



Engaging youth

A report on NWMO youth
engagement activities 2022

NOVEMBER 2023

nwmo

NUCLEAR WASTE
MANAGEMENT
ORGANIZATION

SOCIÉTÉ DE GESTION
DES DÉCHETS
NUCLÉAIRES

Land acknowledgment

The Nuclear Waste Management Organization (NWMO) acknowledges that we have worked in many different Indigenous territories since the inception of the organization. We are grateful to the Indigenous and municipal communities that have worked with us over the past 20 years.

We further acknowledge that today we are working in northwestern Ontario in the traditional territory of Wabigoon Lake Ojibway Nation with the community of Wabigoon Lake Ojibway Nation and the Township of Ignace.

In southern Ontario, we are working in the traditional territory of Saugeen Ojibway Nation (SON) with the two SON communities — Chippewas of Nawash Unceded First Nation and Chippewas of Saugeen First Nation — and the Municipality of South Bruce.

We further acknowledge that in both the northwest and the south, we have the privilege of working with other First Nations and organizations, with Métis communities and the Métis Nation of Ontario, and with many municipal communities that have all expressed an interest in learning about our work.

As part of our commitment to Reconciliation, we recognize both the historic and current injustices far too many Indigenous communities endure. We pledge to do our part to encourage well-being in communities with which we work.

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Engaging youth: An overview

The Nuclear Waste Management Organization (NWMO) is implementing Canada's plan for the safe, long-term management of used nuclear fuel. Developed through dialogue with Canadians and Indigenous peoples, this project — known as Adaptive Phased Management (APM) — has the end goal of safely containing and isolating Canada's used nuclear fuel in a deep geological repository.

The selection of a preferred site for the repository is planned for 2024. Canada's plan will only proceed in an area with informed and willing hosts, where the municipality, First Nation and Métis communities, and others in the area are working together to implement it.

The Wabigoon Lake Ojibway Nation-Ignace area in northwestern Ontario and the Saugeen Ojibway Nation-South Bruce area in southern Ontario are currently considered potential host areas for the project. As part of the site selection process, the NWMO engages with the potential host communities, including youth outreach.

The NWMO's youth engagement efforts focus 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 in the siting area communities and more broadly.

Youth outreach is realized through several of the NWMO initiatives detailed in this report, including the following:

- In support of **learning and building relationships**, the NWMO provides interested and neighbouring communities with funding and opportunities to participate in learning about Canada's plan, including dedicated youth support.
- **Indigenous youth engagement** enables Indigenous youth to be directly involved in a dialogue about the implementation of Canada's plan and about the NWMO's approach to Reconciliation, through their participation in the NWMO's Council of Elders and Youth.
- **Sponsorships and donations** contribute to local and regional youth well-being initiatives and support science-based education programs.
- The **Early Investments in Education and Skills (EIES) program** supports training, education and other capacity-building activities for youth and adult community members.
- **Post-secondary institutional collaboration** with professors, researchers and graduate students supports career advancement and relevant research.

In support of learning and building relationships

The NWMO provides funding and support for communities in the site selection process to learn about Canada’s plan and explore their potential to host it. Engaging youth in these communities supports awareness and understanding of the project and creates opportunities for youth to learn about and contribute to it.

LEARNING ACTIVITIES

South Bruce borehole tour with #NextGenNetwork

A collaborative event between the NWMO and the Municipality of South Bruce welcomed the #NextGenNetwork youth group, ages 18 to 30, for a borehole tour followed by a trivia game at the town hall.

Youth learn about core (rock) samples retrieved from borehole drilling in South Bruce.



Movie night with Saugeen Ojibway Nation

In collaboration with the Saugeen Ojibway Nation’s Environment Office, the NWMO rented out a movie theatre and screened *Jurassic World Dominion*. A short “Learn more” session from the NWMO with updates on Canada’s plan was shared before the screening.

Local community members were invited to a screening of Jurassic World Dominion hosted by the NWMO.

NWMO INVITES YOU TO

A PRIVATE SCREENING OF
JURASSIC WORLD DOMINION
AND A SHORT PRESENTATION FROM NWMO

Wednesday, June 29, 2022
Galaxy Cinemas Owen Sound

Doors Open at 6:00pm
There will be a short presentation from NWMO at 6:15 followed by the private screening

Free regular popcorn and drink with participation

SCAN ME

To register, scan the QR code or visit bit.ly/nwmo-moive-night-fb

Contact Adam McLaren for more info
eo.support@saugeenojibwaynation.ca

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Waabigonii Zaaga'igan Youth Summit

In July, the Wabigoon Lake Ojibway Nation APM team organized the Waabigonii Zaaga'igan Youth Summit, which was centered around learning about the implementation of Canada's plan. The summit began with an opening ceremony which featured the late Elder Dorothy Parenteau, who had been a member of the Council of Elders and Youth since 2016. A youth member of the Council of Elders and Youth also attended the summit and facilitated a learning session for youth on Mino Bimaadiziwin, an Ojibway philosophy capturing the concept of balancing the four elements of health: physical, mental, emotional and spiritual.

