

## Enclosure 1: Federal Authority Advice Record – Ontario Pumped Storage Hydropower Project

Please submit the completed form by April 6, 2026, via email to [Nottawasaga@iaac-aeic.gc.ca](mailto:Nottawasaga@iaac-aeic.gc.ca).<sup>1</sup>

### Department/Agency Contact Information

<b>Submission Date</b>	March 25, 2026
<b>Department/Agency</b>	Department of Fisheries and Oceans (DFO)
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Review the Initial Project Description and answer the following questions:

1. Will your department or agency exercise a **power, perform a duty or function**, or provide **financial assistance**, related to the project to enable it to be carried out in whole or in part?

As relevant,

- a) Specify the power, duty or function, or financial assistance, and the likelihood that it will be required to construct the project, as either Required, Potential, Likely, Unlikely or Not Required

*A Fisheries Act paragraph 35(2)(b) Authorization will be required if the project is likely to cause the harmful alteration, disruption, or destruction to fish habitat and/or a Fisheries Act paragraph 34.4(2)(b) Authorization if the project is likely to result in the death of fish.*

DFO also reviews projects for effects to listed aquatic species at risk, any part of their critical habitat, or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.

Based on the information provided, as proposed, the Project has the potential to result in the harmful alteration, disruption, or destruction to fish habitat (during construction of the lower inlet/outlet structure and the reservoir), as well as the potential to cause death of fish (during operation of the lower inlet/outlet structure) through impingement and entrainment. As such, the project may require authorization under the *Fisheries Act*. If an authorization were issued, it would include conditions in relation to the aforementioned effects.

- b) Describe any associated Indigenous or public consultation, including timelines, and elaborate on any potential opportunities for consultation coordination with the impact assessment process, if an impact assessment is required

Should DFO consider issuing a *Fisheries Act* paragraph 34.4(2)(b) and/or 35(2)(b) authorization for the project, consultation with Indigenous groups would be undertaken to understand impacts to traditional use of lands and resources as they pertain to fish and fish habitat, and to address comments and concerns received. Consultation may be conducted in-person or virtually, and the time it takes to complete is dependent on the complexity and contentiousness of the proposed project, but may be up to one year. DFO can participate in coordinated consultation during the impact assessment process, as this

<sup>1</sup> Please note that advice provided to IAAC may be posted on the Canadian Impact Assessment Registry Internet Site or otherwise made available to the public.

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will reduce the time needed for DFO to fulfil its Duty to Consult and Accommodate potentially affected Indigenous communities as part of the *Fisheries Act* Authorization process. DFO does not currently provide opportunities for public participation before issuing a *Fisheries Act* Authorization, but can participate in events during the impact assessment process.

- c) Describe any associated information requirements (e.g., alternative means assessment, habitat offsetting), and specify those that may be coordinated with the impact assessment process, if an impact assessment is required

A detailed estimate of residual effects including the potential harmful alteration, disruption, or destruction of fish habitat (during construction) and death of fish numbers (during operations due to impingement and entrainment) will be required to determine whether a *Fisheries Act* paragraph 34.4(2)(b) and/or 35(2)(b) authorization for the project is required, as well as to calculate associated offsetting measures. Information requirements include, but are not limited to, design drawings that indicate disturbance footprints, size and location of intake(s), proposed water intake quantities and rates, screen sizes, site-specific habitat type, productivity, and sensitivity, and species presence.

- d) Identify any associated project-specific guidance or issues of which the proponent should be aware, or information the proponent should provide

DFO recommends that the proponent submit a Request for Review form for review under the *Fisheries Act* and *Species at Risk Act* as early as practical to begin discussions. Guidance on requesting a review can be found at: [Request a review of your project near water: Step 1. What this service offers](#)

The proponent may find the following resources useful in developing the request:

- [Fish and fish habitat protection policy statement, August 2019](#)
- [Measures to protect fish and fish habitat](#)
- [Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater](#)
- [End-of-Pipe Screen Size Tool](#)

At this time, there is not enough information in the Initial Project Description for DFO to make an informed assessment of the potential impacts to fish and fish habitat. DFO will require that the proponent provides site-specific fish and fish habitat assessments, in addition to the information requirements listed in c) above.

- e) Indicate whether your department or agency has identified any power that it will be unable, or may be unable, to exercise to allow the project to proceed, in whole or in part as currently planned, with reasons; if unsure, explain what must be resolved to increase confidence

None identified. It is important to note that review of an application for a project with this scope, complexity, and potential contentiousness can take more than a year to complete. Therefore, it is prudent for the proponent to submit applications as soon as practical and for consultation efforts to be initiated early on in the process. However, DFO will meet the 24-month timeline to complete permitting as outlined in the *Cabinet Directive on Regulatory and Permitting Efficiency for Clean Growth Projects*.

