



Engaging youth:

A report on NWMO youth
engagement activities 2024

NOVEMBER 2025



NUCLEAR WASTE
MANAGEMENT
ORGANIZATION

SOCIÉTÉ DE GESTION
DES DÉCHETS
NUCLÉAIRES

Land acknowledgment

The Nuclear Waste Management Organization acknowledges that we have worked in many different Indigenous territories since the inception of the organization. We are grateful to the Indigenous Peoples and communities we have worked with over the years.

In 2024, we selected Wabigoon Lake Ojibway Nation and the Township of Ignace as potential hosts for the site for a deep geological repository for Canada's used nuclear fuel. With this context, we acknowledge that today and moving forward, we are working in the territory of Wabigoon Lake Ojibway Nation and in other Indigenous communities.

Throughout 2024, in southern Ontario, we worked with Saugeen Ojibway Nation, and we acknowledge their dedication to the siting process. We further acknowledge that we have the privilege of working with other First Nations and Indigenous organizations and communities, including the Métis who expressed an interest in learning about our work.

As part of our commitment to Reconciliation, we recognize both the historic and current injustices and harms that far too many Indigenous communities endure. We commit to doing our part to support well-being in the Indigenous communities with which we work.

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Engaging youth: An overview

The Nuclear Waste Management Organization is a not-for-profit organization tasked with implementing Canada's plan for the safe, long-term management of used nuclear fuel. Developed through dialogue with Indigenous Peoples and Canadians, the goal of this project is to protect people and the environment by safely containing and isolating our country's used nuclear fuel in a deep geological repository.

From the beginning, we have been committed to only proceed with Canada's plan in a siting area with informed and willing hosts. Wabigoon Lake Ojibway Nation and the Township of Ignace in northwestern Ontario and Saugeen Ojibway Nation and the Municipality of South Bruce in southern Ontario were potential host communities that were still being considered in the site selection process in 2024. As a result, community and youth engagement took place in both these siting areas throughout the year in the lead-up to the selection of a site for the repository.

On Nov. 28, 2024, the NWMO announced the selection of Wabigoon Lake Ojibway Nation and the Township of Ignace as host communities for the project.

As part of the site selection process, the NWMO engaged with potential host communities for more than a decade, providing opportunities for information gathering about nuclear energy in Canada and about the repository project. Youth outreach has been an important aspect of these engagement activities, especially given the multigenerational nature of the plan. The NWMO's youth engagement, learning and career development activities in Indigenous and municipal communities in both potential siting areas continued in this critical site selection year.

The NWMO's youth engagement efforts focused on three goals:

- Building youth awareness of the NWMO and Canada's plan in the siting area communities;
- Building youth understanding and confidence in the project in the siting area communities; and
- Building youth capacity for future decision-making regarding Canada's plan.

Youth outreach is realized through several NWMO initiatives. For example, we support interested and neighbouring communities, including youth, with funding and opportunities to participate in learning about Canada's plan. We encourage Indigenous youth to be directly involved in dialogues about the implementation of Canada's plan and about the NWMO's approach to Reconciliation through their participation in the Council of Elders and Youth.

Youth well-being, science learning and sports initiatives are important aspects of youth development which we support through sponsorships and donations.

We are actively investing in helping to prepare youth for the workplace of tomorrow by supporting educational programs related to STEM (science, technology, engineering and mathematics).

In 2024, we continued to invest in educational programs supporting youth skills in geology, environment, technology, media and Indigenous teachings in both potential siting areas. Much of this work focused on building transferable skills. In particular, our Early Investments in Education and Skills program supported training, education and other capacity-building activities for youth and adult community members.

We have also collaborated with post-secondary institutions, including professors, researchers and graduate students, to support career advancement and relevant research. Throughout the site selection process, we focused on in-person learning as we sought to support future opportunities for young people. This annual youth engagement report, which we have been issuing since 2012, outlines the NWMO's activities and educational initiatives, partnerships, sponsorships and donations in several communities.

In November 2024, we successfully concluded the site selection process and have moved forward into the regulatory decision-making process, which will include ongoing engagement and reporting. This is the final *Engaging youth* report from the site selection engagement process. Now that the siting area for the repository has been announced, we will continue to work with the host communities to support youth.

Note: This report intentionally omits the names of participants involved in youth engagement activities for privacy reasons.

In support of learning and building relationships

In 2024, the NWMO provided funding and support for communities in the site selection process to learn about Canada's plan and explore their potential to host it. We engaged youth in these communities by creating opportunities for them to learn about the scientific and community-focused aspects of the project and to contribute their ideas and input. Given the multigenerational nature of this project, engaging young people is a priority. In addition, as many young people are interested in learning more about career and educational opportunities, we have mobilized resources and partnered with educational organizations to offer programs and activities which can help youth explore their educational and career paths.