In response to interest from young people to learn more about careers, the NWMO Environment team gave a presentation about their work and career trajectories. The summit also addressed health and wellness within the community.

Explore and Discover with the NWMO

The NWMO ran a four-day camp for local Ignace youth at the Ignace Learn More Centre, where youth between the ages of seven and 12 participated in a wide range of environmental and cultural activities. The activities included identifying trees, plants and seeds, and learning about medicinal plants and Indigenous Knowledge. The youth also learned about the different types of rock in each of the siting areas and examined local core samples that are part of the NWMO's geological studies.

Youth learn about rocks during the NWMO's Explore and Discover summer day camps.



Touch a Truck

The Municipality of South Bruce and the NWMO organized a “Touch a Truck” event in South Bruce, where children and their families were invited to explore firetrucks, tow trucks, compactor trucks and more. The Mobile Learn More Centre was also present at this event. Attendees learned about Canada’s plan and programs that are underway in South Bruce. The NWMO’s Environment team attended the event, supporting awareness and understanding of the ongoing biodiversity studies in the area.

A firetruck and the NWMO’s booth at the “Touch a Truck” event in South Bruce.



YOUTH PARTICIPATION IN CANADA’S PLAN

Developmental students at the NWMO

In 2022, 21 post-secondary students worked at the NWMO as summer students on tasks related to their fields of study. With students from various institutions, including McMaster University, Toronto Metropolitan University, the University of Ottawa and Humber College, this program provides students with opportunities to make meaningful contributions to the NWMO’s technical and engagement work.

NWMO summer students tour the NWMO’s Discovery and Demonstration Centre in Oakville, Ont.



Oakville tours

Design, optimization and testing are some of the operations performed at our Discovery and Demonstration Centre in Oakville, Ont. Current work is focused on the engineered barriers and placement technologies that will be used in Canada's deep geological repository. In 2022, Oakville tours resumed welcoming community and youth groups. The NWMO summer students participated in a tour and learned firsthand about technical aspects of the project.

Students and staff from French-language schools in northwestern Ontario speak with an NWMO engineer during a visit to the NWMO's Discovery and Demonstration Centre in Oakville, Ont.



Conversations with youth on Golf Day

The NWMO joined youth between the ages of 12 and 19 out on the greens of the Ignace Golf & Country Club for a round of golf, lunch and conversations about Canada's plan. Participants offered insights about potential project impacts relating to post-secondary education, work and opportunities for youth in the community.

Local youth participates in Golf Day.



PARTICIPATORY ENVIRONMENTAL MONITORING AND ENGAGEMENT

Environmental monitoring and engagement are important components of the site selection process. Our understanding of local environmental conditions benefits from local knowledge and participation.

The environmental baseline monitoring program is site-specific and is built with input and feedback from Indigenous and municipal communities in the siting areas. Where possible and where there is interest, opportunities can be developed for the public to participate in sample collection activities. This year, several youth groups participated in environmental engagement and monitoring activities.

Macrophyte sampling in South Bruce

The NWMO ran a macrophyte sampling event for grade 11 and 12 students enrolled in Sacred Heart High School's GENESIS program to support the environmental baseline monitoring program. With support from the Saugeen Valley Conservation Authority (SVCA), the students learned water quality sampling techniques from a water resources technician. They also sharpened their plant identification skills by learning how to differentiate sedges from grasses and rushes.

These skills came in handy over two days in May when students set out to collect samples of sedges, a grass-like plant, as well as their roots and surrounding sediment. Students visited local water bodies such as Schmidt Lake to collect samples which were sent to a laboratory for analysis.

Example of sedges used during macrophyte sampling in Teeswater.



An SVCA water resources technician teaches a GENESIS student how to take a manual water depth reading.

Environmental open house

An environmental open house event was held at the Ignace Learn More Centre for the first time this year. Families and young people came by to learn about the environmental baseline monitoring program and talk to the Environment team to learn about Canada's plan and opportunities for public participation. A virtual open house initiative was launched earlier in the year and remains open to facilitate community input on the monitoring program.

NWMO staff at the environmental baseline monitoring open house.



