



CANADIAN BOREAL FOREST AGREEMENT. COM



Recommendations for, and voluntary contributions, towards a Kesagami Range Caribou Action Plan

Prepared by
the Ontario Regional Working Group of the
Canadian Boreal Forest Agreement

June 2012

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CROWN'S OBLIGATION TO CONSULT

The CBFA signatories affirm that these CBFA Ontario Regional Working Group Recommendations are without prejudice to any eventual positions or opinions that Taykwa Tagamou Nation, Moose Cree First Nation and Wahgoshig First Nation may eventually take in relation to the matters described herein. Further, the CBFA Ontario Regional Working Group affirms that no part of these Recommendations, or the process to develop them, should be taken as relieving the government of Ontario of its obligation to consult with and accommodate these Nations in the implementation of any eventual Caribou Action Plan for the Kesagami Range.



ACKNOWLEDGEMENTS

Over the course of its development, these Recommendations and Voluntary Contributions towards a Kesagami Range Caribou Action Plan have been subject to an extensive internal-to-CBFA and external development process.

The CBFA would like to first and foremost thank the Taykwa Tagamou Nation who generously have met with members of the Ontario Regional Working Group and who have given us their insight and feedback. In particular we would like to thank Chief Linda Job and Peter Archibald of Taykwa Tagamou for their insights, expertise and hospitality.

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- Paul Fantin, R.P.F. and the staff of First Resource Management Group; and,
- Tom Moore Spatial Planning Systems

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- Dave Pearce (CBFA Secretariat, Ontario Regional Working Group Coordinator),
- Lorne Johnson (Facilitator and former CBFA Secretariat, co-Executive Director)

Those members of the CBFA Ontario Regional Working Group who contributed significantly to the development of these consensus Recommendations are:

- Anna Baggio Canadian Parks and Wilderness Society (Wildlands League)
- Julee Boan Ontario Nature
- Andrew de Vries Forest Products Association of Canada
- François Dumoulin Resolute
- Catharine Grant Greenpeace
- Tim Gray Ivey Foundation
- Rick Groves Resolute
- Michel Lessard Tembec
- Rachel Plotkin David Suzuki Foundation
- Janet Sumner Canadian Parks and Wilderness Society (Wildlands League), and
- Al Thorne Tembec

A representative of Canopy joined the working group in March of 2012.

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EXECUTIVE SUMMARY

This document records the recommendations and the voluntary contributions of the Canadian Boreal Forest Agreement (CBFA) signatories for a Caribou Action Plan in the Cochrane-Quebec/Kesagami caribou range in Northeastern Ontario, Canada.

The CBFA's Ontario Regional Working Group has developed a framework and plan that secures wood supply to existing mills while conserving woodland caribou habitat. The plan is a product of months of internal discussion among working group members, as well as engagement with external audiences such as local Mayors, First Nations, scientists and the current forest manager, the Abitibi River Forest Management Inc.

The result is a plan that proposes to establish three new management zones in the Abitibi River Forest Management Unit. The plan covers approximately 86% of the unit (3 million ha). The remaining 14% of the unit is outside the Kesagami Caribou Range and we are not proposing any changes to management in this area at this time. The three zones for the unit include: a Caribou Conservation Zone with a long term deferral (for forestry only) of the most intact habitat; a Caribou Recovery Zone composed of deferrals and harvest areas; and, a Strategic Recovery Zone where normally approved forestry with supplemental caribou recovery objectives will be undertaken.

Each zone has jointly agreed management objectives and suggested management measures. Management measures will be refined and confirmed over time. The plan is premised on taking a precautionary approach for woodland caribou management by carefully placing disturbances in already fragmented areas, by decreasing total disturbance over time, and by voluntarily and permanently avoiding harvest in a gross area of 835,000 ha (the Caribou Conservation Zone which includes some pre-existing protected areas). In addition, the plan increases wood supply for industry relative to the current draft strategy (approximately 20% higher for the next 30-plus years), which provides a degree of business certainty for both forest operators and local communities.

The positive outcomes that could be generated by the implementation of this plan has led to its endorsement by Mayors representing key municipalities such as Timmins, Hearst, Kapuskasing, Smooth Rock Falls, Iroquois Falls, and Matheson.

The recommendations for a Caribou Action Plan are based on a framework developed by the CBFA's Ontario Regional Working Group (our "Caribou Conservation Framework"). We believe that this plan is consistent with Ontario's Endangered Species Act (ESA) and the proposed federal National Recovery Strategy; that it meets the intent of Ontario's Crown Forest Sustainability Act and the Ontario Caribou Conservation Plan; that it is consistent with the latest science related to woodland caribou; and that it meets the principles of the Canadian Boreal Forest Agreement.

The CBFA signatories are of the belief, given the Endangered Species Act's current configuration that the Forest Management Plan, once approved, could be used as an appropriate Endangered Species Act Section 18 instrument for permitting forestry activities in woodland caribou range (subject to addressing various outstanding issues that might arise in contemplating Section 18 as a vehicle). CBFA signatories had developed joint recommendations on how to resolve each of the issues with an overarching objective to ensure that Section 18 instruments could be obtained in a timely fashion and that the use of such instruments would not lead to unnecessary timing delays, unreasonably increase direct or indirect costs or increase risk of litigation exposure.

The CBFA signatories look forward to participating in the next steps to developing a Caribou Action Plan for the Kesagami Range and, as soon as reasonable, to the incorporation of these recommendations into the forest management planning process for the Abitibi River Forest.

The CBFA signatories firmly believe that these recommendations and voluntary contributions toward a Caribou Action Plan in the Kesagami caribou range will produce positive economic and conservation outcomes for the province of Ontario.





BACKGROUND

The Abitibi River Forest is the most northeasterly public forest tenure in Ontario (a "Management Unit"), extending north of the community of Timmins to the northern limit of industrial forestry in Ontario (the northern limit of the so-called "Area of Undertaking") adjacent to the border between the provinces of Ontario and Québec. The province of Ontario administers the Abitibi River Forest as a co-operative forest tenure (a Shareholder "Sustainable Forest Licence" under the province's *Crown Forest Sustainability Act*). This tenure is a relatively new development (August 26, 2011) amalgamating the former Smooth Rock Falls, Iroquois Falls, and Nighthawk Forests and the Cochrane Moose River Crown Management Units.