THE NWMO ON THE ROAD AND GIVING TOURS

The NWMO's Discovery and Demonstration Centre in Oakville

The NWMO regularly welcomes community and youth groups at our Discovery and Demonstration Centre in Oakville, Ont. This year, the centre welcomed youth from Saugeen Ojibway Nation, South Bruce, Wabigoon Lake Ojibway Nation, Ignace and Thunder Bay. Students from Canadian universities conducting research related to components of the deep geological repository also took part in guided tours of the centre. A key aspect of the tours is the chance for small groups of elementary and post-secondary students to ask NWMO scientists questions about Canada's plan. Visitors can learn about the multiple-barrier system that will safely contain and isolate used nuclear fuel and view prototypes of the nuclear fuel storage containers. They can even view a mock-up of an underground storage cavern similar to the one that will be built to permanently store Canada's used nuclear fuel.

Learn More tours for students and community members

Several students from potential siting area communities had the opportunity to learn more about the project and about the nuclear industry through tours organized by their learning institutions and by the NWMO. For example, students from St. Patrick High School in Thunder Bay and students from Sacred Heart Catholic High School in Walkerton took learning trips which included guided visits to McMaster University's research reactor in Hamilton and to Ontario Power Generation's Western Waste Management Facility, located in the Municipality of Kincardine, Ont., in addition to the NWMO's Discovery and Demonstration Centre.

Mobile Learn More Centre

The Mobile Learn More Centre (MLMC) is a travelling exhibit that provides the public with information on the technical and social aspects of Canada's plan. In 2024, the MLMC made more than 30 stops at community-based events. The exhibit visited northwestern Ontario communities, including Whitefish Bay and Kejick Bay in Lac Seul First Nation, Machin, Fort Frances, Thunder Bay, Kenora, Ear Falls and the Northwest Métis in Dryden. In southern Ontario, the mobile unit could be found at the Grey Bruce Children's Water Festival, which drew more than 2,000 student visitors to learn about water and the environment. The MLMC and staff also visited the Teeswater Fall Fair and the Walkerton firefighters' breakfast, regularly stopped at the Wiarton-based Saugeen Ojibway Nation Environment Office and welcomed visitors during Nawash and Saugeen weekly drop-in information sessions. During these visits, NWMO staff answered questions from visitors and engaged with community members.

The Mobile Learn More Centre offers many learning opportunities, including immersive videos about science careers, Indigenous culture and more, accessible through virtual reality headsets.



Immersive learning videos

Virtual reality headsets were used at events throughout 2024 to present immersive videos about Indigenous cultural activities, including canoe building and smudging, to help raise awareness and understanding of Indigenous cultures and traditions and Indigenous Knowledge. The headsets also allowed viewers to go on a 3D tour of the deep geological repository in Finland, the first country in the world to implement one. Career-focused immersive videos introduced youth to 20 virtual career scenarios ranging from construction workers using heavy equipment to environmental scientists conducting field work. The headsets and videos were made available at dozens of industry and community events, youth presentations and conferences and in the NWMO's community Learn More Centre offices.

KEY LEARNING AND RELATIONSHIP-BUILDING ACTIVITIES

Wabigoon Lake Ojibway Nation summer gathering

In August, the Wabigoon Lake Ojibway Nation Youth Gathering hosted about 70 youth from four northwestern Indigenous communities who took part in a two-day workshop focused on learning about Canada's plan and career paths and opportunities. The first day included a presentation about STEM careers in the nuclear industry, while the second day featured an interactive question-and-answer session about the project presented by NWMO staff.

Northwest Nuclear Exploration Event

More than 100 youth participated in the Northwest Nuclear Exploration Event in Ignace, a community learning event which included several exhibitors, including the NWMO, the Toronto Zoo, Science North, Western University and nuclear industry organizations.

The two-day event included information about the Toronto Zoo's Native Bat Conservation Program, which the NWMO is proud to sponsor. That program introduces youth to the role bats play in Ontario's ecosystems, pollinating plants and controlling insects. Virtual reality headsets were also provided for youth to explore the deep geological repository in Finland. The Kids' Zone featured interactive activities, enabling children and youth to learn about radiation, geology and science and technology. NWMO scientist Chantal Medri introduced younger children to the concept of radiation, demonstrating that natural radiation is everywhere around us, even in bananas.

South Bruce Nuclear Exploration Forum

In April, with the NWMO's support, the Municipality of South Bruce hosted a Nuclear Exploration Forum which brought together more than 200 people from the potential host communities in southern Ontario to explore topics related to the nuclear industry, including career options, and to learn more about scientific and environmental topics related to nuclear energy. Presentations, discussions and youth activities focused on safety and the environment and included interactive opportunities to learn. During the forum, NWMO staff led learning activities and subject matter experts addressed questions from community members.

