

March 13, 2026

APM-CORR-00652-302961

Chief and Council
Eagle Lake First Nation

CC:

Lands and Resources Department <contact information removed>

Finn MacDonald, Impact Assessment Agency of Canada (nuclearwaste-dechetsnucleaires@iaac-aeic.gc.ca)

RE: Response to Correspondence Regarding the Deep Geological Repository Project

Dear Chief and Council,

The Nuclear Waste Management Organization (NWMO) thanks Eagle Lake First Nation (ELFN) for its comments submitted to the Impact Assessment Agency of Canada (IAAC) on January 13, January 30, and January 31, 2026, regarding the Initial Project Description (IPD) for the proposed Deep Geological Repository (DGR) for Canada's used nuclear fuel Project (Project). NWMO acknowledges the time and care reflected in your review.

In this letter, we seek to address the key issues raised by ELFN identifying issues and concerns in the immediate vicinity of the DGR project site. We have also responded to the other comments raised in your submission in the attached Appendix.

Scope of the Impact Assessment process: past and future engagement

On January 5, 2026, the NWMO IPD was posted on the IAAC registry. Submitting the IPD formally initiates the rigorous integrated IA and nuclear licensing regulatory process for the Project. The IPD also supports IAAC in identifying potentially affected Indigenous communities, informing engagement planning, and establishing the scope of the assessment. There will be numerous opportunities for engagement before a decision is made about the Project. As reflected in the IPD, the Project has been assessed at a screening level, and the risk of residual adverse effects is anticipated to be low with effects primarily associated with localized Project activities.

After receiving NWMO's IPD, as required by the Impact Assessment Act (IAA), IAAC prepared the Summary of Issues, which the NWMO received on Monday, February 16, 2026. The Summary of Issues outlines the key issues for the federal integrated IA process raised by the public and Indigenous communities during the 30-day comment period on the IPD.

The integrated process follows strict requirements and will include the identification and assessment of potential pathways of interaction and will consider how the Project as described in the Initial Project Description could affect, among other things, the environment, human health, and Indigenous rights before the Project can be approved. As part of this process, the IAAC and the CNSC will develop the requirements for the integrated assessment, requiring the NWMO to engage with the potentially affected Indigenous communities specified by the IAAC and the CNSC.

Engagement and incorporation of Indigenous feedback during the Impact Assessment

Your submission raises questions about the scope of engagement opportunities during the integrated Impact Assessment (IA) process and how Indigenous feedback and Indigenous Knowledge will be incorporated in the process (comments 1, 2, 4, 8, 9, 11, 14, 27, 30, 86, 88, 93, 96-98, 101, 105, 107).

The IPD is the first regulatory submission that formally initiates the federal integrated IA process and supports IAAC in identifying potentially affected Indigenous communities, informing engagement planning, and establishing the scope of the IA. The IPD acknowledges that work is required through the IA process to better understand Indigenous land use, Indigenous laws, Indigenous Knowledge, and potential effects on Indigenous rights of those communities identified as potentially affected by the Project. Further, as noted in Section 15 and 21 of the IPD, work is required through the IA process to understand social, economic, and cultural effects for all potentially affected Indigenous groups.

Section 3.3 of the IPD identifies ELFN as a potentially affected Indigenous group and states that NWMO will undertake work through the IA process to understand community-specific valued components, potential pathways of impact, mitigation measures, and monitoring and follow-up needs. Indeed, Section 21 of the IPD identifies that Indigenous-valued components and indicators will inform the assessment, but this section is presented without conclusions because engagement work on these components and indicators has not yet been undertaken with Indigenous communities potentially affected by the Project. Additional work through Indigenous Knowledge and land use studies may also be appropriate to characterize these valued components and pathways of change. This work will be completed as part of the Impact Statement through engagement with potentially affected Indigenous groups.

In July 2025, the NWMO wrote to ELFN inviting participation in the IA for the Project. ELFN did not respond. The NWMO is committed to ongoing communication, engagement, and participation with ELFN in the IA, with the objective of ensuring that the Impact Statement appropriately considers the potential effects of the Project on ELFN's rights, interests, and potential pathways of impact, including ELFN's values, community-specific valued components, and its culturally and ecologically important features (such as wild rice and moose). In addition, the NWMO's engagement with potentially affected Indigenous groups, include ELFN, will be an important part of developing activity-specific mitigation measures, monitoring, and follow-up programs as part of the Impact Statement and permitting processes.

The NWMO acknowledges prior engagement with ELFN and that this history is relevant context for ongoing discussions. As the Project has transitioned into the federal integrated IA process, the NWMO remains committed to advancing engagement with ELFN to support participation in the process, including sharing information, understanding concerns and interests, and ensuring that ELFN's perspectives can inform the assessment of potential effects and the development of mitigation and follow-up measures as the Project advances.

Transportation

Several of the questions in your submission relate to the transportation of used fuel (see comments 5, 16, 17, 28, 98). The IPD explains that as part of the IA for the Project, the NWMO is assessing potential effects of transportation activities at the Project site, including accidents and malfunctions associated with transportation on the primary and secondary access roads.

Transportation of used nuclear fuel beyond the Project site is not part of the Project. Such transportation would rely on existing vehicular infrastructure and is regulated through a separate federal framework administered by the Canadian Nuclear Safety Commission (CNSC) and Transport Canada, which governs safety, security, emergency preparedness, and compliance of nuclear substances along transportation corridors.

