of consultation for an undertaking subject to this Class EA; and
- Consultation principles and a summary of consultation techniques that may be employed to ensure the objectives of consultation are met.

6.1 Legislated Requirements for Public Consultation

Proponents are required to consult with the public as part of the planning process for any undertaking subject to the *EA Act*. The proponent must document the consultation approach that was employed as well as the results of the consultation and how the input and advice was considered.

6.1.1 Mandatory Consultation

Requirements This section discusses the mandatory notification requirements for the project categorizations discussed in **Section 3**. The mandatory points of contact for a project associated with existing infrastructure include:

- Notice of Project Screening
- Notice of Commencement;
- Notice of Completion (to those who

responded to the Notice of Commencement or have otherwise expressed an interest in the project to the proponent); and

• Statement of Completion.

The mandatory points of contact for a project on a managed waterway include:

- Notice of Commencement;
- Notice of Completion; and
- Statement of Completion.

The mandatory points of contact for project on an unmanaged waterway include:

- Notice of Commencement;
- Notice of Inspection (to those who either responded to the Notice of Commencement or have otherwise expressed an interest in the project to the proponent);
- Notice of Completion; and
- Statement of Completion.

Proponents must submit any required notices to the following email addresses:

- 1. Generic Class EA email address ClassEAnotices@ontario.ca and
- 2. The Regional Class EA email address Central Region eanotification.cregion@ontario.ca

Eastern Region eanotification.eregion@ontario.ca Northern Region eanotification.nregion@ontario.ca

South West Region eanotification.swregion@ontario.ca

West Central Region eanotification.wcregion@ontario.ca

6.2 Creating a Public Consultation Process or Plan

A proponent should consider the following when designing a consultation process or plan:

- A schedule of consultation events;
- The consultation methods to be used at each step and the rationale for their use;
- The scope of information to be provided and messages to be conveyed;
- The flexibility to accommodate unforeseen needs;
- How concerns will be considered and inform the project;

- The documentation of consultation efforts and outcomes; and
- The application of the Class EA consultation process to other legislative requirements and approvals.

6.2.1 Public Consultation Principles

Effective engagement and participation is premised on commonly-held principles of the EA process. These core principles include:

Mutual Respect

- for differing values
- for differing roles in environmentally responsible development
- for timelines
- for each party's constraints
- Clarity
 - of purpose and objectives
 - of how, when and which decisions can be influenced and those decisions that cannot
 - of mandates and/or stake in the development of the project
 - of how information will be used or may be used during the planning of the project
 - of how participants can be engaged
- Transparency
 - information will be provided to allow for meaningful and constructive participation and consideration of values
 - participation in the EA process will inform the outcome of and the final decisions for the project
- Flexibility
 - adaptive participation programs to address the public's ability to be involved
 - considerate of the ability of participants, to the extent practical, to contribute to the development of the timelines and specifics of how the process will be executed
 - translation of publications and information to local languages, as appropriate
- Trust
 - that all involved will contribute to the sustainable development and use of Ontario's waterpower resources

- that information gathered will not be used as a means of penalizing the people who provided it
- that there will be follow-through on commitments made
- Certainty
 - o a defined beginning and end to the process
 - o use of a single coordinated process

6.2.2 Consultation Approaches

In preparing for public consultation, proponents of projects under the Class EA should consider the following approaches:

• Broad initial identification of probable and potential interests

Interests in waterpower projects will be those who are most likely to be affected by, or concerned with, the proposed project and are likely to include the public, riparian right holders, local interest groups, local community members and government agencies. At the initial stage of the proposal, it is important to cast the net of engagement as wide as is practical relative to the nature and scope of the proposal.

• Early engagement

Consultation should be initiated as early in the process as possible. Bringing together all relevant viewpoints at the earliest opportunity is more likely to ensure that all potential concerns are identified. Early consultation also ensures

that people's values, concerns and interests are built into the development of plans and projects from the point of inception. A lack of contact in the initial stages can lead to a loss of confidence in the process among the parties that are not informed about the project until significant decisions have been made.

• Variety in participatory techniques

A range of opportunities for public participation in the Class EA process will optimize the potential for all interested parties to provide input. Techniques should be chosen according to the purpose of the engagement, the audience and the desired outcomes.

• Adequate provision of information

Provision of good quality background information regarding the project is essential to ensuring good levels of understanding amongst participants. Information should be provided so that parties can provide constructive input. Consultation materials should be provided in plain language and where additional material is of value, it should be provided in a timely manner.

Ongoing dialogue

A key objective of early engagement of probable and potential interests is to determine those for whom the project is of specific relevance or importance. Ongoing dialogue with these interests can augment the mandatory notice opportunities and facilitate more informed involvement.

6.2.3 Notification Techniques

There are a number of ways that a proponent may notify the public about the characteristics of a waterpower project. As the mandatory component of consultation, notices are critical to achieving effective and efficient engagement both for the proponent and the public. Notices allow the proponent to disseminate information regarding the project to a wide range of participants. This section summarizes some of the methods that can be used to provide notification of project activities. The list is not intended to be an either/or approach, nor is it presumed to be all-inclusive.

- Newspaper Advertisements
 Newspaper advertisements are one means to provide broad formal notice. The amount of information contained in these advertisements will be limited, but all the necessary information must be included. The proponent must be clear and concise in conveying the intended message. Newspapers selected should be related to the potential geographic extent of interest.
 - Direct Mail Mail outs are typically used to provide information on a project because they ensure a uniform provision of information to a known list of potential interests, or a group of people within a given geographic area. Mail can also be used as a means to provide individual responses to members of the public who have expressed interest in the project. Mailings can convey large amounts of information, including reports. Contact information should always be provided for those who may want to respond to the information being sent out.

Internet and email

A project website is an efficient way to post information regarding the status of the project as it becomes available. Copies of reports and useful background information can be readily accessed and easily obtained from an Internet site. Proponents will also be provided the option of having project notifications posted on the OWA website. Email correspondence enables a quick turnaround time for information sharing. The proponent should be aware that some members of the public may not have access to a computer. The use of electronic communications should primarily be used to complement other consultation techniques.

Newsletters

Project newsletters can be used to keep interested members of the public updated as to the status of the project. Newsletter distribution can be designed so as to focus on expressed interests in the project, allowing for the provision of more detailed information to an already engaged and informed public.

Local Cable TV

Local Cable TV, where available, can be an effective means of notifying a wide community of potential interest.

6.2.4 Consultation Techniques

This section summarizes some of the methods that can be used to stimulate active consultation.

• Public Information Centres

A Public Information Centre (PIC) is a way to provide the public with information on the project with display boards, posters, interactive displays, surveys, etc., and to immediately respond to any concerns that may arise. PICs can include presentations followed by a "question and answer session."

PICs should be held at an appropriate venue in the community closest to the project location. The venue should be easily accessible for interested parties to attend. Proponents (and support staff) should be on site to answer any questions an interested party may have.

Meetings/Workshops

Smaller, focused meetings with specific stakeholders may be more successful for resolving contentious issues associated with an undertaking. Proponents should arrange meetings on an as-needed basis to discuss any concerns related to the project.

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Comment Cards

Comment cards are typically distributed at a PIC where members of the public can submit concerns and opinions directly to the proponent, or bring them home and mail them to the proponent after the event. Comments cards can be structured in a way so that the proponent can determine on a larger scale what the most common concerns about a project may be.

Attention should be paid to the format of the comment card, to ensure that relevant information is obtained without using questions that are too narrow and that may influence a response. The comment card should be formatted so an interested party can include their address for potential follow-up.

- Site Visits Site visits enable the proponent to discuss any concerns a party may have in person. This allows the proponent to fully understand any issues a concerned party may have and address these issues accordingly.
- Direct Correspondence
 Parties may also be invited to submit
 written comments on the project by
 using mail, fax or email. Responses
 should be acknowledged within a
 reasonable time period.
- Advisory Committees
 In some instances, there may be value
 in developing a cohesive group of local
 stakeholders who are representative
 of the varied interests in the project,
 particularly in situations where there
 may be public values and expectations
 that may be in conflict with one
 another.
- Draft Reports
 At its discretion, the proponent may elect to issue draft reports (e.g., technical studies and/or ER) to all or a subset of project stakeholders. This may be done to facilitate enhanced understanding of the project, or to provide additional opportunities to

6.3 Documentation

A key element of satisfying the requirements of the Class EA process is documentation of the approaches applied and outcome of public engagement. In support of the Notice of Completion, the ER must summarize:

- the consultation process;
- the participants to the process;
- how advice and input was considered; and
- how the advice and input affected the project proposal.

As described in **Section 4.5.1**, additional consultation undertaken following the issuance of the Notice of Completion should be documented and summarized prior to issuance of the Statement of Completion.

documentation before it is finalized.

review and comment on project

7.0 ENGAGING AND INVOLVING INDIGENOUS COMMUNITIES

7.1 Indigenous Interests

Indigenous communities are expected to have a range of views to offer and contribute. Some communities are interested in the economic opportunities that a waterpower project, as a form of renewable energy, can offer. Others may have concerns with the potential impact of project on their traditional uses of land, water and resources. Engagement may take on different forms in each community, depending on both the scope of the project and the interests of the community. The common thread with respect to Indigenous interests and waterpower development is the need for openness and inclusiveness. It is important to be aware of the potential impacts that environmental change can have on Indigenous communities. In many cases, activities that affect the environment will also affect the ability of communities to exercise their Indigenous and Treaty rights to use the land and its resources, and may also have far-reaching economic, social and cultural effects. Thus, it is important that the rights and concerns of Indigenous communities are acknowledged during the planning of waterpower projects.

Indigenous communities include First Nations communities, whether recognized under the *Indian Act* or not, and Métis communities.

