



ATTACHMENT B

2020 Environmental Audit

Recommendations and Responses

#	Recommendation	Responding parties	Responses Published in 2020 Audit Report
1-1	<p>The GNWT and ASC consider a focus on climate change for the 2025 NWT Environmental Audit to test whether the Strategic Framework and Action Plan are effective and whether additional tools (regulatory or policy) need to be developed.</p> <p><i>The outcome we expect is that climate change is recognized as a core issue underlying environmental/resource management and impacts/considerations are being adequately regulated.</i></p>	GNWT	<p>GNWT's Response: The GNWT and the Audit Steering Committee (ASC) agree with the intent of this recommendation and the GNWT has planned for a full independent review of the 2030 NWT Climate Change Strategic Framework and the 2019-2023 Action Plan in 2024, one year before the 2025 Audit. The GNWT will conduct a formal review of the Framework and Action Plan, including the incorporation of climate change considerations in decision-making. The findings from the review, along with emerging issues, new technologies and new opportunities, will be used to consider potential revisions to the Framework and support the development of a subsequent 2025-2029 Action Plan. To avoid duplication of effort, the GNWT and the Audit Steering Committee will not include a test of the Framework and the Action Plan as part of the terms of reference for the 2025 NWT Environmental Audit.</p>
1-2	<p>The GNWT and CIRNAC establish a process for parties to meet on a regular basis and discuss implementation opportunities and challenges with respect to the integrated system of land and water management in the Mackenzie Valley. At times, this process will need to include IGOs and industry as appropriate. We further recommend CIRNAC ensure a record of findings, actions, and outcomes are published to ensure transparency and to facilitate monitoring and auditing of progress.</p> <p><i>The outcome we expect is for a process to be established for frequent dialogue between relevant parties in order to discuss issues as they arise with the goal of fostering an integrated system of land and water management.</i></p>	GNWT CIRNAC	<p>Joint GNWT-CIRNAC Response: In responding to this recommendation, the GNWT and CIRNAC have engaged with officials of the Land and Water Boards of the Mackenzie Valley, the Mackenzie Valley Environmental Impact Review Board, and the Canadian Northern Economic Development Agency's Northern Projects Management Office.</p> <p>There are several processes currently in place for parties to meet on a regular basis and discuss implementation opportunities and challenges with respect to the integrated system of land and water management in the Mackenzie Valley. These processes include the annual Mackenzie Valley resource co-management workshops; regular process discussions among federal, territorial, and resource management board staff; the recently launched Mackenzie Valley Regulatory Dialogue; and other processes as requested or required.</p> <p>Final reports for some of these initiatives are already, or will be, prepared and shared with participants in resource management processes. Resource management boards often make final reports publicly available on their websites. GNWT and CIRNAC commit to exploring, with boards, Indigenous governments, proponents, and others, how the findings, actions and outcomes of existing dialogue processes can be more effectively shared to facilitate transparency and monitoring and auditing of progress.</p> <p>GNWT and CIRNAC also commit to exploring, with other parties, if any new dialogue processes should be established in response to this recommendation.</p>
1-3	<p>Organizations/departments with a mandate for monitoring and mitigating community well-being work together to make their efforts complementary by developing a common agenda for their goals with a set of shared measures or indicators, and a plan for making results available to decision-makers during the EA and regulatory phases of projects.</p> <p><i>The outcome we expect is that community well-being is monitored consistently, and the results are used to inform and improve regulatory decision-making.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with this recommendation. The GNWT recognizes the importance of monitoring and mitigating community well-being and making results available to decision-makers during the environmental assessment (EA) and regulatory phases of projects. There are several GNWT departments who have a role in monitoring community well-being and mitigating impacts, and agree that opportunities exist to improve how data is collected by the GNWT. Building on this recommendation and those from previous environmental audits, a socio-economic forum is scheduled for the fall of 2022, which will host representatives from the mining industry, Indigenous governments, and the GNWT to identify ways to work together to increase the socio-economic benefits from resource development, focusing on accountability for both the GNWT and industry. The GNWT will continue to look for opportunities to work with communities in order to develop appropriate monitoring programs.</p>
1-4	<p>The GNWT refresh its NWT Mineral Development Strategy with the express goal of demonstrating unity in messaging and approach. Opening statements from the Premier, the Minister, and the Chamber of Mines should be enhanced by messaging from IGOs.</p> <p><i>The outcome we expect is that the GNWT, Indigenous governments and boards work together to create common messaging and an approach related to responsible mineral development in the NWT. Further, we expect the topics and the overall approach described in the new Mineral Development Strategy to address some of the raised needs of industry about the regulatory system. Finally, we expect this exercise should be informed by outcomes from our recommendation in Section 1.3.2.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with this recommendation. The GNWT is working towards refreshing the Mineral Development Strategy in order to ensure that the Strategy reflect the current state of the mining industry and the post-Devolution NWT context. Engagement activities are planned to occur in 2020-21 and will focus on engaging with Indigenous governments and organizations and community members that are connected in current/planned mining projects as well as partner organizations that support mining initiatives in the regions to ensure that clear, consistent messaging between the GNWT and IGOs is reflected in the refreshed Strategy.</p>

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1-5	<p>The GNWT include a section in the Mineral Development Strategy describing aspects of the regulatory system that are important to industry such as clarity on timelines and regulatory improvements that are felt to be limiting mineral development. This may require engagement with a range of regulators including the LWBs to ensure the accuracy of any messages or conclusions.</p> <p><i>The outcome we expect is that the GNWT, Indigenous governments and boards work together to create common messaging and an approach related to responsible mineral development in the NWT. Further, we expect the topics and the overall approach described in the new Mineral Development Strategy to address some of the raised needs of industry about the regulatory system. Finally, we expect this exercise should be informed by outcomes from our recommendation in Section 1.3.2.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with this recommendation. As stated in the GNWT's response to Recommendation 1-4, the GNWT is working towards refreshing the Mineral Development Strategy. Revisions are anticipated to refocus the Strategy, and potentially investment, on the outcomes that will have the most meaningful impact on mineral investment and development in the NWT. This will be accomplished through focused stakeholder engagement sessions with the mineral exploration and development sector, industry associations and regulatory authorities to ensure that regulatory issues that are felt to be limiting mineral development, such as clarity on timelines and regulatory improvement opportunities, are explored to develop shared understanding and solutions.</p>
1-6	<p>The GNWT create an updated economic development strategy and regularly examine the effectiveness of this strategy against relevant measurable economic indicators such as gross domestic product, unemployment, and economic resilience.</p> <p><i>The outcome we expect is that the NWT has an economic development strategy where it monitors indicators of success, and the results of monitoring are used to improve the strategy over time.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with this recommendation. As a "living" document, the NWT Economic Opportunities Strategy (EOS) is evaluated periodically by the EOS Governance Committee and published through EOS Progress Reports to ensure that it remains current and effective throughout the course of its implementation. Many of its recommended actions are now reflected and implemented in the GNWT's core business activities and initiatives. In 2019, the GNWT created a Performance Management and Evaluation unit that develops, monitors and evaluates programs, initiatives, frameworks and strategies. Development of a renewed Strategy is expected to begin in 2024.</p>
1-7	<p>That the LWBs regularly meet with key client groups outside of specific regulatory processes to discuss opportunities and challenges with the goal of continuing to improve the regulatory system. We further recommend the LWBs use the information from these engagement sessions to inform priorities and workplans.</p> <p><i>The outcome we expect is for the LWBs to create opportunities outside of specific regulatory processes, to understand the needs of groups of proponents (e.g., mineral exploration proponents). We also expect the LWBs to consider creating guidance and products that address the expressed needs identified by proponents.</i></p>	LWB	<p>LWB's Response: The LWBs have multiple opportunities in place for meetings and information sharing with parties involved in the permitting and licensing processes. These include:</p> <ul style="list-style-type: none"> • Bi-monthly to quarterly joint meetings (joint meetings) of senior level staff from GNWT-Lands, GNWT-ENR, CIRNAC, CanNor, and MVEIRB. • "MVRMA in a Day" presentations are given many times each year to various parties (e.g., in 2019 there were 24 such sessions with an average of 7-8 people per meeting, with participants including GNWT Lands, ECE, Health, and ENR; DFO; ECCC; various First Nations; and independent oversight bodies). • For the last several years LWB staff have been key members of the organizing committee for the annual MVRMA Practitioner's workshops held in various regions of the NWT. • LWB staff have participated in recent tradeshow organized by GNWT-ITI through their REDI initiative. • In October 2018 the LWBs created and filled a Community Outreach Coordinator position. Through that position LWB staff have conducted multiple information, dialogue and training sessions in schools, at tradeshow, gatherings of Indigenous government organizations, and events held by other professional or municipal organizations (e.g., LGANT, NWTAC). • The LWBs are a member of the organizing committee for the Regulatory Dialogue initiative spearheaded by CIRNAC and CanNor, and focused primarily on concerns with the regulatory processes raised by industry. The first workshop is planned for mid-March 2020. <p>In addition to the ongoing initiatives, in early January 2020 the LWB EDs reached out to the NWT and Nunavut Chamber of Mines to propose periodic meetings for the purpose of informal discussions on various topics of their choosing.</p>

