



INTRODUCTION – CANADA’S NATURAL OPPORTUNITY

“Protected areas provide options for humanity in a rapidly changing world.”

— World Conservation Union (IUCN) —

Canada's natural capital provides literally billions of dollars in ecological goods and services – clean air and water, productive forests and oceans, the genetic resource base for many pharmaceuticals, climate regulation, and pest and disease control, to name but a few. The non-market value of ecosystem services in the boreal alone is estimated at \$93.2 billion annually.¹ Case studies suggest that protecting natural capital in the settled areas of Canada could save hundreds of millions of dollars of these ecological goods and services every year.² And national parks alone have sequestered over 4.4 gigatonnes of carbon worth \$72–\$78 billion³.

Protected areas provide an important and unique contribution to the conservation of natural capital. They act as benchmarks by which we can assess the sustainability of uses on the broader landscape and marine environment and measure the impacts of climate change. They conserve representative samples of natural areas and preserve ecological features and processes. They provide habitat for a diversity of wildlife. They support important regional goals, from community recreation and health to land claims settlements. Adequately connected and buffered, protected areas are at the core of ecosystem-based management.

Protected areas are key to Canada's competitiveness in the global marketplace, and secure enormous socio-economic benefits to communities across the country. In 1996, for example, wildlife related activities stimulated 215,000 jobs and contributed over \$12 billion to the GDP⁴.

Canada has a long tradition of protected areas establishment and has earned a reputation globally as a leading steward of its natural resources. The 1992 Statement of Commitment to Complete Canada's Networks of Protected Areas catalyzed an impressive growth in protected areas

across the country throughout the 1990s. Fifteen years later, Canada is faced with a variety of new opportunities to position protected areas planning and management squarely within the sustainable

development objectives espoused by many jurisdictions. These opportunities include the emergence of integrated landscape and oceans management, the initiation of Canada's Oceans Agenda, a recent dialogue towards development of a Biodiversity Outcomes Framework for Canada, and concerted international efforts to meet the United Nations Convention on Biological Diversity objective of developing global networks of comprehensive and effectively managed terrestrial and marine protected areas by 2010 and 2012 respectively⁵.

Canada is well positioned to deliver on these commitments. Canada is one of the few countries on

What is a Protected Area?

Canada recognizes the IUCN's definition of protected areas as:

“an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.”

A Statement of Commitment...

On November 25, 1992, Canada's federal, provincial and territorial Ministers of Environment, Parks, and Wildlife signed A Statement of Commitment to Complete Canada's Networks of Protected Areas, in which these Ministers agreed to make every effort to:

- complete Canada's networks of protected areas representative of Canada's land based natural regions by the year 2000 and accelerate the protection of areas representative of Canada's marine natural regions;
- accelerate the identification and protection of Canada's critical wildlife habitat;
- adopt frameworks, strategies, and timeframes for the completion of protected areas networks;
- continue to cooperate in the protection of ecosystems, landscapes and wildlife habitat; and
- ensure that protected areas are integral components of all sustainable development strategies.

Representatives of Canada's forest ministers and four national Aboriginal organizations also attended the meeting and endorsed the recommendations.

¹ Canadian Boreal Initiative and Pembina Institute, Counting Canada's Natural Capital (2005).

² Ducks Unlimited Canada and The Nature Conservancy of Canada, The Value of Natural Capital in Settled Areas of Canada (2004).

³ S.N. Kulshreshtha et al., “Carbon Sequestration in Protected Areas in Canada,” University of Saskatchewan, Department of Agriculture and Economics, 2000.

⁴ Federal-Provincial-Territorial Task Force on the Importance of Nature to Canadians, The importance of nature to Canadians: the economic significance of nature-related activities, 2000.

⁵ Canada is signatory to the Convention on Biological Diversity, a binding international agreement. Federal, provincial and territorial governments have together developed and are implementing the Canadian Biodiversity Strategy as the primary means to address our CBD commitments. The CBD Programme of Work on Protected Areas (2004) and its overall objective, goals and targets is intended as guidance to Canada's governments in advancing their protected areas programs in support of the Canadian Biodiversity Strategy.

A Sample of Canada's Protected Areas

No.	Unique Feature	Name
1	The first municipal park in Canada	Mount Royal, Montréal, Quebec (1876)
2	The first national park in Canada	Banff National Park, Alberta (1885)
3	The first waterfowl refuge in Canada	Last Mountain Lake, Saskatchewan (1887)
4	The first provincial park in Canada	Algonquin Provincial Park, Ontario (1893)
5	The first marine protected areas in Canada	Rochers-aux-Oiseaux Migratory Bird Sanctuary, Quebec (1919) Ile Bonaventure and Rocher Percé, Quebec (1919)
6	The first interprovincial park in Canada	Cypress Hills Interprovincial Park, Alberta / Saskatchewan (1989)
7	The first offshore Oceans Act Marine Protected Area in Canada	Endeavour Hydrothermal Vents Marine Protected Area (2003)
8	The largest protected area in Canada	Queen Maud Gulf Migratory Bird Sanctuary, Nunavut (6,278,200 ha)
9	The smallest protected area in Canada	Christie Islet Migratory Bird Sanctuary, British Columbia (0.08 ha)
10	The most southerly protected area in Canada	Point Pelee National Park, Ontario (42° N)
11	The most northerly (also driest) protected area in Canada	Quttinirpaaq National Park, Ellesmere Island, Nunavut (82.06° N)
12	The most easterly protected area in Canada	Witless Bay Seabird Ecological Reserve, Newfoundland and Labrador (52.8° E)
13	The most westerly protected areas in Canada	Ivvavik National Park, Yukon (141° W) Kluane Game Sanctuary, Yukon (141° W) Kluane National Park Reserve, Yukon (141° W) Vuntut National Park, Yukon (141° W)
14	The highest protected area in Canada	Kluane National Park Reserve, Yukon (Mount Logan, Canada's highest peak at 5959 metres, is found in this national park)

Earth that holds vast expanses of intact natural areas – a great blessing that brings an equally great responsibility. Yet opportunities to secure natural capital in Canada and around the world are rapidly foreclosing. The UN Millennium Ecological Assessment recently reported that 60% of the world's ecosystem services are degraded or used unsustainably. And while the World Economic Forum has ranked Canada 6th overall in environmental sustainability, we consume our natural capital more intensely than many of our peer nations.

Support for natural capital conservation in Canada is strong today. Industries are calling for clear protected areas strategies to inform long-term business plans and promote land certainty. First Nations are advancing natural area preservation to help maintain their cultural practices and heritage and in support of community economic development. Many new conservation collaborations can be found across Canada, bringing together a diversity of government and non-government interests. And the public continues to show consistent support for completing Canada's protected areas networks.



Newfoundland's Witless Bay Ecological Reserve is the most easterly protected area in Canada and is North America's largest Atlantic puffin colony with more than 260,000 pairs. Photo Credit © David Tilley

This provisional map of Protected Areas of Canada is the product of an ongoing collaboration between numerous protected area agencies and organizations.

The Canadian Council on Biological Sciences (CCBS), through its Canadian Wildlife Service (Environment Canada) member, coordinated the process to integrate mammal data from the various authoritative protected areas inventories (including the National Wildlife Inventory, the National Terrestrial Biodiversity Inventory, the CARTS) project, and the preparation of the guidebook for classifying Canada's Protected Areas. The draft publication is entitled, *The Application of IUCN Protected Area Management Categories: A Guidebook for Canada's Protected Areas*. The CCBS member, CARTS, invited various experts to review the draft Guidebook for scientific and technical (Natural Resources Canada) involvement for the CARTS project and preparation of the draft IUCN book.

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Le Comité canadien des écologistes (CCGE) appuie l'entente du Service canadien de la faune (SCF) avec l'Agence canadienne d'évaluation environnementale (ACEE) qui, en vertu de la Loi sur l'accès à l'information (LAI), a permis l'accès à l'information sur les données de l'écotoxicité. Le CCEG appuie également la mise en œuvre de la Loi sur l'accès à l'information (LAI) qui, en vertu de la Loi sur l'accès à l'information (LAI), a permis l'accès à l'information sur les données de l'écotoxicité. Le CCEG appuie également la mise en œuvre de la Loi sur l'accès à l'information (LAI) qui, en vertu de la Loi sur l'accès à l'information (LAI), a permis l'accès à l'information sur les données de l'écotoxicité.

Le Service canadien de la faune (Environnement Canada) a dirigé le préparatoire du rapport de situation sur les aires protégées nationales. Le comité directeur du rapport de situation sur les aires protégées nationales a fourni une trinité et des conseils précieux pour le processus de préparatoire de la culture.

Le Comité canadien des parcs (CCP) a appuyé le processus du rapport de situation sur les aires protégées nationales, le préparatoire de la culture provoque un élargissement, et peut stimuler. Le CCP a également continué à assurer la coopération entre les organismes responsables des aires protégées tout en leur apportant soutien.

L'Atlas du Canada (Resources naturelles Canada) a conçu la carte province des Aires protégées du Canada à partir de la compilation des données-cadres nationales à l'échelle de 1/1 million et des classifications de l'UN/UNESCO par le biais des organismes fédéraux, provinciaux et nombreux des provinces des aires protégées.

Each federal, provincial, and territorial protected area agency provided the geospatial data and verified with the national representative of protected areas. In addition, each authoritative source agency classified their protected areas by the IUCN classification scheme.

This provincial map includes protected areas greater than 1,000 hectares that are administered by Canada's federal, provincial, and territorial governments, and established prior to December 31, 2002 (see Sources for acronyms). The following protected area agencies contributed their data and expertise:

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here in Saskatchewan. Many of the Government of Saskatchewan's protected areas are designated on a land parcel basis (e.g. quarter-sections) separated by road allowances. Therefore many individual areas (hereafter do not meet the 1,000 hectares threshold required for this map. To partially address this problem, adjacent protected land parcels that are a) separated by road allowances and b) can be identified by a common name and c) that collectively exceed 1,000 hectares, have been aggregated to enable appropriate representation at the map scale.

Tous les organismes fédéraux, provinciaux et territoriaux responsables des aires protégées ont fourni les données géographiques associées à la répartition nationale des aires protégées. De plus, tous les organismes de source fédérale ont classé leurs aires protégées selon le système de classification de RICH.

La note provisionnelle répertorie les zones protégées dont la superficie est supérieure à 1 000 hectares qui sont administrées par un gouvernement fédéral, provincial ou territorial du Canada et qui ont été établies avant le 21 décembre 2008 (voir Sources pour

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Nota del Sarachewen: Plusieurs des zones protégées du Gouvernement de la Sarachewen sont désignées comme parcs ou réserves naturelles (par exemple les zones protégées de la Sarachewen). Certaines zones ne sont pas reconnues par l'Organisation mondiale du commerce (OMC) et certaines zones ne sont pas reconnues par l'Organisation mondiale du commerce (OMC).

Role on the IUCN Categories

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La présente carte contribue à rendre l'histoire de l'immigration au Québec plus connue et à mieux saisir les liens entre les immigrants et les Québécois. Elle illustre également les liens entre les immigrants et les Québécois, les liens entre les immigrants et les Québécois, les liens entre les immigrants et les Québécois.

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Scale / Échelle 1 6 250 000



L'Union mondiale pour la nature (UICN) définit une aire protégée comme une « portion de terre affectée ou dédiée spécialement à la protection et au maintien de la diversité biologique, pour qui des ressources naturelles et culturelles associées, et gérées par des moyens officiels, juridiques ou autres ».

Catégorie Ia Aine protégée garde principalement à des fins scientifiques ou de production des ressources sauvages. L'aire tampon elle-même comporte des éléments non, des caractéristiques géographiques ou physiologiques et/ou des espèces menacées ou régionales, qui jouent également à des fins de recherche scientifique et/ou de surveillance continue de l'environnement.

Catégorie Ib Aire protégée d'intérêt principalement à des fins de protection des ressources sauvages. Valeur ajoutée limitée (eau, miel, etc.) ou peu mesurable, étant conservé principalement en son état naturel, équilibre d'équilibre permanent ou temporaire, et/ou en vue de préserver son état naturel. Exemples (sans être limitatifs) : quelques aires protégées provinciales, quelques Réserves naturelles de faune et Refuges d'oiseaux migrateurs.

Catégorie II *Aire protégée pour principalement dans le but de protéger les écosystèmes et/ou des fins récréatives.* Une réserve, terrain ou zone marine, désignée (a) pour protéger l'équilibre écologique dans ou les grands écosystèmes dans l'intérêt des générations actuelles et futures, (b) pour soutenir les écosystèmes ou les écosystèmes compatibles avec les objectifs de la législation et (2) pour offrir des possibilités de récréation à des fins éducatives, scientifiques, récréatives et touristiques.

La zone est désignée pour le soutien des écosystèmes et/ou des fins récréatives (sauf une exception), mais elle n'est pas désignée pour la protection des habitats naturels ou la récréation et/ou les activités de loisir.

Catégorie III *Aux protégera généralement dans le but de préserver les éléments naturels spécifiques.* Aux protégera les paysages d'intérêt national, les valeurs artistiques, historiques, scientifiques, culturelles ou autres, incluant les propriétés de fait ou de droit, de la représentation, des sites qualifiés historiques ou de son importance culturelle reconnue. Exemples (selon qu'il s'agit d'éléments) : parcs nationaux ou des sites naturels spécifiques.

Catégorie V *Aire protégée strictement protégée des forêts d'essence de conifères (les paysages forestiers ont remplacé les forêts d'essence de feuillus) ; Zone forestière, composée parfois de forêts et de zones adjacentes, où l'habitat est une formation de la nature, à la fois de type mixte et d'essence de feuillus.*

Catégorie VI *Aux prodigés génés principalement à des fins d'illumination durable des écosystèmes humains.* Une centaine des systèmes listés, en grande partie des modèles, qui

Non-classifiés: alors protégés qui n'entraient pas dans la catégorie de l'UICN, mais dont la catégorie de protection n'a pas encore été déterminée.