Proponents are expected to involve Indigenous communities who may be directly affected by, or have an interest in, the development of a waterpower project and to develop an engagement approach specific to these interests. When considering which Indigenous communities to contact, proponents should be mindful that the traditional territories, treaty areas, or areas of claims involving Indigenous or treaty rights of some Indigenous communities are extensive.

For projects on provincial Crown land, the Indigenous communities to be engaged through the EA will be those identified by the provincial Crown through a coordinated process. In such instances, this list will often have been developed through the MNRF Crown land site access process. Proponents should also be mindful of the need to communicate with both the formal leadership of an Indigenous community as well as others who may represent the interests of that community. For example, in some communities, there may be both an elected Band Council as well as a traditional council. Sometimes it may also be appropriate to discuss the project with the whole community.

As noted in Section 4.1.3, some project proposals may have been developed with the involvement of Indigenous communities prior to commencing the EA, and the Class EA will be informed by the relationships with Indigenous communities that have already been established. Proponents should be aware that the Crown undertakes consultation with Indigenous communities in the course of different regulatory processes, including MNRF's Site Release and Development Review process, some planning approvals processes, and processes put in place by other agencies, as appropriate. To the extent possible, consultation under these processes should be coordinated and harmonized with consultation under the Class EA. In addition, before distributing the Notice of Project Screening or Notice of Commencement for a project, proponents will provide MECP Regional Offices with a list of Indigenous communities that the proponent intends to engage and the rationale for the engagement. In many instances, this list will have been informed through the MNRF Crown land site release process.

Indigenous engagement and involvement is intended to allow the proponent to identify and consider the concerns and issues of Indigenous communities and to provide those communities with an opportunity to receive information about and have meaningful input to the project proposal. Some possible considerations for the design and implementation of a participation program specific to Indigenous communities may include:

- The local language;
- Physical and electronic accessibility of communities;
- Governance structures;

- Differing decision-making structures than found in provincial, federal and municipal agencies and potentially between Indigenous communities themselves;
- Consultation protocols established between federal, provincial and municipal agencies and Indigenous communities;
- The particular role of women with respect to water in many Indigenous cultures;
- Relationships between Indigenous communities; and,
- The unique values, traditions and interests of each Indigenous community. In addition, it should be noted that the Indigenous community may wish to:

- Work solely with government(s);
- \circ Work directly with the proponent; and/or,
- Work with the government and proponents simultaneously.

Figure 9, courtesy of the Chiefs of Ontario provides an example of an overview of the First Nations Communities in Ontario and their Provincial Treaty Organization affiliation, if any.¹ Additional information sources and contact information for First Nations Communities, Tribal Councils and Treaty Organizations is available from the OWA, as referenced in **Appendix C**.

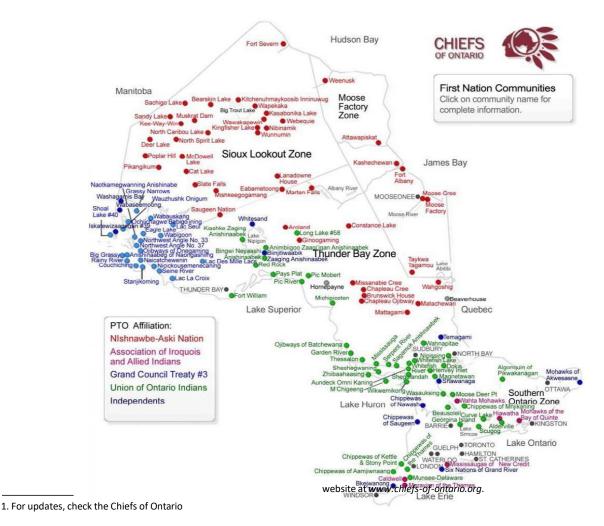


Figure 9 First Nations Communities in Ontario

Many Indigenous communities, tribal councils and provincial territorial organizations have their own websites where information about their communities may be found. Information on Indigenous communities may also be found on the Crown-Indigenous Relations and Northern Affairs Canada websites.

7.2 Indigenous Traditional Knowledge

Many of the activities related to EA involve environmental studies and environmental data collection. Indigenous peoples have the potential to make important contributions in this area. Indigenous Traditional Knowledge (ITK) can also be referred to as "traditional knowledge," "indigenous knowledge," or "naturalized knowledge." ITK usually refers to those indigenous systems of knowledge, as well as cultural practices and methodologies related to the production of knowledge based on traditional belief systems, relationships to the environment, and community practices. It is the accumulated and living knowledge possessing a depth and breadth of information built upon the historic experiences of peoples living on the land and adapts to social, economic, environmental, spiritual and political change. It can have particular value in understanding species, ecosystems, sustainable management, conservation and wise use. It comprises a deep understanding of complex interrelationships between individual environment components, the dynamics of local ecosystems and the peoples that live in them. ITK is often used to denote systems which may differ from western approaches to science and knowledge. Much of this knowledge may be orally transmitted, and it may be considered sacred, thus it is important that ITK as well as community attitudes and desires regarding the use of ITK be treated with the utmost respect.

7.3 The Crown's Duty to Consult

Some waterpower projects may affect Indigenous communities who hold or claim Indigenous or treaty rights, or lands that may be subject to a land claim. Any project that interferes with or infringes on the exercise of these rights or potential rights may result in a duty to consult on the part of the Crown. Nothing in the Class EA is intended to alter or detract from any obligation the Crown may have to consult with Indigenous communities in light of the protection provided for the existing Aboriginal and treaty rights of the Indigenous peoples of Canada as recognized and affirmed in Section 35 of the *Constitution Act*, *1982*. Although the ultimate responsibility for fulfillment of the Crown's duty to consult and accommodate rests with the Crown, the Crown may delegate certain procedural aspects of consultation to proponents.

The Crown has a duty to consult with and accommodate Indigenous communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that might adversely affect it.

During the consultation and engagement process with Indigenous communities, it may be determined that the proposed project may potentially adversely affect an existing or asserted Indigenous or treaty right protected under Section 35 of the *Constitution Act*, *1982* and that the Crown has a legal duty to consult.

The Class EA is not intended to fully describe how any duty to consult on the part of the Crown, if it is triggered, may be discharged. However, the Crown may delegate the procedural aspects of consultation to proponents and recognizes a corresponding responsibility of Indigenous communities to participate in the process, make their concerns known and respond to efforts to address their concerns. Respective roles and responsibilities for engaging Indigenous communities should be discussed prior to or at the initial proponent-agency coordination meeting and throughout the Class EA process.

If an Indigenous community has asserted that the Crown has a duty to consult based on the potential adverse effects on an Indigenous or treaty right during the course of engagement about the potential effects of the project, the proponent should notify the Director of the EAB.

Proponents can assist the MECP by providing the list of the Indigenous communities that have been engaged and details of what has transpired to date between the proponent and the Indigenous community(ies). The MECP will determine whether additional consultation is required or whether additional Indigenous communities should be consulted. The Director may request that the proponent seek and provide further particulars of the assertion where appropriate.

When the duty to consult has been engaged, all parties should realize that:

• The nature, scope, and content of the duty to consult and accommodate

varies with the circumstances;

- Meaningful consultation requires the Crown to listen with an open mind to what the Indigenous communities have to say;
- Consultation may oblige the proponent to make changes to its proposed project based on information obtained;
- Accommodation requires a process of balancing interests; and
- Responsiveness is a key element of both consultation and accommodation.

8.0 CLASS EA ADMINISTRATIVE PRACTICES AND PROCEDURE

8.1 Compliance Monitoring Program for the Class EA

The OWA will be responsible for monitoring the implementation of this Class EA to ensure that it is satisfying its purpose and that it remains relevant and current. Where feasible, the OWA will identify areas for improvement that would enhance the effectiveness of the Class EA.

To monitor the progress and experience arising from the implementation of this Class EA, the OWA will:

- Retain Notices of Commencement and Statements of Completion provided to the OWA by project proponents; and
- Submit annual reports to the Director of the EAB for projects initiated, planned and implemented during the previous year. Annual reports will be submitted to the Director for placement on the Public Record. The annual report will include, as a minimum:
 - A statement of whether the Class EA document is providing an effective and efficient planning process for protecting the environment.
 - Identification of any changes to the Class EA that would serve to improve the Class EA itself or its administration.
 - Identification of any common problems experienced with Class EA projects that may suggest the need for amendment.
 - A summary table listing of all projects known by the OWA to have been carried out following the Class EA document and a breakdown by project type. The summary table shall include the following information:
 - Name and brief description of the undertaking;
 - Name of the contact person;
 - Location of the undertaking;
 - The date undertakings were started; and
 - EA Project status.

8.2 Amending Class Environmental Assessment Documents

The following summarizes the process for requesting amendments to Class Environmental Assessments and the authority for the Director and Minister to make amendments to the Class Environmental Assessment. To the extent that there is a conflict between what is set out below and the provisions in the *EA Act* in respect of the authority of the Minister or Director, the provisions in the Act prevail.

Section 15.4 of the *EA Act* sets out the authority for the Minister of the Environment, Conservation and Parks (MECP) and the Director of the Environmental Assessment Branch (EAB) at MECP to amend the Class EA. An amendment may be made at any time and may be initiated by the Minister or the Director, or as a result of a request for an amendment.

The Minister may amend the Class EA if the Minister is satisfied that the amendments are consistent with the purpose of this Act and the public interest. Examples of the types of amendments that the Minister may make include:

- Improving the efficiency or the effectiveness of the process described in the document;
- 2. Adding new projects to the Class EA;
- 3. Recategorizing existing undertakings/projects in the Class EA; and
- Updating the Class EA to be consistent with new or updated guidelines, policies, regulations or legislation.

The Director may amend the Class EA to make any of the administrative changes set out in section 15.4(5) of the Act as described in **Section 8.2.1**.