With respect to questions about the risk of accidents from transporting used nuclear fuel, used fuel is a solid material that cannot spill. Additionally, it will be transported in a certified package that is designed and tested to protect the public and the environment under both normal operating conditions and severe accident conditions. The test conditions described in the safety standards are used to demonstrate that a package can provide adequate radiation shielding and containment of radioactive materials under normal conditions of transport and the conditions expected in a severe accident. The packages must be designed to withstand a drop test, puncture test, fire test and immersion test to simulate cumulative accident scenarios, including immersion in water.

The NWMO's used fuel transport operations will not commence until at least 2043. Before any shipments of used nuclear fuel can begin, the NWMO will be required to demonstrate to regulatory authorities that all applicable safety and security requirements have been met. This includes the development, submission, and approval of a comprehensive Emergency Response Plan and a Security Plan. Please refer to the NWMO-RSOI-38 in NWMO's response to the Summary of Issues for additional information on this topic.

Level of Detail and Certainty in IPD

Several of the comments in ELFN's submissions address the certainty and level of detail of statements in the IPD (see comments 3, 19, 38, 95-97). The NWMO is confident in the suitability of the Project site to host a DGR, based on extensive geoscientific studies and safety assessments, including detailed analysis of the geology, hydrogeology, long-term stability of the rock, and the multiple-barrier safety system.¹ That initial work is reflected in the IPD.

That said, the IPD is the first step in the federal integrated IA process, it is not intended to meet the more detailed assessment requirements of the *Impact Assessment Act* and the *Nuclear Safety and Control Act*. As described in the IPD, this will be undertaken through the Impact Statement and the initial licence application to the CNSC, which will examine NWMO's early findings and ongoing work through the safety case and assessment of future conditions.

The IPD also explains that the CNSC through REGDOC-3.5.3, Regulatory Fundamentals, applies a graded approach to licensing and compliance activities. The graded approach is a systematic process in which the level of analysis, depth of documentation, and scope of actions required to meet regulatory requirements are commensurate with the relative risks of the activity being regulated. As the Project advances through each licensing phase, additional site characterization and analysis are required – not because of

¹ This work is reflected in the [Confidence in Safety – Revell Site – 2023 Update](#), which reinforces the NWMO's confidence that a deep geological repository can be constructed and operated safely at the selected site.

uncertainties about the site, but because the graded approach inherently requires increasing levels of detail to demonstrate safety at each stage of regulatory review. This approach ensures that more detailed assessments, including consideration of long-term future conditions, are required at the appropriate stages of licensing.²

In addition, the IPD presents mitigation measures at a screening level to identify potential pathways of change. Detailed, activity-specific mitigation measures, including timing restrictions for vegetation clearing, will be developed as part of the Impact Statement and permitting processes in accordance with applicable migratory bird and wildlife protection requirements. Participation by potentially affected Indigenous groups, including ELFN, will be an important part of refining these measures.

One comment in the submission asked about the terms “where practicable” and “to the extent practicable”. While these terms are used, the intent is not to weaken environmental protection. Rather, the assessment and Project will be guided by the precautionary principle (as applied by applicable regulators), which means that avoidance of environmentally and culturally sensitive periods and areas is the preferred and primary mitigation measure. Where complete avoidance is not reasonable due to safety, engineering, or logistical constraints, additional measures will be applied to reduce the potential effects on valued components. For example, temporary buffer zones and exclusion fencing could be installed around nearby nesting habitat during construction activities. A discussion of potential effects from the Project and proposed mitigation measures will be provided in the Impact Statement.

Anticipated positive effects of the Project

Several comments in the submission ask about social and cultural effects of the Project (see comment 7, 29, 31). As described in Section 19 of the IPD, with the application of proposed mitigation measures, the Project is anticipated to result in net positive social and cultural effects. In addition, Appendix D to the IPD, *Choosing a Way Forward*, includes a comprehensive assessment of potential socioeconomic and cultural effects and explains the requirement for the NWMO to report tri-annually on any significant socioeconomic or cultural impacts associated with the Project.

However, the statement on anticipated positive impacts from the Project acknowledges that Indigenous data are not yet represented. Additional assessment work is required, particularly with Indigenous groups potentially affected by carrying out the Project, and the Impact Statement will include an assessment of potential adverse and positive Project effects to Indigenous groups participating in the process. The NWMO welcomes ELFN’s participation, including on how the Project should approach intergenerational guardianship, institutional control mechanisms, and long-term access conditions.

Post-closure monitoring

Your submission requests additional information about post-closure monitoring (comment 10, 24, 25). The Project will include a long period of monitoring and oversight as part of decommissioning and closure. The detailed monitoring programs, timelines, thresholds, and adaptive management measures will be further developed through the Impact Assessment, licensing, and future regulatory processes.

² See CNSC regulatory expectations for site characterization and environmental protection described in REGDOC-1.2.1 (Guidance on Deep Geological Repository Site Characterization) and REGDOC-2.9.1 (Environmental Protection: Environmental Principles, Assessments and Protection Measures).

The NWMO welcomes the opportunity to discuss with ELFN conceptual decommissioning, closure, and extended monitoring plans, including the identification of monitoring objectives, indicators, and adaptive management approaches, to support the protection of Indigenous interests and values over the long term, including through an intergenerational perspective. This discussion could be completed as part of the impact statement and initial licence.

Studies and baseline programs

Many of ELFN's comments address studies and baseline programs that the NWMO has completed or are currently undertaking (comment 33-37, 39, 52, 59). Some of these comments are more specifically about groundwater and surface water, vegetation, wetlands, and bird and wildlife habitat. The NWMO addresses its general approach to studies and its baseline programs in this section, and below, addresses topic-specific questions.

