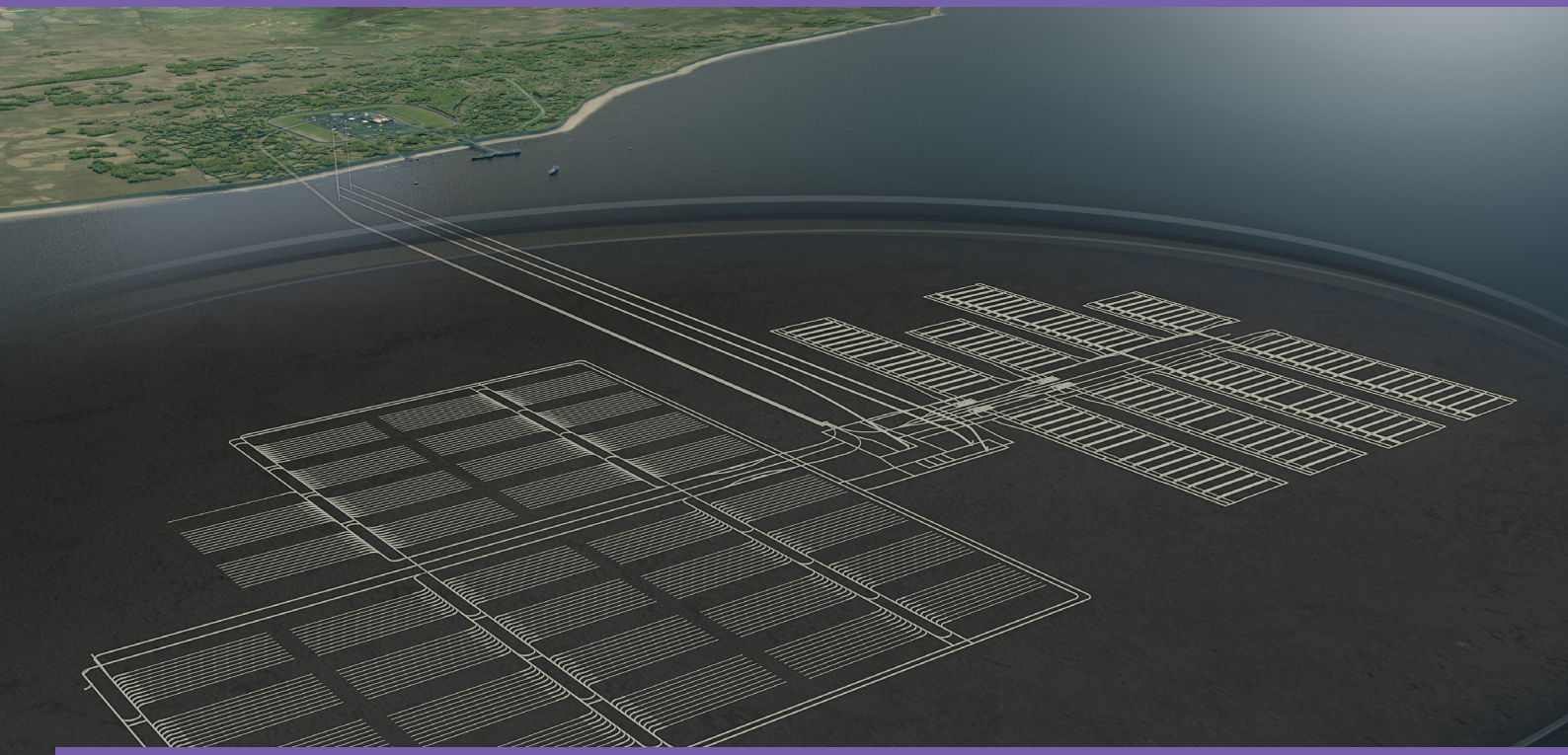
South Copeland GDF
Community Partnership Newsletter



Welcome to the eighth printed newsletter from South Copeland GDF Community Partnership. We're now almost three years into being a part of the GDF programme.

Contents

By the time this newsletter is delivered to you, we will have hopefully granted the full third £1million Community Investment Funding (CIF) allocation to the South Copeland community.

This funding is provided to all communities in Search Areas as they take part in the Geological Disposal Facility (GDF) siting programme - recognising that this is a long, considered process.

There is a continued opportunity for local projects to access CIF in 2025, so do get in touch if you'd like to find out more or apply (more information on page 15).

Attending the International Atomic Energy Agency's Technical Meeting on Strengthening Local Stakeholder Engagement in Vienna.

While this funding is being granted, we're also now thinking about the longer term. If a suitable site was found and this area chosen to host a GDF, what could a community vision look like, so that the Significant Additional Investment package would be of maximum benefit? We're keen to hear your views in developing this vision – you can read more about this on page 6.

Community Partnership member Bill Amos and I recently attended the International Atomic Energy Agency's Technical Meeting on Strengthening Local Stakeholder Engagement in Vienna. The five-day event encouraged conversations among representatives of areas involved in nuclear around the world. It was interesting to hear from local communities and organisations operating nuclear facilities and those involved in the earlier initiation, siting, and construction phases of nuclear projects.