2. **Using Table 1**, identify project- and context-specific **key issues** based on the expertise within your mandate<sup>2</sup> and the information in your possession. Available information may include your access to databases and corporate knowledge, the Initial Project Description, any exchanges with the proponent or others related to the project and known means to address the effects.

<sup>2</sup> Refer to the [Memoranda of Understanding with IAAC](#).

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For each key issue:

- a) Specify the key issue (e.g., specific species and location)
- b) Specify the project component or activity linked to the key issue
- c) Explain why it is a key issue based on:
  - i. biophysical effect pathway(s) from the specific project component or activity
  - ii. concerns unique to the project or a priority within your mandate
  - iii. the issue being material<sup>3</sup> to decision-making under the *Impact Assessment Act*
- d) Identify how the issue could be resolved, including through other means than an impact assessment (e.g., other regulatory oversight)
- e) Identify additional information the proponent could provide to build confidence about how the issue could be addressed through other means

IAAC has prepared a preliminary list of potential effects that are either likely or unlikely to be key issues for the impact assessment.<sup>4</sup> While completing **Table 1**, IAAC requests that, as appropriate based on your department or agency's mandate and expertise, you validate this list, add precision or rationale where appropriate, and recommend any additional key issues for consideration. For project activities on federal lands (e.g., reservoir, powerhouse, water conveyance structures, switchyard, etc.), per section 2 of the IAA, a broader range of effects are within federal jurisdiction, including socio-economic effects.

IAAC has identified the following topics as **potential key issues** for the impact assessment:

- Effects to fish and fish habitat
  - during operations from interactions with the inlet/outlet structure such as impingement and entrainment, changes in lake flow patterns, and turbidity, which may require special attention in ongoing project design
  - during construction of the inlet/outlet structure from lake-bed disturbance and turbidity, unless this is easily managed with well understood mitigation
- Effects to the environment on federal lands
  - including federally listed species at risk, wetlands, and riparian environments that provide special habitat or functions, from construction activities and footprint location, some of which could require offsetting and special attention in ongoing project design
  - if soil contaminants are identified in overburden materials to be disturbed and/or relocated, potential changes to groundwater and surface runoff quality, to inform site specific stormwater management strategies
- Impacts to the physical and cultural heritage of Indigenous peoples and sites of archaeological importance, with a focus on potential archaeological resources on land or water, and species of cultural importance (e.g., black bear)
- Impacts to the economic conditions of Indigenous Peoples
- Effects to people from activities on federal lands, such as dust and noise interactions with base personnel, to help DND identify suitable mitigation and monitoring for any conditions it may place on a land use decision
- Positive effects of the project, including
  - economic benefits for Indigenous groups
  - contributions to Canada's ability to meet its climate change commitments for long-term targets (i.e., 2050) and displace greenhouse gas emissions in the energy sector
  - contributions to sustainability including local socio-economic benefits and Indigenous economic reconciliation

IAAC has identified the following topics as **unlikely key issues** for the impact assessment because the effects are either immaterial to decision-making, effectively managed by other regulatory mechanisms, or have well understood mitigation measures:

- Effects to fish and fish habitat from

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<sup>3</sup> An issue is material to decision making if its analysis is anticipated to affect the conclusions on (1) whether adverse effects within federal jurisdiction or direct and incidental adverse effects (collectively adverse federal effects) are likely not significant, or of low, medium or high significance; (2) appropriate mitigation measures for significant adverse federal effects; or (3) justification in the public interest.

<sup>4</sup> IAAC has prepared this list based on limited information prior to receipt of the Initial Project Description. It may change based on input received from federal and provincial authorities, Indigenous communities, and the public.