Ripley Wolf Cub Adventure Camp in Huron-Kinloss

The NWMO also hosted learning opportunities for youth in neighbouring communities outside the potential siting areas. For example, in southern Ontario, NWMO developmental students (post-secondary students working at the NWMO) hosted a rock testing activity for youth in Ripley, in the Township of Huron-Kinloss. The summer camp activity, for youth ages five to 10, aimed to make learning about geology fun. It included worksheets to guide campers through four types of rock tests, which were performed on two types of rocks. NWMO staff also provided a brief presentation to the campers and their counselors about the NWMO and how understanding geology is an important component of our work to protect people and the environment.

The rock exploration activity in Ripley, Ont. included interactive learning activities about geology and rock testing for 36 youth.



Hillcrest Central School Grade 4 field trip

A NWMO subject matter expert shows rock core samples to Hillcrest Central School students.



During Hillcrest Central School's Grade 4 field trip to the NWMO's South Bruce rock core storage facility, students investigated how humans use rocks and minerals. The students engaged in a variety of activities to explore fossils, rock layers, types of rocks and the rock cycle. NWMO subject matter experts joined in to discuss the NWMO's borehole program and explore local rock formations. These hands-on experiences connected directly to the Grade 4 Ontario science curriculum.

The Toronto Zoo's Native Bat Conservation Program

The NWMO's ongoing commitment to protecting the environment includes supporting efforts to preserve Ontario's bat population. For the fifth year in a row, we partnered with the Toronto Zoo to support their Native Bat Conservation Program, which conducts research to better understand the ecology of Ontario's bats. This partnership includes the development and testing of innovative monitoring techniques to improve the study of bats in the future, with the participation of community members and Indigenous Peoples. Educational activities included Toronto Zoo staff delivering a bat awareness presentation to youth during the Northwest Nuclear Exploration Event held in Ignace and conducting bat workshops as part of Indigenous youth events in the potential host communities.

Saugeen Ojibway Nation bat conservation workshop

Representatives from the Toronto Zoo's Native Bat Conservation Program spent two days presenting ongoing research, including long-term acoustic monitoring and trap-and-release studies, to youth from Nawash First Nation. The workshop enabled youth to learn from NWMO and Toronto Zoo staff about the importance of bat conservation efforts and included an evening in the park hoping to net bats for temporary observation and release.

Wabigoon Lake Ojibway Nation bat observation workshop

In July, youth from Wabigoon Lake Ojibway Nation were joined by representatives from the Toronto Zoo's Native Bat Conservation Program and NWMO staff to learn about the importance of bats in Ontario's ecosystems. About 20 youth participated in a daytime workshop about bats and environmental studies-related careers. In the evening, the group took part in the bat monitoring program.

NWMO Explore and Grow Youth Day Camps

In Ignace, more than a dozen youth day camps were organized by NWMO staff throughout the summer for youth ages seven to nine and 10 to 12, with a range of interactive games, crafts and activities. These events provided opportunities to explore geology, learn about Indigenous cultures and take nature walks with environmental scientists to learn about different plants and animals.

Ignace Area Youth Gathering

The Township of Ignace's Youth Engagement Strategy is brought to life through a working group (Ignace Youth Engagement Advisory Working Group) of key local organizations, including the NWMO. While the working group provides learning opportunities for local youth throughout the year, a particular highlight in 2024 was the Ignace Area Youth Gathering held in September. Youth were able to explore and connect with local community and regional resources and supports to learn more about essential skills, health literacy, youth employment and Truth and Reconciliation. They took part in presentations, workshops and interactive activities.

Working with youth to support food security programs

In South Bruce, the NWMO worked with the community to support the Teeswater Good Food Box Program. In Ignace, the NWMO and the Mary Berglund Community Health Centre rolled out the Treat or Eat campaign, which collects non-perishable food items to help families experiencing food insecurity. Youth filled a Treat or Eat bag with food items and in return for their contribution could enter a draw for Halloween-themed prizes.

Water Symposium

The NWMO hosted a Water Symposium in October that brought together more than 90 families from Saugeen Ojibway Nation. This event included Indigenous Knowledge Holders, water protectors, western scientists and community members coming together with a shared priority of water protection and safety. Water is life, and water protection was highlighted throughout the event. This engagement event provided opportunities for community members to engage with NWMO staff one-on-one in a variety of formal and informal ways to learn about Canada's plan and to help build shared pathways to learning.

National Truth and Reconciliation Day

At the end of September, the NWMO Learn More Centre in Ignace held an open house in honour of the National Day for Truth and Reconciliation. Learning resources about Orange Shirt Day and the National Day for Truth and Reconciliation were shared. Visitors were offered orange shirts, as well as paints and stencils to design an orange shirt reflective of their Reconciliation journey.

In southern Ontario, NWMO staff took part in the National Day for Truth and Reconciliation event hosted by Saugeen Ojibway Nation, helping serve food at a community commemoration event in Nawash. We also shared a collection of books by local Indigenous authors and illustrators with area schools.