The IPD draws on many years of environmental and geoscientific studies originally undertaken to support site selection over a broad area. These studies are being refined and tailored to the selected DGR Project site to support the Impact Statement and Initial Licence Application. Studies referenced in the IPD are generally available on the NWMO's website.

The NWMO is also undertaking ongoing baseline studies, as outlined in Section 2 of Appendix E of the IPD. Baseline sampling programs are designed using established scientific and regulatory methods to ensure sufficient data quality and statistical robustness to support detection of changes in chemicals of potential concern over time. The NWMO agrees that these programs must meet the needs of regulators and also consider the interests of Indigenous groups potentially affected by carrying out the Project (to the extent that such interests are shared). The design of the baseline studies is updated annually as Project design progresses and to support identified information requirements.

The NWMO has reached out to ELFN and would welcome the opportunity to meet to review the studies completed to date and planned studies and the status of the environmental baseline programs (including the soil and sediment sampling program, the hydrology work, and the geochemical testing program). NWMO would also welcome a discussion about opportunities to provide input into other ongoing baseline work to support the Project, and to further discuss site characterization activities.

NWMO answers ELFN's questions about specific baseline work in the Appendix. The full details of baseline studies completed to inform the integrated impact assessment will be described in Technical Supporting Documents submitted as part of the Impact Statement.

Groundwater and Surface water

Your submissions asked specific questions about the potential effects of the Project on water (i.e., surface water and groundwater) (see comment 13, 15, 23, 45-48, 50, 92, 100, 101). An assessment of all potential effects to water, including linkages to other environmental components along the effects pathway, will be completed as part of the Impact Statement. The IPD acknowledges that additional work is planned to further characterize the shallow groundwater–surface water interface to support the development of the integrated water management plan, and that this information will be refined as part of the Impact Statement and licensing submissions.

The water management systems that will manage water on site will meet applicable municipal, provincial and federal water quality guidelines before re-use or release to the environment. Studies required to inform the assessment, including an assimilative capacity assessment, will be completed and described in the Impact Statement.

Further, the development of groundwater models is an iterative process that will continue to evolve as additional site characterization data become available through the Impact Assessment and subsequent regulatory and licensing phases. The NWMO has not yet finalized timelines for public release of an initial site-specific groundwater model.

More information about groundwater sampling methods, analytical results (i.e., major ion analytical chemistry results from sampled groundwater), and isotope testing results (and modelling results and assumptions) used to conclude the age of groundwater in the hydrogeological zone of the repository will be included in Technical Supporting Documents included as part of the Impact Statement.

With respect to questions about Wabigoon River, the NWMO recognizes the long-standing impacts of mercury contamination in the Wabigoon River system and the serious effects this has caused. The IPD acknowledges the importance of engaging potentially affected Indigenous groups in identifying valued components for the assessment of groundwater and surface water as well as the interactions those components have on human health and the health of ecological receptors.

The NWMO remains ready to meet with ELFN to discuss planned groundwater and surface water modelling work, including the approach, timing, and whether and how modelling outputs may be shared as the Project advances. The IPD also recognizes the importance of incorporating Indigenous Knowledge into the identification of valued water features, and the NWMO would welcome the opportunity to meet with ELFN to understand locations of groundwater-fed wetlands, culturally important headwaters, and areas of potential concern such as waste rock storage and laydown areas.

NWMO has responded to ELFN's other questions about specific aspects of the groundwater and surface water work in the Appendix.

Wetlands, bird and wildlife habitat, and vegetation

Many of ELFN's comments relate to wetlands, bird and wildlife habitat, and vegetation (comments 53-58, 60-80, 94). As part of its baseline program, NWMO is collecting baseline data to characterize vegetation, riparian, and wetland environments within and surrounding the Project site. NWMO is also collecting additional bird and habitat data. The areas where preliminary baseline studies were completed to inform the IPD are where direct and indirect effects from the Project are anticipated to potentially occur.

The IPD presents preliminary risk-informed screening information intended to inform the scope of the Impact Statement and is not a substitute for the full effects assessment. For example, section 14.7 of the IPD presents vegetation information at a screening level and is not intended to be a comprehensive inventory. Similarly, Section 14.8.1 summarizes findings from desk-based review and field surveys completed to date and acknowledges that additional baseline work is planned to further characterize aquatic habitat. Sections 14.10.1 and 14.11.1 also present results from different stages of baseline screening and habitat characterization, but clarification of species observations and their interpretation will be provided as part of the Impact Statement, where wildlife data will be presented in a consolidated and updated manner.

These sections of the IPD and others recognize that additional data collection is required to capture the assessment of all potential direct and indirect effects to bird and wildlife habitat, vegetation, riparian and wetland environments. This additional field work, background review, and analysis are planned to further characterize vegetation communities, species of conservation concern, and species of interest as part of the Impact Statement. Study areas and assessment boundaries will also be confirmed as part of the effects assessment methodology and presented in the Impact Statement.

Your submissions make specific reference to Ontario's significant wildlife habitat ("SWH"). The IPD was informed by that measure, but as a federal IA, provincial SWH are not used to formally define land use or manage wildlife habitat. For the purposes of the IA, wildlife habitat is managed by Environment and Climate Change Canada through Migratory Bird Sanctuaries, National Wildlife Areas, and the *Species at Risk Act*, which includes managing critical habitat for species of national importance

Within the IA, provincial SWH may be used as information to inform the characterization of baseline conditions, but they will not be formally used to describe suitable habitats for wildlife (including birds) and vegetation valued components. Instead, as is standard for federal IA, Ecological Land Classification (ELC) studies and habitat characterization will be completed to describe vegetation communities and inform the development of Habitat Suitability Index models to characterize suitable habitat for wildlife species.

