



# Forests or Fibre?

**A 10-Year Report Card on Forest Conservation Law & Policy in Canada**



**A Sierra Legal Defence Fund Report  
February 2006**

## **ACKNOWLEDGEMENTS**

Elaine MacDonald, Senior Staff Scientist at Sierra Legal Defence Fund wrote this report, with the invaluable assistance of Staff Lawyers Dania Majid and Devon Page and Communications Director Jode Roberts. A gracious thanks to Sierra Legal Staff Lawyer Anastasia Lintner for writing the aboriginal law and policy section of the report.

This report was researched and produced thanks to the generous support of the Ivey Foundation.

A special thanks to Chris Henschel of Canadian Parks and Wilderness Society-Wildlands League and David Coon of the Conservation Council of New Brunswick for their insightful comments.

“A culture is no better than its woods.”

-- W.H. Auden

## TABLE OF CONTENTS

Executive Summary .....	2
Introduction.....	3
Selection of indicator baseline questions.....	3
Grading System .....	4
Forest Conservation Related Law and Policy: 1995 and 2005.....	5
General questions (1-2) .....	5
1. Do laws and policies require mandatory conservation based land - use planning with community consultation?.....	5
2. Do the jurisdiction's laws and policies regulate environmental pollutants affecting forest health?.....	7
Species at Risk Questions (3-7).....	10
3. Do laws and policies require mandatory science-based listing of species at risk? .....	10
4. Do laws and policies prohibit harming legally listed species at risk?.....	11
5. Do laws and policies require recovery measures within a fixed timeframe?.....	12
6. Do laws and policies require multi-species and ecosystem recovery where appropriate?.....	14
7. Do laws and policies require monitoring of species population levels and recovery plans? .....	14
Summary of Endangered Species Law and Policy Findings .....	15
Parks and Protected Areas Specific Questions (8-11) .....	16
8. Do laws and policies mandate conservation and ecological integrity as top priority?.....	16
9. Do laws and policies provide additional protection for ecological reserves and wilderness areas? .....	17
10. Do laws and policies prohibit industrial resource development in parks?.....	18
11. Do laws and policies prohibit hunting and fishing in parks? .....	19
Summary of Parks and Protected Area Law and Policy Findings .....	20
Managed Forest Baseline Questions (12-20).....	20
12. Do annual allowable cut (“AAC”) calculations account fully for conservation needs? .....	20
13. Do laws and policies require environmental impact assessments prior to commencement of site operations?.....	23
14. Do laws and policies require management for a broad range of indicator species?.....	25
15. Do laws and policies require large areas of contiguous core primarily mature and old forest habitat, be maintained?.....	28
16. Do laws and policies require connectivity be maintained between important habitats and landscape features? .....	30
17. Do laws and policies require that access management planning avoid roads and maintain remoteness?.....	31
18. Do laws and policies require riparian reserves with additional reserve for fish and wildlife habitat?.....	33
19. Do laws and policies ban the use of chemical pesticides in forestry operations? .....	35
20. Do laws and policies prohibit the use of genetically modified organisms (“GMOs”)? .....	36
Summary of Forest Management Law and Policy Findings.....	37
Law and Policy concerning Aboriginal Rights.....	37
21. Do laws and policies recognize and respect legal and customary rights of Aboriginal Peoples? .....	37
Summary of Law and Policy with respect to Aboriginal Rights .....	41
Discussion of Findings.....	41
Conclusions .....	43
References.....	44
Appendix A – Jurisdictional and Temporal Comparison Tables.....	48
Table 1 - 1995 Law and Policy Summary .....	48
Table 2 – 2005 Law and Policy Summary.....	50
Table 3 - 1995 and 2005 Comparison (bold indicates improvement).....	52
Endnotes.....	54

## EXECUTIVE SUMMARY

---

This report evaluates and compares forest conservation law and policy in five provinces across Canada and relevant federal government legislation and policies. Given that commercial forestry operations have the greatest impact on Canada's forests, the report compares the provinces of British Columbia, Alberta, Ontario, Quebec and New Brunswick; the provinces with the largest commercial forestry industries. Laws and policies in these jurisdictions that aim to protect other forest values, such as biodiversity, are also examined as they have a considerable impact on forest conservation.

To evaluate these jurisdictions, the report poses twenty-one questions based on leading indicators of forest ecosystem conservation. The questions examine law and policy with respect to protected areas, endangered species and crown forest management. Where possible, the analysis examines the state of law and policy in 1995 and draws a comparison to the state of the forest conservation law and policy in 2005. Indicator questions are posed such that a "yes" answer indicates that the jurisdiction has the required laws and policies needed to address the indicator, whereas a "no" indicates it does not. A "somewhat" answer indicates that it has some laws and policies or even practices, but does not fully meet the indicator threshold. Scoring, which is described further in the report is conducted by issuing two points to a "yes" answer, zero points to a "no" answer and one point to a "somewhat" answer. Each province receives a percentage score based on their total points.

This report is limited to examining the laws and policies as written and does not analyze implementation of the policies or compliance and enforcement of the laws. Implementation and enforcement may be deficient in many jurisdictions, and thus would likely further decrease the grades assigned in this report.

### RATING THE PROVINCES: FOREST OR FIBRE?

The analysis found that forest conservation laws and policies in all five provincial jurisdictions are weak; all five provinces fail scoring less than a 50% average, where a 100% represents a "yes" response to all indicator questions.

The province of Quebec received the highest score, a meagre 43%; largely due to somewhat progressive laws and policies with respect to parks and protected areas that prohibit industrial activity, hunting and fishing in parks and place ecological integrity as a top priority. This rating is somewhat ironic because Quebec is often criticized by conservationists for having a relatively low percentage of its overall land base protected in parks in comparison to other provinces. However, the indicator questions in this report compare laws and policies that concerning existing protected areas and do not address the adequacy of the provincial parks systems or the need to for additional parks and protected areas. The provinces of Alberta and British Columbia receive the worst scores at 24% and 28% respectively.

The report also demonstrates the little progress made over the last 10 years in all jurisdictions in the forest conservation law and policy indicators analysed.

Below is a summary of the scores for 1995 and 2005 along with the ranking for each of the five provinces. The federal government is not ranked with the provinces due to the different jurisdictional powers the provincial and the federal governments have over forest conservation issues.

### FEDERAL LAW AND POLICY

The federal government, with its limited jurisdiction over forest conservation (for example, the provinces oversee regulating the forestry industry on crown land), receives a score of 54% largely due

	1995 Score	1995 Ranking	2005 Score	2005 Ranking
Quebec	26%	1	43%	1
New Brunswick	22%	2	33%	2
Ontario	19%	4	31%	3
British Columbia	20%	3	28%	4
Alberta	17%	5	24%	5
Federal Government	25%		54%	

to laws and policies that protect national parks and endangered species. However, the report does not analyse the implementation or enforcement of those laws and policies, which would likely lower the federal government's score. Seeing initiatives through is an issue that has been highlighted by the Federal Commissioner for the Environment and Sustainable Development as problematic at the federal level.<sup>1</sup>

## ENDANGERED SPECIES

The federal *Species at Risk Act*, even with the limitations discussed in the report, is stronger than all five provincial endangered species laws examined. The federal *Species at Risk Act* receives a score of 5 out of 10 based on the five species at risk law and policy questions examined. Although not analysed in this report, Nova Scotia is considered to have the strongest provincial endangered species act by conservation groups.

Endangered species need to be listed under the law based on scientific and traditional knowledge and their habitat must be protected regardless of which level of government holds jurisdictional power. A strong endangered species law that applies only to a few of many species at risk in limited areas is nothing more than a good law of limited utility.

## PARKS AND PROTECTED AREAS

Of the five provinces examined, Quebec has the strongest parks protection laws, scoring 8 out of 8 with respect to the questions posed. Alberta has the worst parks protection laws and policies of the five provinces assessed, scoring a mere 1 out of 8. Ontario has introduced a new act into the legislature, which would improve its score if passed into law.

Beyond the scope of this study is the question as to whether a jurisdiction has sufficient parks and protected areas to meet biodiversity needs. Natural areas need to be protected; strong park and protected areas laws without sufficient park space are simply good laws that have limited application.

## FOREST MANAGEMENT

All five provinces assessed score very poorly on their management of logging on crown forestlands. British Columbia, Alberta and Quebec receive a score of 5 out of 18 while Ontario and New Brunswick receive a score of 6 out of 18. Of particular concern is the finding that all five provinces fail to account for conservation needs in determining harvesting levels (annual allowable cut volume).

Canada is uniquely placed in that it still has the opportunity to protect vast tracts of forests, but action must occur quickly. In 2004, the Organization of Economic Cooperation and Development ("OECD") reported<sup>2</sup> that 20% of the world's remaining natural areas are in Canada, but Canada's total national protected area is less than the average of the 29 OECD member nations.

The value of large vast areas of protected forest to future generations is immense and could certainly outweigh the forests value as a wood fibre source. Canada's forests are threatened due in part to a weak framework of laws and policies that place industrial activity ahead of biodiversity needs.

The following report has identified some of the key law and policy needs that are weak or absent in Canadian jurisdictions. However, strong ecosystem based laws and policies are only one part of the puzzle. Strong laws need to be implemented and enforced and need spaces in which they apply.

## INTRODUCTION

---

In 2004, the Organisation for Economic Co-operation and Development reported<sup>3</sup> that 20% of the world's remaining natural areas are in Canada, but Canada's total national protected area is less than the OECD average. According to a 2001 OECD report<sup>4</sup> Canada finished 28th out of 29 of nations in terms of total volume of timber logged, with only the United States logging a larger volume of timber. Canada ranks 27th out of 29 in terms of logging per capita, with only Finland and Sweden logging greater volumes per capita.

This report examines key policy and legal questions regarding the conservation of Canada's forest in the five top wood harvesting provinces by volume<sup>5</sup>, which in decreasing order are: British Columbia, Quebec, Ontario, Alberta and New Brunswick. Applicable federal law and policy is also analysed. These provinces were selected because it is widely recognized that commercial harvest of trees from crown land for the production of forest products has the greatest direct impact on Canada's forest, therefore, laws and policies in these jurisdictions that aim to protect other forest values, such as biodiversity, would also have the greatest impact on forest conservation.

The report examines the current regime of forest conservation-related policies and laws and compares to the year 1995 in order to illustrate changes that have occurred over the last ten years and highlight inadequacies in present policy as well as law and areas of progress and deterioration. Although the report does not examine enforcement and compliance with laws, or the implementation of government policy, some anecdotal information that relates to enforcement, compliance and implementation concerns is reported.

### Selection of indicator baseline questions

In determining the policy and law issues examined, a comprehensive review was undertaken of literature on ecosystem sustainability indicators. The intent is to examine law and policy aimed at conserving biodiversity in Canada's forests, both within

protected areas and within the crown forests subject to logging. Given the large breadth of this task we decided to primarily focus on law and policy at the broader forest landscape level. While this report focuses on what we determine to be some of the leading indicators based on our literature review, we recognize that we may have omitted other indicators of forest conservation. For example, focusing on the landscape level issues ignores really important questions regarding habitat at the stand level but a tough decision had to be made with respect to the scope of the report in order to keep it manageable. We would suggest further analysis should be done in another study to examine forest stand level law and policy issues.

Much has been written on indicators particularly with respect to sustainable forest management. Our literature review included the Montreal Process<sup>6</sup>, Forest Stewardship Council's National Boreal Standard, and reports by Canadian Parks and Wilderness Society<sup>7</sup>, World Wildlife Fund, and Canadian Boreal Initiative<sup>8</sup>, government policy documents such as those from National Resources Canada, Canadian Council of Forest Ministers and various academic journal publications.

This report examines more than just the managed forests; it also examines law and policy with respect to parks and protected areas and endangered species. Indicator questions pertaining to parks and protected areas were chosen based on the research published by David Boyd of the University of Victoria in his report *Wild By Law*<sup>9</sup> and based on the experience of Sierra Legal acting on behalf of numerous conservation groups defending the ecological integrity of protected areas.

The indicators are broken down into sub categories that allow for further analysis of laws and policies related to endangered species, parks and protected areas and forest management planning and operations (logging on crown land).

## Grading System

The laws and policies of each jurisdiction with respect to each indicator question are rated "yes", "no" or "somewhat". A "yes" rating means that the jurisdiction's laws and policies meet the indicator, "no" means it does not meet the indicator and "somewhat" rating means it partially meets the indicator.

Each jurisdiction received a final numerical grade based on the sum of the responses to each indicator question. Scoring was conducted by assigning a 'yes' response two points, a 'no' response zero points and a 'somewhat' response one point. The numerical grade was based on the sum. The best possible score a jurisdiction can receive is 42 (e.g. 21 questions x 2 points for a 'yes' response). To aid in the interpretation of the scores, we converted the score

out of 42 to a percentage score, thus 100% would mean the jurisdiction got a full 42 points, two points for each question. In the case of some indicator questions, 1995 law and policy could not be easily determined so questions remained unanswered. Therefore, total scores may be out of a lesser total but are still converted into a percentage for comparison purposes. Only 12 questions are relevant to the federal government so in that case the maximum score is 24.

The scoring in the report is not well designed to address degradation in laws and policies that were already weak. If a jurisdiction's laws and policies did not meet the indicator threshold in 1995 such that a 'no' (zero points) grade was received and the laws and policies were further weakened and thus it still does not meet the threshold in 2005, the 'no' grade would still receive zero points.

## Key Facts about Forests in the five Provinces<sup>10</sup>

### BRITISH COLUMBIA

Land area: 94.6 million hectares  
Forest area: 64.3 million hectares (68% of total)  
Provincial parks: 10.3 million hectares (10.9 % of total land area)  
96% Provincially owned  
1% Federal owned  
3% Private owned  
2003 Potential Harvest: 83.7 million m<sup>3</sup>  
2002 Harvest: 76.3 million m<sup>3</sup>  
2003 Harvest: 65.4 million m<sup>3</sup>

### ALBERTA

Land area: 65.4 million hectares  
Forest area: 36.4 million hectares (55.6 % of total)  
Provincial parks: 210, 550 hectares (0.3 % of total)  
89% Provincially owned  
8% Federal owned  
3% Private owned  
2003 Potential Harvest: 26.9 million m<sup>3</sup>  
2002 Harvest: 24.6 million m<sup>3</sup>  
2003 Harvest: 24.2 million m<sup>3</sup>

### ONTARIO

Land area: 107.5 million hectares  
Forest area: 68.3 million hectares (63 % of total)  
Provincial parks: 7.6 million ha (7 % of total)

91% Provincially owned  
1% Federal owned  
8% Private owned  
2003 Potential Harvest : 34.2 million hectares  
2002 Harvest: 26.3 million m<sup>3</sup>  
2003 Harvest: 24.2 million m<sup>3</sup>

### QUEBEC

Land area: 151.9 million hectares  
Forest area: 84.6 million hectares (55.7 % of total)  
Provincial parks: 754,600 hectares (0.5% of total)  
Forest area: 84.6 million hectares  
89 % Provincial owned  
11% Private owned  
2003 Potential Harvest: 54.6 million m<sup>3</sup>  
2002 Harvest: 39.6 million m<sup>3</sup>

### NEW BRUNSWICK

Land area: 7.31 million hectares  
Forest area: 6.2 million hectares (85 % of total)  
Provincial parks: 22,084 hectares (0.3 % of total)  
48% Provincial owned  
2 % Federal owned  
50% Private owned  
2003 Potential Harvest: 11.4 million m<sup>3</sup>  
2002 Harvest: 10.1 million m<sup>3</sup>  
2003 Harvest: 10.4 million m<sup>3</sup>

# FOREST CONSERVATION RELATED LAW AND POLICY: 1995 AND 2005

---

## General questions (1-2)

### 1. Do laws and policies require mandatory conservation based land - use planning with community consultation?

Jurisdiction	1995	2005
Federal	Somewhat	Somewhat
B.C.	Somewhat	Somewhat
Alberta	No	Somewhat
Ontario	No	Somewhat
Quebec	No	Somewhat
N.B.	No	Somewhat

#### FEDERAL

The Government of Canada has little jurisdiction over the provinces forested land use except in term of the establishment and management of national parks and other federal lands such as reserves. Parks Canada has taken a scientific approach by dividing Canada up into 39 distinct ecological regions. According to Nature Canada, the national parks system is only 69% complete<sup>11</sup> and twelve more parks are needed to complete a National parks system that represents all 39 distinct regions.

The *Canada National Parks Act* (the “CNPA”), enacted in 2000, was an improvement over the previous *National Parks Act*. The CNPA strengthened planning and management of the parks, including planning for new parks, as well as placing ecological integrity as the primary consideration in all aspects of parks management. However, the primacy of “ecological integrity” was tested in a legal case challenging the construction of a winter road through Wood Buffalo National Park and failed. The judge found that it was, “reasonably open for the Minister to place interest of the people directly affected by the management of the park above the first priority given to ecological integrity where impairment to ecological integrity could be minimized... ”<sup>12</sup>

In 2002 then Prime Minister Chrétien announced 10 new national parks over the next five years as part of a five year National Parks Action Plan. Expansion of

the National Parks network begins with the identification of candidate areas followed by a process of negotiations between the federal government, provincial and territorial governments, First Nations and local stakeholders. A National Park is legally protected once its boundaries are subscribed into the CNPA. Section 12 of the CNPA requires public consultation on land use planning within national parks.<sup>13</sup>

#### BRITISH COLUMBIA

Prior to 1992, land-use planning in BC occurred haphazardly. In the early 1990s, the BC government established the Commission on Resources and Environment (“CORE”) to design and implement province-wide strategic land use plans. CORE was specifically tasked with making land use recommendations for the following regions in BC: the Vancouver Island, Cariboo-Chilcotin, West Kootenay-Boundary and East Kootenay regions. Concurrently, subregional planning was being conducted in areas where regional planning was not being undertaken. Such plans became known as Land and Resource Management Plans (“LRMPs”). To date four regional plans (developed through CORE) and 16 subregional LRMPs have been completed and approved and an additional six LRMPs are being developed. The planning process is community-based and structured to encourage participation by the public, stakeholders and various levels of government.

Under BC’s soon to be repealed *Forest Practices Code*, plans could be designated as “higher level plans” which made their objectives legal requirements for forest planning. However, there was no legal requirement for such a designation. Under the recently introduced *Forest and Range Practices Act*, objective setting must be guided by higher level plans.

Recently, the BC government has attempted to consolidate planning through a “Sustainable Resource Management” planning process. While still in the process of being implemented, the outcomes

and lack of mandatory components are similar to earlier planning processes.

## ALBERTA

Alberta has no permanent policy initiative regarding land-use planning. The Northern East Slopes Sustainable Resource and Environmental Management Strategy (“NES”), an area east of Jasper National Park, is undergoing an integrated land-use planning process, which was announced in 2000 and began public and stakeholder consultations in 2001. Final recommendations by the regional steering group were made to government in 2003 yet the government has not released the final strategy.<sup>14</sup> The Alberta Government mentions on their web site “A Sustainable Strategy for Southern Alberta” although it appears to have not yet begun.<sup>15</sup>

Special Places<sup>16</sup> is an initiative that began in 1995 to identify areas representing the environmental diversity of the province's six natural regions. Candidate sites were nominated for protection by a provincial coordinating committee, which included delegates from conservation groups. As of July 2001 the Special Places program had designated 81 new and 13 expanded sites. However, the program has been criticized because the new areas are open to logging, mining, drilling, and motorized recreation.<sup>17</sup>

## ONTARIO

The ‘Lands for Life’ initiative was a land-use planning process which ultimately designated 378 protected areas within the “area of undertaking” for forest management in Ontario – commercially logged crown land. The Lands for Life process has generated some criticism from conservationists as the government has failed to protect several Lands for Life protected areas from resource activities such as forestry, mining and hunting.<sup>18</sup>

North of presently forestry tenured lands a First Nations community based planning process is currently underway under the Northern Boreal Initiative (“NBI”) program. This strip of land, about 30 to 180 km wide, coincides with what the province deems to be the extent of the commercially viable forests in Ontario. However, the NBI has been criticised as being primarily about advancing

commercial forestry northward and not landscape level conservation based land use planning.<sup>19</sup>

North of the NBI region no comprehensive land-use planning has occurred. Conservation groups are now calling on the province to begin a land-use planning process – before resource industries such as mining take hold. For example, a large portion of intact wilderness in the northern boreal is currently under threat by the proposed DeBeers Victor diamond mine in the James Bay lowlands.

The Ontario Ministry of Natural Resources launched a new integrated land-use management planning process for the Temagami area. Conservationists have long fought to ensure the protection of the Temagami area because of its unique and pristine ecological significance.

Community consultation has occurred through local and regional meetings and the Environmental Bill of Rights Registry.

Other large scale planning process are underway in Southern Ontario to reduce urban sprawl, including around the Greater Toronto Area through the Greenbelt initiative and regional planning which includes legislated green zones which are off limits for new development. Throughout the process the community was been consulted.

## QUEBEC

Quebec does not have any formal land-use planning process although *The Act Respecting the Lands in the Domain of the State* allows the Minister of Natural Resources to undertake land use planning and bring it to government for approval. Quebec amended the *Forest Act* in 2001 such that no management can occur above the territorial limit set by the Minister, which was set at about the 51<sup>st</sup> parallel in 2002 after extensive consultation.<sup>20</sup> The province of Québec’s agreement with the Cree of Quebec has given the Cree extensive say in where and how forest management can proceed north of the 52<sup>nd</sup> parallel.

Quebec has set a goal to reserve 8% of its territory in protected areas by 2008. The province has been developing a provincial protected area network in recent years that emphasizes the boreal forest. On July 6, 2005, Quebec announced the creation of 22

new protected areas for a total of 7,000 km<sup>2</sup>. In the boreal forest zone, Quebec has more than 580 000 km<sup>2</sup> of protected area and five protected areas of this network that play a role in the conservation of woodland caribou.<sup>21</sup> With these new areas Quebec reports that it has 5.8% of its land-base protected<sup>22</sup> however conservationists argue that the percentage is actually less than 1% based on the total of areas that are protected from industrial activities.<sup>23</sup>

## NEW BRUNSWICK

After ten years of extensive consultations, New Brunswick introduced the *Protected Natural Areas Act* (the “PNA”) in December 2002. The PNA was developed to provide more comprehensive legislation to manage and administer the province’s network of protected natural areas. Two classes of protected natural areas were created with the restrictive Class I for total protection and conservation. In a Class II protected natural area conservation is the main objective but some recreational activities are allowed. All industrial uses are prohibited in both classes. The original twenty conservation areas and ecological reserves are considered Class I, whereas the ten new protected natural areas are Class II. According to a recent Sierra Club report<sup>24</sup> integrated land-use planning has occurred when land has been brought from private hands into the control of the Crown.

### 2. Do the jurisdiction's laws and policies regulate environmental pollutants affecting forest health (acid rain precursors, ground level ozone, green house gases)?

Jurisdiction	1995	2005
Federal	Somewhat	Somewhat
B.C.	?	Somewhat
Alberta	Somewhat	Somewhat
Ontario	No	Somewhat
Quebec	Somewhat	Somewhat
N.B.	Somewhat	Somewhat

## FEDERAL

Acid rain is still a problem in many forested areas in Ontario, Quebec and the Atlantic provinces after decades of efforts to battle this problem. Recent federal assessments conclude that North American

emissions of nitrogen oxides (NO<sub>x</sub>) and sulphur dioxide (SO<sub>2</sub>) must be reduced by up to 75% in addition to reductions currently planned.<sup>25</sup> Reductions must come from the United States and Canada given the majority of the acid precipitation is caused by SO<sub>2</sub> emissions from American coal fired electrical generating facilities particularly those in the Ohio River Valley/Midwest.

The progress made to date was primarily driven by the 1985 Eastern Canada Acid Rain Program which put a cap on the sulphur dioxide emissions that cause acid rain in the seven easternmost provinces at 2.3 million tonnes a year starting in 1994. Similarly the 1991 Canada - U.S. Air Quality Agreement<sup>26</sup> set the same target for sulphur dioxide and additional targets for nitrogen oxide and sulphur dioxide emissions from mobile and industrial sources. Other federal programs like The Canada-Wide Acid Rain Strategy for Post-2000 introduce the concept of critical load (a standard based on an analysis of the ecosystems ability to buffer acid deposition), however the strategy while recognizing the need, fails to commit to further reductions.<sup>27</sup>

In 1999, the federal government passed regulations limiting the amount of sulphur in gasoline. Starting in 2005, low-sulphur gasoline (that is gasoline with an average sulphur level of less than 30 mg/kg) is required throughout Canada. Starting June 1, 2006 the sulphur content in on-road diesel fuel produced or imported for use or sale in Canada must be less than of 15 mg/kg.

The Canada Wide Standard (“CWS”) for ozone was set in 2000 and commits government to significantly reducing ground-level ozone by 2010 (to 0.065 ppm average over eight hours). The CWS, set through the Canadian Council of Minister of the Environment, is a “risk-based standard” primarily based on the impact ozone has on human health. Forest health is also impacted by ozone in areas prone to high ozone episodes (found in smog prone regions like southern Ontario). Thus, efforts to reduce troposphere (ground level) ozone will benefit forest health. All provinces and territories (except Quebec) signed the Canada wide standard for ozone.

