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Via Email: Christine.Morin@mffp.gouv.qc.ca

Direction de la gestion des forêts Nord-du-Québec
1121, boulevard Industriel, C.P. 159
Lebel-sur-Quévillon (Québec)
J0Y 1X0

Re: Les plans d'aménagement forestier intégré opérationnels (PAFIO)

The Natural Resources Defense Council (NRDC) welcomes the opportunity to comment on the Ministère des Forêts, de la Faune et des Parcs (MFFP)'s plans for integrated operational forest management (PAFIO). NRDC is an international environmental group with more than 3 million members and on-line advocates in both the United States and Canada.

NRDC is deeply concerned by Quebec's plans to expand logging in the Broadback River watershed. The proposed PAFIO would irreparably degrade this ecological gem, which is one of the last intact forest areas in Quebec south of the northern logging limit, and is a refuge for several at-risk species, including boreal caribou, wolverines, black bears, and golden and bald eagles. This region contains the last intact territory of the Cree First Nation of Waswanipi (Waswanipi Cree), who have fought for decades to protect their homeland from an expanding logging footprint. In addition, the PAFIO would further jeopardize the already-precarious future of the boreal caribou herds in the region. Allowing expanded logging in the region without any science- and traditional knowledge-based boreal caribou range plans in place is both irresponsible and short-sighted. The proposed plan also degrades a region vital for protecting the world from the worst impacts of climate change.¹

The area around the Broadback River the proposed PAFIO would affect is part of Eeyou Istchee, the traditional territory of the Crees. The Waswanipi have relied upon and stewarded the Broadback for millennia, and, as Waswanipi Chief Marcel Happyjack stated, the "Cree way of life still connects us very strongly to the land."²

¹ Chief Marcel Happyjack, "Statement on COMEX public hearing, Waswanipi," CREE FIRST NATION OF WASWANIPi, January 19, 2016, <http://www.waswanipi.com/en/chief-message/452-chief-marcel-happyjack-statement-on-comex-public-hearing-waswanipi-january-19-2016>.

² *Id.*

Logging has already taken a devastating toll on the Waswanipi Cree, and the proposed PAFIO would further erode the last ten percent of intact territory the community has left. Between 1980 and 2015, the disturbed area in the Broadback River watershed increased 380 percent from 457 to 1,736 km², and the Waswanipi Territory is now fragmented by over 30,000 kilometers of forestry roads.³ Today, only three of the Waswanipi Cree's 62 traplines remain undisturbed by industrial activity, threatening traditional subsistence activities including hunting, fishing, and trapping.

A Major Threat to the Waswanipi Cree Way of Life

This PAFIO directly undermines the Waswanipi's tireless efforts to protect their remaining intact homeland. The proposal would allow logging in the Mishigamish, one of the last largely intact regions in Waswanipi Territory undisturbed by industry (see Figure 1).

While Quebec has protected some areas of Eeyou Istchee, these protections are far from sufficient, and, as Chief Happyjack stated, "[don't] protect what should really be protected."⁴ For more than 15 years, the Waswanipi have asked the Quebec Government to safeguard the Mishigamish as an essential means of "protecting the traditional Cree way of life."⁵ In 2002, the Waswanipi sent a conceptual outline of the proposed protected area to the Quebec government. Following years of silence from Quebec, in February 2011, the Waswanipi Cree submitted a formal Mishigamish Protected Area proposal to Quebec's Ministère du Développement durable, de l'Environnement et des Parcs (MDDEP). This proposal was developed in consultation with tallymen, who are responsible for managing the community's traplines, and is "grounded in the cultural, ecological and economic values that are important to the people of Waswanipi."⁶

The Mishigamish Proposal is strongly supported not only by the Cree First Nation of Waswanipi, but also by the Cree Nation Government (CNG). In addition, the neighboring Cree communities of Nemaska and Ouje-Bougoumou, whose protected areas and proposed protected areas overlap with the Mishigamish proposal, are in support of the conservation plan.