⁹ **Source:** Comité sénatorial des droits indigènes, 2009, à l'initiative des colporteurs de genres d'anes protégées de l'ECRI. Suite à l'invitation des organisations autochtones des années protégées, le système de signalement de l'écoulement des anes de conservation, première version, (juin 2009) (non publié). L'Assemblée de l'ECRI, la Commission nationale des anes protégées et le Comité sénatorial de surveillance de la conservation, 1994. L'écoulement des anes protégées de genres d'anes protégés, 3ème édition.

On ne peut avoir l'air de croire avec des noms semblables utilisés au Canada. Je mentionne des détails de chacune des politiques relatives de façon plus précise les aspects de genres ou aspects culturels et linguistiques.


L'Atlas
du Canada

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This map has been produced as an accompaniment to the *Informe Periódico sobre el Estado del Medio Ambiente* (2006), a unpublished report coordinated by Environment Canada.
Cetle carte a été produite pour accompagner le rapport de l'état de l'environnement (2006), un rapport non publié coordonné par Environnement Canada.

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180s-carbams	Enkephalins of interest
Metamorphosis	Proteinase intercalation
and Serine	Enzyme proteinase at Serine
and Glycyl-Histidine	Lysine (N-glycosylation) (Glycyl-Histidine)
Hydroxyl-2'-OH	C-2' (Glycyl-Histidine) (Glycyl-Histidine)

CHAPTER 1 – CANADA’S PROTECTED AREAS – THE FACTS

SUMMARY OF FINDINGS

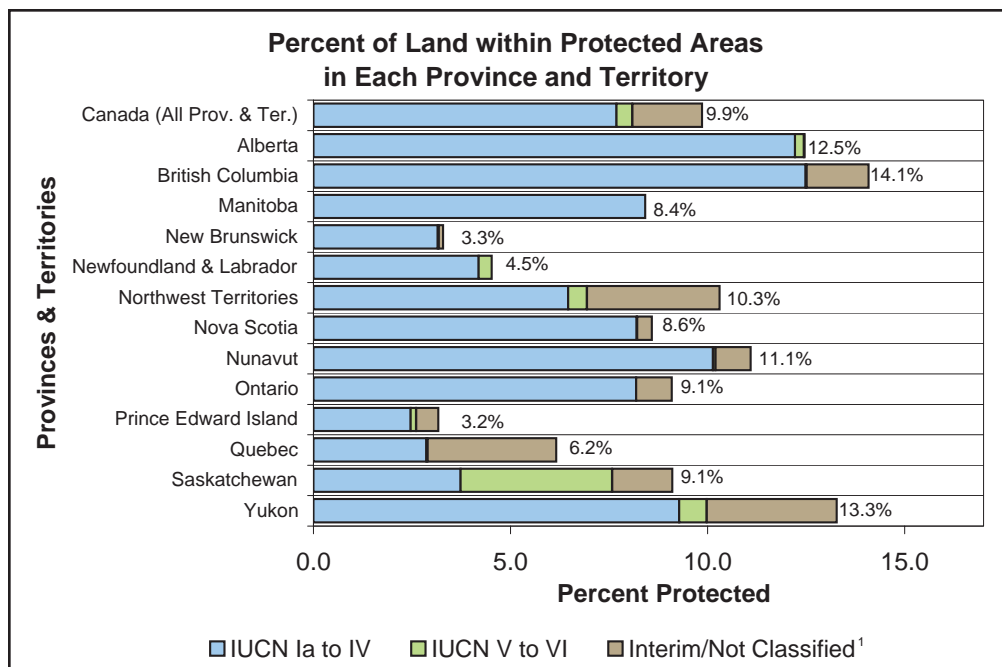
- Canada has set aside 9.9% of its lands in protected areas (8.6% in existing protected areas and 1.3% in interim protected areas), a growth of approximately 19% since 2000.
- Canada has set aside 0.5% of its oceans in marine protected areas.
- The extent of protected areas in Canada varies considerably between different ecological regions of the country – from the 22.6% of the Arctic Cordillera ecozone that is found within protected areas, to 7.4% of the Boreal Shield ecozone, to 0.4% of the Mixedwood Plain ecozone (Great Lakes - St. Lawrence Valley).
- 95% of lands within Canada’s terrestrial protected areas are classified within IUCN Management Categories I-IV, which largely prohibit industrial activities such as forestry, mining and hydro development.
- Canada ranks 4th out of 30 OECD countries in terms of the amount of lands in protected areas that largely prohibit industrial activities. Canada ranks 16th out of 30 OECD countries in terms of the amount of lands set aside in all terrestrial protected areas. Canada ranks 70th globally in percentage of oceans protected.

- Canada’s various governments administer a diverse range of terrestrial protected areas – wilderness areas, parks, wildlife areas – although about half of the entire network is found in national, provincial, or territorial parks.
- Protected areas in Canada are managed for multiple values – resource conservation, public education, preservation of culturally significant sites, research, and wildlife and habitat conservation.

ANALYSIS

- EXTENT OF TERRESTRIAL PROTECTED AREAS -

- Canada has set aside 9.9% of its lands as protected areas.
- Canada’s terrestrial protected areas network includes a total of 98.3 million hectares (ha).
- 12,662,819 ha (13%) of these lands currently have interim protection¹.
- The federal government administers 49.2% of lands in Canada’s terrestrial protected areas and the provinces and territories 49.3%.



¹ Includes interim protected areas, Aboriginal and privately owned protected areas, and unclassified government administered protected areas.

¹ Interim protected areas receive effective legal or regulatory protection, temporarily or otherwise, while negotiations and legal issues are resolved. Note that these land withdrawals are subject to feasibility studies, consultations, and/or the negotiation of agreements. The various interim protected areas, or portions thereof, may or may not eventually be established as protected areas.

Summary of Terrestrial Protected Areas in Each Province and Territory¹

Province/Territory	No. of Protected Areas	Area Protected (ha)	Interim Area Protected ² (ha)	Total Area Protected ³ (ha)	% of Land Protected ⁴
Alberta	537	8,250,133	0	8,250,133	12.5
British Columbia	948	12,088,155	1,224,996	13,313,151	14.1
Manitoba	122	4,275,508	1,194,510	5,470,018	8.4 ⁵
New Brunswick	106	232,095	5,000	237,095	3.3
Newfoundland & Labrador	63	1,838,275	0	1,838,275	4.5
Northwest Territories	19	9,489,418	4,363,896	13,853,314	10.3
Nova Scotia	75	455,671	17,000	472,671	8.6
Nunavut	27	21,353,025	1,870,000	23,223,025	11.1 ⁶
Ontario	647	9,429,202	381,194	9,810,396	9.1 ⁷
Prince Edward Island	184	16,053	1,891	17,944	3.2
Quebec	1,096	7,522,120	1,817,200	9,339,320	6.2 ⁸
Saskatchewan	4,608	5,337,477	601,983	5,939,460	9.1
Yukon	24	5,234,779	1,185,149	6,419,928	13.3
Canada (All Prov. & Ter.)	8,475	85,597,154	12,662,819	98,259,973	9.9⁷

¹ Includes protected areas administered federally, provincially and territorially, as well as Aboriginal or privately held conservation lands that are recognized by protected area agencies as being part of their network.

² Interim protected areas receive effective legal or regulatory protection, temporarily or otherwise, while negotiations and legal issues are resolved. Note that these land withdrawals are subject to feasibility studies, consultations, and/or the negotiation of agreements. The various interim protected areas, or portions thereof, may or may not eventually be established as protected areas.

³ Note that these figures include a number of terrestrial protected areas that have a marine component totalling 2,899,532 ha.

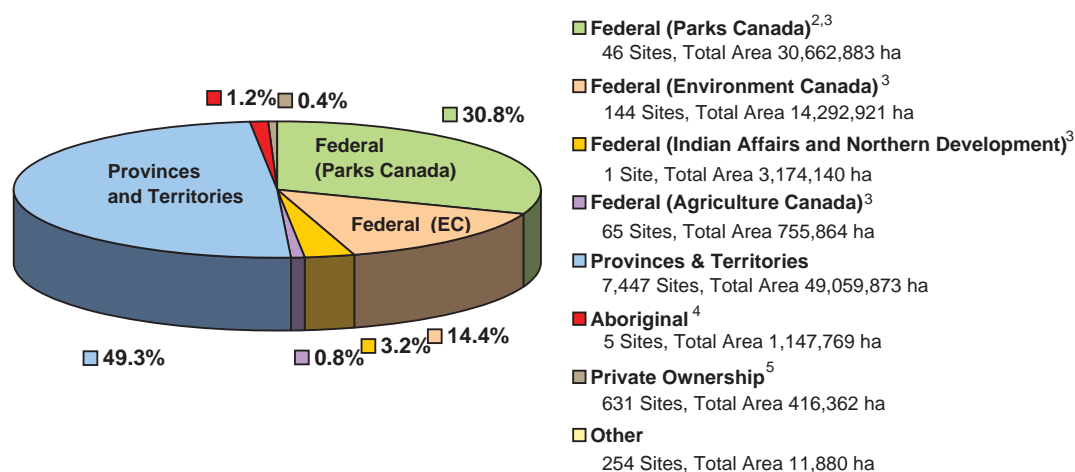
⁴ Total land of each jurisdiction based on 2005 Natural Resources Canada statistics (includes both land and freshwater), or on figures provided by relevant provincial or territorial protected areas agencies.

⁵ IUCN Categorizing is still under review; Categories V & VI have not been finalized. Note that MB does not currently recognize EC administered National Wildlife Areas (IUCN IV) as part of their protected areas network. Excluded are 168,197 ha of Agriculture Canada administered PFRA pastures. These lands will be reviewed in the near future for possible inclusion in MB's Protected Areas Initiative. The total lands that MB currently accounts for within its protected areas network is 5.4 million ha, or 8.4% of the province.

⁶ Until such time as a PAS is developed, Nunavut differentiates between lands that have surface and sub-surface rights withdrawn (National Parks, National Wildlife Areas, and the Thelon Game Sanctuary, totalling 6.5%), Territorial Park lands that include withdrawal of surface rights only (0.07%), and lands that include withdrawal of seasonal surface rights only, including Migratory Bird Sanctuaries, Territorial Wildlife Sanctuaries, and Territorial Critical Wildlife Areas (4.27%).

⁷ ON totals include provincial parks, conservation reserves, wilderness areas and national parks. Excluded are 32,183 ha of National Wildlife Areas (NWAs) and Migratory Bird Sanctuaries (MBSs) that are located in ON and administered by Environment Canada. These NWAs and MBSs are, however, included in the totals calculated for Canada.

⁸ Includes the terrestrial portion of Environment Canada's 28 Migratory Bird Sanctuaries that are found in QC, but excludes the marine portion of these Sanctuaries (43,078 ha).

Who Manages Canada's Terrestrial Protected Areas?¹

¹ Total includes both existing protected areas and interim protected areas.

² 42 National Parks and National Park Reserves and four areas that have been given interim protection formally by means of Order in Council, pursuant to legislation.

³ Omitted from these totals is the 363 km² Gatineau Park. This park is administered by the National Capital Commission, a federal agency that was not involved in this study.

⁴ Aboriginal protected areas are set aside for conservation by an Aboriginal community through a land claim agreement or other legal instrument. They have no federal, provincial or territorial protected area designation, but are recognized as protected areas by government protected areas agencies.

⁵ Private protected areas are privately administered conservation lands (other than those held by Aboriginal communities), formally recognized by a protected areas agency as being part of their protected areas network. Most of these lands are under management by private land trust organizations.

- EXTENT OF MARINE PROTECTED AREAS -

Canada has set aside 0.5% of its oceans as protected areas.

- Canada's marine protected areas network includes a total of 3,278,362 ha.
- Environment Canada administers 47.9% of Canada's marine protected areas, Parks Canada 32.4%, Fisheries and Oceans Canada 7.7%, and provinces and territories 12%.
- Parks Canada reported its intent to establish an additional 3 million ha of marine protected areas over the next two years.