The Abitibi River Forest licence is held by a consortium of forest industry partners, ranging from small independent logging operators, through a First Nations enterprise to large forest-products producers. The two large shareholders in the co-operative are Tembec Inc. and Resolute Forest Products, both of whom are signatories to the Canadian Boreal Forest Agreement. From the wood supply derived from this tenure, Resolute operates a mill in the community of Iroquois Falls and Tembec has mills in the communities of Cochrane and Timmins.

Three First Nations express significant interest in this region - the Moose Cree First Nation, the Taykwa Tagamou Nation, and the Wahgoshig First Nation, all signatories to Treaty #9, the James Bay Treaty, with Aboriginal and treaty rights to these same forests.

The Moose Cree First Nation has reserves centered around Moose Factory with traditional territory extending south into the Abitibi River Forest. Moose Cree First Nation, through its business development company Moose Band Corporation operates several businesses in the region that are active in the forest and other sectors.

The Taykwa Tagamou Nation has two reserves located in the vicinity of Cochrane along the banks of the Abitibi and Little Abitibi Rivers, within the Abitibi River Forest, and an extensive traditional territory overlapping the Abitibi River Forest. Taykwa Tagamou has several wholly owned businesses, including a forestry company, Island Falls Forestry L.P., which has contractual relations with area forestry companies and contractors.

The Wahgoshig First Nation is an Anishanaabe (Algonquin and Ojibwe) and Cree First Nation, with a reserve east of Matheson, south of Lake Abitibi and the Abitibi River Forest, and traditional territory extending throughout northeastern Ontario and northwestern Québec. Wahgoshig operates a community resource company, Wahgoshig Resources Inc., which is a shareholder in the Abitibi River Forest.



BACKGROUND

Moose Cree and Taykwa Tagamou are also members of the Mushkegowuk Council, whose member Nations are affiliated with the regional, Nishnawbe Aski Nation (NAN), a significant Aboriginal political territorial organization representing 49 First Nation communities within northern Ontario.

Also in the Abitibi River Forest, there are other significant economic interests, most notably mining interests. For instance, **Detour Gold Corporation is developing** Detour Lake Gold Mine, the largest known undeveloped pure gold deposit in Canada, northwest of Cochrane.

The forest industry in North Eastern Ontario, and the communities that depend on the industry, including the mill towns of Iroquois Falls, Cochrane and Timmins, have faced significant economic and social challenges in recent years. These challenges have included curtailed forestry and milling operations and the idling or closure of numerous mills in the region.

Layered on top of these challenges is the imperative to take action to ensure the survival of the at-risk, wild populations of woodland caribou (Rangifer tarandus caribou). Forest-resident woodland caribou are threatened across the Boreal forest by changes to the Boreal predator and prey dynamic resulting from natural and humancaused disturbances to the forest. The federal Species at Risk Act and Ontario's Endangered Species Act mandate action to address these threats.

Northeastern Ontario features populations of woodland caribou that reside in the as yet, largely unaccessed, intact forest landscapes within the tenured commercial forest, and have been observed in portions of the forest that have some anthropogenic disturbance - forests that are a source of wood supply for the remaining mills in the region. These forests are part of the Kesagami Caribou Range, or Cochrane-Québec Range, an extensive caribou range (4.8 million ha), which was determined by Environment Canada to be "not self-sustaining" due to the existing level of disturbance of these forests.

Further, this range is presently considered by Environment Canada to be a national priority for coordinated recovery actions because its declining caribou population has been judged a critical link in the national metapopulation of woodland caribou - a so-called "Connectivity herd" as described in Environment Canada's proposed National Recovery Strategy (2011).

Both Canada's proposed National Recovery Strategy and Ontario's Caribou Conservation Plan recommend action to reduce the level of disturbance in the Abitibi River Forest portion of the Kesagami Range. The Caribou Conservation Plan's Dynamic Caribou Habitat Schedule risked further impacting the already challenged forest industry and forest-industry dependent communities of northeastern Ontario unless an approach could be developed that improved both caribou conservation as well as socioeconomic conditions.

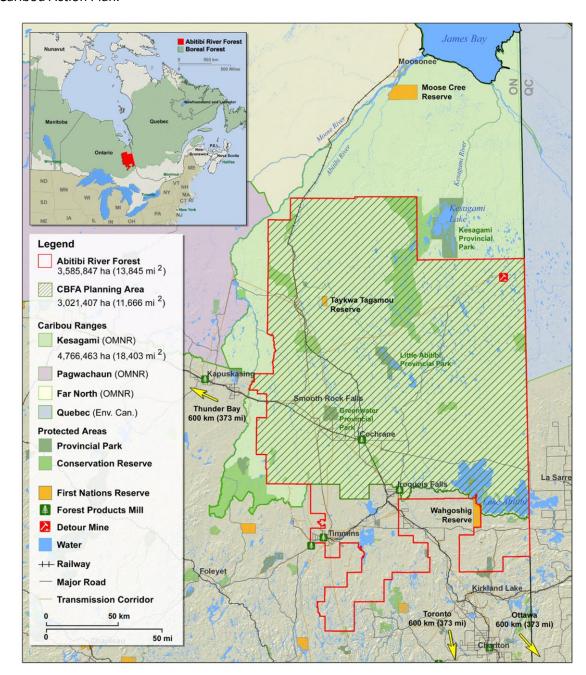
It was against this background that the Canadian Boreal Forest Agreement was signed and that the work of its Ontario Regional Working Group commenced.



PLANNING AREA

The planning area is an area of some 3.0 million ha (approximately 11,500 squares miles) or that portion of the Abitibi River Forest (86%) that overlaps the 4.8 million ha (approximately 18,500 squares miles) Kesagami Caribou Range in northeastern Ontario (Figure 1).

