

# PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

Independent Auditor's Report



OFFICE OF THE AUDITOR GENERAL  
NEWFOUNDLAND AND LABRADOR

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## AUDIT AT A GLANCE

### WHY WE DID THIS AUDIT

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- On October 18, 2019, the Public Accounts Committee of the House of Assembly requested that the Office of the Auditor General investigate wetland capping not preceding the flooding of the Muskrat Falls reservoir.
- The provincial government established the Independent Expert Advisory Committee to provide recommendations for mitigating human health concerns related to methylmercury, with particular focus on methylmercury in country foods in the Churchill River and downstream, including Lake Melville. While the Independent Expert Advisory Committee did submit recommendations that could have been implemented prior to flooding, government's decision making process concluded too late and no physical mitigation actually occurred.
- Our audit did not include an assessment of the recommendations issued by the Independent Expert Advisory Committee or a detailed analysis of methylmercury and its health effects.
- It is important that government departments and agencies are able to effectively and efficiently manage information, communication and decision making processes to ensure they fulfill their mandates and duty to the public.

### CONCLUSIONS

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The Department of Municipal Affairs and Environment did not appropriately communicate and monitor the timelines and deadlines of the Independent Expert Advisory Committee recommendation for physical mitigation of the Muskrat Falls reservoir wetlands. However, we did not find any evidence that government intentionally missed the wetland capping deadline.

There were numerous missed opportunities to understand and manage the urgency of the wetland capping timelines. These missed opportunities, within the Department of Municipal Affairs and Environment and between the Department and other stakeholders, appears to have resulted in the physical mitigation of the Muskrat Falls reservoir wetlands not occurring.

## **AUDIT OBJECTIVE**

To determine whether a breakdown in communication occurred that resulted in physical mitigation of the Muskrat Falls reservoir wetlands not being completed.

**Audit Period:** April 2016 to December 2019

## **WHAT WE FOUND**

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- We could not determine a plausible reason why the wetland capping policy decision did not happen in a timely manner. Furthermore, with Nalcor Energy's permit amendment request and communications plan under review by the Department, the urgency of wetland capping should have been well understood and pursued.
- The lack of effective communication within Municipal Affairs and Environment, and between Municipal Affairs and Environment and Nalcor Energy, led to missed opportunities to ensure the wetland capping deadline was understood, discussed and met.
- It appears that credible information on physical mitigation options and deadlines was not used by the Deputy Minister and Senior Advisor of Municipal Affairs and Environment to guide their decision making and communication processes. Their reliance on a risky post flooding physical mitigation option may have lessened any sense of urgency.
- There are conflicting recollections about whether timeline sensitivity and deadlines were sufficiently communicated by the Deputy Minister of Municipal Affairs and Environment to their Ministers. With respect to the Premier and the Premier's Office, there were missed opportunities to receive direction and ensure a wetland capping decision was made in a timely manner.
- It appears government missed an opportunity to benefit from the Independent Expert Advisory Committee Chair's expertise and advice regarding the physical mitigation recommendation of the Independent Expert Advisory Committee.

## TABLE OF CONTENTS

	<b>Page</b>
<b>Background</b>	1
Methylmercury and Physical Mitigation	1
Independent Expert Advisory Committee's Role	2
Nalcor Energy's Role	3
Government's Role	5
Media Attention About Muskrat Falls Project	6
<b>Summary Timeline of Major Events</b>	7
<b>Findings</b>	8
<b><u>Criteria 1 &amp; Criteria 2</u></b>	
Communications within Municipal Affairs and Environment (MAE)	9
Communications between MAE and Internal Stakeholders	11
Communication between MAE and External Stakeholders	15
<b><u>Criteria 3</u></b>	
Permit Amendment Process	17
Permit Tracking Process	18
Indigenous Consultation	18
<b>Conclusions</b>	20
<b>Appendix I – About the Audit</b>	21
<b>Appendix II – Independent Expert Advisory Committee</b>	26
<b>Appendix III – Comprehensive Timeline of Events</b>	28

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## BACKGROUND

On October 25, 2016, the former Premier, Dwight Ball, met with the leaders of Labrador Indigenous governments and organizations to discuss their concerns about the Muskrat Falls Project. Specifically, Indigenous leaders expressed concerns that the flooding of the reservoir (scheduled for July 2019) would result in increased levels of methylmercury, impacting the area's natural food sources. In that meeting, the Government of Newfoundland and Labrador committed to an independent assessment of the issue, via a special committee, to look at ways to reduce possible methylmercury contamination. Premier Ball, on October 26, 2016, said he "imagined the government would accept the recommendations that were supported by science."

## METHYLMERCURY AND PHYSICAL MITIGATION

Methylmercury is formed when microscopic organisms (bacteria) in water and soil convert inorganic mercury into the organic form of mercury, which can accumulate in predatory fish and other living things at the top of the food chain, such as seals. Flooding of land during the creation of a reservoir for hydroelectric purposes has been documented to increase methylmercury concentrations in reservoir water and organisms. Measurement of concentrations can only reliably be determined after years, with the degree of change depending on a variety of factors.

For the purposes of this audit, physical mitigation is the term used for the targeted soil removal and/or wetland capping, as outlined by Nalcor Energy's (Nalcor's) engineering consultant. These methods could be used to reduce the risk of methylmercury increases when the Muskrat Falls reservoir was flooded.

Soil removal refers to removing soil from areas that have been previously cleared of trees and vegetation in the future reservoir. Wetland capping means physically covering areas of land where the soil is covered or saturated by water either seasonally or permanently throughout the year using sand or clay. These targeted mitigation scenarios were expected by the Independent Expert Advisory Committee (IEAC) to reduce the potential for methylmercury production that can result after the flooding of the reservoir.

With respect to physical mitigation, the IEAC recommended 1,031 hectares of soil (over 2,500 acres) be removed and 39.5 hectares of wetlands (almost 100 acres) be capped.

## **INDEPENDENT EXPERT ADVISORY COMMITTEE'S ROLE**

The Provincial Government established the terms of reference for the IEAC on March 24, 2017. Specifically, the Committee was to “independently assess the adequacy of mitigation, monitoring and management of the Lower Churchill Project, and to provide recommendations to [government] with respect to the protection of the health of the Indigenous and local population impacted by the Lower Churchill Project, with particular focus on methylmercury in the lower Churchill River and downstream.” The IEAC consisted of an Independent Chair, an Oversight Committee and an Independent Expert Committee.

The IEAC provided government with two sets of recommendations. On September 22, 2017, the first set of recommendations were issued, which included a recommendation to conduct a feasibility study for the removal of all organic soil and vegetation (full mitigation) from the future reservoir area. Government accepted this recommendation, as well as the other two recommendations the IEAC provided, on September 26, 2017.

The engineering consultant provided Nalcor with the feasibility study on full mitigation dated December 21, 2017, which Nalcor gave to the IEAC on December 22, 2017. The IEAC requested a further study be conducted on two targeted mitigation scenarios – soil removal and wetland capping. Nalcor's engineering consultant provided this second study to IEAC on March 22, 2018. This report contained critical information regarding timelines related to the two targeted mitigation scenarios as well as information about a post-impoundment option.

### ➤ Timelines

The engineering consultant determined both soil removal and wetland capping were feasible within a July 2019 flooding schedule. Both of these options focused on pre-impoundment mitigation, with the engineering consultant stating that they did not assess in detail the concept of capping after reservoir flooding.