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- loss of habitat from lake-bed footprint, which is expected to be routinely managed through an authorization under the *Fisheries Act*, if needed
- changes to water levels in the Georgian Bay, which are anticipated to be negligible based on the volume of water taken relative to the volume in the lake
- changes to water quality in the Georgian Bay from reservoir outflow, because the reservoir will be lined with an impermeable layer and water will not be held in the reservoir for prolonged periods
- Effects to migratory birds from construction activities due to well-understood mitigations measures, and regulations under the *Migratory Birds Convention Act*
- Effects to the environment on federal lands, including wildlife and vegetation that are not federally listed species at risk, as population-level effects are unlikely
- Effects on Indigenous peoples':
  - ability to access lands and resources for traditional purposes (harvesting, navigation), as IAAC understands that access to the surrounding land and water is already restricted by DND (apart from any land use near the potential transmission lines outside of the restricted use areas)
  - use of fish for traditional or commercial purposes because population-level changes to fish in the Georgian Bay are not anticipated; should fish population changes be a concern, effects to fishing would be considered
- Effects to the health, social and economic conditions of non-Indigenous peoples resulting from activities carried out on federal lands, including
  - changes to commercial and recreational use of water in the Georgian Bay as public access to the surrounding water is already restricted
  - changes to the visual environment as the project is primarily obscured from view
  - changes to drinking water quality from reservoir outflow because bay water will move in and out without alteration and an impermeable layer in the reservoir will prevent seepage
  - non-Indigenous cultural heritage resources due to well established protocols set by provincial standards, and regulatory oversight off-federal lands
  - impacts to the operations of the Canadian Armed Forces from construction and operation logistics, as DND can manage these in parallel through its Operational Impact Assessment
  - changes to socio-economic conditions in Meaford from the construction workforce as the proponent will focus on local and regional workers, where possible, and is working closely with the municipal government and community service providers
  - changes in energy pricing as this will be managed by Ontario's energy contracting policies and decisions
- Contributions to Canada's ability to meet its climate change commitments for short-term targets (i.e., 2035) because the project will cause greenhouse gas emissions during construction and no further information is required to conclude the project does not contribute to Canada's short-term targets
- Contributions to Canada's ability to meet its environmental obligations as no further information is required to conclude the project does not contribute to Canada's ability to meet its environmental obligations

Nathan Entz, Biologist (DFO)

Name and title of Departmental /  
Agency Responder

March 25, 2026

Date

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**Table 1: Key Issues to inform the impact assessment process**

This table should outline key issues to inform the impact assessment process, including whether an impact assessment is required and, if so, the scope of the assessment and tailoring of the Tailored Impact Statement Guidelines.

Key issues are the major concerns directly related to a project component or activity, the analysis of which is anticipated to be material to decision-making under the *Impact Assessment Act*.

Federal authorities' advice should be guided by the identification and resolution of key issues. If an impact assessment is required, it will be focused on key issues.

Comment ID	a) Key issue	b) Project component or activity	c)(i) Biophysical effect pathway(s)	c)(ii) Concern unique to the project or a priority within your mandate	c)(iii) Material to federal decision-making	d) Means for issue resolution	e) Additional information from the proponent
<p>Identify each comment by your organization's acronym and a sequential comment number.</p> <p>e.g.: IAAC-01</p>	<p>Specify each key issue (e.g., specific species and location).</p>	<p>Identify the project component or activity linked to the key issue.</p> <p>Be specific about the nature, scale, novelty and complexity of the component or activity.</p>	<p>Identify the specific effect pathway between the project component or activity and the affected environmental or human receptor (including Indigenous Peoples).</p>	<p>Describe why it's a key issue within the mandate of your department or agency, including in terms of priorities of the federal government and in terms of anticipated likelihood, severity or uncertainty of effects.</p> <p>Identify if the key issue is common for project activities of this nature or in this sector, or whether it is unique to this project due to the project's complexity, size or novelty; a sensitive or rare receiving environment; and/or proximity of sensitive environmental or human receptors (including Indigenous Peoples).</p>	<p>Describe why the key issue is material to decision-making as either:</p> <ul style="list-style-type: none"> <li>an adverse effect within federal jurisdiction, or a direct or incidental adverse effect, that may be significant based on available evidence including:                             <ul style="list-style-type: none"> <li>federal experts' knowledge and experience with past project assessments;</li> <li>presence of sensitive species, habitats or human receptors (including Indigenous Peoples);</li> <li>novel or complex project activities, components or technologies;</li> <li>high uncertainties in effects or in the effectiveness of mitigation measures;</li> <li>unknown or unproven mitigation; or</li> </ul> </li> <li>a factor for the justification in the public interest anticipated to be material to decision-making such as a likely positive effect contributing to sustainability, to Canada's environmental obligations or climate change commitments or in supporting governmental priorities, such as reconciliation with Indigenous Peoples.</li> </ul>	<p>Describe how the key issue could be resolved or addressed by:</p> <ul style="list-style-type: none"> <li>Any means, including powers, duties, functions, frameworks, policies or guidance for which your department or agency is responsible;</li> <li>Any means, including powers, duties, functions, frameworks, policies or guidance from another jurisdiction, including the province;</li> <li>Common, proven, well-understood or standard mitigation measures to mitigate the effect or effect pathway(s); or</li> <li>Commitments made by the proponent (e.g., in the Initial Project Description).</li> </ul>	<p>Describe information the proponent could provide, or commitments the proponent could make, that would provide confidence that the issue can be resolved by existing means (to be considered for Summary of Issues and response, or (potential) Tailored Impact Statement Guidelines).</p> <p>Consider whether information, studies, analyses or collaborative work with other authorities would be required to address the issue beyond existing means.</p>
DFO-1	<p>Substrate disturbance/Resuspension of sediment</p> <p>Sedimentation of fish habitat</p> <p>This key issue would affect all fish species present in Georgian Bay that may be present in the vicinity of the project activities.</p>	Construction of lower inlet/outlet structure	<p>Use of Machinery in Water</p> <p>Placement of Materials in Water</p>	<p>Sedimentation of fish habitat has the potential to directly or indirectly impair the habitat's capacity to support one or more life processes of fish.</p> <p>Although this issue is common for projects requiring construction below the high water mark of a waterbody, this project is unique given the size of the</p>	Increased turbidity and sedimentation of the water column may result in a potential adverse effect to fish and fish habitat that could require an authorization under <i>Fisheries Act</i> paragraph 35(2)(b).	Sedimentation of fish habitat could be resolved through the employment of adequate mitigation measures that isolate the work area and contain potential turbidity plumes caused by disturbance of the lake bed during construction.	Construction and mitigation methods associated with the construction/installation of the lower inlet/outlet structure have yet to be finalized. Once determined, DFO will be able to make a determination of potential adverse effects associate with this key issue.

