



Mackenzie Valley Operational Dialogue 2024

Summary Report

PREPARED FOR

Crown-Indigenous Relations and
Northern Affairs Canada

DATE

July 30, 2024



CONTENTS

BACKGROUND AND WORKSHOP OVERVIEW	3
WORKSHOP OBJECTIVES	3
LITHIUM 101	4
FIELD TRIP OUTCOMES	4
LITHIUM BACKGROUND & GEOLOGY	4
LITHIUM CONTEXT	5
LITHIUM EARLY AND ADVANCED EXPLORATION	6
FROM LITHIUM EXPLORATION TO MINING AND PROCESSING	7
LITHIUM AND THE BIOPHYSICAL ENVIRONMENT	8
FUTURE OF LITHIUM IN THE NWT	10
OPERATIONAL DIALOGUE: UPDATES AND DISCUSSION	14
LIGHT WORK PLAN 1: ADDRESSING ADMINISTRATIVE CHALLENGES	14
LIGHT WORK PLAN 2: ANALYTICS TRACKER	17
LIGHT WORK PLAN 3: EDUCATION & OUTREACH (RETIRED)	17
LIGHT WORK PLAN 4: COMMUNICATIONS STRATEGY (RETIRED)	17
UPDATES ON EXTERNAL INITIATIVES	17
OPERATIONAL CHALLENGES DISCUSSION	23
OPPORTUNITIES TO ADDRESS OPERATIONAL CHALLENGES	24
NEXT STEPS	26
ANNEX A: PARTICIPANT LIST	27
ANNEX B: MVOD 2024 AGENDA	28
ANNEX C: MVOD 2024 FEEDBACK SURVEY RESULTS	31

BACKGROUND AND WORKSHOP OVERVIEW

The Mackenzie Valley Operational Dialogue (MVOD) was established in 2019-20 to create space for regular dialogue among parties to collaborate on specific and prioritized operational improvements related to the northern regulatory regime for mineral development. MVOD is led by an organizing committee coordinated by Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) and includes the Government of the Northwest Territories (GNWT), NWT/NU Chamber of Mines, and the Mackenzie Valley Land and Water Board. It is funded through the CIRNAC-led Northern Regulatory Initiative (NRI) under the Critical Minerals Strategy, given the priority to improve regulations to accelerate responsible project development. While MVOD's primary focus remains operational, regulatory changes may be raised in discussion and directed to other venues to address. MVOD supports a 2020 NWT Environmental Audit recommendation for improved collaboration between parties within the regulatory regime.

Since the original in-person meeting in March 2020, two hybrid meetings, in February 2023 and May 2024, as well as several virtual meetings have been held. Additionally, Light Work Plans were developed with some completed and some ongoing. The most recent MVOD workshop was held May 29-30, 2024, as a hybrid (in-person and virtual attendance) event, to provide participants an opportunity to learn more about lithium (Day 1), a critical mineral for Canada that is of growing exploration interest in the NWT, and to discuss operational (and regulatory if relevant) challenges and solutions (Day 2) (see Annex A for the participant list and Annex B for the agenda). There were approximately 100 participants over the two days, half of which attended in person. An optional field trip was held on May 28th in advance of MVOD, which provided a practical learning opportunity about lithium.

Workshop Objectives

The objectives of the workshop were to:

- Share information and learn about lithium exploration and mining, and associated operational, regulatory, environmental, and economic challenges and opportunities.
- Share relevant background information on MVOD and origins of this workshop.
- Provide updates on Light Work Plans.
- Discuss additional operational (and regulatory if relevant) challenges and opportunities.

The purpose of this report is to provide a summary of the key takeaways and discussion on operational challenges and solutions. The graphic below outlines the organization of the report.



LITHIUM 101

The Lithium 101 session consisted of a field trip on May 28th and a lithium learning session held as part of the annual MVOD on May 29th.

Field Trip Outcomes

On May 28th, participants visited the Yellowknife Historical Museum where Li-FT Power, one of the exploration companies in the NWT, spoke to their exploration activities in the region, the exploration process, subsequent steps to mine and process lithium, and associated challenges and opportunities for the NWT. The group then visited a pegmatite outcrop about 1 hour away from Yellowknife along the Ingraham Trail. Gideon Lambiv, a geologist from the NWT Geological Survey, acted as a guide and explained where lithium is found in pegmatite rocks.

Note: initially the group was to visit the Li-FT exploration site, however bear activity in the area necessitated a quick shift in approach.

On May 29th, a lithium learning session was held as part of the annual MVOD. A synopsis of presentations and a summary of the question and answer (Q&A) period is found below.

Lithium Background & Geology



Gideon Lambiv

*Industrial Minerals Geologist, Northwest Territories Geological Survey (NTGS),
Government of the Northwest Territories (GNWT)*

Gideon provided information on lithium, where it is typically found (e.g., in spodumene mineral within pegmatitic rocks) and its occurrence in the NWT. There are three main types of lithium deposits: pegmatites, brines, and clays; all which require different types of processing methods and resulting environmental impacts. Although pegmatites account for only about 30% of current global lithium production, they are attracting a lot of exploration and research interest because of their higher grades, simple mineralogy, and low environmental footprint. The NWT has hundreds of pegmatites with demonstrated lithium potential, which also contain significant concentrations of other critical minerals. The NWT may also have potential for oilfield-type lithium brines, but these sources need to be further evaluated.

Q&A

- One participant asked whether lithium is included in the automatic testing during oil and gas drilling, or would companies need to specifically test for it. Gideon responded that lithium is not a mandatory reporting mineral, so although companies may test for it, the reporting may not be publicly available.

- Another participant wondered if brine is safe for wildlife. Gideon confirmed that brines are safe for wildlife as they are not interested in salt flats.

Lithium Context



Jesse Hembruf

Policy, Research Analyst, Natural Resources Canada (NRCan)

Jesse presented briefly on the Canadian and global lithium context, including what the supply chain looks like, as well as market challenges and outlook. Lithium is critical to meet Canada's clean energy transition commitment to achieve 100% zero-emission vehicle sales by 2035 for all new light-duty vehicles. It is one of six priority minerals for clean growth for Canada and is used primarily in electric vehicle batteries, followed by other batteries, energy storage systems, ceramics, and glass. Australia is the largest supplier of lithium, with 50% of global production coming from five mines, and China is the largest supplier of refined lithium. The lithium market is unstable and experiences periods of over and under supply, which causes fluctuations in its market price. Canada has the potential to supply 100% of lithium needed for planned battery factories but mining projects need to reach commercial production and mid-stream processing plants need to be built, which are large gaps. Most lithium projects are in the advanced stage and occur in Ontario and Quebec, followed by some across the prairie provinces. The Government of Canada has financial supports available through various programs and tax credits to advance lithium mining in Canada.