The consultant's report indicated that an assumed start date for work would be August or September 2018. This assumption meant that physical mitigation work could be done during the winter of 2018-19, prior to the spring thaw in April 2019 and the flooding of the reservoir in July 2019. Spring thaw in Labrador, also known as freshet, refers to a period, when snow melt causes significant flooding and migratory birds return to the region to nest.

### ➤ Post-impoundment option

The engineering consultant's report did not provide a detailed assessment of the option of wetland capping and/or soil removal after flooding. The report included a brief section describing these options as inherently more dangerous due to the limited ability to work during the open water season, which they noted also presented significant personal safety risks to employees working on the project.

## PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

On April 10, 2018, the IEAC issued its second set of recommendations on how to address potential contamination from methylmercury. The fourth recommendation of this set stated that Nalcor undertake targeted soil removal and wetland capping in the future reservoir area before impoundment. While the full recommendation was not unanimous, all four voting members of the IEAC did support wetland capping. The IEAC noted the remaining non-voting members of the IEAC supported moving forward without any further mitigation. While the federal government representative did not provide an opinion, Nalcor and the provincial government representatives did provide their opinions for not supporting any physical mitigation. Additional details on the composition of the IEAC and their two sets of recommendations can be found in Appendix II.

This fourth recommendation of the IEAC with respect to physical mitigation of the Muskrat Falls reservoir wetlands is the focus of this audit.

### **NALCOR ENERGY'S ROLE**

In 2016, to comply with Federal legislation, Nalcor developed a Fish Habitat Compensation Plan for creating fish habitat to replace the habitat that would be altered upon reaching full impoundment of the Muskrat Falls reservoir. A fish habitat is an area that fish use to reproduce, grow, feed, and shelter. This habitat work in the Edwards Brook Camp area, within the Muskrat Falls reservoir area, was ongoing through the summer of 2018 and was due to conclude in the fall of 2018.

In a letter dated July 24, 2018, and sent on July 25, 2018, to the provincial Water Resources Management Division (the Division) of MAE, Nalcor requested permission to perform capping of 28 hectares of wetlands (about 70 acres) within an area near Edwards Brook Camp. The permit approval process is the delegated responsibility of the Director of the Division, who may seek further direction from Departmental executive. It does not need ministerial or Cabinet approval. This permit amendment request was made with an expectation by Nalcor that wetland capping would be directed by government based on the IEAC recommendation. Nalcor anticipated this area of wetlands could be effectively and efficiently capped without incremental environmental impacts.

The following table provides details on the total wetlands (in hectares) within the Muskrat Falls reservoir, including wetlands inaccessible to equipment, and the area referenced within Nalcor's permit amendment request.

PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

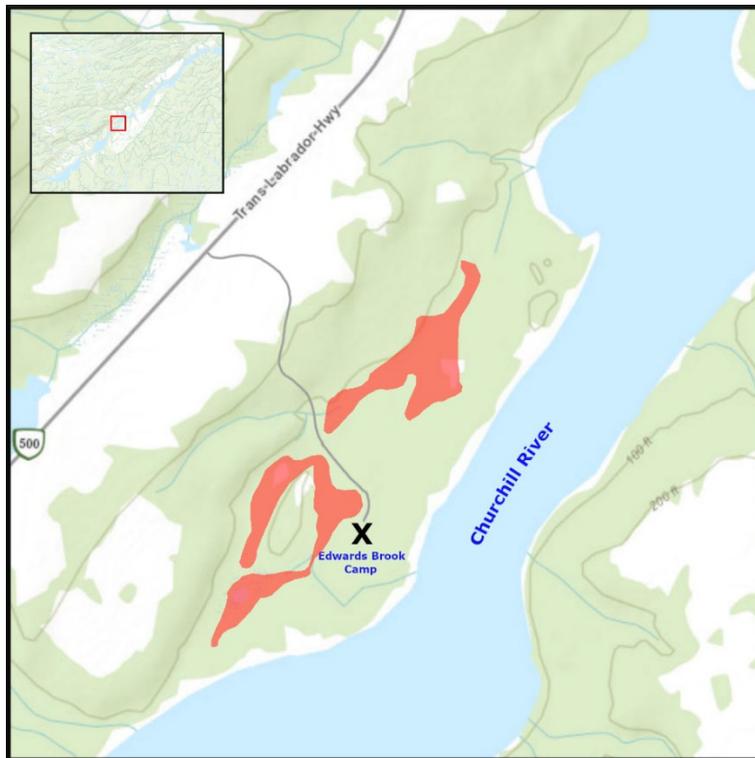
**WETLANDS HECTARES AVAILABLE FOR CAPPING**

Wetlands Description	Area (Hectares)
Total identified wetlands within reservoir area as per Ecological Land Classification	101.85
Wetlands with vegetation present or with restricted access	62.35
Remaining cleared wetlands recommended for capping by the IEAC	39.50
Wetlands requested for capping by Nalcor (portion of wetlands accessible within the Edwards Brook Camp area)	28.00
Remaining accessible wetlands not in Nalcor permit	11.50

Source: Prepared by the Office of the Auditor General based upon Nalcor's engineering consultant's March 21, 2018, report and Nalcor's permit amendment request (unaudited)

The following map provides a visualization of the Edwards Brook Camp area of the Muskrat Falls reservoir where Nalcor's permit amendment request proposed performing wetland capping. The area highlighted in orange represents 28 hectares (or approximately 70 acres).

**MAP OF AREA NALCOR REQUESTED FOR WETLAND CAPPING**



Source: Prepared by the Office of the Auditor General based upon a map provided by GIS and Mapping Division, Department of Fisheries, Forestry and Agriculture, with editing based upon Nalcor's engineering consultant's March 21, 2018 report.

## PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

Nalcor's proposed wetland capping of 28 hectares of wetlands at the Edwards Brook Camp area represented 70 per cent of the area recommended for capping by the IEAC. Nalcor already had a contractor and the infrastructure in place at the location. As a result, Nalcor's cost estimate for completing this work was a range of \$5 to \$6 million, which was lower than the engineering consultant's estimate of \$12 to \$20 million. Nalcor noted in the permit amendment request that the work was planned to be completed by December 1, 2018. Since Nalcor did not receive approval for the wetland capping permit amendment, Nalcor's contractor completed the fish habitat compensation work and decommissioned the Edwards Brook Camp location by November 1, 2018. The proposed capping prior to flooding of the reservoir, specifically the 28 hectares of wetlands near the Edwards Brook Camp, did not occur.

### **GOVERNMENT'S ROLE**

Government announced that it had accepted the first set of IEAC recommendations on September 26, 2017, four days after the recommendations were submitted to government by the IEAC. The departmental process of getting a decision on the second set of IEAC recommendations, received in April 2018, appears to have begun in late November 2018. It culminated in a presentation and decision at a Cabinet meeting on January 9, 2019.

On January 14, 2019, at a Lower Churchill Committee meeting, the Deputy Minister of MAE told the Nalcor Executive Vice President that soil removal had not been approved by Cabinet and to proceed with wetland capping. Nalcor's Executive Vice President responded that it was too late for wetland capping and that the opportunity to do this work was lost when the fish habitat compensation work ended on November 1, 2018. The Nalcor Executive Vice President asked their engineering consultant to identify whether any mitigation might be possible, either pre or post flooding. This January 23, 2019, feasibility review from the engineering consultant recommended against capping after reservoir flooding due to safety risks.