Written requests for amendments to a Class EA must be submitted to the Director of the EAPB at the Ministry.

Amendment Process

The two types of amendments, Director and Minister, are described in the following sections.

8.2.1 Director Amendments

The Director may make the following administrative amendments to the Class EA:

- Correcting errors that are editorial or typographical in nature;
- Updating references to a guideline, Act or regulation, or provisions or other portions of an Act or regulation;
- Updating references to bodies, offices, persons, places, names, titles, locations, websites or addresses; or
- 4. Clarifying the existing text of the Class EA.

To request a Director's amendment, a formal written request must be submitted to the Director and must include details on the proposed amendment and the reason for the request.

Based on the information before the Director, the Director will decide whether to amend the Class EA. The Director will notify the person given approval in respect of the class environmental assessment ("Class EA Holder") of any amendments..

The Director may also initiate an administrative amendment on their own initiative. The Class EA Holder will be advised in writing if an administrative amendment is made by the Director. The amendment will come into effect upon publication of a notice of the amendment in the registry under the Environmental Bill of Rights, 1993.

8.2.2 Minister Amendments

Requests for Minister amendments should be made in writing to the EAB. The request should include the current text in the Class EA, the proposed changes and rationale for the changes, and revised text. The Ministry may request additional information regarding the requested amendment.

The Minister may also initiate an amendment on their own initiative. The Class EA Holder will be advised by the ministry in writing if a Minister's amendment is being considered. As part of the request for an amendment, a consultation plan must be submitted to the Ministry. The consultation plan may outline the method for consultation on the proposed amendments and identify the persons, agencies, ministries and Indigenous communities to be consulted. The Class EA Holder will undertake consultation in accordance with the plan and is required to address and respond to any concerns that are raised during the consultation and provide those concerns and responses to the ministry for consideration. This consultation will be relevant to the Minister's obligation to ensure adequate public notice and an opportunity for public comment has been given in respect of any proposed amendments.

The Ministry will undertake consultation on any Minister initiated amendments and may undertake additional consultation on requested amendments.

Based on the information before the Minister, the Minister may:

- amend the Class EA, as requested or amend with changes to what was requested, in accordance with s. 15.4(3) of the EAA; or.
- b. refuse to amend the Class EA.

The Minister will give written reasons to the Class EA Holder and to any other persons the Minister considers advisable.

8.3 Five Year Review of this Class EA

A review of the Class EA will be submitted by the end of the calendar year five calendar years after the year in which the Class EA is approved, and every five years thereafter. The review will consider the efficiency and effectiveness of the Class EA planning process, assess new legislative requirements and evaluate best practices of direct relevance to waterpower projects. The OWA will provide, by letter, to the Director of the EAB the results of the review. This review will also include a summary of issues and amendments that arose during the comment period, and an account of how the issues and amendments that have been or will be addressed, for approval by the Director of the EAB. Any revisions, additions, or updates can be made using the amending procedure described in Section 8.2.

8.4 Urgent Situation Provisions

Though very unlikely to involve new capacity, situations may develop where there is a threat or potential threat to human life or safety, property, public service, or the environment. Examples of urgent situations include flooding, erosion, or collapse of a structure. In these situations, the proponent may proceed with actions that would otherwise be subject to the processes under this Class EA. Should this occur, the proponent will provide notice to the Director of the EAB within 30 days of the commencement of action taken, containing the following information:

- The location and nature of the situation;
- The effects of the situation;
- Actions taken to resolve the situation and the effects of the actions;
- The effectiveness of the actions; and
- Anticipated future remedial works and monitoring, if any.

These provisions are not intended to apply to the construction of new facilities.

8.5 Transition Provisions

Some waterpower projects that would be considered within the class of undertakings may be in progress on the date of approval of the Class EA. Projects for which a Notice of Commencement has been issued are considered to be in progress. In order to ensure a smooth transition between previous requirements and those of the new Class EA, this Class EA offers the following transition provision.

Projects for which a Notice of Commencement has been issued before the 2022 version of the Class EA came into effect are ineligible to go through the screening process outlined in **Section 3.1.1** and Table 2 of this Class EA, and must continue to follow the full Class EA process outlined in this document.

If the Notice of Commencement has not been issued, projects that are subject to this Class EA must follow the latest version of the Class EA.

If a proponent has filed its Statement of Completion and is required to prepare an addendum, the proponent must use the addendum provisions in the latest version of this Class EA.

8.6 Section 16 Orders

Under the *EA Act*, the Minister has the authority to make two types of orders with respect to an undertaking proceeding in accordance with a Class EA. This authority may be exercised by the Minister or their authorized delegate, if any.

The following summarizes the Minister's authority under ss. 16 and 16.1 of the *EA Act*, and the prohibitions in s.15.1.1. To the extent that there is a conflict between what is set out below and the provisions in the *EA Act*, the provisions in the *EA Act* prevail.

The Minister may, by order, declare that an undertaking is a Part II.3 project or may impose conditions on the undertaking.

Section 16(1) and 16(3) Orders

The Minister may, on their own initiative, within a time limited period, declare an undertaking to be a Part II.3 project (which would require the proponent to prepare a comprehensive environmental assessment), referred to as a s.16(1) order, or impose conditions on an undertaking, referred to as a s.16(3) order.

If the Minister is considering making an order on their own initiative, the Minister must make the order no later than 30 days after the end of the comment period set out in the Notice of Completion or Notice of Addendum, unless unless the Director provides a notice to the proponent, within the 30-day period, advising the proponent that the Minister is considering making a s. 16 order (Notice of Proposed Order). If the Director issues a Notice of Proposed Order, the Minister may only make the s. 16 order within 30 days of the Director's notice being given to the proponent unless the notice includes a request for information.

If the Notice of Proposed Order includes a request for information, the proponent must provide that information to the Director within the deadline contained in the notice. When the information is received, the ministry will review the information and if the Director is satisfied that the proponent has provided the requested information, the Director will notify the proponent (Notice of Satisfactory Response). The Minister will then have 30 days to make a s. 16 order. In this case, the following outcomes could apply:

- If the Minister issues a s.16(1) order, the proponent cannot proceed with the undertaking without first seeking and obtaining approval under Part II.3 of the EA Act, which involves the preparation of a comprehensive EA.
- If the Minister issues a s.16(3) order, the proponent must meet the conditions outlined in the order in proceeding with their undertaking.
- If the Minister does not issue an order within 30 days of the Director giving a Notice of Satisfactory Response, the proponent can proceed with their undertaking.

If the Director is not satisfied with the information provided in response to a request for information in a Notice of Proposed Order or if the proponent fails to provide the information requested within the timeline provided in the Director's notice, the Director will issue a Notice of Unsatisfactory Response and the proponent will be required to issue a new Notice of Completion or Notice of Addendum. The new Notice of Completion or Notice of Addendum. The new Notice of Completion or Notice of Addendum, providing for a new comment period of at least 30 days, must be issued within the time period and following any directions specified by the Director in the Notice of Unsatisfactory Response (e.g., post information to the proponent's website). In addition, the information specified in the Notice of Unsatisfactory Response must be provided to the Director for review. If the Director is satisfied with the information provided to the ministry with the new Notice of Completion or Notice of Addendum, the Director will issue a Notice of Satisfactory Response. Once the Notice of Satisfactory Response is given, the Minister will have 30-days to issue an order if the Minister chooses to do so. In this case, the following outcomes could apply:

If the Minister issues a s.16(1) order, the proponent cannot proceed with the undertaking without first seeking and obtaining approval under Part II.3 of the *EA Act* (which involves the preparation of a comprehensive EA).

order, the proponent must meet the conditions specified in the order in proceeding with their undertaking.

 If the Minister does not issue an order within 30 days of the Director giving a Notice of Satisfactory Response, the proponent can proceed with their undertaking.

However, if the Director remains unsatisfied with the information provided when a new Notice of Completion or a Notice of Addendum is issued or the proponent continues to not provide the requested information, the Director will issue another Notice of Unsatisfactory Response, thereby requiring the proponent to again issue a new Notice of Completion or Notice of Addendum, in accordance any directions specified by the Director and provide the requested information to the Director.

Requests for s.16 orders on the grounds that the order may prevent, mitigate or remedy adverse impacts on Indigenous and treaty rights

In addition, the *EA Act* allows a person to request an order under s. 16 of the *EA Act* only on the grounds that the order may prevent, mitigate or remedy adverse impacts on Aboriginal or treaty rights. Requests that are not made on these grounds will not be considered by the Minister.

The proponent shall provide accurate and detailed information on the s.16 order request process to the public and to Indigenous communities. At a minimum, proponents must include information on the s.16 order request process in the Notice of Completion and any Notice of Addendum. The information in the notices should include: what the grounds for a request must be (i.e. that the order may prevent, mitigate or remedy adverse impacts on Aboriginal or treaty rights), how to submit a request for a s.16 order, and, timing for submission of the request, and information that must be submitted to the ministry in making a request. This includes:

- a. requester contact information, including full name;
- b. undertaking name;
- c. proponent name;
- d. the type of order that is being requested;
- e. specific reasons on how an order may prevent, mitigate or remedy potential adverse impacts on Aboriginal and treaty rights;

• If the Minister issues a s.16(3)

Class Environmental Assessment

- f. information about efforts to date to discuss and resolve concerns with the proponent; and
- g. any other information in support of statements in the request.

If a request for a s.16 order is received by the ministry, the ministry will contact the proponent for a response to the concerns raised in the s.16 order request. The proponent must respond in a timely manner with complete information. For more information on the section 16 order process, please visit: https://www.ontario.ca/page/class-environmentalassessments-section-16-order

8.7 Period of Project Authorization

The proponent may proceed with a project within five years of filing a Statement of Completion. If a project has fulfilled the Class EA requirements but has not yet started construction within five years of filing the Statement of Completion, the proponent shall review the planning and design process and the current environmental setting to ensure that the project and the mitigation measures are still valid.