Q&A

- Some participants commented on the insufficiency in funding of the Indigenous Natural Resource Partnerships Program. The allocated \$25 million is not adequate for the meaningful participation, consultation, and engagement with Indigenous peoples where these critical minerals are being explored. NRCan responded that they paused intake for the program given it was oversubscribed and that they are working on extending it.
- Another participant asked whether Canada is committed to a domestic lithium supply. Jesse shared that electric vehicle (EV) battery plants are being built in Canada due to Canada's competitive advantage in terms of ESG, with five amortized lithium mines assumed to feed these plants. He reiterated that there is a clear domestic demand and export potential to the US and elsewhere.
- One participant wondered when Canada was going to support more grassroots exploration as compared to more advanced projects. Jesse responded that NRCan continues to support industry, and advocate for supports such as a junior exploration tax credit.



Alex Langer

President, Li-FT Power

Alex spoke to the lithium market's performance and the need for more supply to meet the demand for the green energy transition. The price of lithium is forecasted to increase but only for a short timeframe. It is important for lithium mine projects to come online within this timeframe. Li-FT Power is well positioned to deliver lithium in the market, especially to contribute to NWT's economy with the expected diamond mine closures. The average timeline from discovery to production is 15 years; however, other countries have a shorter timeframe as they may be fast tracking their regulatory processes, which means everyone here must work in partnership to make the timing work.

Q&A

- One participant asked what is in the works for development beyond exploration, and what is the market forecast 10-12 years down the road given exploration occurs long before the profitable production stage of lithium projects. Alex responded that it is hard to gauge since new technologies can emerge. Lithium is abundant but can be difficult to process. New technology for producing lithium from brines could change the market and make traditional mining (e.g., hard rock mining) less competitive. There is a risk of being left behind.

Lithium Early and Advanced Exploration



Daniel Campbell

General Manager, Loyal Lithium

Daniel provided an overview of Loyal Lithium's operations in the NWT. The Hidden Lake Lithium Project is in the exploration stage and had identified extensive spodumene-bearing pegmatite outcrops with all dykes clearly visible from the surface. Drilling intercepts show favourable mining geometries for open cut and underground mining operations. Existing infrastructure could be used to truck ore to Hay River and then transport South by rail. Loyal Lithium has completed some mapping and geophysical surveys, with further conceptual studies and surveys to be completed in the near future. The site has received a land use permit for drilling that contains 101 conditions.



Mark Calderwood

Managing Director, Midas Minerals

Mark presented on an NWT exploration model and walked participants through five phases: targeting, prospecting, mapping and sampling, initial drilling, resource drilling, and feasibility study. The area of land would decrease at each phase as the exploration would narrow down the area for spodumene concentrate extraction, going from 100 square kilometers to 1 to 2 square kilometers. The probability of success for the exploration project would decrease at each phase starting at 100% and potentially dropping to 2%.

Q&A

- A participant asked whether delaying drilling to de-risk (i.e., understand grade and volume in the ground) would mean that Loyal Lithium may miss the window of opportunity for Li exploration. Daniel responded that drilling operations are easy to transition to and that the time is worth it to understand the quality and volume of lithium that exists, given accountability to shareholders.
- A question for Mark was whether lithium extraction operations in Australia are deemed to be quarries or mines. Mark responded that they are mostly mines in Australia and the deposits are larger compared to Canada.
- A participant asked what the infrastructure needs are given existing infrastructure. Infrastructure depends on whether mining and refining is occurring in the NWT. Loyal Lithium is not expecting to bring power lines to site and renewables may be complex. It takes less energy to mine and produce spodumene concentrate than refining the concentrate to lithium. Spodumene concentrate would be trucked to Hay River for transport by rail to be refined elsewhere.
- Another question was about the need to trench/channel when drilling has already occurred. There has been some historical drilling on Loyal Lithium's properties, with recent work focusing on surface channel sampling to understand grade changes in the pegmatite dykes. This work will help understand where future drilling is needed to evaluate the pegmatites at depth.
- One participant asked the presenters' thoughts on additional challenges in North of 60 for investment and mentioned NRCan's Mineral Exploration Tax Credit. The participant also asked whether a North of 60-specific tax credit would be beneficial. Daniel suggested that any supports from the Government of Canada or the GNWT, including tax credits, would be helpful for the NWT.

From Lithium Exploration to Mining and Processing



Hendrik Falck

Manager of Geology and Resource Royalty Policy, GNWT

Hendrik provided an overview of the Tanco mine, a multi-commodity mine currently producing spodumene, located in southern Manitoba. The presentation showed what the mine and its operations look like, including onsite production with lithium, cesium, tantalum assessed separately. The site also includes tailings reprocessing. The production of the mine is dependent on the market and the mineral's profitability.

Q&A

- Some Indigenous participants voiced that Indigenous groups with settled land claims benefit more from resource royalties. There needs to be engagement and consultation for this gap. How do we take away roadblocks and get funding to First Nations who need to be engaged the most? The GNWT is working on redeveloping the Mineral Resources Act (MRA) with Indigenous governments, which governs how resources will be developed in the future. The funding piece may be addressed through this co-development process. Further concern was expressed that there has not been collaboration with First Nations on weaving UNDRIP (United Nations Declaration for the Rights of Indigenous Peoples) into the new regulations.



Dr. Charlotte Gibson

Assistant Professor, Queens University



Brian Cook

PhD Candidate, Queens University

Charlotte and Brian presented on lithium hard rock mineral processing. They shared the history of hard rock lithium processing in Canada and methods to process spodumene, including new processing techniques such as sensor-based ore sorting, dense media separation, magnetic separation, de-sliming, and flotation.

Q&A

- One participant asked about the environmental impacts of processing related to energy consumption. Processing lithium does consume a lot of energy and water, though the water is recirculated and not many chemicals are used in the process. There is intensive energy use when converting spodumene using heat. Tailings out of the concentrate are quartz and silicate, which are inert. More downstream processing may have bigger energy impacts based on processing methods.

Lithium and the Biophysical Environment



Matthew Hudder

Environmental Scientist,
CanmetMINING, NRCan



Charbel Atallah

Research Scientist,
CanmetMINING, NRCan

Matthew and Charbel both presented on the Critical Minerals Research, Development & Demonstration Program (CanmetMINING), which focuses on working with industry to support project advancement and address technical challenges. This presentation provided an overview of lithium brines as an alternative lithium source and extraction methods, including research on technology. Lithium can be extracted from low-grade Canadian oilfield brines using

electrochemical technologies that have been developed and tested at laboratory scale. This technology is continuing to be tested and piloted.

Q&A

- One participant asked that given there is only hard rock and spodumene in the NWT, how much competition would there be in terms of economics in the NWT? The quality of lithium may be better in the NWT which could make hard rock lithium more competitive to brines in some cases.



Dr. Richard Goulet

Scientist, CanmetMINING, NRCan

Richard talked about the environmental impacts of hard rock lithium mining and substances of concern. He spoke to the environmental regulations, including Metal and Diamond Mine Effluent Regulations under the *Fisheries Act*, and efforts to collect data in advance of projects coming online. Lithium is a priority substance to develop environmental guidelines. Data to help predict potential impacts of elements of concern (e.g., toxicity thresholds) would support more efficient federal assessments for lithium projects. For example, tantalum is another element requiring further investigation and guideline development. Lithium is not toxic to aquatic invertebrates compared to other elements but there need to be more long-term chronic tests to ensure the guidelines developed are sufficiently protective.