COMMUNITY-BASED PARTICIPATORY RESEARCH: ENVIRONMENTAL BASELINE MONITORING PROGRAM

In 2024, the NWMO continued environmental baseline monitoring in areas surrounding the potential repository sites. Our community-based participatory research approach allows community members, including youth, Indigenous Peoples and researchers to collaborate on aspects of the monitoring by helping to develop study questions, design the methodology, collect data and interpret the findings.

Sacred Heart Catholic High School GENESIS program

Over the past three years, the NWMO's environmental scientists in South Bruce have collaborated with Sacred Heart Catholic High School in Walkerton to support the school's GENESIS classes through innovative and experiential learning opportunities. Students in the GENESIS program earn four credits in one semester as part of an Environmental High Skills Major designation. The collaboration began in 2022 and has expanded to include educational visits to Bruce Power, the McMaster Nuclear Reactor and the NWMO's Discovery and Demonstration Centre, as well as the rock core storage facility in Teeswater.

This year, with support from the Saugeen Valley Conservation Authority, the program's 12 students learned about environmental monitoring, water quality sampling techniques and potential career paths in environmental science. Sacred Heart teacher Bob Legace said, "The NWMO has brought in geologists, engineers and environmental scientists to share their education journey and experiences. This has inspired many students to pursue pathways in these fields after graduation." More information on the GENESIS program can be found on [their website](#).

The NWMO partnered with the GENESIS program to offer students insight into what is involved in fieldwork and opportunities to learn about career paths in environmental science. Here, a NWMO environmental scientist leads a field activity.



YOUTH EMPLOYMENT

The NWMO continued hiring university and college students through our annual and summer co-operative work term programs in our Toronto office and in the two potential siting areas that remained in the site selection process in 2024. These opportunities enable youth to gain important practical skills and experiences in areas related to their field of study and to learn more about Canada's plan for used nuclear fuel.

Nine developmental students from colleges and universities across Canada worked with the NWMO, including five students from the potential siting areas who worked to support youth and community engagement activities. During the busy summer months, from May to August, developmental students supported community engagement, Indigenous engagement and environmental programming in the potential host communities. Two engineering interns also began 16-month learning internships with the NWMO and two communications interns worked with our Communications team from May to December.

In addition, the NWMO offices in South Bruce and Ignace each welcomed a high school student for a semester, as the students completed their co-operative education work terms. A high school student from Ignace participated in the Government of Ontario's Cooperative Education Program by accepting a placement in the Ignace Learn More Centre during the school year, where she learned about digital and print communications and supported engagement activities. In South Bruce, a student interested in environmental studies worked with the NWMO's environmental team as part of a co-operative high school program.

Developmental student profiles

ENGAGEMENT DEVELOPMENTAL STUDENT, SOUTH BRUCE

In South Bruce, the NWMO engagement team was joined by developmental student Lauren Shierz, a student in the Department of Professional Communication at Toronto Metropolitan University. During the summer, Lauren participated in a variety of community events and initiatives, offered tours of the Mobile Learn More Centre and led the NWMO's engagement with a local youth summer camp. Lauren was an integral part of the South Bruce doorstep discussion initiative, which was designed to make it easier for busy residents to obtain information by having NWMO staff members come directly to their neighbourhood to answer questions in person. Lauren also supported the NWMO team during the 2024 South Bruce Nuclear Exploration Forum. She worked closely with the NWMO Regional Communications Manager, contributing to the NWMO's South Bruce newsletter, local news outlet pitches and other communications activities.

ENGAGEMENT DEVELOPMENTAL STUDENT, IGNACE

Reporting to the Community Liaison Manager in Ignace, developmental student and local resident Andi Davenport had the opportunity to support community engagement activities in the Ignace area from May to August. In this role, Andi helped to organize and support initiatives geared specifically for local and regional youth and community engagement. She played a pivotal role in informing local youth about Canada's plan and how to learn more about potential jobs and career paths related to the project. She also organized and took part in a variety of engagement events.

Andi said, "I thoroughly enjoyed my summer with the NWMO as it allowed me to engage with our community and with neighbouring communities. This role allowed me to travel outside of Ignace and experience some communities that I may not have visited without my work experience. I enjoyed being able to plan day camps and work with youth throughout the community. Being in the education field myself, working with youth is my passion so I'm happy that my work allowed me to do so."

NWMO developmental and co-operative education students in the northwest region supported community engagement activities such as the Tim Hortons Smile Cookie Campaign in support of the Dryden Native Friendship Centre and Making Connections for Children and Youth. Other students completing work terms with the NWMO focused on engineering, safety, technical research and communications.



Indigenous youth engagement

The NWMO supports Canadian organizations contributing to co-creating a shared future built on rights, equity and well-being for Indigenous Peoples in the youth demographic through school and extracurricular programming. Our Indigenous youth engagement allows youth to be directly involved in implementing Canada's plan for the long-term management of used nuclear fuel by learning from Indigenous Knowledge and applying those learnings to our work through their participation in the Council of Elders and Youth.

