

NUCLEAR WASTESOCIÉTÉ DE GESTIONMANAGEMENTDES DÉCHETSORGANIZATIONNUCLÉAIRES

Phase 2 Preliminary Assessments

Summary findings and decisions based on advanced detailed studies

NOVEMBER 2019

Contents

1.	Purpose of document	2
2.	Findings from studies to date	3
	Potential for safety Potential for safe and secure transportation Potential for partnership	3 4 4
3.	The way forward	7
	Decisions Acknowledging leadership Challenges ahead	7 7 7
4.	Background on Canada's plan and the site selection process	8
	A matter of safety and responsibility Adaptive Phased Management The site selection process	8 8 9
5.	An appropriate site	10
6.	Advancing understanding through detailed studies	11
	Potential for safety Potential for safe and secure transportation Potential for partnership	11 13 14
7.	Moving forward in partnership	16

1. Purpose of document

The purpose of this document is to provide an overview of findings from studies completed to date in the area around the five communities remaining in the Nuclear Waste Management Organization's (NWMO) site selection process: Hornepayne, Huron-Kinloss, Ignace, Manitouwadge, and South Bruce. These communities remain from a list of 22 that entered the site selection process to learn about Canada's plan for the safe, long-term management of used nuclear fuel and to explore the potential for hosting the project in their area.

Since these communities first expressed interest in participating, the process has advanced to include learning about the project and exploring the potential for building partnerships with First Nation, Métis and municipal communities in the broader areas. These communities include Wabigoon Lake Ojibway Nation, Saugeen Ojibway Nation, Constance Lake First Nation, Ganoogaming First Nation, Métis Nation of Ontario and regional communication committees, City of Dryden, and other Indigenous and municipal communities now involved in learning and discussions in potential siting areas.

Based on findings from studies to date, this document identifies which siting areas have strong potential to meet the robust safety requirements of the project and will be the focus of more detailed study and further assessment.

Through further study and engagement with people in potential siting areas, the NWMO is working to identify a single preferred site for the deep geological repository and associated Centre of Expertise by 2023. The site selected will meet or exceed safety requirements, and be located in a place with a supportive partnership involving the community that initially entered the site selection process, and First Nation, Métis and municipal communities in the area.

The site selection process involves gradually narrowing down to focus progressively more detailed studies in areas with strong potential to meet the robust project requirements. Since the initiation of the siting process in 2010, both technical and social desktop and field studies have guided decision-making. This narrowing down decision is the latest in a series of decisions:

- 1. At the conclusion of Phase 1 Preliminary Assessments in various areas: November 2013, January 2014, December 2014, January 2015;
- During Phase 2 Preliminary Assessments Initial Studies: January 2014, December 2014, March 2015;
- 3. At the conclusion of Phase 2 Preliminary Assessments Initial Studies: June 2017, December 2017; and
- 4. During Phase 2 Preliminary Assessments Detailed Studies in all remaining areas: November 2019.

Descriptions of previous decisions and rationale are available at www.nwmo.ca.

2. Findings from studies to date

Ongoing studies suggest strong potential to develop a deep geological repository with a strong safety case in each of the siting areas.

There is also strong potential to develop a safe and secure transportation plan to move used fuel from interim storage facilities to a site in each of these areas.

However, the potential to build the partnerships required to advance the project differs across siting areas. While there is some potential in each siting area, as discussed in the following sections, two appear to have strong potential to develop the depth and breadth of partnerships required for the project.

Potential for safety

There is strong potential to develop a deep geological repository with a strong safety case in each of the siting areas.

In each of the Ignace, Hornepayne and Manitouwadge siting areas, potential geologically suitable repository areas were identified based on results from detailed desktop technical studies and field investigations such as airborne geophysical surveys and geological mapping. Through discussion with people in each area about a number of potentially geologically suitable sites, the NWMO identified potential repository locations for initial borehole studies. These include the Revell Batholith (Ignace area), Black-Pic East Batholith (Hornepayne area) and Black-Pic West Batholith (Manitouwadge area).