Q&A

- A participant asked about whether effluent is anticipated in the projects we heard about. Li-FT Power commented that they are in the early stages of project definition right now. More advanced exploration would involve metallurgical tests and flow sheets to determine any potential parameters of concern in any waste stream/wastewater. In terms of deposits of waste, there are options for dry stack tailings which limits liquid effluent with the dense media separation (DMS) plant. It is hard to say how things will roll out in the future if a lithium mine is viable here.
- Another participant asked about Environment and Climate Change Canada's (ECCC) database of toxicity data and whether it contains lithium related data that is publicly available. The National Guidelines and Standards Office of ECCC is compiling and reviewing lithium toxicity data for guidelines development; however, the dataset is not ready for external sharing at this time. The target date for the release of the guidelines is 2024.
- A participant inquired whether any hexavalent chromium was seen in chromium testing of brines. The current testing only tested for total chromium but leaching tests will examine chromium 3 and 6 for speciation. The current focus is on release rates as these data are used in risk assessment models by proponents in their water management plans.
- There was also discussion on whether there has been research on bacterially mediated reactions given weather conditions that would push to different valences for all elements. Microbial assays inform how bacteria could act, though current operating sites have dry

conditions for bacteria to grow. Research on DNA sequencing is ongoing to see growth of microbes.

Future of Lithium in the NWT

The panel discussion with the panellists below, moderated by Lisa Dyer, Director General at the Canadian Northern Economic Development Agency, focused on the opportunities for lithium mining in the NWT and its future in the region.

Moderator:



Lisa Dyer

Director General, Canadian Northern Economic Development Agency

Panelists:



April Hayward

Chief Sustainability Officer, Li-FT



Pamela Strand

Deputy Minister, Industry, Tourism and Investment, GNWT



Andrew Ghattas

Director, Policy and Economics Branch, NRCan



Eileen Marlowe

Land & Community Manager, Loyal Lithium & member of Łútsël K'é Dene First Nation

What is the opportunity for Lithium in the NWT?

April Hayward is an aquatic biologist who worked at Ekati mine and joined Li-FT Power in 2023 as the Chief Sustainability Officer.

April identified the key opportunity of resource development is providing socioeconomic opportunities as the diamond mines close. There is a narrow window to take advantage of the demand for lithium in the NWT to advance green energy solutions globally.

Eileen, an Akaitcho Dene from Yellowknife, is the land and community manager at Loyal Lithium.

Eileen's identified opportunity was for resource development, including lithium, to provide benefits for Indigenous peoples and define what the community benefits look like. Collaborations and strategic partnerships to strategically position Indigenous peoples to be involved in the procurement process pre-environmental assessment is one way to realize this opportunity. Akaitcho Dene First Nations are in the landscape and need to be part of the system, which is lacking in this sector. Opportunities for training and hiring Indigenous peoples is key.

Andrew is the Director of the Policy and Economics Branch at NRCan, who is leading the implementation of the Critical Minerals Strategy.

Andrew identified the opportunity for Canada to participate in a global transition from other commodities to respond to the demand of green energy solutions by developing stronger connections to different value chains. There are economic opportunities at a broad level. Indigenous participation opportunities in the NWT can demonstrate different approaches and develop this sector from the ground up.

Pamela is currently the Deputy Minister of Industry, Tourism and Investment at the GNWT.

Pamela identified the opportunity to do business differently as it relates to UNDRIP and ESG (Environment, Social, Governance). There is a race to tell the NWT story, their vision, and how to get there together.

What do we need to be thinking about to move from exploration to mining and how may we want to do things differently?

A common theme in the responses to this question was around Indigenous partnership early in the process, Indigenous benefits that go beyond the concept of Impact Benefit Agreements (IBA) with Indigenous peoples and building Indigenous capacity.

April Hayward

- Lithium exploration is less resource and time intensive than diamond or gold exploration given lithium can be found at the surface and seen in pegmatite outcrops. The process to move through exploration and research is also quicker to determine whether mining is viable.
- Li-FT Power is in the initial drilling phase (early exploration) and will be starting economic studies to determine the quality of spodumene. There is variability in the amount of lithium and its accessibility to extract out of the host rock. Further drilling and feasibility studies and financing will determine whether or not Li-FT Power can move from exploration to mining.
- Li-FT Power aims to ensure that the benefits of exploration are shared with local Indigenous communities, beyond IBAs. For example, Li-FT Power is working with Det'on Cho Corporation on a feasibility study for renewable energy to power a DMS plant locally given the challenges to bring infrastructure and power to mining projects. Lithium mining can grow business offerings and grow Indigenous businesses through partnerships, which maximizes benefits and keeps them in the territory.

Eileen Marlowe

- Contracting and procurement of Indigenous peoples for conducting technical studies needs to be done differently. This change includes hiring and training Indigenous peoples for technical studies in a meaningful way (i.e., hiring before the RFP process for experts on a contract basis).
- Indigenous governments need to work together and with companies on ownership, studies they would like to work on, and procurement opportunities, though more support is needed to build capacity for Akaitcho and Yellowknives Dene First Nation.

- Benefits should be shared in a tiered approach, with those closest to the asset at the top, followed by those farther away.

Andrew Ghattas

- There is a need to build Indigenous capacity early on, which can also help accelerate project development. For example, bringing Indigenous knowledge into discovery, as demonstrated through the Tahltan project in British Columbia where University of British Columbia supported training of Indigenous geologists.
- Infrastructure (especially power/grid capacity) is an important consideration as it would help unlock high potential regions. This development needs to occur in parallel as waiting until projects come online will further delay the ability for mines to start production. Infrastructure investment also has social benefits and a good plan in place will lead to positive outcomes.

Pamela Strand

- There is a need to reimagine mines by working together to shape what a mine may look like both from a physical, infrastructure perspective and to support capacity building. The needs, resources, and approaches to working together need to be identified to shape what mining could look like, particularly since multi-commodity mining will look different. There are plans for GNWT to follow-up on these discussions, which also occurred at the Prospectors and Developers Association of Canada (PDAC) annual forum earlier this year.
- Negotiating benefits early, beyond the concept of IBAs, is needed.

What would be the next headline related to critical minerals and lithium in the NWT five years in the future?

April Hayward

Residents of this territory need to decide on the socioeconomic benefits available through lithium mining and whether these outweigh potential impacts on history and culture. It is a challenging question that only those who own the land can answer. How do we work together to find the right balance among impacts? If those who live, work, and play here decide it's the next step, then we all need to get on board and make it happen since there is a narrow window for hard rock lithium, especially in the NWT, to make it to global market.

“NWT gets green light to proceed to production – partnerships prevail to the benefit of all.”