There's a lot that we can learn from international collaboration, and within this newsletter on page 8 we speak to Jamie Matear, Director of Siting Coordination at Canada's Nuclear Waste Management Organization (NWMO), and look at some of the similarities and differences between the UK and Canada's GDF programmes. Canada is 21 years into its GDF programme, and two communities there, the Township of Ignace and Municipality of South Bruce, have recently confirmed their willingness to move forward to the next phase of the site selection process to host a deep geological repository.

The UK GDF developer, Nuclear Waste Services, has recently published a video on Copeland's geology, issued their Property Value Protection Scheme (page 13) and their GDF Annual Report (page 13) – all of which are available to access on our website news section.

The GDF regulators, the Environment Agency (EA) and Office for Nuclear Regulation (ONR), have also recently published their annual NWS scrutiny report, that summarises our work relating to the geological disposal of radioactive waste during 2023 to 2024 (page 13).

It's very important to the Community Partnership that the public receive information from a range of reliable sources, so we have collated a list of information sources independent of NWS that you can read on our website if you are interested in learning more (more detail on page 13).

Finally, we are still looking for additional Community Partnership members who can speak for youth, seldom heard, tourism, and agriculture, so if you are interested in joining us in leading this vital conversation with our community, please get in touch.

Wishing you a wonderful Christmas and all the best for 2025.

Ged McGrath
Chair, South Copeland GDF Community Partnership

GDF progress from NWS:

Finding a suitable site for a Geological Disposal Facility

An important part of the journey towards a Geological Disposal Facility (GDF) is identifying potentially suitable sites.

Nuclear Waste Services (NWS) is currently gathering information to understand if the current Search Areas – in South Copeland and Mid Copeland in Cumbria and Theddlethorpe, in Lincolnshire - could be suitable to host a GDF. A Search Area is the geographical area on land made up of one or more electoral wards, where NWS is considering potential sites.

A GDF is a facility designed to safely and securely dispose of the most hazardous radioactive waste in highly engineered vaults and tunnels deep underground.

For a location to be suitable, it needs to include the right sub-surface geological environment, deep underground for the disposal area; a surface location; and the ability to connect the two with accessways.

As it's difficult to carry out some of the more detailed feasibility studies required in large Search Areas, and the adjacent inshore (the area beyond the coast out to a maximum of 22km), NWS identifies smaller 'Areas of Focus' in the Search Area, as the next step in the process of finding potentially suitable sites.

This allows focused site evaluation studies and prioritisation of resources to consider the potential for an area to safely host a GDF.

Simon Hughes, NWS' Siting and Communities Director, said:

"The process we're following towards identifying Areas of Focus is similar to the approach taken by other large infrastructure projects. Areas of Focus are identified using existing information and help us consider where may have the potential to host project infrastructure.

"This stage isn't to define an exact site, it's to help decide which areas we could take forward for more detailed investigations. This would include drilling boreholes to better understand the geology deep below the surface, where the underground part of a GDF would be built.

"Early next year we will publish an update and our teams will be out in communities to explain our findings, hear feedback and consider next steps. A GDF will only be built where there is a willing community and a suitable site."

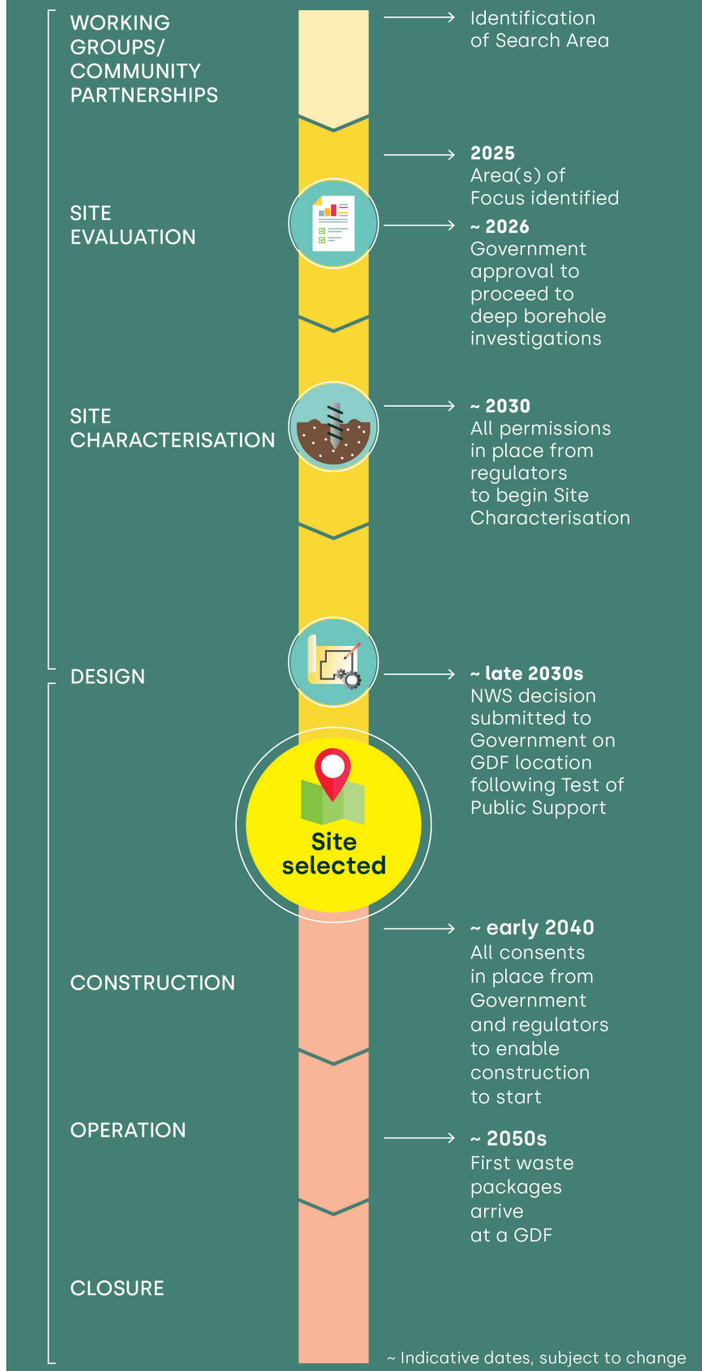
A decision on the site(s) to take forward in the process for more detailed investigations would need to be approved by the Secretary of State. Exact locations for borehole drilling would be determined though consultation and environmental assessment work.