THE NWMO AND THE TORONTO ZOO'S NATIVE BAT CONSERVATION PROGRAM

The NWMO's ongoing commitment to protecting the environment includes Ontario's bat population. 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 in the siting areas. Several community activities were organized to support awareness of the program and facilitate community participation, and participants of all ages learned that bats are threatened, not threatening.

Indigenous peoples are stewards of the land and have a deep connection to the plants and animals that inhabit their traditional territory. That commitment to environmental conservation is a value shared by the NWMO, the Toronto Zoo and the communities we work with. We're proud of our partnership with the Toronto Zoo, which is committed to connecting people, animals and conservation science to fight extinction, and see it as a natural fit given our mission to safeguard the environment — including the people and the biodiversity within it.

Community science: Backyard bat acoustic monitoring

Métis families across the Métis Nation of Ontario-Georgian Bay Traditional Territory participated in the Toronto Zoo community science project to track bat populations in their backyards. This work informs the NWMO's ongoing environmental baseline monitoring program, and the data collected will contribute to the NWMO's efforts to protect vulnerable bat populations. Local volunteers in the South Bruce area also participated in the program.

Saugeen Ojibway Nation Bat Conservation Day

Representatives from the Toronto Zoo Native Bat Conservation Program spent a day presenting ongoing research, including long-term acoustic monitoring, trap-and-release studies and telemetry studies. Families and children from Saugeen First Nation and Chippewas of Nawash Unceded First Nation visited the Saugeen Ojibway Nation Environment Office to learn about the conservation program, do arts and crafts, and build and decorate bat boxes.

Youth work together to build and decorate bat boxes.



Example of a bat box that can provide a roosting habitat.

Bat monitoring presentation: A night with the bats

A collaboration between the NWMO and the Toronto Zoo Native Bat Conservation Program invited youth in grades six to 12 to learn about the bat monitoring programs in the Ignace area. Several youth joined the event to learn about bats and build custom bat boxes.

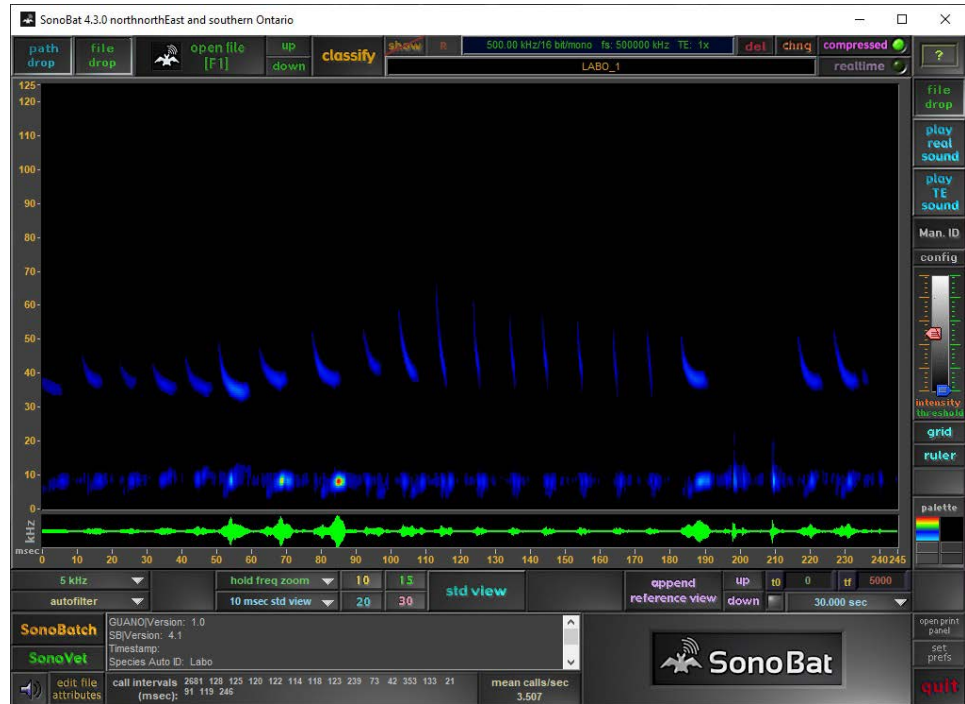
Youth decorate a bat box they built themselves after the Toronto Zoo presentation.



Bat Night

In July, youth from Wabigoon Lake Ojibway Nation joined Toronto Zoo Native Bat Conservation Program representatives and NWMO staff to learn about the importance of bats in the ecosystem, and participated in an evening walk to listen for bats in the area. The youth constructed two bat boxes to provide a temporary roosting spot for the bats. Participants had an exciting evening using technology to make echolocation calls audible for human hearing.