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				lower inlet/outlet as this may pose challenges in implementing routine mitigation measures typically employed to alleviate this impact (e.g. cofferdam isolations, turbidity curtains).			
DFO-2	<p>Infilling/Change in channel/shoreline morphology</p> <p>Change or loss of wetted area</p> <p>This key issue would affect fish species present in any watercourses (e.g. tributaries, creeks) that may overlap the upper reservoir footprint</p>	Construction of upper reservoir	Placement of Materials in Water	The alteration or loss of wetted area would constitute a harmful alteration, destruction, or disturbance (HADD) of fish habitat under the <i>Fisheries Act</i> .	Harmful alteration, destruction, or disturbance to fish habitat would result in potential adverse effects that would require an authorization under <i>Fisheries Act</i> paragraph 35(2)(b).	If the footprint of the upper reservoir overlaps with existing fish habitat, and the construction of the reservoir results in alteration/destruction of said fish habitat, it is unlikely that any mitigation would be available to resolve these concerns. DFO would expect the proponent to attempt to avoid, and then minimize effects to the existing fish habitat, but would otherwise manage these effects through an authorization under the <i>Fisheries Act</i> and associated offsetting requirements.	Detailed site-specific fish and fish habitat assessments will need to be conducted within the upper reservoir footprint, once its location is finalized, to determine if any fish habitat will be altered or destroyed during construction.
DFO-3	Sublethal effects and/or mortality of fish due to impingement and entrainment at the lower inlet/outlet structure	Operation of lower inlet/outlet structure	Water Diversion	<p>Fish mortality has the potential to occur as a result of impingement or entrainment at the water intake structures.</p> <p>This issue is common for projects that withdraw water from natural sources and can generally be mitigated through the installation of appropriately sized screens and reducing the intake/approach velocity.</p> <p>However, given the location of the project and the presence of Zebra mussel (<i>Dreissena polymorpha</i>) and Quagga mussel (<i>Dreissena bugensis</i>) in Georgian Bay, there may be challenges in maintaining the screened intake assembly as additional maintenance may be</p>	Death of fish as a result of impingement and/or entrainment during the operation of the lower inlet/outlet structure would require an authorization under <i>Fisheries Act</i> paragraph 34.4(2)(b).	<p>Impingement and entrainment of fish can be mitigated through low intake velocities and the installation of appropriately sized screens.</p> <p>Consideration should be given to efforts that could prevent colonization of Zebra and Quagga mussels and/or maintenance to frequently remove mussels from the screened intake.</p>	A detailed description of the operation of the lower inlet/outlet structure will be required for DFO to properly assess the risk to fish. This should include the size and location of the intake(s), proposed intake rate, and whether the intake(s) will be screened.

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				required to remove/prevent mussel colonization, which would otherwise severely restrict intake flows. This may deter the proponent from installing screens altogether.			
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*Please insert additional rows as necessary.*