Over many years borehole data, together with results from research and development, will be used to build understanding of whether an area could safely host a GDF.

Further permissions and a positive Test of Public Support (ToPS) would also be required for development of a GDF. Applications for these permissions will require consultation and environmental assessment studies to help develop and refine NWS' preferred GDF site location and boundary.

The whole process to identify a preferred site is expected to take 10-15 years, while constructing, operating and closing the facility would take 150 years or more.

For more information on this, visit NWS' new website: **https://nuclearwasteservices.uk/disposal/geological-disposal/areas-of-focus/**

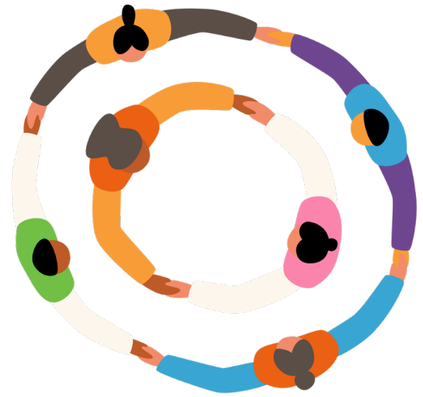


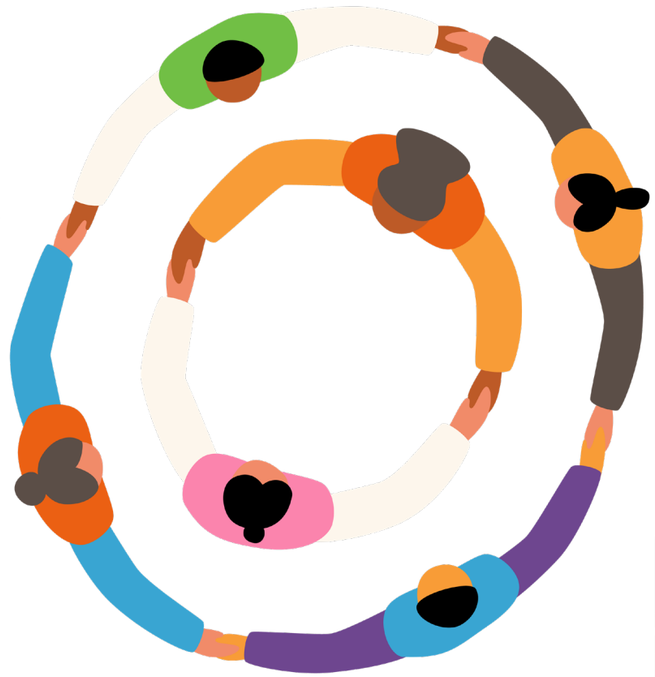
Tell us what matters to you

Help create a Community Vision

One of the key roles of the Community Partnership is to create a local community vision. This involves working with local people to consider how you would like your community to evolve, and whether a GDF could play a part in that.

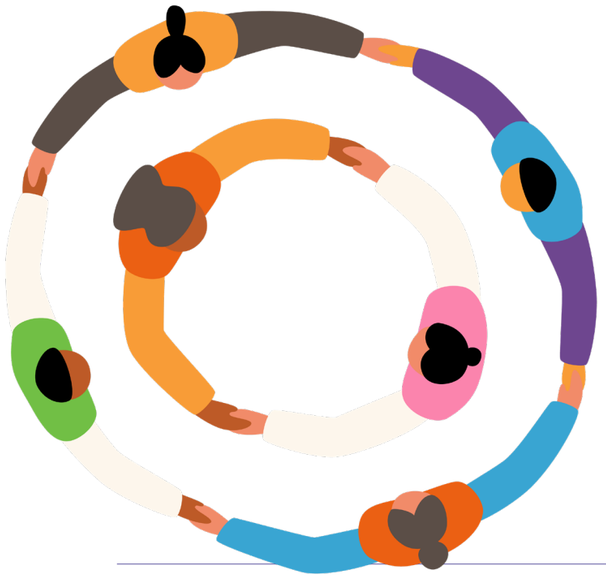
The UK Government will provide Significant Additional Investment to the community that is ultimately selected to host a GDF, and this investment will be shaped by the community vision. It could, for example, include local education and skills, transport infrastructure or recreational facilities.