Climate change is influencing forest ecosystems as longer growing seasons and warmer temperatures influence ecosystems and species ranges. The United Nations Framework Convention on Climate Change,

which Canada ratified in 1992, commits Canada to developing and reporting emissions of greenhouse gases.

The Kyoto protocol, signed in December 1997 and ratified in 2002, commits 38 industrialized countries to cut their emissions of greenhouse gases between 2008 to 2012 to levels that are 5.2 per cent below 1990 levels. Kyoto could change the way forests are managed in Canada. Under the Kyoto protocol, forests can be counted as sinks that sequester carbon (CO<sub>2</sub>). Activities counted under Kyoto are limited to reforestation, afforestation, and deforestation (“RAD”) but these terms are not yet fully defined.<sup>28</sup> If there is an increase in carbon stocks between 2008-2012 because of RAD activities undertaken after 1990, then the average amount of carbon removals during the period will be subtracted from Canada's average emissions for that period. Conversely, if carbon stocks decline during that period, the amount will be added to Canada's emissions from 2008-2012.

In “Moving Forward on Climate Change a Plan to Honouring Canada’s Kyoto Commitments”<sup>29</sup> forest sinks are estimated to be in the range of 0-20 megatonnes based on a business as usual scenario. Concern exists that by using Canada’s forests as sinks the policy will drive forestry that encourages young fast growing forests (faster sink or sequestering) over older slow growing forests that may no longer be acting as sinks. In addition, much CO<sub>2</sub> is stored in the forest floor thus policy regarding land use planning and silvicultural practices (e.g. clear cut versus selective cut) will influence the storage or release of this CO<sub>2</sub>. Increased forest fires due to climate change coupled with fire suppression policy (although wildfires are part of the natural boreal forest ecological cycle) to prevent CO<sub>2</sub> release are other factors, which will influence how forests are accounted for under Kyoto. Thus it is still too early to determine whether Kyoto goals will help or hurt forest conservation and biodiversity goals although there are great opportunities to encourage conservation of large forest ecosystem as carbon reservoirs.

## BRITISH COLUMBIA

British Columbia’s forests do not suffer the effects of acid rain, but do suffer from smog episodes pertaining to particulate matter. This is a concern from a public health perspective but less so in terms of forest health. Air regulations under the 2003

British Columbia *Environmental Management Act* (the “B.C. EMA”) regulate the sulphur content of gasoline (but at a level less stringent than the federal standard which will take affect in 2006) as well as other components such as benzene that contribute to ground level ozone.<sup>30</sup> Under the B.C. EMA permits are issued with respect to discharges of waste – waste is defined as including air contaminants.

British Columbia signed the Canadian wide standard on ozone and easily meets the standard. British Columbia uses mostly guidelines and criteria to manage air pollutant discharges from industry (e.g. Medium Density Fiberboard Guideline, NO<sub>x</sub> from natural gas fired boilers) and (Biomedical Waste Incinerators). Due to BC's topography, regional districts and municipalities have enacted local laws to control pollution. There are also area-based plans to manage pollution along geographic lines that recognize airsheds instead of political boundaries. The B.C. EMA recognizes that airsheds exist and states that a manager under the B.C. EMA, "may give consideration" to them, but their full legal status is uncertain.

## ALBERTA

Air quality management in Alberta includes the use of regulations<sup>31</sup> that are made under the authority of the *Environmental Protection and Enhancement Act*. Alberta's ambient air quality objectives are established to define desired environmental quality intended to protect public health and ecosystems.

Alberta's coal-fired power plants are being required to reduce greenhouse gas emission to that of a natural gas plant. Industrial emissions are controlled through facilities approvals, but there are no province-wide regulatory standards except for ambient air quality standards, which must be met at the property line. In the case of upstream oil and gas operations like heavy oil processing plants or sour gas plants, sulphur recovery to some extent is expected in order to get approval.

Under the Clean Air Strategic Alliance (“CASA”), established in March 1994, Alberta's industry, government, and environmental and health organizations have reached consensus on a provincial framework for managing fine particulate matter and ground-level ozone, two major contributors to smog, which may also impact forest health. The CASA

ozone objective is set at a higher concentration level than the Canada Wide Standard (“CWS”) (0.082 ppm versus 0.065 ppm) but is averaged over a shorter period (1 hr versus 8 hours for the CWS). Rural areas of Alberta sometimes exceed the CASA ozone objective.<sup>32</sup>

## ONTARIO

Ontario has lowered its SO<sub>2</sub> emission by about 70% from 1980 levels.<sup>33</sup> By far Ontario has the most comprehensive air pollution regulatory and policy framework, but it also has the worst air quality. Ontario regulates emissions of NO<sub>x</sub> and SO<sub>2</sub> from electrical generating facilities and SO<sub>2</sub> from smelters. It recently passed regulations for NO<sub>x</sub> and SO<sub>2</sub> emissions from other industries such as cement kilns, petroleum refineries, pulp and paper mills and steel mills, but the timelines for reductions are long and emissions trading may permit laggards to continue their business as usual.

Ontario requires refineries to report the sulphur contents of gasoline and regulates air pollutants through ambient air standards. Ontario signed the Canada wide standard for ozone but regularly exceeds the ozone standard particularly in the heavy populated and industrialize south also an area prone to transboundary air pollution.

Under the “Drive Clean Program”, the province has regulations forcing vehicle owners to pass regular emission tests regarding tailpipe emission from cars, trucks and buses in Southern Ontario.<sup>34</sup>

## QUÉBEC

Division VI of the *Environment Quality Act* addresses air pollution issues in Québec.

Since the end of the 1980s, Québec has lower its SO<sub>2</sub> emissions by more than 60% from 1980 levels.<sup>35</sup> While Ontario has reached a similar goal, the United States will have reduced its SO<sub>2</sub> emissions by 40% (1980 reference year) by 2010. It would appear, however, that these achievements will not be sufficient to recover the resources affected by acidification. Québec is therefore committed to seek

an agreement with the other Eastern Canadian provinces for an additional 50% reduction in SO<sub>2</sub> emissions. The government of Québec has signed a similar agreement with the Eastern Canadian Provinces and New England States addressing the problems of acid precipitation and mercury specifically.<sup>36</sup>

Under the *Regulation respecting the quality of the atmosphere* under the *Environmental Quality Act*, which dates back to the 1980s but has been updated many times, Quebec set limits for criteria pollutant emissions from industry and ambient air quality standards. The regulation also set limits for sulphur in oil and coal and nitrogen oxide emissions from the burning of fossil fuels. Three regions of Quebec regularly exceed the Canada wide ozone standard: Montréal, Gatineau and Trois-Rivières.

## NEW BRUNSWICK

New Brunswick's 1997 *Clean Air Act* (the “N.B. CAA”) controls the type and amount of contaminants that are released into the atmosphere through a system of air quality approvals. The N.B. CAA applies to all businesses, industries, and individuals in New Brunswick, to federal and provincial governments, and to Crown corporations. The N.B.CAA has built into it a public consultation process where the public can submit comments on Class 1 air quality approvals and air quality objectives.<sup>37</sup>

The *Air Quality Regulation* classifies sources of air pollution by the amount and type of contaminants they produce. It sets maximum levels for smoke density, contaminants in petroleum products, and ground-level concentrations of several pollutants. Above all, the *Regulation* lays out a system of air quality approvals. The *Regulation* restricts the allowable sulphur content of fuel oils sold or burned in New Brunswick. The release of carbon monoxide, hydrogen sulphide, nitrogen dioxide, total suspended particulates, and sulphur dioxide are restricted so that ground level concentrations as prescribed in the *Regulation* are not exceeded. As well, maximums are set for sulphur dioxide at ground level in the counties of Charlotte, Kings and Saint John.<sup>38</sup>

## Species at Risk Questions (3-7)

### 3. Do laws and policies require mandatory science-based listing of species at risk?

Jurisdiction	1995	2005
Federal	No	No
B.C.	No	No
Alberta	No	No
Ontario	No	No
Quebec	No	No
New Brunswick	No	No

Note: Mandatory science-based listing is the listing of species under the law (e.g. federal or provincial endangered species acts) based on scientific, community and traditional aboriginal knowledge. Economic and corporate interests do not factor into the decision to list species.

#### FEDERAL

The federal *Species at Risk Act* (“SARA”) came into force in June 2003. SARA does not require science-based listing of species. The Committee on the Status of Endangered Wildlife in Canada (“COSEWIC”) recommends species for listing under SARA but the federal cabinet retains discretion regarding whether to do so or not. COSEWIC operates at arm's length from government in an open and transparent process, maintaining impartial scientific and expert judgement in its assessment of wildlife species. The federal government has been criticised for the delay in making a decision on listing a species recommended by COSEWIC<sup>39</sup> and for not listing species on an emergency basis as recommended by COSEWIC.<sup>40</sup> Further criticism has been launched because the Environment Minister refused to use his powers under the SARA to order emergency protection measures.<sup>41</sup>

The SARA has limited jurisdiction in that it only applies to federal lands (e.g. reserves, national parks, defence bases), marine species and migratory birds. SARA does have provisions, which would allow the federal minister in charge to step in and take action to invoke SARA's provisions in a province or territory (i.e. on crown land) if a species faces imminent

threats to its survival or recovery, or if the laws of the province did not provide effective protection, but thus far the federal government has never used these powers. The federal government has had discretionary authority to intervene in the provinces on environmental matters for over 30 years but have never exercised the jurisdiction to do so.

#### BRITISH COLUMBIA

British Columbia has no stand-alone species at risk laws or scientific listing process. British Columbia lists only four species under the *Wildlife Act*; the Vancouver Island Marmot, American White Pelican, and Burrowing Owl as endangered, and the Sea Otter as threatened. Scientists at the province's Conservation Data Centre have identified more than 1400 species as being at risk.<sup>42</sup> The *Forest and Range Practices Act* lists an additional 35 vertebrate species and provides some protection in areas with forestry and range activities but these are either subject to a requirement that protections not “unduly impact timber supply” or subject to a one-percent impact on the timber harvest land-base. British Columbia has compiled colour based policy lists (red are the legally protected species lists, expatriated species or candidates for such designation, blue are species not immediately threatened but of concern, the yellow is all other species) but no protection arises from such listing. The *Wildlife Amendment Act, 2004*, has not received royal assent but would offer protection to species and residence but not habitat. The *Wildlife Amendment Act, 2004* does not require listing based on science. The Act, proclaimed in the spring of 2004, was to come into force through the passing of regulations identifying species at risk; however, none have been passed.

#### ALBERTA

Alberta has no stand-alone species at risk legislation but does have provisions under its *Wildlife Act*. Alberta has 13 species<sup>43</sup> designated as threatened or endangered under the *Wildlife Act*, significantly less than the 40 species listed in Alberta by COSEWIC. The Alberta government receives recommendations on listing from the Endangered Species Conservation

and its scientific arm, the Scientific Subcommittee, both created under the *Wildlife Act* in 1998. Alberta has been criticised for ignoring the recommendations of its own experts.<sup>44</sup>

## ONTARIO

The Ontario *Endangered Species Act* (the “OESA”) came into effect in 1971. The legislation is implemented by the Ontario Ministry of Natural Resources Committee on the Status of Species at Risk in Ontario (“COSSARO”), which includes non-MNR representation. The purpose of this committee is to ensure a science-based approach to provincial status evaluations conducted for Ontario species. However species listed by CASSARO do not automatically get regulatory protection under the OESA. Forty species are protected under the OESA; an additional 77 have been listed by CASSARO as endangered or threatened but have no regulatory protection.

## QUEBEC

Quebec compiled a list of threatened or vulnerable fauna and flora that are likely to be protected; this list includes 374 species of vascular plants and 76 species or populations of vertebrate wildlife found in Québec. However, the *Loi sur les espèces menacées ou vulnérables*, adopted in 1989, only protects 18 animal and 19 plant species. There is an independent committee that makes recommendations on which species to list but the actual listing is left up to the government.

## NEW BRUNSWICK

The New Brunswick *Endangered Species Act* (the “NBESA”) was enacted in 1974 and amended in 1996. An advisory committee has produced a list of approximately 100 species at risk, but only 16 of these species have protection under the law.<sup>45</sup> According to Nature Canada no species have been listed under the NBESA since 1996.<sup>46</sup>

## 4. Do laws and policies prohibit harming legally listed species at risk?

Jurisdiction	1995	2005
Federal	No	Yes
British Columbia	Yes	Yes
Alberta	Yes	Yes
Ontario	Yes	Yes
Quebec	Yes	Yes
New Brunswick	Yes	Yes

## FEDERAL

Under the federal *Species at Risk Act* (“SARA”) a person shall not “kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species” or “damage or destroy the residence of one or more individuals of a wildlife species that is listed as an endangered species or a threatened species”.

However, the protection offered by SARA is limited in that it only applies to migratory birds, aquatic species and terrestrial species found on federal land (e.g. National Parks, Reserves, Defence Bases, Airports etc...).

The *Migratory Birds Convention Act* provides some protection to migratory birds and their nests and the *Fisheries Act* protects fish and fish habitat.

## BRITISH COLUMBIA

The British Columbia *Wildlife Act* prohibits the “killing, trading, trafficking and transport” of provincially listed endangered species of which there are only four.

## ALBERTA

The Alberta *Wildlife Act* protects nests and dens of listed endangered and threatened species and includes penalties for killing or trafficking in endangered animals.

## ONTARIO

Under the Ontario *Endangered Species Act* it is illegal to wilfully “kill, injure, interfere with or take or attempt to kill, injure, interfere with or take any species of fauna or flora.” *The Fish and Wildlife Conservation Act* offers additional protection to some species.

## QUEBEC

The Quebec *Act Respecting Threatened or Vulnerable Species (Loi sur les espèces menacées ou vulnérables)* protects listed plant species and states that, “[N]o person may have any specimen of a threatened or vulnerable plant species or any of its parts, including its progeny, in his possession outside its natural environment, or harvest, exploit, mutilate, destroy, acquire, transfer, offer to transfer or genetically manipulate it.” Although fauna are listed under the law the only protection they get is under the *Act Respecting the Conservation and Development of Wildlife (Loi sur la conservation et la mise en valeur de la fauna)*, which also establishes the provinces hunting and fishing rules.

## NEW BRUNSWICK

The New Brunswick *Endangered Species Act*, as amended in 1996, extends protection to critical habitat however; critical habitat is not defined nor listed under the act. In New Brunswick no person shall:

- (a) *possess a member or any part of a member of an endangered species or regionally endangered species,*
- (b) *wilfully or knowingly kill, injure, disturb or interfere with a member or any part of a member of an endangered species or regionally endangered species,*
- (c) *wilfully or knowingly attempt to kill, injure, disturb or interfere with a member or any part of a member of an endangered species or regionally endangered species,*

(d) *wilfully or knowingly destroy, disturb or interfere with the nest, nest shelter or den of a member of an endangered species of fauna or regionally endangered species of fauna,*

(e) *wilfully or knowingly attempt to destroy, disturb or interfere with the nest, nest shelter or den of a member of an endangered species of fauna or regionally endangered species of fauna,*

(f) *wilfully or knowingly destroy, disturb or interfere with the critical habitat of a member of an endangered species or regionally endangered species, or*

(g) *wilfully or knowingly attempt to destroy, disturb or interfere with the critical habitat of a member of an endangered species or regionally endangered species.*

### 5. Do laws and policies require recovery measures within a fixed timeframe including identification and protection of species at risk recovery habitat?

Jurisdiction	1995	2005
Federal	No	Somewhat
British Columbia	No	No
Alberta	No	No
Ontario	No	No
Quebec	No	No
New Brunswick	No	No

## FEDERAL

The federal *Species at Risk Act* (“SARA”) requires the identification but not the protection of recovery habitat through recovery plans within three years after the listing of an endangered species, and within four years after listing of a threatened species. For a species of “special concern” a management plan for the species must be prepared within five years of the listing. After the Committee on the Status of Endangered Wildlife in Canada (“COSEWIC”) lists a species, additional delays in the government listing decision (regulatory listing) beyond the nine months allowed under SARA add to the overall period. Only residences of endangered and threatened species are

protected under SARA, habitat including critical habitat is not protected, unless identified in a recovery strategy (however, there is no mandatory obligation for recovery strategies to do so). The *Accord for the Protection of Species at Risk*<sup>47</sup> (the “Accord”) was signed by all provinces, territories and the federal government in 1996 and requires provinces to draft recovery plans for endangered and threatened species within 1 and 2 years respectively of being listed by COSEWIC. Under the Accord, federal, provincial and territorial governments agreed to coordinate activities by creating the Canadian Endangered Species Conservation Council. The Council is composed of Federal Ministers of Environment, Fisheries and Oceans, and Heritage and the provincial and territorial ministers with responsibilities for wildlife species.

Recovery strategies for national species at risk are administered by a joint federal, provincial, territorial program under the Recovery of Nationally Endangered Wildlife Program (“RENEW”).

## BRITISH COLUMBIA

Under amendments made in 2004 to the *BC Wildlife Act* cabinet provides limited opportunities to identify recovery habitat.<sup>48</sup> Two provincial plans have been adopted to date: Mountain Caribou Recovery Strategy and the North Cascades Grizzly Bear Recovery Plan; however these have no legal status.

Under the Recovery of Nationally Endangered Wildlife Program (“RENEW”) program, national recovery plans have been developed for the Vancouver Island Marmot, Wood Bison, Burrowing Owl, Marbled Murrelet and Peregrine Falcon. However, a recent decision by the BC government's Forest Practices Board has found that there is a “systemic failure in government policy to protect threatened species such as marbled murrelets on crown forest lands.” According to a media release from the Board “[c]urrent planning efforts are being led by industry rather than government, and no wildlife habitat areas have been approved to date. The end result is that threatened species such as the marbled murrelet are falling through the cracks, with logging continuing in sensitive areas under plans approved by government agencies.”<sup>49</sup> An earlier

report concerning old-growth dependent mountain caribou reached similar conclusions.<sup>50</sup>

## ALBERTA

Alberta law allows for but does not require recovery plans. Only three recovery plans have been completed and approved under the Federal Provincial Territorial RENEW program. A caribou recovery team update was released in July 2005, however contrary to the recommendations in the Alberta woodland caribou recovery plan, the Alberta government has refused to put a moratorium on new industrial developments within any of the ranges of this threatened species.

## ONTARIO

There is no mention of recovery plans in the Ontario *Endangered Species Act*. Provincial recovery planning generally follows federal guidelines. According to an Ontario Ministry of Natural Resources, there are currently 69 recovery teams; eight for provincially listed species that are not listed federally and 61 national teams. The teams cover a total of 88 species because some are multispecies ecosystem recovery teams. Of the 61 national recovery teams that included species in Ontario, 35 are lead or co-lead by Ontario. Provincial recovery programs are handled by Ministry of Natural Resources and according to Ontario Nature, recovery plans that are underway include eastern Massasauga rattlesnake, the Blanchard's cricket frog, the eastern spiny softshell turtle, blue racer snake, several fish species and numerous plant species.<sup>51</sup>

The Sydenham ecosystem recovery plan has been finalized but is not considered to comply with SARA.<sup>52</sup>

The *Provincial Planning Act*, which applies to municipalities, prohibits development in significant habitat of a provincially regulated endangered or threatened species.

## QUEBEC

There is no legal requirement to produce recovery plans under Quebec law. According to Nature Canada<sup>53</sup>, 10 recovery plans for nine species (two plans are for different populations of Caribou) have been produced for provincially listed species but only a few have been implemented.

Quebec has administrative agreements that allow for voluntary protection of three listed raptors and one turtle in the province's forest management operations.

## NEW BRUNSWICK

Although there is no legal requirement to produce recovery plans in New Brunswick, some recovery efforts have been under way at the policy level. There is a national recovery plan for the piping plover and provincially listed species such as furbish's lousewort. However, New Brunswick gives priority for recovery planning to endangered species that have both provincial and national status.

According to the Ministry of Natural Resources, there are three provincial recoveries plans in the works (two of the species are also listed nationally) but no recovery plans have been approved yet: pinedrops, maritime ringlet butterfly, furbish's lousewort. Provincial recovery plans for species also listed under SARA will be "rolled up" into a national recovery plan upon completion of the provincial plan.<sup>54</sup>

### 6. Do laws and policies require multi-species and ecosystem recovery where appropriate?

Jurisdiction	1995	2005
Federal	No	Somewhat
British Columbia	No	No
Alberta	No	No
Ontario	No	No
Quebec	No	No
New Brunswick	No	No

## FEDERAL

The *Species at Risk Act* ("SARA") allows for multispecies ecosystem recovery strategies if deemed appropriate by the appropriate minister. Only one such plan has been developed to date, for the Sydenham River in southwestern Ontario.

## BRITISH COLUMBIA, ALBERTA, QUEBEC, AND NEW BRUNSWICK

These provinces have no law or policy on ecosystem recovery planning.

## ONTARIO

Ontario has no law or policy on ecosystem recovery planning. However there is one multispecies ecosystem recovery plan in Ontario conducted through the national program under SARA for the Sydenham River but is not considered to comply with SARA.<sup>55</sup>

### 7. Do laws and policies require monitoring of species population levels and distribution and recovery plans for species that no longer occupy certain areas of their former range?

Jurisdiction	1995	2005
Federal	No	Somewhat
British Columbia	No	No
Alberta	No	No
Ontario	No	No
Quebec	No	No
New Brunswick	No	No

## FEDERAL

"Wild Species 2000: the General Status of Species in Canada" was written by Canadian Endangered Species Conservation Council<sup>56</sup> and examines species at risk and discusses species distribution. The Wild Species 2000 report defined 'rapid decline' of a species as a decrease of 50% over the last 20 years or six generations, whichever is longer, and 'decline' of a species as a decrease of 20% over same time period.

The *Species at Risk Act* (the "SARA") recognizes the concept of former ranges and defines habitat to include where species "formerly occurred." Recovery strategies must identify "critical habitat" which is not defined as including former range. When existing or "surviving" habitat is considered inadequate for species recovery the recovery strategy may look at expansion in former ranges. For example the recovery plan summary for the Acadian Flycatcher and Hooded Warbler, two birds found in the Carolinian forests of Southwestern Ontario, describes a strategy for recovery which includes "identification, protection, expansion, and appropriate management of important breeding habitat."

However, in the case of the Vancouver Island Marmot, a species that has been impacted by logging and forest fragmentation, historical habitat has been identified but the recovery strategy concludes, “additional habitat protection or habitat manipulation is not required.”

### BRITISH COLUMBIA

There is no legal requirement regarding monitoring of population distributions or recovery in former ranges. Sometimes policy will identify former ranges but have not required measures for recovery. For example, Vancouver island marmot recovery strategy defines areas in which they have declined but concludes that additional habitat protection or manipulation is not required. Lastly, policy for species such as the spotted owls, which prioritizes logging of habitat for forest-dependent species, or which arbitrarily reduces the area managed for endangered species to less than their historic range, effectively precludes reintroduction into the historic landscape.

### ALBERTA

There is no legal requirement regarding monitoring of population distributions or recovery in former ranges. Some of the 15 recovery teams in Alberta have looked at trends across the province (i.e. piping plover) under the federal recovery strategies.

### ONTARIO

There is no legal requirement for monitoring of population distributions or recovery in former ranges. However according to a spokesperson for the Ontario Ministry of Natural Resources, recovery strategies may address both survival and recovery habitat, the later referring to former range. The only finalized provincial recovery plan is the Ontario Tallgrass Savannah recovery plan.

### QUEBEC

A review of some of the summaries of action plans for endangered and threatened species listed under Quebec law shows that in some cases adequate measures are being taken to re-establish historical habitat, such as for the peregrine falcon. However, with other species, such as the woodland caribou, the recovery plan (Gaspesie population) does not seek to re-establish the caribou in its former habitat.

### NEW BRUNSWICK

The national strategy for species such as the piping plover, which is listed both federally and provincially, includes a goal that there be no net loss of habitat due to human activity. To prevent further decline the strategy states that “agencies will give the highest priority to management actions that will protect the species, its key nesting areas and associated habitat,” but there is no mention of recovery in former ranges.

Three recovery plans underway include actions regarding recovery in historical ranges.<sup>57</sup>

## Summary of Endangered Species Law and Policy Findings

Even with all the problems of the federal *Species at Risk Act*, many of which are discussed above, and its limited jurisdiction, all five provincial endangered species laws examined are weaker. The federal *Species at Risk Act* receives a score of 5 out of 10 based on the five species at risk law and policy questions examined. All five provinces ranked poorly on provincial endangered species laws and policies. Although not analysed in this report, Nova Scotia it is widely considered to have the strongest provincial endangered species act because it is the only province that has mandatory scientific-listing of endangered species.<sup>58</sup>

### Summary of Provincial Scores

British Columbia	Alberta	Ontario	Quebec	New Brunswick
2 out of 10	2 out of 10	2 out of 10	2 out of 10	2 out of 10

## Parks and Protected Areas Specific Questions (8-11)

Note: In light of David Boyd’s excellent review on Parks and protected areas law and policy from 2001 we are limiting our research to the examination of four key questions with respect to parks law and policy. Based on our experience and the experience of our many clients, these are key legal and policy challenges that threatening the ecological integrity of our National and Provincial Parks. We suggest readers that want a more thorough analysis of this issue should refer to the report *Wild By Law* and the book *Unnatural Law*, both by David Boyd.