If through technical review and by applying the potential effects identification matrix set out in **Table 3**, the review does not identify important changes, the project can proceed without amendments to the ER. The proponent is required to retain a copy of the review results with the original ER.

If changes have occurred or modifications to the project are required that may result in negative effects to the environment, the review shall be recorded in an Addendum to the ER as described in **Section 8.8** below.

8.8 Addendum Provisions for Environmental Reports

The purpose of the addendum provisions is to require proponents to consider the significance of changes to projects after completing the Class EA process or with implementation of a project more than five years after filing a Statement of Completion, and to require consultation on changes that are environmentally significant. The changes may include, for example, environmental conditions, alternative project approach, new government policies, new engineering standards or new technologies for mitigating measures.

Circumstances under which proponents must apply the addendum provisions outlined in this section:

- Where a project has been planned in accordance with the Class EA, but where a proponent decides prior to or during construction that it is not feasible or desirable to implement the project in the manner described in the completed ER.
- Where a project has been constructed/implemented as described in a completed ER under the Class EA or Screening Report/Environmental Review Report under the Environmental Screening Process, and where the proponent wishes to make a minor modification to the project.
- Where a project was approved under Part II.3 of the EA Act, and the proponent wishes to make a minor modification to the project that is not covered by the original approval.

For the purposes of this Class EA, a minor modification is any change to a waterpower facility that would increase the name plate capacity of the facility by less than 25 percent.

Proponents shall determine, through technical review and/or consultation with interested and affected parties and by applying the potential effects identification matrix set out in **Table 3**, whether the proposed change to the project may have new negative effects to the environment.

8.8.1 No Potential for New Negative Effects

Where it is determined that there will be no new negative effects, the proponent shall document that determination in their project files and advise the Ministry of the Environment, Conservation and Parks of the determination, for information only.

8.8.2 Potential for New Negative Effects

Where it is determined that there may be new negative effects, the proponent shall prepare an Addendum. Alternatively, the proponent may elect to prepare a new ER, rather than prepare an Addendum.

The Addendum shall:

 reference the original ER and describe the change(s) being considered;

- summarize the circumstances necessitating the change(s);
- describe the implications of the change(s); and
- review mitigation measures that will be employed to reduce new negative effects of the change.

The proponent must then provide a Notice of Addendum. The notice will describe the project, its Category, and the date of filing the Statement of Completion (or Notice of Approval in the case of a comprehensive EA), request comments, indicate the basis upon which the Addendum is proposed, and provide contact information and information regarding the opportunity to request a Section 16 Order. Requests shall be issued to both the contact person named in the notice and the Minister of the Environment, Conservation and Parks.

The Notice is to be issued to those who would have received the Notice of Completion as issued in accordance with Section 4.4.3 of the Class EA.

Note that unless otherwise extended by the proponent a 30-day response period is to be provided. If a Section 16 Order request is received, the process described in **Section 8.6** will be followed. In addition to the requirements in **Section 8.6**, a request for a Section 16 Order should refer to changes in circumstances that have occurred since the project was originally approved that support the request for a Section 16 order.. Where an addendum is prepared, the Section 16 Order provision applies only to the changes to the project; not the aspects that were previously authorized to proceed under the EAA.

During the 30-day comment period, the proponent must not proceed with the changeto which the Class EA applies. Furthermore, where implementation of a project has already commenced, those portions of the project that are the subject of the Addendum, or have the potential to be directly affected by the proposed change, shall cease until the proponent is authorized to proceed under the *EA Act*.

If no Section 16 Order request is received within the notice period, the proponent may

proceed with the project at least 30 days (or such other period of time as may be prescribed by regulation) after the expiry of the notice period, unless otherwise authorized under ss. 15.1.1 (5.1) of the *EA Act*. The proponent shall keep a copy of the Addendum with the original project documentation on site (or in an alternate location where it will be readily available) for the life of the project.

Appendix A: GLOSSARY OF TERMS AND ACRONYMS

A note on terms used in this document:

Terms commonly used in this document are defined in **Appendix A**. For other terms, the normal meaning of the word applies. At all times, legislated or formal government policy definitions of a term prevail over those used in this document. Defined terms in **Appendix A** are intended to capture both singular and plural forms of these terms in the policies.

Abandonment – A retirement option involving the surrender of responsibilities and claims for such facilities. Some or all of the physical structures and components of the waterpower facility would be left behind.

Access Road – A road built to a site orwaterpower facility for the purpose of construction, operation and/or maintenance.

Archaeological Resources – Include artifacts, archaeological sites, marine archaeological sites, as defined under the *Ontario Heritage Act*. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with the *Ontario Heritage Act*.

Archaeological resources are often on or below ground, or form part of a cultural landscape. Their integrity can be compromised by any land use activity, including, but not limited to, site alteration, grading, soil removal, construction, shoreline stabilization, alteration to watercourses, extraction of aggregates, and the clearing of woodlots or forested areas.

Archaeological site – Any property that contains an artifact or any other physical evidence of past human use or activity that is of cultural heritage value or interest. Areas of archaeological potential – means areas with the likelihood to contain archaeological resources. Criteria for determining archaeological potential are established by the Province, but municipal approaches which achieve the same objective may be used. Archaeological potential is confirmed through archaeological fieldwork undertaken in accordance with the Ontario Heritage Act. Areas of archaeological potential – means areas with the likelihood to contain archaeological resources. Criteria to identify archaeological potential are established by the Province. The *Ontario Heritage Act* requires archaeological potential to be confirmed by a licensed archaeologist.

Associated with Existing Water Management Infrastructure – Where the existing water management infrastructure at a site may be used, retrofitted, redeveloped or refurbished/upgraded for a particular project at that site.

Auxiliary Structure – Any structural device, other than the powerhouse, which affects the operation of the generating station (e.g., dams, weirs, etc.).

Block Dam – A dam structure, consisting of impermeable material, normally located at topographical/geological depressions to prevent leakage of water from a storage or head pond and to "block off" previous inflows or outflows to the watercourse may also be referred to as a side dam. The structure is designed for water retention; therefore, it has no specific facilities for passing water.

Built Heritage Resources – means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest identified by a community, including an Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial, federal and/or international registers. (PPS, 2020)

Canal – A channel dug or built to carry water. May be associated with the intake or tailrace of a generating station or may be a component of a diversion scheme.

Comprehensive EA – An environmental assessment that is subject to the requirements set out in Part II.3 of the *EA Act* (see environmental assessment).

Cultural heritage landscape – means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the *Ontario Heritage Act*, or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms. (PPS, 2020)

Cultural Heritage Resources – includes built heritage, cultural heritage landscapes, and marine and other archaeological sites.

Dam – a structure that is constructed as a barrier across a river, lake, pond, or stream to hold back water in order to raise its level, create a reservoir to control flooding, or divert the flow of water.

Day – for all timelines in the Class EA means calendar day.

Disposition – The granting by the MNRF of certain or all rights to Crown resources through such means as permits, licenses, approvals, permissions, consents, leases, licenses of occupation, or sale.

EAB – Environmental Approvals Branch.

Effect – An occurrence of change or alteration associated with the environment within the defined study area, positive or negative, that would occur as a result of a project.

Efficiency Increase – Refers to the like for like equipment replacement including generators, transformers and runners that results in an increase in the production of the existing facility, where the resultant capacity is either under 200 MW or the increase is less than 25% of existing capacity and the resultant capacity is 200 MW or greater, but does not change the water management regime.

Endangered Species – Any species, as listed in the Regulations under the Ontario *Endangered Species Act, 2007* and/or the schedules of the Federal *Species at Risk Act.*

Environment – Has the same meaning as in the *Environmental Assessment Act*; it is currently defined as meaning:

- (i) air, land or water;
- (ii) land and animal life, including man;
- (iii) the social, economic and cultural

conditions that influence the life of man or a community;

- (iv) any buildings, structure, machine or other device or thing made by man;
- (v) any solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from the activities of man; or
- (vi) any part or combination of the foregoing and the interrelationships between any two or more of them, in or of Ontario.

Environmental Assessment (EA) – The identification and evaluation of effects of an undertaking on the environment, as contained within a document prepared in accordance with the Ontario *Environmental Assessment Act*.

Environmental Assessment Act (EA Act) -

A provincial statute that has the purpose of the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment.

Fish – (as defined in the federal Fisheries Act) includes parts of a fish; shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine mammals; and, the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine mammals.

Fish Habitat – (as defined in the federal Fisheries Act) means 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.

Fishway – any device, work or other thing that provides for the free passage of fish, including a canal, a fish pump, a fish ladder, a fish elevator and a fish lock

Forebay – A reservoir immediately upstream of the generating station intake. Also referred to as headpond.

Full Class EA Process – The process described in **Section 4.0** of this Class EA.

Generating Station/Facility – a facility in which the force of failing or flowing water spins turbines to drive generators for electricity production. It is a general term, which includes a powerhouse, dam, headpond and a means of carrying water from the headpond to the powerhouse. This also includes pumped storage and instream facilities.

Generator/Generating Units – A machine for converting mechanical energy into electric energy.

Habitat – The place or environment where a plant or animal naturally or commonly lives and grows.

Head – The difference in elevation between the water surface at the intake and the tailrace level of the hydroelectric facility.

Headpond – The reservoir typically used for waterpower generation.

Headrace – a channel through which water passes to reach the hydro plant intake; also called an intake channel.

Heritage Attributes – means the principal features, characteristics, context and appearance that contribute to the cultural heritage significance of a protected heritage property.

Hydroelectric – Generation of electricity from falling water.