Share your views

To support the development of the vision, and ensure it reflects the community's hopes and aspirations for the future, we would like to know what matters to you. Consider how you feel about this area: What do you most value? What, if anything, would you like to change, add or improve? We are interested in all opinions, views and ideas.



You can share your views online by accessing our webform and completing a set of questions there:

Why does the UK need a GDF?

The purpose-built, above ground facilities where the UK currently keeps radioactive waste – most of which are at Sellafield in Cumbria – are designed to be safe for around 100 years, and do not provide a permanent solution. They need to be continually monitored and periodically refurbished to keep the waste secure while the radioactivity naturally decays. For some of the waste this will take many thousands of years, so even if well maintained, eventually, they will need to be replaced, or the waste moved elsewhere. Surface storage is also vulnerable to natural and human effects.

In 2003, the Committee on Radioactive Waste Management (CoRWM) was established with the purpose of considering how to manage the UK's higher activity radioactive waste in the long term, to protect people and the environment. In 2006, it was concluded that, within the present state of knowledge, a Geological Disposal Facility is the best available approach. This continues to be under review and remains CoRWM's position.

Geological disposal involves isolating the most hazardous radioactive waste deep underground, inside a suitable rock volume to ensure that no harmful quantities of radioactivity reach the surface environment. A GDF will be a highly engineered structure consisting of multiple barriers that will provide protection to people and the environment over hundreds of thousands of years whilst the radioactivity naturally decays. This will be at a depth of between 200 and 1,000 metres.

NWS is currently assessing three Search Areas: South Copeland and Mid Copeland in Cumbria and Theddlethorpe in Lincolnshire. If a suitable site is found, there will be a Test of Public Support. Without the community's support, the project will not go ahead.

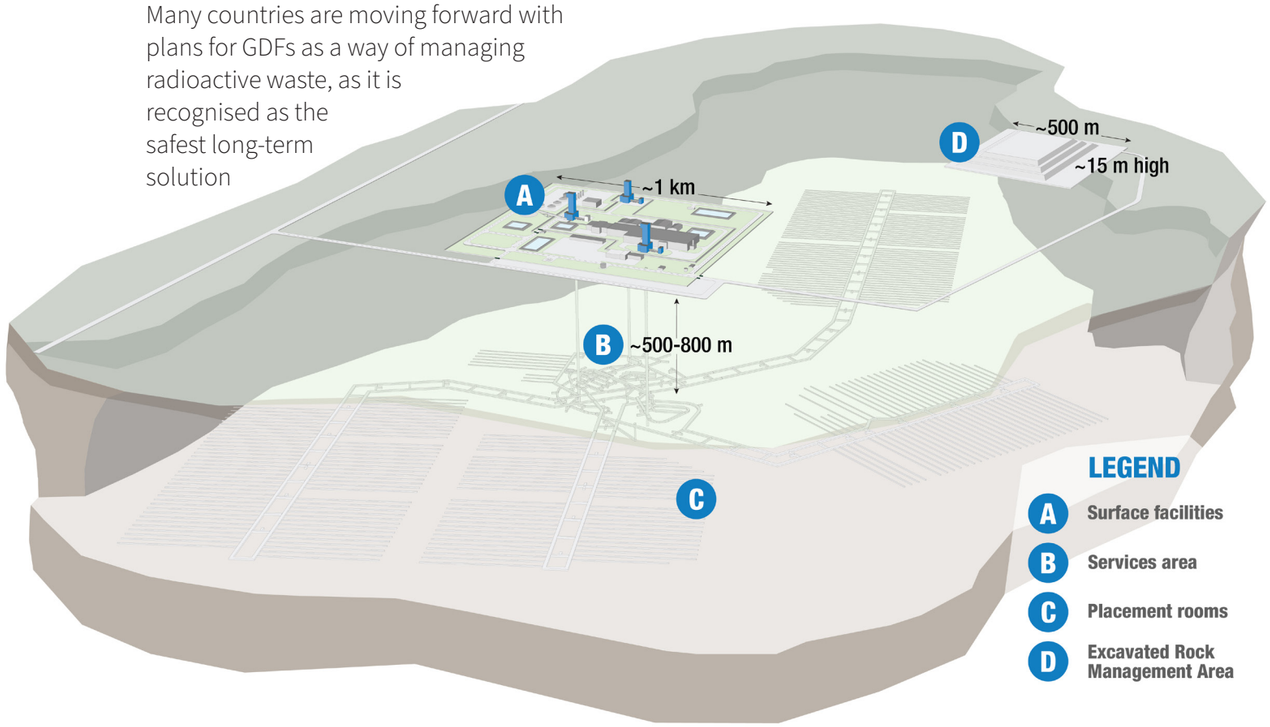
Understanding the Canadian GDF programme