Figure 1 – The CBFA's planning area used to develop the recommendations for a Kesagami Range Caribou Action Plan.



INTRODUCTION

The Canadian Boreal Forest Agreement (CBFA), announced in May 2010, is an agreement between the 18 members of the Forest Products Association of Canada (FPAC) and nine Canadian environmental organizations to develop solutions for Canada's Boreal Forest intended to protect species-at-risk, with an initial focus on woodland caribou, and other ecological values and to enhance the prosperity of the Canadian forest sector and the communities that depend upon it.

We are committed to providing advice and recommendations on these issues identified in the Agreement to provincial, federal and Aboriginal governments.

For clarity, the Agreement explicitly recognizes that Aboriginal peoples have constitutionally protected Aboriginal and treaty rights and titles as well as legitimate interest and aspirations. The Agreement is intended to be without prejudice to, and in accordance with, those rights and titles.

The members of the Ontario Regional Working Group (ON RWG) of the CBFA who developed these recommendations were representatives of Resolute, Tembec, Weyerhaeuser, Canadian Parks and Wilderness Society, David Suzuki Foundation, Greenpeace, Ontario Nature and Ivey Foundation. A representative of Canopy joined the working group in March of 2012.

The ON RWG has been tasked with developing recommendations for Caribou Action Plans for two priority areas in Ontario. One of these areas is the Abitibi River Forest (ARF) located in Northeastern Ontario where Tembec and Resolute operate in a cooperative Sustainable Forest License with other companies.

These recommendations are a product of two years of internal discussions within the ON RWG and discussions with external audiences such as local mayors, First Nations, scientists and the Abitibi River Forest Management Inc.

These recommendations for a Caribou Action Plan are based on a framework developed by the ON RWG for the protection of woodland caribou which, we believe, meets the conditions of

Ontario's *Endangered Species Act*, the latest science related to woodland caribou and the principles of the Canadian Boreal Forest Agreement (the ON RWG's "Caribou Conservation Framework" or "Framework")1. In addition, we believe the recommendations meet the intent of the Crown Forest Sustainability Act and the Ontario Woodland Caribou Conservation Plan,

The Kesagami Caribou Range includes a large portion of the Abitibi River Forest Management Unit, parts of the Gordon Cosens Forest and areas north of the Area of the Undertaking. These recommendations propose the establishment of three distinct zones in the Abitibi River Forest portion of the range - an area totaling approximately three million hectares.

These recommendations for Caribou Action Planning in the Abitibi River Forest portion of the Kesagami Range, which were developed with reference to the ON RWG's Framework, conserve caribou habitat while ensuring a viable wood supply to existing mills in Northeastern Ontario.² The analysis conducted by the ON RWG demonstrated that it was possible to do this by minimizing the expansion of the industrial footprint within the caribou range while still providing for an improvement in wood supply – the ON RWG estimates that there may be as much as an approximate 20% increase in wood supply in the first 30-years from the Long Term Management Direction base case.

These recommendations adopt a zonation strategy for the Abitibi River Forest portion of the range, placing an emphasis on:

- Habitat conservation in two zones within the existing caribou range where caribou currently exist and human-caused disturbance is low to moderate; and
- Modified forest harvesting activities in a zone where caribou are not currently present and where existing disturbance is relatively high. In addition, wood values in this area tend to be higher.





RECOMMENDED GOAL FOR CARIBOU ACTION PLANNING

The recommended goal for Caribou Action Planning in the Kesagami Range is the maintenance or enhancement of a self-sustaining woodland caribou population within the range. We believe this goal meets the intent of both Environment Canada's proposed long term recovery target or goal for Boreal caribou, which has been identified as, achieve self-sustaining local populations throughout their distribution in Canada to the extent possible, and, Ontario's Caribou Conservation Goal, which is identified as, to maintain self-sustaining, genetically-connected local populations of Woodland Caribou where they currently exist, improve security and connections among isolated mainland local populations, and facilitate the return of caribou to strategic areas near their current extent of occurrence.

RECOMMENDED PRINCIPLES FOR CARIBOU ACTION PLANNING

The key principles from the ON RWG's Framework for caribou conservation relevant to forest management planning are summarized as⁵:

- 1. Minimizing the industrial footprint within caribou ranges contingent upon ensuring that long-term, secure and economic wood supply is available to existing mills,
- 2. Monitoring populations of woodland caribou to ensure their long-term health and recovery, and to better understand caribou re-occupancy of previously disturbed habitats,
- 3. Offsetting the incremental costs of best practices such as road deactivation and enhanced silviculture,
- 4. Reviewing all new industrial proposals through a cumulative effects screening tool that operates at the caribou range level,
- 5. Implementing an adaptive management approach by government for population monitoring and recovery of the species on an ongoing basis.

As mentioned, these recommendations are premised upon a zonation approach to management of the Abitibi River Forest portion of the Kesagami Caribou Range.

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RECOMMENDED ZONATION FOR CARIBOU ACTION PLANNING

For the Abitibi River Forest portion of the Kesagami Caribou Range we recommend a three-zone approach as follows: a Caribou Conservation Zone (Zone 3) with long-term deferral (only forestry will be prohibited) of intact habitat (835,000 ha gross area composed of 661,000 ha of new no logging zones and an existing 174,000 ha of permanent protected areas designated through other processes); a Caribou Recovery Zone (Zone 2) composed of deferrals and harvest areas (985,000 ha gross); and, a Strategic Caribou Recovery Zone (Zone 1) where normally approved forestry with supplemental caribou recovery objectives will be undertaken (1,200,000 ha gross) (Figure 2).

Taykwa Tagamou First Nation (TTN), one of the First Nations in the region, has engaged in its own land use planning exercise for a portion of the Abitibi River Forest - the area referred to as their "Community Interest Zone" (Figure 3). In this Community Interest Zone, the consensus from the community is that membership of TTN will determine land uses. The ON RWG has worked with TTN to understand their interests on their territory and modified these recommendations accordingly.