Eileen Marlowe

“Indigenous collaboration marks historic milestone in NWT resource development: partnerships formed for lithium exploration promising mutual benefits.”

There are more Akaitcho Dene First Nations working within this sector, co-management systems, regulatory systems as well as in project management roles.

Andrew Ghattas

There is programming in place with the Indigenous loan guarantee for Indigenous participation and ownership of projects in a way that has not been done previously.

“Indigenous-owned lithium project nears production.”

Pamela Strand

“Big federal investment, in partnership with all levels of government, in infrastructure to facilitate critical minerals mining in the territory.”

Q&A

- The language “critical” implies that there is a sense of urgency to reinforce economic needs, however, it is scaring people due to connotations of warfare.
 - The federal government defined critical minerals based on what was needed for clean technology, development, and key supply chains – what are the minerals for wind, electric vehicles, solar etc.? These minerals are also critical for defense. Since the launch of the strategy, NRCan has worked to improve critical minerals literacy to explain what this means but it is hard to get messaging out to all communities when operating at a national level.
 - These minerals are also critical for climate change globally and for northerners. They can solve climate change problems with resources here in the territory.
 - Translating this language to Elders will need to be carefully considered. Defining diamonds in Inuktitut took some time to communicate. Similarly, critical minerals and new commodities may take time to communicate.
 - Another perspective of “critical” is what is critical for Indigenous communities, which may be different than governments, and non-Indigenous peoples. It is critical for Indigenous peoples that they are included and have the financial resources and capacity to participate in the sector.
- Akaitcho haven’t seen the Critical Minerals Strategy (CMS) in their community. NRCan needs to visit.
- One question posed by a participant, aligned with other comments on capacity, is how are we going to get GNWT and Government of Canada to provide funding immediately? The honour of the Crown and Duty to Consult by the Government of Canada and GNWT must be upheld, along with adequate funding for meaningful Consultation.
 - Governments are aware of this need and get asked regularly what they are doing about this challenge. There is a need to advance this conversation as it was also heard at PDAC.

OPERATIONAL DIALOGUE: UPDATES AND DISCUSSION

Light Work Plan 1: Addressing Administrative Challenges

Light Workplan 1 focuses on improving the efficiency of the regulatory process for application and review processes for small scale mineral exploration projects. Updates shared included the progress on addressing issues and perceptions about the regulatory process that were raised in discussions with parties involved in MVOD.

Water Use

Issue: In 2020, the Land and Water Boards (LWBs) became aware that water uses, where the water is returned to the same water source, were being regulated differently in the Mackenzie Valley than in Nunavut (even though the definition of water use in the legislation is the same). At issue is whether the volume of water being used for building ice-bridges is factored in the determination of need for a Type A or B water licence.

Progress: The LWB clarified their interpretation of the definition through a [water use reference bulletin](#). Information used to develop the reference bulletin included public review inputs of LWB's interpretation and potential changes as well as LWB counsel's analysis of review comments. LWBs received many comments from representatives of federal, territorial, and Indigenous governments as well as industry via their Online Review System. Almost all parties who responded recognized and supported the need to amend the water regulations and all parties supported the exclusion of ice-bridge water use from the determination of the need of a Type A or B water licence. See below under 'Consider changes to waters regulations' for more information on next steps.

Opportunity: Present evidence and potential revised interpretation to the Full Board for decision in early July 2024.

Indigenous Engagement

Issue: Industry expressed lack of clarity on engagement requirements for regulatory processes and outdated engagement group contact lists. Licence/permit applicants feel that this affects their ability to engage prior to making their applications, causing delays in the regulatory process.

Progress: In 2023, the LWBs started the process of updating their Engagement Guidelines, informed by gathering input from communities. Community engagement sessions have taken place so far in Łíídlı́ Kúé and Gameti. LWBs released a 'What We Heard' report, including potential conceptual changes to guidelines. This report will be sent for public review and input before LWBs further update guidelines, conduct public review, and make decisions. The LWBs are also engaging on the possibility of an interactive online engagement mapping tool to be available on the LWB's websites.

Opportunity: Continuation of community engagement sessions through Tea and Talks in the various regions of the Mackenzie Valley. Development of interactive online engagement tool.

Definition of small-scale projects

Issue: Industry representatives have found that the current regulatory process does not work well for small-scale projects. Perceptions include that threshold and triggers lower over time and

that parties do not understand what small-scale projects involve. The current legislation does not contain a definition of 'small-scale' and the current water regulations do not mention exploration or the co-management system.

Progress: LWBs have dedicated more resources to understand issues and specific information that are believed to create unnecessary challenges for small-scale operators. Information is being gathered during presentations and this MVOD meeting to inform solutions. A letter was sent to GNWT and CIRNAC on focused amendments to the Water Regulations, with the full Act and its regulations to be updated later (see below under 'Consider changes to water regulations'). Industry representatives agreed on the need for a schedule in the regulations that includes a definition of small-scale exploration.

Opportunity: Information/ideas gathered at this MVOD meeting will help inform perspectives and realistic solutions.

Management Plans

Issue: Industry representatives perceive management plan requirements as onerous and a hurdle to the application process. Questions have also been raised about whether it is possible to replace at least some management plans with requirements within the terms and conditions of licences/permits.

Progress: Small-scale projects tend to be unique, making it difficult to develop a standard template; however, LWBs are investigating the possibility that templates could be developed for small drilling/exploration projects that do not require a water licence. Clarification was provided that not all applications require full plans depending on the operation; for example, if there is minimal waste generated, waste management plans can be captured within the land use permit template itself.

Opportunity: Information/ideas gathered at this MVOD meeting may help further progress this topic.

Consider changes to waters regulations

Issue: During the 2023 virtual MVOD touchstone meeting, ideas were presented around the areas of the waters regulations (Waters Regulations under the *Waters Act* and Mackenzie Valley Federal Areas Waters Regulations under the *Mackenzie Valley Resource Management Act*) that were causing operational challenges. Issues identified were project types not contemplated in the regulations, real or perceived disconnect between the amount of regulatory process required and the potential impact of some regulated activities, and unclear language used for some provisions.

Progress: The LWBs sent a letter to GNWT and CIRNAC in May 2024 with recommendations for focused amendments to both the Waters Regulations and the Mackenzie Valley Federal Areas Waters Regulations.

Opportunity: Address targeted regulation changes now, with bigger changes to *Waters Act* and regulations in the future.