Q&A with Jamie Matear

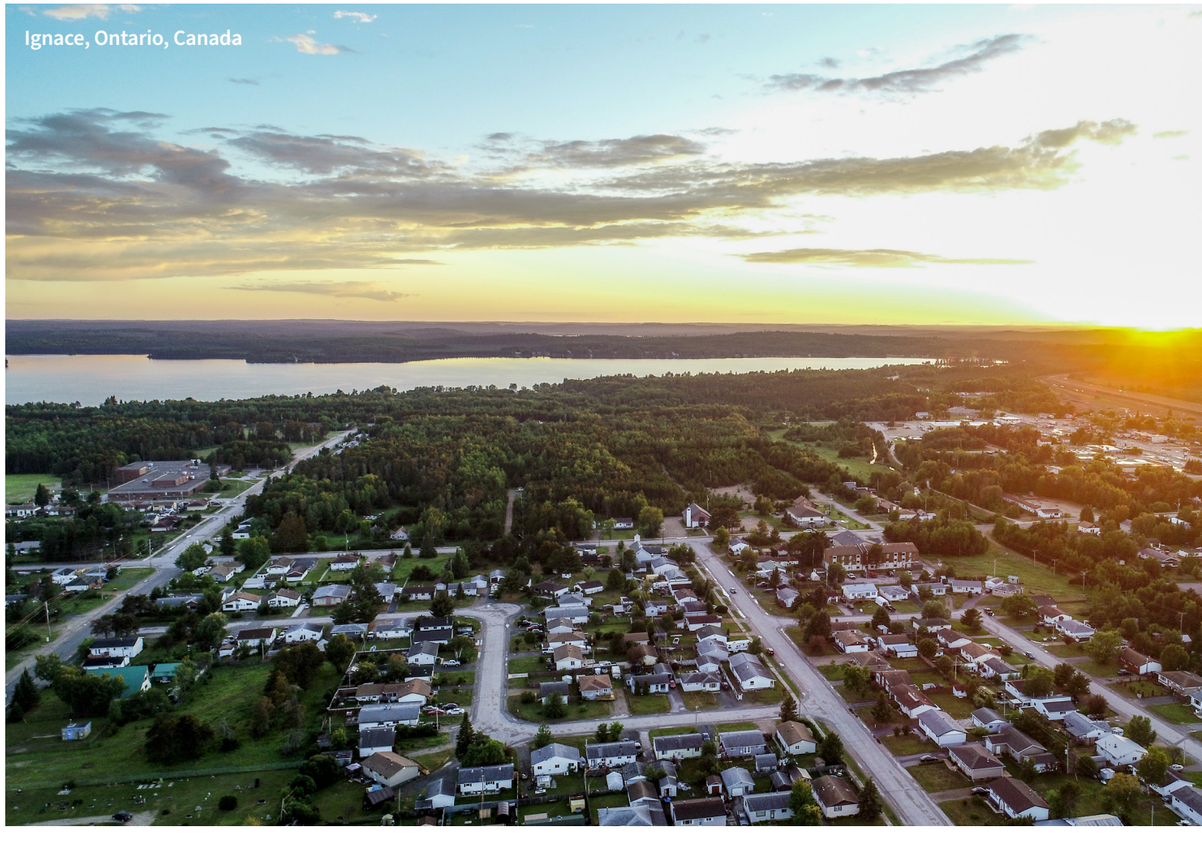
We spoke to Jamie Matear, Director of Siting Coordination at Canada's Nuclear Waste Management Organization (NWMO)
Jamie joined a South Copeland Community Partnership meeting earlier this year as part of a collaboration and learning visit. Several queries from the public were raised, highlighting the differences between the Canadian and UK GDF programme.

Many countries are moving forward with plans for GDFs as a way of managing radioactive waste, as it is recognised as the safest long-term solution for the management of the most hazardous radioactive waste.

Below, we share an interview with Jamie which was published on Gov.uk last year, and we have asked him some further questions to find out more about the similarities and the differences between Canada and the UK's geological disposal programmes.



NWMO's conceptual design for surface facilities and deep geological repository

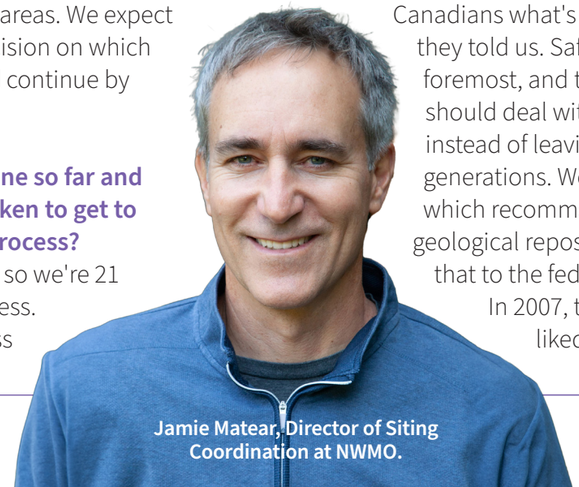

Ignace, Ontario, Canada

What stage is NWMO currently at with its deep geological repository plans?

We are getting towards the end of what we call our site selection process. We had 22 communities express an interest in potentially hosting a deep geological repository, and we've narrowed down through technical and social research to the final two siting areas. We expect to be making a decision on which of the two sites will continue by the end of 2024.