Summary of Marine Protected Areas in Canada

Administrator	Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)	% of Canada's MPAs
Parks Canada	National Marine Conservation Area	1	11,500	32.4%
Parks Canada	National Park (Marine Portion)	11	938,000	
Parks Canada & Quebec	Saguenay - St. Lawrence Marine Park	1	113,800	
Environment Canada	National Wildlife Area (Marine Portion)	13	152,317	47.9%
Environment Canada	Migratory Bird Sanctuary (Marine Portion)	51	1,417,145	
Fisheries and Oceans	Marine Protected Area	5	253,530	7.7%
Newfoundland & Labrador	Ecological Reserve (Marine Portion)	6	15,200	0.5%
Prince Edward Island	Terrestrial Protected Area (Marine Portion)	1	87	0.003%
Quebec	Waterfowl Gathering Areas	352	195,333	6.0%
British Columbia	Terrestrial Protected Area (Marine Portion)	114	181,450	5.5%
Total		555	3,278,362	

- EXTENT OF PROTECTED AREAS IN CANADA'S VARIOUS NATURAL REGIONS -

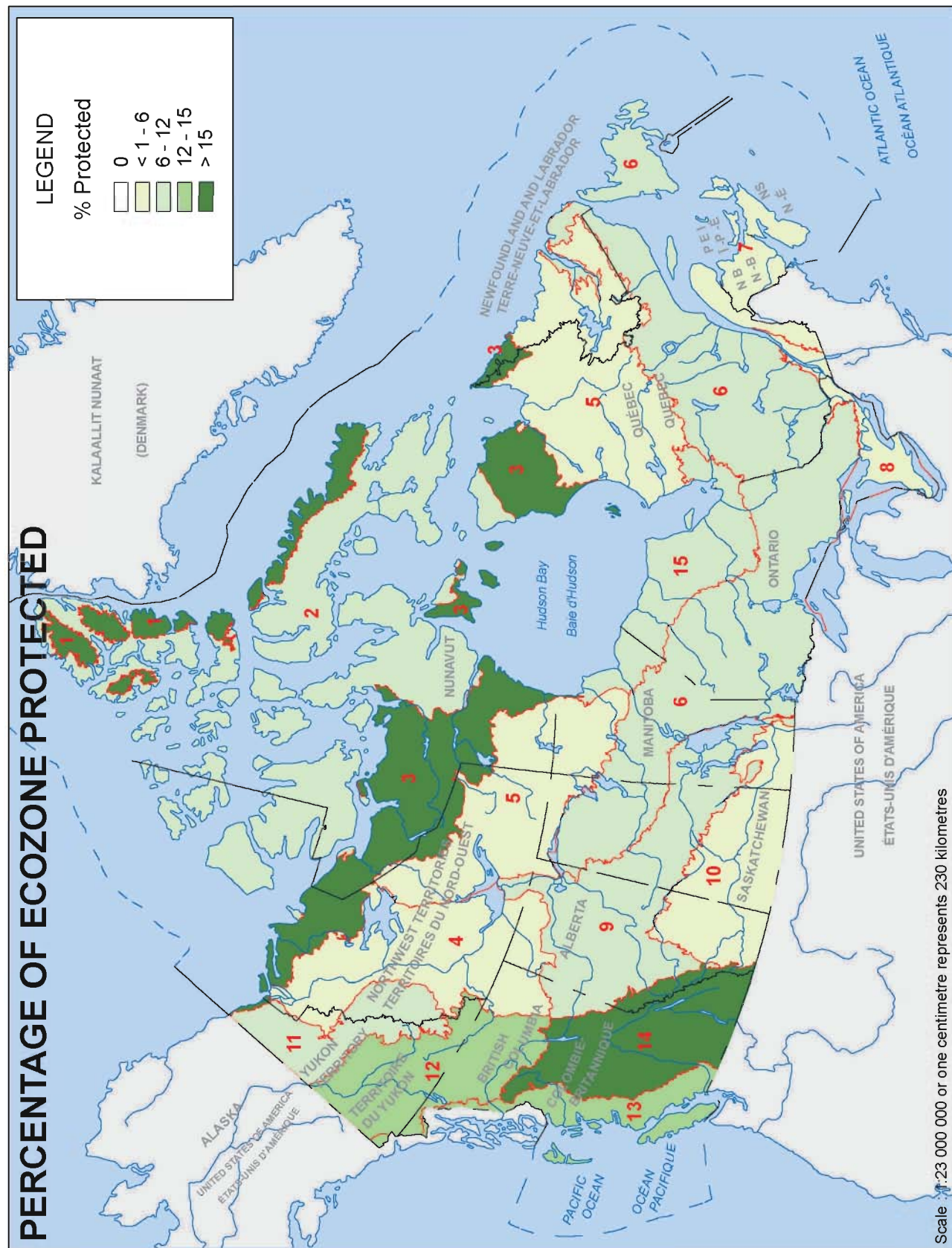
The extent of protected areas in Canada varies considerably between different ecological regions of the country – from the 22.6% of the Arctic Cordillera ecozone that is found within protected areas, to 7.4% of the Boreal Shield ecozone, to 0.4% of the Mixedwood Plain ecozone (Great Lakes - St. Lawrence Valley).

Percent of Protected Areas in Canada's 15 Ecozones

Ecozone No.	Ecozone	Percent Protected
1	Arctic Cordillera	22.58%
2	Northern Arctic	7.42%
3	Southern Arctic	15.94%
4	Taiga Plain	4.87%
5	Taiga Shield	3.95%
6	Boreal Shield	7.37%
7	Atlantic Maritime	4.33%
8	Mixed Wood Plain	0.42%
9	Boreal Plain	8.14%
10	Prairie	3.54%
11	Taiga Cordillera	10.26%
12	Boreal Cordillera	14.29%
13	Pacific Maritime	12.38%
14	Montane Cordillera	16.49%
15	Hudson Plain	10.43%

Ecozones and Ecoregions – Part of Canada's Ecosystem Framework

A land-based ecological classification system has been developed to help Canadians understand the ecological diversity of the country. Across the country, there are 177 ecoregions, which nest into 15 broad ecozones. Each of these unique ecological units is based on physiography and soils, and their expression with respect to vegetation under the influence of Canada's diverse climatic regimes. Developed in the 1980s, the system has been used as a common tool to assess and report nationally on the state of Canada's environment and forests as well as by many jurisdictions as the basis of their representative protected area systems planning. A complementary system has been developed for Canada's marine ecosystems.



Source: Protected Areas Provisional Atlas Framework for protected areas >1,000 ha, & the Canadian Conservation Areas Database for protected areas <1,000 ha. Excludes all interim protected areas that are not identified in the Protected Areas of Canada map.

- CANADA'S DIVERSITY OF PROTECTED AREAS -

Canadian jurisdictions administer a diverse range of protected areas, with about half of the land in all terrestrial networks found in national, provincial, or territorial parks.

- Most protected areas agencies use a range of protected area types, including pristine wilderness areas, parks that provide for both conservation and public enjoyment, and wildlife areas that protect valuable habitat for specific wildlife species.
- 95% of lands within Canada's terrestrial protected areas are classified within IUCN Management Categories I-IV, which largely prohibit industrial activities such as forestry, mining and hydro development¹.
- Many jurisdictions are just beginning to evaluate lands which might fall into Category V and VI protected areas. In many cases these areas may be owned and managed outside of traditional park and protected area agencies. For example, a number of jurisdictions are beginning to assess the extent to which privately administered conservation lands within their province or territory meet the IUCN protected areas classifications.

Management Classification of Canada's Terrestrial Protected Areas (IUCN Categories)^{1,2}

IUCN Category	IUCN Protected Area Managed for	No. of Protected Areas	Total Area Protected (ha)
Ia	Science or wilderness protection	570	1,555,222
Ib	Wilderness protection	143	30,552,847
II	Ecosystem protection & recreation	1,192	40,454,877
III	Conservation of specific natural features	795	3,033,612
IV	Conservation through management intervention	1,724	998,057
V	Landscape/seascape conservation or recreation	171	218,154
VI	Sustainable use of natural resources	2,483	3,785,698
Unclassified		437	3,997,564
Total		7,515	84,596,031

¹ Does not include interim protected areas, as the majority of these lands have not yet been classified. It similarly does not include protected areas established by Aboriginal communities or private organizations.

² This IUCN data should be viewed as preliminary and subject to change, as jurisdictions compare their rankings to others in Canada and begin a discussion to arrive at a more common understanding on how to apply the CCEA's Application of IUCN Management Categories – A Guidebook for Canadian Protected Areas Agencies (February 2005).

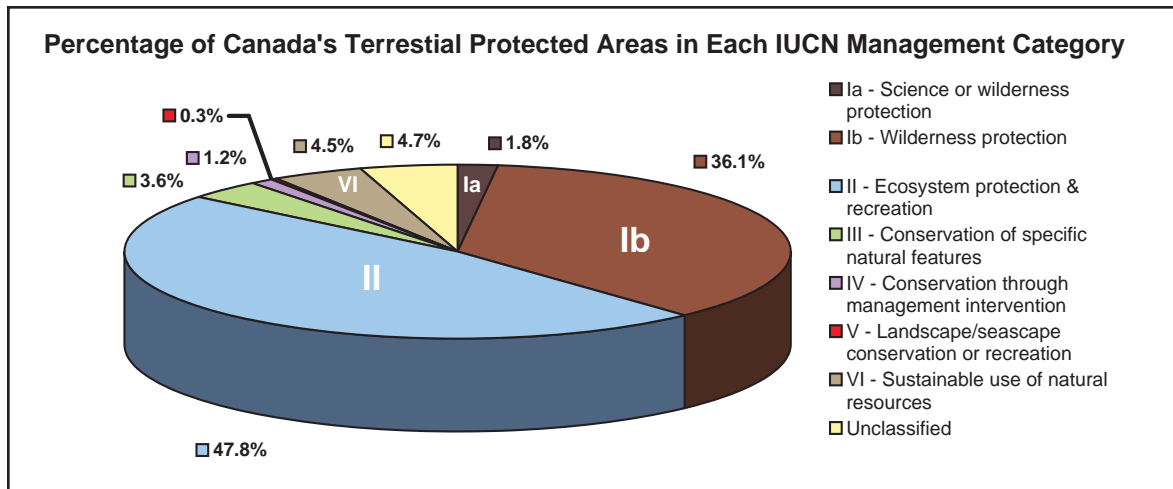
Classifying Canada's Protected Areas

Globally and within Canada, protected areas are classified according to a series of six management categories, depending upon their management objective. These categories, developed by the World Conservation Union (IUCN), are summarized as follows:

- Category Ia - Protected area managed mainly for science or wilderness protection
- Category Ib - Protected area managed mainly for wilderness protection
- Category II - Protected area managed mainly for ecosystem protection and recreation
- Category III - Protected area managed mainly for conservation of specific natural features
- Category IV - Protected area managed mainly for conservation through management intervention
- Category V - Protected area managed mainly for landscape/seascape conservation or recreation
- Category VI - Protected area managed mainly for the sustainable use of natural resources

Over the last year, protected areas agencies have begun to review and reassess the IUCN categories of their various protected areas using a guidance document prepared by the Canadian Council on Ecological Areas, in order to help ensure national consistency in the classification of Canada's protected areas. This is a work in progress; protected areas agencies continue to work with the CCEA to further refine and ensure consistency in the evaluation and reporting of these categories for Canada's protected areas.

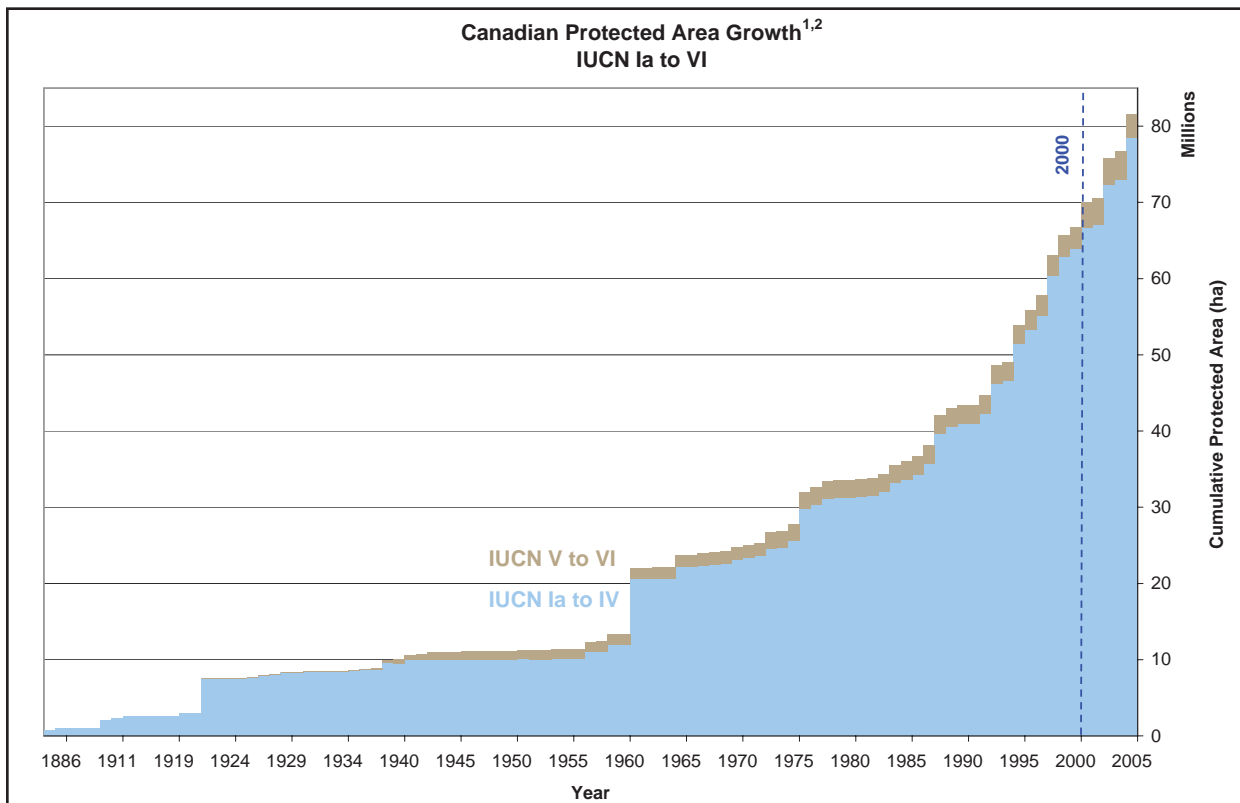
¹ The Canadian Council on Ecological Areas advises that in classifying Canadian protected areas according to IUCN classifications, industrial activities such as mining, forestry and hydro-development be regarded as incompatible with the objectives of protected areas in categories I-IV, but that in some cases these activities may be grandfathered until leases expire. Source – CCEA, The Application of IUCN Management Categories – A Guidebook for Canadian Protected Areas Agencies (February 2005).



- CANADA'S GROWING PROTECTED AREAS NETWORKS -

Canada's protected areas networks have grown by roughly 19% since 2000.

- Approximately 16 million ha of land have been added to Canada's protected areas networks since 2000.
- From 2000 to 2005, the growth rate of Canada's protected areas network has been 3.9% per year, while from 1992 to 2000 the growth rate was 4.9% per year.



¹ Does not include interim protected areas identified in this report.