Q&A

- There was a question about whether there is understanding of potential improvements and dependencies of the regulations on the Act.
 - The Schedules are the main source of concern for this issue; the Boards did not think that changes were needed to the legislation.
- There were concerns around the overall mining economy and job security, water licencing approvals, and changes and decisions around fees that could impact projects and benefits to the community. There is a need for clarity and consistency to be more effective in developing water licences and land use permits while also updating outdated regulations and legislation.
- A participant asked for clarification on how many of these concerns could be dealt with through board processes instead of regulatory changes (such as changes to thresholds).
 - Lithium could be a huge economic driver and that begins with exploration. Discussion could be had on the level of regulation for different levels of mineral exploration. Ultimately, it is up to the public government to change the regulations and not the boards.
 - The water use bulletins are helpful but none of these changes are permanent and could be reinterpreted by new board members.
- A participant shared a concern regarding engagement guidelines and the online tool. There is a need to collaborate with all Indigenous Governments to seek input regarding what guidelines should look like for regions specifically. Part of the issue is that LWBs have resources and capacity but communities and Indigenous Governments need to brief many higher levels internally and obtain engagement specialists at the community level. There is a need to address the capacity challenges as there is an imbalance.
 - The LWBs in the past put out engagement guidelines but have realized the need for engaging communities differently than regionally. Ideally each community would have their own guideline but there is limited capacity.
- A participant asked if there is a need for a definition or schedule to address lack of understanding for small scale exploration projects and how MVOD meeting participants could collaborate to get benefits to everyone in the territory. They noted that large scale projects work well within the existing system, but smaller-scale projects have been driven outside of the NWT because of costs and regulatory hurdles.
- A participant shared a concern around issues with Type B water licence requirements and the threshold of water use for Type B licences (e.g., applications requiring all water sources to be identified even in the circumstances of water recycling or small quantities of water being used from any number of lakes and requiring bathymetry data for each lake).
 - The LWBs interpret how the regulation is regulated and do not weigh in on thresholds. There is a need for regulations that are clear and protective of the environment while ensuring the regulatory processes reflect actual impacts. They also need to meet the needs of the NWT mandate.

Light Work Plan 2: Analytics Tracker

The LWBs spoke to the [Online Review System](#) (ORS), which is accessible through the LWB and MVEIRB websites. GNWT has been using this system as well for reviews of wildlife management and monitoring plans. Elements of the Analytics Dashboard include search options by types of public reviews, permits, licences, proponents, activity, date ranges, and more. These data will help to identify where all parties are spending their time and may help identify and focus on opportunities for improvements. The MVEIRB's current website also includes a timeline tracker component to see progression in the Environmental Assessment and Environmental Impact Review processes.

Q&A

- There was a question about whether one can review the nature of comments and delays.
 - The LWBs indicated that the tool does not have this function, though it can be built out in the future. Delays tend to be different in nature though, often around an application being incomplete.
- A question was raised on how to assess whether the process is taking too long if there is no legislated timeline.
 - The LWBs indicated that the legislated timeline starts once the application is deemed complete. The ORS breaks down the time spent by LWB and the proponent.
- A participant asked if metrics could be tracked to measure the time between application and ability to start work.
 - The LWBs indicated that there is a legislated timeline and Type B licences / permits are approved quickly, with conditions attached if there are any concerns.

Light Work Plan 3: Education & Outreach (retired)

MVOD will continue to have a focus on education and outreach, like the Lithium 101 day.

Light Work Plan 4: Communications Strategy (retired)

The communications strategy has been a framework for how this group meets and communicates. This plan also includes the tracking of relevant NWT Environmental Audit recommendations that can be completed through MVOD. The framework is complete, but tracking the Audit remains a standing item. This information can be found on the MVLWB and [GNWT](#) websites. The Audit takes place every 5 years, with the last one being completed in 2020, and the next Audit currently underway, with results to be released in 2025. MVOD is an example of how GNWT and CIRNAC are working together to address Audit recommendations, namely recommendation 2020-1-2: the GNWT and CIRNAC establish processes for parties (Government of Canada, GNWT, LWBs, industry, IGOs) to meet regularly and discuss implementation opportunities and challenges with respect to the integrated system of land and water management in the Mackenzie Valley.

Updates on External Initiatives

The presentation slides are available as supplementary information to this report, accessible on the Mackenzie Valley Land and Water Board's [website](#).

Critical Minerals Strategy – Natural Resources Canada

NRCan presented on the Critical Minerals Strategy (CMS), which is designed to increase the responsibly sourced supply of critical minerals to grow domestic and global value chains for the green and digital economy. This vision is guided by five core objectives and will be implemented through six focus areas (Figure 1).



FIGURE 1: CRITICAL MINERALS STRATEGY'S AREAS OF FOCUS

NRCan identified that 15 more mines need to open over the next decade to supply enough minerals for four EV battery factories and the need to avoid minerals being the bottleneck on clean energy. Canada is not seeing these types of new mines developed; there have only been three mines since 2005. The pace of new battery metal mines opening needs to increase fivefold through the next 20 years to meet Canada's critical minerals target. The March 2021 Critical Minerals list has 34 minerals deemed essential for net zero. Canada is a sustainable source of minerals for key international partners as many do not have access to these types of natural resources, making Canada a key supplier. The intention is to give certainty for investors and partners on national mineral priorities. While there are different critical mineral's lists at the provincial and territorial level, the CMS complemented what is needed for clean energy at the national level. Critical minerals are also a way to advance socioeconomic opportunities with Indigenous communities and change the model with meaningful participation and opportunities for ownership. Results to date are provided in the supplementary presentation slides.

Visit [NRCan's webpage](#) for more information on critical minerals.

Q&A

- A few participants representing Indigenous organizations/governments expressed concern on the low amount of funding available under the Indigenous Natural Resource Partnerships (INRP) Program. It was noted that \$25 million is not enough, especially for a northern co-management system. They also asked when the program would open again for applications.
 - NRCan responded that the program is currently oversubscribed and that they are looking to open it again, though to temper expectations because it is national in scope and the demand will exceed funding availability. Capacity building is an ongoing area of focus.

- An industry participant stated that funding of the NICO project with matched funds from the US was unprecedented, noting that the national tax credits for industry are not helpful since territories are often outcompeted by the provinces, which have their own credits. It is difficult to establish the supply chain and raise money in the critical minerals space, especially in the context of the biodiversity target of 30% of land protected by 2030.
 - NRCan responded that they advocate for more funding, but the outcomes depend on the financial context in government. They are ensuring that critical minerals interests are considered for more informed decisions on land conservation goals. They acknowledged that there is a shift in exploration investment (i.e., challenges in raising money and more focus in the south) and that there is a need for exploration to continue in the NWT to unlock areas with high critical minerals potential.
- There was a comment that a north of 60 credit is needed to support revenue generation in the north, since the exploration tax credit is not where it should be for the territory.
- A participant asked if, within Pillar 4, are there any co-developed strategies with Indigenous governments and how the federal government is looking to increase capacity of people in this region.
 - There is no specific program or strategy. The INRP Program is supporting capacity building broadly across the country. It is not region specific but ensures even distribution and selection of areas at the highest need. The Northern Regulatory Initiative focuses on Indigenous capacity building within this space.
- There was a comment about how the co-management system works well when everyone gets to participate. If this is not the case, then Aboriginal treaty rights are not being respected.
- There was a question regarding competing against other countries with different rules where sustainability is not a concern for critical minerals production. Is there enough critical minerals production where Canada can be self-sufficient and not dependent on other countries?
 - There are lots of discussions internationally around some common concerns and competitiveness. We are seeing some change where other countries are looking for resiliency, security of supply, and high standards. It comes with a premium but there is more willingness to pay. It is recognized that there is a need to operate differently than we have in the past.