The IPD recognizes the importance of incorporating Indigenous Knowledge and Traditional Knowledge in the NWMO's study of wetlands, bird and wildlife habitat, and vegetation. The NWMO would welcome the opportunity to meet with ELFN to identify plant and other species of cultural importance and to inform the continued refinement of baseline studies to support the Impact Statement.

NWMO answers ELFN's questions about specific statements regarding wetlands, bird and wildlife habitat, and vegetation are contained in the Appendix.

Next Steps

The NWMO appreciates the opportunity to respond to ELFN's questions and welcomes the opportunity to meet with ELFN to better understand how the Project may potentially affect your community, including with respect to the issues described above. We would welcome the opportunity to discuss next steps at your convenience. Please contact Joe Gaboury, Director, Indigenous Engagement, by email at <contact information removed> or by phone at <contact information removed> at your convenience if you are interested in meeting in this regard.

In the meantime, for additional information regarding the Project, we refer you to the NWMO's response to the summary of issues provided by IAAC based on the IPD. The NWMO's response is available on the IAAC's registry website for this Project at: <https://iaac-aeic.gc.ca/050/evaluations/proj/88774>.

Thank you again for sharing ELFN's perspectives. The NWMO looks forward to continued dialogue.

Sincerely,

<Original signed by>

Jessica Perritt
Director, Indigenous Relations & Reconciliation
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Appendix – Answers to other questions

Below, the NWMO provides answers to specific questions raised in ELFN's submissions that are not addressed above.

Question re “Effective” versus “proven” environmental protection measures (comment 6)

As described in guidance from the IAAC, the Impact Statement must identify mitigation measures that are technically and economically feasible and that would eliminate, reduce, control or offset potential adverse effects within federal jurisdiction. Proposed measures required to mitigate significant non-negligible adverse federal effects resulting from the Project are required to be effective and/or proven.

“Effectiveness” refers to how well a mitigation works in practice at eliminating, reducing, controlling or offsetting significant adverse federal effect(s). The effectiveness of mitigation proposed (i.e., level of certainty that the proposed mitigation would work) is assessed to determine whether the mitigation will address the potential adverse effect such that the pathway-of-change is eliminated, reduced, controlled or will offset a significant adverse federal effect(s). Uncertainty in the effectiveness of proposed mitigation measures will be considered in the characterization of residual Project effects and the proposed follow-up program.

“Proven” mitigation refers to a measure that has been demonstrated and verified - through robust evidence - to reliably eliminate, reduce, control or offset a specific significant adverse federal effect(s). Proven” typically implies monitoring data, replicated results, long-term performance, and scientific evidence.

The NWMO will take an adaptive management approach over the life of the Project related to environmental performance, adjusting management practices and approaches, and learning from the outcomes of ongoing environmental monitoring and management.

Question re previous assessment for other DGR projects (comment 12)

Two previous projects underwent federal environmental assessments for proposed deep geological repositories in Canada, as follows:

- Ontario Power Generation (OPG) Deep Geologic Repository for Low and Intermediate Level Radioactive Waste Project. [The Joint Review Panel environmental assessment report](#) (CEAA 2015) presents the Panel's rationale, conclusions and recommendations regarding the examination of environmental effects under the *Canadian Environmental Assessment Act, 2012*, as well as mitigation and follow-up. It includes information relating to the Panel process, OPG's environmental assessment methodology and the project description, as well as a summary of the information received by the Panel, including comments from participants, and the Panel's conclusions. The [link to the EIS documents](#) for this project can be found on the Impact Assessment Agency of Canada's assessment registry.
- Seaborn Panel. The Seaborn Panel was an Environmental Assessment Panel which examined the disposal concept for used nuclear fuel management proposed by Atomic Energy of Canada Limited (AECL) between 1989 and 1998. Its report, entitled Report of the Nuclear Fuel Waste Management and Disposal Concept Environmental Assessment Panel, was published in February 1998. The report contained an assessment of the disposal concept proposed by AECL as well as a set of conclusions and recommendations concerning the path forward for Canada on this issue. The link to the [Panel](#)

[Report](#) for this assessment be found on the Impact Assessment Agency of Canada's assessment registry.

Question re contact water (comment 18)

For the Project, all contact water, regardless of source or Project phase, will be collected, monitored, and treated as necessary prior to discharge to the environment. This approach is intended to minimize potential contaminant loading through runoff, seepage, or drainage pathways and to protect downstream users and the receiving environment. As defined in Section 19 of the IPD, with the application of industry-standard mitigation measures, the risk of residual adverse effects to water is expected to be low; however, the NWMO will undertake extensive surface water and groundwater modelling, including site-wide water balance and groundwater–surface water interaction assessments, as part of the Impact Statement and initial licensing phase.

Question re water taking and effluent discharge (comment 20)

The effects assessment will consider all relevant pathways of interaction of the Project with the surface water receiving environment, including the combined effects of water withdrawal and treated effluent discharge to the same watercourse, if this configuration is confirmed in the final water management plan. For example, if both activities occur on the same watercourse, the assessment will evaluate potential impacts of these combined activities on flow regime, water quality (e.g., nutrients, chloride, metals, ammonia), fish and fish habitat and assimilative capacity). Importantly, all water takings and discharges will be required to meet applicable provincial, and federal requirements. The Project design is conceptual at this stage, and specific locations for water taking and water discharge have not yet been selected. These locations will be identified and evaluated as part of the alternative means assessment to be undertaken during the Impact Statement phase of the Project.

