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.[1]

Department/Agency Contact Information

Submission Date	April 2, 2026
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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
   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
   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
   d) Identify any associated project-specific guidance or issues of which the proponent should be aware, or information the proponent should provide
   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

   No, Health Canada will not exercise a power, perform a duty or function or provide financial assistance related to the project.

2. **Using Table 1**, identify project- and context-specific **key issues** based on the expertise within your mandate[2] 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.

   For each key issue:

[1] 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.
[2] Refer to the Memoranda of Understanding with IAAC.

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[3] 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.[4] 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
  - loss of habitat from lake-bed footprint, which is expected to be routinely managed through an authorization under the *Fisheries Act*, if needed

[3] 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.

[4] 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.

  - 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

Julie Boudreau,
Impact Assessment Specialist

Name and title of Departmental / Agency Responder

April 2, 2026

Date

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
Identify each comment by your organization's acronym and a sequential comment number. *e.g.: IAAC-01*	*Specify each key issue (e.g., specific species and location).*	*Identify the project component or activity linked to the key issue.* *Be specific about the nature, scale, novelty and complexity of the component or activity.*	*Identify the specific effect pathway between the project component or activity and the affected environmental or human receptor (including Indigenous Peoples).*	*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.* *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).*	*Describe why the key issue is material to decision-making as either:* • *an adverse effect within federal jurisdiction, or a direct or incidental adverse effect, that may be significant based on available evidence including:* ○ *federal experts' knowledge and experience with past project assessments;* ○ *presence of sensitive species, habitats or human receptors (including Indigenous Peoples);* ○ *novel or complex project activities, components or technologies;* ○ *high uncertainties in effects or in the effectiveness of mitigation measures;* ○ *unknown or unproven mitigation; or* • *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.*	*Describe how the key issue could be resolved or addressed by:* • *Any means, including powers, duties, functions, frameworks, policies or guidance for which your department or agency is responsible;* • *Any means, including powers, duties, functions, frameworks, policies or guidance from another jurisdiction, including the province;* • *Common, proven, well-understood or standard mitigation measures to mitigate the effect or effect pathway(s); or* • *Commitments made by the proponent (e.g., in the Initial Project Description).*	*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).* *Consider whether information, studies, analyses or collaborative work with other authorities would be required to address the issue beyond existing means.*
HC-01	**Effects to human health** Human health may be impacted by air and noise emissions from the project construction phase. A preliminary key issue is noted on p. 2 of the FAAR	**Project-related air and noise emissions from equipment and material during construction phase of the pumped storage facility** The project is estimated to have a 5.5 year	**Air and noise impacts on human health generated from construction of the pumped storage facility** Given the duration of project construction phase (i.e., 5.5 years) and	**Potential gap in requirement for construction mitigations** As provincial construction mitigations do not apply on federal lands, there is a potential gap in coverage for non-federal	**Presence of sensitive human receptors** This may be considered a key issue given the close proximity of sensitive receptors (i.e., daycare and training facility/school) as well as the proximity of permanent residences and the	**Apply standard air and noise construction mitigation measures and include project-specific mitigation measures and/or follow-up monitoring in conditions** Air and noise assessments, as they relate to human health, are	**In the response to the Summary of Issues (SOI) and as Tailored Impact Statement Guidelines (TISG) requirements:** • **provide a map with receptor locations, that includes sensitive receptor locations, and;** • **commit to conducting an air and noise assessment for the**