### 8. Do laws and policies mandate conservation and ecological integrity as top priority?

Jurisdiction	1995	2005
Federal	No	Somewhat
British Columbia	No	No
Alberta	No	No
Ontario	No	Somewhat
Quebec	?	Yes
New Brunswick	No	No

#### FEDERAL

The 2000 enacted *Canada National Park Act* states that maintaining ecological integrity shall be the top priority in all aspects of parks management. However, the primacy of “ecological integrity” was tested in a legal case challenging the construction of a winter road through Wood Buffalo National Park and failed. The judge found that it was, “reasonably open for the Minister to place the interest of the people directly affected by the management of the park above the first priority given to ecological integrity where impairment to ecological integrity could be minimized... ”<sup>59</sup>

#### BRITISH COLUMBIA

The British Columbia *Parks Act* enacted in 1996 does not make the preservation of ecological integrity a top priority. In section 3 of the Act, responsibility for “wildlife and its habitats in parks and recreation areas” is but one of six duties of the Minister with respect to park administration and management. The *Protected Areas of British Columbia Act* was enacted

in 2000 and lists parks and ecological reserves in schedules but does not strengthen protection.

#### ALBERTA

Section 3 of Alberta's *Provincial Parks Act* sets out three purposes to develop and maintain a provincial park, but only one of which relates to conservation as follows:

*Parks shall be developed and maintained:*  
 (a) for the conservation and management of flora and fauna,  
 (b) for the preservation of specified areas and objects in them that are of geological, cultural, ecological or other scientific interest, and  
 (c) to facilitate their use and enjoyment for outdoor recreation.

While both (a) and (b) include aspects of conservation and ecological preservation, neither are given top priority.

#### ONTARIO

Ontario's *Provincial Parks Act* at present does not place top priority on ecological integrity. However, Ontario has undertaken a comprehensive review of its laws, including extensive public consultation. Draft legislation has recently been proposed that puts ecological integrity as a top priority. However, the same draft legislation would allow logging to continue in Algonquin Park.

#### QUEBEC

Quebec’s protected areas legislation includes the *Parks Act* and the *Natural Heritage Conservation Act*, which replaced the *Ecological Reserves Act* in 2002. Under the Quebec *Parks Act*, a park is defined as:

*a national park whose primary purpose is to ensure the conservation and permanent protection of areas representative of the natural regions of Québec and of natural sites with outstanding features, in particular because of their biological diversity, while*

*providing the public with access to those areas or sites for educational or cross-country recreation purposes [emphasis added]*

Similarly, Quebec’s *Natural Heritage Conservation Act* defines its objective as:

*The object of this Act is to contribute to the objective of safeguarding the character, diversity and integrity of Québec's natural heritage through measures to protect its biological diversity and the life-sustaining elements of natural settings.*

The *Natural Heritage Conservation Act* also defines biodiversity reserves and ecological reserves as designated for the protection of biodiversity and threatened and endangered species.

Clearly the ecological integrity of parks is the top priority under Quebec law.

## NEW BRUNSWICK

The New Brunswick *Parks Act*, which dates back to 1982, fails to mention ecological integrity, conservation or preservation of biodiversity as priorities or even purposes of provincial parks. Under “purpose” in the *Parks Act*, a park is for the healthful enjoyment and education of New Brunswickers and all those that use the park.

## 9. Do laws and polices provide additional protection for ecological reserves and wilderness areas?

Jurisdiction	1995	2005
Federal	No	Somewhat
British Columbia	Yes	Yes
Alberta	No	No
Ontario	Somewhat	Somewhat
Quebec	Somewhat	Yes
New Brunswick	Yes	Yes

## FEDERAL

The *Canada National Parks Act* has provisions for the designation of wilderness areas within national

parks in which the Minister may not authorize any activity that may impair the wilderness character. Canada has no federal ecological reserve legislation.

## BRITISH COLUMBIA

In 1971, the Legislature gave unanimous approval to the *Ecological Reserve Act*. With this act, British Columbia became the first province in Canada to formalize and give permanent protected status to ecological reserves. Under the *Parks Act* a nature conservancy area is defined as “a roadless area, in a park or recreation area, retained in a natural condition for the preservation of its ecological environment and scenic features, and designated as a nature conservancy area under this Act.”

## ALBERTA

Alberta's *Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act* only offer protection to some areas. The report *Wild by Law* found that protection is strong for wilderness areas but weak for ecological reserves, where the law allows for mining, logging and petroleum and natural gas development.<sup>60</sup>

## ONTARIO

Ontario establishes conservation reserves under the *Public Lands Act*, regulation 805/94. Wilderness areas are established under the *Wilderness Areas Act* and one park, the *Kawartha Highlands Signature Site*, has its own act. Conservation reserves are provided additional protection such as the banning of all industrial activities including: mining, commercial forest harvest, hydro-electric power development, the extraction of aggregate and peat. In one case, mining was permitted in a conservation reserve, although after public pressure was brought to bear, the government backed down and refused to renew the permit.<sup>61</sup> The *Wilderness Areas Act*, which is primarily for protection and preservation of natural areas, allows for “the development or utilization of the natural resources in any wilderness area that is more than 260 hectares in size.”

## QUEBEC

The 2002 *Natural Heritage Conservation Act*, which replaced the *Ecological Reserves Act* (the “ERA”), provides strong protection for ecological reserves, biodiversity reserves and aquatic reserves. In biodiversity and aquatic reserves there is a prohibition on all industrial and commercial

activities, hydroelectric developments, exploration, occupation of land or vacation property, earth and construction works, hunting, trapping and fishing. Ecological reserves obtain almost the same level of protection except for select cases regarding pre-existing cottagers, the occupation of land and vacation property, construction works, and commercial activities are permitted. No person can enter an ecological reserve unless authorized under law. The ERA also requires the establishment of a conservation plan, which can set even more limitations.

## NEW BRUNSWICK

The New Brunswick *Ecological Reserves Act* (“N.B. ERA”), which dates back to the 1979, does supply strong protection for ecological reserves forbidding industrial activities and hunting. Ecological reserves, according to the N.B. ERA, are established for the following purposes listed below:

*3 The purpose of this Act is to reserve areas, for ecological purposes,*

*(a) that are suitable for scientific research and educational purposes and other aspects of the natural environment;*

*(b) that are representative examples of natural ecosystems within the Province;*

*(c) that serve as examples of ecosystems that have been modified by man and that offer an opportunity to study the recovery of the natural ecosystem from such modification;*

*(d) in which rare or endangered native plants and animals in their natural habitat may be preserved; and*

*(e) that contain unique and rare examples of botanical, zoological, pedological or geological phenomena.*

## 10. Do laws and policies prohibit industrial resource development in parks?

Jurisdiction	1995	2005
Federal	Somewhat	Somewhat
British Columbia	No	No
Alberta	No	No
Ontario	No	No
Quebec	Yes	Yes
New Brunswick	No	No

### FEDERAL

Industrial development is not explicitly prohibited under the *Canada National Parks Act* (“CNPA”). Regulations under the CNPA prohibit disposition or development of natural resources.

### BRITISH COLUMBIA

The *BC Parks Act* (“BCPA”) does not prohibit industrial activities; on the contrary, the BCPA has provisions that allow for resort tourism and oil and gas developments. Parks under the BCPA are given class numbers from 1 to 6. The class determines the type of development and activities that may occur in the park. Activities within the parks must not prevent or inhibit the use of the park for its designated purpose. Class 1 parks are protected in order to preserve its environment and ecology. Class 2 parks are designated for “preservation and presentation to the public of specific features of scientific, historic or scenic nature.” Classes 3, 4, 5 are aimed more towards recreational opportunities and Class 6 is for multipurpose parks.

In 2003, the province enacted Section 33 of the BCPA, significantly weakening it. It includes the following text:

**33 (1)** *Despite anything in this Act but subject to this section, an authorization, drilling licence, permit, lease or other right under the Petroleum and Natural Gas Act may be issued or granted to a person for purposes of exploration for, or development or production of, petroleum or natural gas in or from the subsurface of land within a park or recreation area.*

## ALBERTA

Alberta's *Provincial Parks Act* does not prevent industrial activities in provincial parks, natural areas or ecological reserves. The *Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act* protects only wilderness areas from industrial activities.

## ONTARIO

Ontario's *Provincial Parks Act* does not prohibit industrial resource activities in provincial parks. Logging is conducted in Algonquin Park; mining and prospecting is permitted in 23 parks under a regulation. In one case, mining was permitted in a conservation reserve, although after public pressure was brought to bear the government backed down and refused to renew the permit.<sup>62</sup> Mining claims that overlap with new parks established under the 'Lands for Life' land use planning process have been a point of conflict in Ontario and the Ministry of Natural Resources has begun to consult the public on a proposed land use planning process to deal with these issues.

The Ministry of Natural Resources has recently proposed draft legislation which would prohibit industrial activities in parks except for the case of Algonquin Park in which logging would be permitted to continue.

## QUEBEC

The Quebec *Parks Act* prohibits industrial activity in parks. The 2002 *Natural Heritage Conservation Act* clearly prohibits industrial activities in parks, biodiversity, aquatic and ecological reserves.

## NEW BRUNSWICK

New Brunswick's *Parks Act* allows discretionary resource activity and other industrial activity within provincial parks. The *Ecological Reserves Act*, which was first enacted in the 1970s but was amended in the 1980s and early 90s, prohibits industrial resource activity.

## 11. Do laws and polices prohibit hunting and fishing in parks?

Jurisdiction	1995	2005
Federal	Yes	Yes
British Columbia	No	No
Alberta	Somewhat	Somewhat
Ontario	No	No
Quebec	Yes	Yes
New Brunswick	Yes	Yes

## FEDERAL

Hunting and fishing is prohibited in National Parks with a few exceptions.

## BRITISH COLUMBIA

Hunting is permitted in parks listed in a schedule under the *Park and Recreation Area Regulation* of the *Parks Act*. Fishing is permitted in parks.

## ALBERTA

Hunting and fishing activities are prohibited in ecological reserves and wilderness areas only under the *Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act*.

## ONTARIO

Whether or not hunting and fishing is applied is determined through parks management planning. Hunting and fishing is permitted in some parks and portions of parks in Ontario according to regulations made under the *Fish and Wildlife Conservation Act*. Hunting and fishing is also permitted in conservation reserves.

## QUEBEC

The Quebec *Parks Act* prohibits hunting and trapping in parks. The 2002 *Natural Heritage Conservation Act* clearly prohibits hunting, fishing and trapping in parks, biodiversity, aquatic and ecological reserves.

## NEW BRUNSWICK

The New Brunswick *Parks Act* prohibits hunting, fishing and trapping in parks in New Brunswick, “[n]o person shall hunt, trap, take, snare, injure or destroy any game animal, fur-bearing animal or other

wild animal or any game bird or other wild bird within the limits of a provincial park.” The *Ecological Reserves Act*, which was first enacted in the 1970s but was amended in the 1980s and early 90s, prohibits hunting, fishing and trapping.

### Summary of Parks and Protected Area Law and Policy Findings

Of the five provinces, Quebec by far has the strongest parks protection laws scoring an 8 out of 8. This rating is somewhat ironic because Quebec actually has a very low percentage of its land base protected in parks compared to many other provinces.<sup>63</sup> However, this report compares laws and policies that protect existing parks but does not address issues such as the adequacy of the existing parks system in terms of protecting biodiversity, or the state of policy with respect to the proposal and generation of new parks and protected areas.

Quebec ranked higher than the federal government in terms of the questions poses on parks and protected areas law and policy, which received a score of 5 out of 8. Alberta has the worst parks protection laws and policies of the five provinces assessed receiving a score of 1 out of 8. Ontario has introduced a new Act into the legislature, which would improve its score if passed into law. Beyond the scope of this study is the question as to whether a jurisdiction has sufficient parks and protected areas to meet biodiversity needs and whether or not the laws are being enforced.

#### Summary of Provincial Scores

British Columbia	Alberta	Ontario	Quebec	New Brunswick
2 out of 8	1 out of 8	2 out of 8	8 out of 8	4 out of 8

## Managed Forest Baseline Questions (12-20)

Amendments to Canada’s Constitution in 1982 made it clear that the provinces are primarily responsible for forest management<sup>64</sup>, therefore, the federal government is not included in the analysis with respect to forest management law and policy.

### 12. Do annual allowable cut (“AAC”) calculations account fully for conservation needs (are they ecosystem based)?

Jurisdiction	1995	2005
British Columbia	No	No
Alberta	No	No
Ontario	No	No
Quebec	No	No
New Brunswick	No	No

### BRITISH COLUMBIA

Note: British Columbia forestry law is a transitional period. The *Forest and Range Practices Act* (“FRPA”) and its regulations took effect on Jan. 31, 2004. Any activities already approved under the *Forest Practices Code* may continue and are governed by the *Forest Practices Code* and its regulations. After the transition period ends, a licensee may only submit an operational plan under the FRPA and once the plan is approved, the licensee will operate under *FRPA*.

In British Columbia under Section 7 of the *Forest Act* the chief forester sets the AAC at least once every five years for more than 70 management units (tree farm license and timber supply areas). The chief forester must consider many factors including: the

rate of timber production that can be sustained, implications of alternative rates of harvesting, economic and social objects, abnormal infestations and devastations. Clearly absent in the factors to consider in setting the AAC, are biodiversity or wildlife habitat needs.

The new FRPA and the *Forest Planning and Practices Regulation*, which came into force in 2004, sets objectives for soil, riparian areas, wildlife and biodiversity but qualifies each objective set by government with the statement “without unduly reducing the supply of timber from British Columbia's forests.”

Timber supply impact caps are referred to both in the FRPA and in the regulations. Furthermore, the *Government Actions Regulation* limits the ability of the Minister of the Environment to take action to protect the environment. Basically, action can be taken as long as it does not affect timber supply; section 2 (b) states, “*the order would not unduly reduce the supply of timber from British Columbia's forests, and...* ”.

In addition, policies set minimum impacts on wood supply due to biodiversity protective measures. The Identified Wildlife Management Strategy, which allows for designated areas to be withheld from logging, may have no more than a 1% impact on timber supply. The Spotted Owl Management Plan may have no more than a 10% impact on timber supply.

In 1996 an inventory audit found that timber supply had been overestimated by 23% in the Fraser Timber Supply Area. Other similar overestimates were found in other areas of British Columbia in which bloated inaccurate inventories lead to too high AACs and thus overcutting. Since then AACs in the south have come down but have increased in the highly biologically diverse north.<sup>65</sup>

In 2002, the *Forest Act* was amended to enable trials to establish AACs based on harvested area (hectares per year) rather than harvested volume (cubic metres per year). The intent of the trials is to determine if area-based AACs can provide a viable alternative for regulating harvest levels in British Columbia.

## ALBERTA

Under the *Albert Forest Act* the Minister of Sustainable Resource Development sets the AAC for each unit.

The province has developed guidelines for determining the annual allowable cut. Alberta claims that areas classified as non-productive for wood fibre (i.e., muskegs, bushland, grass areas, open meadows), streamside buffers, wildlife habitat and recreation areas protected areas are identified and withdrawn from harvesting. However, conservation groups report that clear-cut logging has removed large areas of mature and old-growth coniferous forests, the preferred habitat of many caribou herd a provincially listed endangered species and nationally listed threatened species. Furthermore, most of the caribou range in Alberta has been committed to industrial forestry through Forest Management Agreements or Quota Licenses.<sup>66</sup>

Back in the early 1990s Alberta ran into problems with overestimating wood supply caused in part by doubtful inventories, for example, an expert panel found that in at least one sampling region, “inventory types appear too high by as much as 30 per cent.”<sup>67</sup> Under the *Forest Act* in 1999 companies were put in charge of conducting updated inventories. In a 2001 publication, Alberta claims the rate for the productive forest in Alberta was calculated at 44 million cubic metres. The approved annual cut in 2000 was 23.2 million cubic metres while only approximately 17 million cubic metres was harvested the year before<sup>68</sup> which is of concern to the province who wants to see this gap shrink. However, the Canadian Parks and Wilderness Society (“CPAWs”) found that there is no requirements for incorporating either anticipated fire or clearing by the petroleum sector in timber supply analyses and that no companies included losses due to fire into their timber supply modelling and only few included loss due to clearing for the petroleum sector.<sup>69</sup>

Alberta proposed new forest management planning standards in June of 2005; the new standard is based on the Canadian Standard Association’s Sustainable Forest Management Standard (“CSA-SFM”) which has been criticised by conservation groups as certifying “business as usual” practices. Forest operations conducted under CSA certification were found to have allowed environmental damage.<sup>70</sup>

## ONTARIO

The *Crown Forest Sustainability Act* (the “CFSA”) requires that forest management plans be prepared for each designated management unit in accordance with the Forest Management Planning Manual (“FMPM”) and harvest limits are set in the Forest Management Plan. Thus in Ontario, harvest levels are not determined at a provincial or regional level. They are determined at a local level during forest management planning. Government foresters in Ontario use the Strategic Forest Management Model (“SFMM”) which conservation groups claim can be tweaked to help meet timber supply objectives<sup>71</sup> by playing with the input variables designed to meet wildlife habitat requirements, riparian buffer zones and other conservation requirements.

The SFMM is not a spatially explicit model, which can present some difficulties in terms of incorporating wildlife habitat, such as marten core habitat, into operational planning. According to Wildlands League, the AAC projections are lowered through area deferrals for reasons such as wildlife, but protection of deferred areas is only guaranteed by operational harvest block layout. A recent report on the Whiskey Jack forest<sup>72</sup> by the Wildlands League took a close look at the predictions based on the SFMM model and found that the aspatial nature of the model leads to overestimates in available wood. Furthermore, inputs are developed by the planning team based on the set of objectives for the plan which they also develop. There is always a trade-off with mill fibre demand driving the determination.

A report titled *Provincial Wood Supply Strategy* published in 2004 by the MNR discusses pending wood supply shortages in Ontario’s boreal forest due to an “accelerated rate of harvest since the 1970s” resulting in very old forests and very young forests, but a scarcity of stands in the 20-60 year age range. The report also discusses the need for more inventories and forest succession information across the province which managers use for wood supply estimates and AAC calculations.<sup>73</sup> As a result the Ontario Ministry of Natural Resources published a best practices guide to wood supply modeling. The Environmental Commissioner of Ontario in his 2004-2005 annual report found that, “the increased emphasis in the Wood Supply Strategy on using mill demand information to set wood supply objectives

and potentially influencing available harvest level in forest management plans raises doubts as to MNR’s assurance that wood supply is determined by an assessment of what the forest can sustainably provide.”<sup>74</sup>

## QUEBEC

Under the *Forest Act* in Quebec (the “QFA”) the AAC is determined by the Minister using the method described in the forest management manual. Although the QFA defines the AAC as the “maximum volume of timber of a particular species or group of species that may be harvested annually in perpetuity from a given management unit without reducing the productive capacity of the forest environment.” The ACC determination in the manual involves three main areas of analysis: biodiversity, forestry resource and socioeconomic considerations.

In October 2003, the Quebec government set up the Commission d’étude sur la gestion de la forêt publique québécoise (Commission for the study of Quebec public forest management), also known as the Coulombe Commission. The Coulombe Commission’s report strongly criticized Quebec’s AAC calculation method and found that the method has resulted in over-harvesting in the province and recommended major reforms with respect to AAC calculations as well as reforms of the entire Québec forestry regime.<sup>75</sup> In light of the Coulombe Commission’s recommendations, the province has amended Bill 71, a bill that was amending the QFA, and passed it urgently. Bill 71 included a 20% AAC reduction between the years 2005 and 2008, and up to a 25% AAC reduction in the James Bay Territory.

## NEW BRUNSWICK

In 1982 New Brunswick proclaimed the *Crown Lands and Forests Act* (the “CLFA”). The CLFA made provision for the establishment of crown timber licences and the assignment of management responsibility for those licences to the forest industry. In New Brunswick a license holder must own or control a processing mill and process the wood in province. The CLFA states that a “permittee” is a license holder entitled to: “a prescribed allocation of annual allowable cut of timber on Crown Lands...” The province claims a “sustainable harvest level is calculated for each license through a detailed wood supply analysis. The analysis incorporates a range of

scientific data relating to the management of timber and non-timber objectives.”<sup>76</sup>

From the September 2004 report by the Legislative Assembly Select Committee on Wood Supply titled *Final Report on Wood Supply in New Brunswick*, the AAC is described as being governed in part by the size of the inventory stocks from which the harvest is drawn and by the rate at which those stocks are replenished by growth of the forest. Like other jurisdictions - namely BC, Quebec, and Ontario - New Brunswick has, “forecast a future low point in inventory stocks to occur around 2030.”<sup>77</sup>

Like Quebec and Ontario, pending or eminent wood supply shortages have forced New Brunswick to reassess their forest management practices. A report by Finnish consultants Jaakko Pöyry commissioned by the New Brunswick Forest Products Association suggested that harvesting could be doubled without negative impacts on biodiversity by shifting to more intensive forest operations like tree farms.

The Committee, after extensive consultation and public outcry firmly disagreed with the Jaakko Pöyry report saying it is not a “go forward document” and that “it does not fully support all of the Jaakko Pöyry recommendations, nor does it support the doubling scenario put forth in its report.” The committee instead endorsed management the forests for greater diversity.

According to a 2005 standard and objective guide, the AAC is being maintained at 2002 levels from 2007 to 2012.<sup>78</sup> However this level of AAC, approximately 11 million cubic meters, is still much greater than the AAC of the early 1990s which was about 9 million cubic meters, given the province is suppose to be running out of wood. Conservationists say the New Brunswick’s AAC is still 35% too high based on natural rates of growth.<sup>79</sup>

### 13. Do laws and policies require environmental impact assessments prior to commencement of site operations?

Jurisdiction	1995	2005
British Columbia	Somewhat	Somewhat
Alberta	Somewhat	Somewhat
Ontario	Yes	Somewhat
Quebec	Somewhat	Somewhat
New Brunswick	Somewhat	Somewhat

#### BRITISH COLUMBIA

British Columbia's *Environmental Assessment Act* (the “B.C. EAA”) came into force in 2002 and applies to projects that are designated as “reviewable” by the *Reviewable Projects Regulation*. Forest operations are not covered by the B.C. EAA or the regulation but forest products are found in the regulations.

The *Environment Management Act* grants the Minister of Water, Land and Air Protection the discretion to act in relation to potential detrimental environmental impacts and emergencies.

*Operational and Site Planning Regulation* of the *Forest Practices Code of BC Act* outlines the content for Forest Development Plans (“FDP”), however, there are no details provided regarding environmental considerations that must be looked at in preparing the FDP. The Code contains the requirement that logging plans adequately manage and conserve forest resources but decisions concerning spotted owl have determined that this will not prevent extirpation of a species by logging its habitat. In any event, the provisions are soon to be replaced by the *Forest and Range Practices Act*.

The *Forest and Range Practices Act* represents a repeal of prescriptive forestry laws, providing licensees with the discretion to determine how logging will occur. The Act provides fewer details on the content of FDP, including requiring only approximate locations of cut blocks and roads. The *Forest Planning and Practices Regulation* sets objectives for logging such as requiring conservation of sufficient wildlife habitat for the survival of

species at risk, regionally important wildlife and winter survival of specified ungulates; however, any action cannot unduly reduce the supply of timber.<sup>80</sup>

*Forest Development Plan Guidebook* sets out a more detailed approach to preparing the FDP however there is no obligation to apply its approach. Prior to harvesting, forest companies must develop a Forest Stewardship Plan specifying how forest values will be conserved, and identifying, on a map, the general areas where harvesting is planned; however, the detail of information provides little direct information on the nature and extent of proposed logging.

## ALBERTA

Alberta's *Environmental Protection and Enhancement Act* (the "EPEA") enacted in 2003 regulates the process for environmental assessments and approvals. The 1993 *Environmental Assessment (Mandatory and Exempted Activities) Regulation* outlines the activities that require an environmental assessment to be completed, however the EPEA also gives the Director discretion to order an environmental assessment for activities based on their location, size and public concern. Forest management operations are neither required nor exempted from the Regulation outlining activities necessitating an environmental assessment.

The *Alberta Natural Resources Conservation Board Act* (the "NRCBA") provides for an impartial process to review projects that will or may affect the natural resources of Alberta to determine whether, in the Natural Resource Conservation Board's opinion, the projects are in the public interest. The Board must balance the economic effects of a project with its environmental impact. The NRCBA only applies to projects that are defined as "reviewable projects" which includes forest industry projects.

The *Alberta Timber Harvest Planning and Operating Ground Rules, 1994* outlines the requirements for a General Development Plan ("GDP")<sup>81</sup> and an Annual Operation Plan ("AOP"). The AOP describes how timber harvesting will be implemented in a timber disposition. It describes how, where and when the operation will develop roads, harvest timber, integrate operations with other resource users, mitigate the impact of logging, reclaim disturbed sites, and reforest harvest areas in the disposition. Stand operators may be required to describe the

potential impact of logging on soil, wildlife, fisheries, watershed, and other resources of concern. They may also be required to consider alternative harvesting methods on complex or sensitive sites.

## ONTARIO

Forest management operations were covered under the *Timber Class Environmental Assessment* approved in 1994 for a 9-year period. In 2003, the government released the Declaration Order regarding Ministry of Natural Resource's *Class Environmental Assessment Approval for Forest Management on Crown Lands in Ontario*. This Order extends and amends the 1994 *Environmental Assessment Act* (the "OEAA") approval to allow MNR to continue forest management planning on Crown lands in Ontario, subject to conditions. Bump up request to a full individual environmental assessment can be made for individual forest management unit operating plans but are rarely approved. Conservation groups have criticized the declaration order because it does not allow for Ministry of Environment oversight and does not expire.