This graph displays the echolocation signals of a bat, allowing researchers in the field to identify the species. In this case, it is an eastern red bat, a species common in Ontario.



Indigenous youth engagement

COUNCIL OF ELDERS AND YOUTH

The NWMO Council of Elders and Youth is an independent advisory body that provides counsel on the application of Indigenous Knowledge in the implementation of Canada’s plan and the NWMO’s approach to Reconciliation. Indigenous youth are directly involved in dialogue about these subjects through their participation in the council. The council plays a crucial role in helping build and strengthen relations with First Nation and Métis communities in the siting areas.

PASSING KNOWLEDGE TO YOUNGER GENERATIONS

The Council of Elders and Youth provides new outlooks and shared perspectives that motivate the NWMO, allowing us to be open to learning from spirit and ceremony as we explore our journey in Reconciliation. In an interview with the late Elder Dorothy Parenteau, she taught us that, “By doing Reconciliation work in this way it creates space for reflection, compassion and love, which is not typically encouraged within corporate culture but is so important if the NWMO wants to get Reconciliation work right.”

Elder Dorothy Parenteau was a member of the council from 2016. She followed the traditional teachings of the Anishinaabe Nation and was a member of the Waabigonniiw Saaga’iganiw Anishinaabeg, also known as Wabigoon Lake Ojibway Nation. Through oral teachings, she passed on knowledge to the younger generation — including Jeremiah George, a youth member of the council — to ensure they understood their responsibilities as caretakers of Mother Earth.

“My grandma, Elder Parenteau, taught me to always be respectful, supportive, honest and forthcoming with anybody I deal with. The spirits of our family members are always watching us, and we must do everything we can to honour them,” said Jeremiah George.

Elder Dorothy Parenteau was a valued member of the Council of Elders and Youth for eight years until beginning her journey to the spirit world in August 2022. Elder Parenteau was a proud supporter of youth leadership as part of the council. While her presence on the council will be missed, the important legacy of care for Mother Earth she passed on to young people like Jeremiah George will be everlasting.

The late Elder Dorothy Parenteau with Jeremiah George of the NWMO Council of Elders and Youth.



The Council of Elders and Youth gathering

In May 2022, the Council of Elders and Youth met for their first in-person gathering after a two-year hiatus due to the COVID-19 pandemic. This three-day gathering started with a traditional sunrise ceremony around a sacred fire. Those who attended the gathering discussed topics surrounding impact assessment, the environment, Indigenous engagement and more.

The Council of Elders and Youth at their first in-person gathering after two years.



SPONSORED INDIGENOUS YOUTH PROGRAMS

The Gord Downie & Chanie Wenjack Fund's Legacy Schools program

The Legacy Schools program, through the Gord Downie & Chanie Wenjack Fund (DWF), engages, empowers and connects students and educators to advance Reconciliation in their communities — including the siting area communities. Educators and youth leaders are equipped with a toolkit to help students learn about the history and impact of the residential school system on Indigenous peoples.

In June, the DWF partnered with Scotiabank and Maple Leaf Sports & Entertainment (MLSE) for a special one-day event to celebrate National Indigenous Peoples Day. Over 1,000 students gathered at Scotiabank Arena in downtown Toronto and thousands more joined virtually to hear from Indigenous Elders, performers, speakers and artists who showcased their work, stories and knowledge. Students had the honour of hearing from the Wenjack and Downie families about how we can continue to move Reconciliation forward in our lives and communities.

Students gather at Scotiabank Arena in downtown Toronto, Ont. for a day of education and celebration in honour of National Indigenous Peoples Day, hosted by the Gord Downie & Chanie Wenjack Fund in partnership with Scotiabank and MLSE.



Right To Play's Promoting Life-skills in Aboriginal Youth (PLAY) program

Right To Play's PLAY program supports community programs within First Nation, Métis and Inuit communities, as well as urban Indigenous organizations. Through support and partnership, this program promotes play-based learning which fosters leadership development and the development of community health, including education, healthy relationships and employment success. The NWMO's sponsorship contributes to programming throughout Ontario.

Early Investments in Education and Skills program

The NWMO's Early Investments in Education and Skills (EIES) program provides communities in the siting areas with funding for enriching educational activities. This program is an investment in the youth of today and their community, supporting them to become the leaders and innovators of tomorrow.