Quebec has committed to meaningfully discuss with the Waswanipi Cree the creation of the Mishigamish Protected Area. Under Schedule C of the 2015 Agreement to Resolve the Baril-Moses Forestry Dispute ("2015 Agreement"), the Quebec Government announced its "intention... to have meaningful discussions with the Grand Council of the Crees (Eeyou Istchee)/Cree Nation Government and Waswanipi regarding options for additional

³ W. Smith and R. Cheng, *Time Series Analyses of Anthropogenic Disturbance in the Broadback River Watershed, Quebec*, GLOBAL FOREST WATCH, October 2016, p. 12 -13, <http://globalforestwatch.ca/sites/gfwc/files/publications/2016%20Oct%2020%20Broadback%20Bulletin.pdf>.

⁴ Happyjack, *supra* note 1.

⁵ *The Mishigamish Protected Area Proposal*, CREE FIRST NATION OF WASWANIP, 2011, <http://www.eeyouconservation.com/projects/Mishigamish.pdf>.

⁶ *Id.*

protective measures in the Broadback region.”⁷ Yet, the Quebec government through the Broadback Task Force has met with the CNG and Waswanipi to discuss the Broadback only once—more than two years ago. Since that meeting, Quebec has failed to respond to the CNG and Waswanipi’s repeated requests to resume discussions under Schedule C to protect their territory. It is unconscionable that Quebec would approve the PAFIO and logging in the Mishigamish without upholding its obligations under the 2015 Agreement.

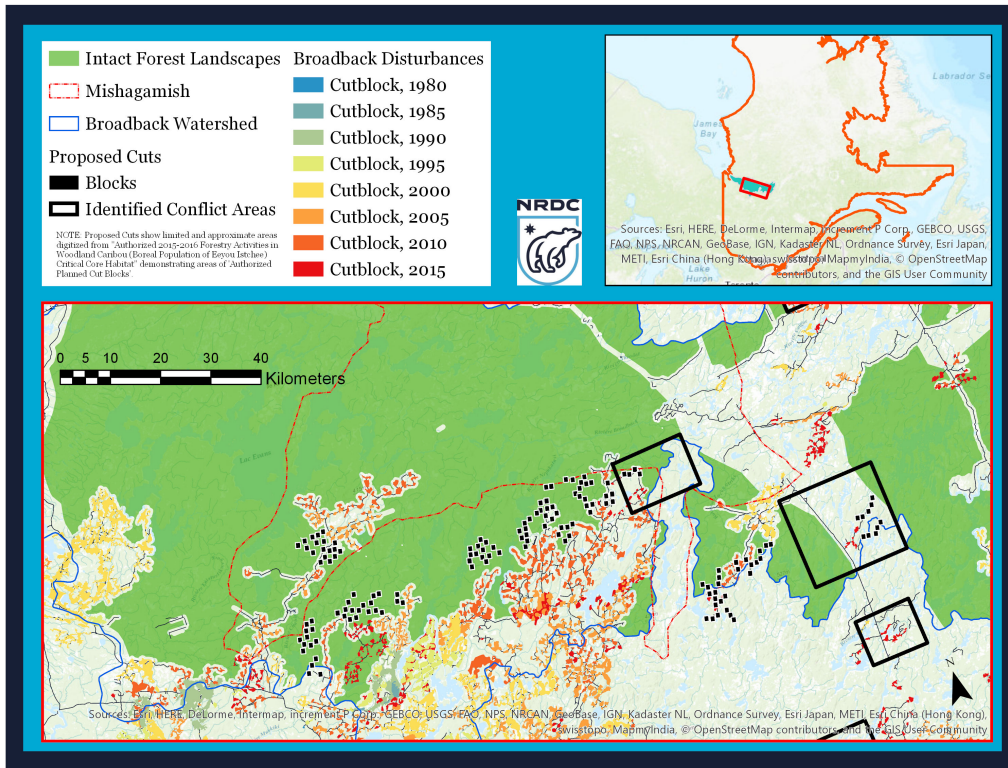


Figure 1: Logging Plans In and Near the Mishigamish

The proposed PAFIO also illustrates the failure of Quebec to abide by the terms of the Agreement Concerning a New Relationship between Le Gouvernement du Québec and the Crees of Québec (“Paix des Braves Agreement”). Under the Paix des Braves Agreement, Quebec committed to adapting its forestry regime to consider the Cree way of life. As part of this, Quebec agreed to limit harvesting in sites of wildlife interest to the Crees and apply “[s]pecific management standards” to these areas. The “sites of special interest” cover 25% of productive forest area in each trapline and constitute some of the Cree’s most valuable hunting areas.⁸ However, as the Waswanipi Cree Council determined in a December 2017

⁷ Agreement to Resolve the Baril-Moses Forestry Dispute between the Cree Nation of Eeyou Istchee and the Gouvernement du Québec (hereafter “2015 Agreement”), Schedule C 2015, <https://www.autochtones.gouv.qc.ca/actualites/2015/documents/entente-cris/entente-baril-moses-en.pdf>.