Pursuant to the OEAA, significant public projects proposed by the provincial and municipal governments, and in a few cases, environmentally sensitive private projects are subject to an assessment of their environmental impacts or effects. The application of the process is subject to the discretion of the Minister of the Environment, who must provide an approval before a project or undertaking may proceed. In some cases, a public project, which is caught by the legislation, may be exempted by order of the Minister. In other cases, private projects, which would normally not be subject to the OEAA, may be designated by the Minister after having been asked to do so by members of the public.

The *Crown Forest Sustainability Act, 1994* requires a forest management plan be prepared for every management unit.<sup>82</sup> The plan, prepared in accordance with the *Forest Management Planning Manual* (the "Manual") must describe the forest management objectives and strategies applicable to the Forest Management Unit ("FMU"), and have regard to the plant life, animal life, water, soil, air and social and economic values, including recreational values and heritage values, of the management unit.<sup>83</sup>

The Manual also requires the plan to identify fish and wildlife resources in the Forest Management Unit (“FMU”). The plan must also describe the management objectives and indicators and a conclusion on forest sustainability and documentation as to how the forest management plan has regard for plant life, animal life, water, soil, air and social and economic values, including recreational and heritage values.<sup>84</sup>

## QUEBEC

The Quebec *Environmental Quality Act* (the “QEQA”) and the *Environmental Impact Assessment and Review Regulation* contains Quebec’s environmental assessment process. There are regulations under the QEQA that specifically outline the environmental assessment process for the northern and northeastern areas of Quebec.

Forest management projects that are subject to the environmental assessment include: any road or branch of such road at least 25km in length which is intended for forestry operations for a period of at least 15 years; all wood, pulp and paper mills or other plants for the transformation or the treatment of forest products; and all land use projects which affect more than 65 km. Forestry projects that are exempt from an environmental assessment include forestry development when included in plans provided for in the *Forest Act* (chapter F-4.1) provided they were subject to public consultations.

The *Forest Act*, last amended in 1995, requires that “agreement holders” prepare a general forest management plan which specifies the various forest management activities the agreement holder intends to carry on to attain the annual yield or to promote the protection or development of forest resources.

## NEW BRUNSWICK

The Minister of the Department of the Environment and Local Government is responsible for administering the *Clean Environment Act*. Projects listed in Schedule A of the *Environmental Impact Assessment Regulation* (The “EIAR”) are required to undergo an environmental assessment which includes commercial processing or treatment of timber resources other than fuel wood, except maple sugareries, shingle mills and sawmills producing less

than one hundred thousand foot boards measure annually. There does not appear to be a mechanism that allows the Minister of the Environment and Local Development to designate projects to be subject to the EIAR.

The *Clean Environment Act* gives power to the Lieutenant Governor in Council to make regulations regarding Environmental Impact Assessments. Section 31.1(2)(g) gives authority to make regulations regarding the classification of undertakings, but there is no mention of class assessments.

A Forest Management Plan (“FMP”) is required by the *Crown Lands and Forests Act*. A FMP for a 25 year period (updated every 5 years) describes the manner in which the licensee will manage Crown Lands with respect to a variety of matters including fish and wildlife habitat and watershed protection. The FMP guides all forest-related activities and provides direction for the preparation of various site-specific wildlife habitat management plans.<sup>85</sup>

The Forest Management Manual<sup>86</sup> focuses on operational plans for several aspects of forest activities including the impacts on fish and wildlife habitat and watercourses.

### 14. Do laws and policies require management (with quantifiable habitat objectives) for a broad range of indicator species and species sensitive to forest practices?

Jurisdiction	1995	2005
British Columbia	No	No
Alberta	No	No
Ontario	No	Somewhat
Quebec	Somewhat	Somewhat
New Brunswick	No	Somewhat

## BRITISH COLUMBIA

Under the *Forest Practices Code*, the obligation for forest development plans to adequately manage and conserve forest resources provided a valuable “safety net” for ensuring sustainable forestry. This obligation will end when the *Code* is repealed at year end.

The *Forest and Range Practices Act* authorizes the Minister of Water, Land and Air Protection to establish regulations for ungulate winter ranges, wildlife habitat areas and general wildlife measures.

The *Forest Planning and Practices Regulation* lists the wildlife, biodiversity, riparian and fish habitat objectives but management is conducted, “without unduly reducing the supply of timber from British Columbia's forests.” In the 2004 enacted *Government Actions Regulation*, the same limitation is put on the government’s ability to make orders to protect wildlife and habitat, including regionally important wildlife, ungulate species, species at risk, community watersheds, streams and fisheries sensitive watersheds, clearly putting the delivery of wood supply ahead of environmental and conservation concerns.

Wildlife Habitat Areas (“WHAs”) are areas managed for selected species and plant communities that have been designated (or grandfathered) under the *Forest Practices Code* or the *Forest and Range Practices Act* as "Identified Wildlife". The term "Identified Wildlife" refers to species at risk and regionally important wildlife that the Minister of Water, Land and Air Protection, designates as requiring special management attention. Identified wildlife are managed through the establishment of WHAs and the implementation of general wildlife measures, or through other management practices. Species such as mountain caribou, mountain goat, grizzly bear, marbled murrelet, northern saw whet owl have approved wildlife habitat areas although many other known habitat areas have been rejected.

A wildlife habitat area does not necessarily excluding logging activity instead some considerations are made such as access control in a grizzly bear area or marbled murrelet (an endangered species) management may involve minimizing disturbance during breeding season and the retention of old growth trees in coastal areas for nesting. More

importantly, the ability to designate wildlife habitat areas is subject to two arbitrary caps – the requirement that such measures not unduly impact timber supply and the maximum 1% impact permitted by the Identified Wildlife Management Strategy. As discussed earlier, the Forest Practices Board has concluded that these measures will not assist with species conservation.

## ALBERTA

The Albert *Forest Act* does not contain any provision regarding the management of wildlife or biodiversity however logging companies must follow planning requirements to obtain approval. Under the *Alberta Timber Harvesting Ground Rules* (1994), a habitat biologist identifies and explains fish and wildlife zones that was be included in the forest management plan in which specific operating standard may apply. There are standards regarding fish habitat, in stream activities and requirements that fish migration be unimpeded, all of which would be required under the *Federal Fisheries Act* anyway. However, a target that 10% of the forest be managed as mature/overmature forest is only a guideline, and unmerchantable stands, buffers and areas not scheduled to be harvest can contribute to the 10%. There are guidelines regarding timing of operations in breeding and birthing areas and size and shape of cut blocks for distance to winter thermal cover. A standard ensures ungulate zones to be identified but the management of those zones is under a guideline. A standard requires that logging be implemented according to the provincial guidelines for timber harvesting in boreal caribou habitat but those guidelines do not prevent logging or require areas to be withdrawn from logging.

In 1998 the Alberta Government came out with the *Interim Forest Management Planning Manual* which is touted a guide to lead forest management planning toward sustainable forest management which Alberta was claiming to ‘embrace’. Alberta has recently release a proposed *Forest Management Planning Standard* for public comment, this standard will replace the interim standard and is based on the Canadian Standard Association Sustainable Forest Management System Standards which conservation groups have criticised for not requiring on the ground measures to protect biodiversity.

The Boreal Caribou Committee produced a 2001 industrial guideline to operations in caribou habitat in

Northern Alberta. The submission of a Caribou Protection Plan to the appropriate Land and Forest Division Office by October 15th of each year is a pre-requisite for operations within identified caribou ranges. Although there does not appear to be any measurable requirement regarding habitat protection, the only requirement is that operations not occur during caving period.

## ONTARIO

Forest management planning must be in compliance with the Ontario Forest Management Planning Manual and its affiliated guidelines. Compliance with the manual is required to obtain plan approval under the 1994 *Crown Forest Sustainability Act*. A forest management plan describes the forest management objectives and strategies applicable to the management unit and a Minister shall not approve a plan unless the Minister ensures the sustainability of the Crown forest, having regard to the plant life, animal life, water, soil, air and social and economic values, including recreational values and heritage values.

The plan is required to make a conclusion on forest sustainability, with sustainability defined as: “the long term Crown forest health [which is] the condition of forest ecosystem that sustains the ecosystems complexity while providing for the needs of the people of Ontario.”

Indicators and objectives cited in the manual to determine sustainability include: conservation of biological diversity, enhancing ecosystem condition and productivity, conserving soil and water resources and others.

Ontario is in the process of revising and replacing many of their forest management guides. The guides pertaining to wildlife management will be consolidated into landscape and site guides, which are forecast to be released in 2007.

At present Ontario has guides for Bald Eagle, Woodland Caribou, Marten Habitat, Pileated Woodpecker, White Tailed Deer, Golden Eagle, Bats, Habitat Guidelines for Wetland Birds, Cavity Nesting Birds, Forest Nesting Accipters, Buteos and Eagles, Wablers, Waterfowl, Osprey, Heronries, Peregrine Falcon, Fish Habitat and Moose Habitat.

Some guides like those for woodland caribou and marten, require large tracks of core old growth forest be retained and also sets limits on access roads. Others such as those for raptors require buffer zones around nests.

## QUEBEC

The *Regulation respecting standards of forest management for forests in the domain of the State* that replaced an older regulation in 1996, under the *Forest Act*, sets buffers around heronries and bears dens (seasonally) and ecological reserves and sites. In caribou calving, breeding and winter feeding habitat operators must “leave the vegetation intact” and logging must not be conducted in blocks larger than 50 hectares. Similar but smaller cut block size restrictions, which depend on forest type, exist for white tail deer.

Sierra Club reported that known occurrences of vulnerable and endangered species are located on a map by foresters when planning forest operations, and guidelines are set out for the protection of each species.<sup>87</sup>

## NEW BRUNSWICK

The fish and wildlife habitat section of the 2004 Interim Forest Management Manual covers the objectives, roles, responsibilities, standards, and requirements for the management and protection of fish and wildlife habitats at the operational level. Objectives and standards are described in the forest management planning section and in *A Vision for New Brunswick Forests: Goals and Objectives for Crown Land Management* (“Vision Report”).

Operational standards are defined for:

- Heron and Raptor Nest Tree Retention
- Watercourse Buffer Zones
- Forestry Operations in Old Spruce-Fir Habitat Areas
- Deer Wintering Area Management

Operational standards for the five old-forest wildlife habitat types, other than old spruce-fir, for which there are objectives, have not been defined.

In managing for deer winter habitat the New Brunswick Forest Management Manual limits

logging by requiring a minimum basal area (density of trees weighted according to trunk size) and crown closure and limiting the amount logged. In New Brunswick, each license is required to set aside specified areas of land to be maintained as deer habitat. Crown forest currently has more than 275,000 hectares of deer wintering areas.

Official standards for raptors nest were included in the Forest Management Manual in 2004, prior to 2004 only guidelines existed.<sup>88</sup> The Forest Management Planning manual requires buffer zones ranging between 15 to 100 meters, nesting season ‘no activity zones’ ranging from 100 to 200 meters and ‘no road zones’ ranging from 50 to 400 metres, all depending on species and nest type.

The Forest Management Planning Manual identifies 17 species that require and utilize only old spruce fir habitat: american marten, white-tailed deer, black-backed woodpecker, red-breasted nuthatch, red crossbill, white-winged crossbill, evening grosbeak, olive-sided flycatcher, boreal chickadee, winter wren, golden-crowned kinglet, ruby-crowned kinglet, solitary vireo, cape may warbler, blackburnian warbler, bay-breasted warbler and pine siskin. Old spruce –fir habitat is the only habitat type that is identified spatially (blocked) in forest management plans and that comes with specific planning and implementation standards related to timber harvesting. A minimum patch of 375 hectares is required. No more than 40 % of the hectares providing old spruce –fir habitat block can be harvested (partially or wholly) in a single management period. Limits are also set on basal area that can be removed and crown closure. There are requirements regarding retention of cavity trees and large woody debris. The provisions also prohibit harvesting in blocks where over mature balsam fir dominated stands on any site or mature and over mature spruce and fir dominated stands on poorly drained sites.

According to Conservation Council of New Brunswick (“CCNB”), before 1997 there were no provisions in place to maintain mature forest habitat. According to CCNB putting mature forest objectives in place in the Vision Report, and identifying wildlife species that depend on mature forest in 2003 were very important steps forward in the forest management planning process for Crown lands.

CCNB report titled, *Our Acadian Forest in Danger*,<sup>89</sup> concluded after a study of the forest diversity and wildlife habitat goals of over 1,000,000 hectares (ha) of crown land in the northern part of New Brunswick that:

1. *The classification system used by the Department of Natural Resources to define both the forest diversity and the habitat types in New Brunswick are not adequate to protect key features of the Acadian forest.*
2. *Current vegetation communities and habitat type targets are not being met. Thus forest diversity and wildlife habitat are currently not being maintained on Crown lands.*
3. *The targets that have been set for forest diversity and wildlife habitat by the Department of Natural Resources are often too low to properly maintain key components of the Acadian forest.*

**15. Do laws and policies require large areas (thousand of hectares) of contiguous core primarily mature and old forest habitat, be maintained (FSC sets goal of 20% for boreal)?**

Jurisdiction	1995	2005
British Columbia	No	No
Alberta	No	No
Ontario	No	Somewhat
Quebec	No	Somewhat
New Brunswick	?	Somewhat

**BRITISH COLUMBIA**

British Columbia has no law requiring contiguous or old growth forest. Although there is an order called the *Provincial Non-Spatial Old Growth Order*, which came into effect in 2004, “to contribute to conservation of biodiversity, licensee must maintain old forest,” however critics claim that the order limits rather than enhances the ability to ‘protect’ old growth because it contains only two categories of biodiversity protection – low/intermediate and high which are not relevant to many forested areas.

## ALBERTA

Alberta has no law on core or old growth forest, there is a guideline in the *Alberta Ground Rules* on mature forest setting a retention objective of 10%, but riparian areas and areas not scheduled for harvesting can contribute to that 10%. There is no requirement for large contiguous forest.

## ONTARIO

The *Forest Management Guidelines for the Provision of Marten Habitat* were finalized in 1996. Ontario requires forestry companies to apply the marten guidelines in the boreal forest. In the area of transition between the boreal forest and Great Lakes St. Lawrence forest, managers must make a choice between applying the marten or the pileated woodpecker guidelines. "Suitable marten habitat should be arranged in core habitat areas between 30 and 50 km<sup>2</sup> in size. A minimum of 75 percent of core habitat areas should be comprised of suitable stands." Partial harvesting can occur in as much as 30 percent of the core habitat area, provided it retains 50 percent of the original conifer basal area and canopy closure of at least 50 percent. According to the guidelines, core areas should be connected by riparian reserves and other unharvested forest. Connections need not be continuous; according to the guideline gaps of open habitat more than 1 - 2 km in width should be avoided.

The *Forest Management Guidelines for the Conservation of Woodland Caribou: A Landscape Approach* was finalized in 1999 and applies to Northwestern Ontario. Forestry companies must assess relative habitat supply on an area approximately 700,000 ha in size forcing them to work together to manage woodland caribou habitat over an area greater than one forest management unit and over an 80-year or more period. According to the guidelines woodland caribou winter habitat requires that the forest are managed such that there is a "a continuous supply of mature coniferous forests featuring winter habitat attributes in large (in the order of 10,000 ha or greater) tracts." On the downside this same argument is used for clearcuts of 10,000 ha or greater under the *Forest Management Guidelines for the Emulation of Fire Patterns* as future caribou winter habitat once the trees grow back and the forest produces mature coniferous.

## QUEBEC

There are no legal requirements to set aside contiguous forests. According to a Sierra Club report, the government has an objective for the maintenance, by 2006, of a closed large mature forest of 100 km<sup>2</sup> in every forest management unit ("FMU") of the allocated northern boreal forest. This objective has not yet been adopted into policy.

The Quebec government is introducing new rules for the 2007 management plans that will involve preserving large tracts of mature forest for caribou habitat and old growth forest.<sup>90</sup> Included is a plan to set aside 100 km of close tract forest that must not have been logged in the last 10 years (not exactly mature) as 'core mature' forest in each FMU covered by the 2007-20012 planning process.

Forests can also be designated "exceptional forests", such as the 104 listed in the summer of 2005, because the forests are mature, have endangered species, rare natural features or an anthropological site. Listings started in 2002 and most recent 41 sites were added in 2005. Forestry and mining (including staking) activities are generally not permitted but the Minister can make exceptions if the activity "does not alter the exceptional character" of the forest. According to Québec's Ministry of Natural Resources, the exceptional forest system was not designed to protect large intact mature forests but forests on a 'stand' level.

According to the Ministry of Natural Resources sources, 19,238 hectares of forest have been designated as exceptional forests and, "81% of those forests are old growth forests while 13.3% are rare forests and 5.7 % are shelter forests for threatened or vulnerable species."

## NEW BRUNSWICK

In May 2001, the Government established 10 new protected natural areas across the province. They total approximately 147,000 hectares and occur mainly on Crown land. Forest harvesting activities in these areas are disallowed or highly restricted.

Each license is required to set aside specified areas of land to be maintained as deer habitat. Crown forest currently has more than 275,000 hectares of deer wintering areas.

Old spruce–fir habitat is the only habitat type that is identified spatially (blocked) in Forest Management Plans and that comes with specific planning and implementation standards related to timber harvesting. A minimum patch of 375 hectares is required. No more than 40% of the hectares providing old spruce–fir habitat block can be harvested (partially or wholly) in a single management period. To limit the risk of stand blow down, no more than 30% of the basal area shall be harvested while maintaining a residual basal area of 18 m<sup>2</sup>/ha and crown closure 50%. The provisions also prohibit harvesting in blocks where over mature balsam fir dominated stands on any site or mature and over mature spruce and fir dominated stands on poorly drained sites. There are requirements regarding retention of cavity trees and large woody debris.

**16. Do laws and policies require connectivity be maintained (or restored) between important wildlife habitats, core forest and key landscape features?**

Jurisdiction	1995	2005
British Columbia	No	No
Alberta	Somewhat	Somewhat
Ontario	No	Somewhat
Quebec	No	No
New Brunswick	No	Somewhat

**BRITISH COLUMBIA**

The *Biodiversity Guidebook* provides information on designing forest ecosystem networks to meet connectivity objectives and stand management for the purposes of preserving biodiversity. However, the guidebook is not mandatory, was referred to under the old version the *Forest Practices Code of British Columbia*, which is no longer in force, and it is not mentioned under new *Forest and Range Practices Act*.

**ALBERTA**

*Alberta Timber Harvest Planning and Operating Ground Rules*, 1994, describes requirements for wildlife habitat preservation. Mature or overmature forest areas are to be reserved in blocks, and

corridors are to be left in "well-defined valleys," and along streams and rivers.<sup>91</sup>

Under the general fish and wildlife guidelines of the *Timber Harvest Planning and Operating Ground Rules* the following description of corridor requirements is given:

*Wildlife travel corridors are required in well-defined valleys or along permanent streams and rivers. These should contain timber stands on the floodplain of well-developed valleys, and forested areas at the top of well-developed valley breaks. These corridors should be at least two "sight distances" in width to allow undisturbed movement of wildlife. Where the stream buffer provides adequate sight distance, no additional consideration is needed. Harvest designs may include selective harvest, narrow cutblocks, and other techniques designed to maintain or enhance travel corridors.*

**ONTARIO**

*Forest Operations and Silviculture Manual* is a regulatory manual under the *Crown Forest Sustainability Act*. It contains references to guidelines that prescribe distinct no-cut reserves around such areas as nesting sites, or they give general descriptions of cutting patterns that are beneficial to a species or group of species.<sup>92</sup>

Leaving corridors is encouraged but not required in marten (1996) and caribou (1999) wildlife guidelines, both of which were reviewed in 2000, and apply to the Ontario’s northwest. Ontario plans to integrate these guides in stand and landscape guides which are forecasted for completion in 2007.

**QUEBEC**

A policy document entitled *Proposed Forest Resources Protection and Development Objectives for the 2005-2010 General Management Plans* discusses measures in place to protect habitat, species and biodiversity in Quebec. The plans require temporary maintenance of mature forests, and permanent maintenance of wildlife corridors. The

objective proposes that forestry management plans include special management plans in areas known to comprise the habitat of species with large home ranges.<sup>93</sup>

## NEW BRUNSWICK

According to the *2004 Interim Forest Management Manual* connectivity of the severe winter deer habitat components to the deer winter area should be maximized.<sup>94</sup> The *Interim Forest Management Manual* contains a section on fish and wildlife habitat.<sup>95</sup> Expanded buffer zones providing cover for species moving from watercourses *may* be created.<sup>96</sup> Vegetation at least two meters tall is said to satisfy the needs of most species moving through the area in the summer.

### 17. Do laws and policies require that access management planning avoid roads near protected areas, describes abandonment strategies and maintains remoteness in areas of sensitive biodiversity/biological values?

Jurisdiction	1995	2005
British Columbia	Somewhat	Somewhat
Alberta	Somewhat	Somewhat
Ontario	Somewhat	Somewhat
Quebec	No	No
New Brunswick	?	Somewhat

## BRITISH COLUMBIA

The *Forest and Range Practices Act* (“FRPA”) provides information about forest stewardship plans and protection of the environment. This FRPA replaces the *Forest Practices Code* (“FPC”), and does not give the same regard to wilderness protection as its predecessor. The FRPA gives the Lieutenant Governor in Council discretionary authority to establish regulations regarding the deactivation of roads. The *Forest Management and Planning Regulation* sets out requirements for deactivating a road.<sup>97</sup>

The FPC is relevant until the end of 2005. Many of its provisions were repealed when transition to the FRPA began. The old FPC contained a "strategic

planning, objectives and standards" section meant to protect wilderness areas from forestry practices.<sup>98</sup> In the version of the FPC currently in force, the relevant subsections have been repealed.<sup>99</sup> Under the FPC the district manager may close the road if damage to the environment is occurring or likely to occur and deactivation is required.<sup>100</sup>

British Columbia has a *Forest Road Regulation*, which outlines more specific requirements for roads. The situation is unclear with regards to the application of the regulation after December 31, 2005. The regulation currently gives consideration to stream crossings to ensure they cause as little damage as possible. Riparian areas must be avoided, unless there are no other viable options, or the alternatives would cause more damage and special permissions are required when riparian areas will be affected. Section 18, which dealt with wildlife measures pertaining to road deactivation, has been repealed.

## ALBERTA

The *Alberta Timber Harvest Planning and Operating Ground Rules, 1994*<sup>101</sup> states that, “[t]o ensure that Alberta's forests continue to produce high-quality timber and yield other benefits, it is important to keep the land intact and protected from damage. The watershed (i.e., soils and water) is the primary component of the forest environment that can be protected during timber operations.” The rules establish buffers zones where roads are not permitted next to different watercourses. In addition, the *Resource Road Planning Guidelines* sets out the standards and guidelines that should be followed when constructing or improving roads in a forest with the objective to minimize the area disturbed.<sup>102</sup>

Watercourse crossings shall be constructed according to standards and guidelines described in Table 3 of the ground rules and the publication *Stream Crossing Guidelines, Operational Guidelines for Industry*. Guidelines also set out the procedure to reclaim and abandon roads.<sup>103</sup> All terrain vehicles may be permitted on reclaimed roads. The guidelines emphasize that forest operators should construct and manage their roads to limit the impacts on fish and wildlife. The guidelines encourage that roads be constructed away from important wildlife habitat areas, including reproductive habitat for selected management species, key features such as mineral

licks, and important feeding habitats and watering sites.

In designated areas, road construction and hauling activities should avoid critical wintering, breeding and birthing periods when populations may be more vulnerable to sensory disturbance and harassment. In designated areas, the Forest Superintendent may request timber operators to restrict road access during specified periods, implemented in accordance with departmental policy. Road access in some key habitats should be removed after all operations have been completed.

The guidelines also recommend that cutlock access roads be managed to minimize the secondary impacts of vehicle access (e.g., hunting pressure, poaching and animal harassment). Roads may be closed by removing stream crossings, rolling back slash, roots and other logging debris on portions of the right of ways, scarifying and planting, or other similar techniques.

## ONTARIO

*Forest Management Planning Manual for Ontario's Crown Forests* (2004) requires forest managers undertake the consideration and environmental analysis of a reasonable range of practical alternative road corridors and branch roads.<sup>104</sup> The *Environmental Assessment Act* applies if the road traverses a provincial park or conservation reserve. Special consideration is placed on crossings through areas of concern including preventative and mitigation measures. The Manual requires the development of a road use strategy for new roads. The strategy outlines whether the road will be maintained in the future or abandoned naturally or physically.

*Environmental Guidelines for Access Roads and Water Crossings*<sup>105</sup> provides standards, guidelines and best management practices for engineering and constructing roads and water crossings. The Guidelines set out how to plan the location of the roads i.e. avoid osprey nests and how abandoned roads should be treated to limit erosion and decay. However, the Guidelines do not have specific rules and conditions for which roads must be closed or rehabilitated to protect values.

The 1996 *Forest Management Planning Manual*<sup>106</sup> required that for each new primary and secondary road, documentation of the reasons this road was required needed to be provided. Furthermore, the 1996 Manual required one to look at alternative locations for the corridor. It does not provide for specific conditions or procedures for abandoned roads but abandonment is consideration that must be examined in the planning process.