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1-8	<p>The LWBs and the GNWT develop a standardized mineral exploration permitting bundle, in consultation with affected parties, similar to what the MVLWB has already done for municipal water licences.</p> <p><i>The outcome of such an approach would be to streamline the approval of low-risk exploration activities while maintaining the made-in-the-north environmental protection and management system operating in the Mackenzie Valley. A standardized, or “fill-in-the-blanks”, permitting bundle for low-risk mineral exploration could include such items as a draft project description, draft management plans, draft engagement plans, a draft screening report, and draft authorizations.</i></p>	GNWT LWB	<p>GNWT’s Response: The GNWT agrees with the intent of this recommendation. The GNWT recognizes there is a growing interest by industry proponents to streamline permitting processes for low-risk, small exploration activities. The GNWT, the Government of Canada, regulators and reviewers plan to come together in a workshop in 2020 to develop shared understanding of process and content issues related to small-scale exploration regulatory applications, and identify potential solutions for joint action. GNWT ITI’s Client Services and Community Relations Unit will also continue to work with industry associations and regulatory partners at the early stages of the application process in an effort to expedite review processes, while ensuring the requirements under the Mackenzie Valley Resource Management Act are adhered to.</p> <p>LWB’s Response: In considering this recommendation, it is important to recognize that municipal operations and mineral exploration are distinctly different types of projects. Municipal projects are stationary, affect a limited area, and, for the most part in the NWT, consist of existing operations, so potential concerns and impacts are generally already known and limited to a localized area. Mineral exploration projects are much more variable in terms of location and project area, so there is greater potential for these projects to overlap with culturally significant areas and with other land and water uses. Accordingly, there is greater potential for variability in what is considered acceptable and low risk for different projects and even within a given project boundary. It is important that each applicant provide adequate project-specific information for potentially affected parties and the LWBs to understand and assess the potential impacts of the project. Further, if a project requires a water licence, the LWBs require information regarding water sources to fulfill additional requirements under the Waters Act and MVRMA (e.g. to assess potential claims for water compensation and determine precedence).</p> <p>To assist all applicants, clarify expectations, and improve consistency, the LWBs have been prioritizing updates to existing guidance and development of additional guidance documents, which includes additional information specific to particular types of projects where appropriate:</p> <ul style="list-style-type: none"> • The LWBs recently updated the permit and licence application forms and are in the process of updating the associated guidance documents. The LWBs have guidelines available for each of the management plans that are required with all applications, and these guidelines all contain templates or examples. • A Standard Land Use Permit Conditions Template is available, and a similar template for licences is in the process of being finalized. Additionally, applicants can access copies of permits and licences for similar types of applications on the LWBs’ public registry. • The LWBs and the GNWT are currently in the process of developing a Guideline for Determining Water Source Capacity in the Mackenzie Valley.

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1-8	<p>The LWBs and the GNWT develop a standardized mineral exploration permitting bundle, in consultation with affected parties, similar to what the MVLWB has already done for municipal water licences.</p> <p><i>The outcome of such an approach would be to streamline the approval of low-risk exploration activities while maintaining the made-in-the-north environmental protection and management system operating in the Mackenzie Valley. A standardized, or “fill-in-the-blanks”, permitting bundle for low-risk mineral exploration could include such items as a draft project description, draft management plans, draft engagement plans, a draft screening report, and draft authorizations.</i></p>	GNWT LWB	<p>This information is applicable to all types of applications, including mineral exploration, and while the LWBs will continue to evaluate the need for development of additional general guidance on an ongoing basis, the LWBs currently have no plan to develop further guidance based on specific project types. If another party (e.g., the NWT and Nunavut Chamber of Mines or GNWT-ITI through its Client Services and Community Relations Division) was to take the initiative to build on the above noted guidance documents to develop more specific management plan templates for their members/clients, LWB staff would be available to assist and review the templates; however, it should be noted that the LWBs will continue to assess each application on a case-by-case basis and will continue to conduct their standard public review process for each application. Should applicants have questions about the application process, they are encouraged to contact LWB staff. In the longer term, the LWBs may work towards providing online applications.</p> <p>In developing the response to this recommendation, the LWBs have engaged with the GNWT.</p>
1-9	<p>The MVEIRB and the LWBs, in cooperation with other relevant regulators and affected Indigenous communities, establish, where necessary, a project TK Advisory Committee or talking circle to advise on the use of TK for the purpose of enhancing decision making of the project. Such TK committees would advise project proponents and regulators and conduct monitoring, if required, from pre-regulatory through regulatory reviews, construction, operation, and beyond as required. To be most effective, a TK Advisory Committee would need to be established as early as possible, but no later than the start of an EA, and live through to the end of the project, advising both regulators as well as the project proponent.</p> <p><i>The outcome we expect is that TK has an opportunity to be meaningfully incorporated and used in decision-making throughout the life of a project from project design, through operations, and closure. Project proponents are strongly encouraged to help fund such initiatives, as it could form an important element of community engagement and increase awareness about impacts, mitigation, and best operational practices.</i></p>	LWB MVEIRB	<p>LWB’s Response: The LWBs agree that more efforts need to be made to enhance the use of TK throughout the regulatory process. MVEIRB’s methods are an illustration of progressive solutions that incorporate community knowledge into decision making. The LWBs’ permitting and licensing processes consist of much longer and more complex relationships between project proponents, communities, and regulators. As such, instruments of partnership and collaboration are necessary between communities and proponents as the 2020 Audit suggests - through the life of the project, the regulator’s role is to promote and foster those relationships while utilizing their proceeds in its process of review. The LWBs will examine our guidelines and our reviews over the coming years to better foster these relationships and to create a respectful integrated approach.</p> <p>MVEIRB’s Response: MVEIRB fully agrees with the desired outcome “that TK has an opportunity to be meaningfully incorporated and used in decision-making throughout the life of a project from project design, through operations, and closure” and that proponents have a role in supporting this.</p> <p>MVEIRB has been using its Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment. The guidelines stay high level and do not prescribe TK methods - MVEIRB respects and promotes the use of local protocols for knowledge ownership and sharing, interpretation, peer review, and use in environmental impact assessment.</p> <p>In recent environmental assessments MVEIRB has used a variety of approaches to incorporating TK, based on discussion with Indigenous governments and organizations.</p> <p>In future assessments, MVEIRB will engage Indigenous governments and organizations to determine if and when a TK Advisory Committee is the preferred approach and, whatever approach is chosen, to ensure it works for the people and project being considered.</p>
1-10	<p>The GNWT and the federal departments with responsibility for engagement and consultation under the MVRMA work with their respective clients to review and improve engagement strategies.</p> <p><i>The outcome we expect is that strategies for engagement and consultation are regularly reviewed and improved as necessary.</i></p>	GNWT CIRNAC	<p>GNWT’s Response: The GNWT agrees with this recommendation. The GNWT provides advice and resources to support the pro-active, coordinated and consistent government-wide approach to Aboriginal consultation and engagement with Indigenous governments. The GNWT undertakes ongoing review of its approaches to ensure consistency with the evolving case law as well as developing resources, tools and training to ensure meaningful public engagement and/or Aboriginal consultation to ensure responsible decision making, mutually respectful relationships, and to achieve reconciliation. As appropriate, the GNWT works with the Government of Canada and/or resource management boards to facilitate consistent approaches to Aboriginal consultation in the Mackenzie Valley Resource Management Act (MVRMA) and related processes.</p>