COMMUNITY SPOTLIGHT

South Bruce STEM learning

With the Municipality of South Bruce, the NWMO supported the purchase of a new welding simulator for the Bruce-Grey Catholic District School Board. The purchase of this equipment aims to support students in the Specialist High Skills Major programs, as well as those taking Technical Education courses. Learning on the simulator helps build confidence in many students before they step into the welding booth, as well as reducing material waste. The skills and experience they gain will help these students obtain co-operative education placements, apprenticeships and secure employment in the area.

South Bruce area schools received contributions towards science, technology, engineering and mathematics (STEM) materials, including Sphero littleBits kits, 3D printers and Ozobots for math and coding. The South Bruce Community Liaison Committee supported 10 local students studying STEM at university with a \$1,000 bursary each.

Ignace STEM learning

In Ignace, the Ignace Community Liaison Committee approved funding for robotic Lego kits and iPads for students in grades one to 12. A lunch-hour Lego club is planned for students to learn how to build and program the Lego robots. They will be available for use by students at their convenience at the Ignace Public Library.

Ignace's annual Kids Fest and Science North's Great Northern Ontario Road Show

The Ignace Kids Fest hosted Science North and STEM-related activities to enable children to learn through fun experiences. As part of the event, participants met with an NWMO geologist, learned about rocks, viewed core samples and tried a hands-on interactive activity to create their very own core sample.

Youth participants create their own core samples.



The NWMO contributes to Huron-Kinloss' business incubator program

Parallel to the EIES program and in support of developing skills locally, Huron-Kinloss business incubator The Hub received funding for virtual training for young entrepreneurs. The training modules cover a range of introductory issues, including creativity, innovation and opportunity identification, digital literacy, marketing and social media, and entrepreneurship 101. Several aspiring businesspeople participated in the youth program this year. Alongside the various programs available to the community, The Hub is preparing to provide additional in-person support for future youth-oriented training.

The Hub's Business Development Co-ordinator on site in Huron-Kinloss.



Sponsorships and donations

Fun and engaging STEM programs can motivate young people to consider STEM education and professional trajectories in STEM. The NWMO's sponsorships and donations program contributes to local and regional initiatives, corporate and youth science organizations that support youth development and community well-being, and broader regional science education programs. We also contribute to post-secondary scholarships and financial awards for graduating high school students.

As in the past, this year's community requests for sponsorships included funding local sports and recreation. This funding helps the communities in their efforts to promote physical activity and community health.

LOCAL AND REGIONAL INITIATIVES

The Nuclear Innovation Institute's summer program

The Nuclear Innovation Institute (NII) Explore's Science in the Summer program, sponsored in part by the NWMO, returned for its second year this year. In its summer programming, NII supports STEM learning through experiments, creation and discovery. During July and August, NII instructors travelled across Bruce, Grey and Huron counties engaging young people with several hands-on activities, including laser-cut creations, "Rock'n Robots," "Electrifying Energy" and others.

"The NWMO recognizes the importance of supporting education in science and technology to foster the innovation of tomorrow [...]. Thank you to NII Explore for delivering this program with creativity and energy to children across the region this summer. It is our pleasure to contribute to this important work."

— NWMO Director of Site Selection, South Bruce

High-energy instructors led fun and engaging science programs across the region.



Saugeen First Nation Ribbon Skirt-Making and Gala

In June, NWMO staff were invited to participate in the Saugeen First Nation Ribbon Skirt-Making and Gala in Southampton, Bruce County. Youth and other community members gathered to learn about the teachings behind the ribbon skirts and build them with guidance from the women of the community.

An NWMO staff member joined the Saugeen Library and Event Co-ordinator at the Saugeen First Nation Ribbon Skirt-Making and Gala in Southampton.



Ignace Minor Ball Season Windup

The Ignace Minor Ball program hit the field for the 2022 spring season after being suspended due to COVID-19. This year, NWMO staff got into the swing of things and participated in two friendly games against local youth. The NWMO's sponsorship aims to support recreational opportunities and physical fitness among young people.

Iggy the Otter steps up to the plate during the NWMO vs. youth game at the annual Ignace Minor Ball Season Windup.



NWMO Free Skate Day

The NWMO sponsored a summer free skate for youth and families at the Ignace Recreation Centre. The event was part of a community initiative to make recreational opportunities available for youth. The NWMO had a booth where people could drop in to learn more and get updates about Canada's plan.



A local skater gets ready to hit the ice in Ignace.

Teeswater Fall Fair Kickoff

The NWMO supported the Teeswater Agricultural Society's Fall Fair Kickoff outdoor movie night in Teeswater. The event was a fun way for families to participate in the Fall Fair and learn about Canada's plan by visiting the NWMO table. The movie *The Bad Guys* was screened and a snack booth was available for those attending.