In Huron-Kinloss and South Bruce, detailed assessment of available historic local and regional geoscientific studies, including recent deep borehole data from the Bruce nuclear site, showed that the geological setting has a number of favourable characteristics for hosting a deep geological repository for used nuclear fuel. Based on key geoscientific characteristics and constraints considered in the assessment, the Municipality of South Bruce and the Township of Huron-Kinloss contain large areas with potential to meet geoscientific site evaluation factors and requirements.

Environmental studies conducted to date identified no environmental conditions that would preclude siting the repository in any of the three areas. Environmental effects are expected to be similar to other large industrial or mining projects, and it is anticipated that long-term interactions or potential environmental consequences can be managed or mitigated through a combination of in-design features, operating procedures, and implementation of a sound environmental management plan.

While each of the communities appear to have favourable geoscientific and environmental characteristics for hosting a deep geological repository, more detailed studies are required to further assess their potential to meet the project's robust technical requirements.

Potential for safe and secure transportation

There is potential to develop a safe and secure transportation plan to move used fuel from interim storage facilities to each siting area.

The NWMO is developing our transportation program to meet or exceed all regulatory requirements, including packaging, radiological security, emergency response, and conventional vehicle safety requirements. Transportation distance, cost and carbon footprint vary by siting area. However, at this preliminary phase of work, these differences are not instrumental in the narrowing down decision.

Potential for partnership

Awareness, learning and project support is building, and there is potential to build partnerships in each siting area; however, two areas appear to have strong potential to develop the depth and breadth of partnerships required for the project. One is around Ignace, and the other around Huron-Kinloss and South Bruce.

Awareness, learning and project support is building in each of the siting areas

In each siting area, awareness and support for the project is building, as is confidence in the safety of the project. There is potential for the project to contribute to the well-being of each of these areas, and to align with the long-term vision and aspirations identified by people living there. There is also growing interest in the project and engagement in dialogue about it. The project would go far to address many economic development and social priorities identified by people in each of the communities and areas.

In each community that entered the siting process and triggered studies in their area, there is strong leadership advancing discussion of the project among residents, and grassroots involvement is growing. Strong community liaison committees and working groups have met monthly for several years, advancing active learning and discussion. Social service, resource management and economic development groups have become involved in learning and discussion. In each community, strong leaders have reached out to municipal and Indigenous communities to help build the relationships needed.

Many Indigenous communities have become involved in learning and discussion in each area, and in some areas, they have helped guide and oversee technical studies on land within their traditional territory. There has been advancement in awareness, interest and engagement in all siting areas.

Project alignment and potential for partnership is strong in two siting areas

Strong alignment between aspirations, vision and objectives of municipal and Indigenous communities is a key requirement for long-term project support and sustainable partnerships to implement the project. Although there is potential for alignment in each area, this potential is particularly strong in the area around Ignace in northwestern Ontario, and the area of Huron-Kinloss and South Bruce in southern Ontario, and less so in the areas around each of Hornepayne and Manitouwadge in northeast Ontario. The potential to build the depth and breadth of partnerships required to implement the project is, similarly, stronger in these two areas.

IGNACE AREA

In the area around the Township of **Ignace**, there appears to be strong general alignment at the leadership and grassroots levels of local aspirations and vision with what the project can provide. A strong foundation for the project and partnerships is developing. There appears to be growing widespread awareness of and support for the project, public confidence in safety, and public support for ongoing field studies on a potential repository site. Ignace leaders and the NWMO have been able to build and maintain relationships with other communities in the area, which are also engaged in learning. These include **Dryden** and the **Local Services Boards** of Wabigoon Village and Melgund.

Wabigoon Lake Ojibway Nation has taken a strong leadership role in advancing learning and discussion of the project, both within its community and in the broader area. It has been actively involved in planning field studies, including ceremonies and sharing Indigenous Knowledge of the area identified as a potential repository site within its traditional territory. Wabigoon Lake Ojibway Nation has assumed a leadership role in the region, instituting learning and sharing gatherings, where regional Indigenous communities are invited to send participants, receive information on the project and share perspectives.