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1-10	<p>The GNWT and the federal departments with responsibility for engagement and consultation under the MVRMA work with their respective clients to review and improve engagement strategies.</p> <p><i>The outcome we expect is that strategies for engagement and consultation are regularly reviewed and improved as necessary.</i></p>	GNWT CIRNAC	<p>CIRNAC's Response: The primary mechanism used by Canada to engage with Indigenous groups and to honour the Crown's section 35 (Constitution Act) duty to consult for applications within the Mackenzie Valley is to rely on assessment and regulatory processes established under land claims agreements and the MVRMA. These processes are facilitated by the establishment of implementation plans (contracts) that flow funds to Indigenous groups to support their involvement in land and water management processes. Capacity within Indigenous organizations is further supported through the Northern Participant Funding Program (NPPF) that provides financial support when large, complex or controversial projects enter the assessment process. Implementation plans with Indigenous groups are renewed on a 10 year cycle, and the NPPF will be reviewed in 2023 with the hope of extending and expanding this program if there has been a demonstrated need.</p> <p>Canada has developed a consultation model that supplements Board processes which directly requests information relating to impacts on treaty right and provides opportunity for comments on the consultation process for projects undergoing an Environmental Assessment. Canada also reviews its approach to consultation following judicial review process relating to consultation and s. 35 rights. Currently, Canada and the territorial government are working in collaboration with the Mackenzie Valley resource co-management Boards to review engagement and consultation strategies in light of the Clyde River-Chippewas of the Thames Supreme Court Decision (Hamlet of Clyde River v Petroleum Geo-Services Inc. and Chippewas of the Thames First Nation v Enbridge Pipelines Inc.). Finally, Canada actively participates in the MVRMA Audit process, which provides an opportunity for third party review of MVRMA process including engagement and consultation strategies. As the Boards update their consultation and engagement policy and guidelines, the federal government has expressed interest in participating in these initiatives and will be looking for any comments or recommendations on how the federal government can improve their involvement and processes.</p> <p>The federal government will continue to review and look for ways to improve their engagement strategies. With the passage of Bill C-88, the federal government has the authority to develop consultation regulations, should resource management partners view this as a priority.</p>
1-11	<p>The MVLWB re-examine its engagement process and enhance the process where appropriate to better detect emerging public concerns and to adapt their plan for engagement as required.</p> <p><i>The outcome we expect is for MVLWB to be aware of community issues prior to hearings.</i></p>	LWB	<p>LWB's Response: The LWBs are pleased to note that the 2020 Audit found the majority of survey respondents indicated satisfaction with current engagement approaches and acknowledge the need to update policy and process to reflect lessons learned and ensure engagement with affected parties remains robust.</p> <p>The LWBs and MVEIRB are currently in the process of developing a joint engagement and consultation policy (joint policy). The purpose of this exercise is to both update the existing MVLWB Engagement and Consultation Policy to reflect experience over the past several years, incorporate emerging best practices, and expand the policy to include environmental assessment and impact review. In addition to considering past experience, the LWBs and MVEIRB are seeking input from interested parties to inform development of the joint policy. It is envisioned that the joint policy will cover the roles of the Boards, the Boards' expectations for project proponents, and the interface between Board processes and overall Crown Consultation.</p> <p>As noted in the MVLWB Policy and 2020 Audit, there are aspects of engagement and consultation which fall outside of the LWBs' jurisdiction and will be more appropriately addressed by the GNWT and federal government. The LWBs are committed to working with governments to ensure efforts regarding engagement and consultation are complimentary. The LWBs will investigate and adopt, where appropriate and feasible, practices which ensure public concerns are identified early in review processes, as noted in Recommendation 1-11.</p>
1-12	<p>The Land Use Planning Boards work with the GNWT to identify key capacity challenges and develop and implement a plan to help alleviate the identified challenges (e.g., to share administrative components amongst planning boards).</p> <p><i>The outcome we expect is that land use planning efforts are sufficiently resourced.</i></p>	GNWT SLUPB GLUPB	<p>GNWT's Response: The GNWT agrees with this recommendation. The GNWT commits to working with the Land Use Planning Boards and the Government of Canada (as the funding body) to identify, evaluate, and work to alleviate capacity challenges of the Land Use Planning Boards.</p>

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1-12	<p>The Land Use Planning Boards work with the GNWT to identify key capacity challenges and develop and implement a plan to help alleviate the identified challenges (e.g., to share administrative components amongst planning boards).</p> <p><i>The outcome we expect is that land use planning efforts are sufficiently resourced.</i></p>	GNWT SLUPB GLUPB	<p>SLUPB's Response: SLUPB: It is the SLUPB's perspective that any work relating to addressing capacity challenges within land use planning boards should be done with the Federal Government rather than the GNWT. According to the Land Claim in section 25.1.3, it is the responsibility of the Federal Government to fund LUPBs adequately to ensure their ability to be full partners in the integrated resource management system. This includes ensuring that capacity challenges and issues are addressed and therefore, the Federal Government must be involved in any such conversations. However, the SLUPB does see a role for the GNWT in coordinating amongst the LUPBs on substantive planning issues and challenges that all regions are facing such as climate change, crossboundary issues, and training on land use planning.</p> <p>GLUPB's Response: Key capacity challenges have already been identified as part of a land claim funding review initiated by GoC in 2016. The GLUPB and SLUPB each provided documentation to GoC of the funding levels required to alleviate capacity challenges identified by both boards. Funding increases were provided to both the SLUPB and GLUPB but did not fully meet the needs of either Board. As noted in the SLUPB response, it is the federal government that bears responsibility for adequate funding, which is the most significant ongoing challenge for both Planning Boards. The GLUPB does not see how the GNWT can do more than the Boards already do by collaboratively advocating for adequate resources from the GoC.</p> <p>Clarification on the example of "sharing administrative components amongst planning boards" is required from the auditors. The GLUPB and SLUPB have always actively sought to collaborate on common issues while respecting regional differences and will continue to do so, but these efforts have not resulted in being sufficiently resourced, so this outcome as written does not seem realistic.</p>
1-13	<p>The Land Use Planning Boards develop monitoring and evaluation frameworks for all established plans, using the Sahtu LUP as an example/template to reduce capacity challenges. We also recommend that those responsible for monitoring the environment and community well-being (e.g., GNWT ENR; GNWT ITI; GNWT Education, Culture and Employment) participate in LUP reviews and updates, at a minimum, to ensure community well-being and environmental monitoring information is considered and integrated into updated plans.</p> <p><i>The outcomes we expect are monitoring and evaluation frameworks for all established plans as well as improved integration of community well-being and environmental monitoring information into the land use planning process.</i></p>	GNWT SLUPB GLUPB CIRNAC	<p>GNWT's Response: The GNWT agrees with the intent of this recommendation. The GNWT supports the development and implementation of monitoring and evaluation frameworks to ensure that land use plans contribute to the vision and goals of the planning regions. The GNWT will continue to participate in the regular reviews of land use plans. The GNWT will continue to engage all GNWT departments with interests or responsibilities related to land use planning, including those responsible for monitoring environmental and community well-being, throughout the review processes.</p> <p>SLUPB's Response: The work that the SLUPB has undertaken in its 5-year review relating to monitoring and evaluation of the plan is important and some of the first of its kind in the north. The SLUPB looks forward to implementing the framework in the years to come. The SLUPB received many inquiries regarding this work from across the NWT and is keen to share learnings and outcomes as they become available. The SLUPB encourages each LUPB to develop a framework that makes sense for the context within which they work rather than using the Sahtu's framework as a template. Each planning context is different and may require different approaches and partners to ensure that plan implementation is adequately monitored. Further, the SLUPB has recognized the monitoring of community well-being as an important component of monitoring the implementation of the SLUP. However, in order to do this, the SLUPB will require significant resources beyond its current funding in order to incorporate this additional monitoring in the best way. The SLUPB is currently chronically under resourced and any additional projects or components of projects such as the one recommended must be coupled with the appropriate resources for the SLUPB in order to coordinate and monitor appropriately.</p> <p>GLUPB's Response: The GLUPB has enquired about the SLUPB monitoring and evaluation framework and is keen to draw from the excellent work the SLUPB has done. The GLUPB will develop a monitoring and evaluation framework that gives consideration to consistency with the SLUPB one while ensuring a framework that makes sense for the Gwich'in context. The GLUPB also re-iterates the SLUPB assertion that planning boards are "currently chronically under resourced". For example, The GLUPB has identified a component of monitoring plan implementation is the need to systematically engage with regulatory authorities to review and assess conformity determinations that have been made and whether conformity is maintained through the life of a project (e.g. inspectors might grant variances to permits or licences in the field). To date, efforts have been limited because the staff are required to focus on priority activities like the plan review, legislation reviews, etc. The audit recommendation has some good components, but the expected outcome is only realistically feasible with adequate funding for the planning boards to establish and participate in their respective frameworks once developed.</p>