During the week of July 8, 2019, upon direction of the Premier, Nalcor's CEO presented a settlement offer in lieu of physical mitigation to the three Indigenous governments and organizations that were on the IEAC. Based on the settlement, each of the representative governments and organizations would receive \$10 million to directly benefit their communities. The Innu Nation and the NunatuKavut Community Council accepted the settlement on July 10, 2019. To date, the Nunatsiavut Government has not, with media reporting that the Nunatsiavut Government believes the wetland capping deadline was intentionally missed.

## **MEDIA ATTENTION ABOUT MUSKRAT FALLS PROJECT**

During the scope period of this audit (April 2016 to December 2019), there was considerable public attention on the Muskrat Falls Project, specifically public protests, a public inquiry, and updates on the project outlining delays and cost increases.

Throughout September and October 2016, and as a part of the Nunatsiavut Government's "Make Muskrat Right" campaign (launched in 2015), protests occurred, including several outside Confederation Building in St. John's. Protests escalated to the point that protesters occupied the project site, and a hunger strike was started by three individuals. The agreement to form the IEAC occurred in October 2016.

The Commission of Inquiry Respecting the Muskrat Falls Project was established on November 20, 2017. Public hearings occurred during the fall of 2018 through to the summer of 2019. During the public hearings, the issue of wetland capping was the subject of several testimonies. The final report of the Commission was submitted to government on March 5, 2020.

## Summary Timeline of Major Events



Refer to Appendix III for a comprehensive timeline of notable dates and events.

## FINDINGS

The objective of this audit was to determine whether a breakdown in communication occurred that resulted in physical mitigation of the Muskrat Falls reservoir wetlands not being completed. Findings are organized in accordance with each of the three criteria established.

### CRITERIA 1

Government departments and entities communicated appropriately and in a timely manner, with each other, and with Indigenous governments and organizations.

### CRITERIA 2

The Muskrat Falls reservoir physical mitigation deadline was appropriately communicated and monitored.

We could not determine a plausible reason why the wetland capping policy decision did not happen in a timely manner. Furthermore, with Nalcor's permit amendment request and communications plan under review by the Department, the urgency of wetland capping should have been well understood and pursued.

The lack of effective communication within MAE and between MAE and Nalcor, led to missed opportunities to ensure the wetland capping deadline was understood, discussed and met.

It appears that the Deputy Minister of MAE and their Senior Advisor did not use the credible information in the engineering consultant's report provided to the IEAC, such as the schedule assumed, to guide their decision making and communication processes. They also relied on post-impoundment as an option even though the reports of both the IEAC and the engineering consultant focused on pre-impoundment mitigation measures. Their reliance on a risky post flooding physical mitigation option may have lessened any sense of urgency.

There are conflicting recollections of whether Minister Parsons or Minister Letto had been fully briefed, as they stated they were not aware of the timeline sensitivities about wetland capping.

The Deputy Minister and Senior Advisor did not discuss the physical mitigation recommendation or the permit amendment with the Premier in a meeting on August 29, 2018. The coincidental events of that day – meeting with the Premier, an email from Nalcor and the decision to hold the permit – should have clearly identified the urgency to decide wetland capping next steps. The meeting with the Premier could have been an opportunity for the Deputy Minister to ensure the Premier understood the engineering consultant's report's timeline assumptions and to receive direction regarding wetland capping.

The IEAC Chair's offers to provide assistance after the Committee concluded may have been an opportunity for the Deputy Minister to clearly understand the Chair's concerns about the time sensitivity and misinformation.

It appears neither the Deputy Minister or Senior Advisor sufficiently explored the context of the Nalcor enquiries about wetland capping or why the timeline was being stressed.

As the Muskrat Falls Project owner, Nalcor was in a unique position to understand the urgency associated with the wetland capping timeline. A call between a senior official at Nalcor and a senior official in government may have resulted in wetland capping options being explored.

A quarterly meeting in October 2018, of MAE staff with Nalcor officials appears to have been the last opportunity for MAE to have recognized that Nalcor's contractors would need to stay in the Edwards Brook Camp area in order for wetland capping to be an option.

## COMMUNICATIONS WITHIN MAE

### Communication between the Deputy Minister and Senior Advisor

A Senior Advisor in MAE was the provincial government representative on the IEAC's oversight committee (non-voting). As a committee member, the Senior Advisor received a copy of all reports provided to the IEAC by Nalcor's engineering consultant. We find it noteworthy that the Senior Advisor also provided an opinion, which was reported within the IEAC's final report to government, stating that they did not support any physical mitigation and recommended no further action.

The Deputy Minister of MAE confirmed to us that the Senior Advisor was a key contributor to the policy decision processes on the IEAC recommendations. The Deputy Minister further stated that the Senior Advisor briefed them on details within the engineering consultant's March 21, 2018, report. Contrary to cautions against post-flooding wetland capping outlined in the engineering consultant's report, the Senior Advisor advised us that they believed that wetland capping after flooding was a strong possibility. This belief lessened any sense of urgency related to the physical mitigation recommendation because there was – as the Senior Advisor and Deputy Minister of MAE believed – another option available. They relied on post-impoundment as an option even though the reports of both the Independent Expert Committee of the IEAC and the engineering consultant focused on pre-impoundment mitigation measures, with the engineering consultant's report stating that this was very risky.

As a result, it appears that MAE executive and officials did not give enough attention to the engineering report, such as the schedule assumed, to guide their decision making and communication processes concerning the deadline for wetland capping.

During the Deputy Minister's testimony before the Muskrat Fall Inquiry, they noted that "the work would occur in October, November [2018], up to February [2019], I think, in terms of capping." It was during October 2018 that the Deputy Minister made efforts to get a decision on the IEAC recommendations to the attention of the Minister and, later, Cabinet.

### **Communication between the Minister and Deputy Minister**

Between receiving the IEAC recommendations in April 2018 through to the fall of 2018, there was a change in Ministers in the Department. Minister Eddie Joyce received the IEAC recommendations. Minister Andrew Parsons was appointed on April 26, 2018, and was briefed on May 16, 2018. On November 8, 2018, Minister Graham Letto was appointed, who was briefed on November 13, 2018.

In mid-October 2018, the Deputy Minister prepared a draft letter addressed to the CEO of Nalcor that stated the Department had accepted the wetland capping recommendation, along with the other three recommendations. The Deputy Minister's intention was to inform Minister Parsons that MAE did not yet have a government decision on the IEAC recommendation on physical mitigation. There are conflicting recollections of whether the Deputy Minister briefed the Minister on the timelines and permit amendment request. The draft letter appears to have resulted in a late October 2018 meeting of Minister Parsons and the Deputy Minister with a Special Advisor to the Premier. While the letter highlighted wetland capping, it did not contain details that would have emphasized timeline sensitivity for the wetland capping work. No one from Cabinet Secretariat attended the meeting. Ultimately, the Department did not send the letter to Nalcor.

On November 13, 2018, the Deputy Minister briefed Minister Letto on the IEAC recommendations. There are conflicting recollections of whether Minister Letto was briefed at that time about the permit amendment. After this briefing, the Department prepared a cabinet submission in an effort to get this information before Cabinet as quickly as possible. Minister Letto advised us that timeline sensitivity for wetland capping was not communicated to him. Minister Letto understood there was a spring 2019 deadline, so he felt there would have been time for the work to be done during the winter.