Impact management strategy – refers to the range of environmental protection strategies such as avoidance/prevention/mitigation and post- construction monitoring/evaluation/adjustment.

Intake – A structure that forms the transition from the headpond or channel to a water-conveying conduit. The intake or headworks commonly incorporates trashracks to preclude debris, and gates to stop flow to the conduit and generating unit(s) beyond.

Kilovolt (kV) – One thousand volts (see volt). Used to describe "high voltage" electrical conductors, as in 115kV.

Kinetic Hydro – Kinetic water power systems are an emerging technology in Ontario. Turbines are placed in the river and use only the existing flow to generate electricity – there is no head involved. Kinetic systems produce less energy per unit volume of water and are generally used for small scale projects such as a remote cottage or resort.

Listed Species – Species at risk listed under the federal *Species at Risk Act* and/or the provincial *Endangered Species Act, 2007.*

Load – The power requirement (usually measured in kilowatts) of a system or a piece of equipment at a given instant, or the average rate of energy consumption during a designated period of time.

Maintenance – The regular, routine actions, taken to retard the natural deterioration of a resource (or fixture and/or equipment). These actions are intended to keep the resource from premature loss due to failure, decline, wear or change attributable to normal use or the effect of the natural environment.

Managed Waterway – A waterway, including its full reach on which other water management infrastructure (dams, diversions, weirs etc.) and/or waterpower facilities exist.

MCM – Ministry of Citizenship and Multiculturalism.

Mechanical – Those components of a hydroelectric facility that operate by way of machinery or a mechanism. This includes machinery such as cranes, pumps, compressors, turbines and systems such as compressed air, cooling water, sewage and domestic water.

MECP – Ministry of the Environment, Conservation and Parks.

Megawatt – One thousand kilowatts or one million watts, abbreviated as MW. (A gigawatt is one million kilowatts; a terawatt equals one billion kilowatts.)

Megawatt-Hours – the energy value of the production of a megawatt of electricity, abbreviated as MWh (a

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gigawatt-hour is s one million kilowatt hours; a terawatthour equals one billion kilowatt hours.)

Mitigation – The elimination, reduction or control of the adverse effects to the environment of a project, including restitution for any damage to the environment caused by such effects through replacement, restoration, compensation or any other means. The means, by which, projects can be modified to minimize or eliminate potential negative effects.

MNRF – Ministry of Natural Resources and Forestry.

Modification – A significant modification means any expansion of or change in the facility that would increase the name plate capacity of the facility by 25 per cent or more. A minor modification is any expansion of or change in the facility that would increase the name plate capacity of the facility by less than 25 per cent.

Nameplate Capacity – The nameplate capacity of a generation facility that is currently recognized with the Independent Electricity System Operator (IESO), the Ontario Electricity Financial Corporation or the Ontario Energy Board.

Natural Heritage Features and Areas – Features and areas such as wetlands, fish habitat, woodlands, valleylands, wildlife habitat, and portions of the habitat and area of natural and scientific interest, which may be important for their environmental and social values.

Net Effect – Positive or Negative effects of a project and related activities that will remain after mitigation and impact management measures have been applied. One project-one process- a concept that in practice will allow a proponent to apply a single coordinated process (i.e. description, evaluation, consultation, assessment, documentation) to the multiplicity of legislative requirements that can reasonably be addressed or anticipated at the EA stage of a project.

Operation – Includes operation, maintenance and repair, rehabilitation, as well as upgrading and replacement, provided that the function or capacity of the facility remains similar.

Part II.3 Project Has the same meaning as in the EA Act.

Penstock – An assembly of pipes or a civil structure designed to carry water under pressure to a turbine. Large penstocks are Class Environmental Assessment usually made of curved steel plates embedded in concrete.

Pipeline – An assembly of hollow cylinders for carrying water.

Powerhouse – A primary part of a hydroelectric facility where the turbines and generators are housed and where power is produced by falling water rotating turbine blades.

Primary Power Source – With respect to a generation facility, the primary power source used by

the facility to generate electricity, based on the energy input of the power sources used by the facility to generate electricity.

Project – An undertaking to which this Class EA applies, as described in **Section 2.1**; same meaning as **waterpower project** as defined in this Glossary.

Project footprint – For projects at existing infrastructure, the relative topographic increase of the existing Water Management Infrastructure.

Proponent – Has the same meaning as in the *EA Act*.

Protected Heritage Property – means real property designated under Park IV, V or VI of the *Ontario Heritage Act*; heritage conservation easement property under Parts 11 or IV of the *Ontario Heritage Act*; and property that is the subject of a covenant or agreement between the owner of a property and a conservation body or level of government, registered on title and executed with the primary purpose of preserving, conserving and maintaining a cultural heritage feature or resource, or preventing its destruction, demolition or loss.

Pumped Storage – a method of storing and producing electricity to supply high peak demands by moving water between reservoirs at different elevations.

Qualified Persons – with regard to cultural heritage resources, means individuals – professional engineers,

architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.

Redevelopment – Redevelopment involves a major modification to, or an extension of, a hydroelectric facility. A redevelopment is normally carried out on a facility that is beyond economic maintenance/repair and is often at the end of its useful life. Redevelopment involves the replacement of a facility or a substantial portion thereof. Facility redevelopment may result in the construction of a new facility and retirement of the existing one. The redevelopment of generation facilities may not necessarily occur at the same locations, but may take place in the same general area as the existing facilities. An extension to a generating station traditionally refers to the addition of one or more complete generating unit(s) which increases the name plate capacity of the facility. This extension may be in the same general area or near the existing facilities.

Refurbishment/Upgrade – Uses existing water management infrastructure that produces electricity to produce more electricity.

Reliability – The degree of continuity of electricity supply.

Retrofit – The conversion of existing infrastructure (e.g. dam, canal, conduit, or similar) that either previously did or did not produce electricity so that it does produce electricity (e.g. a Generating Station/Facility).

Riparian – Refers to the area adjacent to the shoreline.

Run-of-River – A run-of-river facility uses only the natural flows in the river, as they are available, for generation. Therefore, the flow in the river is either passed through the plant, or partially released around the plant if the flow exceeds the capacity of the plant to use all of it.

Appendix B: Examples of Typical Mitigation Measures

The following are examples of the types of mitigation measures generally considered for waterpower projects. This is not an all-inclusive list. Alternatives to the measures listed below may be considered and/or implemented as circumstances dictate. **Appendix C** includes specific references to approved mitigation approaches. This list is illustrative only. Proponent(s) will determine project specific potential effects and possible impact management measures.

ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	APPLICATION
1.0 Natural Environment		
1.1 AIR		
Equipment Exhaust	avoid unnecessary engine idlingensure proper equipment maintenance	Throughout construction
Smoke from Burning Project Waste Materials	 avoid or minimize vegetation clearing and open burning do not burn waste plastics, rubber, used engine oil waste or chemically treated/contaminated materials chip* and compost waste timber slash, utilize select materialsfor wildlife habitat creation burn timber only when it is dry and configure timber slash piles to promote good internal air circulation and rapid burning carry our burning only under favourable ambient air quality and meteorological conditions identify locations of sensitive ecological and human receptorsin proximity to proposed burn location maintain an adequate buffer between burn area and sensitive ecological and human receptors avoid burning at locations, and during conditions when sensitive receptors downwind are potentially impacted monitor smoke plume density and direction and take any required actions to minimize impacts on sensitive receptors apply fine water mist to dense smoke plumes potentially affecting sensitive receptors prepare a contingency plan to address excessive smoke and out of control burns 	Throughout construction
Dust	 wet down dry soils or apply other dust suppressants temporarily plant vegetation use wind control structures (e.g. tarpaulin on trucks) 	
Odour	use approved waste disposal site for organic waste and backfill frequently	

ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	APPLICATION
1.2 SOIL		
Soil Compaction and Topsoil-Subsoil Mixing	 avoid rutting by vehicles schedule construction to minimize soil disturbance (e.g. winter) use vegetation, gravel or woodchips in roads use vehicles with low bearing pressure stop activities when ground conditions give rise to severe soilprofile disruption 	Throughout construction
	 plough or cultivate backblading/grading	At completion of construction
Wind and Water Erosion	 avoid areas with high erosion potential schedule activities to the most stable ground conditions andlow water levels install wind control structures stabilize slopes 	Prior to construction
	 use mechanical and vegetative erosion controls minimize vegetation clearing avoid trenching parallel to the fall of a slope avoid access road grades of greater than 12% (5% near river banks) minimize stream crossing and install adequate crossings provide buffer zones along water bodies 	During initial phases of construction Operational Phase
Shoreline Erosion in Headpond/Reservoir	 monitor shoreline for headpond-induced erosion implement riverbank protection and stabilization as appropriate 	
Contamination by Petro-Chemicals and Other Chemicals	 build impervious dikes around oil, fuel and chemical storageareas install impervious liners ensure availability of spill control material and procedures investigate restoration methods properly store and dispose of materials containing oil (including crankcase oil), chemicals, fuel and other hazardousmaterials supervise oil and fuel extractions from storage areas fuel trucks at properly designed fuelling stations prohibit crankcase oil draining onsite 	