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1-14	<p>The GNWT and the GoC work collaboratively to adequately fund land use pre-planning/planning activities in regions without settled land claims; it is incumbent on the GNWT and the GoC to adequately fund this process in these areas.</p> <p><i>The outcome we expect is that the process for development of new LUPs is adequately and consistently resourced.</i></p>	GNWT CIRNAC	<p>GNWT's Response: The GNWT agrees with the intent of this recommendation. The GNWT agrees that work to conduct land use planning on public lands in unsettled regions of the NWT requires appropriate in-kind and financial support from the GNWT and Government of Canada (GoC), and commits to having discussions with the Government of Canada regarding appropriate resourcing for these initiatives.</p> <p>CIRNAC's Response: CIRNAC commits to working with GNWT to search for funding to support planning activities in areas with unsettled land claims and continues to actively participate in the existing initiatives in these areas mentioned in the report.</p>
1-15	<p>The GNWT offer training for LUP implementation to the broader NWT community responsible for LUP implementation and monitoring, namely the LWBs, Land Use Planning Boards, and all regulators responsible for conformance authorizations.</p> <p><i>The outcome we expect is that appropriate training is available both for land use planners as well as others responsible for LUP implementation and monitoring.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with this recommendation. The GNWT delivers land use plan implementation training internally to GNWT regulators to support effective land use plan implementation. The GNWT supports the delivery of land use plan implementation training to all regulators responsible for conformity in the issuance of permits, licenses and authorizations. As guidance on the implementation of land use plans is the responsibility of the Land Use Planning Boards, the GNWT is interested in partnering with the Land Use Planning Boards to extend and adapt the GNWT's existing training to the broader NWT regulatory community responsible for implementation (including the Land and Water Boards [LWBs]).</p>
1-16	<p>The LWBs seek to develop a participant funding program, funded by the federal and territorial governments, to support regulatory decisions within its jurisdiction. The funding would provide capacity support to Indigenous parties requiring assistance to participate in the regulatory process, as well as technical support.</p> <p><i>The outcome we expect is that Indigenous parties have adequate resources to meaningfully participate in licensing/permitting processes. In the interim, and until such time as a capacity funding program can be developed, we encourage the GNWT provide staff services (in-kind support) to provide technical advice and information to interested Indigenous parties in order to allow Indigenous parties to understand the project impacts and potential mitigations for development of recommendations to the LWBs.</i></p>	GNWT LWB CIRNAC	<p>GNWT's Response: The GNWT agrees with the intent of this recommendation. The GNWT was glad to see the federal government establish the Northern Participant Funding Program in 2019. The GNWT supports participant funding for regulatory processes and is of the opinion the recommendation should be directed solely to Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) as the responsibility for the Mackenzie Valley Resource Management Act remains a federal responsibility.</p> <p>Where possible, the GNWT provides in-kind support to interested Indigenous parties and will continue to do so. The GNWT is of the opinion that the recommendation to provide in-kind support should also be directed to the federal government, in relation to federal mandates and responsibilities.</p>

1-16 Continued next page

#	Recommendation	Responding parties	Responses Published in 2020 Audit Report
1-16	<p>The LWBs seek to develop a participant funding program, funded by the federal and territorial governments, to support regulatory decisions within its jurisdiction. The funding would provide capacity support to Indigenous parties requiring assistance to participate in the regulatory process, as well as technical support.</p> <p><i>The outcome we expect is that Indigenous parties have adequate resources to meaningfully participate in licensing/permitting processes. In the interim, and until such time as a capacity funding program can be developed, we encourage the GNWT provide staff services (in-kind support) to provide technical advice and information to interested Indigenous parties in order to allow Indigenous parties to understand the project impacts and potential mitigations for development of recommendations to the LWBs.</i></p>	GNWT LWB CIRNAC	<p>LWB's Response: The LWBs have identified the need for a participant funding program in the past. For example, on page 11 of the 2011 MVLWB Perspectives on Regulatory Improvement in the Mackenzie Valley Paper, the LWBs state:</p> <p><i>As many parties have put forth over many years since the establishment of the MVRMA, there is a need for intervener funding to enable affected communities and broader public participation in project reviews. This is clearly a federal responsibility. As was raised under our discussion of Crown consultation policy, there is also a need for funding to enable Aboriginal organizations to effectively participate in project reviews as it relates to their section 35 rights and interests and for increased funding to enable government agencies to effectively support Board reviews in this context, including the provision of expert legal, policy, scientific, and technical advice. Additionally, there is a need for financial, institutional, and human resource capacity for Aboriginal organizations to ensure that among other things Traditional Knowledge is effectively incorporated into decision-making processes.</i></p> <p>Recently, during the environmental assessment for Diavik Diamond Mines Inc.'s proposal to deposit kimberlite into pits and underground, parties raised the issue about the need for funding following the environmental assessment phase. To illustrate, the Łutsel K'e Dene First Nation stated in its closing arguments that, "Funding should be made available for affected Indigenous governments and organizations to participate in the water licence and land use permit phase of the regulatory process in order to allow Indigenous parties [to] meaningfully participate in the entire regulatory process."</p> <p>However, the LWBs wish to re-iterate that a funding program, including its administration, is a responsibility held by the federal government. The LWBs are quasi-judicial decision-making bodies and as such, administering a participant funding program could 1) create a perception of bias towards groups who do or do not receive funding, and 2) become an unnecessary administrative burden on the LWBs.</p> <p>As identified in the 2020 Audit, CIRNAC has now developed the Northern Participant Funding Program to provide capacity funding for impact assessment review of major projects, and the LWBs strongly recommend that this Program be expanded to cover the LWBs' permitting and licensing process as well. This expansion of the current program would fulfill the intent of the Audit's recommendation. In developing the response to this recommendation, the LWBs have engaged with the GNWT.</p> <p>CIRNAC's Response: In December 2018, CIRNAC announced the creation of the Northern Participant Funding Program, which supports participation in environmental assessments. In its current form it is unable to support participation in LWB or other regulatory processes and was not designed to provide additional funding to LWBs. As this new program is implemented, CIRNAC is actively seeking feedback from its partners on what needs this program does and does not meet, and may revise the program's design when it is up for renewal in 2022-23.</p>
1-17	<p>The GNWT introduce a multi-year funding envelope for a portion of the IRMA funds; this is a leading practice for grant and contribution funding programs. We also recommend that the GNWT increase the IRMA funding envelope by an incremental amount commensurate with an appropriate index, such as cost-of-living differential or inflation, in order to continue to support Indigenous organizations at a similar level year-over-year. We further recommend GNWT help facilitate coordination opportunities between applicants where appropriate, since only the GNWT as the fund manager can identify similar project proposals that may benefit from cooperation.</p> <p><i>The outcome we expect is reduced administrative requirements (with multi-year funds), adequate resources to meaningfully participate, and greater coordination and cooperation between applicants.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with the intent of this recommendation. The GNWT recognizes the importance of the Interim Resource Management Assistance (IRMA) Program to funding recipients and aims to make the funding process as efficient and effective as possible. The IRMA Program was reviewed in 2015 and improvements were implemented. The GNWT will further explore how the IRMA Program is being implemented, in consideration of this recommendation, and may conduct another review to fully inform any future decisions in regards to the IRMA Program.</p>

#	Recommendation	Responding parties	Responses Published in 2020 Audit Report
1-18	<p>The LWBs and the inspection units of GNWT and the GoC establish a process to meet and discuss challenges and solutions with respect to the inspection regime in the Mackenzie Valley, specifically as it relates to clarifying roles and responsibilities, ensuring adequate inspector capacity, as well as timely and transparent inspections, reporting and follow-up. We further recommend boards ensure a record of findings, actions, and outcomes are published to ensure transparency and facilitate future auditing of progress.</p> <p><i>The outcome we expect is that there is a clear understanding of roles and responsibilities related to enforcement and compliance, that inspectors have the capacity and necessary tools and resources to execute these responsibilities, and that the LWBs and GNWT Inspection work together with the goal of ensuring a functioning enforcement and compliance regime for MVRMA authorizations.</i></p>	GNWT LWB CIRNAC	<p>GNWT's Response: The GNWT agrees with this recommendation. The GNWT acknowledges the need to work with the LWBs and other federal regulating departments with inspection responsibilities under the MVRMA to improve the overall effectiveness of the NWT regulatory system including the functioning of the inspection regime. The GNWT reinforced this commitment through the recently implemented Department of Lands Ministerial Policy on compliance and enforcement. Several opportunities are already available for the GNWT and LWBs to share information and to discuss pertinent issues related to compliance and enforcement. These include: annual inspector meetings, quarterly Joint Working group meetings between GNWT Lands, GNWT ENR, CIRNAC, and each Executive Director of the LWBs, and regular informal meetings between the GNWT and the LWBs throughout the year.</p> <p>LWB's Response: There has been an informal process in the past for the LWBs, GNWT, and CIRNAC to meet to discuss compliance and enforcement issues, including annual inspector meetings and bi-monthly to quarterly joint meetings of senior level staff from GNWT-Lands, GNWT-ENR, and CIRNAC. Last year, the Executive Directors of the LWBs met with the Assistant Deputy Ministers (ADM) of GNWT-ENR and GNWT-Lands to discuss the roles and responsibilities of inspectors regarding the enforcement of activities that require an authorization but do not have one; and the capacity of inspectors to conduct inspections and complete inspection reports. The LWBs aim to have regular meetings with the GNWT and CIRNAC to discuss specific compliance and enforcement issues, which largely fall under the governments' jurisdiction.</p> <p>As noted in the 2020 Audit, the LWBs have expressed concern about the capacity of inspectors, particularly for water licences, to conduct inspections and complete inspection reports. The LWBs are pleased to note that according to the 2020 Audit, the GNWT has confirmed that coordination and the division of roles between GNWT Lands and ENR inspectors could use improvement to enhance clarity and effectiveness. This is particularly important for regions of the Mackenzie Valley (e.g. the Dehcho) that seem to have a shortage of Water Resource Officers.</p> <p>Regarding the need for records of findings, actions, and outcomes to be published to ensure transparency and facilitate future auditing of progress, the LWBs place every document that is received on the public registry, unless it is deemed to be confidential. Therefore, it is essential that inspection reports are submitted to the LWBs on a timely basis. The LWBs will continue to work with inspectors to ensure that these records are up-to-date and available to the public.</p> <p>In developing the response to this recommendation, the LWBs have engaged with the GNWT.</p> <p>CIRNAC's Response: CIRNAC is committed to exploring with our territorial government counterparts, processes aimed to improve our approach to inspections and reporting across the Mackenzie Valley and will continue to invite open dialogue. We continue to support initiatives to share information, coordinate, and collaborate such as the regularly scheduled joint meetings and spill working group meetings that are currently held with partners.</p> <p>CIRNAC uses a system based on the former Inspection Reporting and Risk Assessment system (IRRA) that existed prior to devolution in our department to accomplish consistency in several areas of its inspections program. The system tracks land use permits, water licences, and leases with important dates highlighted. CIRNAC uses this tool in determining inspection frequencies through a risk based lens. It further allows for Inspectors to establish inspection plans for upcoming seasons, or future years; to track inspections completed and costs associated with inspection activities. It is the tool that Inspectors use to ensure a consistent approach to the reports generated by CIRNAC and the GNWT. It has the ability to carry forward non-compliance from one inspection to the next to ensure follow up is carried out. CIRNAC is developing a new land management system that will have the capacity to track non-compliance issues specific to land use permits based on notation in the reports completed. CIRNAC is committed to engaging with the public and the land and water boards, and to working with other federal and territorial inspection authorities to examine ways to improve already existing (and future) tools to provide for a consistent approach to inspection frequency and reporting to ensure that the information collected meets the needs of the land and water boards and the public.</p>