As a result, areas where forest harvesting can occur in the Community Interest Zone are designated Zone 2a and harvest exclusion areas are described as Zone 3a. This exclusion includes an additional area, separate from the Community Interest Zone described as the Gerloch Creek Area or Chain of Lakes Area. The Gerloch Creek Area is designated as an Area of Concern in the draft Forest Management Plan for the Abitibi River Forest.

The community's interest in excluding areas from forestry operations include the protection of historical trails along the Abitibi River, potential tourism opportunities associated with fishing, hunting and trapping and potential heritage sites where old villages would be recreated (Figure 3). The ON RWG has worked for over a year with TTN and intends to continue to work with the TTN going forward.

In addition, discussions are ongoing with Moose Cree First Nation regarding the ON RWG's recommendations inside Moose Cree Homeland territory (Figure 3).

CROWN'S OBLIGATION TO CONSULT

The CBFA signatories affirm that these CBFA Ontario Regional Working Group Recommendations are without prejudice to any positions or opinions that Taykwa Tagamou Nation, Moose Cree First Nation and Wahgoshig First Nation may eventually take in relation to the matters described herein.

Further the CBFA Ontario Regional Working Group affirms that no part of these Recommendations, or the process to develop them, should be taken as relieving the government of Ontario of its obligation to consult with and accommodate these Nations in the implementation of any eventual Caribou Action Plan for the Kesagami Range

¹ A summary of the ON RWG's Caribou Conservation Framework can be found on-line at the CBFA website - http://www.canadianborealforestagreement.com/media-kit/CBFA Ontario.od The ON RWG's complete Caribou Conservation Framework can be found on-line at the CBFA website-http://canadianborealforestagreement.com/june2012/

² The ON RWG's Caribou Conservation Framework was submitted to the Minister of Natural Resources through an Ontario Environmental Bill of Rights submission – A proposed approach for habitat protection for Woodland Caribou (forest-dwelling boreal population) under the Endangered Species Act, 2007 (EBR 011-2303) (Mar 10, 2011). Following the ON RWG's work on a proposed approach to the Endangered Species Act, the group took to fashioning specific recommendation for the Abitibi River Forest portion of the Kesagami Range. For an account of the path the group followed to arrive at the present recommendations see Appendix 1.

³ Environment Canada (2011) Proposed National Recovery Strategy for Boreal Caribou, p. 15.

⁴ Ministry of Natural Resources (2009) Ontario's Woodland Caribou Conservation Plan, p. 2.

⁵ A summary of the ON RWG's Caribou Conservation Framework can be found on-line at the CBFA website - http://www.canadianborealforestagreement.com/media-kit/CRFA Ontario.pdf
The ON RWG's complete Caribou Conservation Framework can be found on-line at the CBFA website - http://canadianborealforestagreement.com/june2012/



Figure 2 – The CBFA's recommendation for the delineation of three zones for caribou management in the Abitibi River Forest portion of the Kesagami Range.

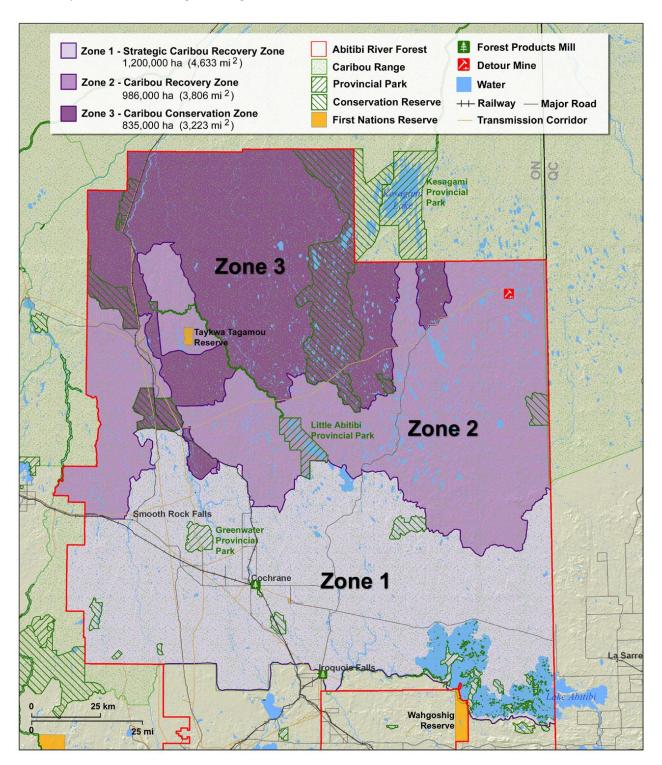
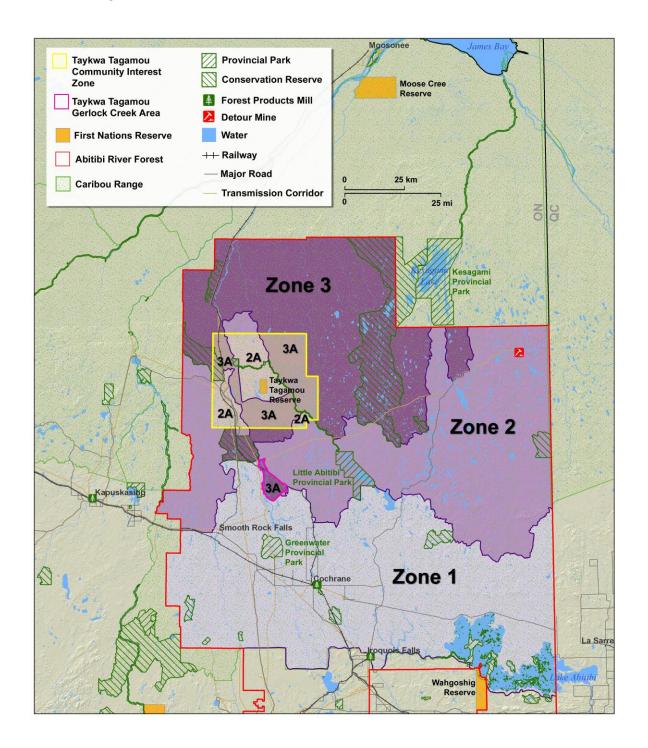




Figure 3 – Taykwa Tagamou First Nation "community interest zone" and recommendations for forest harvesting and forest harvesting deferral zones.