A poster advertising NWMO engagement at the Teeswater Fall Fair.

CORPORATE SPONSORSHIPS

Ontario Tech University sponsorships

The NWMO committed to a partnership with Ontario Tech University in 2020 to support the NWMO Women for STEM Scholarship and the NWMO Indigenous Student Award. The Women for STEM scholarships are part of a program that the university launched in 2019 with the goal of increasing gender parity in STEM careers. The NWMO supported these scholarships from the program's beginning, with a five-year commitment to help sustain them into the future.

In 2022, the NWMO continued our support of the Women for STEM program through student scholarships, through sponsorship of the Women for STEM conference, and by participating in the program's mentorship program.



Ontario Tech University Women for STEM Scholarship recipients.

SPONSORSHIP OF YOUTH SCIENCE ORGANIZATIONS

Youth science programs contribute to youth development and build interest in careers related to the NWMO and science-driven industries. Contributions to Science North, Scientists in School and Shad Canada programs are part of the NWMO's continuing efforts to fund science education in the siting areas and beyond.

Science North

Science North provides hands-on and virtual STEM learning for students from junior kindergarten through grade eight. In 2022, the NWMO's sponsorship supported Science North in delivering virtual science workshops presented by a Science North instructor, live science shows and informal "Ask a scientist" sessions throughout communities in northwestern Ontario. Students in Ignace, Dryden, Vermillion Bay, Ear Falls, Atikokan, Kenora, Pawitik, Sioux Lookout and more participated in e-workshops on coding, cell structures and "The Mine Life." With the NWMO's sponsorship, Science North delivered 75 e-workshops and 33 "Ask a scientist" sessions that reached over 1,900 students.

"The Bluecoat [Science North instructor] did a fantastic job of 'going with the flow' and keeping the kids interested. He was extremely knowledgeable about so many topics. The kids were really happy with the answers they received (even to some of their questions that they thought might be too outrageous)."

— Open Roads School, Dryden

A Science North Bluecoat takes grade one students through the virtual workshop "Creative Coding," where they listen closely to instructions ("code") in order to draw a picture.



Scientists in School

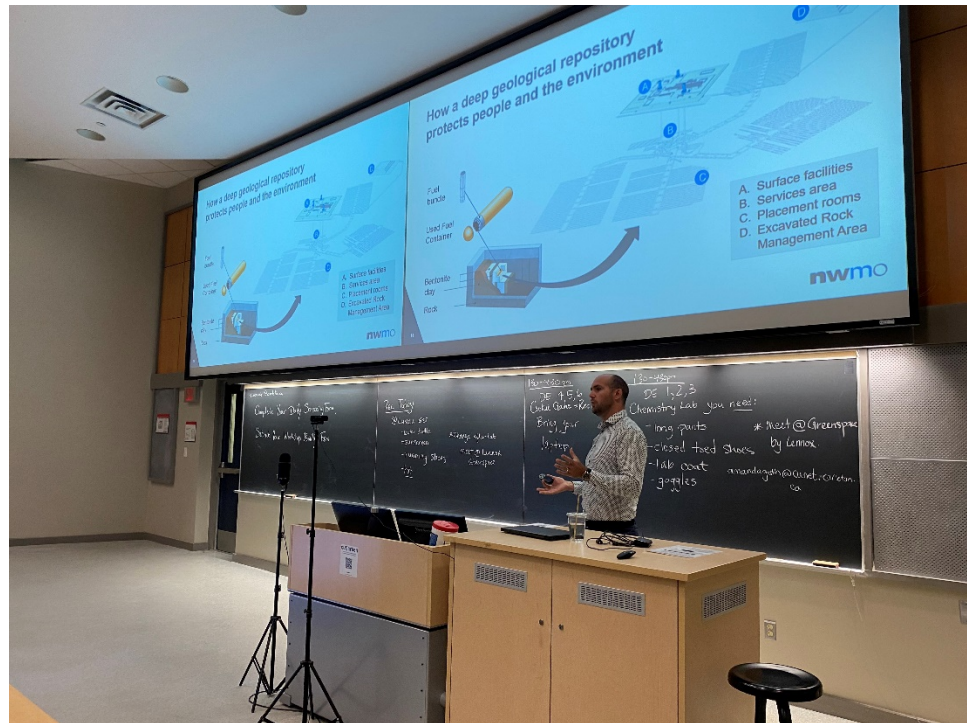
The NWMO continued our sponsorship of Scientists in School, supporting the organization in delivering STEM workshops to youth across Grey, Bruce, Huron and Perth Counties. Throughout the 2021-22 school year, the NWMO's support funded 90 virtual classroom workshops, 30 community workshops and the ongoing development of new program content. This year, the NWMO's support assisted the program to reach 6,750 young scientists through complimentary classroom workshops and 450 children and youth through partnerships with libraries and Big Brothers Big Sisters.

