

**Timeline for Methylmercury Actions**

- March 22, 2016** Scientific workshop, “Methylmercury and Muskrat Falls: Sharing and Understanding Our Varied Perspectives”, held in St. John’s. Facilitated by Mr. Bruce Gilbert, Office of Public Engagement.  
<https://www.releases.gov.nl.ca/releases/2016/env/0323n05.aspx>
- June 14, 2016** Minister of Environment and Conservation (Perry Trimper) releases Human Health Risk Assessment Plan. The release notes that should the need be identified for consumption advisories, Nalcor shall provide compensation measures:  
<https://www.releases.gov.nl.ca/releases/2016/env/0613n05.aspx>
- August 4, 2016** Scientific Workshop, “Methylmercury Mitigation and Muskrat Falls: A Discussion of Practical Solutions”, held in Happy Valley - Goose Bay. Facilitated by Mr. Wayne Thistle Q.C. Final report published October 28, 2016.  
[https://www.mae.gov.nl.ca/env\\_assessment/projects/Y2010/1305/Workshops\\_methylmercury/1305\\_final\\_aug4\\_%20methylmercury\\_mitigation\\_workshop%20\\_report\\_updated\\_28oct.pdf](https://www.mae.gov.nl.ca/env_assessment/projects/Y2010/1305/Workshops_methylmercury/1305_final_aug4_%20methylmercury_mitigation_workshop%20_report_updated_28oct.pdf)
- September 29, 2016** Early draft of “Methylmercury Monitoring Plan for Surface Water Quality of the Muskrat Falls Reservoir, Churchill River and Lake Melville” prepared by the Department of Environment and Climate Change (ECC).
- October 14, 2016** First set of samples collected under the above monitoring plan. Note that the plan was revised over the course of several months including October 17, December 19, 2016 and September 29, 2017 through consultation with the three Indigenous groups. Data is posted to website.  
[https://www.mae.gov.nl.ca/methylmercury\\_mrf.html](https://www.mae.gov.nl.ca/methylmercury_mrf.html)
- October 26, 2016** Premier meets with the three Indigenous groups and there is an agreement for the formation of an independent experts advisory committee (IEAC).  
<https://www.releases.gov.nl.ca/releases/2016/exec/1026n01.aspx>
- November 10, 2016** A framework for IEAC terms of reference (TOR) was formally sent to officials of the three Indigenous groups.
- December 9, 2016** A revised draft TOR was returned to ECC.
- End of 2016** About 1,750 hectares of tree cover had been removed from the reservoir. (Nalcor)
- Dec 9 – March 24** There were 6 teleconference calls to discuss details of the TOR for the IEAC.
- March 24, 2017** Terms of reference for the IEAC are agreed to by all parties.  
[https://www.mae.gov.nl.ca/env\\_assessment/projects/Y2010/1305/ieac\\_tor.pdf](https://www.mae.gov.nl.ca/env_assessment/projects/Y2010/1305/ieac_tor.pdf)

May 16, 2017	First meeting of the IEAC via teleconference. Work begins to find a chair for this committee.
July 4, 2017	Premier is provided with a briefing on the progress of the IEAC
July 27, 2017	As of this date, 500 water samples have been collected from the project area and analyzed for methylmercury and other water quality parameters. Data and graphs are posted on the internet.
May 16 – Aug 4	There were 8 teleconference calls with the IEAC members to finalize the selection of the chair.
Mid 2017	Additional 40 ha tree cover removed on Edwards Island. (Nalcor)
August 4, 2017	An independent chair (Dr. Ken Reimer) is approved by all IEAC members and appointed to lead the IEAC. <a href="http://ieaclabrador.ca/members/ken-j-reimer/">http://ieaclabrador.ca/members/ken-j-reimer/</a> .
August 22, 2017	The IEAC formally appoints a research director, 6 scientific experts and three Indigenous knowledge experts and begins to work on fulfilling the objective of the IEAC terms of reference.
September 22, 2017	The IEAC issues its first set of recommendations (3) to the NL Minister of Municipal Affairs and Environment. These recommendations were that a feasibility study be undertaken for soil and vegetation removal, changes be made to the aquatic monitoring plan, and that Nalcor finalize their methylmercury modelling project.
September 25, 2017	Provincial Government issues news release to advise it has received and accepted the IEAC's first set of recommendations: <a href="https://www.releases.gov.nl.ca/releases/2018/mae/0411n03.aspx">https://www.releases.gov.nl.ca/releases/2018/mae/0411n03.aspx</a>
Sept 25 – March 8	There were 4 teleconference calls with the IEAC oversight committee.
February 28, 2018	Evaluation of MeHg Production by Muskrat Falls Reservoir and Implications for Lake Melville – A Top-Down, Mass-Balance Approach, Baker/Mann...
March 8, 2018	Face-to-face meeting of the IEAC in Happy Valley – Goose Bay.
March 26, 2018	Teleconference and webinar with the IEAC oversight committee and the scientific and Indigenous knowledge experts.
March 28, 2018	Then Minister of Municipal Affairs and Environment Hon Eddie Joyce, issues letter to Mr. Stan Marshall regarding the IEAC's request for Nalcor to expedite its current methylmercury modelling project and the efforts of Nalcor's consultants in that regard.
April 9, 2018	<i>Meeting for DMs regarding IEAC. Invited - Jamie Chippett, John Abbott, Ron Bowles, Aubrey Gover, Gordon McIntosh, Patricia Hearn, Greg Clark, Martin Goebel.</i>