Ecological and management realities formed the basis for the suggested zonation strategy (Table 1).

Table 1 - Status and condition of the recommended three zones for caribou management in the Abitibi River Forest portion of the Kesagami Caribou Range

Zone 1	Zone 2	Zone 3
(the southern-most zone)	(the central zone)	(the northern-most zone)
 (the southern-most zone) Area: 1,200,047 ha. Current level of disturbance: high (72%) Very little known Caribou occupancy in the last 50 years Very little intact forest A longer period of industrial forestry Wood is closer to the mills and the forest conditions are the most productive of the three zones, thus better meeting sawmill and pulp mill needs and reducing transportation costs Recovery efforts for caribou would be less cost effective in much of this region (especially near towns, agricultural lands and transportation corridors) with less chance of success than in other zones. Therefore recommend focusing the use of large-scale habitat conservation in Zone 3, habitat conservation and harvest timing measures in Zone 2 (e.g. the 	 (the central zone) Area: 985,991 ha. Current level of disturbance: There are fewer disturbances than Zone 1 (62% versus 72% Caribou presence has been documented Large-landscape patches of intact forest The forest is dominated by lowland black spruce The majority of historic harvesting has used winter roads The forest conditions lend themselves to natural regeneration which generally has led to successful renewal of conifer stands that are well suited for caribou habitat. Roads that are built in the winter and only used for winter activities regenerate naturally 	 (the northern-most zone) Area: 835,369 ha. Current level of disturbance: low (17%) Largely intact and continuous with the intact portions of the range in the Far North region Caribou presence is well documented The forest is lowland black spruce with extensive open or sparsely treed bog and fen complexes It is our opinion that there is low volume, small diameter wood that is uneconomical to access or transport to mills even in normal market conditions First Nations have indicated a conservation interest in North French watershed area, the only remaining undisturbed watershed
less cost effective in much of this region (especially near towns, agricultural lands and transportation corridors) with less chance of success than in other zones. Therefore recommend focusing the use of large-scale habitat conservation in Zone 3, habitat conservation and harvest timing measures in Zone 2 (e.g. the application of the existing DCHS tracts), and to limit our efforts to recover caribou in Zone 1 to the use of	The forest conditions lend themselves to natural regeneration which generally has led to successful renewal of conifer stands that are well suited for caribou habitat. Roads that are built in the winter and only used for winter activities regenerate naturally sooner than all season roads with the little additional effort	volume, small diameter wood that is uneconomical to access or transport to mills even in normal market conditions First Nations have indicated a conservation interest in North French watershed area, the only
geographically specific measures in the areas between Zone 2 and the north shore of Lake Abitibi (e.g. road deactivation, extended rotations and enhanced reforestation)	It is our opinion that there is both an economical wood supply and a higher probability of successful recovery of caribou habitat at lower cost than Zone 1	

The current plan for caribou management in the range, which is being implemented through forest management planning, follows the recommended Dynamic Caribou Habitat Schedule (DCHS). The DCHS "is a long-term plan for the provision of sustainable year-round caribou habitat in very large interconnected habitat tracts... implemented through long-term strategies and operational plans for roads, forest harvesting and forest renewal within acceptable limits of habitat supply and population persistence." See the section titled "Meeting the intent of Ontario's Woodland Caribou Conservation Plan" below for a review of the commonalities between our recommendations and the approved provincial Caribou Conservation Plan.

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RECOMMENDED MANAGEMENT OBJECTIVES AND MEASURES FOR CARIBOU ACTION PLANNING

The following management objectives are recommended for each zone:

- 1. Zone 1 (the southern-most zone or "Strategic Caribou Recovery Zone") is to be managed in a manner similar to the area outside of the caribou range with a commitment to supplementing the caribou recovery objectives from Zone 2, i.e. some recovery efforts will be undertaken to set the stage for longer-term recovery should the more intensive efforts in Zone 2 prove successful. As an example, we would like to explore strategic linkages between Zone 2 and Lake Abitibi. This area has also been identified as a restoration priority by Wahgoshig First Nation. We recommend removing DCHS harvest approaches in this zone and while achieving other ecological objectives through the application of the various provincial guidelines during the FMP process, including supplementary input to be provided by the RWG. However, if localized caribou values become known in the future, these will be accommodated in on-going management planning.
- 2. Zone 2 (the central zone or "Caribou Recovery Zone") is recommended as a caribou recovery zone with a commitment to supplementing the wood supply from Zone 1. Current DCHS tracts are still the preferred approach here.
- 3. Zone 3 (the northern-most zone or "Caribou Conservation Zone") is a recommended caribou conservation zone. This area contributes to meeting the ecological and wildlife targets ecological targets for the entire forest management planning area. No harvesting will be planned or undertaken in this zone. For clarity, we are not recommending changing the land use classification to prohibit mineral staking or other non-forestry uses.

The following management measures are recommended for each zone:

- 1. Zone 1 (the southern-most zone or "Strategic Caribou Recovery Zone"):
 - a. Application of forest practice rules that are equivalent to those applied elsewhere in the landscape. For example, we intend to meet mature conifer targets here. In addition, we plan to strategically consider linkages and future caribou recovery potential from Lake Abitibi to Zone 2. As a result marten cores will not be applied in Zone 1.
 - b. Collectively examine for application a "basket of tools" to increase the probability of producing, over the long term, habitat that is suitable for caribou re-occupation and persistence.
 - c. Recognizing the utility to caribou is vastly reduced because of the greater fragmentation and discontinuity produced by the considerable z-blocks in the west efforts in the eastern part of Zone 1 will focus to potentially create connectivity between the Lake Abitibi area and the Zone 2 area to the north. The area is of restoration interest to Wahgoshig First Nation and we will be discussing with them in the coming months how they would like to see the region restored.
 - d. A final set of recommendations for Zone 1 management approaches will be confirmed by the ON RWG.
- 2. Zone 2 (the central zone or "Caribou Recovery Zone"):
 - a. Subject to our overarching commitment to strive for recommendations that achieve high degrees of social and economic prosperity and ecological integrity, further harvest in the limited remaining intact forest within Zone 2 to be avoided until re-occupancy or threats to industrial viability are demonstrated.
 - b. A final set of recommendations for Zone 2 management approaches will be confirmed by the ON RWG.