Question re capacity of receiving watercourse to assimilate the sewage effluent (comment 21)

An assimilative capacity study will be included as part of the Impact Statement. Importantly, any discharges from the Project must comply with applicable municipal, provincial, and federal regulatory requirements. Consistent with Ontario's regulatory framework, treated effluent discharge will be required to meet discharge criteria established in consultation with the MECP during the provincial permitting process to ensure environmental protection; discharge requirements must be assessed in relation to the designated receiving environment's assimilative capacity, in accordance with MECP Policy B 1 5. Please also refer to response above regarding assessment of combined impacts (e.g., to the same watercourse).

Question re reuse of water (comment 22)

Water pumped from the underground development area will meet applicable provincial and federal water quality guidelines before re-use or release to the environment. The process for determining the suitability of re-use or release of water pumped from underground to the environment after treatment will be assessed and described in the Impact Statement.

Question re retrieval of used nuclear fuel (comment 26)

This question relates to a statement in Table 12.4 of the IPD. This statement reflects the Adaptive Phased Management (APM) approach, which includes a long-term commitment that used fuel remain retrievable for an extended period of time.

The IPD does not suggest that retrievability is uncertain. Rather, it recognizes that site-specific engineering methods for retrieval would be finalized, demonstrated, and validated as part of detailed design and licensing, consistent with CNSC requirements. The ability to retrieve used fuel is an established design principle of the APM concept and will be confirmed through engineering design, safety case, and licensing process prior to operations. Please see NWMO-RSOI-37 for additional information about retrieval.

Question re climate change (comment 30)

Climate change is recognized as an important factor in the assessment of Project performance and is a required component of the impact assessment process. Changing environmental conditions associated with climate change, including shifts in normal temperature ranges, precipitation patterns, flooding, drought, and wildfire risk, will be considered as part of the Impact Statement's assessment of climate change and its potential influence on Project performance and the surrounding environment. The impact assessment will be informed by both western science and Indigenous Knowledge.

Question re "activity exclusion" radius around Project site (comment 32)

Section 13.2 of the IPD describes the temporary land withdrawal established to allow the NWMO to complete site investigations and confirms the selected Project site. The IPD does not define specific activity exclusion radii at this stage. Setbacks, buffer zones, and any activity restrictions required to protect surface and subsurface infrastructure will be determined through the impact assessment, safety assessment, and licensing processes, where site protection measures are established in accordance with regulatory requirements under the *Nuclear Safety and Control Act*.

Question re blasting (comment 36)

The IPD recognizes that blasting may have interactions with people and the environment and identifies it through the pathways-of-change screening approach. At this stage, standard design and mitigation measures appropriate for similar projects, including those used in the regional area, have been identified and as stated in Section 19 of the IPD, risk of an adverse effect is low.

Questions re bedrock conditions and site characterization (comments 37, 39)

The work summarized in the IPD is based on data collected from the initial site characterization investigation program, which included six deep boreholes. As part of ongoing site characterization work, additional boreholes and geoscientific investigations will be completed to support the integrated impact assessment and future licence application(s) to the CNSC. These activities are being conducted in accordance with applicable CNSC regulatory guidance, including REGDOC-1.2.1, Guidance on Deep Geological Repository Site Characterization. Based on the results of the initial site characterization and borehole drilling program completed to date, the NWMO has confidence in the safety and suitability of the site at the proposed repository depth. Further site characterization, analysis, and modelling will continue to support future stages of the Impact Assessment and subsequent licensing decisions, as required by the CNSC.

Questions re geochemical testing (comments 40-42)

Section 14.3.1 of the IPD describes the geochemical testing program underway to characterize excavated rock. Based on geochemical characterization completed to date, including sulphur content and acid-base accounting, the host rock is not anticipated to be acid generating or metal leaching, and testing results to

date support this conclusion. The rock is inherently very low in sulphide minerals, and laboratory testing completed to date indicates sufficient neutralization potential to prevent acid generation

Geochemical characterization, including static testing and ongoing kinetic testing, will continue as part of site characterization and will be further reported in the Impact Statement and Initial Licence Application, including consideration of long-term conditions where neutralization potential may be depleted. The Project design includes the collection of all contact water associated with excavated rock management, including runoff and seepage, with monitoring and treatment as required prior to release to the environment. Should testing indicate any potential for acid generation, industry-standard mitigation measures for the management of potentially acid generating rock would be implemented.

Questions re soil samples (comments 43-44)

Section 14.4.1 of the IPD summarizes soil and sediment baseline work at a screening level. Detailed sampling locations, study design, and the environmental quality guidelines used for comparison will be included in baseline Technical Supporting Documents (TSDs) included as part of the Impact Statement. Environmental quality guidelines were generally selected to be the more conservative of available federal and provincial guidelines.

Question re hydraulic conductivity (comment 45).

Section 14.6 of the IPD states that the transmissivity was measured in 20 m intervals. The hydraulic conductivity is related to the transmissivity through the thickness of the tested zone, (i.e., $K = T / b$, where b is the length of the tested zone). Detailed information on how transmissivity values were derived, in addition to calculations and supporting data, will be included in TSDs with the Impact Statement.