Minister Letto was not aware that by the time Cabinet made its decision on January 9, 2019, to proceed with wetland capping, Nalcor had already removed its contractor from the area and it was too late to complete any wetland capping prior to spring thaw or reservoir flooding.

## COMMUNICATION BETWEEN MAE AND INTERNAL STAKEHOLDERS

### Communication with Nalcor

As noted earlier in this report, Nalcor submitted a permit amendment request to MAE on July 25, 2018, seeking approval for wetland capping at the Edwards Brook Camp area. Upon receipt of the permit amendment request from Nalcor, the Director of the Water Resources Management Division of MAE interpreted that the permit amendment request was to implement the IEAC recommendation related to physical mitigation of the wetlands, which was under review by government. The Director of the Division temporarily placed the permit amendment request on hold and brought the request to the attention of the Department executive on three occasions (August 3, August 24 and August 29).

During the same timeframe in which Nalcor submitted the permit amendment request, Nalcor also provided to MAE (on July 23, 2018) a communications document, which outlined Nalcor's planned communications regarding wetland capping. The Department's communications director advised us they provided it to the Deputy Minister, who subsequently provided it to the Minister. This document contained an update to Nalcor's Fish Habitat Compensation Plan to include the additional wetland capping of approximately 28 hectares in the Edwards Brook Camp area. The communications document noted that expansion of the work would enable a large area of wetland capping to happen with only an incremental increase in cost. The Nalcor Executive Vice President advised us that since they already had a contractor in the Edwards Brook Camp area doing the fish habitat compensation work, they saw this as an opportunity to do capping work in this particular area because they already had roads, camps, personnel, and equipment in place. On July 24, 2018, Nalcor delayed implementation of the communications plan and, ultimately, it was never implemented.

On July 31, 2018, the Nalcor permit coordinator followed up with the Division and asked for a status update on the permit amendment request. In August 2018, on three separate occasions (August 3, August 9, and August 29), Nalcor's IEAC representative followed up with the Senior Advisor via email on the status of the permit amendment and repeatedly stressed the urgency for getting the permit amendment approved, emphasizing that "the window to complete the [wetland capping] work [was] closing".

## PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

While the Senior Advisor did not provide the emails to the Deputy Minister, they advised us that they did relay the urgency to the Deputy Minister. The Deputy Minister advised us that a number of people did express urgency. Although the Senior Advisor informed the Deputy Minister that the Nalcor official was enquiring about the status of the permit amendment, it appears neither sufficiently explored the context of the enquiries or why the timeline was being stressed. While the Senior Advisor did reply to each email from the Nalcor IEAC representative about the permit approval, it was only to inform them that the policy decision had not yet been made and therefore the permit had not yet been approved. The Deputy Minister and the Senior Advisor did not ask for any clarifications from the Nalcor IEAC representative. It appears there was no communication between MAE and Nalcor seeking clarification, technical or otherwise.

On August 29, 2018, the Deputy Minister directed that the permit amendment request remain on hold. The Deputy Minister advised us that they believed there could be a perceived connection between the wetland capping within the permit amendment request and the IEAC physical mitigation recommendation. The Deputy Minister did not want it to appear that the Department had made a decision on the IEAC recommendation without the approval of the Premier and Cabinet, particularly given the Premier's involvement in establishing the IEAC.

We could not find a rationale for why the policy decision did not go to Cabinet during the summer or fall of 2018. Furthermore, with Nalcor's permit amendment request and communication plan under review by the Department, the urgency of wetland capping should have been well understood and pursued.

Another indication of communications issues within MAE involved the staff of the Division. Staff of the Division attended quarterly meetings with Nalcor officials regarding the Lower Churchill Project progress. The minutes from the October 11, 2018, meeting indicate that Nalcor's Fish Habitat Compensation Plan work was nearing completion. The Division staff did not inform the Director of the Division that the fish habitat compensation work was nearing completion. This appears to have been the last opportunity to keep the contractors in the Edwards Brook Camp area. If the staff in the Division had briefed the Director, it is possible the Director may have pursued the issue.

We were advised there were no further communications between MAE and Nalcor from mid-October 2018 through to January 2019. As the Muskrat Falls Project owner, Nalcor was in a unique position to understand the urgency associated with the wetland capping timeline. A call between a senior official at Nalcor and a senior official in government may have resulted in wetland capping options being identified.

## **Communication with Cabinet Secretariat**

A responsibility of Cabinet Secretariat is to ensure that the Premier and Ministers are well prepared to discuss and make decisions on the issues on Cabinet's agenda. To ensure this happens, Cabinet Secretariat must maintain a strong oversight function by maintaining good relationships with department executives, who are able to contact Cabinet Secretariat for advice or to provide early warnings about emerging issues. The Deputy Minister of a department must maintain multiple relationships to fulfill their mandate – with their Minister, with Cabinet Secretariat, with their departmental staff and the general public.

We would have expected Cabinet Secretariat to be involved in the process to get a decision on the IEAC recommendations. This expectation is in line with a draft operational manual created by a former Clerk of the Executive Council in 2013. The current Clerk confirmed that they are involved in performing this type of oversight for all government Deputy Ministers as part of their role as the Clerk.

The former Clerk advised us that, while they were aware of the topic, they were not included in any discussions about wetland capping. The former Clerk also advised us that they did not recall any discussion about the IEAC physical mitigation recommendation with the Deputy Minister during the period April 2018 to October 2018. The Deputy Minister's performance contract, which was signed by the Clerk and Deputy Minister in July 2018, did state that implementation of IEAC recommendations was a priority.

## **Communication with Premier's Office**

Premier Ball and his Chief of Staff both advised that, throughout the period between the IEAC's release of its second set of recommendations in April 2018 and Cabinet's approval of the wetland capping in January 2019, they understood that wetland capping would occur to meet a deadline of spring 2019.

The Deputy Minister and Senior Advisor had a briefing with the Premier and his staff focused on the status of methylmercury monitoring on August 29, 2018, the same day that Nalcor followed up on the permit amendment request and the same day that MAE officially placed the permit amendment request on hold. We do not have a timeline for that sequence of events. Neither Minister Parsons nor the Cabinet Secretariat were present at the meeting.

The Deputy Minister and the Senior Advisor stated they did not discuss the physical mitigation recommendation or the permit amendment with the Premier during this briefing. The coincidental timing of the meeting and the permit amendment request activity could have spurred the Deputy Minister into action on the amendment, the recommendation or both. This meeting with the Premier could have been an opportunity to ensure the Premier fully understood the engineering consultant's report and timeline and to receive direction regarding wetland capping.

## PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

In late October 2018, as stated earlier, Minister Parsons and the Deputy Minister met with a Special Advisor to the Premier to discuss the draft letter for Nalcor needing approval from the Premier's Office to move forward with wetland capping. The Deputy Minister confirmed they did not follow up with the Premier's Office on the draft letter's status or to inquire if the Premier had reviewed or approved the letter. The Department ultimately did not send this letter to Nalcor.

In early December 2018, the Deputy Minister and Minister Letto met with Premier Ball. There was discussion about the IEAC recommendation on physical mitigation and the Premier advised that he did want the decision to go to Cabinet. The Deputy Minister advised us that there was no discussion about the deadline of December 1, 2018 within Nalcor's permit amendment request.