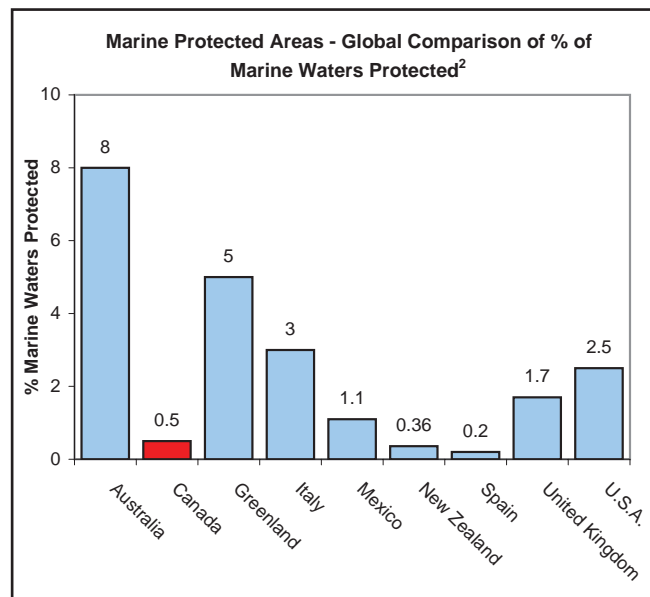
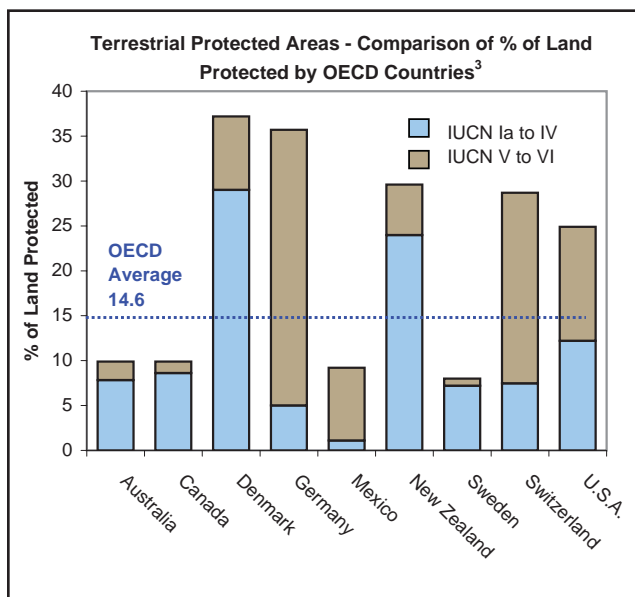
² Data used for calculating growth in protected areas across Canada is derived from the Canadian Conservation Areas Database.

- A GLOBAL PERSPECTIVE -

Canada ranks 4th out of 30 OECD countries in terms of the amount of lands in protected areas that largely prohibit industrial activities. Canada ranks 16th out of 30 OECD countries in terms of the amount of lands set aside in all terrestrial protected areas. Canada ranks 70th globally in percentage of oceans protected.

- Canada manages 5.1%¹ of the world's terrestrial protected areas, and 1.4%² of the world's MPAs.
- Among OECD countries, Canada ranks 16th out of 30 in terms of the amount of lands we protect (9.9%), behind Denmark (37.2%), New Zealand (29.6%), and the United States (24.9%), but ahead of Mexico (9.2%) and Sweden (8%). However, Canada ranks 4th out of 30 in terms of the amount of lands in IUCN Categories I-IV protected areas, which largely prohibit industrial activities such as forestry, mining, and hydro development.

- Canada ranks 70th globally in percentage of oceans protected—behind Australia (8%), Greenland (5%), Italy (3%), the United States (2.5%), UK (1.7%), and Mexico (1.1%), but ahead of New Zealand (0.36%) and Spain (0.2%).
- While many countries around the world have fully assessed and currently report on the full suite of IUCN protected areas categories, in Canada many jurisdictions are just beginning to evaluate lands which might fall into Category V and VI protected areas. Ongoing progress by Canada in this respect will help us to more accurately assess and report on the full extent of our protected areas networks on a national and international scale.



¹ Source: IUCN World Commission on Protected Areas and the United Nations Environment Program – 2006 World Database on Protected Areas.

² A considerable amount of the Marine Protected Areas data used in this publication / database / map was derived from MPA Global, a global database of MPAs developed by Louisa Wood, Sea Around Us Project, University of British Columbia Fisheries Centre, as part of her (currently) ongoing PhD thesis, and in collaboration with WWF and UNEP-WCMC (2006). MPA Global was originally developed from the World Database on Protected Areas (WDPA), maintained by UNEP-WCMC, and much of the data in MPA Global have been used to update the WPDA. Please refer to www.mpaglobal.org and www.unep-wcmc.org for additional information on these MPAs. Any further use or publication of these data must include this acknowledgment.

³ Source: OECD Environmental Data Compendium 2004 Edition, p. 142. Note that because comparisons are made using 2004 data, the percentage of land protected for Canada is slightly less than what is reported elsewhere in this chapter.

CHAPTER 2 – TERRESTRIAL PROTECTED AREAS PLANNING

SUMMARY OF FINDINGS

- 11 of 15 jurisdictions have protected areas strategies in place. BC has substantially completed implementation of its strategy.
- 29% of Canada's ecoregions are afforded a high level of protection (>12%), 12% moderate protection (6 to 12%), 42% low protection (<6%), and 17% have no protected areas.
- Varying levels of attention are being given by jurisdictions to designing protected areas networks to sustain ecological processes and functions across landscapes, to conserve wide ranging species, and to protect hot spots for biodiversity and species at risk in the settled regions of southern Canada.
- Candidate protected areas are being identified and advanced in NWT and NU using community-based approaches to planning.
- Several jurisdictions are beginning to assess potential impacts of climate change and consider adaptation strategies (BC, AB, SK, ON & PC).
- 6 of 15 jurisdictions plan for the conservation of inland freshwater ecosystems within their protected areas networks (BC, AB, MB, ON, QC & PC).
- Two thirds of the total area protected in Canada are found within a small number of protected areas that are greater than 300,000 ha, which is a roughly estimated minimum size needed to guard against biodiversity loss.
- Jurisdictions have highly variable levels of scientific data, information, tools and capacity for designing protected areas networks. Several agencies noted the need for additional research regarding the design of protected areas networks to sustain ecological processes and functions, and to preserve wide ranging species.
- Jurisdictions are working cooperatively on the management of transboundary protected areas. More opportunity exists for jurisdictions to work together in planning their protected areas networks on an ecoregional basis.

CONTEXT

Canada is one of the few countries that still has the opportunity to conserve relatively intact, unfragmented habitats within its protected areas networks, particularly in its boreal forests and Arctic ecosystems. Jurisdictions have made significant progress in this respect; however, none has yet fully met the commitment to complete networks of protected areas.

In the southern regions of the country, the highly fragmented landscapes necessitate approaches to protected areas planning that focus on conserving biodiversity and species at risk hot spots and working with conservation organizations, landowners, and land users towards the effective stewardship of private lands.



Photo Credit © Ontario Ministry of Natural Resources

ANALYSIS

- PROTECTED AREAS STRATEGIES -

11 of 15 jurisdictions have protected areas strategies in place. BC has substantially completed implementation of its strategy.

Status of Protected Areas Strategy (PAS) for Each Jurisdiction

PAS substantially implemented	BC ¹
PAS being implemented	AB ² , SK, MB, ON ² , QC, NB, NS, PEI, NWT, YK, PC
PAS being developed	NL, EC
No PAS in place	YK ³ , NU ⁴

¹ BC has completed implementation of its protected areas strategy; however, there are important gaps remaining that it continues to work to fill.

² AB and ON protected areas strategies and frameworks are in place and completed, while new strategies have been developed and are being implemented to further complete AB's and ON's systems.

³ Individual protected areas opportunities are being considered in YK through the land claims process. Upon completion of remaining land claims, YK may consider the need to develop a representative protected areas network.

⁴ The NU government supports the development of a PAS but feels that the Government of Canada's Indian and Northern Affairs Canada has the mandate through the Territorial Lands Act and as administrator of all Crown lands in the territory, and should be the lead in development of the strategy.

- PROTECTING REPRESENTATIVE HABITATS WITHIN CANADA'S ECOREGIONS -

29% of Canada's ecoregions are provided a high level of protection (>12%), 12.4% moderate protection (6 to 12%), 41.9% low protection (<6%), and 16.6% have no protected areas.

- Jurisdictions committed in both 1992 and 2000 to complete networks of protected areas representative of Canada's land-based natural regions.¹
- Most jurisdictions are developing protected area networks with a primary objective of protecting representative habitats in each ecoregion.
- AB provides the greatest level of representative areas protection of all jurisdictions, with 66% of its natural regions receiving a "high" level of protection.

Summary of Ecoregion Protection

Degree of Protection	Ecoregion Count	Percent of Ecoregions
>15 %	50	23.0%
12 to 15%	13	6.0%
6 to 12%	27	12.4%
<1 to 6%	91	41.9%
None	36	16.6%

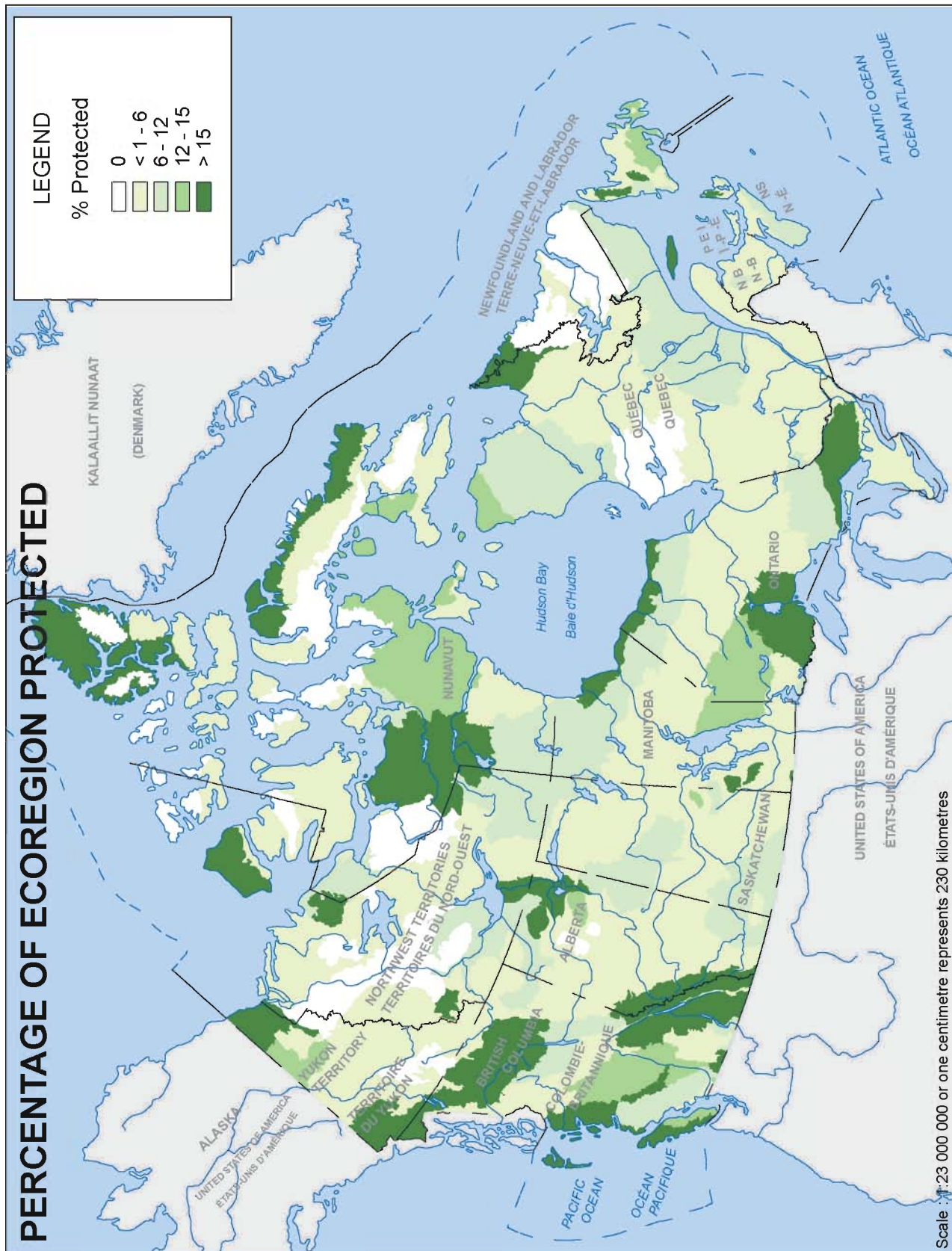
Representative Targets Achieved for Each Jurisdiction's Protected Areas Networks (As reported on by each provincial and territorial protected areas agency)

Jurisdiction	% of Ecological Units Protected
BC	33% high; 19% moderate; 48% low
AB	66% high; 19% moderate; 15% little or none
SK	nd
MB	27% high; 9% moderate; 42% partial; 22% none
ON	in preparation ¹
QC	46% high; 15% moderate; 39% low
NB	14% high; 71% moderate; 14% low
NS	34% fully represented
PEI	nd
NL	17% high; 69% have study areas; 14% none
YK	33% represented; 33% partial; 33% none
NWT	62% represented; 38% partial (<10%) or none
NU	No PAS in place, but future strategy may include representivity targets
PC	72% complete (28 of 39 natural regions)
EC	PAS not based on representative framework

nd – not determined.

¹ ON is in the process of collecting this information through the implementation of its comprehensive monitoring framework and in preparation for future State of Protected Areas reporting.

¹ Most governments use ecoregions as the basis for designing their representative protected areas networks. Some agencies use different ecological units for their protected areas planning (e.g. PC uses natural regions; BC uses ecodistricts).