Shad Canada

The NWMO has supported Shad Canada since 2009, building a strong relationship with this organization that helps high school students (and future STEM leaders) build their networks, strengthen their skills and support their passion for STEM. In 2022, Shad Canada returned to their in-person summer program hosted at Canadian universities, with 1,000 grade 10 and 11 participants (55 per cent of whom were young women) attending from all provinces and territories. The NWMO’s support contributed to the success of this year’s program, including a fee reduction that helped keep the program as accessible as possible. Over one-third of participants received additional financial support.

This year, NWMO employees travelled to various university campuses in Ontario, Quebec and New Brunswick to talk to Shad students about Canada’s plan for used nuclear fuel. In addition to providing an overview of the project, this year’s presentations highlighted how the NWMO supports community well-being. The NWMO reached over 570 students through 10 in-person presentations.

An NWMO staff member presents to Shad students about community well-being.



Engaging young scientists in collaboration with post-secondary institutions

Canada's plan to contain and isolate used nuclear fuel involves engaging leading universities and scientists to ensure that we have a good understanding of the materials and processes that will be used for the project. To this end, the NWMO collaborates with many professors, graduate students and international experts in various fields, including chemistry, physics, engineering and geoscience. Below are some examples of graduate students from our partner universities involved in science-based youth engagement, and some of their reflections on working with the NWMO in the context of their research.

EXPLORING POST-SECONDARY PATHWAYS

Secondary student engagement in the northwest

In September, students from the University of Western Ontario and the University of Waterloo visited northwestern Ontario with a focus on “for youth by youth” engagement. They gave presentations to participants in grades seven to 12 at the Ignace and Area Youth Gathering where they shared information about their post-secondary institutions, their career pathways and opportunities for youth in their fields.

Graduate students from NWMO partner universities visit an NWMO borehole site in the Revell batholith where they are supporting research.

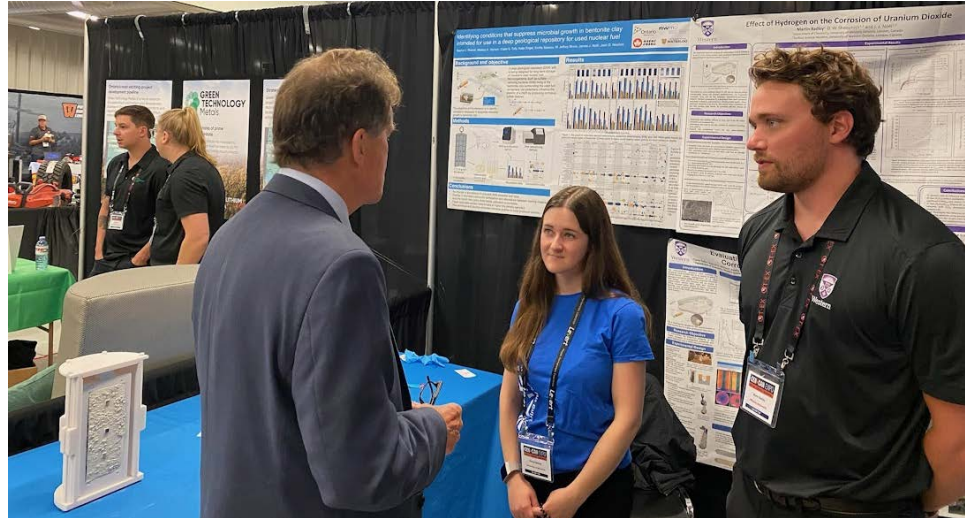


Their engagement also included networking at a regional energy conference, cultural awareness training at Wabigoon Lake Ojibway Nation and a visit to the Revell area borehole site, where their research is currently being utilized in ongoing borehole work.

Central Canada (CEN-CAN) Resource Expo

The CEN-CAN Expo featured hundreds of organizations that work in the mining, forestry and energy sectors in central Canada, including the NWMO. The event, held in Thunder Bay, enabled graduate students participating in NWMO research to introduce and share their work with a broader audience within their industry.

Graduate students present their research at the CEN-CAN Expo.



YOUNG SCHOLARS COLLABORATING ON NWMO RESEARCH PROJECTS

Through the Ontario Research Fund, the NWMO works with an inter-university network of faculty, staff and students from several Canadian universities including the University of Western Ontario, the University of Waterloo, the University of Toronto, York University and Queen’s University in support of our technical research program. This collaboration enables students to gain insight into how their research can be applied by industry.