## QUEBEC

The Quebec Forest Act (the "FA") permits the construction of roads in the buffer zones established to protect lakes shores and watercourses.<sup>107</sup> Under the FA, the Minister may, for public interest reasons, limit or prohibit access to a forest road.<sup>108</sup>

*Regulation respecting standards of forest management for forests in the domain of the State* under the FA, also contains provisions regarding the protection of lakes and watercourses from roads. In a waterfowl gathering area, the regulation prohibits the construction of a road within 60 meters of a lake or watercourse or within 30 meters of an intermittent watercourse.<sup>109</sup> The regulation also includes other requirements that must be met when constructing a road near a water body. Sierra Club reports that there are no guidelines to minimize road density or forest conversion and that tenure holders are not allowed to de-activate roads; once a road is constructed, it becomes property of the Crown.

## NEW BRUNSWICK

Roads in New Brunswick are governed by the *Crown Lands and Forests Act*, the *Forest Management Manual* (the "FMM"), and the *Roads and Watercourse Crossings Guidelines*.

The FMM states that where roads are in or adjacent to site-specific wildlife habitats you should refer to the wildlife habitat guidelines in the FMM. Planning for road layout will consider the locations of all sensitive environmental areas.<sup>110</sup> Road locations should be designed to minimise the number of watercourse crossings. Roads are not to be located in watercourse buffer zones except at approved watercourse crossings.<sup>111</sup> Furthermore, with respect to heron and raptor nests, the FMM sets out nests buffer zones, nesting season no-activity zones, and

no-road zones.<sup>112</sup> Road construction in old spruce-fir habitat blocks and deer wintering areas shall be kept to the minimum required to access the harvest blocks. Roads are not permitted to be located in the severe winter deer habitat.<sup>113</sup>

The *Crown Lands and Forest Act* provides the Minister with the authority to close a forest road.<sup>114</sup> In addition, where a licensee<sup>115</sup> abandons a road he shall rehabilitate the area affected by the road.<sup>116</sup> The FMM also states that forest and logging roads on Crown lands will only be closed or abandoned under the authority of Ministry of Natural Resources. Furthermore, if a road is closed at the request of the licensee then they are responsible for the proper placement of barricades, approach, and road closed signs. The FMM states that a licensee shall reclassify an inactive logging road into a forest road at the request of Minister of Natural Resources.

### 18. Do laws and policies require riparian reserves with additional reserve for fish and wildlife habitat?

Jurisdiction	1995	2005
British Columbia	No	Somewhat
Alberta	?	Somewhat
Ontario	Somewhat	Somewhat
Quebec	?	Somewhat
New Brunswick	?	Somewhat

#### BRITISH COLUMBIA

*Forest Planning and Practices Regulation* of the *Forest and Range Practices Act*<sup>117</sup> s.47(4) sets out the minimum riparian management area width, riparian reserve zone width and riparian management zone width, on each side of the stream, wetland or lake. Unless exempted, a person must not construct a road in a riparian management area unless the alternative would create sediment; there are no other practicable option, or is required as part of the stream crossing.<sup>118</sup> An agreement holder must not cut, modify or remove trees in a riparian reserve zone unless permitted under the regulation.<sup>119</sup> Regulation sets out the percentage of the total basal area left as standing trees in a cutblock located within a riparian management zone.<sup>120</sup> Furthermore, the remaining trees must be able to maintain the stream bank or channel stability. Also, an agreement holder must ensure that forest activities do not cause the temperature of a stream to

increase and do not have an adverse effect on fish passage and must conduct such activity at a time and manner that is unlikely to harm fish or destroy their habitat.

*Operational and Site Planning Regulation* of the *Forest Practices Code of BC Act*<sup>121</sup> is very similar to the *Forest Planning and Practices Regulation*. The *Forest Practices and Planning Regulation* which establishes rules for operations in riparian areas came into effect in January of 2004. This regulation creates a certain amount of discretion that may mean its less effective than the prescriptive provisions it replaces. This framework of legislation was taken from Ontario.

#### ALBERTA

The *Alberta Timber Harvest Planning and Operating Ground Rules* sets out buffers zones where roads are not permitted next to different watercourses.<sup>122</sup> The *Resource Road Planning Guidelines* set out the standards and guidelines that should be followed when constructing or improving roads in a forest with the objective to minimize the area disturbed.<sup>123</sup> Watercourse crossings shall be constructed according to standards and guidelines described in the publication *Stream Crossing Guidelines, Operational Guidelines for Industry*. The guidelines encourage that roads be constructed away from important wildlife habitat areas, including reproductive habitat for selected management species, key features such as mineral licks, and important feeding habitats and watering sites. Watercourse crossings should use a bridge.

The manual sets out that streamside protection buffers shall be incorporated according to the standards prescribed in the manual. Where water-source areas have productive fish and wildlife habitat, harvest activities can occur only if the impacts can be avoided or mitigated. Generally speaking standards are as follows: roads, landings bared areas are not permitted within a prescribed buffer zone, timber in buffer zone should not be disturbed, felled trees should not enter the watercourse, and machinery should not operate within a prescribed distance to the watercourse.<sup>124</sup>

## ONTARIO

The *Environmental Assessment Act* applies if the road traverses a provincial park or conservation reserve. Special consideration is placed on crossings through areas of concern including preventative and mitigation measures. *Environmental Guidelines for Access Roads and Water Crossings*<sup>125</sup> provides standards, guidelines and best management practices for engineering and constructing roads and water crossings.

The *Code of Practice for Timber Management Operations in Riparian Areas*<sup>126</sup> states that the primary objective for forest management practices near water bodies is to minimize soil and site disturbance. The Code sets out guidelines in order to ensure that these objectives are met. This Code is to be used with the *Timber Management Guidelines for the Protection of Fish Habitat*<sup>127</sup> and the Fisheries Branch Policy FI .3.0.01. The Code outlines that harvesters working near water bodies should take the following factors into consideration: slope, soil, seasons, equipment and debris.

In addition to the abovementioned factors<sup>128</sup> the guideline for protection of fish habitat also call for management to be modified in order to ensure that fish habitat is protected. The Code states that where operations cannot be carried out in an area of concern so as to ensure protection of fish habitat, the area of concern should be designated as a reserve where no operations will be permitted. Where operations can be modified to protect fish habitat, then appropriate prescriptions should be developed according to the guidelines set out in the Code for different water bodies. Roads and landings should not be constructed in areas of concern<sup>129</sup>, harvesting within areas of concern should be restricted<sup>130</sup>, mechanical site preparation should not be carried out within areas of concern.<sup>131</sup>

There is also the *Habitat Management Guidelines for Waterfowl in Ontario*<sup>132</sup>, which recommends that cuttings not be totally prohibited in riparian zones, and highlights openings can be beneficial to certain species. The guidelines say that cutting in riparian zones should not occur during waterfowl nesting season. Where cutting is allowed, it should happen as patch cuts, strip cuts, or by group selection cutting techniques.<sup>133</sup> All snags, large trees and unmarketable trees should be left behind. Cut-over

areas should be allowed to regenerate naturally. Erosion inducing activities should be restricted in riparian zones. Riparian zones widths are determined by a calculation that takes into account the slope, percentage and angle. Roads and lands should be avoided in riparian zones.

## QUEBEC

The *Quebec Forest Act* (“QFA”) permits the construction of roads in the buffer zones established to protect lakeshores and watercourses.<sup>134</sup> Under the QFA, the Minister may, for public concerns reasons, limit or prohibit access to forestland.<sup>135</sup> However, the QFA prohibits forest management activity within a zone of 60 metres in width on each side of any river or part of any river identified as a salmon river by the Minister without prior authorization to that effect from the Minister.

*Regulation respecting standards of forest management for forests in the domain of the State* (under the QFA)<sup>136</sup> also contain provisions regarding the protection of lakes and watercourses from roads. It allows permit holders to lay out only one road (no wider than 5m) leading to the lake or watercourse from a forest camp.<sup>137</sup> It does, however, allow road construction machinery to be operated on either side of a 5m strip along an intermittent watercourse. In a waterfowl gathering area, the regulation prohibits the construction of a road within 60 meters of a lake or watercourse or within 30 meters of an intermittent watercourse.<sup>138</sup> The regulation also includes other requirements that must be met when constructing a road near a water body.<sup>139</sup> Everyone constructing/improving a road that crosses a watercourse or fish habitat or lake must construct a bridge or install culverts to ensure there is free passage of water and fish.<sup>140</sup> Furthermore, forest management activities may not be carried out at a water intake, ecological site or an archaeological site.<sup>141</sup>

A permit holder shall preserve a buffer strip 20m wide along the banks: of a peat bog with a pond, of a swamp, of a marsh, of a lake or of a permanent watercourse.<sup>142</sup> However, the permit holder may harvest trees located in the buffer strip where the land has a slope of less than 40%.<sup>143</sup> Forest camps near a watercourse shall not reduce more than 3 visual openings in the buffer strip.<sup>144</sup> No person may operate machinery used in a forest management

activity in a strip of land 5 m wide on both sides of an intermittent watercourse except for the construction/improvement/maintenance of a road or drainage ditch or infrastructures.<sup>145</sup> A permit holder must remove tree debris that fall in the water as a result of their forest activities.<sup>146</sup> A permit holder who lays out a trail across a watercourse or fish habitat shall install bridging and remove it once it is no longer needed.

## NEW BRUNSWICK

Roads in New Brunswick are governed by the *Crown Lands and Forests Act*<sup>147</sup>, the *Forest Management Manual*<sup>148</sup>, and the *Roads and Watercourse Crossings Guidelines*<sup>149</sup>. Road locations should be designed to minimise the number of watercourse crossings. Roads are not to be located in watercourse buffer zones except at approved watercourse crossings.<sup>150</sup>

The *Forest Management Manual* covers the objectives, roles, responsibilities, standards, and requirements of the licensees and Ministry of Natural Resources for the management and protection of fish and wildlife habitats at the operational level on Crown lands. Strategic-level objectives and standards are described in the Forest Management Planning section and in *A Vision for New Brunswick Forests: Goals and Objectives for Crown Land Management*<sup>151</sup>. Watercourse buffer zones are applied according to the objectives and guidelines detailed in “Watercourse Buffer Zone Guidelines for Crown Land Forestry Activities”<sup>152</sup>

Operational standards are defined for Watercourse Buffer Zones. The Manual states that a licensee must leave buffer zones<sup>153</sup> adjacent to all natural watercourses where harvesting is occurring as a means to moderate some of the affects of forestry activities. Selective harvesting may occur within the buffer zone as long as its function<sup>154</sup> is not compromised. More specifically, the buffers must be a minimum of 30 meters on any watercourse that is half a metre or wider, whether it is dry in the summer or not. A permit must be granted to cut selectively in the buffer zone and then up to 30 percent of the volume can be removed over 10 years. Special precautions should be taken to limit the potential for blow down or siltation. The Appendix to the Manual outlines the guidelines for determining bank slope and the ground distance equivalents for buffer width.

In areas where harvest block size and adjacency standards have been waived, buffer zones may be expanded beyond what is require for water quality and aquatic habitat to provide wildlife with a corridor for movement and buffer zones should be adjusted for landform and forest conditions and forest activities in the buffer zone.

## 19. Do laws and policies ban the use of chemical pesticides in forestry operations?

Jurisdiction	1995	2005
British Columbia	No	No
Alberta	No	No
Ontario	No	No
Quebec	No	Somewhat
New Brunswick	No	No

### BRITISH COLUMBIA

Pesticides can be used in forest operations in British Columbia. The *Pesticide Control Act* and its regulations outline the use of pesticides in British Columbia.<sup>155</sup> A person is required to have a permit before using pesticides. The members of the Pest Control Committee must include a representative from the ministry responsible for forestry.

### ALBERTA

Pesticides can be used in forest operations in Alberta. *Pesticide Sales, Handling, Use and Application Regulation*,<sup>156</sup> and the *Code of Practice for Pesticides*<sup>157</sup> *Forest Management Herbicide Reference Manual*<sup>158</sup> outline the procedures and conditions that must be met before pesticides are applied to a forest.<sup>159</sup>

### ONTARIO

*Forest Management Planning Manual*<sup>160</sup> does allow for pesticides to be sprayed in accordance with a permit from the Ministry of Environment under the *Pesticides Act*. There is also a guide entitled *Aerial Spraying for Forest Management (1991)*<sup>161</sup> that

outlines in four parts information related to aerial spraying procedures. Osprey management guidelines has a section on use of pesticides around nests. The 1996 Forest Management Manual outlines the procedure for the use of aerial herbicide and insecticide projects as well as the use of seed orchards.<sup>162</sup>

## QUEBEC

The *Regulation respecting standards of forest management for forests in the domain of the State* (under the QFA)<sup>163</sup> only prohibits the use of pesticides in a heronry and waterfowl gathering area, where the application of pesticides is for the purpose of controlling an insect infestation or a cryptogamic disease.<sup>164</sup>

Quebec also has a *Pesticides Act*<sup>165</sup> and the *Regulation respecting permits and certificates for the sale and use of pesticides*<sup>166</sup> that must be followed when applying pesticides.

Although not a legal requirement, the Forest Protection Strategy mandated the elimination of herbicides by 2001. In the 2002 publication *Forêt*<sup>167</sup> published by the Ministry of Natural Resources, Quebec announced that it was the first province to eliminate herbicides from use in public forests (80% of Quebec's forest).

## NEW BRUNSWICK

*Crown Lands and Forests Act*<sup>168</sup> states that subject to s. 75 and to the Pesticides Control Act, the Minister may, for any purpose referred to in s.73<sup>169</sup>, carry out or permit an aerial or ground spray operation on forests on any lands vested in the Crown or held privately.<sup>170</sup>

New Brunswick also has the *Pesticides Control Act*<sup>171</sup> and regulations that must be followed when applying pesticides.

## 20. Do laws and policies prohibit the use of genetically modified organisms ("GMOs")?

Jurisdiction	1995	2005
British Columbia	No	Yes
Alberta	No	Somewhat
Ontario	No	No
Quebec	No	No
New Brunswick	No	No

## BRITISH COLUMBIA

*Forest Practices Code of British Columbia Act* section 70(4)(c) requires that tree seed must be used in accordance with the regulations and standards.<sup>172</sup> Genetically modified trees are not used in British Columbia and would not be eligible for use under current registration policies and standards.<sup>173</sup>

*Chief Forester's Standards for Seed Use*<sup>174</sup> took effect on April 1, 2005 and applies to persons who use seed in establishing a free growing stand under *FRPA*. These standards address the registering, storing, selecting and transferring of seed used for Crown land reforestation. Section 5.1.8. does not permit the registration of a lot consisting of seeds or vegetative material that has been subjected to genetic modification through mutagenesis, a recombinant DNA technique or other related methods.

## ALBERTA

In a 2001 position paper, the *Alberta Forest Genetic Resources Council* stated that there were no GMO trees planted in operational forest plantations on crown lands in Alberta. Since the potential risks of GMOs are still poorly understood, the Council did not recommend at that time the use of GMOs for reforestation.<sup>175</sup>

## ONTARIO

Ontario does not have any law or policy with respect to genetically modified organism use in forest management operations. The Ontario government reports they do not use genetically modified trees or seeds in Ontario forest management operations.<sup>176</sup>

## QUEBEC

There is no mention of GMOs in Quebec law or policy with respect to forest management. However, a government spokesperson reports that Quebec does not use any genetically modified organisms in their forest management operations.<sup>177</sup>

## NEW BRUNSWICK

There is no mention of GMOs in either New Brunswick law or policy with respect to forest management. Sources within the New Brunswick government report that they do not use genetically modified trees or seeds.<sup>178</sup>

### Summary of Forest Management Law and Policy Findings

All five provinces assessed scored very poorly on their management of crown forest logging. British Columbia, Alberta and Quebec receive scores of 5 out of 18 while Ontario and New Brunswick receive scores of 6 out of 18. Of particular concern is the finding that all five provinces fail to account for conservation needs in determining harvesting levels (annual allowable cut volume).

British Columbia	Alberta	Ontario	Quebec	New Brunswick
5 out of 18	5 out of 18	6 out of 18	5 out of 18	6 out of 18

## Law and Policy concerning Aboriginal Rights

### 21. Do laws and policies recognize and respect legal and customary rights of Aboriginal Peoples?

Jurisdiction	1995 <sup>179</sup>	2005
Federal	Somewhat	Somewhat
B.C.	Somewhat	Somewhat
Alberta	No	No
Ontario	Somewhat	Somewhat
Quebec	No	Somewhat
New Brunswick	No	No

The legal and customary rights of Aboriginal Peoples in Canada are expressed through both Canadian and aboriginal legal systems. Canadian law recognizes common law aboriginal rights (such as aboriginal title) and provides constitutional protection for aboriginal and treaty rights in the *Constitution Act, 1982*. Canadian law has also interpreted the right to apply customary aboriginal law as part of an aboriginal right in some marriage and adoption cases. Although there has been no *successful* case asserting constitutionally protected aboriginal title in Canadian

law to date, the legal test for aboriginal title takes into account customary aboriginal law.<sup>180</sup> It is beyond the

scope of this Report to review customary aboriginal law in any detail. For the remainder of this section, the analysis will be restricted to the Canadian legal interpretation of aboriginal and treaty rights, unless otherwise noted.<sup>181</sup> “Aboriginal Peoples” are defined in the *Constitution Act, 1982* to include “Indians, Inuit and Métis”.

Over the last 15 years, Canadian courts have affirmed aboriginal and treaty rights and enunciated governments’ obligations to recognize and address such rights. Thus, forest policy and forest management practices must reflect the constitutional protection afforded to aboriginal and treaty rights. The recent Haida and Taku decisions by the Supreme Court of Canada have affirmed and extended governments’ obligation to consult and accommodate Aboriginal Peoples even before the existence or scope of aboriginal rights (including aboriginal title) have been determined by Canadian courts.<sup>182</sup> The former decision relates directly to a tree farm license in British Columbia and it was found that the

provincial government had failed to properly consult and accommodate aboriginal interests.

There are several policies that have been adopted nationally, by varying levels of government, sometimes with agreement of aboriginal groups and other stakeholders. For example, the First National Forest Accord (1992-1997) makes the commitment to: “Establishing new partnerships that will reflect the importance of forests to Aboriginal people, maintain and enhance cultural and spiritual values, and facilitate expanded economic opportunities.”<sup>183</sup> By the Third National Forest Accord (2003-2008) the commitment has become: “Accommodating Aboriginal and treaty rights in the sustainable use of the forest in a manner consistent with constitutional requirements.”<sup>184</sup> The dramatic change in the commitment over the intervening period reflects the evolving legal rights of Aboriginal Peoples. Similarly, the National Forest Strategy (2003-2008) contains a section encouraging accommodation and recommending recognition of the importance of Aboriginal Peoples in sustainable forestry.<sup>185</sup> The Canadian Council of Forest Ministers has also established a system of criteria and indicators. Aboriginal and treaty rights are included under criterion 6.<sup>186</sup>

## FEDERAL

The federal government has a fiduciary relationship with Aboriginal Peoples that originates in the Royal Proclamation of 1763. Under section 91(24) of the *Constitution Act, 1867*, the federal government has jurisdiction over “Indians, and Lands reserved for the Indians”. “Indians” includes “Bands” and “Chief and Council” (through the federal *Indian Act*) and Inuit (through Canadian caselaw). “First Nations” is generally used to describe Bands. Only the federal government can make treaties with Aboriginal Peoples. However, the federal government does not have complete jurisdiction over forest resources. Canadian courts have not adequately addressed the inherent jurisdictional conflict within Canada’s provinces – only the federal government can make treaties and only the provincial government can honour treaties with respect to forest use management. At a practical level, modern day treaties are negotiated on a three party basis. As the federal government often does not have jurisdiction over forest ecosystems, aboriginal and treaty rights are primarily address through policy at the federal level. The federal government does regulate timber

harvest on Indian Reserves, surrendered federal lands and prescribed “first nations lands”.<sup>187</sup> These regulations require the consent of the Band Council before the Minister of Indian Affairs and Northern Development can grant a licence to harvest timber on reserve lands. This requirement has remained unchanged since 1995. With respect to policy, the First Nations Forestry Programme is a joint initiative between Natural Resources Canada and Indian and Northern Affairs Canada.<sup>188</sup> It funds programs that involve partnerships between First Nations, the federal government and industry. The programme’s goal is to improve the socio-economic situation of First Nations through involvement in sustainable forestry. According to the website, it has funded 1,500 such projects since 1996.<sup>189</sup>

The federal government provides funding for participation in “resource access” and “resource partnership” negotiations. Both assist the aboriginal community in negotiating *once the resource project is underway*. For example, should a Sustainable Forest Licence be issued in Ontario, eligible aboriginal communities may receive funding to participate in the Forest Management Planning Exercise in order to “access” a share of resources (expressed as timber supply) allocated to the forestry company.

The federal government has also made agreements regarding resource revenue sharing in the context of modern treaties. See, for example, the Resource Revenue Sharing (Canada-BC)<sup>190</sup> or the Resource Revenue Sharing (Canada-NL-Labrador Inuit).<sup>191</sup> Historical treaties do not provide for resource revenue sharing.

## BRITISH COLUMBIA

The Forest Practices Code regime (consisting of the *Forest Practices Code of British Columbia Act*, regulations and guidebooks) came into effect in 1995. Under this regime, Forest Development Plans were required to identify locations of areas of Aboriginal interest. Aboriginal Peoples were invited to be involved in forestry activity planning through consultation and negotiation. Also, First Nations Forestry Council was formed. Access to timber provided through woodlot licences that could be obtained by Indian Bands (extended to community forest pilot agreements, forest licences and timber sales licences).<sup>192</sup> British Columbia also developed the “Direct Award Policy”: Ministry of Forests –

Interim Policy, First Nations Access to Timber Tenures (Sections 43.5 and 47.3 of the *Forest Act*).<sup>193</sup>

This Forest Practices Code regime has been replaced new forest practices legislation. The new regime (consisting of the *Forest and Range Practices Act* and regulations) came into effect January 31, 2004 and will be fully implemented by December 2005. Associated regulations require that when making a forest stewardship plan, the proponent must try to meet with affect First Nations to discuss the plan,<sup>194</sup> that the Minister identify areas as Aboriginal cultural heritage resource (if the site is not already recognized under the *Heritage Conservation Act*,<sup>195</sup> and that government objectives include the conservation and protection of cultural heritage resources that are subject to traditional uses by Aboriginal Peoples.<sup>196</sup> The value of the woodlot license must be weighed against this cultural importance.<sup>197</sup> The new regime will allow the Minister discretion to take various actions if an approved operational plan is subsequently found that is or could be an unjustifiable infringement on aboriginal right or title.<sup>198</sup> The Minister also has discretion to refuse to issue a licence if consultation not consistent with policy.

British Columbia has developed several aboriginal consultation policies: Ministry of Forests, Strategic Approaches to Accommodation (2003),<sup>199</sup> Aboriginal Rights and Title Policy (15.1) (2003),<sup>200</sup> Consultation Guidelines (2003)<sup>201</sup> and the Ministry of Aboriginal Relations and Reconciliation, Provincial Policy for Consultations with First Nations (2002).<sup>202</sup> Volume 1 of the BC Policy Manual, "Resource Management Policies," describes the government's recognition of and policy towards Aboriginal rights and title.<sup>203</sup> In addition, a consultation process is outlined.

## ALBERTA

None of the policies or laws of the Alberta Sustainable Resource Development Ministry (including the Alberta *Forests Act*, the forestry manuals, and the forestry regulations) make any mention of Aboriginal Peoples, rights or consultation.

Alberta's 2000 Aboriginal Framework Policy<sup>204</sup> articulated 2 goals:

1. *Improvement of economic opportunities for First Nations*

2. *Clarification of the roles of federal, provincial and aboriginal government*

With regards to the first goal, the government pledges to help create more just access to the forestry industry, but does not make any concrete statements.<sup>205</sup>

Alberta came out with a policy on consultation on May 16, 2005.<sup>206</sup> The guiding principles outlined are reflective of the recent Haida and Taku Supreme Court of Canada decisions.

## ONTARIO

In 1995, the Timber Class Environmental Assessment and the *Crown Forest Sustainability Act* governed Ontario's timber harvest. The *Crown Forest Sustainability Act* contains a specific non-derogation clause.<sup>207</sup> The Timber Class Environmental Assessment required that Aboriginal Peoples be consulted as a condition of the approval of the class assessment, that a Report on the Protection of Identified Aboriginal Values must be provided, and that the Ministry of Natural Resources is obligated to negotiate with aboriginal communities located in the forest management units to ensure they are better able to participate in the forest management process.<sup>208</sup> The regulated planning manual *Forest Management Planning Manual for Ontario's Crown Forests* incorporates an aboriginal consultation process.<sup>209</sup> In meeting the last condition (T&C #77), the Ministry of Natural Resources developed a policy<sup>210</sup> based on the Province's Aboriginal Policy Framework, which stated:

*Public lands and natural resources can provide a basis for Aboriginal economic development. This approach needs to be balanced by public concern about Aboriginal harvesting activities and the Province's conservation of wildlife and management of public lands and resources. Ontario's approach will meet legal requirements, including Aboriginal and treaty rights; protect the provincial interest in conservation; and will protect Ontario's ongoing authority to manage public lands and natural resources in the most flexible manner possible.<sup>211</sup>*

In the final State of the Forest Report under the Timber Class Environmental Assessment, the

Ministry of Natural Resources indicated that the negotiations regarding economic opportunities would have to happen between industry and Aboriginal Peoples, as the government's role was indirect.<sup>212</sup> It has also been reported that some aboriginal communities have found that the situation has worsened with the implementation of T&C #77 and issuing Sustainable Forest Licences has proceeded with no apparent regard for T&C #77.<sup>213</sup>

The 1999 Ontario Forest Accord, an agreement signed by the government, the Partnership for Public lands, and forestry industry representatives (but not aboriginal groups), pledged in the preamble that: "All parties acknowledge that the Accord is written with the understanding that treaty and aboriginal rights must be respected and honoured. The parties also acknowledge that the land-use decisions are without prejudice to land claims recognized by Ontario and Canada."<sup>214</sup> With regards to development of the areas covered by the agreement, commitment 24 states that the full agreement of Aboriginal communities will be sought on a "best effort basis."