⁸ S. Teitelbaum and C. Lussier, *Consultation of Waswanipi Tallymen on Amendment no.6 of the Paix des Braves Agreement*, March 16, 2016, p. 3.

resolution, the PAFIO creates no protection in these 25% areas, placing at risk areas vital for traditional activities.

A Major Threat to Boreal Caribou

In addition, the PAFIO jeopardizes the future of boreal caribou herds in the region (see Figure 2). The Broadback River watershed contains some of last intact boreal caribou habitat in Quebec. Boreal caribou in Quebec now occupy only a fraction of their original range.⁹ Industrial development, particularly logging, is the primary threat to boreal caribou populations because it degrades and destroys their habitat.¹⁰ Boreal caribou are especially sensitive to habitat disturbance, which increases their exposure to predators.¹¹

In 2015, Quebec's Chief Forester found that 70 percent of studied caribou habitat in the province was too disturbed to support caribou populations in the long-term.¹² This unsustainability will only increase, the Chief Forester concluded, as "the current management strategies will provoke, in the long run, a decrease in the remaining habitat where caribou self-sufficiency is still possible."¹³ The decline of boreal caribou in the Broadback is especially problematic given that caribou are an indicator species. This means that their populations are a barometer of the health of the broader boreal forest and its wildlife.

Eeyou Istchee, which is home to the Nottaway and Assinica caribou herds, has experienced significant caribou habitat loss, largely due to logging. The ranges of both herds are already severely degraded, with the Assinica range 51% disturbed and the Nottaway 34% disturbed.¹⁴ Scientists have determined that there is insufficient critical habitat for these herds to survive long-term without habitat recovery efforts.¹⁵

⁹ Bureau du forestier en chef, *Caribou forestier—Effet des stratégies actuelles d'aménagement forestier sur les taux de perturbation de l'habitat*. AVIS DU FORESTIER EN CHEF, 2014, http://forestierenchef.gouv.qc.ca/wp-content/uploads/2015/05/avis_caribou_perturbation_mai2015-pdf.pdf.

¹⁰ Committee on the Status of Endangered Wildlife in Canada, "COSEWIC Assessment and Status Report on the Caribou Rangifer Tarandus, Newfoundland Population, Atlantic-Gaspésie Population, Boreal Population in Canada - Species at Risk Public Registry," 2014, http://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=2769.

¹¹ *Id.* C. Callaghan, S. Virç, and J. Duffe, *Woodland caribou, boreal population, trends in Canada*, CANADIAN BIODIVERSITY: ECOSYSTEM STATUS AND TRENDS, 2011, p. 19, [http://catalog.ipbes.net/system/assessment/78/references/files/317/original/78 Callaghan C. Virç S. a nd Duffe J. 2011. Woodland caribou boreal population trends in Canada. Canadian Biodiversity Ecosystem Status and Trends 2010 Technical Thematic Report No. 11.pdf?1417520560](http://catalog.ipbes.net/system/assessment/78/references/files/317/original/78%20Callaghan%20C.%20Virç%20S.%20and%20Duffe%20J.%202011.%20Woodland%20caribou%20boreal%20population%20trends%20in%20Canada.%20Canadian%20Biodiversity%20Ecosystem%20Status%20and%20Trends%202010%20Technical%20Thematic%20Report%20No.%2011.pdf?1417520560). Réhaume Courtois et al. (20 February 2007) "Effects of forest disturbance on density, space use, and mortality of woodland caribou," 14(4): 491-498.

¹² Bureau du forestier en chef, *supra* note 9.

¹³ *Id.*

¹⁴ Tyler Rudolph et al., *Status of Woodland Caribou (Rangifer tarandus caribou) in the James Bay Region of Northern Quebec*, SCIENTIFIC REPORT PRESENTED TO THE MINISTÈRE DES RESSOURCES NATURELLES ET DE LA FAUNE DU QUÉBEC AND THE GROUND COUNCIL OF THE CREES (EYYOU ISTCHEE), Sept. 2012, <http://www.gcc.ca/pdf/Final-Rapport-Status-of-Woodland-Caribou-James-Bay-Eeyou-Istchee.pdf>.