- April 10, 2018 IEAC issues the final set of recommendations. These recommendations were to mitigate MeHg impacts by soil removal and wetland capping, develop a community based monitoring program, post and impact security fund, and provide advice on future health management.
- April 11, 2018 Provincial Government responds to receipt of the final IEAC recommendations. <https://www.releases.gov.nl.ca/releases/2018/mae/0411n03.aspx>
- April 24, 2018 *Teleconference call with Jamie Chippett, Haseen Khan, Martin Goebel to discuss the details of the recently released IEAC recommendations.*
- April 26, 2018 A scheduled teleconference call with the chair of the IEAC is cancelled. Minister Parsons is assigned to the Department of MAE portfolio.
- May 16, 2018 A briefing is held for then Minister Parsons on the IEAC's recommendations. *Jamie Chippett, Randy Simms, Erin Shea, Martin Goebel*
- June 7, 2018 Conference call with Minister Parsons and Nunatsiavut Government (*Tony Anderson*) to discuss the recommendations of the IEAC.
- June 7, 2018 Conference call with Minister Parsons and Dr. Ken Reimer to discuss the recommendations of the IEAC.
- June 19, 2018 Start of an internal departmental research project to undertake a statistical analysis of the methylmercury data collected from the Lower Churchill River. The purpose is to identify trends and include an interpretation of analysis results for the many samples that were below the laboratory's detection limit (less than 0.01ng/l, which is the smallest amount of MeHg that can be measured by the best available scientific methods)
- June 28, 2018 Presentations by Nalcor on predicted MeHg effects for MAE officials. This is the completion of the Harris hydrodynamic model for the formation of methylmercury in the Muskrat Falls reservoir and transport downstream. Other results:
- MeHg Generation in MFR, Azimuth, Given flooding at elevation 23m, mass export of MeHg is much less than Calder prediction.
  - Summary of Human Health Risk and MeHg, Azimuth, further analysis of previous human health risk analysis.
  - Predicted MeHg in Downstream Food Web, Wood/McCarthy, impacted species limited to brook trout, rainbow smelt and ringed seal.
  - Predicted Increases in MeHg in Goose Bay, and Lake Melville, Harris, predicted increases in MeHg exported from the reservoir are lower than the Calder et al. (2016) analysis.
  - Goose Bay/Lake Melville Model for MeHg in Water. Baird/Harris, MeHg in Lake Melville water predicted to increase by 30-40% (max) in upper 20 m based on 3 yr average. (vs 240% peak by Calder)

- Muskrat Falls reservoir and the Canadian Reservoirs Comparison Matrix, Azimuth, Based on empirical weight-of-evidence, there is no support or precedents for the magnitude of increase in fish [Hg] at MFR as promulgated by Harvard group.