In 2003, the review of the binding Timber Class Environmental Assessment ended with a declaration order – Declaration Order regarding MNR's Class Environmental Assessment Approval for Forest Management on Crown Lands in Ontario.<sup>215</sup> The three conditions respecting Aboriginal Peoples are maintained (although forest management is technically exempt from the *Environmental Assessment Act*, with numerous conditions). There have been no amendments to the *Crown Forest Sustainability Act*. The Ministry of Natural Resources does not have a consultation and accommodation policy; however, the Ontario government has recently established a new approach to aboriginal affairs.<sup>216</sup>

Private Members Bill 97, *First Nations Resource Revenue Sharing Act*, 2004 recently went through first and second reading and was referred to the Standing Committee on Finance and Economic Affairs. The Standing Committee held public hearings in northern Ontario during September 2004.

Although the laws and policies in Ontario appear to recognize and respect aboriginal and treaty rights, disputes have arisen between the forest industry, the Ministry of Natural Resources and First Nations. A court challenge was launched by some trappers from

Grassy Narrows First Nation regarding forest operations that conflict with traditional uses such as trapping. Although the Ministry of Natural Resources has been aware to the conflict between aboriginal and treaty rights in the Grassy Narrows First Nation traditional territories for many years, clearcut logging continues to be practiced without respect of individual traplines and other aboriginal rights.

## QUÉBEC

Since 2001, the consultation of First Nations is codified in the *Forest Act*.<sup>217</sup> Accommodation of aboriginal practices can be accomplished by adapting the regulations to "better reconcile forest management activities with activities pursued by Native persons".<sup>218</sup> The "payment of dues" (or royalties) is not required for a contractor that is a Native band council (just as is the case for municipal timber contractors).<sup>219</sup> The legislation also permits an adapted forestry system for the James Bay Region.<sup>220</sup> The Order in Council between Quebec and the Cree (The James Bay And Northern Quebec Agreement And The Northeastern Quebec Agreement) give the Cree extensive say in how and where commercial forest management may proceed.

The *Consultation Policy on Québec's Priorities for the Management and Development of the Forest Environment* – in addition to specifically including Aboriginal Peoples in all consultation processes, devotes a special section to consultation with Native communities.<sup>221</sup> First Nations have been invited to sit on a Permanent National Table.

## NEW BRUNSWICK

The *Crown Lands and Forests Act* and the *Forest Management Manual* are the relevant general forestry documents. The *Crown Lands and Forests Act* contains no information concerning aboriginal rights or interests.

However, New Brunswick has a separate system of Aboriginal Harvesting Agreements.<sup>222</sup> The Province has signed separate agreements with each of its 15 aboriginal groups. New Brunswick allocates five percent of the annual allowable cut to First Nations. Under any Aboriginal Harvesting Agreement, the royalties generated from the harvest as well as the revenues from selling timber accrue to the First Nation.

## Summary of Law and Policy with respect to Aboriginal Rights

There has been a dramatic evolution in the recognition and respect of legal and customary rights of Aboriginal Peoples between 1995 and 2005. In 1996, the Royal Commission released its five-volume report, having completed four years of consultation and research.<sup>223</sup> This marked the beginning of an evolution in Canadian law, particularly with respect to the duty to consult and, in some cases, accommodate aboriginal interests when making forest use decisions. Although there is varying degrees of recognition for aboriginal and treaty rights in federal and provincial law and policy (as summarized below), how the aboriginal and treaty rights are recognized and respected in practice is often a different story. There is still quite a way that Canadian governments will have to go to adequately “recognize and respect the legal and customary rights of Aboriginal Peoples”.

## DISCUSSION OF FINDINGS

Tables 1 and 2 in Appendix A provide a summary of the response to each indicator question for easy comparison between jurisdictions and for assessment of total jurisdictional scores.

Table 3 in Appendix A provides a summary comparison between the 1995 and 2005 responses to each indicator question, which allows for analysis of law and policy progression over the last 10 years.

### BEST AND WORST OVERALL

The analysis found that forest conservation laws and policies in all five provincial jurisdictions are pathetic; all five provinces fail scoring less than a 50% average, where a 100% represents a “yes” response to all questions. The province of Quebec receives the best score at a meagre 43%, largely due to progressive laws and policies with respect to parks and protected areas. The province of Alberta at a mere 24% receives the worst score. Alberta law and policy with respect to forest conservation fails to

protect forests in all areas analysed. The report also demonstrates the little progress made over the last 10 years in all jurisdictions with respect to the forest conservation law and policy indicators analysed. There was even evidence of declining law and policy (e.g. Ontario’s forest management environmental assessment regime and British Columbia’s forest management legislation).

Below is a summary of the scores for 1995 and 2005 along with the ranking for each of the five provinces. The federal government is not ranked with the provinces due to the different jurisdictional powers the provincial and the federal governments have over forest conservation issues.

Provincial rankings have remained similar over the last ten years: Quebec receives the highest score for forest conservation law and policy today as it did ten years ago and, Alberta received the lowest score ten years ago as it does today.

	1995 Score	1995 Ranking	2005 Score	2005 Ranking
Quebec	26%	1	43%	1
New Brunswick	22%	2	33%	2
Ontario	19%	4	31%	3
British Columbia	20%	3	28%	4
Alberta	17%	5	24%	5
Federal Government	25%		54%	

## FEDERAL LAW AND POLICY: TOO LIMITED TO MAKE A DIFFERENCE

Given the federal government has little jurisdiction over management of the forestry on crown land, questions with respect to logging on crown land did not apply. The federal government scores 58% largely due to laws and policies regarding national parks and endangered species. The report does not analyse the implementation or enforcement of those laws and policies, which if done would likely lower the federal government's score.<sup>224</sup>

## BEST AND WORST ENDANGERED SPECIES LAWS AND POLICIES

The federal *Species at Risk Act*, even with the limitations discussed in the report, is stronger than all five provincial endangered species legislation examined. The federal *Species at Risk Act* receives a score of 4 out of 10 based on the five species at risk law and policy questions examined. All five provinces ranked poorly on provincial endangered species laws and policies. Although not analysed in this report, Nova Scotia is considered to have the strongest provincial endangered species laws by conservation groups.

## BEST AND WORST PARKS AND PROTECTED AREA LAWS AND POLICIES

Of the five provinces, Quebec by far has the strongest parks protection laws scoring an 8 out of 8. Quebec ranks higher than the federal government in terms of parks and protected areas law and policy, which received a score of 5 out of 8 with respect to the questions posed in this study. However Quebec is criticized by conservationist for having a low percentage of its overall land base protected in parks in comparison to other provinces in Canada. Alberta has the worst parks protection laws and policies of the five provinces assessed. Ontario introduced a new act into the legislature, which would improve its score if passed into law. Beyond the scope of this study is the question as to whether a

jurisdiction has sufficient parks and protected areas to meet biodiversity needs.

## BEST AND WORST FOREST MANAGEMENT LAW AND POLICIES

All five provinces assessed score very poorly on their management of crown forest logging. British Columbia, Alberta and Quebec receive a score of 5 out of 18 while Ontario and New Brunswick received a score of 6 out of 18. Of particular concern is the finding that all five provinces fail to account for conservation needs in the determination of harvesting levels (annual allowable cut).

Very little progress has been made over that last ten years in terms of laws and policies designed to protect our forested landscapes. In Table 3 in Appendix A uses **bold** to indicate an improvement from 1995 to 2005, for example if from 1995 to 2005 a response changed from 'no' to 'some' or 'some' to 'yes'.

## A DECADE OF INACTION

Except for the federal level, endangered species laws and policies in those jurisdictions analyzed did not improve between 1995 and 2005. With the exception of the province of Quebec, little improvement was made in parks and protected areas related laws and policies between 1995 and 2005. Forestry management policies and laws have seen some minor improvements in Ontario and New Brunswick with respect to wildlife habitat requirements. Deterioration in law was also observed (e.g. environmental impact assessments in Ontario – question number 13).

As discussed in the introduction it is beyond the scope of this report to examine the implementation or enforcement of the laws and policies discussed herein, although the move towards industry self-regulation and reduced government oversight is a cause for concern in this respect.

This report is not designed to address further undermining of laws and policies that were weak and thus did not meet the indicator threshold in 1995. If these laws and policies were further weakened, it would still receive the same 'No' response (Zero points) in 2005.

	B.C.	Alberta	Ontario	Quebec	N.B.
Parks and Protected Area Laws and Policies	2 out of 8	1 out of 8	2 out of 8	8 out of 8	4 out of 8
Endangered Species Laws and Policies	2 out of 10				
Forest Management Law and Policies	5 out of 18	5 out of 18	6 out of 18	5 out of 18	6 out of 18

## CONCLUSIONS

---

In 2004, the Organisation for Economic Co-operation and Development (“OECD”) reported<sup>225</sup> that 20% of the world’s remaining natural areas are in Canada, but Canada’s total national protected area is less than the OECD average. According to a 2001 OECD report<sup>226</sup> Canada finishes 28th out of 29 nations in terms of total volume of timber logged, with only the United States logging a larger volume of timber.

While so many countries around the world have lost their forest to development, agriculture and industrial activity like forestry, Canada is uniquely placed in that it still has the opportunity to protect vast tracts of forests, but action must occur quickly.

Questions based on leading ecosystem indicators found that the laws and policies in Canada’s leading forest industry provinces fail to protect our forests. Each of the five provinces examined (British Columbia, Alberta, Ontario, Quebec, and New Brunswick) receive a failing grade based on 21 leading indicator questions.

Canada’s forests are threatened due in part to a weak framework of laws and policies that place industrial activity and fibre supply ahead of biodiversity needs. This report has identified some of the key law and

policy needs that are weak or absent in Canadian jurisdictions.

The value of large vast areas of protected forest to future generations is incalculable and would certainly outweigh the forests value as a wood fibre source. However, strong ecosystem based laws and policies are only one part of the puzzle. Strong laws need to be implemented and enforced and need spaces in which they apply.

Natural areas need protection; strong park and protected area laws without sufficient park space are simply good laws that have limited application. Similarly, endangered species need to be automatically listed under the law, based on scientific and traditional knowledge, and their habitat must be protected, regardless of which level of government holds the jurisdictional power. A strong endangered species law that applies only to a few of many species at risk in limited areas is nothing more than a good law of limited utility.

Action is needed on many fronts. This report only addresses one small part of a complex need when it comes to conserving Canada’s forest.

## REFERENCES

---

### REPORTS

Boyd, David R., 2001. Canada versus the OECD: An Environmental Comparison.

Boyd, David R., 2002. Wild by Law: A Report Card on Laws Governing Canada's Parks and Protected Areas, and a Blueprint for Making these Laws More Effective.

Boyd, David R., 2003. Unnatural Law: Rethinking Canadian Environmental Law and Policy.

DeWolf, K. and Simard, I. and Coon, D. 2005. Conservation Council of New Brunswick. Our Acadian Forest in Danger: The State of Forest Diversity and Wildlife Habitat in Brunswick.

Commission for the Environment and Sustainable Development. The Report of the Commission for the Environment and Sustainable Development to the House of Commons. The Commissioner's Perspective – 2005. News release.

Chris Henschel and Lucie Tessier. Canadian Parks and Wilderness Society and World Wildlife Fund. Measuring Up. A National Evaluation, Comparison and Recommendations for Quebec's Public Forest.

Environmental Defence. 2004. Next Stop, Extinction: A Report Card on the Failure of Canadian Governments to Save Endangered Species.

Environment Canada. Meteorological Services of Canada. The 2004 Canadian Acid Deposition Science Assessment: Summary of Key Results.

Environmental Commissioner of Ontario. 2004-2005 Annual Report: Planning our Landscape.

Forest Ethics, Greenpeace and Sierra Club of British Columbia. 2003. On the Ground. Forest Certification: Green Stamp of Approval or Rubber Stamp of Destruction.

Indian and Northern Affairs Canada. 1996. Report on the Royal Commission of Aboriginal Peoples. People to People and Nation to Nation.

Legislative Assembly Select Committee on Wood Supply. 2004. Final Report on Wood Supply in New Brunswick.

Lloyd, B. and Daniel, C. 1999. Canadian Institute Environmental Law and Policy. At Work in the Natural World: Forestry and Mining. The Environmental Agenda for Ontario Project.

May, Elizabeth. 2005. At the Cutting Edge. The Crisis in Canada's Forest.

The Montreal Process Working Group. 1999. The Montreal Process. Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forest

Natural Resources Canada. Canadian Forest Services. State of Canada's Forests 2003-2004. Profiles Across the Nation.

Natural Resources Canada. Canadian Forest Services. State of Canada's Forests 2004-2005. Profiles Across the Nation.

New Brunswick Department of Natural Resources. 2003. Management of New Brunswick's Crown Forest.

Ontario Ministry of Natural Resources. 2004. Provincial Wood Supply Strategy.

Ontario Ministry of Natural Resources. 2001. State of the Forest Report.

Organisation of Economic Cooperation and Development. 2004. Environmental Performance Reviews Canada.

Quebec Ministry of Natural Resources. June 2002. Forêt. Number 74.

Schneider, Richard and Walsh, Helen. CPAWS. 2005. Forest Management in Alberta: Status Report and Recommendations for Policy Change.

Sierra Club of Canada. 2005. National Forest Strategy Report Card.

## **MEDIA**

Now Magazine. The Final Frontier. September 8<sup>th</sup>, 2005 Edition.

## **WEB SITES**

Canadian Boreal Initiative <[www.borealcanada.org](http://www.borealcanada.org)>

Canadian Legal Information Institute <[www.canlii.org](http://www.canlii.org)>

Canadian Parks and Wilderness Society <[www.cpaws.org](http://www.cpaws.org)>

Department of Justice Canada

Environment Canada

Federal Department of Natural Resources

The Forest Stewardship Council <[www.fsccanada.org](http://www.fsccanada.org)>

Government of British Columbia

Government of Alberta

Government of Ontario

Government of Quebec

Government of New Brunswick

National Forest Strategy Coalition <[nfsc.forest.ca](http://nfsc.forest.ca)>

Nature Canada <[www.cnf.ca](http://www.cnf.ca)>

Organization for Economic Cooperation and Development <[www.oecd.org](http://www.oecd.org)>

Sierra Club <[www.sierraclub.org](http://www.sierraclub.org)>

Sierra Legal Defence Fund <[www.sierralegal.org](http://www.sierralegal.org)>

Wildlands League. A Chapter of the Canadian Parks and Wilderness Society. <[www.wildlandsleague.org](http://www.wildlandsleague.org)>

## **LAWS**

### **Federal**

Canada National Parks Act

Cleaner Gasoline Regulation

Constitution Act  
Indian Act  
Federal Fisheries Act  
Migratory Birds Convention Act  
Species at Risk Act

**British Columbia**

Environmental Assessment Act  
Ecological Reserves Act  
Heritage Conservation Act  
Forest Act  
Forest Practices Code of British Columbia Act  
Forest and Rang Practices Act  
Parks Act  
Pesticide Control Act  
Protected Areas of British Columbia Act  
Wildlife Act  
Wildlife Amendment Act

**Alberta**

Environmental Protection and Enhancement Act  
Forest Act  
Natural Resources Conservation Board Act  
Provincial Parks Act  
Wildlife Act  
Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act

**Ontario**

Crown Forest Sustainability Act  
Endangered Species Act  
Environmental Assessment Act  
Fish and Wildlife Conservation Act  
Kawartha Highlands Signature Site  
Parks Act  
Pesticides Act  
Public Lands Act  
Provincial Planning Act  
Wilderness Areas Act

**Quebec**

An Act Respecting Threatened and Vulnerable Species/ Loi sur les espèces menacées ou vulnérables  
Ecological Reserves Act  
Environmental Quality Act  
Forest Act  
Natural Heritage Conservation Act  
Parks Act  
Pesticides Act

**New Brunswick**

Clean Air Act  
Clean Environment Act  
Crown Lands and Forests Act

Ecological Reserves Act  
Endangered Species Act  
Parks Act  
Pesticides Control Act  
Protected Natural Areas Act

## **AGREEMENTS & PROGRAMS**

### **Federal**

Accord on the Protection of Species at Risk  
Canada – U.S. Air Quality Agreement  
Canadian Forest Accord  
First Nations Forestry Program  
Recovery of Nationally Endangered Wildlife Program  
United Nations Framework Convention on Climate Change  
Kyoto Protocol

### **Alberta**

Clean Air Strategy Alliance

### **Ontario**

Drive Clean Program  
Ontario Forest Accord

## APPENDIX A – JURISDICTIONAL AND TEMPORAL COMPARISON TABLES

Table 1 - 1995 Law and Policy Summary

General Questions (applies province wide)	Federal	British Columbia	Alberta	Ontario	Quebec	New Brunswick
1. Do laws and policies require mandatory conservation based land use planning with community consultations?	Some	Some	No	No	No	No
2. Do the jurisdiction's laws and policies regulate environmental pollutants affecting forest health (acid rain precursors, ground level ozone, green house gases)?	Some	Unknown	Some	No	Some	Some
<b>Species at Risk</b>						
3. Do laws and policies require mandatory science based listing of species at risk?	No	No	No	No	No	No
4. Do laws and policies prohibit harming species at risk?	No	Yes	Yes	Yes	Yes	Yes
5. Do laws and policies require recovery measures within fixed timeframes including identification and protection of species at risk recovery habitat?	No	No	No	No	No	No
6. Do laws and policies require multi-species and ecosystem recovery where appropriate?	No	No	No	No	No	No
7. Do laws and policies require monitoring of species population levels and distribution and recovery plans for species that no longer occupy certain areas of their former range?	No	No	No	No	No	No
<b>Parks and Protected Areas</b>						
8. Do laws and policies mandate conservation and ecological integrity as the top priority?	No	No	No	No	Unknown	No
9. Do laws and policies provide additional protection for ecological reserves and wilderness areas?	No	Yes	No	Some	Some	Yes
10. Do laws and policies prohibit industrial activity in parks?	Some	No	No	No	Yes	No
11. Do laws and policies prohibit hunting in parks?	Yes	No	Some	No	Yes	Yes
<b>Managed Forest (Logging on Crown Land)</b>						
12. Do annual allowable cut calculations account fully for conservation needs (are they ecosystem based)?	n/a	No	No	No	No	No
13. Do laws and policies require impact assessment prior to commencement of site operations?	n/a	Some	Some	Yes	Some	Some

14. Do laws and policies require management (with quantifiable habitat objectives) for a broad range of indicator species and species sensitive to forest practices?	n/a	No	No	No	Some	No
15. Do laws and policies require large areas (thousand of hectares) of contiguous core primarily mature and old growth forest habitat be maintained?	n/a	No	No	No	No	Unknown
16. Do laws and policies require connectivity be maintained (or restored) between important habitats, core forest and key landscape features?	n/a	No	Some	No	No	No
17. Do laws and polices require that access management planning avoid roads near protected areas, describes abandonment strategies and maintains remoteness in areas of sensitive biodiversity/biological values?	n/a	Some	Some	Some	No	Unknown
18. Do laws and policies require riparian reserves and additional reserves for fish and wildlife habitat?	n/a	No	Unknown	Some	Unknown	Unknown
19. Do laws and policies prohibit the use of pesticides in forest management?	n/a	No	No	No	No	No
20. Do laws and policies prohibit the use of genetically modifies organisms (GMOs) in forest management?	n/a	No	No	No	No	No
21. Do laws and polices recognize and respect legal and customary rights of Aboriginal people in forest management?	Some	Some	No	Some	No	No
<b>SCORE</b>	6/24	8/40	7/40	8/42	10/38	8/36
<b>Percentage Score (100 % is a perfect score and indicates a yes response to all questions)</b>	<b>25%</b>	<b>20%</b>	<b>17%</b>	<b>19%</b>	<b>26%</b>	<b>22%</b>

**Table 2 – 2005 Law and Policy Summary**

<b>General Questions (applies province wide)</b>	<b>Federal</b>	<b>B.C.</b>	<b>Alberta</b>	<b>Ontario</b>	<b>Quebec</b>	<b>N.B.</b>
1. Do laws and policies require mandatory conservation based land use planning with community consultations?	Some	Some	Some	Some	Some	Some
2. Do the jurisdiction's laws and policies regulate environmental pollutants affecting forest health (acid rain precursors, ground level ozone, green house gases)?	Some	Some	Some	Some	Some	Some
<b>Species at Risk</b>						
3. Do laws and policies require mandatory science based listing of species at risk?	No	No	No	No	No	No
4. Do laws and polices prohibit harming species at risk?	Yes	Yes	Yes	Yes	Yes	Yes
5. Do laws and policies require recovery measures within fixed timeframes including identification and protection of species at risk recovery habitat?	Some	No	No	No	No	No
6. Do laws and policies require multi-species and ecosystem recovery where appropriate?	Some	No	No	No	No	No
7. Do laws and policies require monitoring of species population levels and distribution and recovery plans for species that no longer occupy certain areas of their former range?	Some	No	No	No	No	No
<b>Parks and Protected Areas</b>						
8. Do laws and policies mandate conservation and ecological integrity as the top priority?	Some	No	No	Some	Yes	No
9. Do laws and policies provide additional protection for ecological reserves and wilderness areas?	Some	Yes	No	Some	Yes	Yes
10. Do laws and policies prohibit industrial activity in parks?	Some	No	No	No	Yes	No
11. Do laws and policies prohibit hunting in parks?	Yes	No	Some	No	Yes	Yes
<b>Managed Forest (Logging on Crown Land)</b>						
12. Do annual allowable cut calculations account fully for conservation needs (are they ecosystem based)?	n/a	No	No	No	No	No
13. Do laws and policies require impact assessment prior to commencement of site operations?	n/a	Some	Some	Some	Some	Some
14. Do laws and policies require management (with quantifiable habitat objectives) for a broad range of indicator species and species sensitive to forest practices?	n/a	No	No	Some	Some	Some
15. Do laws and policies require large areas (thousand of hectares) of	n/a	No	No	Some	Some	Some

contiguous core primarily mature and old growth forest habitat be maintained?						
16. Do laws and policies require connectivity be maintained (or restored) between important habitats, core forest and key landscape features?	n/a	No	Some	Some	No	Some
17. Do laws and policies require that access management planning avoid roads near protected areas, describes abandonment strategies and maintains remoteness in areas of sensitive biodiversity/biological values?	n/a	Some	Some	Some	No	Some
18. Do laws and policies require riparian reserves and additional reserves for fish and wildlife habitat?	n/a	Some	Some	Some	Some	Some
19. Do laws and policies prohibit the use of pesticides in forest management?	n/a	No	No	No	Some	No
20. Do laws and policies prohibit the use of genetically modified organisms (GMOs) in forest management?	n/a	Yes	Some	No	No	No
21. Do laws and policies recognize and respect legal and customary rights of Aboriginal people in forest management?	Some	Some	No	Some	Some	No
<b>SCORE</b>	13/24	12/42	10/42	13/42	18/42	14/42
<b>Percentage Score (100 % is a perfect score and indicates a yes response on all questions)</b>	<b>54%</b>	<b>28%</b>	<b>24%</b>	<b>31%</b>	<b>43%</b>	<b>33%</b>

Note: On scoring (also described in the introduction), a ‘yes’ response received 2 points, a ‘no’ response received 0 points and a ‘some’ (or ‘somewhat’) response received 1 point.