COUNCIL OF ELDERS AND YOUTH

The Council of Elders and Youth provides counsel on the NWMO's application of Indigenous Knowledge and Reconciliation in implementing Canada's plan. There are 17 First Nations and Métis members on the council and six members are youth. The council is an independent advisory body and Indigenous youth are directly involved in providing guidance to the NWMO as we continue in our Reconciliation journey.

Prioritizing youth engagement within the council reflects the importance of youth members in decision-making. One of the council's priorities in 2024 was to learn more about the regulatory decision-making process to empower them to provide advice and guidance to the organization on this topic. Youth members continued to provide support to the Elders by co-chairing meetings, taking notes and sharing their unique perspectives on work being undertaken by the NWMO, including water protection and engagement.

Indigenous Knowledge and Western Science Workshop

In October, the NWMO hosted our seventh annual Indigenous Knowledge and Western Science Workshop. The workshop was held at Soul of the Mother Lodge in Six Nations of the Grand River territory. The goal of this gathering was to build on the momentum of our work to create meaningful alignment of Indigenous Knowledge and western science systems in relationship with the NWMO's work. In addition to many Saugeen First Nation youth, three members of the NWMO's Council of Elders and Youth participated: two Elders accompanied by youth member Jeremiah George from Wabigoon Lake Ojibway Nation. NWMO staff also attended, including specialists from a wide range of fields of expertise.

Jeremiah George, a youth member of the Council of Elders and Youth from Wabigoon Lake Ojibway Nation and Antoine Boyer, from the NWMO's safety assessment team, take part in the NWMO's 2024 Indigenous Knowledge and Western Science Workshop.



SPONSORED INDIGENOUS YOUTH PROGRAMS

Gord Downie & Chanie Wenjack Fund

The NWMO is the first supporting and longest-serving sponsor of the Gord Downie & Chanie Wenjack Fund, a Canadian organization building awareness, education and connections between Indigenous and non-Indigenous people. As in previous years, the NWMO sponsored the Legacy Schools Program.

The Legacy Schools Program engages, empowers and connects students and educators to advance Reconciliation in their communities. Participating educators receive a tool kit with books and educational resources.



Legacy of Hope Foundation and Future Generations Foundation

In 2024, the NWMO made donations to the Legacy of Hope Foundation and the Future Generations Foundation. Both donations were made in recognition of the National Day for Truth and Reconciliation to support the foundations' ongoing work. The Legacy of Hope Foundation's educational materials and exhibitions raise awareness of the history of the residential and day school system, the subsequent "Sixties Scoop" and the resulting impact on Indigenous Peoples. The Future Generations Foundation provides resources to create opportunities that improve quality of life for First Nations and Métis people in Canada.

Right To Play's Youth Leadership Program in Ontario

Since 2019, the NWMO has partnered with Right To Play to support the PLAY (Promoting Life Skills in Aboriginal Youth) Program in Ontario. Right To Play supports community programs within First Nations and Métis and Inuit communities, as well as urban Indigenous organizations. The organization trains youth to deliver play-based programs to support health and holistic wellness, teach positive life skills and connect youth with local languages and cultures.

The NWMO was invited to participate in one event as a guest in August, as youth leaders from across Canada gathered in Toronto for a leadership symposium to engage in leadership-building activities and share ways to engage youth through play. The symposium brought together youth leaders from across Right To Play programs for a week of experiences, workshops and learning activities. Youth leaders were able to increase their confidence in their leadership abilities and enhance their capacity to create positive and safe spaces for themselves and their peers. Hands-on team-building sessions included land-based activities in the Indigenous Garden, arts with flag-making, crafting with polymer clay and culture with hand drumming.

Indigenous youth leaders took part in the Right To Play leadership symposium learned about the healing properties of herbs and flowers in the University of Toronto's Indigenous Garden. Some NWMO staff were invited to join youth leaders to take part in this learning activity.



Early Investment in Education and Skills program

In 2024, the NWMO's Early Investment in Education and Skills (EIES) program provided potential host communities still being considered in the site selection process with funding for enriching educational activities, including skill development workshops as well as science, engineering and math learning opportunities. This program is an investment in the youth of today and their communities, supporting them to become the leaders and innovators of tomorrow. Resources often support capacity-building, education and the development of transferable skills youth can apply to a broad range of projects or workplaces.

SCIENCE, TECHNOLOGY, ENGINEERING AND MATH EXPERIENCES

Bruce County Museum & Cultural Centre: "Climate Change in a Box"

Through the EIES program, the NWMO was proud to support an educational tool kit produced by the Bruce County Museum & Cultural Centre and the Saugeen Ojibway Nation Coastal Waters Monitoring Program. The "Climate Change in a Box — Eni-aanji-zhiwebak — the changing weather" learning kits were delivered to Grade 8 classrooms in 60 schools across the Bluewater District School Board and Bruce-Grey Catholic District School Board. The boxes contained curriculum-based materials that supported a variety of environment-focused learning opportunities.