	as "[e]*ffects 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*". It is also indicated that non-base personnel (i.e., sensitive receptors such as those in the on-site daycare and non-military members utilizing the training facilities) may be present on federal lands. In addition, off-site receptors are noted within less than 500 meters (m) distance of project components [pdf pg. 44, Initial Project Description (IPD)]. It is recommended these aforementioned receptors be included in consideration of key issues.	construction phase [pdf pg. 37 IPD]. Project-related air (e.g., diesel exhaust emissions from heavy equipment) and noise emissions from equipment and material during the construction of the pumped storage facility may impact human health.	close proximity of sensitive receptors (i.e., daycare and training facility/school), it is recommended that the pumped storage facility construction phase impacts to air and noise, and subsequent impacts on human health of non-federal workers on federal land, be considered. Additionally, off-site receptors are noted within 500 m of the project and the nature (i.e., sensitive receptors and permanent residences) and location of these receptors has not been provided.	workers, on federal lands in close proximity to the pumped storage facility construction. This is unique, as many federal impact assessment projects do not include sensitive receptors on federal lands. Additionally, impacts to nearby off-site receptors would also be included in this potential construction mitigation gap.	potential for additional nearby off-site sensitive receptors. The location of the proposed reservoir abuts the 4th Canadian Division Training Centre (CDTC Garrison) which includes a daycare and training facilities for military and non-military members, as well as temporary and permanent accommodation facilities [pdf pg. 44, IPD]. Additionally, off-site residences are noted within less than 500 m distance of project components [pdf pg. 44 IPD], and the location and specific distances of on-site and off-site sensitive receptors from the project have not been provided.	recommended during the construction phase. If the assessments determine any project-specific mitigation measures or follow-up monitoring are needed, these could be captured in the project conditions. Standard construction mitigation measures for air and noise could also be included in conditions if the project is approved. Commonly applied construction noise mitigation measures can be found in appendix H of Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Noise and "*Best Practices for the Reduction of Air Emissions From Construction and Demolition Activities (Cheminfo Services Inc, 2005)*" referenced in Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Air Quality.	**construction phase and identifying potential mitigation measures/follow-up monitoring needs using Health Canada's guidance.** In the response to the SOI and as TISG requirements, include a map with receptor locations, identifying sensitive receptors, including those on federal lands. In the response to the SOI and as TISG requirements, commit to completing noise and air assessments including all predicted emission levels at all receptor locations during the construction phase in accordance with Health Canada Guidance[1]: Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Noise; Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Air Quality; and, Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Human Heath Risk Assessment Additionally, commit to implementing mitigation measures and/or follow-up monitoring, if required.
HC-02	**Effects to human Health** Human health may be impacted by project-related effects to impacted groundwater and/or surface water used as a drinking water source. The following key issue is noted on p. 2 of the FAAR that potential changes to groundwater and surface runoff quality may occur "*if soil contaminants are identified in overburden materials to be disturbed and/or relocated*". It is suggested that the non-key issue, listed on p. 3 of the FAAR, "*changes*	**Project-related impacts to groundwater and surface water used as a drinking water source during the construction and operation phases of the pumped storage facility** The construction and operation of the pumped storage facility is anticipated to disturb on-site soil and lakebed sediment, respectively. This may subsequently impact groundwater and surface water, which are both indicated as drinking water sources.	**Groundwater and surface water quality impacts on human health generated from construction and operations of the pumped storage facility** During the construction phase, if contaminated soils/sediment are encountered, surface run-off and groundwater seepage from potentially contaminated soil in the overburden stockpile may deteriorate the quality of groundwater, which is used as a drinking water source.	**Gap in information regarding baseline environmental quality, final reservoir design, and potential impacts to drinking water sources** Concerns related to the management of potentially contaminated soil/sediment and related impacts to groundwater and surface water quality, as a potential drinking water source, have been indicated [Table 9-16, pdf pg.167, Table 9-12 pdf pgs.160-162 and Table 9-13 pdf pg. 163 IPD].	**Presence of drinking water sources and human receptors** This may be considered a key issue as concerns have been raised around impacts to groundwater and surface water quality, which are both used as drinking water sources in the project area. Drinking water supply wells have been noted in the project area according to MECP well records [pdf pg. 158 IPD] and Georgian Bay is noted as a source of drinking water for numerous municipalities in the area including Meaford [pdf pg. 163 IPD]. Additionally, some residential properties are located less than 500 m distance from project components, as well as non-federal workers located on-site [pdf pg. 44 IPD].	**Include project-specific drinking water mitigation and monitoring in conditions and apply standard soil/sediment mitigations if contamination is confirmed** A drinking water quality assessment, as it relates to human health, is recommended if operable pathways exist (i.e. if contaminants are found in environmental media and may migrate to nearby drinking water sources). Should the assessment warrant any project-specific mitigations or monitoring and follow-up, these could be captured in project conditions if the project is approved.	**In the response to the SOI and as TISG requirements:** • **include a map with drinking water supply wells, source water protection zones/intakes and receptor descriptions; and** • **confirm if there are operable pathways from project components to groundwater and surface water as a drinking water source. If so, commit to conducting a drinking water assessment for the project using Health Canada's guidance and identifying potential mitigation measures/follow-up monitoring needs.** In the response to the SOI and as TISG requirements, include a map showing the locations of drinking water supply wells that are in close proximity to the