#	Recommendation	Responding parties	Responses Published in 2020 Audit Report
1-19	<p>The GNWT develop and publish an overall project inspection scheme to assist regulators, the public, and permit holders in tracking of ‘unacceptable’ items from previous inspections all the way to their satisfactory conclusion and inspector sign-off. Furthermore, improvements could be made in the consistency of information collected to ensure future inspectors, the proponent, and regulators appreciate the context of an inspection. We encourage the GNWT to work with their Federal counterparts on this initiative, including CIRNAC and the Canada Energy Regulator.</p> <p><i>The outcome we expect is that the GNWT adopt a publicly viewable singular common inspection scheme, to accompany the filing of multiple disparate inspector reports. Such a scheme would have a common numbering system to label an observation, event, or location. For each observation or event, the inspector would clearly describe their observation, the compliance tool deployed (surveillance, advice, direction, etc.), a description of the specific company action required, the due date for the company action, the date that the issue is closed in the opinion of the inspector, and the reason for closing the matter. Such a reporting scheme would greatly help multiple inspectors and regulators better track progress, and would assist auditing of the inspection regime.</i></p>	GNWT CIRNAC	<p>GNWT’s Response: The GNWT agrees with the intent of this recommendation. An Inspection Reporting and Assessment system (IRRA) is used to support inspectors and promote consistency across the GNWT. Upgrades to this system are currently in development. The GNWT is committed to engaging with the LWBs to examine ways to improve existing tools to provide for a more consistent approach to inspection frequency and reporting across the GNWT and to ensure that the information collected meets the needs of the LWBs and the public. The GNWT will include the Office of the Regulator of Oil and Gas Operations in these discussions as appropriate.</p> <p>CIRNAC’s Response: CIRNAC is committed to working with the GNWT and other federal inspection authorities.</p>
2-1	<p>The RA to work with TK-holders to consider how best to recognize and utilize TK-based information in the evaluation of water quality and quantity trends and to develop a transparent process to guide the use of TK.</p> <p><i>The outcome we expect is that TK-based information is available and utilized in water trend analysis in a way that is compatible and respectful for TK-holders.</i></p>	GNWT	<p>GNWT’s Response: The GNWT, as the responsible authority (RA), agrees with this recommendation and the importance of traditional knowledge in water-related assessments and decision-making. The Traditional Knowledge Policy and Implementation Framework guides GNWT work, and efforts are underway to develop a GNWT-wide Traditional Knowledge Action Plan.</p> <p>The GNWT is working with partners, including Indigenous governments and organizations, to build a meaningful, informed and culturally appropriate foundation to advance work related to traditional knowledge (TK) and water research, assessments and decision-making. This includes: a) a NWT Water Strategy Aboriginal Steering Committee which is made up of representatives from Indigenous governments, that provides strategic direction on NWT Water Strategy implementation, including the role of traditional knowledge; b) the Mackenzie River Basin Board, of which the GNWT is a member, is piloting a new approach grounded in traditional knowledge and community experience to assess the Basin’s aquatic ecosystem health for the Board’s next State of the Aquatic Ecosystem Report; c) multijurisdictional development of a framework for inclusion of TK in the bilateral water management agreement implementation; d) annual NWT Water Strategy partner meetings that bring together water partners to share ways of knowing in implementation activities; and e) support of and participation in traditional knowledge research on water and water governance, such as through the Tracking Change project led by the University of Alberta (trackingchange.ca). This ongoing work continues to inform the GNWT’s approach to the use of TK in water-related decision-making and understanding of water quality and quantity across the NWT.</p> <p>The GNWT commits to ongoing collaboration to build on this foundational work to identify and implement a meaningful, community-engaged process for ensuring TK informs water-related assessments and decision-making.</p>

#	Recommendation	Responding parties	Responses Published in 2020 Audit Report
2-2	<p>The RA develop and/or provide descriptions of the rationale and study design for individual monitoring stations sampled by the federal and territorial government and make this information available at a central electronically-accessible location.</p> <p><i>The outcome we expect is that the network of long-term water monitoring stations in the NWT is described in a way that makes it possible to see gaps and overlaps and to understand the intent and purpose of monitoring stations.</i></p>	GNWT	<p>GNWT's Response: The GNWT, as the responsible authority (RA), agrees with the intent of the recommended outcome. Water monitoring networks and programs in the NWT are operated by numerous responsible agencies and are intended to address a wide range of objectives. Status and trend reports provide information about the rationale and study design for specific programs. The GNWT will explore consolidating the rationales and study designs of its programs in a publicly informative way, such as updating an inventory of water monitoring in the NWT to include rationale and study design for each identified program. This consolidation may assist with future gap and overlap assessment.</p>
2-3	<p>The RA perform a periodic review (e.g., every five years) of the overall monitoring network in the NWT to ensure that the network is sufficient to detect and explain trends in water quality and quantity. Monitoring locations should be added or dropped with the key consideration being their maintenance over the long term. Short-term monitoring programs are of limited use unless they are intended to answer a specific question over the short term.</p> <p><i>The outcomes we expect are that water monitoring efforts are focused on stations located at sites that are representative of relevant watersheds and that can be maintained over the long term.</i></p>	GNWT	<p>GNWT's Response: The GNWT, as the responsible authority (RA), agrees with this recommendation. The GNWT agrees that periodic reviews and audits of water programs are important components of the monitoring cycle to ensure that monitoring data are meeting the needs of water managers and stewards. Water monitoring in the NWT is re-examined and improved through regular network evaluations (e.g., Environment and Climate Change Canada Hydrometric Network 2014), status and trend reporting (e.g., Coppermine/ Lockhart 2015; Great Slave Lake Tributaries 2017), and frequent engagement with water partners (e.g., Water Stewardship Strategy and Aboriginal Steering Committee meetings). Monitoring programs are informed by, or designed through stakeholder input and are reviewed periodically with water partners to determine effectiveness in meeting program objectives and modified as appropriate. For example, the NWT-wide Community-based Water Quality Monitoring (CBM) program was evaluated in 2018 as part of a five-year review; a third party conducted this evaluation using feedback on program effectiveness and future improvements from multiple stakeholders.</p> <p>Data from long-term stations are essential for cumulative effects monitoring and should be maintained and enhanced through network partnerships.</p>
2-4	<p>The RA develop a lake-specific monitoring program. While there are hundreds of thousands of lakes in the NWT, reliable tracking of environmental trends could be conducted on a small subset of lakes stratified by size, watershed area and ecoregion. Ontario's Broad Scale Monitoring Program is referenced as an example of a program addressing large numbers of lakes in a systematic manner to document a) trends over time and b) the state of the resource.</p> <p><i>The outcome we expect is that long-term water trend information is available to the RA for both rivers and lakes, to provide a comprehensive picture of aquatic health.</i></p>	GNWT	<p>GNWT's Response: The GNWT, as the responsible authority (RA), agrees with the intent of this recommendation. The GNWT acknowledges the importance of both river and lake monitoring to track environmental trends. The GNWT is currently leading or supporting numerous lake-specific monitoring programs in the NWT. Long-term lake monitoring is being carried out in the Coppermine and Lockhart basins and numerous lakes in the North Slave region. Short-term monitoring and research was conducted in lakes along the Inuvik to Tuktoyaktuk Highway. The GNWT is partnering with Canadian Lake Pulse Network and Environment and Climate Change Canada to expand lake monitoring in the NWT. Additionally, the GNWT will identify lake monitoring as a data gap when revising NWT Cumulative Impact Monitoring Program's Water Blueprint. Partnerships with other researchers are essential to overcome capacity and resource constraints, especially given the large number of lakes in the NWT.</p>
2-5	<p>The various large mining operations are compiling long-term (20+ years) records of water quality and biology in lakes as part of their AEMPs. These include reference lakes which document regional and climate-related changes. These records may be lost or discontinued after mines close. We recommend the GNWT consider assuming monitoring programs (or at least key stations within those programs) initiated by industry as an efficient way to build a database for lakes and rivers.</p> <p><i>The outcome we expect is that the RA curtail the loss of millions of dollars in monitoring investments made by industry and increase their ability to detect changes over the long term. Overall, the recommendations in this section are meant to support a cost-effective and focused network of long-term water monitoring stations that can produce data suitable for the detection of trends and their potential causes in key NWT watersheds.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with the intent of this recommendation. The GNWT acknowledges the importance of long-term lake and river monitoring to track environmental trends. The GNWT will continue to monitor the regulatory requirements for current mining operations, including reference lakes, and will provide input to final closure requirements when required, including long-term monitoring requirements by industry. The GNWT may consider future incorporation of these industry-led monitoring sites into the existing GNWT monitoring networks, depending on the benefits and feasibility of doing so.</p>