Other Indigenous communities in the area are also involved in learning and discussion.

HURON-KINLOSS/SOUTH BRUCE AREA

In the areas of Huron-Kinloss and South Bruce, there appears to be strong general alignment of the project with community and area aspirations. A process is currently underway to identify and access land in each of these communities, with the goal of identifying a single potential repository site in one of the two communities on which to focus borehole studies, engagement and partnership activities.

In **South Bruce**, the community as a whole has strong general alignment of local aspirations and vision for what the project can provide. This is evident in the support the community has provided in the process of identifying and aggregating land for the project. A strong foundation for building supportive partnerships is developing. There appears to be growing awareness of and support for public confidence in safety, public support for field studies and identification of a potential repository site.

In **Huron-Kinloss**, the general alignment of the project with local aspirations and vision of the community as a whole is strong. There appears to be growing awareness of and support for public confidence in safety, public support for field studies and identification of a potential repository site. A foundation for building supportive partnerships is developing; however, there are some within the community who appear to hold a different view of well-being with which the project does not align.

The **Saugeen Ojibway Nation** (Chippewas of Nawash First Nation and Chippewas of Saugeen First Nation) is currently involved with the NWMO through a Learn More Agreement. It is currently focused on other projects in its area, but it is following NWMO project activities. Based on ongoing discussions, the NWMO expects that the Saugeen Ojibway Nation will become more engaged in the site selection process. Given the Saugeen Ojibway Nation's general knowledge about nuclear projects, the NWMO considers there to be potential for developing needed partnerships by 2023. Other Indigenous communities in the area are also involved in learning about the project.

AREAS OF HORNEPAYNE AND MANITOUWADGE

In the **Manitouwadge** area, the project appears to strongly align with local aspirations and vision in the community of Manitouwadge; however, it does not appear to align with the long-term vision for the area of the First Nations in closest proximity to the potential site. The NWMO believes it will be challenging to build the required partnerships with First Nations in the immediate vicinity of the proposed borehole drilling sites within the planning time frame.

In both the community of **Hornepayne** and in the surrounding area, the general alignment of the project with local aspirations and vision is strong among some in the community and less so among others. Groups within the community and area tend to view the project in different ways and level of interest, and support for the project varies. People in the area appear to hold a range of perspectives on how the area should achieve growth and advance well-being, and the extent to which they are comfortable with achieving this through a nuclear-related project. Reasons that tend to be cited include concern about safety, potential effects on relationships with Indigenous groups in the area – some of which have stated opposition to the project – and potential changes in community character with the introduction of a large project and population growth. Some of these concerns might be addressed over time through awareness building and learning activities; however, some appear to be related to fundamental values (e.g., views about the nuclear industry) that are unlikely to change during the NWMO's planning period.

3. The way forward

Decisions

At this time, the NWMO is announcing our intention to focus the next set of more detailed studies in two siting areas: the area around Ignace, and the area of South Bruce and Huron-Kinloss. In South Bruce and Huron-Kinloss, one of these communities will move forward once a potential repository site is located through the ongoing land access process. The NWMO will continue to engage with municipalities and Indigenous communities in these areas to explore potential to meet the requirements of the project, both with respect to technical safety and potential to advance the project in partnership.

At this time, the NWMO is concluding studies in the areas around Hornepayne and Manitouwadge.

Acknowledging leadership

With this announcement, studies will no longer continue in potential repository locations in the areas of Hornepayne and Manitouwadge. We would like to acknowledge the leadership of communities in these areas and their contribution on behalf of all Canadians to advancing Canada's plan.

An investment will be made in the well-being of municipal and Indigenous communities that have led siting activities in these areas.

Challenges ahead

It is important to note that the remaining siting areas have not been confirmed as suitable for hosting the project. Further study is needed to confirm technical suitability, communities will need to confirm willingness to host the project, and supportive partnerships will need to be confirmed.

Regarding **safety**, additional field studies and more detailed site evaluations are required before the NWMO, communities and the regulator could be satisfied. There is more information to be gathered, data to be analyzed and uncertainties to be explored in collaboration with communities to better understand each site's potential to meet requirements.