The Bruce County Museum & Cultural Centre, in partnership with the Saugeen Ojibway Nation Coastal Waters Monitoring Program and the NWMO, created a kit to support environmental learning about water in schools across Bruce County.



Nuclear Innovation Institute

In October 2024, the NWMO once again partnered with the Nuclear Innovation Institute's (NII) Explore program in support of the NII Explore Energy Co-op. Over two mornings, NWMO staff, including geologists, hosted students from Kincardine District Senior School to facilitate a variety of engaging learning experiences. The workshops included a visit to the NWMO's rock core storage facility in Teeswater, where students learned about the multiple-barrier system that will contain and isolate Canada's used nuclear fuel from people and the environment. They also explored local geology through an offsite borehole tour. The program included a presentation on bentonite clay, a component of the multiple-barrier system, coupled with a hands-on learning activity.

Students also took part in a water sampling activity to simulate what is typically carried out as part of the NWMO's environmental baseline monitoring program.

Students learn about bentonite clay as a water barrier from NWMO Senior Engineer Chang Seok Kim during the two-day NII learning program.



Sacred Heart Catholic High School Grade 9 geography class

Through the EIES program, NWMO staff connected with a Grade 9 geography teacher who expressed interest in the NWMO's role in geological studies. Our staff delivered a presentation — with a particular emphasis on local geology — to four Grade 9 geography classes at Sacred Heart Catholic High School. Following the in-class presentation, the NWMO hosted the students at our rock core storage facility in Teeswater, where students participated in an offsite borehole tour led by a NWMO geologist. This initiative provided students with a comprehensive understanding of local geology and an opportunity for hands-on learning.

Students and community members visit the NWMO's rock core storage facility, where samples from the South Bruce borehole drilling project provide an up-close look at rock formations that make up the local geology in the region.



Saugeen Ojibway Nation STEM Camp

Youth from Saugeen Ojibway Nation took part in learning about science, technology, engineering and math through fun summer activities in a dedicated STEM learning summer camp. The camp was hosted by the Saugeen Ojibway Nation Environment Office in partnership with the Nuclear Innovation Institute and with support from NWMO staff. Traditional Indigenous methods of construction, including the science of basket-making, were part of the curriculum. The math and science curriculum was rooted in activities that would engage youth as they learned.

STEM backpack program

The regional EIES program in northwestern Ontario sponsored a backpack program to support young students with science and math activities during the school year. In December 2024, new backpacks were filled with STEM books and supplies, including coding kits and circulating maker spaces, and donated to local libraries within the region. Youth are encouraged to sign out the STEM backpacks as they would a library book, to facilitate learning about science.

Sponsorships and Donations program

In 2024, the NWMO's Sponsorships and Donations program continued to support a variety of youth-focused initiatives in the potential siting communities and surrounding regions. The program supports community groups and individuals that offer events, initiatives, sports programming and a host of youth well-being and learning activities. The program also sponsors Canadian organizations working to advance Reconciliation through event programming and exhibits.

LOCAL AND REGIONAL SPORTS AND WELL-BEING INITIATIVES

We supported more than 200 local and regional initiatives through our Sponsorships and Donations program. Many of these initiatives are led by local community members and promote youth recreation, well-being and development.

Well-being initiatives

In South Bruce, we provided support for community youth mental health initiatives, including the provincewide, barrier-free e-counselling organization WES (Wellness and Emotional Support) for Youth Online, based in Walkerton.

In Ignace, wellness programming included a weekly activities program for youth during the winter months, including games and movies, and support for broader regional initiatives such as the Ear Falls Family Safety Night.

Summer sports

In early July, the NWMO partnered with the Township of Ignace and community organizations to organize various family-based activities for the annual Ignace White Otter Days. The NWMO was the lead sponsor of the two-week event, which included the White Otter Days Hockey Tournament and Baseball Tournament. Throughout the festival, the NWMO's Learn More Centre welcomed youth for self-directed learning about careers in the nuclear industry and about Indigenous culture, available through a virtual reality headset video series.

The NWMO supported South Bruce Minor Soccer and many other wellness and recreational activities organized by local communities in support of youth.

Treaty 3 Warriors Hockey Team

The NWMO sponsored the Treaty 3 Warriors hockey team, a regional hockey team where the athletes are youth from eight different Indigenous communities in Treaty 3 territory.

U15 Warriors Hockey Team

The NWMO also sponsored the newly formed U15 Warriors hockey team, which includes players from Wabigoon Lake Ojibway Nation, Saugeen First Nation, Whitefish Bay First Nation, Rainy River First Nation and Lac Seul First Nation, among others. The team received support from the NWMO to purchase jerseys and attend the All Nations Tribal Days Tournament and the 2024 Oskana Cup.