Regional Energy and Resource Tables – NRCan

The Regional Energy and Resource Tables (RERTs) launched in June 2022 as a Ministerial priority for bringing federal government together with provinces and territories and Indigenous partners to identify key economic opportunities in the clean energy resource sectors and accelerate economic growth. The outcome of these tables will be a collaboration framework identifying shared priorities and actions and to advance shared clean growth priorities.

In March, there was an exploratory session with GNWT and Indigenous governments in the NWT to discuss priority areas. There was agreement on critical minerals, electrification, and Indigenous leadership and capacity being key priorities for partners. There have also been some early

engagements with Indigenous partners, resulting in contribution agreements. The regional table will focus on working with the NWT and Indigenous governments and organizations to advance energy and natural resource priorities. The first step will be to identify actions to be taken in the near term through the development of the collaboration framework with stakeholders.

Q&A

- A question was posed around timing to establish the collaboration framework and industry engagement.
 - This work will be going into 2025. NRCan will engage industry to inform actions to be collectively worked on by governments. NRCan is seeking to advance this work quickly while ensuring all perspectives are considered before putting the collaboration framework forward.

Northern Regulatory Initiative – CIRNAC

CIRNAC is leading the Northern Regulatory Initiative component of the CMS, which is designed to support efficient, effective, and inclusive northern regulatory regimes. The initiative includes four pillars:

1. **Participation in Impact Assessment (IA) and Land Use Planning (LUP) Processes:** Funding has started within the past year but has been mostly pressure based. There is funding available to support participation where there is critical minerals development or related infrastructure. This has mostly been in Nunavut, Yukon, and the Sahtu region so far.
2. **Crown consultation clarity and coordination:** The federal Government continues national/ pan-northern work to examine issues and strategies to clarify and coordinate Crown consultation processes. Crown consultation clarity and coordination has begun a scan to identify where there is Crown conduct, what processes look like, who is doing what etc. The Pan-territorial board forum has included a focus on Crown consultation and the forum report will be posted on the [MVLWB site](#). The next Pan-territorial board forum will take place end of October in Whitehorse.
3. **Regional Studies:** Early stages of regional study are underway in the Slave Geological Province (NWT), as requested by the Tłı̄ch̄q Government. The Committee's Terms of Reference are nearing completion, and Study launch is expected in the Fall 2024 / Winter 2025. The study is expected to be conducted over 2-3 years.
4. **Regulatory Dialogues:** Preliminary discussions continue to occur with partners in each of the three territories to support ongoing and future collaborative dialogues. In the NWT, MVOD is being leveraged to discuss operational components of small-scale exploration.

Q&A

- A participant asked if the IA and LUP funding program will have funding for other regulatory processes. How many LWB processes compared to MVEIRB processes will be in the NWT and is there potential for Indigenous support there?

- Screenings are part of early stages in IA that the LWB is involved in, making it eligible for consideration.
- There was a concern shared around Indigenous government participation and Crown consultation. Indigenous governments have their own internal processes and protocols that involves talking to their leadership and with communities. \$40 million for three territories in seven years is not a commitment to moving forward in way that makes sense.
 - Agreement that there is limited funding available to engage different communities. The purpose of this forum is to initiate these discussions around these ideas, what that would look like, and what is missing to help inform future resourcing requests.
- A participant posed a question regarding consultation and the need for priority filters on both sides to determine when pre-consultation is needed or not. At one time, MVLWB consultations were considered adequate for Crown consultations, though there are still multiple layers of consultations. Has this changed because of policy or perspectives of the Department of Justice? How can Indigenous governments put in effort on big projects and important consultation when there are 300 quarry renewal permits to respond to every 3 years? There should be a way to filter things out/ triage for what has the most impact or risk.
 - A participant mentioned that there is an Interim Measures Agreement in Akaitcho. There are Akaitcho mineral guidelines that need more awareness and implementation for all parties: government, industry, First Nations, and Métis. Set schedules are used to ensure there is adequate accommodation and consultation according to the Agreement to prevent reinventing the wheel. The onus is on everyone to use these processes.
 - A follow-up question was whether there are guidelines and resources available to support understanding of the Interim Measures Agreements and whether any updates are needed.
 - A participant responded that more funding is needed to support this work. It is important that everyone understands the agreed-upon processes and to create awareness of these processes.
 - A comment for this question was to not consider a lack of participation in consultation to mean that consultation is unwanted. The current method of funding is the limiting factor for Indigenous governments. There is also no guarantee of long-term funding to support staff retention. If any commitments can be made for long-term funding to alleviate perpetual turnover and lack of certainty First Nations have for securing long-term competent staff.
 - CIRNAC responded that there may be opportunities to better explore how communities wish to be engaged, and whether there are opportunities for industry, boards, and governments to coordinate activities (and better understand what issues are important to communities) so that communities are not being overwhelmed with engagements (especially on topics that are not priorities for them). There may also be an opportunity to connect different sources of funding to help alleviate that challenge, including the

possibility of long-term funding that may be sourced through the Northern Regulatory Initiative.

Mineral Resources Act and Regulations – Government of Northwest Territories

The *Mineral Resources Act* (MRA) and Regulations support sustainable exploration and mining in the NWT through the Mineral Policy Framework. The Intergovernmental Forum is supporting the Framework. In August 2019, regulations were developed to support new authorities under the *Mineral Resources Act* given the critical changes in legislation. For example, the GNWT is moving toward a merit-based tenure regime and granting rights for exploration. A Technical Working Group was created to ensure the regulations meet the needs of Indigenous governments who were invited to participate. The Act will be in force by 2026 and regulations are to be completed by 2025. Currently, the process is transitioning from planning to regulatory development and implementation. Once the draft regulations are complete, there will be public engagement followed by updates, then consultation, and regulation finalization. Concurrently, implementation activities occur, including training.

Q&A

- A question was posed regarding the end phase of planning (entering draft regulations by 2025). Will there be enough time to address aspects of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) before consultation?
 - Planning is scheduled to early 2025. The Act was developed with UNDRIP in mind and the involved Indigenous governments. The legislation development protocol includes seeking to realize and implement key concepts of UNDRIP with how we do business in the north by creating formalized mechanisms. The technical working group also includes those Indigenous governments that signed on and there is an open invitation to other Indigenous Governments to collaborate on developing the regulations. Indigenous governments will have limited ability to influence the substance of regulations if they join later in the process.
- There was a question on how Indigenous governments would prioritize participation in this process when there is insufficient time to get familiar with the *UNDRIP Implementation Act* and comment on the *Mineral Resources Act* (2023). How would IGs prioritize this and do it meaningfully when there is no funding to participate in this process? Also, previous *Mineral Resources Act* session slides stated that mineral exploration did not have any impact on s35 rights. Can clarification be provided on whether that is GNWT's stance?
 - The *UNDRIP Implementation Act* was passed in the NWT, and it was considered in the development of the *Mineral Resources Act* with Indigenous governments. There is funding for those who do not receive royalty share agreements to attend the Technical Working Group. Rights are given to explore mineral claims, not to extract the minerals. There will be more consultation on the regulations.
- A participant commented that industry engages on mineral exploration at all stages and that they understand section 35 rights.