Question re cumulative effects (comments 47, 106)

The IPD presents a preliminary pathways-of-change and risk screening intended to inform the scope of the forthcoming Impact Statement. The detailed assessment of cumulative effects, including consideration of past, present, and reasonably foreseeable future activities in the region, will be undertaken as part of the Impact Statement in accordance with the requirements of the *Impact Assessment Act*.

The IPD also explains that the safety case, safety assessments, and licensing basis required under the *Nuclear Safety and Control Act* will evaluate potential accident scenarios, operational upsets, and other unforeseen events as part of the integrated Impact Assessment and Initial Licence Application to the CNSC. Through this process, cumulative effects and potential risks, including those raised by ELFN, will be examined in greater detail in the Impact Statement and Initial Licence Application submissions.

Question re flooding risk (comment 49)

The NWMO is currently completing a Preliminary Flood Hazard Assessment for the proposed Project site. This assessment includes development of a 2-dimensional hydraulic runoff model for the site which will look at changes in flood elevations as a result of proposed land-use changes and infrastructure at the site. This assessment and detailed information regarding flooding risk will be included in baseline TSDs included as part of the Impact Statement.

Question re parameters associated with Project activities (comment 50)

The NWMO confirms that parameters associated with construction and blasting activities, including hydrocarbons (e.g., diesel range organics, oil and grease) and nitrogen-related compounds (e.g., ammonia, nitrate, nitrite) are being considered as part of the Project's effects on water quality and will be reflected in the surface water monitoring programs developed to support the Impact Statement and construction planning.

Question re baseline groundwater monitoring program (comment 51)

Section 14.6.2 of the IPD presents the shallow groundwater monitoring approach at a preliminary stage. The final design of the groundwater monitoring network, including well locations and rationale for their placement, will be refined as part of the Impact Statement and supporting hydrogeological modelling and water management planning.

Question re Provincially Significant Wetlands (comment 55)

Section 14.7.1 of the IPD notes the absence of Provincially Significant Wetlands but does not limit the assessment to those wetlands alone. Additional work through the integrated Impact Assessment will consider wetlands more broadly as part of the evaluation of valued components. The NWMO is also planning diet and food surveys to support the Human Health and Ecological Risk Assessment, which may include information related to traditional foods and medicines.

Question re “rarity of candidate SWH” and how future field studies will be determined (comment 57)

The rarity of a significant wildlife habitat (SWH) refers to how the SWH is designated by the Province of Ontario by the Natural Heritage Information System (NHIC), operated by the Ministry of Natural Resources (MNR). Rare plant communities (ecosites) are those communities designated by MNR to have a Subnational Rank of S1-S3 which are considered Extremely Rare (S1), S2 (Very Rare), or S3 (Rare to uncommon).³ But as explained above, as federal Impact Assessment, Province of Ontario SWH are not used to formally define land use or manage wildlife habitat.

As explained above in the letter, the need and scope of future field studies to inform the Impact Statement will be determined to fill any identified gaps to satisfy the requirements of the *Nuclear Safety Control Act* initial license application and the anticipated IAAC Tailored Impact Assessment Guidelines. All baseline studies completed to inform the Impact Assessment will be described in TSDs submitted as part of the Impact Statement, including a description of their rationale.

Question re Great Blue Heron and Sharp-tailed Grouse (comments 61-62)

Great Blue Heron and Sharp-tailed Grouse will be added to the Impact Statement as a bird species detected within and surrounding the Project site. As explained above, baseline surveys of breeding bird communities (including Great Blue Heron) within and surrounding the Project Site will be completed to inform the integrated Impact Assessment.

³ More information is available here: <https://www.ontario.ca/document/significant-wildlife-habitat-technical-guide/appendix-j-natural-heritage-resources-ontario>

Question re Caribou range (comment 64)

The IPD was developed using preliminary available information. The Ontario Ministry of Natural Resources has published a map of the Caribou Range Boundary in Northern Ontario. The map shows that the Caribou Range Boundary is located more than 70km from the Project. Study areas and assessment boundaries will be confirmed as part of the effects assessment methodology and presented in the Impact Statement. The NWMO welcomes an opportunity to discuss with ELFN how its Traditional Knowledge could inform the understanding of areas and values of ecological and cultural concern, including woodland caribou.

Question re white-tailed deer and woodland caribou (comment 65)

The NWMO understands that white-tailed deer and woodland caribou are important to ELFN. In addition to the consideration of cultural importance, the inclusion of these valued components in the integrated Impact Assessment will be determined based on the likelihood of white-tailed deer and woodland caribou interacting with the Project and the anticipated spatial extent of potential effects. The final extent of the local and regional study areas for assessment, as well as the valued components included, will be confirmed in the Impact Statement, and the NWMO will welcome all information from ELFN that may contribute to making these determinations.

Question re radius to study moose (comment 67)

The 30 km radius was selected to conservatively include the estimated home range of the local moose population. The size of animal home ranges is strongly affected by habitat quality parameters (e.g., resource availability), and, therefore, it is highly variable both temporally (i.e., seasonally), and spatially. The mean moose home range size obtained by telemetry-based studies in Canada ranges from 36.8 square kilometres (km²) in Central Ontario (McLaren and Patterson, 2021) to 174 km² in the Northwest Territories (Stenhouse et al., 1995). These estimates are equivalent to the areas occupied by circles with 3.42- and 7.44-km radii, respectively. In a precautionary manner, it is assumed that the largest estimate applies to the local moose population and therefore, the preliminary 30 km radius study area encompass the home ranges of moose beyond the largest mean estimates in Canada.