Source: Protected Areas Provisional Atlas Framework for protected areas > 1,000 ha, & the Canadian Conservation Areas Database for protected areas < 1,000 ha. Excludes all interim protected areas that are not identified in the Protected Areas of Canada map.

- PROTECTING OTHER ECOLOGICAL FEATURES -

Varying levels of attention are being given by jurisdictions to designing protected areas networks to sustain ecological processes and functions across landscapes, to conserve wide ranging species, and to protect hot spots for biodiversity and species at risk in the settled regions of southern Canada.

- Effective protected areas network design requires a number of complementary approaches – inclusion of representative habitats, conserving unique or threatened habitats, ensuring habitat for wide ranging wildlife, and preserving ecological processes and functions¹.
- Jurisdictions have to date focused network strategies primarily on protection of representative habitats.
- Most jurisdictions have also given some consideration to employing “fine-filter” approaches to protect specific habitats of importance to rare, threatened and endemic wildlife. Some recent studies suggest, however, that Canada’s protected areas network does a less effective job of conserving biodiversity hot spots and habitats for species at risk, particularly in settled regions of southern Canada^{2,3,4}.
- Initial attention is being given by some jurisdictions to designing protected areas networks to maintain ecological processes and functions, such as facilitating

animal and plant dispersals and gene flows, providing for shifts in species ranges, maintaining natural processes (fire, wind, water, etc.), and ensuring resilience to short-term natural disturbances.

- A few jurisdictions have in place specific measures to ensure that wide ranging migratory species are effectively conserved within their protected areas networks.
- 13 of 15 jurisdictions have conducted some form of gap analysis to assess protected areas gaps and opportunities.

Designing Protected Areas for Newfoundland and Labrador’s Woodland Caribou

NL’s protected areas strategy provides for the establishment of six wilderness reserves, each greater than 1,000 km², specifically targeted for the conservation of the province’s woodland caribou.



Photo Credit © David Tilley

A Conservation Design for Canada’s Boreal

The University of Alberta’s BEACONS Project is developing a conservation design framework for Canada’s boreal region, including confirming appropriate levels of protection required to maintain the ecological integrity of the region. Under the BEACONS reverse-matrix model for conservation planning, the paradigm of reserves as nodes within a largely degraded environment is inverted, and extensive conservation lands are the supportive matrix within which development activities are carefully managed so as not to erode other values.

The BEACONS team is identifying criteria and candidates for benchmark areas across boreal Canada to anchor a protected areas network, and to provide reference areas against which resource development activities can be evaluated. **Benchmark areas** must be large enough to maintain ecological processes, such as predator-prey dynamics, hydrological connectivity and natural disturbance regimes. Both SK and NWT are working with BEACONS to assess benchmark suitability/requirements for their protected areas networks.

- COMMUNITY-BASED PROTECTED AREAS PLANNING IN THE NORTH -

Candidate protected areas are being identified and advanced in NWT and NU using community-based approaches to planning.

- Land claims processes in all three northern territories play an important role in planning, identifying and establishing protected areas.
- Existing or planned protected areas strategies and/or land claims processes in NWT and NU recognize the important role of local communities in nominating and advancing candidate protected areas.
- Federal and territorial jurisdictions noted the importance of identifying areas of cultural importance to local Aboriginal communities in the three northern territories, recognizing the close association between the conservation and cultural value of the land.

¹ R. F. Noss, C. Carroll, K. Vance Borland, G. Wuerthner, Conservation Biology 16, 895 (2002)

² Jeremy T. Kerr, Josef Cihlar, Patterns and Causes of Species Endangerment in Canada, Ecological Applications, 14(3), 2004, pp. 743-753

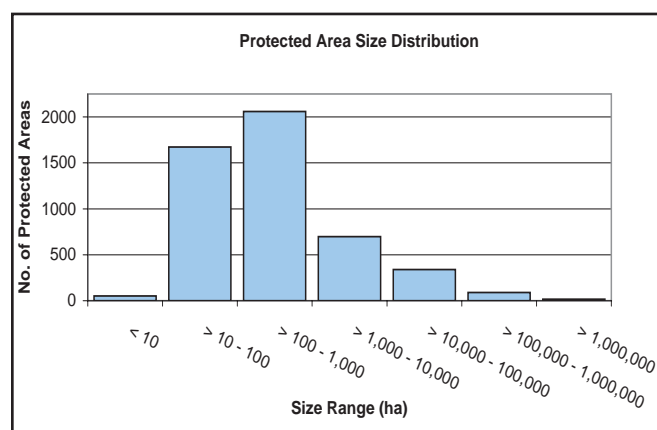
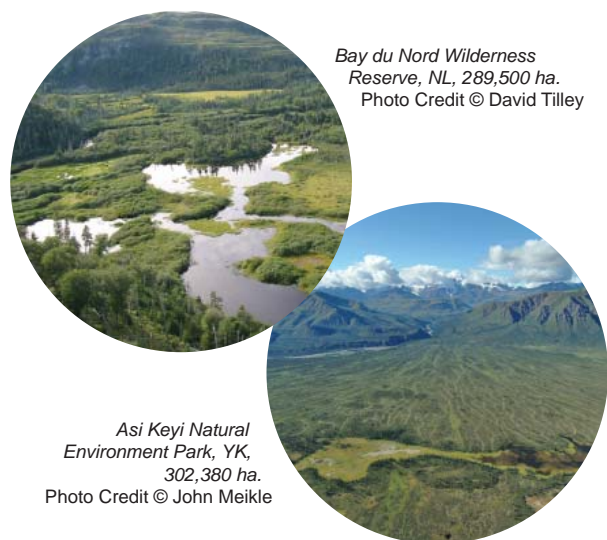
³ L. Warman, D.M. Forsyth, A.R.E. Sinclair, K. Freemark, H.D. Moore, T.W. Barrett, R.L. Pressley, D. White, Species Distributions, Surrogacy, and Important Conservation Regions in Canada, Ecology Letters (2004) 7:374-379

⁴ G.C.E. Scudder, Biodiversity Conservation and Protected Areas in British Columbia, University of British Columbia

- CONSERVING UNFRAGMENTED HABITATS -

Two thirds of the total area protected in Canada are found within a small number of protected areas that are greater than 300,000 ha, which is a roughly estimated minimum size needed to guard against biodiversity loss¹.

- 4 of 10 jurisdictions include design requirements in their network strategies to preserve unfragmented habitats.
- SK, ON and NL's protected areas strategies all provide for the inclusion of a series of protected areas in excess of 100,000 ha within their networks. Many other jurisdictions also plan for and have established large protected areas within their networks.
- QC and NWT are advancing several candidate protected areas that exceed 500,000 ha and 700,000 ha respectively. MB is currently advancing one candidate protected area which is 748,000 ha.



¹ The 300,000 ha figure is taken from Wiersma, Yolanda F., Thomas J. Beechey, Bas M. Oosenbrug and John C. Meikle. 2005. Protected Areas in Northern Canada: Designing for Ecological Integrity. Phase 1 Report. CCEA Occasional Paper No. 16. Canadian Council on Ecological Areas, CCEA Secretariat, Ottawa, Ontario, Canada. xiv + 128 pp. + folded map. This minimum reserve area was estimated based on historical species distributions. It should be noted that in the highly fragmented landscapes of southern Canada, many species that were historically present and that required large tracts of unfragmented habitat have been extirpated, and remaining wildlife may have lesser area requirements.

- ENSURING HABITAT CONNECTIVITY -

Variable attention is being given to providing for habitat connectivity between protected areas.

- Eight jurisdictions noted as "significant" constraints to their protected areas planning the lack of tools for providing habitat connectivity and/or for the compatible management of activities adjacent to protected areas. ON noted that establishing connectivity was one of its top priorities over the coming years.
- Jurisdictions reported using the following mechanisms for providing habitat connectivity.

Mechanisms in Place to Provide for Connectivity Between Protected Areas

Connectivity Measure	No. of Jurisdictions with Connectivity Measure in Place
Regulatory-based buffers or corridors	5
Policy guidance on need for networking protected areas	4
Non-regulatory designations (i.e. World Heritage Sites, model forests, etc.)	5
Environmental assessment process that consider impacts on protected areas	7
Policy guidance to <u>governments</u> on compatible use of lands around protected areas	4
Policy guidance to <u>industry</u> on compatible use of lands around protected areas	3

Mineral Claims Restrict Protected Area Opportunities in Nunavut

There is a perception that NU contains great areas of lands available for protected areas. However, most potentially available lands have been reserved/claimed for prospecting and exploration. In the last three years, NU has quietly experienced the most extensive mineral rush in Canadian history. Over 2,500 permits were issued between 2004 and 2006, committing over 40 million hectares to development. At the same time, there is currently no appropriate mechanism for communities to identify and set aside areas of importance to allow time for needed research to be completed (WWF, 2005).

- PLANNING FOR CLIMATE CHANGE -

Several protected areas agencies are beginning to assess potential impacts of climate change and consider adaptation strategies (BC, AB, SK, ON & PC).

- Climate change predictions suggest a shifting of ecosystem distributions and composition, generally in a northward direction, and that special consideration must be taken in order to ensure that habitat connectivity can be maintained¹. The impacts of climate change are expected to be most pronounced in polar regions, where temperature increases will be greatest².
- BC, AB, SK, ON & PC are all advancing climate change studies and/or pilot projects within their protected areas networks to assess potential impacts and develop adaptation strategies.
- In the northern territories, jurisdictions have not yet begun to assess potential consequences of climate change for their network planning.
- Canada's protected areas play an important role in our country's efforts to minimize the release of CO₂ into the atmosphere by sequestering large amounts of carbon³.

Preparing National Parks for Climate Change

Parks Canada is developing climate change scenarios for each geographic region and every national park as part of the suite of indicators that are used to monitor the ecological integrity of the park system. From the scenarios and monitoring, park scientists will be better able to predict the impacts on plant and animal communities. Park managers can then take measures to adapt to the inevitable changes. Climate change considerations are increasingly being used to design boundaries of proposed national parks.



Observatory for the avalanche control program in Rogers Pass, Glacier National Park, BC.
Photo Credit © W. Lynch

- PLANNING FOR FRESHWATER PROTECTION -

6 of 15 jurisdictions plan for the conservation of inland freshwater ecosystems within their protected areas networks (BC, AB, MB, ON, QC & PC).

- It is not known what amount of freshwater habitat is found within Canada's protected areas networks, as most jurisdictions do not currently have the ability to report this information.
- An important factor in the identification of candidate protected areas by First Nations in NWT is the protection of watersheds and wetlands.
- PC's National Marine Conservation Areas system plan provides for five freshwater NMCAs in the Great Lakes. There is currently one NMCA (Fathom Five) and another proposed for Lake Superior.
- The Canada-Ontario Agreement respecting the Great Lakes Basin Ecosystem provides for Canada and ON to begin to establish a viable and representative Great Lakes protected areas network.

Freshwater Ecosystem Protection

- BC's protected areas network includes 13.1% of the province's total freshwater habitat, including 46,000 of its 389,000 lakes.
- ON has set, as a target, to establish one waterway provincial park in each of its 71 ecodistricts. 42 ecodistricts are currently represented with a waterway park.
- QC's protected areas strategy includes an 8% target for freshwater habitat protection.
- 6.6% of PEI's protected areas are within freshwater ecosystems.

¹ G. del Barrio, P.A. Harrison, P.M. Berry, N. Butt, M.E. Sanjuan, R.G. Pearson and T. Dawson. 2006. Integrating multiple modelling approaches to predict the potential impacts of climate change on species' distributions in contrasting regions: comparison and implications for policy. *Environmental Science & Policy*. Volume 9, Issue 2, pp. 129-147.

² James J. McCarthy, Osvaldo F. Canziani, Neil A. Leary, David J. Dokken, Kasey S. White (editors). *Climate Change 2001: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change.

³ S.N. Kulshreshtha et al., "Carbon Sequestration in Protected Areas in Canada", University of Saskatchewan, Department of Agriculture and Economics, 2000.

- SCIENCE IN SUPPORT OF NETWORK DESIGN -

Jurisdictions have highly variable levels of scientific data, information, tools and capacity for designing protected areas networks.

- 11 of 15 jurisdictions reported having adequate scientific information for designing representative protected areas networks.
- Most jurisdictions reported having moderate to good data to plan for fine filter considerations, such as species at risk and areas of high biodiversity.
- Many jurisdictions reported having partial or minimal information to plan networks for sustaining ecological processes and functions and preserving wide ranging species, and that further research was needed to assist efforts in this respect.
- The greatest reported limitations in the planning of protected areas networks were (1) inventory and monitoring; (2) stress assessments and indicators; and (3) traditional ecological knowledge.
- Most jurisdictions reported having the following adequate capabilities to design their protected areas networks: (1) database design; (2) GIS mapping; and (3) candidate area evaluation.

- INTERGOVERNMENTAL NETWORK PLANNING -

Jurisdictions are working together on the management of transboundary protected areas. More opportunity exists for jurisdictions to work together in planning their protected areas networks on an ecoregional basis.

- Many provinces and territories are working cooperatively on the management of specific cross-border protected areas. BC and AB, and AB and SK, have established inter-provincial protected areas.
- Most jurisdictions are not working with adjacent governments more broadly in the overall planning of protected areas networks across landscapes that they share.
- A few provincial jurisdictions reported working with the Nature Conservancy of Canada and adjacent states and provinces on conservation planning that informs protected areas planning.
- The NWT Protected Areas Strategy is jointly administered by the governments of NWT and Canada.
- All jurisdictions are members of the Canadian Parks Council and the Canadian Heritage Rivers Program (with the exception of QC), and others participate in a number of international protected areas planning or related initiatives, notably the Circumpolar Protected Area Network of the Arctic Council and the Commission on Environmental Cooperation.
- The Canadian Council on Ecological Areas' Conservation Areas Reporting and Tracking System (CARTS), currently under development, is an important new framework for ensuring nationally consistent protected areas information is collected and made publicly available.