ASSESSING THE FUTURE CONDITION OF THE RANGE

The ON RWG commissioned two types of analyses of possible future condition of the Abitibi River Forest Portion of the Kesagami Range relative to the Long Term Management Direction under three scenarios for its proposed three-zone approach to Caribou Action Planning. The first was an assessment of the possible future wood supply impacts. The second was an assessment of the possible future extent and spatial distribution of disturbance. (A more detailed account of the scenarios can be found in Appendix 2.)

Assessing possible future wood supply impacts

The ON RWG commissioned First Resources Management Group (FRMG) to run three scenarios to compare possible wood supply projections under these scenarios against the current Long-Term Management Direction and the Dynamic Caribou Habitat Schedule.

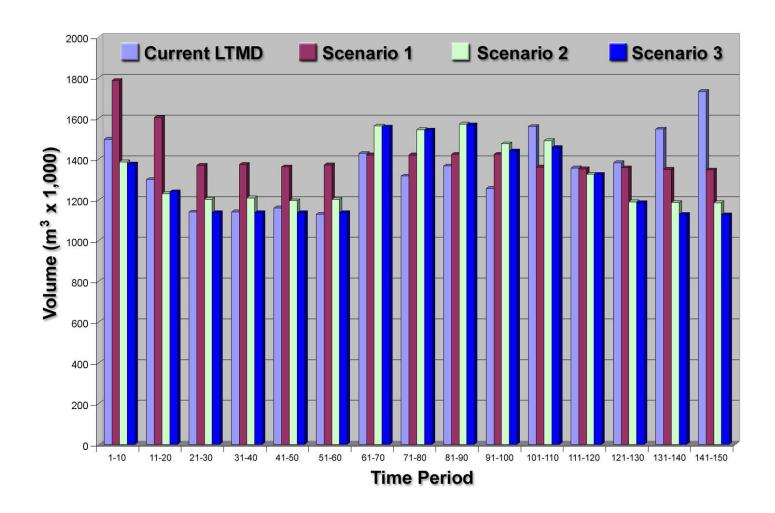
- All scenarios avoided harvest in Zone 3,
- All scenarios applied the existing DCHS tracts in Zone 2,
- Scenario 1 would not apply the existing DCHS tracts in Zone 1,
- Scenario 2 and 3 would apply the existing DCHS tracts in Zone 1.
- Scenario 3 would include an additional mature conifer requirement for Zone 1

The resulting wood supply analysis (Figure 4) showed that scenario 1 provided the most harvest volume of all the scenarios for the first 60-years. This scenario provides strong indications of adequate wood supply, demonstrating an approximate 20% increase in wood supply in the first 30years from the base case currently proposed by using the existing DCHS tracts throughout the entire FMU.

As the other two scenarios provided even less volume than the current Long Term Management Direction, they were not consistent with the CBFA requirement for balancing conservation with forest sector and community prosperity.



Figure 4 - The relative wood supply projections of the CBFA's recommended scenario 1 versus the current Long Term Management Direction for a three-zone approach to Caribou Action Planning in the Abitibi River Forest portion of the Kesagami Caribou Range. This scenario provided the most harvest volume of all the modeled scenarios for the next 60-years.





Assessing the extent and spatial distribution of possible future disturbances

The ON RWG commissioned Spatial Planning Systems to compare changes to the level of possible disturbance (from the present) within caribou habitat under the ON RWG's scenario 1 versus the current Long Term Management Direction. This was done by calculating projected future total disturbance at the range-level. It is the opinion of the ON RWG that such an approach meets the intent of the provincial Caribou Conservation Plan and the proposed federal National Recovery Strategy for Boreal Caribou.

Spatial Planning Systems developed forecasts of future forest condition, location of harvest and road access at 10, 40 and 100 years in the future. The analysis assumed that disturbed areas, both harvesting and decommissioned roads, are no longer disturbed after 40 years based on Environment Canada's approach.1 (Appendix 3, Table 4 contains detailed results of the disturbance analysis.)

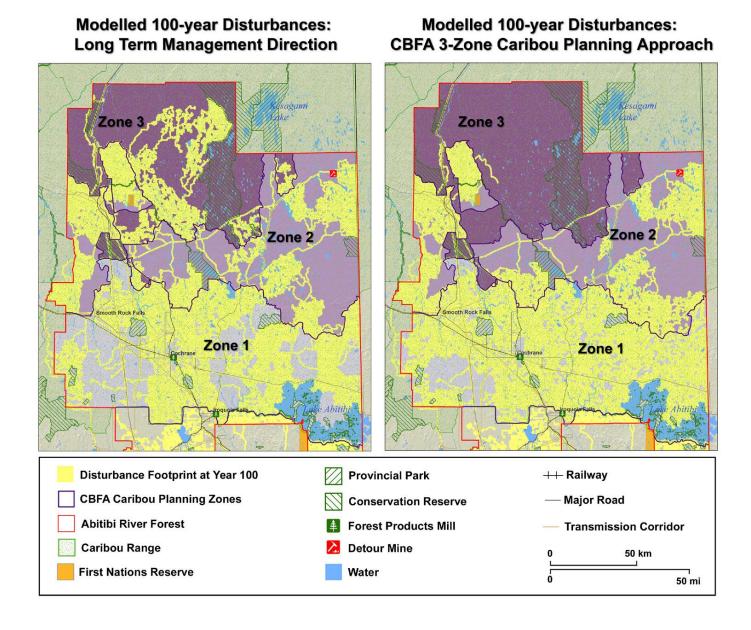
The resulting analysis showed a general trend that the three-zone approach concentrated disturbance in Zone 1, eliminated industrial disturbance in Zone 3, and showed little difference from the LTMD in Zone 2 (Figure 5).