**Table 3 - 1995 and 2005 Comparison (bold indicates improvement)**

<b>General Questions (applies province wide)</b>	<b>Year</b>	<b>Federal</b>	<b>B.C.</b>	<b>Alberta</b>	<b>Ontario</b>	<b>Quebec</b>	<b>N.B.</b>
1. Do laws and policies require mandatory conservation based land use planning with community consultations?	<i>1995</i>	<i>Some</i>	<i>Some</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
	<b>2005</b>	Some	<b>Yes</b>	<b>Some</b>	<b>Some</b>	<b>Some</b>	<b>Some</b>
2. Do the jurisdiction's laws and policies regulate environmental pollutants affecting forest health (acid rain precursors, ground level ozone, green house gases)?	<i>1995</i>	<i>Some</i>	<i>Unknown</i>	<i>Some</i>	<i>No</i>	<i>Some</i>	<i>Some</i>
	<b>2005</b>	Some	Some	Some	<b>Some</b>	Some	Some
<b>Species at Risk</b>							
3. Do laws and policies require science based listing of species at risk?	<i>1995</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
	<b>2005</b>	No	No	No	No	No	No
4. Do laws and policies prohibit harming species at risk?	<i>1995</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<b>2005</b>	<b>Yes</b>	Yes	Yes	Yes	Yes	Yes
5. Do laws and policies require recovery measures within fixed timeframes including identification and protection of species at risk recovery habitat?	<i>1995</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
	<b>2005</b>	<b>Some</b>	No	No	No	No	No
6. Do laws and policies require multi-species and ecosystem recovery where appropriate?	<i>1995</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
	<b>2005</b>	<b>Some</b>	No	No	No	No	No
7. Do laws and policies require monitoring of species population levels and distribution and recovery plans for species that no longer occupy certain areas of their former range?	<i>1995</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
	<b>2005</b>	<b>Some</b>	No	No	No	No	No
<b>Parks and Protected Areas</b>							
8. Do laws and policies mandate conservation and ecological integrity as the top priority?	<i>1995</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>Unknown</i>	<i>No</i>
	<b>2005</b>	<b>Some</b>	No	No	<b>Some</b>	<b>Yes</b>	No
9. Do laws and policies provide additional protection for ecological reserves and wilderness areas?	<i>1995</i>	<i>No</i>	<i>Unknown</i>	<i>No</i>	<i>Some</i>	<i>Some</i>	<i>Yes</i>
	<b>2005</b>	<b>Some</b>	<b>Yes</b>	No	Some	<b>Yes</b>	Yes
10. Do laws and policies prohibit industrial activity in parks?	<i>1995</i>	<i>Some</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	<i>No</i>
	<b>2005</b>	Some	No	No	No	Yes	No
11. Do laws and policies prohibit hunting in parks?	<i>1995</i>	<i>Yes</i>	<i>No</i>	<i>Some</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>
	<b>2005</b>	Yes	No	Some	No	Yes	Yes
<b>Managed Forest (Logging on Crown Land)</b>							
12. Do annual allowable cut calculations account fully for conservation needs (are they ecosystem based)?	<i>1995</i>	<i>n/a</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
	<b>2005</b>	n/a	No	No	No	No	No

13. Do laws and policies require impact assessment prior to commencement of site operations?	<b>1995</b>	<i>n/a</i>	<i>Some</i>	<i>Some</i>	<i>Yes</i>	<i>Some</i>	<i>Some</i>
	<b>2005</b>	<i>n/a</i>	<i>Some</i>	<i>Some</i>	<i>Some</i>	<i>Some</i>	<i>Some</i>
14. Do laws and policies require management (with quantifiable habitat objectives) for a broad range of indicator species and species sensitive to forest practices?	<b>1995</b>	<i>n/a</i>	<i>No</i>	<i>No</i>	<b><i>No</i></b>	<i>Some</i>	<b><i>No</i></b>
	<b>2005</b>	<i>n/a</i>	<i>No</i>	<i>No</i>	<b><i>Some</i></b>	<i>Some</i>	<b><i>Some</i></b>
15. Do laws and policies require large areas (thousand of hectares) of contiguous core primarily mature and old growth forest habitat be maintained?	<b>1995</b>	<i>n/a</i>	<i>No</i>	<i>No</i>	<b><i>No</i></b>	<b><i>No</i></b>	<i>Unknown</i>
	<b>2005</b>	<i>n/a</i>	<i>No</i>	<i>No</i>	<b><i>Some</i></b>	<b><i>Some</i></b>	<i>Some</i>
16. Do laws and policies require connectivity be maintained (or restored) between important habitats, core forest and key landscape features?	<b>1995</b>	<i>n/a</i>	<i>No</i>	<i>Some</i>	<b><i>No</i></b>	<i>No</i>	<b><i>No</i></b>
	<b>2005</b>	<i>n/a</i>	<i>No</i>	<i>Some</i>	<b><i>Some</i></b>	<i>No</i>	<b><i>Some</i></b>
17. Do laws and polices require that access management planning avoid roads near protected areas, describes abandonment strategies and maintains remoteness in areas of sensitive biodiversity/biological values?	<b>1995</b>	<i>n/a</i>	<i>Some</i>	<i>Some</i>	<i>Some</i>	<i>No</i>	<i>Unknown</i>
	<b>2005</b>	<i>n/a</i>	<i>Some</i>	<i>Some</i>	<i>Some</i>	<i>No</i>	<i>Some</i>
18. Do laws and policies require riparian reserves and additional reserves for fish and wildlife habitat?	<b>1995</b>	<i>n/a</i>	<b><i>No</i></b>	<i>Unknown</i>	<i>Some</i>	<i>Unknown</i>	<i>Unknown</i>
	<b>2005</b>	<i>n/a</i>	<b><i>Some</i></b>	<i>Some</i>	<i>Some</i>	<i>Some</i>	<i>Some</i>
19. Do laws and policies prohibit the use of pesticides in forest management?	<b>1995</b>	<i>n/a</i>	<i>No</i>	<i>No</i>	<i>No</i>	<b><i>No</i></b>	<i>No</i>
	<b>2005</b>	<i>n/a</i>	<i>No</i>	<i>No</i>	<i>No</i>	<b><i>Some</i></b>	<i>No</i>
20. Do laws and policies prohibit the use of genetically modifies organisms (GMOs) in forest management?	<b>1995</b>	<i>n/a</i>	<b><i>No</i></b>	<b><i>No</i></b>	<i>No</i>	<i>No</i>	<i>No</i>
	<b>2005</b>	<i>n/a</i>	<b><i>Yes</i></b>	<b><i>Some</i></b>	<i>No</i>	<i>No</i>	<i>No</i>
21. Do laws and polices recognize and respect legal and customary rights of Aboriginal people in forest management?	<b>1995</b>	<i>Some</i>	<i>Some</i>	<i>No</i>	<i>Some</i>	<b><i>No</i></b>	<i>No</i>
	<b>2005</b>	<i>Some</i>	<i>Some</i>	<i>No</i>	<i>Some</i>	<b><i>Some</i></b>	<i>No</i>

Note: Some (or somewhat)

## ENDNOTES

---

- <sup>1</sup> The Commissioner for the Environment and Sustainable Development 2005 report criticised the Government of Canada for rarely seeing through its environmental initiatives. “When it comes to protecting the environment, bold announcements are made and then often forgotten as soon as the confetti hits the ground,” said Ms. Gélinas. “The federal government seems to have trouble crossing the finish line.” <<http://www.oag-bvg.gc.ca/domino/media.nsf/a70cfc882b597e2c852565bf0070f7bf/65a88f57251ccb918525708a006a1e9a?OpenDocument>>
- <sup>2</sup> OECD Environmental Performance reviews Canada. 2004. p. 75
- <sup>3</sup> OECD Environmental Performance Reviews Canada. 2004. p. 75
- <sup>4</sup> Boyd, David R., 2001. Canada vs. The OECD: An Environmental Comparison. p. 3
- <sup>5</sup> Natural Resources Canada. 2003 – 2004. State of the Forest Report.
- <sup>6</sup> The Montreal Process Working Group. 1999. The Montreal Process. Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forest. available at <[www.mpci.org](http://www.mpci.org)>
- <sup>7</sup> Chris Henschel and Lucie Tessier. Canadian Parks and Wilderness Society and World Wildlife Fund. Measuring Up. A National Evaluation, Comparison and Recommendations for Quebec’s Public Forest.
- <sup>8</sup> Canadian Boreal Initiative. 2005. The Boreal in the Balance, Securing the Future of Canada’s Boreal Region.
- <sup>9</sup> Boyd, David R., 2002. Wild By Law: A Report card on Laws Governing Canada’s Parks and Protected Areas, and a Blueprint for Making these Laws More Effective.
- <sup>10</sup> Natural Resources Canada. State of Canada’s Forests . 2003-2004 and 2004-2005 available at <[www.nrcan-rncan.gc.ca](http://www.nrcan-rncan.gc.ca)>
- <sup>11</sup> Nature Canada. Available at <<http://www.cnf.ca/parks/national/system.html>>
- <sup>12</sup> Canadian Parks and Wilderness Society v. Canada (Minister of Canadian Heritage), [2001] F.C.J. No. 1543
- <sup>13</sup> Canada National Parks Act. available at < <http://laws.justice.gc.ca/en/N-14.01/19348.html>>
- <sup>14</sup> Available at < <http://www3.gov.ab.ca/env/regions/nes/strategy.html>>
- <sup>15</sup> Available at <<http://www3.gov.ab.ca/env/regions/southern/strategy.html>>
- <sup>16</sup> Information available at < <http://www.cd.gov.ab.ca/preserving/parks/managing/establishing.asp>>
- <sup>17</sup> <http://raysweb.net/sp2000/cpaws/> and <http://www.cpaws.org/news/new-special-places-2000-0607.html>
- <sup>18</sup> Wildland League. Making sure our Parks are Truly Protected. Available at <<http://www.wildlandsleague.org/makesure.html>>
- <sup>19</sup> Now Magazine. September 8<sup>th</sup>, 2005. The Final Frontier.
- <sup>20</sup> Available at <<http://www.mrnf.gouv.qc.ca/presse/communiqués-forets-detail.jsp?id=1640>>
- <sup>21</sup> André R. Bouchard, Ministère des Ressources naturelles et de la Faune  
Direction de l’environnement forestier via e-mail July 15, 2005.
- <sup>22</sup> Ibid
- <sup>23</sup> Personal communication on December 21, 2005 with Jean-François Gagnon, Executive Director of CPAWS, Montreal.
- <sup>24</sup> Sierra Club of Canada. 2005. National Forest Strategy Report Card. Available at <<http://www.sierraclub.ca/national/programs/biodiversity/forests/nfs/database/index.php>>
- <sup>25</sup> Meteorological Services of Canada. Environment Canada. The 2004 Canadian Acid Deposition Science Assessment: Summary of Key Results. Available at < [http://www.msc-smc.ec.gc.ca/saib/acid/assessment2004/summary/index\\_e.html](http://www.msc-smc.ec.gc.ca/saib/acid/assessment2004/summary/index_e.html)>
- <sup>26</sup> Copy of agreement available at <<http://www.ijc.org/rel/agree/air.html#q>>
- <sup>27</sup> Copy of the strategy is available at <[http://www.ec.gc.ca/acidrain/strat/strat\\_e.htm](http://www.ec.gc.ca/acidrain/strat/strat_e.htm)>
- <sup>28</sup> Information available at <<http://www.ec.gc.ca/pdb/ghg/documents/Foundationpaper.pdf>>
- <sup>29</sup> Information available at <<http://www.climatechange.gc.ca>>
- <sup>30</sup> Cleaner Gasoline Regulation. Available at <[http://www.qp.gov.bc.ca/statreg/reg/W/WasteMgmt/498\\_95.htm#section3](http://www.qp.gov.bc.ca/statreg/reg/W/WasteMgmt/498_95.htm#section3)>
- <sup>31</sup> Regulations listed: The Substance Release Regulation regulates the release of gaseous emissions from vinyl chloride and polyvinyl chloride industrial facilities; The Ozone-Depleting Substances and Halocarbons Regulation regulates the use and atmospheric release of ozone-depleting substances and their halocarbon alternatives; The Release Reporting Regulation deals with the release of substances into the environment and sets out requirements for the reporting of such releases to Alberta Environment.
- <sup>32</sup> Information available at < [www.casahome.org](http://www.casahome.org)>
- <sup>33</sup> Environment Canada. 2002 *Progress Report and Post 2000 Canada Wide Strategy*. March 2004. And *1997 Annual Report on the Federal-Provincial Agreements for the Eastern Canada Acid Rain Program*. July 1998.
- <sup>34</sup> Information available at <<http://www.drivclean.com>>
- <sup>35</sup> Supra. Note 29.
- <sup>36</sup> Available at <[http://www.menv.gouv.qc.ca/air/pre\\_acid/index-en.htm](http://www.menv.gouv.qc.ca/air/pre_acid/index-en.htm)>

- 
- <sup>37</sup> See Public Participation Regulation <<http://www.gnb.ca/0009/0355/0005/0005-e.html>>
- <sup>38</sup> Available at <<http://www.gnb.ca/0009/0355/0005/0012-e.html>>
- <sup>39</sup> Environmental Defence. April 2004. *Next Stop, Extinction Report Card on the Failure of the Canadian Governments to Save Endangered Species*.
- <sup>40</sup> Nature Canada. Species at Risk Report Card 2004.
- <sup>41</sup> Refer to press release at <[http://www.sierralegal.org/m\\_archive/pr04\\_10\\_21.pdf](http://www.sierralegal.org/m_archive/pr04_10_21.pdf)>
- <sup>42</sup> Boyd, David. 2003. Unnatural Law. Rethinking Canadian Environmental Law and Policy. p. 191
- <sup>43</sup> Please refer to <<http://www3.gov.ab.ca/srd/fw/escc/aeslist.html>>
- <sup>44</sup> Alberta Woodland Caribou Recovery Planning Update. July 2005.  
<[http://www3.gov.ab.ca/srd/fw/speciesatrisk/pdf/Caribou\\_recovery\\_web\\_update\\_July\\_05.pdf](http://www3.gov.ab.ca/srd/fw/speciesatrisk/pdf/Caribou_recovery_web_update_July_05.pdf)>
- <sup>45</sup> Please refer to <<http://www.gnb.ca/0078/fw/species/index-e.asp>>
- <sup>46</sup> Nature Canada. Species at Risk Provincial Report 2004 New Brunswick. Available at <<http://www.cnf.ca/pdf/ProvincialRC-NB.pdf>>
- <sup>47</sup> Please refer to <[http://www.speciesatrisk.gc.ca/recovery/accord\\_e.cfm](http://www.speciesatrisk.gc.ca/recovery/accord_e.cfm)>
- <sup>48</sup> Please refer to <<http://wlapwww.gov.bc.ca/wld/recoveryplans/rcvry1.htm>>
- <sup>49</sup> Forest Practices Board. March 2005. Provincial Systems Fail to Protect Threatened Species. Available at <<http://www.fpb.gov.bc.ca/news/releases/2005/03-03.htm>>
- <sup>50</sup> Forest Practices Board. September, 2004. Quick Action Needed to Protect Threatened Mountain Caribou Available at <<http://www.fpb.gov.bc.ca/news/releases/2004/29%2D09.htm>>
- <sup>51</sup> Information available at <[http://www.ontarionature.org/educate/jeopardy/theme\\_05.html](http://www.ontarionature.org/educate/jeopardy/theme_05.html)>
- <sup>52</sup> Alan Dextrase, Ministry of Natural Resources. Government of New Brunswick. Via personal communication August 2, 2005.
- <sup>53</sup> Nature Canada. Species at Risk Provincial Report 2004 Quebec. Available at <<http://www.cnf.ca/pdf/ProvincialRC-QBe.pdf>>
- <sup>54</sup> Pascal Giasson, New Brunswick Ministry of Natural Resources. August 5, 2005 via telephone
- <sup>55</sup> Alan Dextrase, Ministry of Natural Resources. Government of New Brunswick. Via personal communication August 2, 2005.
- <sup>56</sup> The Canadian Endangered Species Conservation Council consists of the Minister of the Environment, the Minister of Fisheries and Oceans, the Minister of Canadian Heritage and ministers of the government of a province or a territory who are responsible for the conservation and management of a wildlife species in that province or territory.
- <sup>57</sup> Pascal Giasson, New Brunswick Ministry of Natural Resources. August 5, 2005 via telephone.
- <sup>58</sup> Nature Canada. Species at Risk Provincial Report 2004 Nova Scotia. Available at <<http://www.cnf.ca/pdf/ProvincialRC-NS.pdf>>
- <sup>59</sup> Canadian Parks and Wilderness Society v. Canada (Minister of Canadian Heritage), [2001] F.C.J. No. 1543
- <sup>60</sup> Boyd, David. 2002. Wild By Law. p. 15
- <sup>61</sup> See press releases on Mellon Lake <[www.sierralegal.org](http://www.sierralegal.org)>
- <sup>62</sup> See press releases on Mellon Lake <[www.sierralegal.org](http://www.sierralegal.org)>
- <sup>63</sup> Personal communication. Dec 21, 2005. Jean-François Gagnon. Executive Director of CPAWS Montreal.
- <sup>64</sup> Constitution Act, 1867. <Available at [http://www.canlii.org/ca/const\\_en/const1867.html](http://www.canlii.org/ca/const_en/const1867.html)>
- <sup>65</sup> Elizabeth May. 2005. *At The Cutting Edge. The Crisis in Canada's Forest 2005*. p. 315-317.
- <sup>66</sup> Forest Ethics, Greenpeace and Sierra Club B.C., 2003. *On the Ground. Forest Certification: Green Stamp of Approval or Rubber Stamp of Destruction*. p. 11. Available at <[http://www.sierraclub.ca/bc/aa-bc\\_upload/fd5c29a62a2f2c66bdb73ed43cec4361/Ontheground.pdf](http://www.sierraclub.ca/bc/aa-bc_upload/fd5c29a62a2f2c66bdb73ed43cec4361/Ontheground.pdf)>
- <sup>67</sup> Elizabeth May. 2005. *At The Cutting Edge. The Crisis in Canada's Forest 2005*. p. 272.  
<http://www3.gov.ab.ca/srd/forests/managing/>
- <sup>68</sup> Richard Schneider and Helene Walsh. CPAWS Edmonton Chapter. 2005. *Forest Management in Alberta: Status Report and Recommendations for Policy Change*
- <sup>70</sup> Forest Ethics, Greenpeace and Sierra Club B.C., 2003. *On the Ground. Forest Certification: Green Stamp of Approval or Rubber Stamp of Destruction*. Executive Summary. Available at <[http://www.sierraclub.ca/bc/aa-bc\\_upload/fd5c29a62a2f2c66bdb73ed43cec4361/Ontheground.pdf](http://www.sierraclub.ca/bc/aa-bc_upload/fd5c29a62a2f2c66bdb73ed43cec4361/Ontheground.pdf)>
- <sup>71</sup> Sierra Club National Forest Strategy Report Card. 2005. Available at <<http://www.sierraclub.ca/national/programs/biodiversity/forests/nfs/database/index.php>>
- <sup>72</sup> Chris Henschel and Dave Pearce. 2005. Out of Balance. A revealing look at how public forests are managed on the Whiskey Jack Forest. Available at <<http://207.5.94.222/attachments/whiskey%20jack%20full%20report.pdf>>
- <sup>73</sup> Ministry of Natural Resources. 2004. *Provincial Wood Supply Strategy*. Executive Summary  
<[http://www.mnr.gov.on.ca/mnr/forests/industry/woodsupply/provincial/entire\\_doc.pdf](http://www.mnr.gov.on.ca/mnr/forests/industry/woodsupply/provincial/entire_doc.pdf)>

---

<sup>74</sup> Environmental Commissioner of Ontario. 2004 –2005. Annual Report: Planning our Landscape. p. 81

<sup>75</sup> <http://www.commission-foret.qc.ca/index.htm>

<sup>76</sup> Department of Natural Resources. September 2003. *Management of New Brunswick's Crown Forest*. Available at <[http://www.gnb.ca/0079/pdf/managing\\_NB\\_crown\\_forests-e.pdf#pagemode=bookmarks](http://www.gnb.ca/0079/pdf/managing_NB_crown_forests-e.pdf#pagemode=bookmarks)>

<sup>77</sup> Available at <<http://www.gnb.ca/legis/business/committees/reports/Wood/legwoodfinal-e.pdf>>

<sup>78</sup> Objectives and Standards for the New Brunswick Crown Forest for the 2007-2012 Period. Available at <<http://www.gnb.ca/0079/pdf/technical-vision-EN.pdf>>

<sup>79</sup> Elizabeth May. 2005. *At The Cutting Edge. The Crisis in Canada's Forest 2005*. p. 174.

<sup>80</sup> Without unduly reducing the supply of timber from B.C.'s forests.

<sup>81</sup> The GDP describes the timber operator's proposed harvest strategy and reclamation operations for a 5 year period. It does not specifically address environmental issues related to the timber harvest.

<sup>82</sup> This requirement has been in place since 1994.

<sup>83</sup> see ss.8(2) of the CFSA. This provision is from 1994.

<sup>84</sup> See Part B of the Manual.

<sup>85</sup> The Forest Management Manual for New Brunswick Crown Land provides the details on these plans which include: heron and raptor nest tree retention, watercourse buffer zone standards, operations in old spruce-fir habitat, deer wintering areas.

<sup>86</sup> Available at <[http://www.gnb.ca/0078/reports/Interim\\_Forest\\_Management\\_Manual-e.pdf](http://www.gnb.ca/0078/reports/Interim_Forest_Management_Manual-e.pdf) (2004)>

<sup>87</sup> Sierra Club National Forest Strategy Report Card. 2005. Available at <<http://www.sierraclub.ca/national/programs/biodiversity/forests/nfs/database/index.php>>

<sup>88</sup> Steve Gordon. Manager Habitat Program. New Brunswick Ministry of Natural Resources. Via e-mail July 21, 2005.

<sup>89</sup> [http://www.conservationcouncil.ca/archives/2005/Acadian\\_Forest\\_in\\_Danger\\_final.pdf](http://www.conservationcouncil.ca/archives/2005/Acadian_Forest_in_Danger_final.pdf)

<sup>90</sup> Implementation Document 2005, Forest Resource Protection and Development Objectives General Forest Management Plans 2007-2012

<sup>91</sup> Available at <<http://www3.gov.ab.ca/srd/forests/fmd/manuals/doc/ProvGR94.doc> at pp. 26, 4.3.2, guideline #1.>

<sup>92</sup> Available at <[http://www.mnr.gov.on.ca/mnr/forests/forestdoc/reg\\_manuals/manuals/fosm/fosm.pdf](http://www.mnr.gov.on.ca/mnr/forests/forestdoc/reg_manuals/manuals/fosm/fosm.pdf), see pp.17>

<sup>93</sup> Available at <<http://www.mrnfp.gouv.qc.ca/english/publications/forest/consultation/objectives.pdf> at pp.27>

<sup>94</sup> Interim Forest Management Manual. Section 4.5.5.2. Available at <[http://www.gnb.ca/0078/reports/Interim\\_Forest\\_Management\\_Manual-e.pdf](http://www.gnb.ca/0078/reports/Interim_Forest_Management_Manual-e.pdf)>

<sup>95</sup> [http://www.gnb.ca/0078/reports/Interim\\_Forest\\_Management\\_Manual-e.pdf](http://www.gnb.ca/0078/reports/Interim_Forest_Management_Manual-e.pdf) beginning at pp. 45.

<sup>96</sup> [http://www.gnb.ca/0078/reports/Interim\\_Forest\\_Management\\_Manual-e.pdf](http://www.gnb.ca/0078/reports/Interim_Forest_Management_Manual-e.pdf) at pp. 49

<sup>97</sup> *Forest Planning and Practices Regulation*, 82(1) A person who deactivates a road must do the following: (a) barricade the road surface width in a clearly visible manner to prevent access by motor vehicles, other than all-terrain vehicles; (b) remove bridge and log culvert superstructures and stream pipe culverts; (c) remove bridge and log culvert substructures, if the failure of these substructures would have a material adverse effect on downstream property, improvements or forest resources; (d) stabilize the road prism or the clearing width of the road if the stabilization is necessary to reduce the likelihood of a material adverse effect in relation to one or more of the subjects listed in section 149 (1) of the Act.

<sup>98</sup> *Forest Practices Code of BC Act*, s.2(2) A wilderness area must be managed and used in a way that is consistent with one or more of the following: (a) preservation of wilderness; (b) preservation of biological diversity; (c) subject to subsection (3), any purpose permitted by or under the regulations. s.(3) A person must not carry out commercial timber harvesting in a wilderness area. <<http://www.for.gov.bc.ca/tasb/legsregs/archive/fpc/fpact/part2.htm>>

<sup>99</sup> New *Forest Practices Code of BC Act*. Section 2(2) and (3) were repealed. <<http://www.for.gov.bc.ca/tasb/legsregs/fpc/fpact/part2.htm#2>>

<sup>100</sup> <http://www.for.gov.bc.ca/tasb/legsregs/archive/fpc/fpact/part4-2.htm>

<sup>101</sup> Available at <<http://www3.gov.ab.ca/srd/forests/fmd/manuals/pdf/ProvGR94.pdf>>

<sup>102</sup> The standards may be modified by the superintendent to accommodate unusual situations.

<sup>103</sup> Roads that are no longer required should be permanently reclaimed by: scarifying and returning them to an acceptable land form; removing all watercourse crossing and drainage structures and reclaiming streambanks and approaches; cross-ditching; rolling back topsoil (including slash and logging debris) and revegetating erodible bared surface areas; reforesting disturbed areas inside cutblocks; and establishing access closures where required.

<sup>104</sup> section 1.2.7. This includes examining physical factors, other policy initiatives and public consultations, abandonment and decommissioning. Available at <[http://www.mnr.gov.on.ca/mnr/forests/public/publications/fmpm\\_04/FMPM\\_2004.pdf](http://www.mnr.gov.on.ca/mnr/forests/public/publications/fmpm_04/FMPM_2004.pdf)>

<sup>105</sup> Available at <<http://www.mnr.gov.on.ca/mnr/forests/public/guide/roads%20&%20water%20crossings/toc.pdf>>

<sup>106</sup> Available at <[http://www.mnr.gov.on.ca/mnr/forests/forestdoc/reg\\_manuals/fmpm\\_pdf/FMPM.pdf](http://www.mnr.gov.on.ca/mnr/forests/forestdoc/reg_manuals/fmpm_pdf/FMPM.pdf)>

<sup>107</sup> s.27 of the Forest Act. Section 28.2 does not permit forest management activity within the 60m zone on either side of a salmon river without prior authorization from the Minister.