What have you done so far and how long has it taken to get to this stage in the process?
We started in 2002, so we're 21 years into our process.
It's 170-year process for us, give or take. We formed in 2002 as a result of the Nuclear Fuel Waste Act, federal legislation that said the nuclear industry had to establish an organisation to create a plan to manage Canada's used nuclear fuel.

What were the first stages of the process?
In the early days there was a study period. And through the study period, we asked Canadians what's important, and they told us. Safety first and foremost, and that our generation should deal with the issue instead of leaving it for future generations. We created a plan which recommended a deep geological repository and took that to the federal government. In 2007, they said they liked our plan and we


Jamie Matear, Director of Siting Coordination at NWMO.

implemented it. We developed something called the 'site selection process', which is a volunteer process by which Canadian municipalities and Indigenous communities could come forward and express an interest in learning about the process to potentially hosting the repository. This process started in 2010, and between 2010 and 2012, not knowing how many communities were going to put up their hands, we had 22 communities express initial interest. From this group, 21 of the communities advanced into preliminary site investigations.

What are some of the key similarities and differences between the Canadian and UK programme?

There are a number of similarities between the Canadian and UK programmes. Both countries have a voluntary approach whereby communities express an interest in hosting a GDF, both NWMO and NWS rely on rigorous scientific and technical evaluations of geological conditions and both organizations require mutual agreements and partnerships with local authorities before finalizing a site. Both the Canadian and UK processes are also subject to strict regulatory oversight. Independent regulatory bodies ensure that all aspects of safety, environmental protection, and community well-being are thoroughly evaluated before the approval of a site.

One of the key differences is that the UK is considering sub-seabed disposal, whereas in Canada both the surface facilities and DGR (GDF) will be on land and underground. Our consent-based process relied on the reality of the geologies of the interested communities, and for the communities involved there was no need to consider building a DGR under a large body of water.

Water protection is a topic of significant importance to the Canadian public. The NWMO acknowledges the importance of water and published a Water Statement that outlines how the entire purpose of the plan for used nuclear fuel is to protect people and the environment, including water. The Water Statement acknowledges the truth of the sacred and spiritual connection Indigenous peoples have with water, that NWMO considers how the agency of water may be in relationship with the DGR and surrounding area, and that NWMO will implement a water strategy that it will report publicly on an annual basis. The Canadian program also recognizes the rights of Indigenous Peoples, and their participation is a necessary component of the site selection process. The UK has different historical and demographic contexts and Indigenous participation is not required.

What happened in the next stage of the programme after discussions started?

Over the next decade we conducted technical and social research activities. These included looking at the communities' current and long-term vision and their potential willingness and how neighbouring communities viewed the project. We also reviewed a lot of technical information including geology, the safety case and the ability to build a facility on site. We've now narrowed down to the two final areas: Ignace and South Bruce.

What site evaluations are you conducting at the moment and how long will they take?

On the technical side, confidence in safety reports were published last year. They're quite substantial documents describing the confidence we have to safely store used nuclear fuel in a repository at either site. That information was then communicated back to the communities, to delegations of council and to the public in general. These reports will change over time as we get more information from our technical research programs. We are also working with our communities to understand how they will define a process to establish their willingness to be a host community for the deep geological repository. For example, one community, Ignace, took a consultative approach through a Willingness Ad Hoc Committee that reported to Town Council, while both South Bruce and the Wabigoon Lake First Nation, on whose traditional territory the Ignace project would be built, are holding referendums.

"Both the Canadian and UK processes are subject to strict regulatory oversight. Independent regulatory bodies ensure that all aspects of safety, environmental protection, and community well-being are thoroughly evaluated before the approval of a site."