NWO Mystix Regional Girls Hockey Team

The NWO Mystix is a regional girls' hockey team with players from several northwestern Ontario communities, including Fort Frances, Red Lake, Ear Falls, Sioux Lookout and Dryden. The long-term goal for the team is to create an annual club that will represent northwestern Ontario with pride. The NWMO's support of the team will be recognized with a logo on the team helmets.

Little Native Hockey League

The NWMO supported the Little Native Hockey League teams from Saugeen, Nawash and Aamjiwnang First Nations, as well as the South Bruce Minor Hockey Association, the Walkerton Capitals hockey team and the Ripley Wolves Senior A hockey team.

MÉTIS NATION OF ONTARIO CHARTERED COMMUNITY COUNCILS EVENTS

The NWMO supported various events organized by the Métis Nation of Ontario Chartered Community Councils, which aimed to promote and celebrate Métis culture through music, traditional foods, art and storytelling. For example, during the last weekend in May, the Barrie-South Simcoe Métis Council, on behalf of the Georgian Bay Métis Community (Métis Nation of Ontario Region 7) hosted its annual Métis Youth Camp at Bayview Wildwood Resort in Severn Bridge. This event was designed for Métis youth and their families to celebrate their community, hold youth and Elder knowledge exchanges and experience Métis culture, including beading, dot art and learning about tobacco. Activities also included pontoon boat rides around the lake.

ACADEMIC AWARDS AND SCHOLARSHIPS

Since 2020, the NWMO has worked in partnership with Ontario Tech University to sponsor the NWMO Women for STEM scholarships and the NWMO Indigenous Student Success Award. In 2024, through the NWMO Indigenous Student Success Award, we provided support to four students pursuing studies in computer science, mechanical engineering, kinesiology and technology management. We also supported four engineering students with Women for STEM scholarships.

YOUTH SCIENCE ORGANIZATIONS

Youth science programs promote and encourage youth education in STEM, show youth how science connects to the world and build interest in career paths related to the NWMO and other STEM-driven industries. The NWMO has helped support these programs since 2008 through our contributions to Science North, Scientists in School and Shad Canada to fund elementary and high school science education.

Science North



Science North programming benefits youth across northwestern Ontario. During the 2023-24 school year, Science North school and camp workshops reached 2,498 students in 17 schools in northwestern Ontario. Educators and scientists delivered STEM-based programming through 71 in-person programs and 20 e-workshops involving students in STEM-based learning. The NWMO supports Science North programming as part of our EIES program.

Scientists in School



The NWMO continued our sponsorship of Scientists in School in 2024, supporting the organization in delivering STEM workshops to thousands of elementary school students across Grey, Bruce, Huron and Perth counties. During the past 10 years, the NWMO and Scientists in School have worked together to provide programming to schools in Saugeen Ojibway Nation and the Municipality of South Bruce. During the 2023-24 school year, Scientists in School delivered STEM workshops to 2,400 children in 47 schools in southern Ontario and introduced them to the scientific method, including formulating and testing a hypothesis. In addition, workshops were held for 89 teachers to help them enrich future STEM lessons.

Shad Canada



Shad is a month-long summer program for Grade 10 and 11 students where the educational focus is on STEAM (science, technology, engineering, arts and mathematics) and entrepreneurship. The NWMO has supported Shad Canada since 2009, building a strong relationship with this organization that helps high school students (and future STEAM leaders) build their networks, strengthen their skills and support their passion for science.

In July 2024, 1,600 students participated in Shad across Canada. The NWMO presented at five Canadian university campuses (Carleton University, Wilfrid Laurier University, the University of New Brunswick, York University and Lakehead University). The NWMO's ongoing partnership with Shad allows youth interested in math and science careers to speak to working scientists and begin to develop the skills to take their passion for science to the next level as they prepare for the workplace and post-secondary education. They can also support community projects through the STEAM4Good program.

The NWMO Vice President of Site Selection is a former Shad participant



*Lise Morton,
Vice President of Site
Selection at the NWMO,
is a former Shad
summer student.*

From aspiring student to sustainability leader, Lise Morton, Vice President of Site Selection at the NWMO, credits her inspiring career in part to Shad Canada.

In the early days of Shad in 1982, Ms. Morton was first exposed to a world where her passion for math and science could blossom into a career. "Shad allowed me to understand that engineering was a career option that I might be interested in," she explained. This early exposure was crucial, as it introduced her to the possibilities within the STEAM fields at a pivotal time in her education.

Ms. Morton also highlighted the invaluable role of mentorship and networking during her time at Shad, which aligns with the NWMO's focus on community building and collaborative learning. She reminisced about being surrounded by like-minded peers and supportive mentors who were pivotal in her development.