#	Recommendation	Responding parties	Responses Published in 2020 Audit Report
2-6	<p>The GNWT improve the consistency and quality of trend analyses performed on available water monitoring data by implementing a consistent methodological framework for water. This would include:</p> <ol style="list-style-type: none"> 1. Core parameter list - Additional parameters could be included per the individual study goals, but a core list of required parameters for all monitoring in the territory would greatly increase the compatibility between data sets 2. Consistent analytical laboratory methods and detection limits required for all core parameters 3. Establish a statistical framework for: <ol style="list-style-type: none"> a. Outlier detection and removal b. Censored data handling prior to or as part of trend analysis <ol style="list-style-type: none"> i. Allowable percentage of non-detect samples ii. What concentrations to substitute for non-detects c. Trend Analysis methodology <ol style="list-style-type: none"> i. parametric or non-parametric testing <ul style="list-style-type: none"> • preferred trend method (Mann Kendall or other – we note that the more recent trend assessments all used Mann Kendall so some consistency seems to have established itself) ii. Critical p value for determining significance of trends iii. Defining Seasons (Flow regime vs. Calendar Year) <p><i>The outcome we expect is that trend analyses for all watersheds are performed using a consistent methodological framework to support consistent interpretation of results.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with the intent of this recommendation. The GNWT acknowledges the importance of consistency and quality of trend analysis of water monitoring data, but recognizes there are limitations. The GNWT is engaged in numerous initiatives to improve trend analysis through more consistent data management. Methodologies in data collection and in the evaluation of trends are standardized as much as possible, but flexibility is required to manage datasets that are not completely compatible. Trend analysis techniques should also evolve and follow current scientific literature and best practices. GNWT water monitoring frameworks are collaboratively developed with stakeholders in the NWT and with neighbouring jurisdictions (e.g., bilateral water management agreements). The GNWT, in partnership with other water managers, has or is in the process of developing guidance documents on water monitoring and assessment to promote consistency (e.g., Aquatic Effects and Baseline Monitoring Guidelines). The GNWT will also consider how to incorporate standardized methodology when revising NWT Cumulative Impact Monitoring Program's Water Blueprint to encourage consistency.</p>
2-7	<p>The GNWT implement a system of qualified peer review of all internally and externally produced reports on environmental trends.</p> <p><i>The outcome we expect is that trend analyses for all watersheds are of consistent and adequate quality and that reports meet acceptable professional standards.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with the intent of this recommendation. The GNWT will continue with the practice of qualified in-house peer review for all internally and externally produced reports. This internal review process ensures consistency with accepted methodologies in academic peer-reviewed literature. All GNWT-led manuscripts that are published in scientific journals will be peer reviewed within the GNWT prior to submission to journals. Reports that are developed with partner institutions (e.g. transboundary water agreement programs) will be reviewed internally by each institution prior to publication. Where possible, trend analysis will follow a consistent framework so that results are transferrable to other internal and external reports evaluating hydrologic and water quality metrics.</p>
2-8	<p>The GNWT provide a framework for future trend reports to follow for the evaluation of data such as a requirement that the authors interpret the significance and potential causes of any observed environmental trends, and that they address the potential for cumulative effects.</p> <p><i>The outcome we expect is that watershed trend reports by contractors for the GNWT follow a consistent framework of interpretation and provide a discussion of significance of any trends in order to inform the GNWT such that they can respond in an appropriate way.</i></p> <p><i>The overall outcome of Section 2.1.3 and 2.1.4 is that trend analyses and summary reports prepared for each watershed accurately and defensibly describe the presence, causes and environmental significance of detected trends.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with the intent of this recommendation. The GNWT currently employs a general framework for evaluating water quality and quantity with standardized levels of significance and appropriate statistical testing, consistent with current scientific literature and best practices. Cumulative effects assessment and an interpretation of observed environmental changes are common expectations of watershed trend analysis reporting. However, watershed trend analysis objectives are often numerous and the scope of each assessment can differ.</p>

#	Recommendation	Responding parties	Responses Published in 2020 Audit Report
2-9	<p>The RA work with other appropriate GNWT divisions and parties in the NWT to evaluate how best to improve their water monitoring efforts with the goal of ensuring that any data collected reflect the information needs of residents and could be used for trend analysis and CIM of water. With respect to trend analyses, the evaluation should focus on how best to optimize the availability of long-term data sets to provide good coverage of the NWT and address the gaps identified in Section 2.1.2.</p> <p><i>The outcome we expect is that water monitoring efforts in the NWT adequately address stakeholder concerns.</i></p>	GNWT	<p>GNWT's Response: The GNWT, as the responsible authority (RA), agrees with the intent of this recommendation. The GNWT acknowledges the importance of partnering with others for improved monitoring efforts and addressing stakeholder concerns in the NWT. Water monitoring, data management and communication are pillars of the NWT Water Stewardship Strategy, which is co-developed, implemented and reviewed annually by GNWT ENR, other GNWT departments and water partners. Continued implementation of the NWT Water Strategy facilitates improved coordination of water monitoring efforts, such as through network partnerships, to ensure information needs are met and to address monitoring gaps in the NWT. These network partnerships are fundamental to support capacity and assist program delivery through unique northern logistical challenges and financial constraints and allow for greater coverage of the NWT. Partnerships, including those for community-based monitoring programs, also allow for direct input by NWT communities and stakeholders.</p>
2-10	<p>The GNWT improve the communication of available water monitoring information to residents. These efforts should include increased recognition of public concerns in program design (see also Recommendation 2-9), interpretation of trend monitoring information (see also Recommendation 2-8), the reasons for monitoring and site selection (see also Recommendation 2-2), increased emphasis on plain language summaries and interpretations derived from more detailed technical analyses and improved awareness of where and how such information can be accessed.</p> <p><i>The outcome we expect is that NWT residents are aware of and understand water trends in their regions.</i></p>	GNWT	<p>GNWT's Response: The GNWT agrees with this recommendation. Sharing information on freshwater health with the public is a priority for GNWT monitoring programs. The GNWT provides environmental information as plain language summaries when possible through a number of online platforms including the GNWT website and the NWT Discovery Portal. The GNWT is a founding partner of Mackenzie DataStream which allows users to access, visualize, and download full water quality datasets. On Mackenzie DataStream, the rationale for sampling locations of the monitoring programs is described through the stories and videos of the monitoring groups as well as in the metadata.</p>
3-1	<p>The RA identify an overarching coordinator to ensure the RA's responsibilities under MVRMA Section 146 are fulfilled; a logical coordinator could be the existing NWT CIMP. The coordinator for the RA must be given the authority including appropriate resources to direct the monitoring of other parties such that various entities collect information in a coherent manner according to an accepted monitoring structure and with the authority of regulations to ensure cooperation.</p> <p><i>The outcome we expect is that the relevant business units with responsibility for CIM and trend monitoring are coordinated in delivering the RA's responsibility.</i></p> <p><i>We recognize that implementation of Recommendations 3.1 and 3.2 may result in several business units having increased responsibilities. Therefore it will be important to ensure the GNWT provides adequate resources to carry out their new responsibilities.</i></p>	GNWT	<p>GNWT's Response: The GNWT, as the responsible authority (RA), believes that its obligations for cumulative impact monitoring under Section 146 of the Mackenzie Valley Resource Management Act (MVRMA) are being fulfilled with the current structure. A number of new initiatives that will bolster GNWT efforts to understand cumulative impacts include:</p> <ul style="list-style-type: none"> • The development of water quality reporting guidelines, which have recently been adopted by the Land and Water Boards; • The development of a cumulative effects framework for ENR, which will be distributed for input to our partners in 2020; and • The development of an approach to water quality monitoring that will allow all water monitoring partners to contribute information to fill spatial and temporal gaps. <p>These initiatives, along with existing monitoring activities, will contribute to ENR's ability to monitor and assess cumulative impacts in the NWT and to fulfilling the requirements of the MVRMA.</p>
3-2	<p>The GNWT, on the advice of the overarching coordinator identified in Recommendation 3-1, formally assign roles, responsibilities, and accountabilities, to relevant business units (i.e. other departments, expert divisions and programs that are involved in monitoring).</p> <p><i>The outcome we expect is that relevant business units have clarity in their contribution to fulfilling the RA's responsibility under MVRMA Section 146.</i></p> <p><i>We recognize that implementation of Recommendations 3.1 and 3.2 may result in several business units having increased responsibilities. Therefore it will be important to ensure the GNWT provides adequate resources to carry out their new responsibilities.</i></p>	GNWT	<p>GNWT's Response: The GNWT understands the intent of this recommendation, but is of the opinion that the intent can be achieved with the current structure. To clarify roles and help parties identify opportunities to collaborate, the GNWT will include the current roles and responsibilities of all parties involved in cumulative impact monitoring across the NWT in the cumulative effects framework that is currently being developed by ENR. Further, established interdepartmental working groups can be used to discuss the roles and responsibilities of relevant GNWT business units and provide internal accountability.</p>