More work is required in each area to develop and confirm that **partnerships** required by the project can be established. Work needs to continue to explore specifics of how the project could be implemented in each area, and the shape and form of partnership moving forward. Community questions about the project and the basis of confidence in safety will need to be addressed in a compelling manner. This work will include collaborative development of project implementation plans and draft partnership agreements to inform future decisions.

In South Bruce and Huron-Kinloss, the land access process will need to be completed to identify a potentially socially acceptable repository site.

An important question that will need to be addressed is what constitutes **willingness** and **support** for the project, and how we will recognize whether willingness and support in an area is sufficient for the project to proceed and has been freely given. This will be an important area of reflection for the NWMO and communities advancing in this process, and thinking will need to be shared as it continues to evolve.

4. Background on Canada's plan and the site selection process

A matter of safety and responsibility

Used nuclear fuel is currently safely stored at nuclear generating stations in licensed, purposebuilt, water-filled pools, and in concrete and steel containers referred to as dry storage. Used nuclear fuel needs to be contained and isolated from people and the environment for hundreds of thousands of years. Storage at nuclear plant sites is interim; a long-term management approach is needed.

During a three-year nationwide dialogue to develop Canada's plan, citizens said we have benefited from the energy produced and therefore have a responsibility to put in place a plan to manage the used fuel we have created. We must not leave it as a burden on future generations.

Adaptive Phased Management

Canada's plan involves placing used nuclear fuel in a deep geological repository. It features a multiple-barrier system to contain and isolate the used fuel from people and the environment for the long period of time required.

Canada's plan also involves a management system that ensures decisions are made in phases with citizens involved throughout. We continue to learn and adapt plans in response to advancements in technical knowledge, evolving societal expectations and values, insight from Indigenous Knowledge, and changes in public policy. The plan requires the deep geological repository and the accompanying Centre of Expertise to be sited in an area where safety can be assured and where there is an informed and willing host.

Technical method

- Centralized containment and isolation of used nuclear fuel in a deep geological repository
- » Continuous monitoring
- » Potential for retrievability
- » Optional step of temporary shallow underground storage (not currently included in the NWMO's implementation plan)

Management system

- » Flexibility in pace and manner of implementation
- » Phased and adaptive decision-making
- » Responsive to advances in technology, research, Indigenous Knowledge, and societal values
- » Open, inclusive and fair siting process to seek an informed and willing host
- » Sustained engagement of people and communities throughout implementation

Canada's plan is described in more detail in *Description of a Deep Geological Repository and Centre of Expertise for Canada's Used Nuclear Fuel*, available at www.nwmo.ca/brochures. The plan continues to be refined through an active technical demonstration and testing program, and discussion with communities involved in the site selection process.

Adaptive Phased Management (APM) was developed through a nationwide dialogue with Canadians. After examining a range of plans, APM was selected by the Government of Canada as Canada's plan in 2007, pursuant to the *Nuclear Fuel Waste Act* (2002).

The site selection process

The siting process was initiated in 2010 with the publication of a road map developed collaboratively with a cross-section of Canadians, including Indigenous peoples, through a two-year dialogue. Communities initiated siting activities by coming forward to learn about Canada's plan and the site selection process, and to begin studies to explore their area's potential to meet project requirements.

Over time, technical and social studies have become progressively more detailed. They are planned and implemented collaboratively with people in each area. As work advances, engagement activities have broadened to involve First Nation and Métis communities and surrounding communities in studies and reflection on whether the project can be safely sited and is a "good fit" for the area, taking into account community and area aspirations.

The map below identifies the communities that came forward to initiate the siting process in their area, as well as the subset of those communities whose areas continue to be a focus of study.



5. An appropriate site

The process and criteria for selecting a preferred site was laid out in a siting road map, *Moving Forward Together: Process for Selecting a Site for Canada's Deep Geological Repository for Used Nuclear Fuel*, published in 2010, before the siting process was initiated.