A moose aerial inventory was undertaken by the NWMO in fall-winter 2021/22 to inform Project planning. A follow-up study is being conducted in Q1 of 2026. The NWMO provided ELFN with copies of the 2021/22 report on January 26, 2026, and will provide ELFN with the 2026 reports when they are completed.

Question re Moose Late Winter Cover SWH (comment 68)

Baseline studies reported in the IPD confirmed Province of Ontario SWHs for moose aquatic feeding area and that candidate SWH that has been identified for seeps and springs, and mineral licks. Applicable Provincial SWH within and adjacent to the Project that may interact with the Project will also be considered in the integrated Impact Assessment to inform the characterization of suitable habitat for moose. But as explained above, as a federal integrated Impact Assessment, Province of Ontario SWH are not used to formally define land use or manage wildlife habitat.

Question re radius for terrestrial carnivore species (comment 69)

The 25 km radius around the Project site was selected as a preliminary screening area to assess the potential for adverse residual effects to carnivore species from the Project. The assessment study areas will be chosen to reflect the extent of potential Project effects to valued components selected for the integrated Impact Assessment, including any carnivore species.

Question re Furbearer Movement Corridor SWH (comment 70)

Baseline studies reported in the IPD confirmed Province of Ontario SWHs for mammal denning sites, and seeps and springs. Other applicable Provincial SWH within and adjacent to the Project that may interact with the Project will be considered in the Impact Assessment to inform the characterization of suitable habitat for Mink, Otter, Marten, Fisher and Eastern Wolf. But as explained above, as a federal integrated Impact Assessment, Province of Ontario SWH are not used to formally define land use or manage wildlife habitat.

Questions re bat studies (comments 71-72)

The IPD draws on studies conducted over a broad area of investigation, as their purpose was to inform a screening level assessment. Section 14.10.2 of the IPD confirms that future years of study aim to provide a more thorough characterization of bat community composition and habitat use (including summer home range) within and surrounding the Project site and may include using techniques such as acoustic surveys, identification of roost and maternity colony trees, exit surveys for hibernacula and roost trees, and incidental observations. Study areas and assessment boundaries will be confirmed as part of the effects assessment methodology and presented in the Impact Statement.

Question re amphibian breeding habitat (comment 73)

Baseline studies reported in the IPD confirmed Province of Ontario candidate SWHs for amphibian breeding habitat. Other applicable Provincial SWH within and adjacent to the Project that may interact with the Project will be considered in the Impact Assessment to inform the characterization of suitable habitat for amphibians, including habitat supporting amphibian movement. But as explained above, as a federal integrated Impact Assessment, Province of Ontario SWH are not used to formally define land use or manage wildlife habitat.

Question re "biodiversity value-specific study area" (comment 76)

The intent of the reference to "biodiversity value-specific study area" in section 14.10.2 of the IPD was to state that a study area specific to American beavers will be defined and used to document their presence during field studies. The scope of future studies will be refined as part of the Impact Statement, based on baseline data collected to date and in consultation with regulatory agencies and potentially affected Indigenous communities.

Question re SWH for Species of Special Concern and Rare Wildlife Species (comments 78-79)

As indicated in the IPD, preliminary studies did not focus on the identification of SWH for Species of Special Concern and Rare Wildlife Species. As explained above, as a federal integrated Impact Assessment, Province of Ontario SWH are not used to formally define land use or manage wildlife habitat.

Question re radiation doses (comment 81)

Figure 14.9m of the IPD, referred to in the comment, presents regional context for ambient radiation. The IPD also notes that additional work is required through the integrated Impact Assessment process to support the Human Health and Ecological Risk Assessment (HHERA). The HHERA is typically required under both the *Impact Assessment Act* and *Nuclear Safety and Control Act*. The HHERA will consider baseline prior to assessing impacts associated with the Project.

Questions re tissue sampling (comments 82, 85, 87)

The NWMO acknowledges ELFN's request for additional detail regarding tissue sampling methodology, coordination with food and diet studies, and the sharing of results. Tissue sampling for foods, medicines, wildlife, and fish is being conducted through the NWMO's Environmental Media Baseline Program using established, standardized protocols, including species-specific sampling, handling, quality assurance/quality control, and laboratory analysis for metals and radionuclides.

The IPD identifies tissue sampling as part of the NWMO's environmental data collection and acknowledges that additional work is planned to support the HHERA. Results from the baseline program are intended to inform human health, ecological, and dose assessment work conducted by the NWMO and the CNSC, and summary results will be reported through the Impact Assessment and future regulatory processes.

The NWMO recognizes the importance of coordinating tissue sampling with diet and food consumption studies and of collecting sufficient samples to support statistically robust analysis and long-term monitoring. The NWMO welcomes the opportunity to meet with ELFN to discuss how to submit samples, how results will be shared, and to understand how ELFN may wish to be involved in this work and to better understand local consumption practices and foods of importance.

Question re list radionuclides analyzed in soil and tissues (comment 83)

As discussed in the IPD, plutonium isotopes are expected to be present due to residual fallout from atmospheric testing of nuclear weapons conducted in the 1950s and 1960s and are present globally. Cs-137 was included in the monitoring program but was not detected. Radionuclides considered in the baseline monitoring are: H-3, Be-7, C-14, Cl-36, K-40, Co-60, Se-79, Kr-85, Sr-90, Ru-106, Cs-137, I-129, Pb-210, Rn-222, Ra-226, Th-228, Th-230, Th-232, U-234, U-235, U-238, Am-241, Np-237, Pu-238, Pu-239, Pu-240, Pu-241, Cm-244 as well as gross alpha and beta and gamma. However, this varies by media and the environmental media baseline TSDs that will be submitted with the Impact Statement will include additional information.