#	Recommendation	Responding parties	Responses Published in 2020 Audit Report
3-3	<p>The RA develop a monitoring structure that will ensure that individual monitoring programs undertaken across the NWT can contribute to baseline description, trend analyses and CIM by the RA. This should be done in consultation with other organizations or departments that conduct or direct monitoring in the NWT. This structure could be implemented through policy, guidelines and/or regulations and should define standards for monitoring such as:</p> <ul style="list-style-type: none"> • Rationale for site selection • Core parameter or indicator lists for each VEC • Sampling methods and analytical methods (e.g., detection limits, etc.) • QA/QC and other data handling methods • Statistical methodology • Evidence that the results of individual monitoring programs were being reviewed by the RA, the methods and interpretation verified, and the results disseminated <p><i>The outcome we expect is that there is a common set of rules and expectations to guide monitoring in the NWT such that results across a range of monitoring programs are compatible for the purpose of trend and CIM analysis.</i></p>	GNWT	<p>GNWT's Response: The GNWT, as the responsible authority (RA), agrees with this recommendation. The GNWT supports the development of a monitoring structure that will ensure that individual monitoring programs undertaken across the NWT can contribute to baseline description, trend analyses and cumulative impact monitoring (CIM), including the continued development and promotion of standard data collection and reporting protocols. GNWT will consider ways to promote the development and use of standardized monitoring structures to increase the compatibility of monitoring results to enable trend and CIM analysis. Any potential standardized monitoring structures will need to address the needs of decision-makers and monitoring partners.</p> <p>A number of initiatives that will bolster the GNWT efforts to understand cumulative impacts include:</p> <ul style="list-style-type: none"> • The development of water quality reporting guidelines, which have recently been adopted by the Land and Water Boards; • The development of a cumulative effects framework for ENR, which will be distributed for input to our partners in 2020; and • The development of an approach to water quality monitoring that will allow all water monitoring partners to contribute information to fill spatial and temporal gaps.
3-4	<p>The co-management boards use their ability to impact the design of monitoring programs to ensure the adoption of consistent monitoring requirements for proponents.</p> <p><i>The outcome we expect is that industry's monitoring efforts will be able to aide the RA in meeting its Section 146 responsibilities The overall outcome we expect from the above recommendations is that existing and future monitoring programs in the NWT contribute meaningfully to environmental trends analyses and CIM efforts by the RA.</i></p>	LWB GRRB WRRB GLUPB MVEIRB	<p>LWB's Response: There are examples of LWB efforts made to ensure the adoption of consistent monitoring requirements by proponents. Page 63 of the 2020 Audit describes the CIMP and LWB joint initiative on guidelines for reporting water quality data. The LWBs are involved in an initiative to standardize Surveillance Network Program (SNP) requirements for municipal water licences through the development of guidance manuals for communities.</p> <p>The design of monitoring programs required by the LWBs through permit and/or water licence conditions is impacted by evidence gathered during regulatory proceedings. With respect to monitoring effects in aquatic environments, the MVLWB/GNWT Guidelines for Aquatic Effects Monitoring Programs (AEMP) is a high-level document that guides proponents with the development of their monitoring program, but does not include required technical specifications for sampling methods (e.g. specific QA/QC procedures, minimum detection limits, sampling schedules).</p> <p>Consequently, the data collected by different proponents through water licence AEMP requirements are not necessarily standardized, and may not contribute meaningfully to a dataset that is to be analysed for environmental trends or cumulative impacts.</p> <p>If the GNWT does not provide evidence for monitoring programs to be designed in a certain way, it is challenging for the LWBs to include conditions and/or approve monitoring plans that will result in consistent monitoring requirements for proponents. Standards or guidelines with specifications that would help inform cumulative impacts monitoring could potentially be used to help guide the development of these monitoring programs and help inform Board decisions. The development of such standards/guidelines is currently hindered by the lack of an overarching framework within which to obtain and consider cumulative impacts data in a meaningful and consistent manner.</p>

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3-4	<p>The co-management boards use their ability to impact the design of monitoring programs to ensure the adoption of consistent monitoring requirements for proponents.</p> <p><i>The outcome we expect is that industry's monitoring efforts will be able to aide the RA in meeting its Section 146 responsibilities The overall outcome we expect from the above recommendations is that existing and future monitoring programs in the NWT contribute meaningfully to environmental trends analyses and CIM efforts by the RA.</i></p>	<p>LWB GRRB WRRB GLUPB MVEIRB</p>	<p>GRRB's Response: GRRB does not have the authority to demand that proponents use specific designs for their monitoring programs – we can (and do) make recommendations in our comments on permit applications, but it is up to the LWBs to decide what the standardized requirements for monitoring programs are and to enforce the requirements when issuing permits and reviewing annual reports from permit-holders.</p> <ul style="list-style-type: none"> GRRB has contributed by providing comments on draft versions of the LWB's Guidelines for Aquatic Effects Monitoring Programs (AEMP) and other guideline documents as they are developed. GRRB does not know the monitoring program details until they are provided during the LWB review process - so these same rules and expectations should already have been shared with the proponent at the LWB level. <p>WRRB's Response: The WRRB reviews and comments on all wildlife monitoring programs, as well as other monitoring programs that are consistent with the Board's mandate, to ensure consistent mitigative and monitoring actions, including CIM, are implemented by the RA.</p> <p>GLUPB's Response: As they are identified in the planning process, the Board will keep the CIMP decision makers apprised of the baseline information and monitoring programs necessary so that cumulative effects policy, such as limits of acceptable change, can be integrated into the land use plan in the future. These policy measures will be developed with full consideration given to the roles and responsibilities of all entities with respect to CIM.</p> <p>MVEIRB's Response: MVEIRB supports the overall outcome of the recommendation, from the perspective of having good information to assess cumulative impacts of future development proposals.</p> <p>When MVEIRB sets measures in reports of EA to require monitoring, the measures focus on information needs and monitoring outcomes to prevent significant adverse impacts and ensure mitigation measures are effective, without being too prescriptive about the specific design or methods of a monitoring program. In this way the measures leave space for regulators and developers – who have the knowledge and expertise – to set out monitoring details that are consistent with and contribute to broader cumulative impact monitoring frameworks, where such frameworks exist.</p> <p>MVEIRB agrees that the establishment of standard monitoring frameworks and protocols would better enable project-specific monitoring to be designed and carried out in a consistent way that contributes to cumulative impact monitoring and environmental trend analyses. MVEIRB will continue to support CIMP, LWBs, and others working to establish monitoring frameworks.</p>
3-5	<p>The GNWT and CIRNAC work together to develop regulations under Section 150(a) of the MVRMA to ensure implementation of a monitoring structure for the NWT that would help the RA to successfully fulfill Section 146 responsibilities.</p> <p><i>The outcome we expect is that entities that conduct monitoring or cause others to conduct it are required to contribute usable data to the RA in support of its Section 146 responsibilities.</i></p>	<p>GNWT CIRNAC</p>	<p>GNWT's Response: The development of regulations under Section 150(a) are not a priority at this time. The GNWT believes it is adequately addressing cumulative impact monitoring. In addition, the GNWT has started a number of initiatives which contribute to the fulfilment of Mackenzie Valley Resource Management Act (MVRMA) Section 146, such as:</p> <ul style="list-style-type: none"> The development of water quality reporting guidelines, which have recently been adopted by the Land and Water Boards; The development of a cumulative effects framework for ENR, which will be distributed for input to our partners in 2020; and <p>The development of a pilot project investigating a novel approach to regional long-term monitoring for water.</p> <p>CIRNAC's Response: CIRNAC is supportive of the ongoing work that contributes to the fulfilment of MVRMA Section 146. CIRNAC is open to exploring, with resource management partners, whether the development of regulations should be established in the future in response to this recommendation.</p>