July 19, 2018	Summary of Post-Exposure Human Health Risk Assessment from Methylmercury in Seafood in Goose Bay and Lake Melville, Labrador, Baker, In summary, there is an extremely low likelihood of risk to human health from consumption of seafood from Goose Bay or Lake Melville at peak mercury levels in a post-impoundment scenario
July 25, 2018	Conference call with Minister Parsons and Innu Nation ( <i>Grand Chief Gregory Rich, Donna Paddon, Cathy Guirkis</i> )
August 3, 2018	Conference call with Deputy Minister Jamie Chippett and NunatuKavut Community Council ( <i>Todd Russell</i> ).
August 9, 2018	As of this date, 1,000 water samples have been collected from the project area and analyzed for methylmercury and other water quality parameters. Data and graphs continue to be posted on the web. <a href="https://www.mae.gov.nl.ca/methylmercury_mrf.html">https://www.mae.gov.nl.ca/methylmercury_mrf.html</a>
August 27, 2018	<i>Briefing for DMs on IEAC recommendations, Invited Jamie Chippett, Charles Bown, Aubrey Gover, Ron Bowles</i>
August 29, 2018	Briefing for Premier on status of monitoring and analysis of methylmercury.
October 12, 2018	<i>Meeting with Jamie Chippett, Martin Goebel on MeHg – direction provided for preparation of new technical briefing based on additional data collection, completion of Reed Harris modelling, etc.</i>
October 30, 2018	<i>Meeting with Jamie Chippett to discuss conclusion on MeHg data analysis</i>
November 8, 2018	Minister Letto is assigned to the Department of MAE portfolio
November 13, 2018	Briefing for new minister, Hon. Graham Letto on IEAC.
November 27, 2018	MAE executive briefed by Water Resources Division officials on the statistical analysis of the MeHg monitoring program to date. This analysis was used to inform the development of recommendations to Cabinet.
December 11, 2018	Meeting with Premier and Minister Letto on IEAC. Premier directs to bring matter forward to Cabinet at next meeting.
December 12, 2018	<i>Meeting Jamie Chippett, Martin Goebel, direction provided to finalize presentation for Cabinet and prepare a technical briefing for Indigenous Groups.</i>
December 2018	IEAC presentation to Cabinet deferred until January.

- January 9, 2019 Cabinet briefing - resulted in decisions; discussions on implementation of the recommendations occurred with Nalcor. Indication wetland capping cannot occur.
- January 10, 2019 Briefing for Labrador MHAs
- January 19, 2019 Comparison of Lake Melville Hg values to recent Smallwood and Control Hg values, McCarty, The THg values within Lake Melville are for the most part all within levels found in fish in natural or background waterbodies. The values for all are quite low and are comparable to other natural areas.
- February 18, 2019 Headpond Water Sampling Program, Wood Environment and Infrastructure Solutions, Methylmercury measured within sample stations have generally remained low. During a period of several weeks in February-March, 2017 some total methylmercury concentrations increased in MF Reservoir area and (below Muskrat Falls; however, concentrations did not show a similar pattern farther downstream. Similarly, during the warmer sampling period (June – August of 2017 and 2018), a slight increase in total and dissolved methylmercury concentrations was observed within all stations. Highest concentrations were recorded within the headpond station, which was likely caused by increased microbial activity and increased access to flooded material within the headpond. However, these slight increases do not appear to be transported downriver as most concentrations within Goose Bay remained similar to those at the upriver control/baseline particularly dissolved methylmercury. Any cumulative trend in downstream methylmercury concentrations is not evident.
- March 27, 2019 *Susan Squires, Jamie Chippett, Haseen Khan, Erin Shea. Review TOR for new MHMOC committee.*
- March 28, 2019 *DM's meeting. Jamie Chippett, Karen Stone, Aubrey Gover, Ted Lomand, Krista Quinlan, Ron Bowles, Patricia Hearn, Martin Goebel.*
- April 8, 2019 Premier writes indigenous leaders and advises of agreement on recommendations on monitoring and public health management and requesting a meeting to discuss other recommendations. A draft terms of reference is also provided for next phase of committee.
- April 9, 2019 *Meeting to prepare for meeting with Indigenous groups. Jamie Chippett Haseen Khan, Susan Squires, Erin Shea, Martin Goebel.*
- April 10, 2019 *Continuation of April 9 meeting*
- April 10, 2019 *Cabinet update on Premier's letter and Nalcor's indication that wetland capping cannot be pursued.*
- April 11, 2019 *Scheduled meeting with Premier and Indigenous groups is cancelled.*
- June 7, 2019 *Meeting to discuss upcoming Premier's meeting with Indigenous groups*

*June 11, 2019 Premier meeting with the 3 Indigenous groups. Draft TOR discussed. Premier invites feedback in a week. Discussion on monitoring and health management recommendations.*

*June 13, 2019 DM MAE sends draft TOR to Indigenous representatives to collect feedback as requested by the Premier.*