Operational Challenges Discussion

The section below summarizes the operational challenges that were shared through Mentimeter in response to the following questions:

What are your organization's top 2 operational challenges in the Mackenzie Valley?

How do these challenges impact your organization's ability to reach its objectives / goals?

- Capacity related to:
 - limited staff,
 - high turnover and lack of institutional knowledge,
 - high workload, which limits time available to coordinate with other departments, and
 - technical support.
- Information gaps and management related to:
 - Baseline data,
 - Land Use Plans, and
 - Pre-Environmental Assessment technical studies.
- Need for more inclusion of Indigenous governments in technical sessions (e.g., in the pre-environmental assessment phase) and ensuring there is capacity building and training for them.
- Different expectations and understanding of the regulatory process and outcomes.
- Increase in expenditure with a decrease in value-added input.
- Inefficient and overtaxing regulatory processes. Discussions throughout the workshop highlighted these more specific elements:
 - Regulatory process disconnect with small scale exploration
 - Dated regulations
 - Regulatory creep
- Waters regulations interpretations (*see discussion above for Light Work Plan 1*).
- Lack of stable funding for Indigenous governments and communities to increase readiness for participation in the co-management system.
- Regulatory system has low ability to be nimble in operations and take risks for NWT to capitalize on opportunities.

Broader challenges (non-operational)

- Settling land claims.
- Lack of implementation of the overall regulatory system (lack of land use planning, and renewable resource management / land claims in some regions).

Below is a summary of the plenary discussion on the responses provided above:

- **Information management:** The ORS does a good job of presenting documents related to processes and makes them accessible. The gap is that organizations that work in the regulatory framework do not have the ability or capacity to share information with each other to support collaboration.
- **Land claims and equity in the co-management system:** The quality of the co-management system is good but equity in this system is not being seen. There is disparity among groups in regions being considered for mines where there are settled and unsettled land claims. This disparity does not achieve what was intended out of the co-management system.
- **Decrease in value added output:** There are concerns from industry that new requirements and guidelines/rules have added more complexity with limited added value. For example, the aviation regulations are seen to increase the cost of exploration as they are not seen to increase safety or improve exploration.
- **Duplication of effort and lack of effective coordination:** The MVRMA sets up an integrated system, though there is a need to coordinate processes more effectively. For example, dialogue on a topic can be resolved during an environmental assessment but the same discussion can occur in the licencing/regulatory phase. There need to be mechanisms upfront to proactively address these topics in a process outside the environmental assessment and regulatory process or rely on previous evidence/processes rather than revisiting it.
 - There was further conversation on how impacts on caribou, socio-economic etc. can be assessed outside the assessment and regulatory process through a regional study or strategic environmental assessment. There are many other topics that can be reviewed by using past environmental assessments and information requests to compile information on how these topics are being addressed and why they are a recurring concern.
 - A participant commented that the NWT Environmental Audit covers some of these themes and the current Audit results will be shared next year.

Opportunities to address operational challenges

As a follow-up to the discussion on challenges, participants discussed opportunities to address what they thought were the most pressing challenges. Participants considered the following questions:

Of the challenges discussed, pick the most pressing challenges that your group thinks need to be addressed.

Discuss opportunities / changes that may help address these challenges.

Discussion

Below is a summary of the discussion on and ideas for opportunities to address the challenges identified.

- **Increasing Indigenous government capacity and consistency through strategic approaches and funding:**
 - Being strategic about problems we are currently facing to work toward efficient solutions and may help address capacity issues. Leveraging existing and ongoing work to ensure the focus is on addressing new parts of the challenge.
 - Providing support from other organizations when presenting evidence in a hearing, leveraging studies that are already done in Canada and the GNWT, and sharing this information with Indigenous governments and organizations.
 - Providing long-term, core funding to develop a consistent foundation in resources throughout the life of projects. Simplifying the process to apply for funding pots needs given reporting requirements, which takes up more time than to use the funding itself. Making the types of funding better known and more accessible. Government of Canada needs to provide tangible funding.
 - Directing funding to those Indigenous governments who are doing the work. A lot of the funds go to facilitators, legal staff, consultants, other people holding the pen, even government staff; for example, the MRA does not need one-off funding but throughout the process for one person to be part of the whole process and brief internally along the way.
 - Developing a funding strategy to ensure participation for Indigenous communities.
 - Providing training, mentorship, shadowing positions, and opportunities for youth involvement to bridge the gap between youth and elders.
 - Trusting Indigenous governments to do the work. There is a resistance to trust Indigenous governments to use the funding. The \$25 million for Indigenous engagement does not always go to Indigenous governments for opportunities to increase capacity.
 - Establishing new ways for benefits sharing that align with Indigenous interests.
 - Clarifying process to obtain informed consent.
- **Advocating Indigenous government concerns with GNWT:** there was a comment that this could be done through forums like MVOD.
- **Ensuring the regulatory system supports early-stage exploration:** this opportunity includes defining small scale exploration more clearly to support bringing business in the territories.
- **Providing clarity on Crown consultation processes:** clarifying the roles and responsibilities of the federal government and the GNWT and how they work together to fulfill their consultation obligations.
- **Improving understanding of the co-management system:** communicating what it is supposed to achieve, what the roles and responsibilities are of those in this system, and expectations of investors.
- **Regulatory changes:**

- Updating regulations and associated schedules to reflect the current challenges and circumstances of industry; this opportunity could be advanced through more timely action on the Audit results.
- Initiating focused amendments to Waters Regulations and using the ORS to facilitate the review process (GNWT was mentioned as the lead for this opportunity).
- **Conducting environmental, wildlife and land use studies and managing the information:** there is a need to prioritize information management and conduct studies and land use planning.
- **Equalizing Traditional Knowledge and western science.**

Overall, participants expressed the urgency to implement solutions given that there are planned engagements on many topics and capacity is low to engage in a meaningful manner.

NEXT STEPS

MVOD 2024 participants were asked to provide feedback on this year's MVOD. Survey results are summarized in Annex C and will be considered by the Organizing Committee to inform future MVOD planning. There will be a virtual MVOD in Fall 2024 to follow-up on the discussions at this MVOD. The next annual MVOD will occur sometime in early 2025.