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4-1	<p>The MVEIRB and the LWBs clearly describe the specific information required from government, including the RA, that would aid the boards in considering cumulative impacts in making decisions. We encourage the boards to consider what data, analyses, interpretation, and significance requirements would help inform cumulative effects assessment (MVEIRB) and cumulative impact management (LWBs).</p> <p>We would expect, for example, that the boards might outline requirements for government to provide baseline status of VECs subject to a development proposal and that this would form the basis of the cumulative impact assessment by the proponent.</p> <p><i>The outcome we expect is for board process participants to better understand what is expected of them allowing them to improve their submission in individual proceedings and, more broadly, to assist the RA in identifying monitoring priorities.</i></p>	LWB MVEIRB	<p>LWB's Response: It is currently difficult for the LWBs to consider cumulative impacts because there is no overarching framework within which to be able to obtain or consider cumulative impacts information in a consistent matter. The LWBs are of the opinion that it is the responsibility of the GNWT, in collaboration with relevant partners (e.g., Indigenous Governments and Organizations, LWBs, MVEIRB), to develop such a framework.</p> <p>Currently, the LWBs are limited to making decisions on a case-by-case basis as a result of evidence provided during proceedings. When information is provided, or if potential cumulative impacts are known, then these can be reflected with conditions to a permit and/or licence. For example, the LWBs have included conditions in permits related to limiting activities during nesting season for birds. As another example, if evidence is presented during a proceeding for a water licence that other Effluent Quality Criteria (EQC) values from other projects should be considered for a certain waterbody, as there could be cumulative impacts to the waterbody based on all discharges, the LWBs could take this evidence into account when making a decision on the final EQC for the project that is under review.</p> <p>MVEIRB's Response: MVEIRB relies on active participation from government departments, Indigenous government organizations, and others to inform cumulative effects assessments.</p> <p>For each EA, MVEIRB provides project information and seeks input from government regarding: potential impacts, baseline and other information needs, project design and mitigations, remediation, and assessment methods. Further, MVEIRB actively notifies and requests information from government departments where applicable (and where government appears not to be actively providing the information on their own initiative).</p> <p>Where applicable, MVEIRB has and will continue to request specific information (such as the example provided) directly from government. For this to be effective, government needs to respond in a timely and fullsome manner.</p> <p>Also, departments likely have the knowledge and expertise (within their jurisdictions) to help identify the right questions. In other words, it is important for departments to be active participants in the EA, not limiting themselves only to responding to specific requests from MVEIRB. If a department has information it believes is relevant, it should provide this information in a timely and through manner so that all parties, the developer, and MVEIRB can make use of it.</p>
4-2	<p>The RA consider a risk-based, CIM strategy, prescribing the design and delivery of a CIM program to meet Section 146 of the MVRMA, in response to evidence that a particular VEC is demonstrating a concerning negative trend. Traditional knowledge may be a particularly valuable method of tracking wildlife populations such as caribou, in which TK observations could alert the RAs to a change and could then inform development of a response framework.</p> <p><i>The outcome we expect is that when a substantial concern in a VEC is identified, comprehensive CIM is deployed in order to help determine the possible cause of the change.</i></p>	GNWT	<p>GNWT's Response: The GNWT, as the responsible authority (RA), agrees with this recommendation. GNWT ENR is currently working on the development of a Cumulative Effects Framework to meet the need for a coordinated approach to cumulative effects across the Department. The framework will improve GNWT ENR's ability to consistently monitor, assess and predict cumulative effects, the results of which can inform GNWT ENR and other GNWT decision-making processes. The ultimate aim is to ensure resource management decisions are made with the best available understanding of cumulative effects. This initiative is currently in the planning stage and GNWT ENR will be discussing it with our partners in 2020, in part to begin work on how to best incorporate and include Traditional Knowledge in a meaningful way.</p>
4-3	<p>The RA design a coherent cumulative impacts monitoring and assessment framework for the NWT that includes clarity on language, the role of different organizations, policy directions for boards and departments, monitoring protocols, and advice for industry to manage and consider cumulative impacts.</p> <p><i>The outcome we expect is that the roles and responsibilities of all entities with respect to CIM in the NWT are clear and agreed upon.</i></p>	GNWT	<p>GNWT's Response: The GNWT, as the responsible authority (RA), agrees with this recommendation. In addition to the Cumulative Effects Framework described in response to Recommendation 4-2, GNWT ENR is outlining the current roles and responsibilities of all parties involved in cumulative impact monitoring across the NWT to clarify roles and help parties identify opportunities to collaborate. This information will be made publically available on the GNWT ENR website.</p>

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4-4	<p>The boards publish their CIM knowledge gaps on a regular schedule and request a response from government on how they may assist in providing information.</p> <p><i>The outcome we expect is that the RA is consistently updated on the needs of the boards with respect to knowledge gaps that if filled would aid in the board's decision-making.</i></p>	<p>LWB (including IWB) WRRB GLUPB MVEIRB</p>	<p>LWB's Response (including IWB): All information submitted to the LWBs and all LWB decisions are posted to the LWBs' public registry. Thus, any decisions or issues raised with respect to cumulative impacts are publicly available.</p> <p>In addition, the LWBs collate issues/questions that have arisen during proceedings related to cumulative effects. This information is regularly communicated to CIMP.</p> <p>The biggest limitation/gap at the moment is the absence of a framework within which to be able to obtain or consider cumulative impacts information in a consistent matter. It is difficult to identify gaps in the absence of a framework. The LWBs are of the opinion that it is the responsibility of the GNWT, in collaboration with relevant partners (e.g., Indigenous and Government Organizations, LWBs, MVEIRB), to develop such a framework.</p> <p>WRRB's Response: Through its recommendations and reasons for decisions reports, the WRRB regularly provides input on existing CIM knowledge gaps that if filled would aid in the Board's decision-making.</p> <p>Interviews showed that data and information brought together via NWT CIMP-funded projects is not effectively linked to EA and management decisions as it is not readily usable for assessing and making decisions about cumulative impacts.</p> <p>GLUPB's Response: The GLUPB sees this recommendation as being an important element of the framework identified in recommendation 4-3. As they are identified in the planning process, the Board will keep the CIMP decision makers apprised of the baseline information and monitoring programs necessary so that cumulative effects policy, such as limits of acceptable change, can be integrated into the land use plan in the future. These policy measures will be developed with full consideration given to the roles and responsibilities of all entities with respect to CIM.</p> <p>MVEIRB's Response: MVEIRB's published reports of environmental assessment frequently note gaps and information needs. These reports are posted to the public registry and sent directly to responsible ministers and decision makers. The analysis, explanation, and reasoning in the reports of EA provides important context for identified information gaps.</p> <p>MVEIRB is also willing to publish information gaps in a more generic manner and is currently working with the NWT Board Forum to compile and prioritize research/monitoring priorities.</p> <p>MVEIRB is committed to working closely with CIMP, LWBs, and others to identify and communicate knowledge gaps. MVEIRB will endeavour to publish an update each year.</p>
4-5	<p>When evaluating NWT CIMP funding proposals, the NWT CIMP Steering Committee ensure they consider the needs of decision-makers and document how these concerns were addressed in their funding decisions.</p> <p><i>The outcome we expect is that the results of projects funded by NWT CIMP are increasingly relevant for decision-makers.</i></p>	<p>GNWT</p>	<p>GNWT's Response: The GNWT agrees with this recommendation. The NWT Cumulative Impact Monitoring Program (NWT CIMP) and the NWT CIMP Steering Committee currently consider the needs of decision-makers when evaluating funding proposals. All funding applicants are required to provide details of the engagement and support from relevant decision-makers to ensure funded projects meet decision-makers' needs. The reasons for decisions for project funding are documented internally and are treated confidentially. To further address this recommendation, NWT CIMP will consider how to better communicate the relevancy of NWT CIMP funded projects to decision-makers as part of our program delivery.</p>
4-6	<p>The NWT CIMP continue to evaluate its monitoring priorities on a five-year cycle in response to findings from monitoring and research, and that it provide specific directions and conclusions to decision-makers in the form of memoranda, NWT CIMP-certified monitoring protocols, policies, and customized project-specific advice.</p> <p><i>The outcome we expect is that NWT CIMP enhances the delivery of products that are usable by decision-makers.</i></p>	<p>GNWT</p>	<p>GNWT's Response: The GNWT agrees with this recommendation. The NWT Cumulative Impact Monitoring Program (NWT CIMP) will continue to evaluate and refine its monitoring priorities in collaboration with co-management and Indigenous partners. NWT CIMP will also continue to require funding recipients to make their results publically available, as well as ensure all results are provided to the relevant decision-makers. Furthermore, NWT CIMP will consider how to better develop useable products and communicate project results to decision-makers as part of our program delivery. In turn, the timely adoption of NWT CIMP recommended protocols, policies and advice by decision-makers would support the implementation of this recommendation.</p>