The Premier and his Chief of Staff both advised us that, in early January of 2019, they understood that the Department had prepared a presentation for Cabinet's discussion and decision regarding wetland capping. The Premier and his Chief of Staff both also advised us that they had understood that wetland capping was part of an extension to Nalcor's Fish Habitat Compensation Plan and that this work would continue until the spring of 2019, giving Nalcor the time to perform wetland capping. It appears this was the basis of moving forward to a Cabinet decision in January 2019. At no time did they, the Premier or his Chief of Staff, get any indication that it was already too late for a wetland capping decision by Cabinet.

### **Communication with the Lower Churchill Committee**

Government has a special information sharing committee referred to as the Lower Churchill Committee. This was not a formal decision making body; rather, it was an informal group of senior government officials that came together to share information regarding the Lower Churchill Project.

Members of this committee included deputy ministers of numerous departments, Nalcor officials and senior officials from the offices of the Premier and the Clerk of the Executive Council. The IEAC recommendations were discussed at these meetings, as well as the potential for methylmercury contamination resulting from the flooding. However, none of the committee members we interviewed could recall any discussion during these meetings about the timeline required for wetland capping or any urgency required in implementing the IEAC's physical mitigation recommendation. As a result, it appears there were lost opportunities for Nalcor and government officials to discuss wetland capping and necessary timeline.

Between April 2018 and January 2019, the Lower Churchill Committee met three times – June 4, 2018, November 5, 2018, and January 14, 2019. The committee meeting on November 5, 2018, was four days after Nalcor’s contractor had left the Edwards Brook Camp area. This November committee meeting did not include any representation from Nalcor. A senior government official responsible for coordinating the meetings indicated this was a result of an omission on the email invite list. While it appears it may have been too late to do the wetland capping outlined in the permit amendment request, this meeting could have been an opportunity for government officials to be aware of the situation and to determine whether there were options available.

### **COMMUNICATION BETWEEN MAE AND EXTERNAL STAKEHOLDERS**

#### **Communication with the Chair of the IEAC Committee**

The Oversight Committee of the IEAC selected an independent Chair to oversee the work of the IEAC. The Chair had a background in environmental research and applied project management. As an experienced environmental scientist, the Chair was experienced in situations which deal with publicly controversial issues.

Government, in response to other inquiries, made a commitment to meet with the independent Chair of the IEAC subsequent to the release of the second set of recommendations in order to get a full appreciation of the committee’s work. After the release of the IEAC recommendations in April 2018, the Chair of the IEAC reached out to the Department to offer their assistance and expertise. On April 26, 2018, the Department cancelled a scheduled teleconference call with the IEAC Chair because Minister Parsons had been appointed on that date and was not yet briefed. It was two months after the release of the IEAC recommendations before Minister Parsons and the Deputy Minister met with the IEAC Chair on June 7, 2018. The Chair advised us this meeting was relatively short, leaving the Chair with limited time to emphasize the importance of a timely decision on physical mitigation.

The Chair emailed the Deputy Minister in August 2018, several months after their term as Chair had ended, offering their assistance on the issues noting, particularly, the sensitivity associated with each of the recommendations. The Chair emailed the Deputy Minister again in September 2018 expressing their concern over the lack of response. The Deputy Minister did not respond to these emails. The Chair also did not receive communication from anyone else in government during this time.

The Chair advised us that they were frustrated when they saw subsequent documents stating that the effect of capping would only result in a one to two per cent reduction in methylmercury exposure. While the wetlands represent approximately two per cent of the total Muskrat Falls reservoir, the Chair felt that stating there would only be a one to two per cent reduction in methylmercury without taking into account the amount and depth of organic carbon beneath the wetlands was misleading in representing the effectiveness of wetland capping.

The IEAC Chair's offers to provide assistance after the Committee concluded may have been an opportunity for the Deputy Minister to clearly understand the Chair's concerns about the time sensitivity and misinformation.

The current Deputy Minister of Environment and Climate Change (ECC), in a recent response to an audit inquiry, provided commentary about methylmercury monitoring results. They noted that a model was used to predict the benefit of wetland capping, which was approximately a two per cent reduction in methylmercury. They noted that "given the actual monitoring results, wetland capping, which was already considered to give a negligible benefit, would have been proportionately even less beneficial and that it was beyond scientific accuracy to be able to measure such a very small change that would have resulted from wetland capping in any case". These comments from the current Deputy Minister appear to indicate that ECC feels that the monitoring results taken since impoundment demonstrate a lack of value from wetland capping.

### **Communications with Indigenous Governments and Organizations**

MAE received the IEAC's second set of recommendations in April 2018. Government made a commitment to meet with the Indigenous governments and organizations based on the fact that not all groups agreed on the physical mitigation to be undertaken.

Government had one meeting with each of the three Indigenous governments and organizations about the IEAC's physical mitigation recommendation. Government officials advised us of these meeting dates, which were between June and early August 2018 via conference call, and that the meetings provided an opportunity to the Indigenous governments and organizations to make their own individual representations to Department officials regarding the IEAC recommendations. Two of the three meetings included Minister Parsons. It appears Cabinet Secretariat or the Premier's Office were not included in the meetings due to these being Departmental meetings. These meeting dates represent a time-lag of two to four months from the release date of the recommendations in April 2018.

Following these meetings, Indigenous leaders repeatedly followed up with the Department during the summer and fall of 2018. They stressed the urgency of making a decision on the IEAC recommendations and raised concerns about government's lack of action and linked the urgency to the fact that full flooding was scheduled for July 2019.

Communication from the Indigenous leaders included four letters to the Department of MAE and the Premier's Office. The Department responded to three of these letters stating that they were carefully reviewing the recommendations in detail and consulting with each of the Indigenous leaders. In August 2018, the Nunatsiavut Government sent a letter to the Department, which noted that during their June 2018 meeting with the Department, very little communication had occurred and no follow-up had happened since. The Department could not provide us with a response to this August 2018 letter.

As a result, it appears there were lost opportunities for government to recognize and investigate the urgency that was being brought forward from the Indigenous governments and organizations.

### CRITERIA 3

Appropriate communication related to Permit ALT6933-2013, Amendment No. 5 was facilitated by effective permit amendment request processes at the Department of Municipal Affairs and Environment.

The Division used appropriate processes for the wetland capping permit amendment request. However, the Deputy Minister did not bring the permit amendment request to the attention of Minister Parsons or Cabinet Secretariat or ensure there was follow up with Nalcor.

The Department did not document any monitoring regarding the length of time that the permit amendment request had been on hold. They also did not perform or document follow up within the Department or any periodic communication with Nalcor.

### PERMIT AMENDMENT PROCESS

The process to obtain permit amendment approval begins when an external entity or government entity contacts the Division with a permit amendment request. The Division officials then review the request and its supporting information.

There are three different scenarios under which the Division will put a permit amendment request on hold:

- there are deficiencies in the application (such as missing information);
- the applicant requires an environmental assessment; or,
- the Division requires a policy decision to be made related to the nature of the permit.

Policy decisions are typically made at the Departmental executive level; if a permit amendment request requires a policy decision, it is sent to the appropriate Department executive for review and a decision. The Department executive may choose to bring a policy decision to the Premier or Cabinet. When a policy decision is required, the Division places the application on hold until the appropriate authority - Department executive, the Premier or Cabinet - makes a policy decision. If the application contradicts the policy decision, the Division rejects the application.

Nalcor's permit amendment request was placed on hold by the Division based upon direction by the Deputy Minister, as they decided to bring the policy decision to the Premier. Officials at the Division advised us that in their experience of the Department's permit processing, the wetland capping request was the only instance where a request required a policy decision from Cabinet prior to approval.