"Coming from a small northern Ontario high school in the 1980s, when STEAM wasn't even a known acronym, being at Shad was the first time that I felt like I was surrounded by people who were pursuing interesting and challenging areas of study," she said.

Reflecting on her advice to current Shad participants, Ms. Morton emphasized the importance of fully engaging with the experience to make the most out of the opportunities the Shad program affords every participant.

Engaging students in collaboration with post-secondary institutions

Canada's plan to safely contain and isolate used nuclear fuel involves collaborating with leading universities and researchers to ensure a robust understanding of the materials and processes for implementing a deep geological repository. The NWMO helps fund student research on engineered barriers and geoscience. We engage with many post-secondary students during conferences, workshops and events and by giving in-class presentations.

THE NWMO'S ACADEMIC TOUR

The 5th Annual Academic Tour at the NWMO's Demonstration and Discovery Centre in June 2024 brought together 72 attendees, including NWMO technical staff and academic collaborators. Graduate students were able to see how their research relates to the engineered barriers of the planned deep geological repository, connect with the technical staff and learn from each other's work. More than 60 graduate students and postdoctoral fellows in applied chemistry, microbiology, chemical engineering and mechanical engineering presented their work through a poster session.

The NWMO hosted the 5th Annual Academic Tour of our Discovery and Demonstration Centre in Oakville, Ont. Dozens of undergraduate and graduate students, postdoctoral researchers and university faculty who conduct research for the NWMO spent a day learning from NWMO experts and each other.



PRESENTING STUDENT RESEARCH AT CONFERENCES

The research carried out by students is presented at a wide variety of conferences and workshops. This communications experience is an important part of the research process, as well as the student's development.

One of the members of the NWMO Engineering team provided a technical talk to graduate students at Queen's University in January 2024. In October, McMaster civil engineering students visited the NWMO's office in Toronto to experience a "day in the life" of an engineer. This event provided an opportunity for undergraduate students to interact with technical staff.

ONTARIO RESEARCH FUND – RESEARCH EXCELLENCE PROJECTS

The NWMO collaborates with an extensive network of academic faculty, staff and graduate students from eight Ontario universities and national laboratories in support of our technical research, a collaboration funded through the Ontario Research Fund – Research Excellence. Our university partners include the University of Waterloo, the University of Toronto, the University of Guelph, McMaster University and Queen's University, among others.

This group of experts works to understand and improve the long-term integrity of the NWMO's engineered-barrier system within the deep geological repository. The program offers diverse opportunities to graduate students to expand their networks and expertise, as well as improve their oral communication skills. This collaboration has enabled students to gain insight into how their research can be applied by industry. As this program comes to an end, the key outcomes of the research projects, as well as any remaining gaps within the program, will be documented in an integrated report.

Testimonial: Western University chemistry student Nishtha Saxena

"I began working with the NWMO through a collaboration project with Dr. Gateman focusing on understanding the localized corrosion mechanisms of used fuel containers. My current research involves examining the copper coatings applied to these containers and specifically investigating the relationship between microstructural features and electrochemical activity using scanning probe microscopy. As a PhD student passionate about environmental sustainability, collaborating with the NWMO has allowed me to gain valuable insights into nuclear waste management and the importance of long-term solutions. Engaging directly with NWMO professionals has enriched my learning experience, offering unique perspectives and guidance. The NWMO's commitment to research and innovation offers young researchers like myself a unique platform to contribute to critical advancements in the field."

Testimonial: Western University student Ghazal Shafiee

"My work on the NWMO's project centered on understanding copper corrosion under atmospheric conditions, a considerable factor in ensuring the long-term integrity of Used Fuel Containers. This research involved conducting precise electrochemical measurements and surface analysis to assess how atmospheric films influence copper's corrosion behaviour. The complexity of corrosion mechanisms in real-world environments became increasingly apparent through this work, deepening my understanding of the challenges involved in safeguarding critical infrastructure."

"Collaborating with engineers and materials scientists at the NWMO, I observed how meticulous experimental data informs high-level decisions in nuclear waste management. This experience not only sharpened my technical skills but also broadened my perspective on the practical implications of research within industry. The project's blend of scientific rigour and real-world application has been a formative experience."

The NWMO on social media

Throughout 2024, the NWMO continued to connect with online communities, including youth. The NWMO's Facebook, LinkedIn, X and Instagram accounts often reflected the youth-oriented activities we participated in on the ground. For example, we posted on LinkedIn about Take Our Kids to Work Day to emphasize the importance of engaging with youth as the next leaders of this work. We shared photos from our [Family Science Night in South Bruce](#) across platforms and amplified a web story on our social media accounts about [our partnership with Shad Canada](#) to show how we're investing in youth in relevant fields.

To highlight Take Our Kids to Work Day, we invited teens (pictured here with NWMO President and CEO Laurie Swami, in red) to experience a day at the NWMO head office and shared a post on LinkedIn.