The analysis revealed that at the range-level, total disturbance under both the existing DCHS tracts and the ON RWG's recommended three-zone approach, declined over various time periods (10 years out, 40 years out and 100 years out). However, the threezone approach is believed to be more precautionary because it attempted to take into account configuration of disturbances and didn't move disturbances into currently occupied caribou habitat. There is directional support from both Environment Canada¹ and the CBFA's national-level Caribou Action Planning Methodological Framework for this approach¹.

Therefore, the ON RWG recommends the three-zone approach because it is the ON RWG's opinion that this approach is a more precautionary approach for caribou management than the current Long-Term Management Direction and Dynamic Caribou Habitat Schedule.



Figure 5 – The modeled possible configurations of disturbances resulting from the application of the CBFA's recommended scenario 1 for a three-zone approach to Caribou Action Planning in the Abitibi River Forest portion of the Kesagami Caribou Range versus the current proposed Long Term Management Direction after 100-years.





MEETING THE INTENT OF ONTARIO'S WOODLAND CARIBOU **CONSERVATION PLAN**

It is the opinion of the ON RWG that our recommendations for a Caribou Action Plan are compliant with the direction provided by the Ontario Caribou Conservation Plan and the following Caribou Conservation Plan actions intended to achieve protection and recovery (Table 2).

Table 2 - Comparing Ontario's Woodland Caribou Conservation Plan and the CBFA Recommendations

Ontario Caribou Conservation Plan Proposed Action	CBFA Recommendations for Caribou Action Planning		
Enhance Caribou Science	Our recommendations encourage the adoption of new research and monitoring data		
Adopt a Range Management Approach	Our recommendations are focused on the managed portion of the Kesagami range but considers total disturbance in the whole range including an approach similar to that for Zone 1		
Improve Planning Enhance Caribou Habitat	 Our recommendations: Incorporates the existing DCHS tracts in Zone 2 Addresses the requirements of the insurance policy consistent with ON RWG's Caribou Conservation Framework principles described earlier. Utilizes the integrated range analysis (Red, Yellow or Green Ranges) Accounts for cumulative impacts Employs a disturbance threshold approach Our recommendations: Employ forestry practices that have potential to provide for future caribou habitat Recognizes a strategic recovery area (Zone 1) where 		
Focus on Geographic Priority Areas	 Recognizes a strategic recovery area (Zone 1) where opportunities for improving habitat connectivity are sought Our recommendations prioritize areas within the Kesagami Range for recovery. More generally, our recommendations recognize that different management approaches maybe needed in northeastern and the northwestern Ontario. Our recommendations are specific to the Abitibi River Forest portion of the Kesagami Range and not intended to be replicated everywhere 		



MEETING THE INTENT OF THE ENDANGERED SPECIES ACT

It is our belief that a forest management plan may be the appropriate vehicle to authorize activities under Ontario's Endangered Species Act (subject to addressing various outstanding issues that arise in contemplating section 18 as a vehicle). The vehicle can be confirmed once the Endangered Species Act, caribou habitat regulation is written.

CONCLUSION

These recommendations for and voluntary contributions towards a Caribou Action Planning in the Abitibi River Forest portion of the Kesagami Caribou Range comprise a plan with three distinct zones for the Abitibi River Forest portion of the Range. We also propose management objectives and suggest management considerations for each zone. The management measures are to be refined over time as more data and information become available. The ON RWG will provide further recommendations on these matters.

These recommendations for Caribou Action Planning in the Abitibi River Forest portion of the Kesagami Caribou Range meet the twin pillars of the CBFA: they seek to achieve high degrees of both social and economic prosperity and ecological integrity.

They feature a new three-zone approach to caribou management that the ON RWG believes will meet the conditions of Ontario's Endangered Species Act (ESA) and help recover caribou in the Kesagami Range that is consistent with the proposed National Recovery Strategy for Boreal Caribou.

They are consistent with the ON RWG's earlier recommendations on Ontario's proposed caribou habitat regulation and the Abitibi River Forest Long Term Management Direction, as well as meeting the intent of Ontario's Caribou Conservation Plan.

Further, the CBFA signatories believe that the forest management plan, once approved, would meet the requirements of the *Endangered Species Act*.

These recommendations are a specific package for Caribou Action Planning in the Abitibi River Forest portion of the Kesagami Caribou Range and are not a precedent that the ON RWG would expect to be applied to other forests in Ontario or Canada.





APPENDICES



Appendix 1 - Development of the Abitibi River Forest Management Plan

- 1. First Resource Management Group (FRMG) is responsible for developing a proposed 10-year Forest Management Plan (FMP) and a 2012-2013 contingency plan for the Abitibi River Forest.
- 2. The ON RWG engaged in the FMP process when developing these recommendations for a Kesagami Range Caribou Action Plan.
- 3. Based on the principles of the ON RWG's Framework and a review of the draft scheduled blocks as of April 1st, 2011, the ON RWG developed recommendations for FRMG and the planning team to consider for the Long Term Management Direction (LTMD) for the Abitibi River Forest. The ON RWG had specific comments on six of the scheduled blocks identified in the draft Dynamic Caribou Habitat Schedule (DCHS) to avoid expanding the industrial footprint. For the remaining schedule blocks, they supported the draft schedule contingent upon implementation of the ON RWG Framework recommendations. Particular emphasis was placed on the need for adequate scientific monitoring to inform decision-making for the second ten-year period of the plan commencing in 2022.
- 4. These recommendations to the Abitibi River Forest planning team were cited as 'quite constructive' in a letter to the ON RWG from the MNR Planning Forester responsible for the Abitibi River Forest.
- 5. The released LTMD (Fall 2011) and a response letter from the FRMG indicated that they had implemented the ON RWG recommendations for the first 10-years in a manner that the ON RWG could support.
- 6. However, the LTMD direction for the forest beyond the first 10-years could not be supported by the ON RWG. The restrictions of the existing DCHS tracts applied in the southern part of the unit negatively impacted both longer-term wood supply and mandated new disturbance into northern high value contiguous intact caribou habitat.
- 7. By 2022 (Term 2), the LTMD wood supply dropped below a level that would support existing mill viability (see Figure 1 below). The trend continued past 2032. The LTMD also purposed an increase in new disturbances for caribou without robust peer reviewed evidence that caribou will reoccupy previously harvested and roaded areas. The ON RWG needed a solution that would solve these issues in the following FMP while not negatively affecting progress of the first 10-year plan.
- 8. Subsequently the ON RWG developed a new approach that attempted to address the medium-term saw log wood supply and caribou impacts of the LTMD decision. This new approach proposed a zonation strategy for the Abitibi River Forest portion of the Kesagami Range.