¹⁵ *Id.*

In the 2015 Agreement, Quebec committed to boreal caribou recovery in the Broadback. Quebec promised to “diligently” work with Indigenous Peoples “on a plan to implement as soon as possible measures for the recovery of woodland caribou habitat.”¹⁶ Quebec further acknowledged the importance of protecting boreal caribou in the region when in 2013 it identified “precautionary approach areas” of boreal caribou habitat that would benefit from “interim protection.” In April of 2016, Quebec released an Action Plan to protect woodland caribou, and the top candidate area for protection was the Broadback watershed (9,000 km²), in recognition of the importance of this area for caribou.¹⁷

The CNG has been calling for the protection of caribou in Eeyou Istchee for years. In addition, the James Bay Advisory Committee on the Environment (JBACE) has asked Quebec to integrate into its forestry planning short- and long-term recovery measures for boreal caribou developed in consultation with the Cree.¹⁸ The Waswanipi Cree requested that all logging plans near core caribou habitat be suspended until these recovery measures are implemented. Given the paramount importance of boreal caribou to the Cree, these recovery plans are essential to ensuring that Quebec’s logging plans align with the province’s commitments in the James Bay and Northern Quebec Agreement (JBNQA) protecting “the Cree people, their economies and the wildlife resources upon which they depend.”

Nevertheless, the Quebec Government has failed to create mandatory, enforceable protections for critical boreal caribou habitat in the Broadback and across the province. In October 2017, Quebec missed the federal deadline to submit boreal caribou range plans, after having five years to create them. In addition, a 2014 scientific assessment showed that Quebec’s interim precautionary approach for boreal caribou protection in the Broadback has failed to protect core habitat areas.¹⁹

Without a boreal caribou recovery plan in place, the last thing Quebec should do is open up new habitat areas to logging. Approving the proposed PAFIO would be an irresponsible decision that would irrevocably trade away opportunities to recover these herds, particularly the Assinica. It would also go against the express wishes of the CNG, which asked in September 2015 that all industrial activity in core boreal caribou habitat in Eeyou Istchee be suspended until there are jointly developed comprehensive solutions for the recovery of this species.

¹⁶ 2015 Agreement, *supra* note 7.

¹⁷ “Credible, acceptable and reasonable: An action plan for conserving woodland caribou habitat,” CREE-QUÉBEC FORESTRY BOARD, April 5, 2016, <http://www.ccqf-cqfb.ca/en/credible-acceptable-and-reasonable-an-action-plan-for-conserving-woodland-caribou-habitat/>.

¹⁸ [http://www.ccebj-jbace.ca/images/JBACE - Forest planning and woodland caribou recovery - June 2017.pdf](http://www.ccebj-jbace.ca/images/JBACE_-_Forest_planning_and_woodland_caribou_recovery_-_June_2017.pdf).

¹⁹ Rudolph, T. D. 2014. Towards a caribou conservation strategy for Eeyou Istchee: A review of interim protection measures and proposed modifications to the adapted forestry regime. Submitted to the Cree Nation Government and Grand Council of the Crees (Eeyou Istchee) on June 05, 2014.