ANNEX A: PARTICIPANT LIST

Indigenous Governments and Organizations

- Łutsel K'e Dene First Nation
- Gwich'in Tribal Council
- Ní Hadi Xa
- Sahtu Secretariat Inc.
- Northwest Territory Métis Nation
- Fort Smith Métis Council
- Fort Resolution Métis Government
- Hay River Métis Government
- Tłı̨chǫ Government
- Yellowknives Dene First Nation

Industry

- Aurora Geosciences
- NWT & Nunavut Chamber of Mines
- Li-FT Power
- Loyal Lithium
- NorZinc
- WSP
- Vital Metals / Cheetah Resources
- Midas
- Fortune Minerals
- Arctic Canadian Diamond Company Ltd
- DeBeers

Boards

- Mackenzie Valley Environmental Impact Review Board
- Mackenzie Valley Land and Water Board
- Wek'èezhii Land and Water Board
- Sahtu Land and Water Board
- Gwich'in Land and Water Board

Government of the Northwest Territories

- Industry, Tourism and Investment
- Environment and Climate Change

Government of Canada

- Crown-Indigenous Relations and Northern Affairs Canada
- Natural Resources Canada
- Environment and Climate Change Canada
- Department of Fisheries and Oceans
- Canadian Northern Economic Development Agency

ANNEX B: MVID 2024 AGENDA

Day 1

Timing (MST)	Agenda Item
9:00am-9:30am	<p>Welcome</p> <ul style="list-style-type: none"> Opening remarks and introductions
9:30am-10:45am	<p>Lithium 101: Introduction to Lithium</p> <p><i>A mix of presentations, Q&A, and interactive opportunities to learn more about lithium (e.g., videos, samples to support hands-on learning, small group activities).</i></p> <ul style="list-style-type: none"> Lithium Background & Geology <i>Speaker:</i> <ul style="list-style-type: none"> Gideon Lambiv, Industrial Minerals Geologist, Northwest Territories Geological Survey, Government of the Northwest Territories (GNWT) Lithium Context <i>Speaker:</i> <ul style="list-style-type: none"> Jesse Hembruff, Policy, Research Analyst, Natural Resources Canada (NRCan) Alex Langer, President, LiFT
10:45am-11:00am	Break
11:00am-12:00pm	<p>Lithium 101: Exploration</p> <ul style="list-style-type: none"> Lithium Early and Advanced Exploration <i>Speakers:</i> <ul style="list-style-type: none"> Daniel Campbell, General Manager, Loyal Lithium Mark Calderwood, Managing Director, Midas Minerals
12:00pm-1:15pm	Lunch Break
1:15pm-2:00pm	<p>Lithium 101: From Exploration to Mining</p> <ul style="list-style-type: none"> From Lithium Exploration to Mining and Processing <i>Speakers:</i> <ul style="list-style-type: none"> Hendrik Falck, Manager of Geology and Resource Royalty Policy, GNWT Dr. Charlotte Gibson, Assistant Professor & Brian Cook, PhD Candidate, Queens University
2:00pm-2:10pm	Break

Timing (MST)	Agenda Item
2:10pm-3:45pm	<p>Lithium 101: From Exploration to Mining (continued)</p> <ul style="list-style-type: none"> Lithium & the Biophysical Environment <i>Speakers:</i> <ul style="list-style-type: none"> Matthew Hudder, Environmental Scientist, CanmetMINING, NRCan Charbel Atallah, Research Scientist, CanmetMINING, NRCan Dr. Richard Goulet, Scientist, CanmetMINING, NRCan Future of Lithium in the NWT <i>Moderator:</i> <ul style="list-style-type: none"> Lisa Dyer, Director General, Canadian Northern Economic Development Agency <i>Panelists:</i> <ul style="list-style-type: none"> April Hayward, Chief Sustainability Officer, Li-FT Pamela Strand, Deputy Minister, Industry, Tourism and Investment, GNWT Andrew Ghattas, Director, Policy and Economics Branch, NRCan Eileen Marlowe, Land & Community Manager, Loyal Lithium
3:45pm-4:00pm	<p>Day 1 Closing</p> <ul style="list-style-type: none"> Key takeaways and learning moments roundtable

DAY 2

Timing (MST)	Agenda Item
9:00am-9:30am	<p>Welcome</p> <ul style="list-style-type: none"> Opening remarks; small break out group introductions / activity
9:30am-10:45am	<p>Mackenzie Valley Operational Dialogues</p> <ul style="list-style-type: none"> MVOD Background & History Light Work Plans Updates and Q&A <ul style="list-style-type: none"> LWP 1: Addressing administrative challenges; consideration of water regulation amendments (Mackenzie Valley Land and Water Board) LWP 2: Analytics Trackers (Land and Water Boards)
10:45am-11:00am	<p>Break</p>
11:00am-12:00pm	<p>Mackenzie Valley Operational Dialogues (continued)</p> <p>External Initiatives Updates and Q&A</p>

Timing (MST)	Agenda Item
	<ul style="list-style-type: none"> • Government of Canada: Critical Minerals Strategy, Northern Regulatory Initiative and Regional Energy and Resource Tables (NRCan/CIRNAC) • Government of Northwest Territories: Mineral Resources Act and Mandate Updates (GNWT)
12:00pm-1:15pm	Lunch Break
1:15pm-2:15pm	<p>Operational Challenges Discussion</p> <p><i>Breakout group and plenary discussion</i></p> <ul style="list-style-type: none"> • What are your organization’s top 3 operational challenges in the Mackenzie Valley? • How do these challenges impact your organization’s ability to reach its objectives / goals?
2:15 pm – 2:30 pm	Break
2:30 pm-3:30 pm	<p>Opportunities to Address Challenges</p> <p><i>Breakout group and plenary discussion</i></p> <ul style="list-style-type: none"> • Of the challenges discussed, what are the most pressing challenges that need to be addressed? • What opportunities / changes may help address these challenges?
3:30 pm-4:00 pm	<p>Closing remarks</p> <ul style="list-style-type: none"> • Closing reflections from the audience • Next steps

ANNEX C: MVOD 2024 FEEDBACK SURVEY RESULTS

A feedback survey was shared with all participants in order to inform future MVOD planning. Seventeen responses were received that were overall positive as most participants felt like they learned a lot from the lithium 101 sessions and field trip. However, some participants thought that the presentations were too technical for the audience and some thought that information could have been more relevant to the NWT.

The results from the MVOD discussions were also mostly positive as participants appreciated the variety of voices and perspectives that were shared. There was interest in more time to frame out clear actions and some frustration on the pace of change and action on issues raised previously through MVOD.

The survey also asked for possible topics for future MVOD sessions. The responses that aligned with the scope of MVOD are summarized below:

- Current activities underway in the Mackenzie Valley (similar to lithium theme this year)
- How to make progress on early-stage exploration (original MVOD focus) and understanding exploration operational timelines compared to regulatory timelines.
- Certainty in regulatory processes, including templates for the four typical plans required with a land use permit application.
- Revisions to the Waters Regulations.
- Enforcement.
- Indigenous participation funding and coordination.
- Regulatory collaboration for enabling infrastructure and energy projects (that would support exploration/ mining).
- Synergies from the Federal and Territorial Critical Minerals Strategies to assist in regulatory efficiency for early mineral exploration projects.
- Developing solutions to the topics or "issues" as described in the summary report.