Question re uranium (U-Nat) (comment 84)

The concentration of uranium and radionuclides in groundwater is controlled by geology and geochemistry. The statement in the IPD at p. 142 was specific to radionuclides. There is also information on measured uranium concentrations in shallow groundwater; the existing concentrations are variable but can range above established drinking water guidelines. The analytical results of the groundwater samples can be found in annual reports posted on the NWMO website.⁴

Question re assessment of dissolved metals and radionuclides (comment 89)

Table 19.1, which is referenced in this comment, presents preliminary measurement indicators used for the screening-level assessment in the IPD and is not intended to represent the full scope of parameters that will

⁴ CanNorth. 2024. Adaptive Phased Management Project – Wabigoon Lake Ojibway Nation-Ignace Area Environmental Media Baseline Program – Year 2 Baseline Report. Prepared for the Nuclear Waste Management Organization. 304p. Accessed February 5, 2026. https://www.nwmo.ca/-/media/Reports-MASTER/Technical-reports/APM-REP-07000-0241-WLON-Ignace-Area-Environmental-Media-Baseline-Program---Year-2-Baseline-Report.ashx?sc_lang=en; KGS Group. 2024. Groundwater Monitoring of Shallow Well Networks – Ignace Pressure Data Annual Report 2022. Prepared for Nuclear Waste Management Organization. Accessed February 5, 2026. https://www.nwmo.ca/-/media/Reports-MASTER/Technical-reports/APM-REP-01332-0411-Monitoring-of-Shallow-Well-Networks-IG-Pressure-Data-Annual-Report-2022-2024-11.ashx?sc_lang=en

be assessed. As part of the Impact Statement and supporting baseline and monitoring programs, a broader suite of groundwater quality parameters will be evaluated based on site conditions, regulatory requirements, and input from Indigenous communities, including ELFN.

Question re spring water valued component (comment 90)

The IPD identifies hydrogeology and groundwater as components to be assessed in the effects assessment and acknowledges that additional work is required to understand how these components may be valued and used by Indigenous communities. As explained above, through the integrated Impact Assessment process, the NWMO is committed to engaging with ELFN so that culturally important groundwater features, such as springs, can be identified and considered in the assessment, mitigation, and monitoring measures.

Question re changes to landscape valued component (comment 91)

The IPD indicates that surface changes to the landscape are expected to be limited to site preparation, construction, and operations, with areas to be decommissioned and reclaimed. The IPD does not draw conclusions on how these changes may be experienced by Indigenous communities, including members of ELFN. This will be examined in greater detail through the integrated Impact Assessment process, and the NWMO welcomes discussion with ELFN about this work.

Question re whether rock is non-acid generating (comment 99)

Section 14.3.1 of the IPD describes the geochemical testing completed to date, which indicates that the excavated rock is not acid generating or metal leaching. The IPD also identifies commitments in Appendix E to undertake additional leachate testing and confirmatory testing as part of ongoing baseline and design work. These additional studies are intended to confirm and further support the current understanding as the Project advances through the integrated Impact Assessment and licensing processes.

Questions re fish (comments 102-103)

The preliminary pathways-of-change and risk screening presented in the IPD is intended to identify where potential interactions may occur and to help scope the level of assessment required in the Impact Statement. The screening concluded that, with proposed mitigation and regulatory controls, residual effects on fish and fish habitat are anticipated to be low.

Yet, the IPD also acknowledges that Project activities may affect fish and fish habitat and that these interactions will be assessed in greater detail through the Impact Statement. It also recognizes the need to incorporate Indigenous Knowledge into this work, and the NWMO welcomes engagement with ELFN about fish and fish habitat and potential effects on ELFN's rights and interests.

This additional work reflects the requirement in the *Impact Assessment Act* to complete a full effects assessment in the Impact Statement, regardless of the preliminary screening outcome. This ensures that the assessment of fish and fish habitat is fully evaluated to meet both impact assessment and licensing requirements

Question re changing permitting requirements (comment 104)

The IPD identifies that the Project will be subject to applicable federal and provincial permitting requirements, including those related to species at risk. The NWMO will be required to meet the regulatory requirements in place at the time of permitting and licensing.

Question re Environmental Monitoring Plan (comment 108)

The IPD is an early regulatory submission in the integrated Impact Assessment process. Additional commitments, including detailed monitoring commitments and the development of Project-specific Environmental Monitoring Plans, will be provided as part of the Impact Statement and the Initial Licence Application to the CNSC. Project-specific Environmental Monitoring Plans will be developed to support the site preparation, construction, operations, and future decommissioning phases of the Project. Under the *Nuclear Safety and Control Act*, the CNSC also requires licensees to implement environmental protection programs, compliance monitoring programs, and an environmental management system. These programs include monitoring of biophysical components such as vegetation, wetlands, wildlife, birds, and species at risk, as applicable to the activities being licensed. These monitoring and follow-up programs will verify the accuracy of predictions made in the Impact Statement, confirm the effectiveness of mitigation measures, and measure concentrations of contaminants of potential concern in the environment to assess potential exposures to the public, consistent with the CNSC's graded approach. Monitoring programs are typically developed in accordance with CSA standards (e.g., CSA N288 series) and CNSC guidance such as REGDOC-2.9.1, Environmental Protection.