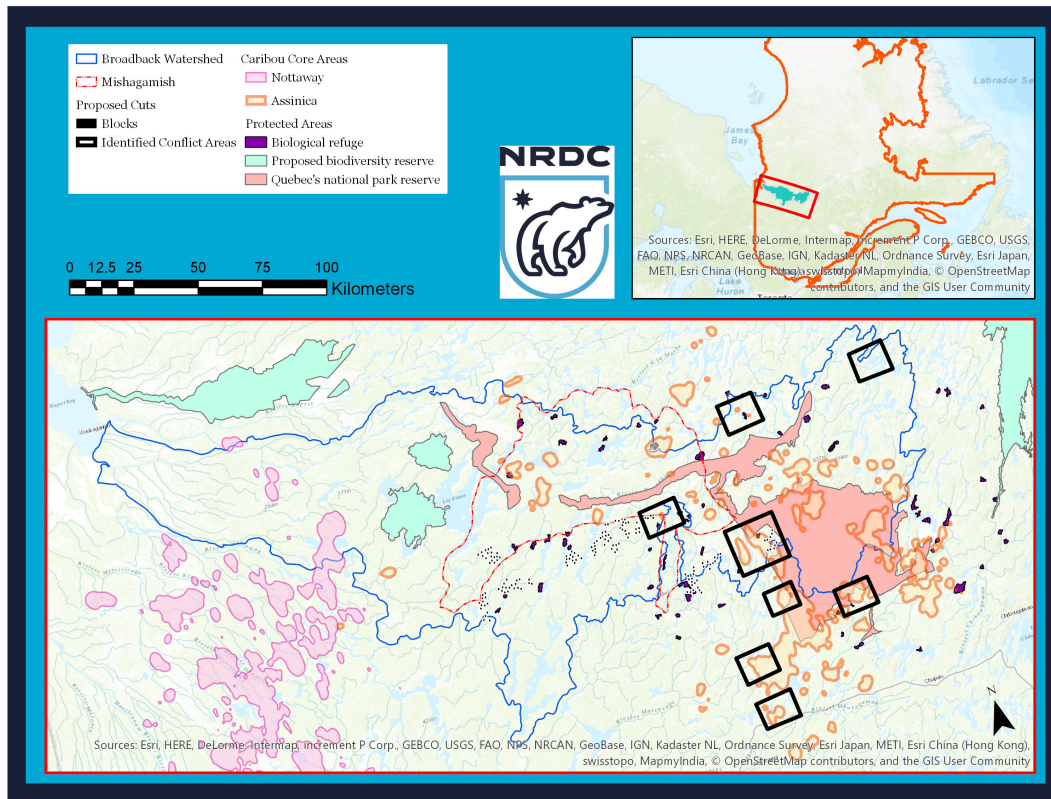


Figure 2: Caribou habitat and Planned Logging in and near the Broadback watershed, including in the Waswanipi Mishigamish proposal

A Major Threat to the Global Climate

Waswanipi Territory, as Chief Happyjack has outlined, “is literally a shield against climate change.”²⁰ The proposed PAFIO would degrade forest regions vital to the global fight to keep temperature rise below 2 degrees Celsius, instead turning these forests into a significant source of harmful greenhouse gas emissions. The boreal forest plays a vital role in mitigating climate change by both absorbing and storing greenhouse gas emissions. The Canadian boreal’s soils, plants, and wetlands hold more than 12 percent of the world’s land-based carbon stock²¹—an amount equivalent to more than 36 years of global carbon dioxide emissions from burning fossil fuels.²² A 1996 study determined that, in the

²⁰ Happyjack, *supra* note 1.

²¹ R. Lal, *Soil Carbon Sequestration Impacts on Global Climate Change and Food Security*, SCIENCE 304, no. 1623 (June 2004).

²² The global terrestrial carbon stock is often estimated at 2,500 gigatons. R. Lal, *Soil Carbon Sequestration Impacts on Global Climate Change and Food Security*, SCIENCE 304, no. 1623 (June 2004): p. 1623. Recent studies of the boreal forest carbon stock have found a median value, based on existing research, of 1,095 gigatons. C. Bradshaw and I. G. Warkentin, *Global Estimates of Boreal Forest Carbon Stocks and Flux*, GLOBAL AND PLANETARY CHANGE, 128, no. 27 (May 2015): p. 26. With 28 percent of the boreal located in Canada, we estimate that around 12.3 percent of the global terrestrial sink, or 306.6 gigatons, is located in Canada’s boreal forest. Natural Resources Canada, “8 Facts About Canada’s Boreal Forest,”

Mishigamish alone, the soils and vegetation store 156 million metric tons of carbon.²³ Annually, Canada's boreal sequesters an estimated 113.4 million tons of carbon dioxide—equivalent to the emissions from 24 million passenger vehicles.²⁴

In a 2017 report and technical paper,²⁵ NRDC developed a model to estimate the long-term carbon impact of clearcutting in the boreal forest. The information the model is based on clearcuts close to Waswanipi territory. It showed that a clearcut acre of boreal forest acts as a net source of carbon dioxide for decades following harvest. The analysis found that, even assuming successful forest regeneration following clearcutting—which is not always the case—Canada's boreal forest is not recovering fast enough to offset the carbon dioxide emissions from clearcutting. According to NRDC's estimates, each year clearcutting across the boreal forest releases more than 26 million metric tons (Mt) of carbon dioxide into the atmosphere—equivalent to the annual emissions of nearly 5.5 million passenger vehicles or 3.6 percent of Canada's total emissions in 2015.²⁶

In Quebec, where clearcutting averages 407,000 acres each year, this annual harvest releases 11.2 million metric tons of carbon dioxide over the ensuing 27 years while the forest begins recovering.²⁷ By failing to protect the intact forests of the Broadback, Quebec severely undermines its position as a climate leader in Canada.