“My research will contribute to our understanding of microbial community abundance and composition in various types of bentonite exposed to different DGR [deep geological repository]-relevant conditions and will help inform [repository] design as well as a safety case for its implementation.”

— Graduate student, University of Waterloo

“My research will inform nuclear waste management organizations of the bentonite clay compaction density necessary to mitigate microbially influenced corrosion of the proposed copper canister under DGR [deep geological repository] conditions. This will aid the NWMO in obtaining all the required licensing to begin construction on a [repository]. This project has been exciting and collaborative and helped me see how vital outreach, effective communication and learning in non-westernized ways are to a holistic research approach. I will take this with me past this project as I continue a career in nuclear.”

— Graduate student, University of Western Ontario

***Natural Sciences and Engineering Research Council of Canada (NSERC)
Alliance grants with the NWMO***

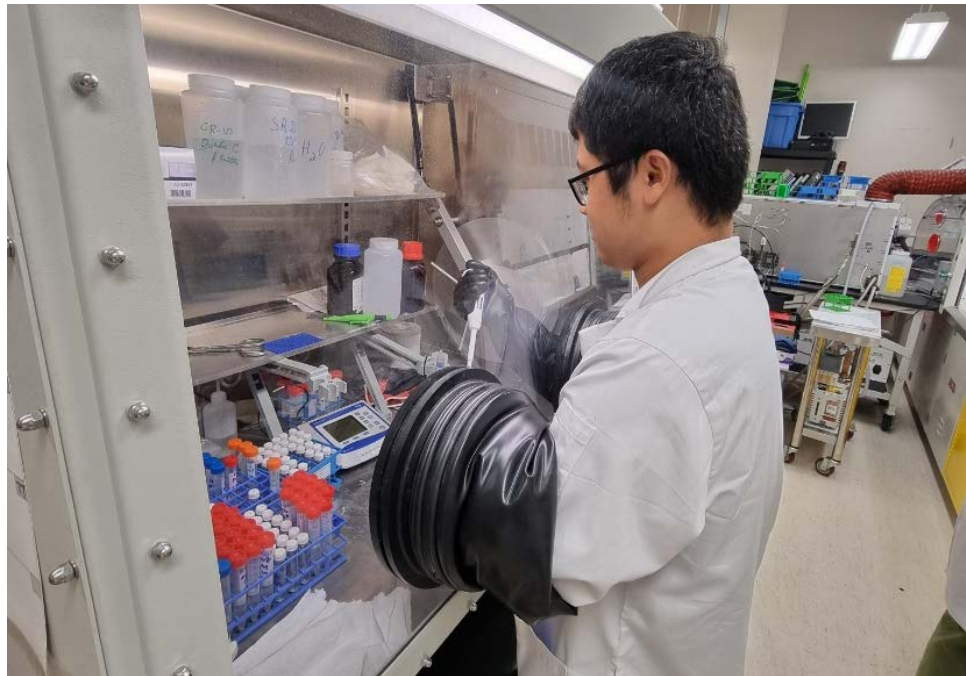
The NWMO has been an industrial partner supporting geological research at McMaster University through NSERC Alliance grants since 2012. Many graduate students contribute to this work and, through it, to Canada's plan.

How are graduate students contributing to the project?

“Currently, the main focus of my research work is studying the sorption behavior of Europium onto five different host rocks, including the pH-ionic strength dependence of these sorption behaviors. These rocks involve granite and bentonite in crystalline underground environment[s], and illite, shale and limestone in sedimentary underground environment[s].”

— Graduate student, McMaster University

A McMaster University graduate student works in a glove box performing sorption experiments.



“Our research work and outputs can help develop the complexation constants for surface complexation reactions and provide the NWMO with more data for peer review. These may help the NWMO with designing and planning for long-term radioactive waste management.

— Graduate student, McMaster University

Social media

In 2022, the NWMO highlighted youth engagement on our social media platforms, including the participation of youth in NWMO-led initiatives. In October 2022, we shared a story about youth participation in the Toronto Zoo's Native Bat Conservation Program, where community members learned about local bat research and built bat boxes to be placed within their communities. The program is part of the ongoing partnership between the NWMO and the Toronto Zoo supporting local bat conservation research.



The NWMO will continue to share youth engagement-related content on social media, encouraging our audiences to learn about Canada's plan for the safe, long-term management of used nuclear fuel.

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NUCLEAR WASTE MANAGEMENT ORGANIZATION SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES

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