Examples of Mitigation Measures for Potential Environmental Effects
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ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	APPLICATION
1.3 WATER		
Sedimentation of Streams Due to Erosion from Construction Activities	use mechanical and vegetative erosion controls	During initial phases of construction and throughout
Bank and Shoreline Erosion	retain buffer strip of bank vegetationuse mechanical and vegetative erosion controls	Throughout construction
Impedance of Flow of Streams and Other Surface Waters (Especially Spring Freshet)	 use and maintain appropriate stream crossing devices use equalizing culverts in roads across wetlands use corduroy in wetlands, where practical maintain adequate flushing rates 	During initial phases of construction
Ponding or Channelization	schedule activities for stable ground conditions	Prior to construction
of Surface Waters Due to Rutting	use gravel roads	Throughout construction
	backblading	At completion of construction
Contamination of Surface Waters through releases of Cement and/or Concrete Cuttings and Debris, Dust and Leachate, Form Oils	 ensure a spill response plan is in place and known to workers maintain appropriate emergency response measures (e.g., absorbent mats, booms) are available onsite 	Construction and Operational/Maintenance Phase
Contamination of Surface or Ground Waters Through Spills or Leaks of Hazardous Substances	 build impervious dikes around oil, fuel and chemical storage areas with impervious liner store fuel, oil and chemicals at least 150 m from water minimize salt usage on access roads ensure availability of spill control material and procedures 	Throughout construction
Contamination of Surface Waters and/or Ground Waters through releases of Contaminated Drainage, or Acid Rock Drainage (ARD)	 avoid or minimize exposure/excavation in rocks having highly leachable and/or reactive contaminants (e.g., heavy metals, pyrite minerals, potash, etc.) control of the amount of surface area exposed to leaching from natural processes (e.g., precipitation; freeze thaw, temperature variation, desiccation, etc. contributing to further fragmentation; etc.) control of the oxidation and acid generating processes control of contaminant migration collection and treatment of contaminated drainage 	Throughout construction
Sedimentation of Streams from Dewatering Operations	 contain material when working in the vicinity of water bodies use sediment traps or settling ponds 	Throughout construction
Channel Disturbance Sediment Production at Stream Crossings	 remove material from the site install an appropriate crossing device use sediment traps or settling ponds 	During initial phases of construction

ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	APPLICATION
1.3 WATER cont.		
Increase in Water Temperature due to Vegetation Removal at Stream Crossings	retain bank vegetation and overhanging vegetation	Throughout construction
Methyl mercury contamination	tree and vegetation clearing of reservoir area before flooding	During construction
Changes to Ice formation and movement	 optimize facility to minimize formation of anchor or frazil ice use ice chutes, wing walls, log booms, sluice gates or bubblers, as appropriate 	Construction and Operational Phases At completion of construction
Reduction in Water Storage Capacity due to Removal of Vegetation (i.e., slopes, wetlands)	 selectively remove vegetation revegetate with compatible species 	
1.4 VEGETATION		
Loss of Vegetation	 minimize clearing use blast mats minimize off-site vehicular activities protect sensitive vegetation areas confine activities to designated areas 	Throughout construction
Injuries to Vegetation	 fell trees into clearing schedule construction and clearing to take advantage of stable soil conditions 	Prior to and throughout construction
Growth Retardation due to Dust	control dust levels	
1.5 WETLANDS		
Drainage Impairment	 schedule activities to minimize effects (e.g., winter) use corduroy use equalizing culverts remove granular fill used on roads avoid filling in wetlands avoid construction during periods of high water table 	Prior to and throughout construction
Soil Disturbance	 use extra wide-tracked equipment minimize access confine activities to designated areas cut muskeg brush just prior to fill replacement on access road 	Throughout construction
Loss of Wildlife Habitat	 selectively remove vegetation retain dead snags to provide wildlife habitat retain compatible vegetation 	During Construction
Loss Due to Flooding	dyke off from reservoir	

ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	APPLICATION
1.6 FISH AND WILDLIFE		
Loss of Habitat Breeding and/or Food Source for Terrestrial Wildlife due to Vegetation Removal	inventory sensitive areasavoid filling in small wetlands	Prior to construction
	avoid areas containing rare/endangered species	Prior to and throughout construction
	 promote wildlife habitat through vegetation control and brush piles 	Throughout construction
Changes in Composition of Vegetation as a Result of Soil Disturbance	 schedule construction to minimize soil disturbance restore soils to a stable condition 	Prior to and during construction
Removal or Burial of Stream Bottom Habitat and Increased Turbidity due to Sedimentation	 minimize erosion from cleared area by maintaining cover vegetation use mechanical erosion control minimize stream bank erosion by retaining shrubby bank vegetation install sediment traps or silt curtains where necessary 	During initial phases of construction
	 contain or filter pumped soil/water near watercourses minimize amount and duration of instream work 	Throughout construction
Impediments to the Migration and/or Breeding	 time construction activities to avoid disturbance to migrating and breeding fish and wildlife 	Prior to construction
of Fish or Wildlife	install and maintain appropriate stream crossing device	During initial phases of construction
	restrict noise levels and duration	Throughout construction
	design intakes to avoid fish entrainment	Prior to construction; operation
	 placement of intakes near to natural barriers to migration or to non-fish bearing reaches 	
	 incorporate fish passage structures into project design where appropriate 	Prior to construction; operation
Loss of Habitat and/or Terrestrial Wildlife Mortality during reservoir filling	appropriate timing of reservoir filling	Construction and Operational Phases
Change in the Chemistry of Water Bodies	 minimize sedimentation of streams prevent cut vegetation from entering watercourses 	Throughout construction
Increased Water Temperature as a Result of Clearing Vegetation Near Streams	retain bank vegetation	Throughout construction

Examples of Mitigation Measures for Potential Environmental Effects
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ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	APPLICATION
2.0 Land and Resource Use		
2.1 AGRICULTURE		
Loss of Standing Crop due to Access Road and Other Construction Activities	 limit width of access and size of site time construction to avoid growing season 	Prior to construction
Soil Compaction	schedule activities to times of the year when soils are least susceptible to compaction	Prior to construction
	 stop activities when ground conditions are poor use equipment with low bearing capacity use gravel roads with filter fabric underlay locate access roads along existing traffic routes or fences 	Throughout construction
	plough or cultivate	At completion of construction
Topsoil-Subsoil Mixing and Soil Rutting	 schedule activities for firm ground stop activity when ground conditions are poor use equipment with low bearing capacity use gravel roads with filter fabric underlay compensate for reduced soil productivity segregate topsoil from subsoil at work site schedule activities to avoid growing season 	Throughout construction
	 backblade and grade add manures to offset fertility loss 	At completion of construction
Disturbance to Farm Operations	maintain contact with landowner/resident regarding timing	Prior to and throughout construction
Damage to Field Tiles	avoid tile bedsminimize tile crossings	Prior to construction
	 use of soft track equipment protect tile crossings by the placement of heavy steel plate or gravel stop activities when ground conditions are poor 	Throughout construction
	repair damaged drains	At completion of construction
Disturbance to Livestock	construction of farm gates	During initial phases of construction
	 secure farm gates inform property owner of work schedule to allow adaptation of grazing practices clean-up construction materials which could be ingested maintain water access employ additional noise control measures near sensitive livestock 	Throughout construction

ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	Application
2.2 RECREATION, FORESTRY,	HUNTING, TRAPPING AND MINING	
	 time construction to avoid peak recreation periods inform forestry and mining operators, hunters, trappers and recreational users of construction schedules and progress recovery of timber resources before flooding of reservoir keep portage, traplines and trails clear of slash minimize harassment to wildlife population minimize turbidity and alteration of fish habitat contain disturbed areas to minimize off-site effects 	Prior to and throughout construction
	removal of temporary access roads	At completion of construction
2.3 HERITAGE RESOURCES	T	1
Disturbance or destruction of archaeological sites and/or human burials	 Conservation plans and mitigation recommendations by a licensed archaeologist after Stage 1 to 3 assessment, which may include: Stage 4 excavation by a licensed archaeologist or Stage 4 avoidance and protection on site as recommended and monitored by a licensed archaeologist 	Prior to and throughout construction
Changes to built heritage resources	 The following mitigation options are arranged according to level or degree of intervention from minimum to maximum. They are to be applied in rank order such that Option 1 must be shown to be non-viable, before Option 2 can be considered, and so on. It is understood that conservation plans will be integrated into all options. Retain existing built heritage attributes with no major change. Restore missing or deteriorated elements where physical or documentary evidence (e.g., photographs or drawings) exists. Retain existing built heritage attributes, but sympathetically modified. Retain existing built heritage attributes with sympathetically designed new structures in proximity. Retain existing built heritage attributes with limitations on use or adapted for a new use. Retain built heritage attributes to an appropriate new site for continued use or adaptive re-use. Remove and/or replace built heritage attributes with a sympathetically designed structure and Salvage building elements for incorporation into new structure or for future conservation work or displays; Undertake full recording and documentation of existing builting. 	Prior to and throughout construction

ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	APPLICATION
3.0 Socio-Economic Environment		
3.1 POPULATION AND ECONC	DMIC BASE	
	 employ local labour force where possible use onsite camp to minimize population influx schedule to avoid peaks and valleys and workforce encourage local spending where possible minimize effect on traditional Indigenous hunting, fishing, trapping and gathering practices and patterns 	Throughout construction
3.2 EMPLOYMENT AND LABO	UR SUPPLY	1
	 inform local residents of skill requirements and consider training programs Identify and plan labour force housing requirements encourage local spending where possible 	Prior to construction
3.3 RECREATION AND TOURIS	м	
	 avoid disruption to tourism businesses by minimizing changes in access maintain continuity of linear recreation corridor retain tree screens and curve access routes plant tree screens avoid sensitive soils for access routes stabilize erodible soils by vegetation or mechanical means maintain and/or implement appropriate landscaping in tourist areas 	Prior to and throughout construction
3.4 TRANSPORTATION AND C	OMMUNICATIONS	
Additional road traffic	 select transportation routes to minimize effects on community traffic patterns and levels select transportation routes that avoid creating permanent access to remote areas time construction to avoid tourist season if possible 	Prior to construction
	 bus in workers from communities provide roadside warning signs and flagmen as necessary 	Throughout construction
Navigation and nautical safety	 recovery of woody debris from reservoir installation of appropriate signage and nautical markers 	At completion of construction