This process for choosing the site is grounded in the values and objectives outlined by citizens as important. The process is also designed to be open, transparent, fair, and inclusive, and to ensure that the highest scientific, professional and ethical standards are met.

The safety and appropriateness of any site is assessed against a number of factors, both technical and social in nature. The preferred site is one that can be demonstrated to be able to safely contain and isolate used nuclear fuel, protecting humans and the environment over the very long term. Locating the facility at the preferred site will also help foster the well-being, or quality of life, of the local community and region in which it is implemented. Evaluation factors relate to both safety and "beyond safety."

Transportation is an important consideration in the assessment of any site. For a site to be considered technically safe, a transportation route must be identified or be capable of development by which used nuclear fuel can safely and securely be transported to the preferred site from locations where it is currently stored. Transportation is also considered in identifying and assessing effects on community well-being.

Canada's plan requires that the deep geological repository and Centre of Expertise be sited in a willing community. As we have worked together with communities to advance the siting process, we have come to understand that the project also requires a supportive partnership involving the initiating community and First Nation and Métis communities in the area coming together to implement the project. The ability to develop a supportive partnership sufficient to implement the project is an important factor in assessing and deciding on a preferred site.

SAFETY	Confidence a deep geological repository can be developed with strong safety case at that location		
TRANSPORTATION	Confidence a safe, secure and socially acceptable transportation plan can be developed		
PARTNERSHIP	Confidence a strong partnership can be developed – with interested community, First Nation and Métis communities in the area, and surrounding communities		

Three key factors in selection of a preferred location to take into detailed site characterization

6. Advancing understanding through detailed studies

We are continuing to advance Preliminary Assessments. Preliminary Assessments are a key component of the site selection process. Preliminary Assessments build on earlier studies and are designed to deepen understanding of rock characteristics at potential repository sites, potential for a willing host, and potential to develop a supportive partnership to implement the project in the area.

More detailed studies involve borehole investigations at locations that could be repository sites, and extensive monitoring and testing. Activities are also advancing along a partnership road map – a sequence of activities that explore in more detail the ability to create the needed partnerships for the project, and culminate in draft project implementation plans and potential hosting agreements.

These activities require intensive effort by municipal, First Nation and Métis communities in siting areas, as well as for the NWMO. As these studies advance, it is important to focus work in areas with strong potential to meet the requirements of the project.

Potential for safety

The site selection process is designed to ensure, above all, that the site selected for the repository is safe and secure for people and the environment, now and in the future.

For each area remaining in the process, early desktop assessments found potential to meet technical project requirements related to engineering and safe construction, safe and secure transportation, and geoscientific suitability focused on the quality of the rock to safely contain and isolate the used nuclear fuel. Ongoing studies and assessments focus on further exploring potential to address project requirements related to geoscientific suitability and potential environmental effects. These include the following key safety considerations:

- Containment and isolation characteristics of the host rock: Are the characteristics of the rock at the site appropriate to ensuring the long-term containment and isolation of used nuclear fuel from humans, the environment and surface disturbances caused by human activities and natural events?
- Description of the site: Is the rock formation at the site geologically stable and likely to remain stable over the very long term in a manner that will ensure the repository will not be substantially affected by geological and climate change processes such as earthquakes and glacial cycles?
- Repository construction, operation and closure: Are conditions at the site suitable for the safe construction, operation and closure of the repository?
- >> Human intrusion: Is human intrusion at the site unlikely, for instance through future exploration or mining?
- Site characterization: Can the geological conditions at the site be practically studied and described on dimensions that are important for demonstrating long-term safety?

Field studies have advanced our understanding of the potential to identify suitable repository sites. In northern Ontario siting areas, where the geology is comprised of crystalline rock, these studies have provided new data and have included the following key activities:

- » Acquisition and processing of high-resolution airborne geophysical data (magnetic and gravity);
- Detailed interpretation of the high-resolution geophysical data (gravity and magnetic) to better understand the bedrock geology such as geological contacts, depth and extent of rock units, and lithological and structural heterogeneity;
- Detailed interpretation of surficial and magnetic lineaments using newly acquired high-resolution remote sensing and magnetic data to identify possible structural features such as fractures shear zones and dykes; and
- Geological mapping to assess geologic characteristics, including lithology, structure, bedrock exposure, and surface constraints.