Up to the point of placing the request on hold, the Division used appropriate processes for the wetland capping permit amendment request. Once the Division reached the policy decision stage with the Deputy Minister, it was noted as such on the Division's permit tracking spreadsheet and there was no further follow up with either the Deputy Minister or Nalcor officials. The Deputy Minister did not bring the timelines relating to the permit amendment request to the attention of Minister Parsons or the former Clerk of Executive Council. The Deputy Minister also did not ensure there was follow up with Nalcor about the permit amendment request or the emails that Nalcor had sent about the status of the request.

## **PERMIT TRACKING PROCESS**

Permit tracking spreadsheets are maintained at the Division; they note when a permit is received and its general status (approved or on hold). However, there is no defined process to monitor the length of time that a permit or permit amendment request has been on hold; to perform or document a status update within the Department; or to periodically communicate a status update to a proponent.

The Department informed Nalcor that the application was on hold until government made a policy decision based on the IEAC recommendations. The Department did not document any monitoring regarding the length of time that the permit amendment request had been on hold. They also did not perform or document follow up within the Department or any periodic communication with Nalcor. Department officials advised that an amendment request of this nature could stay on hold indefinitely.

During our audit we became aware of an example of at least one other permit monitoring concern during our audit scope period. Nalcor submitted a permit application for fish habitat work at Gull Island Shoals in February 2018, which the Division appears to have lost record of until May 2018 when Nalcor followed up. As a result, Nalcor resubmitted the application. Nalcor officials then raised a concern at an October 2018 meeting, and noted that a full construction season has passed while waiting for the permit. The permit for the work at Gull Island Shoals was finally issued in November 2018, six months after Nalcor resubmitted the application.

## **INDIGENOUS CONSULTATION**

The Intergovernmental and Indigenous Affairs Secretariat (IIAS) had Aboriginal Consultation Guidelines for Regulatory Approval Applications (the guidelines) for all permits related to the Muskrat Falls Project. The guidelines were designed to ensure that Nalcor, as the proponent, and regulatory departments and agencies perform appropriate consultation with Indigenous governments and organizations before issuing regulatory approvals for the project.

## PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

According to the guidelines, all original permit applications and amendments that are not ancillary to an approved permit must undergo Indigenous consultation. If an amendment is ancillary to the original approved permit, consultation is not required. An official with IIAS advised us that an ancillary permit means that the proposed work is both minor and directly related to the intended work of the original permit. The guidelines require that IIAS must be consulted by Nalcor or a regulatory department or agency to determine whether a permit amendment would be deemed ancillary and therefore not require Indigenous consultation.

The Director of the Division at MAE advised us they consulted with IIAS in mid-July 2018, based on an informal inquiry from Nalcor, approximately one week before MAE officially received the wetland capping permit amendment request from Nalcor. However, IIAS advised us that the contact by MAE in mid-July 2018 did not constitute consultation with them. Specifically, they had not received a copy of the permit amendment request and would not have had the information required to provide direction at that time on whether the request would require Indigenous consultation.

The wetland capping permit amendment request did not go through, and it is not clear whether the request would have needed to go through, an Indigenous consultation process. Ultimately, the request did not go through all processes at MAE because the Deputy Minister had placed it on hold.

## CONCLUSIONS

The Department of Municipal Affairs and Environment did not communicate appropriately and in a timely manner regarding the IEAC's physical mitigation recommendation and the deadlines and timelines for physical mitigation of the Muskrat Falls reservoir wetlands. The Muskrat Falls reservoir physical mitigation deadline was also not appropriately monitored. However, we did not find any evidence that government intentionally missed the wetland capping deadline.

There were numerous missed opportunities to understand and manage the urgency of the wetland capping timelines. These missed opportunities, within the Department of Municipal Affairs and Environment and between the Department and other stakeholders, appears to have resulted in the physical mitigation of the Muskrat Falls reservoir wetlands not occurring.

## APPENDIX I – ABOUT THE AUDIT

### Objective

The objective of our audit was as follows:

To determine whether a breakdown in communication occurred that resulted in physical mitigation of the Muskrat Falls reservoir wetlands not being completed.

### Criteria

The Office of the Auditor General developed criteria for this audit based on discussions with entity management and other officials, review of relevant documentation, guidelines, legislation, departmental policies and procedures, and reviews of literature including reports of other legislative auditors. The senior management of the current Department of Environment and Climate Change, Nalcor Energy, and the Office of Executive Council accepted the criteria as suitable.

The Office of the Auditor General assessed whether a breakdown in communication occurred that resulted in physical mitigation of the Muskrat Falls reservoir wetlands not being completed against the following criteria:

1. Government departments and entities communicated appropriately and in a timely manner with each other, and with Indigenous governments and organizations.
2. The Muskrat Falls reservoir physical mitigation deadline was appropriately communicated and monitored.
3. Appropriate communication related to Permit ALT6933-2013, Amendment No. 5 was facilitated by effective permit amendment request processes at the Department of Municipal Affairs and Environment.

## Terms of Engagement

On October 18, 2019, the Public Accounts Committee of the House of Assembly requested that the Office of the Auditor General “investigate and report on the breakdown of communication that resulted in wetland capping not preceding the flooding of the Muskrat Falls reservoir”. The request states this was “in violation of an agreement between the government of Newfoundland and Labrador and the Innu Nation, the Nunatsiavut government, and the NunatuKavut Community Council to abide by the recommendations of the Independent Expert Advisory Committee.”

## Scope and Approach

This audit began in October 2019 and covered April 2016 to December 2019. This audit examined whether a breakdown in communication occurred that resulted in physical mitigation of the Muskrat Falls reservoir wetlands not being completed.

Audit procedures included informal interviews with department and entity officials; the use of an email search tool (multi-mailbox); review of the processing of permit applications and permit amendment requests by the Department of Municipal Affairs and Environment; and formal interviews held under oath with senior government and entity officials. We contacted each of the Indigenous governments and organizations and extended an opportunity to provide us with information relevant to our audit. None of the Indigenous governments and organizations chose to reply to provide us with information. Audit procedures also included a detailed inspection of documentation related to physical mitigation; including an examination of policies and procedures, correspondence, reports, committee meeting minutes, information notes, briefing notes and relevant sections of transcripts from the public hearings of the Commission of Inquiry Respecting the Muskrat Falls Project.

This audit did not include an assessment of the validity or quality of the recommendations issued by the IEAC. The Office of the Auditor General did not perform a detailed analysis of scientific methylmercury information and its potential health effects.

This audit of permit and permit amendment processes was limited to an evaluation of the processing, issuing and communication related to Nalcor Energy’s physical mitigation permit amendment request. This evaluation included gaining an understanding of the processes related generally to permit applications and permit amendment requests that were within the responsibility of the Water Resources Management Division of the Department of Municipal Affairs and Environment. It also included an understanding of some of the permits and permit amendments related to the Lower Churchill Project and Nalcor, in general.

## Audit Standards

This independent assurance report was prepared by the Office of the Auditor General of Newfoundland and Labrador on the Physical Mitigation of Muskrat Falls Reservoir Wetlands. Our responsibility was to independently audit whether a breakdown in communication occurred that resulted in physical mitigation of the Muskrat Falls reservoir wetlands not being completed, and to provide objective information and recommendations. The senior management of the current Department of Environment and Climate Change, Nalcor Energy, and the Office of Executive Council acknowledged their responsibility for the audit subject matter and the terms of the audit, including audit objective, scope, and approach.