ENVIRONMENTAL EFFECTS	MITIGATION MEASURES	Application
3.5 HEALTH AND SAFETY		
	provide on-site emergency facilitiesfire/safety inspections	Throughout construction
Noise and Vibration	 limit construction to daylight hours as necessary observe applicable municipal by-laws, the Model Municipal Noise Control By-Law maintain equipment exhaust systems select transportation routes to minimize noise and to avoid residential streets 	Throughout construction Throughout construction, operation and maintenance
Air Quality	 ensure motorized vehicles and construction equipment is maintained in good working condition and have functioning exhaust and/or pollution control systems ensure appropriate respiratory and/or personal safety gear is used during handling of noxious substances 	Throughout construction
Mud and Dust	 wet down dry soils or use other appropriate dust suppression methods chemically control dust clean roads to remove mud temporarily plant grasses or other vegetation screen with natural or planted vegetation landscape in advance of site completion use dust curtains on loaded dump trucks pave or apply wood chips to road use blasting mats 	Throughout construction
Contamination of Water Resources	 properly seal paint, fuel and chemical containers provide drinking water and proper sewage disposal and/or treatment facilities 	Throughout construction
Public safety	 provide information and methods for the protection and safety of area users (e.g., chain link fences near dams, bridges and walkways; provide signs and information to raise public awareness and encourage education) provide advance notice to changes in operating regimes 	Throughout construction and during operation

Appendix C: Resource Material Available through the OWA

Note that there may be instances wherein the advice contained in the resource materials differs from that included in the Class EA. In such instances, the Class EA shall apply.

Indigenous Involvement

- Updated Guidelines for Federal Officials to Fulfill the Duty to Consult, 2011 – Indigenous and Northern Affairs Canada
- A Handbook on "Consultation" in Natural Resource Development, 2007 – Nishnawbe Aski Nation
- First Nations Information Project, 2007 www.aboriginalcanada.com
- Reaching Effective Consultation, 2003 Anishinabek/Ontario Resource Management Council
- First Nations Environmental Assessment Toolkit for Ontario, 2011 Chiefs in Ontario

Consultation

- Consultation in Ontario's Environmental Assessment Process, 2006 – Ministry of the Environment, Conservation and Parks
- Using Mediation in Ontario's Environmental Assessment Process, 2006 – Ministry of the Environment, Conservation and Parks
- Consultation: Community Engagement Toolkit for Waterpower Developers, Planning Solutions Inc., 2016

Cultural Heritage – Archaeology

- Criteria for Evaluating Archaeological Potential: A Checklist for the Non-Specialist, 2015 2011 – Ministry of Citizenship and Multiculturalism
- Standards and Guidelines for Consultant Archaeologists, 2011 - Ministry of Citizenship and Multiculturalism
- Engaging Indigenous Communities in Archaeology: A Draft Technical Bulletin For Consultant Archaeologists In Ontario, 2011 – Ministry of Citizenship and Multiculturalism
- Criteria for Evaluating Potential for Screening for Impacts to Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-

Specialist, Check Sheet for Environmental Assessments, 2015 2010 – Ministry of Citizenship and Multiculturalism

- Planning for Hydroelectric Generating Stations as a Cultural Resource, 1981 – Ministry of Tourism and Culture (now Ministry of Citizenship and Multiculturalism)
- Ontario Hydro Ontario Heritage: A Study of Strategies for the Conservation of the Heritage of Ontario Hydro, 1980 - Mark Fram - Ministry of Culture and Recreation (now Ministry of Citizenship and Multiculturalism)

Provincial Standards and Resources

- Ontario Heritage Tool Kit 2005 http://www.mtc.gov.on.ca/en/heritage/heritage _toolkit.shtml
- Provincial Policy Statement 2014
- Provincial Policy Statement 2005 and associated Info Sheet Series
- Info Sheet #1: Built Heritage Resources
- Info Sheet #2: Cultural Heritage Landscapes
- Info Sheet #3: Archaeological Resources and Areas of Archaeological Potential
- Info Sheet #4: Adjacent Lands and Protected Heritage Property
- Info Sheet #5: Heritage Impact Assessments and Conservation Plans
- Ontario Ministry of Citizenship and Multiculturalism: Heritage Conservation Principle's for Land Use Planning http://www.mtc.gov.on.ca/en/publications/Info Sheet_Principles_LandUse_Planning.pdf
- Ontario Ministry of Citizenship and Multiculturalism: Eight Guiding Principles in the Conservation of Historic Properties http://www.mtc.gov.on.ca/en/publications/Info Sheet_8%20Guiding_Principles.pdf
- Ontario Ministry of Citizenship and Multiculturalism: Archaeological Assessments http://www.mtc.gov.on.ca/en/archaeology/arch aeology_assessments.shtml
- National and International Standards and Resources
- Canadian Register of Historic Places http://www.historicplaces.ca/visit-visite/repreg_e.aspx

- Parks Canada Standards and Guidelines for the Conservation of Historic Places in Canada, 2003 http://www.pc.gc.ca/docs/pc/guide/nldclpcsgchpc/index_E.asp
- Parks Canada National Historic Sites of Canada http://www.pc.gc.ca/progs/lhn-nhs/index_e.asp
- International Council of Monuments and Sites (ICOMOS): Appleton Charter http://www.international.icomos.org/charters/a ppleton.pdf
- Additional conservation principles can be found within the following documents:
 - Well Preserved: The Ontario Heritage
 Foundation's Manual of Principles and Practice
 for Architectural Conservation –Mark Fram
 - Canada's Federal Heritage Buildings Review Office Code of Practice - Public Works Canada

Effects on the Environment

- Class EA for Waterpower Projects Screening
 Questions Guide, OWA, 2023
- Environmental Assessment Best Practices Guide for Wildlife at Risk in Canada - Canadian Wildlife Service
- Environmental Assessment Guideline for Forest Habitat of Migratory Birds - Environment Canada
- Migratory Birds Environmental Assessment Guideline - Environment Canada
- Wetlands Environmental Assessment Guideline -Environment Canada
- Best Management Practices Guide for Waterpower Projects and Lake Sturgeon, 2009 - Ontario Waterpower Association
- Best Management Practices Guide for American Eel and Waterpower in Ontario, 2010 - Ontario Waterpower Association
- Best Management Practices Guide for Channel Darter and Waterpower Operation and Development in Ontario, 2011 - Ontario Waterpower Association
- Best Management Practices Guide for the Mitigation of Impacts of Waterpower Facility Construction, 2012
- Best Management Practices Migratory Birds and Waterpower Facility Construction, 2014.
- Natural Resource Solutions for the OWA
- Best Management Practices Surface Water Quality and Fish Sampling Programs 2014. Hutchinson Environmental for the OWA

- Best Management Practices Wetlands and Waterpower Facility Construction, 2014. Natural Resource Solutions for the OWA
- OWA Ecological Flows Toolkit, 2014
- Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning Publication NPC-300, 2013 – Ministry of the Environment

Federal-Provincial Coordination

- Considering Indigenous Traditional Knowledge in environmental assessments conducted under the Canadian Environmental Assessment Act - Interim Principles, 2012 – Canadian Environmental Assessment Agency
- Cumulative Effects Assessment
 Practitioners Guide, 2012 Canadian
 Environmental Assessment Agency
- Operational Statements Fisheries and Oceans Canada

Legislative and Policy Approvals

- A Review of Potential Legislative Requirements for Waterpower Development in Ontario, 2007 – Ontario Waterpower Association
- Waterpower Site Release and Development Review Process – Ministry of Natural Resources and Forestry
- An Applicants Guide to Submitting an Application for Authorization under Paragraph 35(2)(b) of the Fisheries Act – Fisheries and Oceans Canada
- Lakes and Rivers Improvement Act Administrative Guide and Lakes and Rivers Improvement Act Technical Bulletins – Ministry of Natural Resources and Forestry
- Roles and Responsibilities With Respect to the Class Environmental Assessment for Waterpower Projects Process, August 2014

 Ministry of the Environment, Conservation and Parks / Ontario Waterpower Association / Natural Resources and Forestry

Mitigation

Best Practices for the Reduction of Air Emissions

from Construction and Demolition Activities, March 2005 - Environment Canada

 Considering Fish and Fish Habitat in Existing Hydroelectric Operations and Maintenance: Electricity Industry Practices, 2001 – Canadian Electricity Association

 Interim Standards and Best Practices for Instream Work, Appendix IV: Concrete Work - Province of British Columbia

Appendix D: Notification Templates

*Note: These templates are provided as suggestions only. Proponents are to adapt the notices to their specific needs.

	Proponentis planning to undertake a project screening for a proposed waterpower project (name of project) located The project is subject to the provisions of the Ontario Waterpower Association "Class Environmental Assessment				
Map showing location of project	 for Waterpower Projects" for Projects Associated with Existing Infrastructure or Increases in Efficiency. Project title and Map; Brief description of the project and tentative schedule; Project type (retrofit, or refurbishment/upgrade; or efficiency) 				
	 increase); Watercourse; Current installed capacity and proposed installed capacity; Anticipated % expansion of infrastructure, if any. 				
	Pursuant to the Class EA, this project is is being screened in accordance with the process outlined in section 3.1.1 of the Class EA for Waterpower Projects. For further information about the proposal, please contact				
	The Class EA process requires Proponentto complete a screening to confirm that there are no significant				

Notice of Project Screening under the Class EA for Waterpower Projects

Date:

Waterpower Project

negative environmental effects anticipated from the project. As a first step in the screening process, this Notice of Project Screening is being publicly posted and sent directly to: key provincial Ministries; anyone potentially directly affected by the project; and potentially affected Indigenous communities. Projects that are screened out of the Class EA remain subject to applicable provincial and federal legislation as outlined in Table 1 of the Class EA.