Conclusions and Recommendations

NRDC and the Waswanipi Cree are not opposed to all development. However, this PAFIO directly threatens the traditional Cree way of life, along with iconic species and the global climate. MFFP is not in lockstep with the rest of the Quebec government, which to date has respected a moratorium on development in the Mishigamish. Regional director Marco Trudel, in rejecting the request of the CNG to withdraw cutblocks and roads inside the Mishigamish proposal, stated that their concerns about protecting the Mishigamish “fall[] under the responsibility of the [MDDELCC].” It is critical that Quebec act with one voice and withdraw the cutblocks and roads consistent with the requests of Waswanipi and the CNG and their promises to protect caribou in the Broadback region. This should include waiting

<http://www.nrcan.gc.ca/forests/boreal/17394> (accessed August 30, 2017). Global greenhouse gas emissions from burning fossil fuels totaled just under 8.4 gigatons in 2007, and we have used this number in our calculations. M. Z. Jacobson, *AIR POLLUTION AND GLOBAL WARMING: HISTORY, SCIENCE, AND SOLUTIONS* (New York, NY: Cambridge University Press, 2012), p. 301

²³ Tarnocai et Lacell(1996) 3.

²⁴ This boreal region estimation is based on estimates finding that the mean carbon flux for the Canadian boreal region is 0.056 Mg C/hectare per year. Canada's boreal region covers 552 million hectares (slightly more than the area covered by boreal forest), resulting in total positive flux (sequestration) of 30.9 million metric tons of carbon per year. Converted to carbon dioxide, this totals 113.4 million metric tons per year. Bradshaw and Warkentin (2015), p. 29. United States Environmental Protection Agency, “Greenhouse Gas Equivalencies Calculator,” www.epa.gov/energy/greenhouse-gas-equivalencies-calculator (accessed August 30, 2017).

²⁵ NRDC, *Pandora's Box: Clearcutting in the Canadian Boreal Unleashes Millions of Tons of Previously Uncounted Carbon Dioxide Emissions*, Nov. 2017, <https://www.nrdc.org/sites/default/files/pandoras-box-clearcutting-boreal-carbon-dioxide-emissions-ip.pdf>.

²⁶ *Id.*

²⁷ *Id.*

to proceed on logging and road planning until all nine COMEX conditions for the approval of roads H & I are met and approved by the MDDELCC, as requested in the December 2017 resolution passed by the Council of the Waswanipi Cree.

At the same time, Quebec should resume nation-to-nation discussions with the Waswanipi Cree under Schedule C of the 2015 Agreement and develop a plan for the permanent protection of the Mishigamish. Conserving the Mishigamish would also be a vital step in developing a province-wide plan for protecting and restoring boreal caribou populations and would safeguard a region with immense importance for protecting the world from the worst effects of climate change. In order to harmonize land use in accordance with the new relationship established in Amendment 6 of the Paix des Braves Agreement, the PAFIO must also be compatible with the interests and concerns of the Cree.

NRDC is also concerned by the lack of available GIS data during this comment period. While MFFP provided GIS maps of the proposed cutblocks, we were unable to obtain the data points necessary to see in more detail the effects of Quebec's plans.

Once again, Quebec is prioritizing logging at the expense of its Indigenous Peoples, species, and climate commitments. We urge Quebec to reconsider this irresponsible logging plan and resume meetings with the CNG and Waswanipi Cree under Schedule C. We recommend Quebec conclude an agreement with them by July 2018, the third anniversary of the 2015 Agreement. We also ask Quebec to develop range plans in consultation with Indigenous Peoples to protect the critical habitat of its Eeyou Istchee boreal caribou herds. By taking these actions, Quebec has the opportunity to protect one of the province's most precious intact forest regions, along with the communities and species that depend on it.