This audit was performed to a reasonable level of assurance in accordance with the Canadian Standard on Assurance Engagements 3001 – Direct Engagements set out by the Chartered Professional Accountants of Canada and under the authority of the Auditor General Act.

The Office applies Canadian Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding ethical requirements, professional standards, and applicable legal and regulatory requirements.

In conducting the audit work, we have complied with the independence and other ethical requirements of the Rules of Professional Conduct of the Association of Chartered Professional Accountants of Newfoundland and Labrador.

## Management Representation

The senior management of the current Department of Environment and Climate Change, Nalcor Energy, and the Office of Executive Council confirmed that they had provided the Office of the Auditor General with all the information they were aware of that had been requested or that could significantly affect the findings or conclusions of the audit report.

## Acceptance and Acknowledgement Objection

The senior management at the current Office of Indigenous Affairs and Reconciliation did not accept the criteria of our audit as suitable. The senior management also did not acknowledge their responsibility for the audit subject matter and the terms of the audit, including audit objective, scope, and approach. The senior management of the current Office of Indigenous Affairs and Reconciliation also did not confirm that they had provided the Office of the Auditor General with all information of which they were aware that had been requested or that could significantly affect the findings or conclusions of the audit report.

Furthermore, the Deputy Minister of the Office of Indigenous Affairs and Reconciliation noted that “[the Public Accounts Committee] cannot confer on the [Auditor General] authority to conduct a review which is not within the ambit of the statute”.

## Use of Expert

During this audit, the Office of the Auditor General used the services of a lawyer specifically during the interview process and to provide general advice and guidance.

## Why this Audit is Important

On October 26, 2016, Premier Dwight Ball, the Innu Nation, the Nunatsiavut government, and the NunatuKavut Community Council agreed to establish the Independent Expert Advisory Committee. This committee would recommend options for reducing the possible health risks associated with methylmercury formation in the Muskrat Falls reservoir. Traditionally, Labrador Indigenous governments and organizations have used, and continue to use, the Churchill River waterway for food, travel and lodging. Lake Melville, an estuary downstream from Muskrat Falls, is important to Indigenous governments and organizations as it is their “highway”.

In a letter to Minister Eddie Joyce of the Department of Municipal Affairs and Environment, dated April 10, 2018, the IEAC recommended that Nalcor Energy undertake targeted removal of soil and capping (physical mitigation) of wetlands in the future reservoir area before impoundment (flooding). However, no physical mitigation actually occurred.

It is important to determine whether a breakdown in communication occurred that prevented physical mitigation of the reservoir from being completed. Government departments and entities must be able to effectively and efficiently manage information, communications and decision making processes in a timely manner to ensure that they fulfill their mandates and duties to the public. Departments should have clear and effective means of internal and external communication so that goals and activities are clearly defined and communicated so that work can be accomplished as intended.

## PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

The Public Accounts Committee of the House of Assembly requested that the Office of the Auditor General investigate the breakdown in communication that resulted in wetland capping not preceding Muskrat Falls reservoir flooding. Determining the origin of any communication breakdown that led to government's failure to direct Nalcor to perform any physical mitigation in the reservoir may lead to changes in how government manages their decision making processes and communications so that this type of failure is not repeated.

### Position Titles within the Report

Position and department titles referred to throughout this report represent the positions and departments as they existed, and individuals that held these positions, during the audit scope period. As needed, the terms former and current are used for clarification purposes. Specifically, the responsibility for environment was formerly within the Department of Municipal Affairs and Environment and is now within the Department of Environment and Climate Change. The responsibilities related to Indigenous Affairs were within the Intergovernmental and Indigenous Affairs Secretariat and are now within the Office of Indigenous Affairs and Reconciliation.

### Date Conclusion Reached

We obtained sufficient and appropriate audit evidence on which to base our conclusions on November 30, 2021, in St. John's, Newfoundland and Labrador.



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DENISE HANRAHAN, CPA, CMA, MBA, ICD.D  
Auditor General



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Deputy Auditor General



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Assistant Auditor General

## Appendix II

### Independent Expert Advisory Committee (IEAC)

#### Independent Expert Advisory Committee Structure

- The Independent Chair
- The Oversight Committee
- The Independent Expert Committee

#### The Oversight Committee representatives

- Nunatsiavut Government (voting)
- Innu Nation (voting)
- NunatuKavut Community Council (voting)
- Affected Municipalities (which included Happy Valley-Goose Bay, North West River, Rigolet and Cartwright) (voting)
- Provincial Government (non-voting) – Senior Advisor of MAE
- Nalcor Energy (non-voting)
- Federal Government (non-voting)

#### The Independent Expert Committee

- Six scientific experts chosen by the Oversight Committee
- Three Indigenous knowledge experts appointed by the Nunatsiavut Government, Innu Nation, and NunatuKavut Community Council

#### IEAC Recommendations (as taken from IEAC media releases):

##### September 22, 2017

1. A feasibility study be undertaken by December 20, 2017, for the removal of soil and vegetation from the future reservoir area;
2. Nalcor implement the changes described in the independent expert's report titled "Recommendations on changes to the scope and quality of the Muskrat Falls Aquatic Monitoring Program"; and
3. Nalcor expedite the finalization of their current methylmercury modelling project, and complete the work no later than February 15, 2018.

**April 10, 2018**

1. The IEAC recommends that a public information campaign be undertaken to communicate that, based on scientific evidence, current practices related to consumption of country food and water are safe.
2. The IEAC recommends that an independent body oversee the design and implementation of a monitoring program for the Lower Churchill Project, ensuring that it is community-based, and that it provides information that is relevant to the protection of human health.
3. The IEAC recommends that the Province, Nalcor Energy, Indigenous groups and the local populations negotiate an Impact Security Fund prior to full flooding. The purpose of the fund is to guarantee continued access to local country food, or safe alternatives, if methylmercury exposures increase above pre-established thresholds, despite mitigation efforts.
4. In addition, while the IEAC was not able to achieve consensus with respect to mitigation, based on votes by three of the four voting members, the IEAC recommends that Nalcor Energy undertake targeted removal of soil and capping of wetlands in the future reservoir area before impoundment.

During the IEAC's work to produce its April 10, 2018 set of recommendations, it was not able to achieve full agreement amongst its voting members regarding the physical mitigation of methylmercury impacts. As a result, the Committee held a vote to help reach the recommendation ultimately included in their report as recommendation four. Two of the non-voting members of the Committee, specifically Nalcor and the provincial government, did not support the physical mitigation recommendations.