Tracking Canada's Protected Areas

The Canadian Council on Ecological Areas (CCEA) is leading the development of the Conservation Areas Reporting and Tracking System (CARTS), a national web-based portal that enables the standardized collection, summarizing and mapping of Canada's protected areas. CARTS will enable both scientists and policy-makers to undertake accurate assessments of Canada's growing network of protected areas and will help Canada to fulfill important national and international reporting obligations. The CARTS project is a partnership of federal, provincial and territorial protected areas agencies, the CCEA, the National Forest Information System (NFIS), and the national GeoConnections program.

CHAPTER 3 – MARINE PROTECTED AREAS (MPA) PLANNING

SUMMARY OF FINDINGS

- 0.5% of Canada's oceans waters have been set aside in protected areas.
- The *Federal Marine Protected Areas Strategy* provides a framework for effective federal cooperation in MPA network development on our three coasts.
- Four provincial agencies have also established MPAs focusing on coastal and estuary habitats, totalling 505,870 ha.
- Intergovernmental cooperation in MPA planning and management is occurring frequently across the country.
- MPA network development is hindered by competing interest for access to and use of our oceans and by lack of public awareness.
- Canada has made a number of important national and international commitments to significantly accelerate MPA network establishment.
- MPA priorities for federal agencies include (1) developing a process for MPA network site selection; and (2) engaging provincial and territorial governments to plan and develop MPA networks in a collaborative manner.
- Establishment of the following candidate MPAs over the next two years, as planned, would double the amount of Canadian marine waters in protected areas: seven Oceans Act MPAs (980,232.2 ha), three National Marine Conservation Areas (1,340,000 ha), EC's first Marine Wildlife Area in the Scott Islands region, three new National Wildlife Areas in Nunavut (450,000 ha), and coastal MPAs being advanced by BC, NB and PEI.

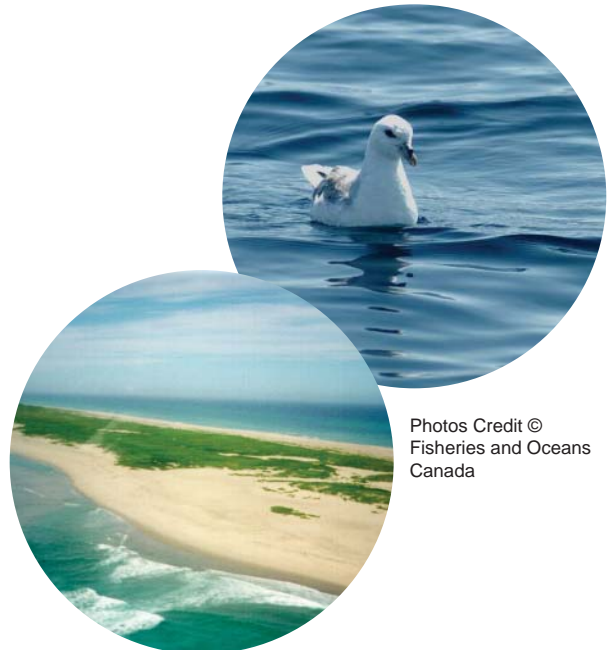
CONTEXT

Despite having the largest coastline in the world, Canada has one of the least developed marine protected areas networks. At the current rate of progress, the country will fall short of meeting its 2012 CBD objective of completing its marine protected areas networks. The Federal Marine Protected Areas Strategy provides a basis for advancing comprehensive MPA networks on all three coasts. A priority for implementation of the Strategy will need to be effective collaboration with provincial and territorial governments, particularly in support of their role in preserving coastal and estuary habitats.

What is a Marine Protected Area?

The IUCN defines a marine protected area as:

"Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment."



Photos Credit ©
Fisheries and Oceans
Canada

ANALYSIS

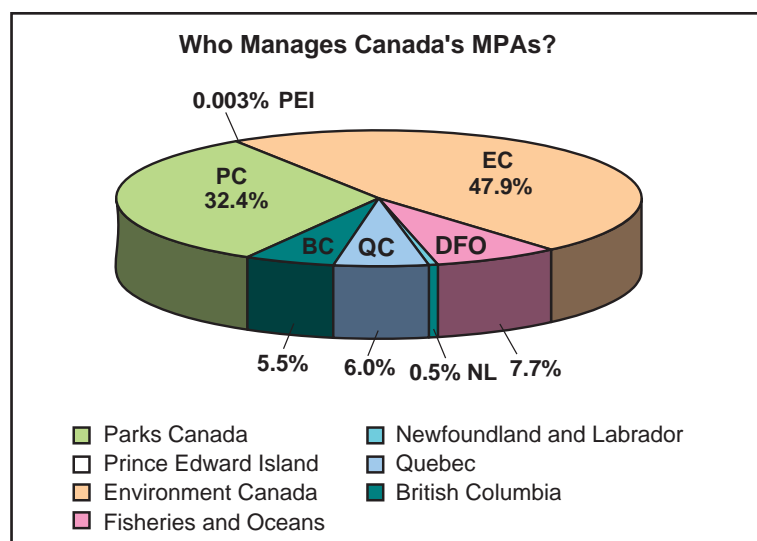
- EXTENT OF MARINE PROTECTED AREAS -

Canada has set aside 0.5% of its oceans as protected areas.

- Canada's marine protected areas network includes a total of 3,278,362 ha.
- Environment Canada administers 47.9% of Canada's marine protected areas, Parks Canada 32.4%, Fisheries and Oceans Canada 7.7%, and provinces and territories 12%.

Summary of Marine Protected Areas in Canada

Administrator	Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)	% of Canada's MPAs
Parks Canada	National Marine Conservation Area	1	11,500	32.4%
Parks Canada	National Park (Marine Portion)	11	938,000	
Parks Canada and Quebec	Saguenay - St. Lawrence Marine Park	1	113,800	
Environment Canada	National Wildlife Area (Marine Portion)	13	152,317	47.9%
Environment Canada	Migratory Bird Sanctuary (Marine Portion)	51	1,417,145	
Fisheries and Oceans	Marine Protected Area	5	253,530	7.7%
Newfoundland and Labrador	Ecological Reserve (Marine Portion)	6	15,200	0.5%
Prince Edward Island	Terrestrial Protected Area (Marine Portion)	1	87	0.003%
Quebec	Waterfowl Gathering Areas	352	195,333	6.0%
British Columbia	Terrestrial Protected Area (Marine Portion)	114	181,450	5.5%
Total		555	3,278,362	



- INTERGOVERNMENTAL COLLABORATION -

Intergovernmental cooperation in MPA planning and management is occurring frequently across the country.

- The federal government has a primary responsibility for oceans management, and three separate federal agencies are advancing MPAs – DFO, PC & EC.
- BC, QC, PEI & NL have also established coastal protected areas with marine components, totalling 505,870 ha.
- A variety of MPA designations and zonations allow for the protection of multiple values - wildlife habitat, fishery resources, ecological representation, cultural heritage, etc.
- QC's MPA program primarily targets important seabird habitat in the Gulf of St. Lawrence. They have to date established 352 protected areas with a marine component, totalling 195,333 ha.
- BC's protected areas strategy mandates the establishment of a representative MPA network. To date, 114 MPAs have been established, totalling 181,450 ha, and a further 49 candidate protected areas on the northern coast have been identified, many with a marine component.
- Based on initial interest, and with two thirds of Canada's shoreline, it is expected that NU's future Territorial Parks Act would include a marine/coastal component to reflect the importance of coastal areas to communities.
- Intergovernmental cooperation in MPA planning and management is essential and is occurring frequently. For example, PC developed the Saguenay - St. Lawrence Marine Park in cooperation with QC; PC & BC resolved seabed issues in Gwaii Haanas NMCA reserve; PEI supported the establishment of DFO's Basin Head MPA and sits on its management committee; and NB is working with DFO to establish an MPA in the Musquash River estuary.

Implementation of Canada's Oceans Strategy on the Pacific Coast

Canada and BC have agreed to develop a sub-agreement on an MPA framework for the Pacific coast. It will outline appropriate mechanisms, processes and structures to coordinate the review and establishment of new MPAs, outline the roles and responsibilities of Canada and BC in coastal planning and integrated oceans management planning, and provide for the development of an integrated ocean information management system to support science-based decision-making and sustainable development.



Photo Credit © BC Parks

- A COORDINATED FEDERAL MPA STRATEGY -

The Federal Marine Protected Areas Strategy provides a framework for effective federal cooperation in MPA network development on our three coasts.

- The recently released federal Marine Protected Areas Strategy outlines the means for the federal government to cooperatively advance MPA networks throughout our marine waters.
- Under the first phase of the Oceans Action Plan, five MPAs will be established by 2007 totalling 987,360 ha. A framework will also be developed to guide future MPA network design and development in a comprehensive coordinated manner.
- It is anticipated that future implementation of Canada's oceans agenda will provide for considerable growth of MPA networks on all three coasts.
- Identified priorities for federal agencies include (1) developing a process for MPA network site selection; and (2) engaging provincial and territorial governments to plan and develop MPA networks in a collaborative manner.

The Federal Marine Protected Areas Strategy

The Federal Marine Protected Areas Strategy is a collaborative effort of DFO, PC and EC under Canada's Oceans Action Plan to identify and manage new MPAs within integrated management planning areas (beginning with five Large Oceans Management Areas), working with provincial, territorial and Aboriginal governments. The Strategy has four objectives:

- establish a systematic approach to MPA planning and establishment;
- enhance collaboration for management and monitoring of MPAs;
- increase awareness and participation of Canadians in the MPA network; and
- link Canada's network of MPAs to continental and global networks.

- IMPEDIMENTS TO MPA NETWORK GROWTH -

MPA network development is hindered by competing interest for access to and use of our oceans, and by lack of public awareness.

- Jurisdictions report competing interests in oceans use as the most severe constraint on their MPA networks.
- Financial and staff resources for MPA programs amount to roughly 1% of the amount spent on terrestrial protected areas programs.
- Jurisdictional complexity, limited inventory of marine ecosystems, lack of public awareness, and the sheer fluidity of oceans are further reported constraints to MPA network advancement.

- NATIONAL AND INTERNATIONAL MPA COMMITMENTS -

Canada has made important national and international commitments to significantly accelerate MPA network establishment.

- Through the Convention on Biological Diversity Programmes of Work on Protected Areas and Marine and Coastal Areas, Canada has committed to establishing comprehensive MPA networks within an overall ecosystem approach by 2012 - a commitment reaffirmed at the World Summit on Sustainable Development in 2002, and endorsed at the World Parks Congress in 2003.
- All governments agreed in 1992's Statement of Commitment to Complete Canada's Network of Protected Areas to accelerate MPA efforts, and recommitted to this goal in 2000.
- Parks Canada has committed to establishing five new NMCA's by 2008, and DFO to five new MPAs by spring 2007.

Gilbert Bay Marine Protected Area

The Gilbert Bay MPA in southeast Labrador was designated in October 2005 to protect a genetically distinct population of (golden brown coloured) cod inhabiting the bay. Researchers from Memorial University and DFO discovered the uniqueness of the population in 1996. The local communities of Port Hope Simpson and William's Harbour approached DFO in 2000 to consider Gilbert Bay as a potential MPA. A steering committee comprised of community, fishery, aquaculture, Aboriginal, academic and government representatives has been involved in planning efforts and will continue involvement with management issues now that the MPA is designated.



Photo Credit © Fisheries and Oceans Canada, NL

CHAPTER 4 – INTEGRATED LANDSCAPE AND OCEANS MANAGEMENT AS A MEANS TO ADVANCE PROTECTED AREAS

SUMMARY OF FINDINGS

- Leading resource industries are proactively supporting the completion of protected area networks as a means to provide land certainty and demonstrate corporate social responsibility. Most provinces identified specific instances where companies have voluntarily withdrawn land or access rights to allow for the establishment of protected areas.
- Integrated landscape management (ILM) is emerging as an important means of ensuring that resource allocation decisions are made in concert with conservation planning, including protected areas planning. ILM processes are currently underway in about half of Canada's jurisdictions; four jurisdictions are advancing ILM in isolation from their protected areas planning.
- Integrated management planning being advanced in five Large Oceans Management Areas provides an opportunity for focused MPA network planning in Canada.
- In areas where integrated planning processes are absent, the "conservation first" principle is gradually being recognized as a proactive means to advance conservation at the same time as decisions are made around major resource developments.

Defining Integrated Landscape Management

Integrated landscape management enables decision-makers, and society as a whole, to set and achieve landscape-level objectives for sustainable development and sustainable ecosystems over appropriate spatial and temporal scales.

Canadian ILM Coalition

Land Use Planning in British Columbia's Great Bear Rainforest

In February 2006, the BC government outlined a land use plan for 6.4 million ha of land and waters on the central and north coast. The land use plan includes:

- more than 100 new protected areas covering 1.2 million hectares, which emphasize habitat conservation, recreation and cultural heritage features;
- additional Biodiversity Areas that allow for some resource development, while maintaining ecological diversity and function; and
- ecosystem based management of Operating Area Zones over the balance of the area, whereby the focus of resource development is to apply a new innovative ecosystem based management approach that will enhance community stability, encourage economic diversification and increase local employment, economic development and other benefits from resources.

The land use plan is based on recommendations from First Nations, resource industries, ENGOs, local governments and the people in these communities. Twenty-five First Nations were consulted during the planning.

ANALYSIS

- RESOURCE INDUSTRY SUPPORT FOR PROTECTED AREAS -

Leading resource industries are proactively supporting the completion of protected area networks as a means to provide land certainty and demonstrate corporate social responsibility.