<sup>108</sup> See s.33 of the *Forest Act*.

<sup>109</sup> s.17. Exemptions may apply in certain circumstances.

<sup>110</sup> Deer Wintering Areas, heron and raptor nests, watercourse buffer zones, Old Spruce-Fir Habitat areas, sites of endangered species under the N.B. *Endangered Species Act*, critical fish habitats, wetlands etc. Available at <[http://www.gnb.ca/0078/reports/Interim\\_Forest\\_Management\\_Manual-e.pdf](http://www.gnb.ca/0078/reports/Interim_Forest_Management_Manual-e.pdf) see sections 4.4-4.5>

<sup>111</sup> Buffer zones are areas of undisturbed vegetation between a timber harvest operation and an adjacent natural watercourse. Buffer zones may be expanded to create wildlife travel corridors. Road rights-of-ways built parallel to a natural watercourse shall have a treed buffer zone greater/equal 30m in width.

<sup>112</sup> These classifications relate to harvesting and road construction activities around nest sites.

<sup>113</sup> OSFH blocks with percent habitat values less/equal 75%, the area of OSFH that can be harvested for road rights-of-way shall not exceed 2%. Forest and logging roads constructed in OSFH blocks and DWA normally shall be greater/equal 50m from watercourses and rights-of-ways shall be less/equal 15m in width.

<sup>114</sup> s.79 (1), (2). A Minister will post signs and erect barricades to indicate a road is closed to travel. Violation of a closure is punishable under the *Provincial Offences Procedure Act*.

<sup>115</sup> Or sub-licensee, permittee or purchaser under a Crown timber sale.

<sup>116</sup> s.81(2). The term "abandoned" in the context of a road is not defined in the Act.

<sup>117</sup> [http://www.qp.gov.bc.ca/statreg/reg/F/ForRangPrac/14\\_2004.htm](http://www.qp.gov.bc.ca/statreg/reg/F/ForRangPrac/14_2004.htm)

<sup>118</sup> s.50 Regulations. If a road is constructed within a riparian management area, a person must not carry out road maintenance activities. Furthermore, a person cannot remove gravel/fill from the riparian management area in the process of constructing, deactivating, maintaining the road unless it is within a prism, at a stream crossing or there is no other practicable option.

<sup>119</sup> s.51 Regulations Permissible reasons include: trees that are a safety hazard, damaged or not wind firm, constructing stream crossings, creating corridor for full suspension yarding; creating guyline tiebacks, sanitation treatment, certain permits, establishing a recreation centre or trail. Removal can not have an adverse effect on the riparian reserve zone. Following activities are prohibited: grazing or herbicide applications, mechanized or broadcast burning site preparation, spacing or thinning

<sup>120</sup> s.52 regulations. The standing trees should be representative of the zone before it was harvested.

<sup>121</sup> Available at <<http://www.for.gov.bc.ca/tasb/legregs/fpc/fpcaregs/oplanreg/opr-8.htm>>

<sup>122</sup> "Alberta Timber Harvest Planning and Operating Ground Rules" 1994  
<http://www3.gov.ab.ca/srd/forests/fmd/manuals/pdf/ProvGR94.pdf>. See table 2.

<sup>123</sup> The standards may be modified by the superintendent to accommodate unusual situations.

<sup>124</sup> Standards vary depending on the waterbody.

<sup>125</sup> Available at <<http://www.mnr.gov.on.ca/mnr/forests/public/guide/roads%20&%20water%20crossings/toc.pdf> (established in 1990)>

<sup>126</sup> Available at <[http://www.mnr.gov.on.ca/mnr/forests/forestdoc/guidelines/pdfs/code\\_prac.pdf](http://www.mnr.gov.on.ca/mnr/forests/forestdoc/guidelines/pdfs/code_prac.pdf) (established in 1991)>

<sup>127</sup> Available at <<http://www.mnr.gov.on.ca/mnr/forests/public/guide/fish%20habitat%20guide.pdf> (established in 1988)>

<sup>128</sup> The Code sets out calculations to determine the "area of concern" that is adjacent to a water body. The calculations are based on the slope percentage and angle of the slope.

<sup>129</sup> see note 4

<sup>130</sup> Restrictions vary according to waterbodies and fish habitat present and may allow for selective harvesting where fish habitat will be protected.

<sup>131</sup> Exceptions maybe considered where it can be demonstrated that fish habitat will be protected.

<sup>132</sup> Available at <<http://www.mnr.gov.on.ca/mnr/forests/forestdoc/guidelines/pdfs/waterfwl.pdf> (established in 1985)>

<sup>133</sup> It should not occur if the area upslope has been cut and has not yet recovered.

<sup>134</sup> s.27 of the Forest Act. Section 28.2 does not permit forest management activity within the 60m zone on either side of a salmon river without prior authorization from the Minister.

<sup>135</sup> See s.33 of the *Forest Act*.

<sup>136</sup> Available at

<[http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/F\\_4\\_1/F4\\_1R1\\_001\\_1\\_A.HTM](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/F_4_1/F4_1R1_001_1_A.HTM) (Division V)>

<sup>137</sup> s.5.

<sup>138</sup> s.17. Exemptions may apply in certain circumstances.

<sup>139</sup> s.18-21. These provisions relates the preservation of groundcover, building on slopes, soil excavation.

<sup>140</sup> S.26-40.

<sup>141</sup> s.44

<sup>142</sup> s.2 Regulation

<sup>143</sup> s.4 Regulation

<sup>144</sup> s.5 Regulation

---

<sup>145</sup> s.7 Regulation  
<sup>146</sup> s.8 Regulation  
<sup>147</sup> <http://www.gnb.ca/acts/acts/c-38-1.htm> see sections 77-84.1  
<sup>148</sup> [http://www.gnb.ca/0078/reports/Interim\\_Forest\\_Management\\_Manual-e.pdf](http://www.gnb.ca/0078/reports/Interim_Forest_Management_Manual-e.pdf) see sections 4.4-4.5  
<sup>149</sup> [http://www.gnb.ca/0078/reports/Roads\\_and\\_Watercourse\\_Crossings\\_Guidelines-e.pdf](http://www.gnb.ca/0078/reports/Roads_and_Watercourse_Crossings_Guidelines-e.pdf). These provide detailed instructions on forest planning and construction, watercourse crossings, and erosion and sedimentation control measures  
<sup>150</sup> Buffer zones are areas of undisturbed vegetation between a timber harvest operation and an adjacent natural watercourse. Buffer zones may be expanded to create wildlife travel corridors. Road rights-of-ways built parallel to a natural watercourse shall have a treed buffer zone greater/equal 30m in width.  
<sup>151</sup> <http://www.gnb.ca/0078/Vision.PDF> (revised March 2000). This document also discusses water buffer zones and vehicle exclusion zones (vehicles are not allowed to travel in or through a watercourse except during construction of a watercrossing).  
<sup>152</sup> [http://www.gnb.ca/0079/pdf/Watercourse\\_Buffer\\_Standards-e.pdf](http://www.gnb.ca/0079/pdf/Watercourse_Buffer_Standards-e.pdf) Provides details on forest activities operating in watercourse buffer zones. Guidelines are set out for aquatic habitat and water quality; waterfowl production areas; wildlife travel corridors; snags and mature trees; soil erosion and windthrow hazard;  
<sup>153</sup> Undisturbed vegetation (watercourse buffer zone) between a timber harvest operation and an adjacent natural watercourse.  
<sup>154</sup> Buffer zones are intended to protect water quality and aquatic habitat, and in some cases they are required for recreation and aesthetic reasons or to provide wildlife travel corridors in heavily harvested areas. Several site specific concerns include critical fish spawning areas, waterfowl production wetlands, provincially significant wetlands and designated watersheds.  
<sup>155</sup> Available at <[http://www.qp.gov.bc.ca/statreg/stat/P/96360\\_01.htm](http://www.qp.gov.bc.ca/statreg/stat/P/96360_01.htm)>  
<sup>156</sup> Alta. Reg. 24/1997 <http://www.canlii.org/ab/laws/regu/1997r.24/20050110/whole.html> Enabling Statute: Environmental Protection and Enhancement Act, R.S.A. 2000, c. E-12  
<sup>157</sup> Available at <<http://www.canlii.org/ab/laws/sta/e-12/20050110/part13.html> date: 2000>  
<sup>158</sup> Available at <[www3.gov.ab.ca/srd/forests/fmd/manuals/index.html](http://www3.gov.ab.ca/srd/forests/fmd/manuals/index.html)>  
<sup>159</sup> The Code states that a proposal must be submitted to Alberta Sustainable Resource Development for authorization.  
<sup>160</sup> Available at <[http://www.mnr.gov.on.ca/mnr/forests/public/publications/fmpm\\_04/FMPM\\_2004.pdf](http://www.mnr.gov.on.ca/mnr/forests/public/publications/fmpm_04/FMPM_2004.pdf)>  
<sup>161</sup> Available at <<http://www.mnr.gov.on.ca/mnr/forests/public/publications/aerialspray/PART%201.pdf>>  
<sup>162</sup> Available at <[http://www.mnr.gov.on.ca/mnr/forests/forestdoc/reg\\_manuals/fmpm\\_pdf/FMPM.pdf](http://www.mnr.gov.on.ca/mnr/forests/forestdoc/reg_manuals/fmpm_pdf/FMPM.pdf)>  
<sup>163</sup>  
[http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/F\\_4\\_1/F4\\_1R1\\_001\\_1\\_A.HTM](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/F_4_1/F4_1R1_001_1_A.HTM)  
<sup>164</sup> see s.62 and 65. Last amended in 1996.  
<sup>165</sup> Available at <<http://www.canlii.org/qc/laws/sta/p-9.3/20050111/whole.html>>  
<sup>166</sup> Available at <<http://www.canlii.org/qc/laws/regu/p-9.3r.0.1/20050111/whole.html>>  
<sup>167</sup> Forêt. Destiné aux Parenaires Forestiers Du Ministère des Ressources Naturelles. Ministère des Ressources naturelles. Numéro 74 juin 2002.p. 4-5  
<sup>168</sup> <http://www.gnb.ca/acts/acts/c-38-1.htm> s.74 1986, c.27, s.20.  
<sup>169</sup> fire, insect and disease  
<sup>170</sup> see s.74  
<sup>171</sup> Available at <<http://www.canlii.org/nb/laws/sta/p-8/20050114/whole.html>>  
<sup>172</sup> Available at <<http://www.for.gov.bc.ca/tasb/legsregs/archive/fpc/fpact/part4-4.htm#70>>  
<sup>173</sup> Available at <[http://www.for.gov.bc.ca/hti/treeseed/gen\\_man.htm](http://www.for.gov.bc.ca/hti/treeseed/gen_man.htm)>  
<sup>174</sup> Available at <[http://www.for.gov.bc.ca/code/cfstandards/pdf/CF\\_Seed\\_Standards.pdf](http://www.for.gov.bc.ca/code/cfstandards/pdf/CF_Seed_Standards.pdf)>  
<sup>175</sup> Available at <<http://www3.gov.ab.ca/srd/forests/fmd/genetics/gmo.html>>  
<sup>176</sup> Joe Churcher, Forest Policy Section , Ontario Ministry of Natural Resources via email September 30<sup>th</sup>.  
<sup>177</sup> via email Andre Bouchard August 22, 2005.  
<sup>178</sup> Steve Gordon, Manager, Habitat Program, New Brunswick Dept. of Natural Resources via e-mail September 30<sup>th</sup>, 2005.  
<sup>179</sup> Even though aboriginal and treaty rights have been constitutionally protected since 1982, the crystallization of what is required of all levels of government to meet this obligation in Canadian law is evolving. As a result, in 1995, for all jurisdictions, the laws and policies reflected a “encouraging partnership” principle that does not meet the current legal obligations to Aboriginal Peoples. As a result of recent Supreme Court of Canada decisions, all jurisdictions are reassessing their laws and policies. However, it is not clear that even existing legal obligations expressed in Canadian law are sufficient to “recognize and respect legal and customary rights of Aboriginal Peoples”.  
<sup>180</sup> In the recently decided cases *R. v. Marshall*; *R. v. Bernard*, 2005 SCC 43, the Supreme Court of Canada found that the test for aboriginal title to the specific lands in question (in Nova Scotia and New Brunswick) was not met. In this case, Stephen Frederick Marshall (and 34 other Mi’kmaq) and Joshua Bernard were logging illegal within the provinces of Nova Scotia and New Brunswick, respectively. For the full text of the decision, see [www.lexum.umontreal.ca/csc-scc/en/rec/html/2005scc043.wpd.html](http://www.lexum.umontreal.ca/csc-scc/en/rec/html/2005scc043.wpd.html).

---

<sup>181</sup> From the perspective of Aboriginal Peoples, there currently exist two sovereignties. No treaty signed with England or Canada has extinguished aboriginal sovereignty. Within Canadian law, aboriginal governance is not recognized at the nation-to-nation level, but rather some limited rights of “self-government” that are encapsulated in aboriginal and treaty rights. In choosing to conduct the analysis primarily from the Canadian legal perspective, Sierra Legal does not in anyway approve or condone this perspective.

<sup>182</sup> The full text of the decisions is available on-line. For *Haida Nation v. British Columbia (Minister of Forests)*, [2004] 3 S.C.R. 511 see [www.lexum.umontreal.ca/csc-scc/en/pub/2004/vol3/html/2004scr3\\_0511.html](http://www.lexum.umontreal.ca/csc-scc/en/pub/2004/vol3/html/2004scr3_0511.html) and for *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*, [2004] 3 S.C.R. 550 see [www.lexum.umontreal.ca/csc-scc/en/pub/2004/vol3/html/2004scr3\\_0550.html](http://www.lexum.umontreal.ca/csc-scc/en/pub/2004/vol3/html/2004scr3_0550.html).

<sup>183</sup> 1<sup>st</sup> Canadian Forest Accord (1992-1997). Available on-line at: [npsc.forest.ca/accords/accord1.html](http://npsc.forest.ca/accords/accord1.html).

<sup>184</sup> 3<sup>rd</sup> Canadian Forest Accord (2003-2008). Available on-line at: [npsc.forest.ca/accords/accord3.html](http://npsc.forest.ca/accords/accord3.html).

<sup>185</sup> Objective #3, National Forest Strategy (2003-2008). Available on-line at: [npsc.forest.ca/strategies/nfs5.pdf](http://npsc.forest.ca/strategies/nfs5.pdf).

<sup>186</sup> Canadian Council of Forest Ministers, *Defining Sustainable Forest Management in Canada: Criteria and Indicators* (2003), pp.17-19. Available on-line at: [www.ccfm.org/2000pdf/CI\\_Booklet\\_e.pdf](http://www.ccfm.org/2000pdf/CI_Booklet_e.pdf).

<sup>187</sup> Indian Timber Regulations, C.R.C. c.961 and Indian Timber Harvesting Regulations, SOR/2002-109 (replacing the Stuart-Temblemur Lanke Band (Tanizul Timber Ltd.) Timber Regulation, SOR/82-171) under the *Indian Act*.

<sup>188</sup> First Nations Forestry Program. Information available on-line at: [www.fnfp.gc.ca/index\\_e.php](http://www.fnfp.gc.ca/index_e.php).

<sup>189</sup> See [www.fnfp.gc.ca/content/projectsProvincial\\_c\\_e.php](http://www.fnfp.gc.ca/content/projectsProvincial_c_e.php).

<sup>190</sup> Available for viewing on-line at: [www.ainc-inac.gc.ca/bc/ftno/rrs/rrs\\_e.pdf](http://www.ainc-inac.gc.ca/bc/ftno/rrs/rrs_e.pdf).

<sup>191</sup> Available for viewing on-line at: [www.ainc-inac.gc.ca/pr/agr/labi/labi\\_e.pdf](http://www.ainc-inac.gc.ca/pr/agr/labi/labi_e.pdf).

<sup>192</sup> Sections 43.5 and 47.3, *Forest Act*.

<sup>193</sup> Interim Direct Award Policy (2002) is available for viewing on-line at: [www.for.gov.bc.ca/haa/Docs/Interim\\_Direct\\_Award\\_Policy\\_Oct\\_31\\_2002.pdf](http://www.for.gov.bc.ca/haa/Docs/Interim_Direct_Award_Policy_Oct_31_2002.pdf).

<sup>194</sup> Clause 21(1)(b), Forest Planning and Practices Regulation, B.C. Reg. 14/2004. Available on-line at: [www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/forplanprac/fppr.htm](http://www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/forplanprac/fppr.htm).

<sup>195</sup> Clause 5(1)(e), Government Actions Regulation, B.C. Reg. 582/2004. Available on-line at: [www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/govact/gar.htm](http://www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/govact/gar.htm).

<sup>196</sup> Subclause 9(1)(d)(i), B.C. Reg. 21/2004. Available on-line at:

[www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/woodlotlicplanprac/wlppr.htm](http://www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/woodlotlicplanprac/wlppr.htm).

<sup>197</sup> Factor 5(c), Schedule 1, Woodlot Licence Planning and Practices Regulation, *ibid*.

<sup>198</sup> Section 77.1, *Forest and Range Practices Act*.

<sup>199</sup> British Columbia, Ministry of Forests, *Strategic Approaches to Accommodation* (2003). Available on-line at: [www.for.gov.bc.ca/haa/Docs/Accomodation\\_Policy\\_final\\_draft\\_10.pdf](http://www.for.gov.bc.ca/haa/Docs/Accomodation_Policy_final_draft_10.pdf).

<sup>200</sup> British Columbia, Ministry of Forests, *Aboriginal Rights and Title Policy* (15.1) (2003). Available on-line at: [www.for.gov.bc.ca/haa/Docs/finalconsultationpolicy03.pdf](http://www.for.gov.bc.ca/haa/Docs/finalconsultationpolicy03.pdf).

<sup>201</sup> British Columbia, Ministry of Forests, *Consultations Guidelines* (2003). Available on-line at: [www.for.gov.bc.ca/haa/Docs/MOF\\_Consultation\\_guidelines\\_final.pdf](http://www.for.gov.bc.ca/haa/Docs/MOF_Consultation_guidelines_final.pdf).

<sup>202</sup> British Columbia, Ministry of Aboriginal Relations and Reconciliation, *Provincial Policy for Consultations with First Nations* (2002). Available on-line at: [www.gov.bc.ca/arr/down/consultation\\_policy\\_fn.pdf](http://www.gov.bc.ca/arr/down/consultation_policy_fn.pdf).

<sup>203</sup> Chapter 15, British Columbia Ministry of Forests and Ranges, *Ministry Policy Manual, Volume 1 – Resource Management*. For on-line access go to Table of Contents website: [www.for.gov.bc.ca/tasb/manuals/policy/resmngmt/rm-toc.htm](http://www.for.gov.bc.ca/tasb/manuals/policy/resmngmt/rm-toc.htm).

<sup>204</sup> Government of Alberta, *Strengthening Relationships: The Government of Alberta’s Aboriginal Framework Policy* (2000). Available on-line at: [www.aand.gov.ab.ca/PDFs/final\\_strengthrelations.pdf](http://www.aand.gov.ab.ca/PDFs/final_strengthrelations.pdf).

<sup>205</sup> *Ibid.*, p. 9.

<sup>206</sup> Government of Alberta, *The Government of Alberta’s First Nations Consultation Policy on Land Management and Resource Development* (2005). Available on-line at: [www.aand.gov.ab.ca/PDFs/ConsultationPolicy-May16.pdf](http://www.aand.gov.ab.ca/PDFs/ConsultationPolicy-May16.pdf).

<sup>207</sup> Section 6 of the *Crown Forest Sustainability Act* states: “This Act does not abrogate, derogate from or add to any aboriginal or treaty right that is recognized and affirmed by section 35 of the *Constitution Act, 1982*.”

<sup>208</sup> See the following Terms and Conditions of the Class Environmental Assessment Approval for Timber Management (available on-line: [www.mnr.gov.on.ca/mnr/forests/timberea/decision\\_pdfs/intro.pdf](http://www.mnr.gov.on.ca/mnr/forests/timberea/decision_pdfs/intro.pdf)): 9(b), 10(b)(i), 11(b)(i), 19, 57 and 77. For all supporting reasons given by the Environmental Assessment Board, see Chapter 10 of the Decisions and Reasons ([http://www.mnr.gov.on.ca/mnr/forests/timberea/decision\\_pdfs/chapter10.pdf](http://www.mnr.gov.on.ca/mnr/forests/timberea/decision_pdfs/chapter10.pdf)).

<sup>209</sup> Ontario Ministry of Natural Resources, *Forest Management Planning Manual for Ontario’s Crown Forests* (2004). Available on-line at: [www.mnr.gov.on.ca/mnr/forests/public/publications/fmpm\\_04/FMPM\\_2004.pdf](http://www.mnr.gov.on.ca/mnr/forests/public/publications/fmpm_04/FMPM_2004.pdf).

<sup>210</sup> Ontario Ministry of Natural Resources, *Implementation Guidelines for Term and Condition #77 of the Class Environmental Assessment*.

- 
- <sup>211</sup> Ontario Native Affairs Secretariat, *Aboriginal Policy Framework: Supporting Aboriginal self-reliance through economic development* (1996), p.4.
- <sup>212</sup> Ontario Ministry of Natural Resources, *State of the Forest Report 2001* (2002), p.3-119.
- <sup>213</sup> Brennain Lloyd and Catherine Daniel, “At Work in the Natural World: Forestry and Mining”, *The Environmental Agenda for Ontario Project*, (Canadian Institute for Environmental Law and Policy: 1999). Available on-line at: [www.cielap.org/infocent/research/natres3.html](http://www.cielap.org/infocent/research/natres3.html).
- <sup>214</sup> Ontario Forest Accord. Available on-line at: [www.mnr.gov.on.ca/MNR/oll/ofaab/accord.html](http://www.mnr.gov.on.ca/MNR/oll/ofaab/accord.html)
- <sup>215</sup> Available on-line at: [www.ene.gov.on.ca/envision/env\\_reg/er/documents/2003/RA03E0004.pdf](http://www.ene.gov.on.ca/envision/env_reg/er/documents/2003/RA03E0004.pdf).
- <sup>216</sup> Ontario Native Affairs Secretariat, *Ontario’s New Approach to Aboriginal Affairs: Prosperous and Healthy Aboriginal Communities Create a Better Future for Aboriginal Children and Youth* (2005).
- <sup>217</sup> Sections 24.5, 25.2.1 and 211, *Forest Act*.
- <sup>218</sup> Section 171.1, *Forest Act*.
- <sup>219</sup> Section 106, *Forest Act*.
- <sup>220</sup> See Chapter III, Divisions IV, *Forest Act*.
- <sup>221</sup> Ministère des Ressources naturelles, *Québec’s Consultation Policy on Orientations for the Management and Development of the Forest Environment* (2003), p13. Available on-line at: [www.mrn.gouv.qc.ca/english/publications/forest/Politique-consultation-a.pdf](http://www.mrn.gouv.qc.ca/english/publications/forest/Politique-consultation-a.pdf).
- <sup>222</sup> Department of Natural Resources, *Aboriginal Harvesting Agreements*, on-line description ([www.gnb.ca/0079/aboriginal\\_harvesting\\_agreements-e.asp](http://www.gnb.ca/0079/aboriginal_harvesting_agreements-e.asp)).
- <sup>223</sup> Full text of the Report of the Royal Commission on Aboriginal Peoples is available on-line at: [www.ainc-inac.gc.ca/ch/rcap/index\\_e.html](http://www.ainc-inac.gc.ca/ch/rcap/index_e.html).
- <sup>224</sup> The Commissioner for the Environment and Sustainable Development 2005 report criticised the Government of Canada for rarely seeing through it’s environmental initiatives. “*When it comes to protecting the environment, bold announcements are made and then often forgotten as soon as the confetti hits the ground,*” said Ms. Gélinas. “*The federal government seems to have trouble crossing the finish line.*”<<http://www.oag-bvg.gc.ca/domino/media.nsf/a70cfc882b597e2c852565bf0070f7bf/65a88f57251ccb918525708a006a1e9a?OpenDocument>>
- <sup>225</sup> OECD Environmental Performance reviews Canada. 2004. p. 75
- <sup>226</sup> Boyd, David R., 2001. *Canada vs. The OECD: An Environmental Comparison*. p. 3

## **Sierra Legal Defence Fund**

Sierra Legal is a non-profit organization dedicated to defending Canadians' fundamental right to a healthy natural environment

### **Toronto Office**

30 St. Patrick Street, Suite 900  
Toronto, Ontario M5T 3A3  
Email: [sldfon@sierralegal.org](mailto:sldfon@sierralegal.org)  
Tel: (604) 685-5618

### **Vancouver Office**

Suite 214 - 131 Water Street  
Vancouver, British Columbia V6B 4M3  
Email: [sldf@sierralegal.org](mailto:sldf@sierralegal.org)  
Tel: (416) 368-7533

**[www.sierralegal.org](http://www.sierralegal.org)**

Printed on 100% recycled post-consumer fibre  
with a certified 100% chlorine-free process