Appendix 2 - Three-Zone Strategy Wood Supply Assessment Scenarios

The CBFA ON RWG jointly identified three possible alternative scenarios for the management of its proposed three-zone approach to the Abitibi River Forest portion of the Kesagami Caribou Range. The RWG had First Resource Management Inc., model these three potential scenarios against the base case of the current Long Term Management Direction for the Abitibi River Forest.

Recognizing the general management objective of trying to reduce harvesting and associated road-building in the northernmost Zone 3 and focusing harvesting in the southernmost Zone 1. The specific directions to FRMG are below and in Table 3.

- 1. Each scenario will employ:
 - a. a 100-year time horizon, and
 - b. include Z-blocks
- 2. Each scenario will produce the following outputs:
 - a. wood supply, distinguishing saw log and pulpwood supply, and
 - b. conifer component of Zone 1
- 3. The Scenarios:
 - a. Base case scenario LTMD
 - b. Scenario #1 Maximize harvesting in Zone 1/Minimize harvesting in Zone 3
 - c. Scenario #2 Test the existing DCHS tracts in Zone 1
 - d. Optional Scenario #3 Test the existing DCHS tracts in Zone 1 plus retention of mature conifer



Table 3 – Kesagami Range Three-Zone Strategy Wood Supply Assessment Scenarios

Drivers	Zones	Base Case	Scenario 1	Scenario 2	Scenario 3 - Optional
		LTMD (Has been modeled)	Max Zone 1/Min Zone 3	Zone 1 Test DCHS	Zone1 DCHS and Mature Conifer
DCHS (Yes/No)	3	Yes	No. No harvest	No. No harvest	No. No harvest
	2	Yes	Yes + avoid intact	Yes + avoid intact	Yes + avoid intact
	1	Yes	No	Yes	Yes
Rotation Age (80- 140yrs)	3	140	N/A	N/A	N/A
	2	140	140	140	140
	1	140	80	80	80
Mature conifer	3	Yes/Yes	N/A	N/A	N/A
(Yes/No) and Both Spatial and A-spatial (Yes/No)	2	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
	1	Yes/Yes	No/No	No/No	Yes/Yes



Appendix 3 - Disturbance Analysis of ON RWG's Scenario 1 for a Three-Zone Approach to Caribou Action Planning in the Abitibi River Forest Portion of the Kesagami Caribou Range

Study Requirements

- 1. Compare impacts of 3-zone vs the existing DCHS tracts on caribou habitat using Environment Canada's methodology
 - a. Develop forecasts of future forest condition, location of harvest, required road access
 - b. Assess the disturbance pattern in the future forest: how will habitat be impacted in 10, 40 and 100
- 2. Develop a spatially explicit prediction of forest management activities: where and when will forest management disturbances occur (roads and harvest)
 - a. Use Patchworks, a spatially explicit forest management model
 - b. Track management and forest development by polygon
- 3. Employ spatial objectives to cluster harvest, implement road access pattern

Modeling Approach

- 4. Start with modeling assumptions from the current Forest Management Plan
 - a. Employ the same growth and yield, silviculture, non-timber objectives, harvest levels, constraints, etc, as the
- 5. Add transportation network
 - a. Existing, proposed, and candidate future roads
 - b. Mill destination
- 6. Build spatially explicit modeling data set
- 7. Run modeling 'scenarios' to depict alternate strategies



Table 4 – Results for Abitibi River Forest - Percentage Disturbance By Zone

Management Approach			
Period	Zone	DCHS	Proposed 3 Zone (Scenario 1)
	1		72.0
EC 1970-2010*	2	Avg 53.1	62.0
	3		17.8
	1	68.1	67.4
ARF 10yr FMP (2012-2022)	2	68.2	65.7
	3	16.6	13.2
	1	58.4	77.0
After 40 years (2012 - 2052)	2	41.5	49.9
	3	16.1	2.4
	1	61.9	80.0
After 100 years (2012 - 2112)	2	49.7	49.4
	3	29.4	2.3

*Note: EC Disturbance Results based on portion of the Kesagami Range within the ARF only (land area only)





THE CANADIAN BOREAL **FOREST AGREEMENT**

Changing economic realities and heightened public and marketplace concern over environmental issues have created both problems and opportunities for Canada's forest industry and environmental organizations. From these challenges has come a unique collaboration between 19 major Canadian forest products companies and nine leading environmental organizations. This collaboration, called the Canadian Boreal Forest Agreement, applies to more than 76 million hectares of forest from the provinces of British Columbia to Newfoundland. While the future of forestry and

conservation in Canada's Boreal Forest rests primarily with governments, both industry and environmentalists have a shared responsibility to help define and realize that future. The shared challenge is to address sometimes conflicting social, economic, and environmental imperatives in a way that captures the economic opportunities that are emerging for forest products of the highest environmental quality. The Canadian Boreal Forest Agreement sees both parties committed to working together in the marketplace and on the ground to support governments in the realization of a stronger, more competitive forestry industry and a better protected, more sustainably managed Boreal Forest. The Agreement explicitly recognizes that Aboriginal peoples have constitutionally protected Aboriginal and treaty rights and titles as well as legitimate interest and aspirations. The Agreement is intended to be without prejudice to, and in accordance with, those rights and titles. The participating companies and environmental organizations believe both successful forest conservation and business competitiveness require fair, inclusive involvement of Aboriginal peoples and their governments.



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