## Appendix III – Comprehensive Timeline of Events

Date	Event Description
October 25, 2016	Premier Ball meets with the three Indigenous governments and organizations on their concerns over the Muskrat Falls Project.
October 26, 2016	Premier Ball and the three Indigenous governments and organizations agree to form the IEAC to look at ways of reducing possible methylmercury contamination from the project.
March 24, 2017	Government establishes the terms of reference for the IEAC.
September 22, 2017	IEAC issues its first set of recommendations to Minister Joyce of MAE on the mitigation and monitoring of potential methylmercury impacts.
September 26, 2017	Government accepts the recommendations from the IEAC, which includes conducting a feasibility study on the removal of soil and vegetation (full mitigation) in the future reservoir area by December 20, 2017.
December 22, 2017	Nalcor provides their engineering consultant's feasibility study on full mitigation to the IEAC. A further report is requested on targeted mitigation scenarios.
March 22, 2018	Nalcor's engineering consultant provides their report on targeted mitigation scenarios. This report focused on 2 options: Scenario A: wetland capping, Scenario B: targeted soil removal.
April 10, 2018	IEAC issues second set of recommendations to Minister Joyce of MAE, which recommends targeted removal of soil and capping of wetlands in the future reservoir. While there was no consensus among voting members on soil removal, there was unanimous support amongst the voting members for wetland capping; two of the non-voting members, which included the provincial government represented by the Senior Advisor in MAE, did not support physical mitigation.
April 26, 2018	Minister Parsons appointed to MAE and Department of Justice and Public Safety portfolios. Scheduled conference call between former Minister Joyce of MAE and the Chair of the IEAC is cancelled.
May 16, 2018	Briefing held for Minister Parsons on MAE operations.
June 4, 2018	Meeting of the Lower Churchill Committee.
June 7, 2018	Conference call of Deputy Minister and Minister Parsons with Nunatsiavut Government to discuss the IEAC recommendations. Conference call of Deputy Minister and Minister Parsons with Chair of IEAC to discuss the IEAC recommendations.
Summer 2018	Numerous parties (Indigenous governments and organizations, IEAC Chair) contact MAE with concerns about the timeline for implementing the IEAC's recommendations.
July 17, 2018	Conversation between Director of the Division of MAE and the Director of IIAS about whether Nalcor's permit amendment request required indigenous consultation.

PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

Date	Event Description
July 23, 2018	Nalcor submits communications plan to MAE on intent of wetland capping as part of fish habitat compensation plan work.
July 24, 2018	Nalcor places communications plan on hold.
July 25, 2018	Nalcor submits permit amendment request to MAE to perform wetland capping (equal to 70 per cent of IEAC recommended area) in conjunction with the fish habitat compensation work.
	Conference call of MAE executive and Minister Parsons with Innu Nation to discuss the IEAC recommendations.
July 31, 2018	Nalcor follows up with MAE, asking for a status update on the permit amendment request.
August 3, 2018	Nalcor follows up with MAE on status of permit amendment request, stressing time pressures.
	Director of the Division in MAE brings the permit amendment request to MAE executive.
	Conference call of Deputy Minister of MAE with NunatuKavut Community Council to discuss IEAC recommendations.
August 9, 2018	Nalcor follows up with MAE on status of permit amendment request, stating time pressures.
August 24, 2018	Director of the Division in MAE brings the permit amendment request to MAE executive a second time.
August 29, 2018	Nalcor follows up with MAE on status of permit amendment request, stating time pressures.
	MAE briefing of Premier Ball on status of monitoring and analysis of methylmercury. Neither Minister Parsons nor Cabinet Secretariat were present.
	MAE Deputy Minister directs the Division to place Nalcor's permit amendment request on hold until a Cabinet policy decision is made on IEAC recommendation.
August/September 2018	Assumed start date for the physical mitigation work in engineering consultant's report.
October 11, 2018	Quarterly meeting between Nalcor and the Division of MAE. Permit amendment is mentioned. Nalcor notes that fish habitat compensation work is nearing completion. Division does not share this information with its Director.
Mid-October 2018	Letter to Nalcor is drafted on wetland capping for Deputy Minister of MAE to bring to Minister Parsons.
Late October 2018	Deputy Minister and Minister Parsons of MAE meet with Special Advisor to the Premier to present and discuss draft letter to Nalcor.
November 1, 2018	Fish habitat compensation plan work ends, contractor finishes decommissioning and leaves the Edwards Brook Camp area. Proposed capping in permit is not performed due to no permit approval received from MAE.
November 5, 2018	Meeting of the Lower Churchill Committee. Nalcor is not invited due to an invitation error by the executive responsible for coordinating the meeting.

PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

Date	Event Description
November 8, 2018	Minister Letto is appointed to the Department of MAE.
November 13, 2018	Minister Letto is briefed on the activity and projects of MAE.
Late-November 2018	Process to bring decision on IEAC Recommendations to Cabinet begins.
December 1, 2018	Planned completion date for the wetland capping work in the Edwards Brook Camp area as referenced in Nalcor's permit amendment request.
December 2018	Meeting between Premier Ball, Minister Letto, and the Deputy Minister of MAE wherein Premier Ball instructs that he wants the decision to go to Cabinet.
	MAE presentation to Cabinet on IEAC Recommendations deferred to January.
January 9, 2019	Cabinet meeting is held. Presentation made on IEAC recommendations resulting in discussions on the implementation of recommendations. Decision is made.
January 14, 2019	Meeting of the Lower Churchill Committee. Nalcor is instructed to move ahead with wetland capping. Nalcor indicates that it is too late to begin wetland capping pre-impoundment.
January 23, 2019	Supplemental Engineering Consultant report about whether there are options to complete wetland capping, which was requested by Nalcor after the January 14, 2019 meeting of the Lower Churchill Committee, is released. Conclusion that there is not sufficient time to do wetland capping pre-flooding from January 2019 to the end of spring thaw; wetland capping post-flooding not recommended due to safety risk.
April 8, 2019	Letter from Premier Ball to the three Indigenous governments and organizations on the creation of a community based monitoring and public health management committee, impact security fund, and physical mitigation.
April 9, 2019	The Nunatsiavut Government responds to Premier Ball indicating their willingness to meet on the IEAC recommendations.
June 11, 2019	Meeting between Premier Ball and the three Indigenous governments and organizations is held. Part of meeting involves sharing the Terms of Reference for the Monitoring and Health Management Oversight Committee.
June 20, 2019	The Deputy Minister of MAE testifies at the Muskrat Falls Inquiry and states that they did not feel that MAE had the ability or the authority to make a decision on the IEAC recommendations without having a discussion with the Premier and likely with Cabinet.
July 2019	Planned flooding deadline for the Muskrat Falls reservoir.
July 4, 2019	Premier Ball testifies at Muskrat Falls Inquiry and states that if there was a gap to be found or work not completed, it would have been in MAE.
	Government unintentionally missing the wetland capping deadline becomes public knowledge.

## PHYSICAL MITIGATION OF MUSKRAT FALLS RESERVOIR WETLANDS

Date	Event Description
July 8, 2019	Nalcor in talks with the Indigenous governments and organizations in Labrador to explore other ways to invest the roughly \$30 million that was set aside for capping.
July 10, 2019	The Innu Nation and NunatuKavut Community Council reach an agreement with Nalcor and accept \$10 million each. Nunatsiavut Government does not agree to the settlement and states publicly that the deadline was missed intentionally. To date, they have not accepted a settlement.
August 2019	Muskrat Falls reservoir is flooded.

## ABOUT US

### VISION

Promoting positive change and accountability in the public sector through impactful audits.

### MISSION

To promote accountability in Government's management and use of public resources and encourage positive change in its delivery of programs and services.

### VALUES

Above all else, the Office of the Auditor General must have independence, credibility and integrity. These are essential to everything we do; critical to our success. The Office of the Auditor General complies with professional and office standards to produce relevant and reliable audit reports. The Office of the Auditor General's independence of government, in fact and in appearance, provides objective conclusions, opinions and recommendations on the operations of government and Crown agencies. Our staff work in a professional and ethical manner, ensuring respect, objectivity, trust, honesty and fairness.

### AUDIT TEAM

The Auditor General wishes to thank the diligent audit team who performed their work with independence, credibility, and integrity:

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