- Resource industries in MB, NB, NL & NWT have specifically endorsed the government's protected areas strategy.
- Most jurisdictions identified specific instances where companies have voluntarily withdrawn land or access rights to allow for the establishment of protected areas (BC, AB, SK, MB, NB, NS, NL, YK).

Growing Support for Protected Areas by Alberta Industries

- Cattle ranchers in southern AB are proposing protection of additional grasslands as Heritage Rangelands to conserve both the land and the ranching lifestyle.
- An energy company has partnered with a national ENGO to propose the establishment of a wildland park on lands that it operates north of Waterton Lakes National Park.
- An innovative forestry company in AB's northeastern boreal forest is proposing the establishment of additional wildland park areas within its Forest Management Agreement (FMA) lands.
- Another forestry company was instrumental in recommending the expansion of William A. Switzer Provincial Park, and manages over a dozen provincial campgrounds within its FMA.



Photo Credit © Travis Sjøvold

In 1999, Amoco Canada relinquished its subsurface petroleum rights in parts of the Whaleback region in Alberta to make way for the establishment of Bob Creek Wildland Provincial Park and Black Creek Heritage Rangeland. Amoco donated these leases to the Natural Conservancy of Canada with no compensation, which were held until 2004 and then turned over to the government with the intent of conservation in perpetuity.

- INTEGRATED LANDSCAPE MANAGEMENT -

Integrated landscape management (ILM) is emerging as an important means of ensuring that resource allocation decisions are made in concert with conservation planning, including protected areas planning.

- BC, AB, SK, MB & ON have all initiated ILM processes over a portion of their province that specifically includes the identification of protected areas gaps and opportunities.
- In all three northern territories, ILM is underway or being planned for through land claim processes, including the development of land use plans. These processes do not necessarily require the identification and establishment of protected areas, but many communities are choosing to do so.
- AB, NS, NWT & NU have or are advancing ILM or similar regional planning processes independently of their protected areas planning, and as such do not identify opportunities for new protected areas.
- Both NL & SK have used their forest management planning in certain areas to identify protected areas opportunities; however, these planning processes do not account for other potential land uses (i.e. oil and gas, mining, etc.).

ILM in Saskatchewan's Boreal Forest & North-eastern British Columbia

SK's Athabasca Land Use Planning Process, which covers about 120,000 km² in the far north of the province, is designed to result in management guidelines for both protected areas and sustainable development areas. The plan is the result of a unique agreement between three Dene First Nations of the Prince Albert Grand Council, the non-treaty communities of the area and the province.



Photo Credit © Saskatchewan Environment

The Muskwa-Kechika Management Area (M-KMA) in north-eastern BC is intended to ensure that land use and other human activities in the M-KMA are managed to a world standard for environmental sustainability and economic stability. The M-KMA Act and M-KMA Management Plan required the development of five local strategic plans – wildlife, oil and gas, recreation, forestry, provincial parks – to provide direction to management of activities and intensities of development.

A summary of terrestrial integrated landscape management measures being advanced by each province and territory, including percentage of jurisdiction where ILM is underway or completed and that provides for the identification and establishment of protected areas.

British Columbia 86%

Over half of the protected area system was developed through organized land use planning tables made up of stakeholders and the public.

Alberta 0%

Alberta's planning initiatives in recent years have focused on integrated strategies to attempt to manage the cumulative effects of resource industries. In 2005, the government embarked on a process to develop a Land Use Framework for the entire province to address land use planning in a more proactive and comprehensive way.

Saskatchewan (not determined yet)

SK has initiated ILM within its boreal forests primarily under the requirements of the Forest Resources Management Act (FRMA). Mineral developments are not subject to the plans. Several planning tables are experiencing real difficulties in achieving consensus, and recent government spending reductions have also limited the resources available to conduct large-scale integrated planning. The Athabasca land use planning process is proceeding under an agreement with Aboriginal people outside of the provisions of the FRMA, and may prove to be an important model for land use planning in Saskatchewan's unallocated boreal region.

Manitoba ~13%

In 2002, Manitoba initiated a broad area planning exercise (Webanong Nakaygum Okimawin) on the east side of Lake Winnipeg as a pilot project for broad area planning across the province. The proposed Pimachiowin-Aki Assembly of Partners World Heritage Site (WHS) initiative is also currently underway. Other land use planning processes which take protected areas into account occur at a regional and community level.

Ontario 60%

A number of additional major land use planning processes underway in southern Ontario focus on private lands. Although these processes do not lead to protected areas establishment in the short term, they do provide a framework for other protection initiatives, including subsequent land acquisition for new protected areas.

Quebec (not determined yet)

The Quebec Protected Areas Strategy includes a policy for integration of protected areas into all public land use and resource allocation processes. All candidate areas are assessed in terms of land use repercussions. The Canada-Quebec Agreement on the St. Lawrence (2005-2010) particularly seeks to develop an integrated management approach for the St. Lawrence and implementation tools. For Quebec, this approach takes the Quebec Water Policy into account. The Strategy will also account for the visions, concerns, suggestions and recommendations of the other participants (government departments and agencies, municipalities, First Nations, user groups and civil society) concerned about integrated management of the St. Lawrence.

New Brunswick 0%

Integrated landscape planning contributes to the maintenance of water quality in sources of public drinking water, promoting watershed

management and appropriate use of lands, addressing water quality and quantity associated with private wells, co-ordinating Land Use Planning approvals and overseeing the Community Planning Act, as well as working with community groups to enhance sustainable planning activities, such as watershed groups. While not protected areas by the IUCN definition, roughly 170,000 ha or 2.4% of New Brunswick outside of protected areas is classed as "designated watershed" for the purpose of drinking water protection. There are land use planning processes at the local level that take conservation of nature into account, but system planning for protected areas has to date been done by the Province outside of land use planning exercises.

Nova Scotia 0%

To date, identification and establishment of formal protected areas has been undertaken through protected areas planning processes that are essentially independent of other land use planning processes. The Department of Natural Resources began the Integrated Resource Management process to determine future uses, examine resource conflicts and determine long-term land use objectives for Crown lands (about 25% of the province).

Prince Edward Island 0%

There is no province-wide land use plan. Municipalities have plans, but none that include protected areas.

Newfoundland and Labrador 0%

There is currently no integrated land use planning in NL. There are a variety of land use planning processes occurring in the province; for example, forest management planning and protected areas planning, but these processes and others are not integrated. Note, one of the terms of the Labrador Inuit Land Claims Agreement is that a land use plan will be completed for the Labrador Inuit Settlement Area within three years of the implementation date (December 1, 2005). This may be an opportunity to prepare the first integrated land use plan in the province.

Yukon Territory ~66%

Integrated land use plans are being developed in four planning areas in Yukon by regional land-use commissions pursuant to settled First Nations land claim agreements. Recommendations related to conservation and protected areas will likely be made in order to maintain a sustainable approach to these plans.

Northwest Territories ~66%

A policy decision was made by the federal government in 1992 that land use planning would be integrated into land claim agreements. Regional land use planning boards may include analysis of ecological representation and consideration of ecological integrity, and the establishment of formal protected areas. The NWT Protected Areas Strategy was established prior to the onset of land use planning, and is developing links with land use planning processes.

Nunavut 0%

The Nunavut Planning Commission (NPC), established under the Nunavut Land Claims Agreement, is responsible for regional land use planning in Nunavut's six planning regions. The identification and mapping of human use, waste sites, areas of archaeological significance, and other significant factors has begun in most of the six planning regions, with the ultimate goal of producing a comprehensive land use plan for each. To date, two land use plans have been completed (Kivalliq and North Baffin regions) and formally approved by all levels of government. There is a draft plan in place for the West Kitikmeot.

- INTEGRATED OCEANS MANAGEMENT -

Integrated management planning being advanced in five Large Oceans Management Areas provides an opportunity for focused MPA network planning in Canada.

- Integrated oceans management planning efforts are currently underway in five priority Large Oceans Management Areas (LOMAs) – the Beaufort Sea, Gulf of St Lawrence, Pacific North and Central Coast, Placentia Bay / Grand Banks, and Eastern Scotian Shelf.
- Integrated oceans management will be a collaborative effort whereby federal and provincial departments, First Nations, local governments, and resource sectors will work together to develop a management regime that promotes economic development while protecting ecosystem structure and function.
- A number of science-based initiatives are underway within each of the LOMAs, including the development of ecosystem overview reports, the identification of ecologically and biologically significant areas and areas/species of concern that will provide a sound scientific basis upon which a federal MPA network can be built.

Integrated Ocean Management Planning on the East Coast

The Eastern Scotian Shelf Integrated Management (ESSIM) Initiative is a collaborative ocean management and planning process being led and facilitated by Fisheries and Oceans Canada. This multi-year, strategic level plan will provide long-term direction and a common basis for integrated, ecosystem-based and adaptive ocean management.

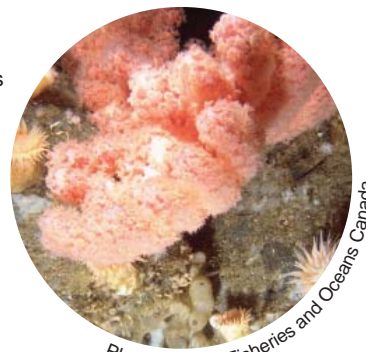
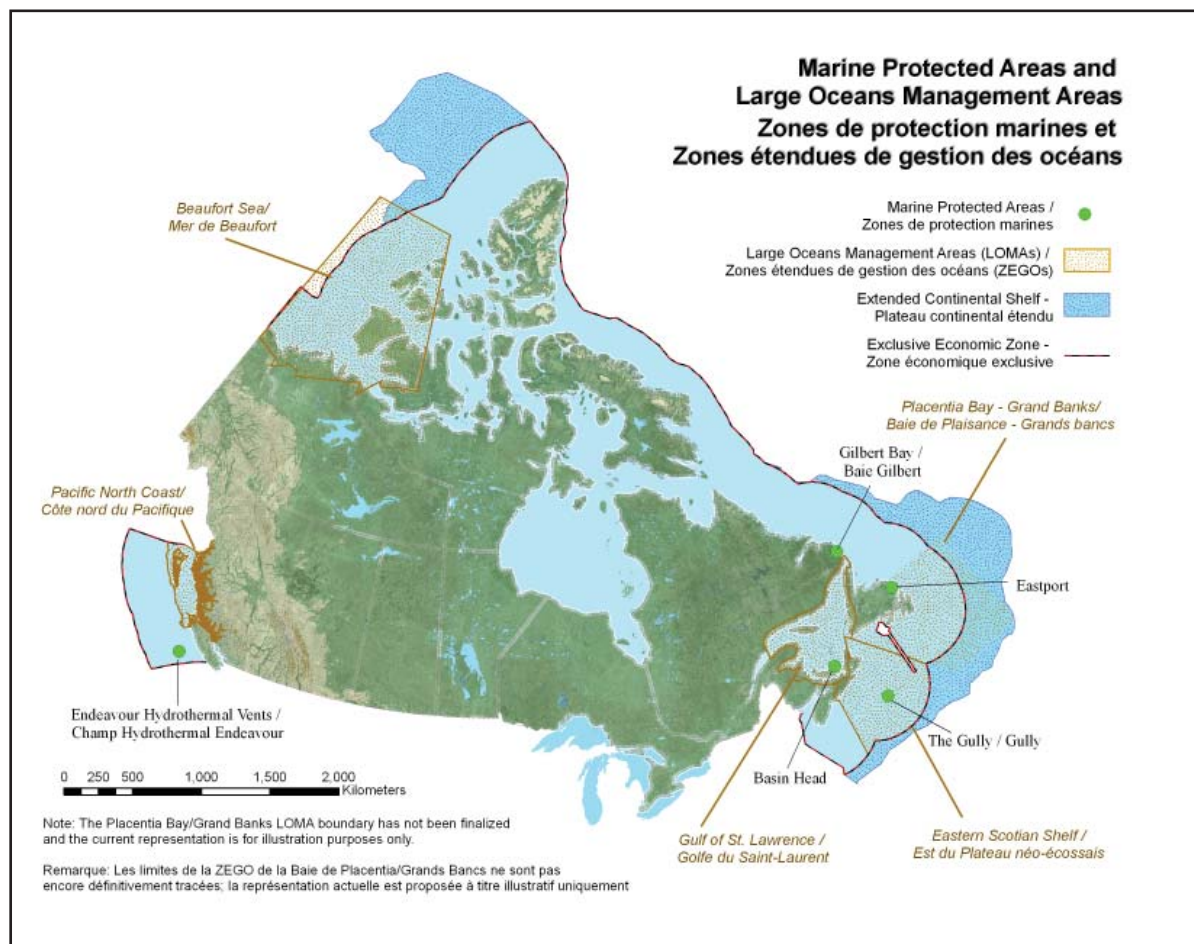


Photo Credit © Fisheries and Oceans Canada



- CONSERVATION FIRST -

In areas where integrated planning processes are absent, the “conservation first” principle is gradually being recognized as a proactive means to advance conservation at the same time as decisions are made around major resource developments.

- Most regulatory approval processes for resource projects are industry-specific. To a large degree, these processes do not provide for an assessment of whether adequate lands have been set aside for conservation.
- The NWT's Mackenzie Valley Action Plan (part of the NWT Protected Areas Strategy) is a notable example of conservation planning being advanced in parallel with the regulatory approval process for the proposed Mackenzie Valley gas pipeline.
- A number of leading industries and Aboriginal communities are advocating and advancing “Conservation First” throughout the boreal forest under the aegis of the Canadian Boreal Initiative's Boreal Forest Conservation Framework.
- Some leading forestry companies are pursuing forest certification processes, in particular Forest Stewardship Council Certification, which considers conservation areas as an integral part of sustainable forest practices. ON is requiring that forest operators on Crown lands be certified by the end of 2000.