	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" be considered further, given the absence of a final reservoir design and potential legacy contamination of sediment [Table 9-16, pdf pg. 167].	For example, concerns have been raised regarding: • impacts to surface water from the construction and operation of the pumped storage facility if there is existing contamination in lakebed sediment or materials in the final reservoir area [Table 9-16, pdf pg. 167 IPD]; • impacts to groundwater and drinking water quality during the construction and operation phases [Table 9-12 pdf pgs. 160-162 IPD]; and, • changes to groundwater quality from the long-term storage of water [Table 9-13 pdf pg. 163 IPD].	During the operations phase, potential contaminants from lakebed sediment or materials in the final reservoir may migrate through the reservoir to underlying groundwater via bedrock cracks and deteriorate drinking water quality. Drinking water supply wells have been noted in the project area, according to well records from the Ministry of Environment Conservation and Parks (MECP), but the exact number and locations are not specified [pdf pg. 158 IPD]. Also, Georgian Bay is noted as a source of drinking water for numerous municipalities in the area, including Meaford [pdf pg. 163 IPD].	Although high level plans for managing potentially contaminated soils and sediment are indicated [Table 9-16, pdf pg. 167 IPD], the baseline conditions of soil/sediment and groundwater have not been provided. Additionally, in response to Indigenous concerns regarding potential effects to groundwater quality from long-term water storage, it is indicated that the final reservoir design will include an impermeable structure [Table 9-13, pdf pg. 163 IPD]. However, the effectiveness of this built-in mitigation has not been confirmed as the project design has not yet been finalized.	Given the potential that drinking water supply wells and source water protection zones/intakes may exist in close proximity to the project site and that project activities may impact drinking water quality, human receptors may experience adverse health effects via drinking water consumption.	Standard mitigation and management measures for contaminated soils/sediment (e.g., remediation) and drinking water sources (e.g., implementation of additional water treatment) could be included in project conditions, if the project is approved.	project site, inclusive of those on and off federal lands, and drinking water source protection zones/intakes in Georgian Bay. Additionally, it would be useful to include a table indicating the distances between the drinking water supply wells and project components as well as information on the type of drinking well users (e.g., residential, sensitive receptors). In the response to SOI and as TISG requirements, commit to confirming whether there are operable pathways from project components, via drinking water supplies (i.e., potable water supply wells and/or Georgian Bay) to human health. If operable pathways exist, commit to conducting an assessment of potential drinking water impacts in accordance with Health Canada Guidance[1]: Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Drinking and Recreational Water Quality; and Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Human Health Risk Assessment. Additionally, commit to implementing any project specific mitigation measures or follow-up monitoring, if required. Please note that should future project studies (e.g., sediment study) identify potential impacts to surface water in Georgian Bay from historic contamination, then impacts to country foods (e.g., fish) should also be considered as a potentially operable pathway when moving to the human health risk assessment. Please refer to Health Canada's guidance on country foods for further information: Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Country Foods.
HC-03	Additional comment on potential effects to human health during the construction phase of the project related to key social						

	determinants of health within the community. See Appendix 1.						

Please insert additional rows as necessary.

[1] Health Canada acknowledges that its guidance documents have been referenced in the IPD.

Appendix 1

For the Impact Assessment Agency of Canada's consideration in its assessment of the project, Health Canada and the Public Health Agency of Canada note the potential for additional effects on human health from a large and rapid influx of out of region workers in Meaford should the Proponent be unsuccessful in meeting its workforce requirement locally.

The construction period is expected to last four to five years and will require the recruitment of approximately 1,700 construction workers (peak period). These workers would be concentrated in the small town of Meaford (population 11,485, including an estimated 325 Indigenous residents) [Census 2021]. The pool of unemployed individuals in Meaford and surrounding communities within a one hour driving distance who would be eligible and interested in working on the Project may be insufficient to fill the required construction positions. Furthermore, Grey and Bruce Counties are currently experiencing a housing crisis, with rental vacancy rates at low levels [The Meaford Independent, 2023; 97.9 The Bruce, 2025]. Simcoe County, while not facing acute shortages, continues to experience significant affordability challenges, particularly for renters [County of Simcoe, 2025].

For these reasons, reliance on drive in/drive out arrangements may be substantial, necessitating a work camp or other short term accommodations (e.g., trailer parks). Proactive planning would be warranted to better anticipate and respond to any major social changes that may occur, particularly during the construction phase of the Project.

A large and rapid influx of workers and/or disposable income in the local area can also influence key social determinants of health within the community, such as access to services, social environments, and community safety. Potential issues to consider, as identified by the Public Health Agency of Canada, include:

- Issue 1: Risk of increased pressure on local infrastructure and services (e.g., higher demand on health care, social supports, and other essential services)
- Issue 2: Risk of increased harms related to substance availability and use and sex trade activity (associated with the presence of a transient and predominantly male workforce and high levels of disposable income)
- Issue 3: Risk of increased gender-based violence (associated with the presence of a transient, nonlocal, predominantly male workforce and demanding working conditions).

Mitigation measures to address these issues/effects would benefit from local collaborative governance mechanisms — bringing together industry, different levels and sectors of government (including service providers), and the community — to navigate any social changes that may occur with greater coordination and responsiveness. For example, mitigations may include efforts to:

- Prepare and implement a health and medical services plan (onsite) for construction workers (Issue 1).
- Promote community safety and strengthen community cohesion (Issues 1 and 2).
- Increase workforce resilience to demanding working conditions through strategies that promote healthy social behaviours, such as stress- and anger-management training (Issue 3).