In the area of Huron-Kinloss and South Bruce, where the geology is made up of sedimentary rock, studies have involved:

- Assembly and detailed review of available geoscientific information such as geology, structural geology, natural resources, hydrogeology, and overburden deposits (surficial deposits);
- >> Interpretation of available geophysical surveys;
- Interpretation of available borehole geophysical data and selected 2D seismic reflection surveys to provide information on the geometry and potential structural features of the subsurface bedrock geology;
- Terrain analysis studies to help assess overburden (surficial deposits) type and distribution, bedrock exposures, accessibility constraints, watershed and sub-watershed boundaries, and groundwater discharge and recharge zones;
- Assessment of land use and protected areas, including parks, conservation reserves, heritage sites, and source water protection areas; and
- Identification and evaluation of general potentially suitable areas based on systematic assessment of key geoscientific characteristics and constraints that can be realistically assessed at this stage of the assessment.

Acquiring and interpreting this data has advanced understanding of the geology of these areas, and allowed for a deeper understanding of the geoscientific uncertainties and complexities identified in earlier desktop assessments. The findings of these geoscience studies are documented in reports produced for each area and available on the NWMO website (www.nwmo.ca/reports).

Environment studies conducted to date have also included preliminary desktop and field studies to better understand features and conditions in each area. Desktop studies assessed, in a preliminary way, the potential to ensure the health and safety of people and the environment, and the potential to manage environmental effects that might result from the project. A range of environmental components were considered, including atmospheric environment, subsurface environment, aquatic environment, terrestrial environment, radiation and radioactivity, and cultural resources.

Environment field studies conducted to date have focused on potential siting areas around Ignace, Hornepayne and Manitouwadge. The study areas were identified through desktop studies and dialogue with people in the area. These recent studies included non-intrusive on-site observations and field mapping through the following activities:

- Description Updating the natural features maps incorporating the latest Ministry of Natural Resources and Forestry information;
- >> Identifying sensitive species habitat use and/or suitability in the areas;
- » Updating the mapping of terrestrial and aquatic habitat areas;
- >> Preparing preliminary ecological land classification (ELC) maps;
- Identifying and mapping known or potential ecological features, including ELC ecosites, candidate significant wildlife habitat, stream reach classification, and sensitive species habitat use; and
- Evaluating the potential impacts of siting work activities (e.g., drilling, road construction), involving limited preliminary environmental data collection, including soil, surface water and sediment samples near potential drilling and road construction areas.

Findings of these environment studies are documented in reports for each area and are available on the NWMO website (www.nwmo.ca/reports).

Potential for safe and secure transportation

Transportation is an important consideration in the assessment of any site. Ultimately, confidence must be established that a safe, secure and socially acceptable transportation plan can be developed to the preferred site.

For each potential siting area remaining in the process, early desktop assessments found potential to meet technical requirements related to transportation, based on publicly available information, supplemented by information provided by the community and observations during NWMO staff visits.

The NWMO considered factors related to comprehensive transportation safety regulation and oversight processes the project will need to meet. The robust Used Fuel Transportation Package, used fuel quantities and transport frequencies, and used fuel transportation experience within Canada and internationally were also considered.

Technical studies are underway to support more detailed assessment at a later stage of study, including detailed worker and public dose assessment, transportation logistics studies and risk assessment, road and rail transport package designs, and detailed mode and route options.

The NWMO is currently leading a dialogue to identify the social framework that should guide future transportation planning to ensure transportation is not only safe and secure, but also meets the needs of citizens irrespective of the site selected. The framework will lay out clear objectives, issues that will need to be addressed, factors to consider in making decisions, and means we will use to ensure the plan includes the best knowledge and experience, as well as the values and priorities of citizens.

The questions and concerns of citizens will need to be addressed through more detailed studies. All citizens share an interest in ensuring the safe and secure transportation of used nuclear fuel to a site where it will be contained and isolated from people and the environment, and where people are informed and supportive of hosting the facility on behalf of Canada.