You are invited to provide comments on the key considerations to be addressed. For information on the project proposal, contact: ______.

All personal information included in a submission – such as name, address, telephone number and property location – is collected, maintained and disclosed by the Ministry of the Environment, Conservation and Parks for the purpose of transparency and consultation. The information is collected under the authority of the *Environmental Assessment Act* or is collected and maintained for the purpose of creating a record that is available to the general public as described in s.37 of the *Freedom of Information and Protection of Privacy Act* (FIPPA). Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential.

Notice of Commencement under the Class EA for Waterpower Projects

Waterpower Project

Date:

Map showing location of project	is planning to undertake an environmental evaluation and assessment for a proposed waterpower project (name of project) located If approved and constructed, this waterpower project would (capacity of project) and produceMWh of renewable energy annually. The project's study area is presented in the map (left). The project is subject to the provisions of the Ontario Waterpower Association "Class Environmental Assessment for Waterpower Projects". Pursuant to the Class EA, this project is considered to be: • associated with existing infrastructure • on a managed waterway
	 on an unmanaged waterway on an unmanaged waterway The Class EA process requiresto undertake an evaluation of the project to evaluate its potential effects to the environment (positive and negative) and prepare a detailed Environmental Report. The project is also expected to require review and approvals under the (<i>Lakes and Rivers Improvement Act</i>, etc.). This notice and the public consultation process for the project under the Class EA is intended to coordinate and meet the notification requirements relevant to the planning stage of the project under these statutes.

The evaluation and environmental report will assess the potential effects of the proposed waterpower project on the environment during its construction and operation._____has identified certain environmental components that are expected to be the focus of the proposed project. Public consultation will be an integral component of this process. You are invited to provide comments on the issues to be addressed, and/or to ask to be placed on the project's mailing list. (For Projects Associated with Existing Infrastructure, the Notice of Completion will be provided to all Indigenous communities, agencies and other parties who expressed interest as a result of this Notice of Commencement and who participated in the consultation process.) For information on the project proposal, to raise any issues or concerns, or to be placed on the mailing list, contact:_.

Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

Notice of Completion

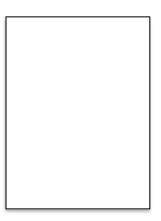
Waterpower Project

Date:

(Proponent) is proposing to construct (waterpower project description – installed capacity, annual average energy generation). The project is proposed to be located (location description, waterway) (See map opposite). The project is subject to the Class Environmental Assessment for Waterpower Projects and is categorized a project:

- · associated with existing infrastructure
- on a managed waterway
- on an unmanaged waterway

pursuant to the Class EA. An Environmental Report ("ER") has been prepared as required under the Class EA. The proposed project has been reviewed in a process consistent with the Class EA for Waterpower Projects, the results of which are described in the (project name) ER. The conclusions of the ER indicate that (general summary of RE conclusions and mitigation/follow-up measures to be taken). In compliance with the Class EA, the ER is available for a_____(as determined by the proponent) day review period. Thus, this ER is being made available for review and comment from__through to_____. Hard copies of the ER may be found during this review period at the following public location:



The ER may also be viewed electronically at: (Proponent) must receive all comments in writing regarding the Project and/or the ER no later than ______. All comments and correspondence should be sent to: (Proponent or proponent's agent contact)

In addition, a request to the Minister of the Environment, Conservation and Parks for an order imposing additional conditions or requiring a comprehenisve environmental assessment may be made on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests should include your full name and contact information.

Requests should specify what kind of order is being requested (additional conditions or a comprehensive environmental assessment), explain how an order may prevent, mitigate or remedy potential adverse impacts, and can include any supporting information.

The request should be sent to:

Minister of the Environment, Conservation and Parks

777 Bay Street, 5th Floor Toronto ON M7A 2J3 minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto ON M4V 1P5 EABDirector@ontario.ca

Requests should also be sent to [project proponent name] by mail or e-mail. Please visit the ministry's website for more information on requests for orders under section 16 of the Environmental Assessment Act at: https://www.ontario.ca/page/class-environmental-assessments-part-ii-order

Prior to making such a request, however, concerned parties are encouraged to speak with the proponent to seek a resolution regarding their concerns.

If no Section 16 Order request is submitted, the proponent may proceed to implement the project, without further public notice, 30 days following the end of the comment period.

Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

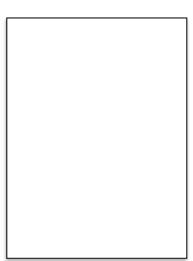
Notice of Inspection of the Environmental Report (projects on unmanaged waterways)

Date:

(Proponent) is proposing to construct (waterpower project description – installed capacity, annual average energy generation). The project is proposed to be located (location description, waterway) (See map opposite). The project is subject to the Class Environmental Assessment for Waterpower Projects and is

categorized a project on an unmanaged waterway pursuant to the Class EA. An Environmental Report ("ER") has been prepared as required under the Class EA. The proposed project has been reviewed in a process consistent with the Class EA for Waterpower Projects, the results of which are described in the (project name) ER. The results of the ER indicate that (general summary of results and measures proposed). In compliance with the Class EA, the ER is being made available for a ______(as determined by the proponent) day review period. Thus, this draft ER is being made available for review and comment from ______through to ______.

Hard copies of the ER may be found during this review period at the following public location:



The ER may also be viewed electronically at: (Proponent) must receive all comments in writing regarding the ER no later than_____. All comments and correspondence should be sent to:

(Proponent or proponent's agent contact)

A copy of the Class EA for Waterpower Projects is posted on the Ontario Waterpower Association website at <u>www.owa.ca.</u> Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

Class Environmental Assessment for Waterpower Projects

Statement of Completion

						For Offi	ce Use Only	
					Reference		Date (y/m/d)	Initials
		<u>General Informa</u>	tion and Instructions		ι <u> </u>		·]
General: The information provided on this form is collected under authority of the <i>Environmental Assessment Act</i> .								
Instructions: Please send the compl	eted form to: Direc 2 St. Toroi Appl	Applicable Ministry of the Applica			How Rend Suits Solution Render, ON K9H 7L7 Ible Ministry of Resources District Office			
Proponent Informat		onment Regional Office		Induital	Resources District Office			
	name of individual or o	rganization)						7
Contact Name								-
Proponent Type:			_		_	_		
□ Corporation	□ Indivi		Partnership		□ Sole Pro	oprietor		
Municipal Governme Other (describe)	ent 🛛 🗖 Feder	al Government	Provincial Governm	ient				
Other (describe: Proponent Mailing	Address – Complete	A, C & D or B, C & D)					
A. Civic Address – Str	eet Information (applies to	an address that has civic numbering a	and street information includes street	number, name, type	Unit Ide	ntifier (iden	tifies type of unit,	7
and direction)					such as suite	e & number)		
B. Delivery Designator					Deliverv	Identifier	(a number	-
	Suburban Service 🗆 M	1obile Route	al Delivery		identifying a Rural Route, Suburban Service or Mobile Route delivery mode)			
					of Mobile R	oue derivery	modey	
C. Municipality/Unorg	anized Township Cour	nty/District Province/	State Country P	ostal Code				
D. Telephone Number	(including area code & ex	tension) Fax Num	ber (including area code)	Email Ac	ldress			
Site Address (Compl	ete A or B and the remain	der of the section)						_
A. Site Address – Street Information (applies to an address that has eivie numbering and street information – includes street number, name, type and direction) Unit Identifier (identifies							7	
type of unit, such as suite and number)								
Waterway Name:								-
B. Survey Address (used	for a rural location specified for a	a subdivided township, an unsubdivid	led township or unsurveyed territory)	NOTE: Do not comp	lete "B" if you o	completed "A)		
Latand Corrections	and the states with the state of the state of the	ownshin Lot Conc	Dart and Dafaranaa	a tatana ta	abte en 197		Part Ref	-
Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number			Part and Reference: used to indicate location within an unsubdivided Part township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach a copy of the plan.					
Non Address Informati	On (includes any additional infor	mation to clarify clients' physical loc		a pian. Aitach a copy	or the plan.			1
	·							
Geo Reference	Zone	Accuracy	Geo Referencing	UTM Easting	<u>,</u>	UTM No	rthing	-
Map Datum		Estimate	Method		s chin tortuning			
Municipality/Unorgani	zed Township		County/District	Postal Code		ode	-	
Municipality/Unorganized Township			Councy/District			i ustai Ut	<i>n</i> ut	1

Project Information

Project Name						
Nameplate Capacity of Facility (in megawatts):						
	Associated with Existing Infrastructure ew Projects on Managed Waterway ew Projects on Unmanaged Waterway					
Brief Project Description:						
Summary of Conclusions of Environmental Report:						
Summary of Indigenous Engagement and Outcome:						
Summary of Public and Agency Consultation and Outcome:						
any Environmental Report, Addendum, and related notices and Statements of Cor documentation of any commitments made by the proponent to address concerns a Complete A or B and the remainder of section. A. Site Address – Street Information (applies to an address that has civic numbering and street information – includes street number, name, type, and direction)						
B. Survey Address (used for rural location specified for a subdivide township, and unsubdivided tow						
Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number	Part and Reference: used to indicate location within an unsubdivided Part Re township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach a copy of the plan.					
Non Address Information (included any additional information to clarify physical location)						
Municipality/Unorganized Township	County/District Postal Code	_				
Contact Name for information about project documentation	Telephone Number for information about project documentation (including area code & extension)					
Section 16 Orders						
Were there any Section 16 Orders? Yes Ves No I	f Yes, what was the outcome?					
Statement of Proponent						
I, the undersigned hereby declare that, to the best of my knowledge, the informat have complied with the Class EA for Waterpower Projects established under the above-noted project.						
Name (please print)	Title					
Signature	Date (y/m/d)					