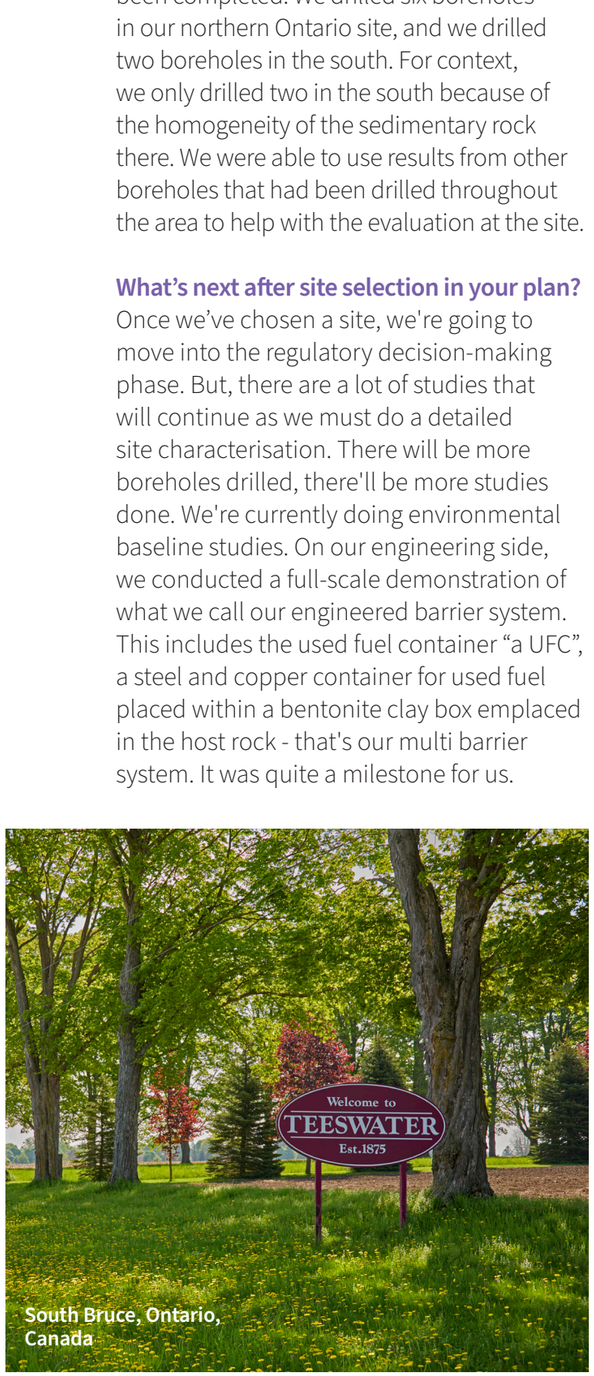
South Bruce, Ontario, Canada

How much borehole drilling have you done?

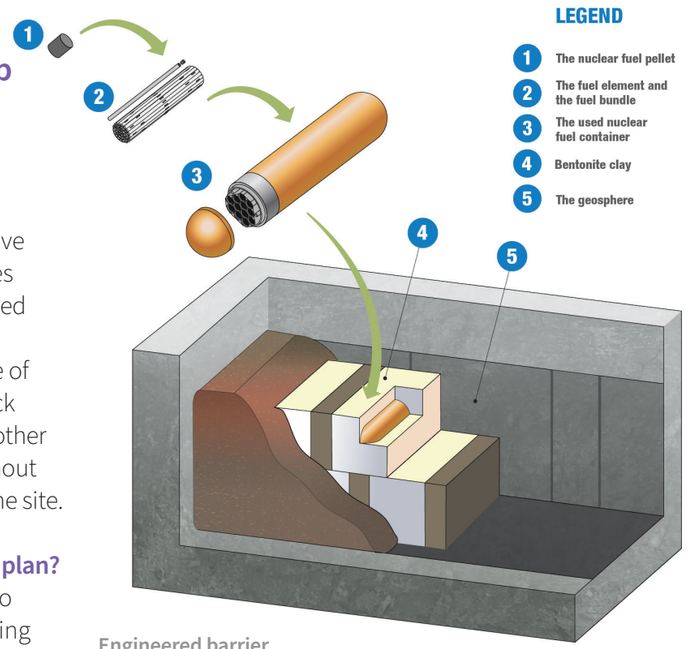
Our initial borehole drilling programs have been completed. We drilled six boreholes in our northern Ontario site, and we drilled two boreholes in the south. For context, we only drilled two in the south because of the homogeneity of the sedimentary rock there. We were able to use results from other boreholes that had been drilled throughout the area to help with the evaluation at the site.

What's next after site selection in your plan?

Once we've chosen a site, we're going to move into the regulatory decision-making phase. But, there are a lot of studies that will continue as we must do a detailed site characterisation. There will be more boreholes drilled, there'll be more studies done. We're currently doing environmental baseline studies. On our engineering side, we conducted a full-scale demonstration of what we call our engineered barrier system. This includes the used fuel container "a UFC", a steel and copper container for used fuel placed within a bentonite clay box emplaced in the host rock - that's our multi barrier system. It was quite a milestone for us.



South Bruce, Ontario, Canada



Engineered barrier system

What is your long-term programme timeline?

After 2024, we move into something called the regulatory decision-making phase. This is when we take our project to the Impact Assessment Agency of Canada, where they'll do an environmental impact assessment. We then go to the Canadian Nuclear Safety Commission, which will provide us with the approval for our licenses to prepare the site and then a license to construct a site. The initial impact assessment process should take five or so years to complete with licensing to follow. With our permissions we hope to begin construction in the early 2030s. It will take about ten years to construct the facility to such a point where we could actually start to bring in the used fuel from where it's currently located. It then takes about 45 to 50 years after that to fill the repository. After the facility is filled, we will move to long-term monitoring and eventually decommission the site. This brings the conception of the project to more than 170 years in length.

Property Value Protection Scheme

NWS has published a Property Value Protection scheme designed to support those who could be affected by the siting process for a GDF. It is available to those who can demonstrate a compelling need to sell their property but who have been unable to do so, other than at a substantially reduced price, due to the search for a suitable site to host a GDF in their community. Details of the scheme are available by following the QR code below.

GDF Report 2024

NWS has published its 2024 GDF Report, detailing progress of the GDF siting process. The report looks at the three communities across England, two in Cumbria, South Copeland and Mid Copeland, and one in Lincolnshire around Theddlethorpe. It details the range of studies and surveys which are underway to help identify locations for further investigative work, such as drilling deep boreholes, to understand the geology and help to ensure a GDF can be constructed, operated, and closed safely and securely. You can read the report online.