The NWMO plans to publish for further discussion a draft framework in 2020 that reflects the direction from engagement and dialogue to date. We have time to develop the transportation plan together and consider it carefully, as transportation is not expected to begin before 2040.

Potential for partnership

The site selection process is designed to ensure any preferred site has an informed and willing host. Beyond this, the NWMO is seeking a supportive partnership involving the community that initiated the siting process in the area, First Nation and Métis communities, and surrounding communities.

Engagement activities help advance learning and dialogue among individuals and communities, and explore project support. Engagement also advances discussions to explore potential to foster the well-being of the community, as defined by people in the area, through implementation of the project. This work is considered an important foundation piece for support and partnership.

The potential to develop a binding and sustainable partnership around the implementation of the project by 2023 is a critical consideration in advancing the siting process in any area. Building on earlier studies, assessment at this stage has focused on assessing each of the following:

- Potential for support for the project, including level of awareness, interest and ability to sustain learning about the project;
- Potential for community and area confidence in the safety of the project, including level of understanding of the safety case and confidence and acceptance of it;
- Potential for support for field investigations to identify a potentially acceptable repository site, including support for planned and ongoing field studies;
- Potential for support for potential technically suitable repository site(s) and extent of participation in discussions about them; and
- Potential for alignment of project well-being opportunities with community and area vision and strategies, including the extent to which well-being opportunities that can be fostered by the project are recognized, understood, and responsive to the priorities and objectives of communities.

A program of engagement and assessment activities has been ongoing since the initiation of the site selection process in siting areas, in some cases beginning in 2012. These activities have involved:

- Learning activities to explore the basis of confidence in safety of the project, and to understand interest and ability to sustain learning as would be required to make an informed decision;
- Involving communities in planning and conducting studies to learn about the land, culture, and local and traditional knowledge of the area;
- Involving people in the area to review potential technically suitable sites and identify which might be socially acceptable for borehole drilling and ultimately siting the project; and
- Exploring potential to foster area well-being through implementation of the project, including understanding the priorities, objectives and vision of people in the area, and alignment with what the project can provide.

Activities have included a sustained program of one-on-one meetings, meetings with community organizations, attendance at local and area events, community liaison committee and working group meetings, learning and sharing gatherings, engagement of Elders and youth, and open houses. Activities have extended beyond municipal and Indigenous communities in the immediate vicinity to include trappers, camp owners/operators, forestry organizations, and economic development groups where appropriate.

Activities have also included outreach and engagement to First Nation, Métis and municipal communities in the surrounding area. More recently, engagement has deepened with some communities to more detailed exploration of the project progressing along the steps of a partnership road map. Communities in each area identified values and principles to guide more intensive and detailed discussions about the project and the conditions for partnership. Discussions are ongoing to develop a shared vision of the project if it is implemented in the area.

The focus and intensity of engagement has differed across siting areas. Willingness of communities to engage in learning and to explore the project at a pace and manner that can build towards the partnerships needed to advance the project is an increasingly important consideration. In addition to supporting communities' individual journeys to explore the project, increasingly, engagement also focuses on building relationships to advance the project with municipal and Indigenous communities together and in a co-ordinated way, with the goal of developing draft partnership agreements by 2023. The NWMO has taken great care to work with communities at their own pace, while also encouraging and preserving opportunities for them to come together to explore the project.

A description of activities conducted in each area and the results of engagement are documented in more detailed reports available on the NWMO website (www.nwmo.ca/reports).

7. Moving forward in partnership

The NWMO will continue the process of narrowing down to identify a single preferred site by 2023. That site will then be the focus of detailed site characterization and regulatory and licensing review. The preferred site must have a suitable rock formation in an area with an informed and willing host. The project will only move forward in an area with the involvement of the interested community, along with First Nation, Métis and surrounding communities, working together to implement it in a supportive partnership.

We look forward to continuing to work collaboratively with communities to implement Canada's plan for the long-term management of the country's used nuclear fuel.



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