Regulatory scrutiny and engagement for geological disposal: Annual Report 2023 to 2024

The GDF regulators, the Environment Agency (EA) and Office for Nuclear Regulation (ONR), have published their annual scrutiny report of NWS. As regulators, they are working together to make sure that any future GDF will meet the high standards for environmental protection, safety, safeguards and security that the law requires, and the public expects. You can read the report here:

Further reading on geological disposal: A list of information sources independent of NWS

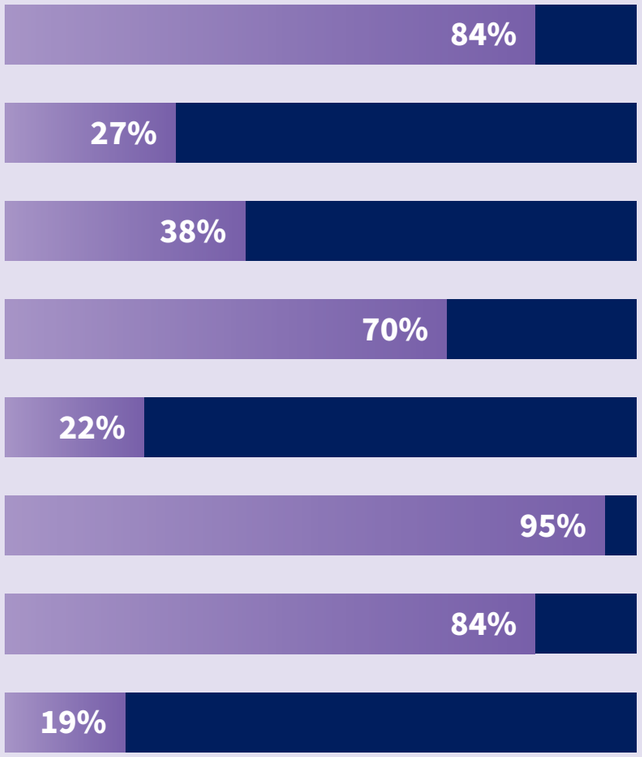
A list of additional reading has been prepared by members of the Community Partnership and is based on topics raised by the community. In this list we have focused on wider sources of information which are independent of NWS. It is not intended to be exhaustive and is simply a signpost to additional information for anyone interested in learning more.

South Copeland
GDF Community Partnership

South Copeland GDF Community Partnership Resident Research, March 2024: Results

The results of the March 2024 resident research survey, looking at local people's awareness, views and information needs regarding GDF, have recently been published – this follows previous surveys in November 2023, June 2023 and June 2022, the results of which are available to read online.

Between 4 and 23 March 2024, research consultant Yonder oversaw a survey of 201 adult residents who were interviewed in person across the wards of Millom and Millom Without.



84% of respondents stated that they were able to recall seeing or reading or hearing something about nuclear waste or geological disposal over the past year.

27% knew the UK's current storage method for its most hazardous radioactive waste is at interim surface and ground-level storage facilities.

38% incorrectly believed it was already held in vaults deep underground in the UK, and 30% did not know.

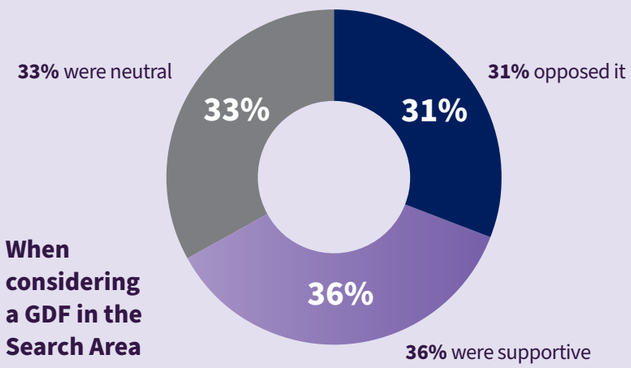
70% were able to identify the accurate description of a GDF.

22% had heard of the term 'GDF' but knew nothing of it.

95% claimed to be aware that a Search Area had been identified within South Copeland.

84% claimed to be aware that a Community Partnership had formed locally.

Respondents most often requested information relating to safety (**19%**).



When considering a GDF in the Search Area

"We are continuing to survey in South Copeland to make sure that we, as a Partnership, have a clear understanding of local people's awareness, views and information needs.

"The findings help to guide our activities, ensuring that people have the information they need on geological disposal and the siting process." – Ged McGrath, Chair

Further information on this survey and previous surveys can be found on our website news section.

St John's Waberthwaite Parochial Church Council received £55,240 towards the creation of a Community Resource Centre.

We are open for funding applications and ready to support you

The South Copeland GDF Community Partnership has up to £1 million in Community Investment Funding available per year to help bring positive change to the area. To date, nearly £3 million has been invested locally.

CIF offers an opportunity to secure funding for projects, big or small, that:

- Create economic opportunities
- Enhance the natural or built environment
- Improve community wellbeing

If you have a project that could benefit the South Copeland communities within the Millom and Millom Without wards, we encourage you to apply. Whether you have a new idea or an existing initiative in mind, we're here to help.

For more information or to start your application, get in touch with us at: communityinvestment-southcopeland@nuclearwasteservices.uk

South Copeland
GDF Community Partnership

Helpdesk

Managed by NWS

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