Conservation Planning for Pipeline Development in the Mackenzie Valley

An important example of a “conservation first” approach to planning is being advanced in NWT's Mackenzie Valley, where a major energy pipeline proposal is in the environmental assessment phase. The proposed 1,500 km route runs through boreal forest from the Mackenzie Delta to the AB border. The objective of the NWT PAS's Mackenzie Valley Five Year Action Plan is to achieve a long term balance of ecological, cultural and economic values. The plan is a collaborative effort between various levels of government, communities, environmental organizations and industry. Under the Action Plan, a network of ecologically and culturally significant areas is to be identified and reserved across the 16 eco-regions in the Mackenzie Valley.



*Pehdzeh
Ki Deh,
Mackenzie River
near Wrigley, NWT.*

Photo Credit © Raquel Cli-Michaud

CHAPTER 5 – MANAGEMENT OF PROTECTED AREAS

SUMMARY OF FINDINGS

- Approximately 25% of Canada's terrestrial protected areas have up-to-date management plans in place. Few jurisdictions are actively implementing actions identified in these plans.
- All federal MPAs have management plans in place or being developed. DFO and PC have or are developing measures to more systematically guide management of their MPA networks.
- The majority of protected areas agencies have recognized the importance of managing their terrestrial protected areas for ecological integrity. Most still lack the necessary measures to manage or monitor ecological integrity.
- The greatest reported threats facing protected areas include incompatible adjacent land use activities, habitat fragmentation, invasive species, and increasing visitor use.
- Most protected areas agencies are working with local communities to help inform management decisions within their protected areas; this is of particular importance in addressing the above-mentioned threats.
- Three jurisdictions have systematic measures in place to assess and report on the state of their protected areas (BC, ON & PC).

CONTEXT

Most protected areas agencies have focused their attention over the last fifteen years on growing their protected areas networks. The majority of agencies reported significant deficiencies in their ability to manage or monitor their protected areas networks. Considerable effort is needed in the immediate future to ensure that these networks are effectively managed with an objective towards preserving the ecological integrity of Canada's landscapes.



Photo Credit © W. Lynch, Parks Canada

ANALYSIS

- MANAGEMENT PLAN DEVELOPMENT AND IMPLEMENTATION -

Approximately 25% of Canada's terrestrial protected areas have up-to-date management plans in place. Two of Canada's jurisdictions are "mostly" implementing their management plans, six jurisdictions are "partially" implementing their plans, and four jurisdictions are taking "little or no action".

Extent that management plans are in place and being implemented

Jurisdiction	No. of protected areas with management plans in place		No. of protected areas with management plans less than 10 years old		Extent that management actions are being implemented
Provincial and territorial protected areas agencies					
BC *	666/835	80%	573/835	69%	Not known
AB	53/519	10%	39/519	8%	Partially
SK	23/129 **	18%	nd	nd	Little or none
MB ***	5/102	5%	1/102	1%	Partially
ON	In prep ****	In prep ****	In prep ****	In prep ****	In prep ****
QC	26/1096	2.40%	12/1096	1%	Partially
NB	0/38	0%	0/38	0%	Management plans under development
NS	15/57	26%	nd	nd	Partially
PEI		80%	nd	nd	Little or none
NL	15/55	27%	7/55	13%	Partially
YK	8/9	89%	7/9	78%	Mostly
NWT	3/3	100%	3/3	100%	Partially
NU	0/27	0%	0/27	0%	Little or none
Federal protected areas agencies					
EC	141/143	99%	4/143	3%	Little or none
PC	33/42	79%	25/42	60%	Mostly

* BC – Management direction may include three types of documents: comprehensive management plans, more concise management direction statements or brief purpose statements and zoning plans

** SK – based on all PAs in categories I, II, III, IV

*** MB – based on all PAs in categories I-IV (categories V & VI have yet to be determined)

**** ON – ON is in the process of collecting this information through the implementation of its comprehensive monitoring framework and in preparation for future State of Protected Areas reporting

nd – not determined

- MPA MANAGEMENT PLAN DEVELOPMENT AND IMPLEMENTATION -

All federal MPAs have management plans in place or being developed. DFO and PC have or are developing systematic measures to guide management of their MPAs.

- DFO's five MPAs and PC's one NMCA have management plans in place or in development.
- Establishment of new federal MPAs is followed by site management planning, which includes research and

monitoring to ensure management effectiveness.

- Many of the federal coastal protected areas with marine components (national parks, national wildlife areas, migratory bird sanctuaries) have management plans in place, though many are outdated.
- All of NL's marine protected areas have management plans, most of BC's do, while most of QC's do not.
- PC and DFO reported having or developing systematic measures for measuring, monitoring and reporting on the ecological health of their protected areas.

- MANAGING FOR ECOLOGICAL INTEGRITY -

The majority of jurisdictions have recognized the importance of managing their terrestrial protected areas for ecological integrity. Most still lack the necessary measures to manage or monitor ecological integrity within their network.

- All jurisdictions but one have recognized the importance of maintaining the ecological integrity of their terrestrial protected areas network (in whole or in part) by including specific reference in appropriate legislation or policy (draft legislation in ON).

Defining Ecological Integrity

Ecosystems have integrity when they have their native components and processes intact.

- BC, AB, ON, YK & PC have identified ecological integrity objectives or indicators for a portion of their protected areas. Several other agencies have indicated future plans to do so (NB, NWT, NU & EC).
- 11 of Canada's 15 jurisdictions have at best sporadic mechanisms in place for monitoring the ecological health of their protected areas network.

Ecological Integrity in Canada's National Parks

The Canada National Parks Act establishes ecological integrity as the first priority in making management decisions. A Panel on the Ecological Integrity of Canada's National Parks concluded in 2000 that national parks were under threat from stressors and called for urgent action to improve ecological integrity. In response, Parks Canada is initiating a system-wide ecological integrity monitoring and reporting program focussed on six to eight key indicators that will be monitored consistently in each national park over time.



Photo Credit © J. Prieau, Parks Canada

- SCIENCE IN SUPPORT OF MANAGEMENT -

Most jurisdictions have relatively good scientific and other information available that they are using to help manage their networks.

- Parks Canada reported having substantial scientific information available for the management of their protected areas, as well as using this information significantly to inform management decisions.
- NU reported having very poor scientific information overall, and NWT, BC, & MB reported having limited information.
- Nine jurisdictions reported having good information on adjacent land uses.
- Many jurisdictions reported having limited information on the occurrence of invasive species and on natural community structure and function.

- THREATS TO CANADA'S PROTECTED AREAS -

The most commonly reported threats facing protected areas are:

- Incompatible land uses adjacent to protected areas, such as mining, forestry, oil & gas, and agriculture, were ranked as very serious threats by 5 of 8 jurisdictions. Habitat fragmentation was ranked a serious threat by 5 of 9 jurisdictions.
- Invasive species were ranked a serious threat by 5 of 8 jurisdictions.
- Increasing visitor use was ranked a serious threat by 4 of 8 jurisdictions.

Assessing Threats to Environment Canada's Protected Areas

A survey of managers of National Wildlife Areas (NWAs) and Migratory Bird Sanctuaries (MBSs) has concluded that many of EC's 143 protected areas are under threat:

- Tourism and recreation is affecting 56 NWAs & MBSs.
- Human disturbance is affecting 29 NWAs & MBSs.
- Pesticides and fertilizers are affecting 32 NWAs & MBSs.
- Exotic vegetation is affecting 30 areas.



Illegal wood cutting.
Purple Loosestrife (*Lythrum Salicaria*)
Photo Credit © Corel Corporation

- STATE OF PROTECTED AREAS REPORTING -

Three jurisdictions have systematic measures in place to assess and report on the state of their protected areas (BC, ON & PC).

- Four jurisdictions reported doing some reporting on their protected areas, either alone or more broadly through state of the environment reporting.
- Five jurisdictions are doing no regular assessment or reporting on the state of their networks.
- NB & NWT have indicated future efforts to systematically assess and report on the state of their protected areas.
- A review of NU legislation recommended systematic reporting.

Ontario's Ecosystem Approach to Protected Areas Reporting

Ontario Parks has developed a comprehensive, ecosystem-based approach to monitoring, to support planning and management of provincial parks and conservation reserves across Ontario and state of protected areas reporting. This hierarchical framework takes a criterion and indicator approach. Implementation is achieved through cooperative efforts in data collection and the sharing of data and expertise within the Ministry of Natural Resources and with other government agencies and non-governmental organizations.

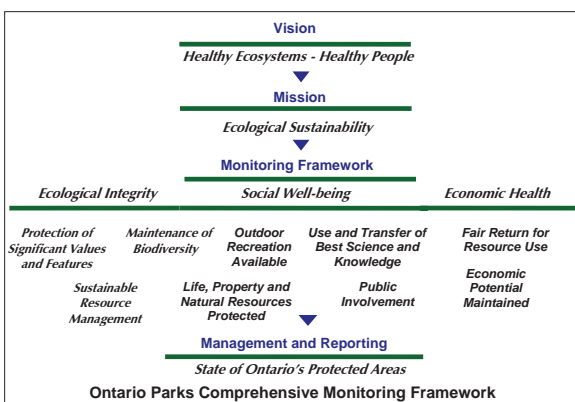


Photo Credit © Ontario Ministry of Natural Resources

- COMMUNITY INVOLVEMENT -

Most agencies are working with local communities to inform management decisions concerning their protected areas.

- 13 of 15 jurisdictions provide opportunities for community involvement for most or all of their protected areas.
- Community participation is enshrined in the legislation administered by eight protected areas agencies.

Community Groups Active at Prince Edward Island and New Brunswick Protected Areas

Supporting community groups within PEI's wildlife management areas will often carry out wildlife and ecotourism projects, including providing the public with access to the area, assisting with signage and promoting public use for recreational pursuits.



Little Harbour Dunes and Salt Marsh Natural Area, PEI.
Photo Credit © Government of PEI

A collaborative process is underway in NB to develop 10 Protected Natural Area management plans by 2007 through the efforts of volunteer Local Advisory Committees—including naturalists, local industry, First Nations, recreational users, anglers and hunters, landowners, local government, educators and tourism operators.



Loch Alva Protected Natural Area open house, NB.
Photo Credit © Vince Zelazny

CHAPTER 6 – ABORIGINAL INVOLVEMENT IN PROTECTED AREAS PLANNING AND MANAGEMENT

SUMMARY OF FINDINGS

- Aboriginal peoples have been involved in establishing over one quarter of the total lands within Canada's protected areas, primarily in the northern territories through land claims or other cooperative agreements.
- Aboriginal rights and benefits are part of the protected areas policy or practice of all governments, including the continuation of Aboriginal cultural practices, continued subsistence harvesting, and employment opportunities and economic assistance.
- The protection of areas of cultural importance is enabled or practiced in 12 of 16 jurisdictions; several provinces and territories (BC, ON, SK, MB, QC, NWT, NU, EC) are pursuing greater opportunities to protect cultural sites via protected areas and land use planning strategies.
- Aboriginal collaboration in integrated landscape management is directly contributing to protected areas network growth and integrity.
- Over half of Canada's jurisdictions are pursuing forms of Aboriginal cooperative protected areas management, with greatest shared management in the territories.

CONTEXT

The settling of remaining land claims agreements and finalization of impact benefit and other agreements provides an important opportunity to consider additional protected areas opportunities / needs.



*Réserve de
parc national des
Monts-Torngat-et-de-
la-Rivière-Koroc, QC.*

Photo Credit © Stéphane
Cossette

ANALYSIS

- ABORIGINAL SUPPORT FOR PROTECTED AREAS PLANNING -

Aboriginal peoples have been involved in establishing over one quarter of the total lands within Canada's protected areas, primarily in the northern territories through land claims or other cooperative agreements.

- Over 25 million ha have been designated as some form of protected area as a result of land claims or other agreements with First Nations - the vast majority under territorial or federal designation in northern Canada.
- Well over 5 million ha in new northern protected areas will develop from First Nations-provincial efforts in BC, ON & QC. For example, QC is working with First Nations to develop eight new parks that will expand its protected areas network more than fourfold.
- Settling remaining land claims agreements and finalizing Impact Benefit and other agreements in the territories will enable more federal and territorial protected areas.

Ni'iinlii Njik: Cooperative Conservation in Yukon

Ni'iinlii Njik is an excellent example of how major conservation goals are accomplished when public, Aboriginal, NGO and private partners work together. This 6,500 km² area in northern Yukon was conserved through the 1995 Vuntut Gwitchin Land Claim Agreement to protect cultural and natural history, notably salmon and grizzly bear. It includes three separate Yukon established protected areas together with Vuntut Gwitchin settlement land, with all four areas jointly managed as an ecological unit. To facilitate the creation of these conservation lands, the First Nation teamed up with the Nature Conservancy of Canada to buy out active mining claims in the preserve. This year, a joint eco-tourism venture will begin through another partnership with a leading bear viewing guide.



Photo Credit © John Meikle

- Protected area establishment may be hindered by lack of First Nations capacity. For example, land withdrawals for protected areas in NU require levels of justification that are impossible with existing data, while First Nations capacity to provide such data is lacking.
- Aboriginal governments are full participants in the NWT Protected Areas Strategy.

Aboriginal Community Involvement in MPAs

- EC & Nunavut Tunngavik Inc. are advancing an IIBA which will protect a bowhead whale sanctuary in Isabella Bay, Canada's largest Northern Fulmar colony at Cape Searle, and two northern cliff faces supporting Thick-billed Murre colonies at Reid Bay.
- An agreement is under development to define the relationship between the Haida and DFO in the establishment and management of the proposed Bowie Seamount MPA.
- A cooperative management framework for a proposed MPA in the Race Rocks area of BC is being developed with First Nations.

- ABORIGINAL INVOLVEMENT IN INTEGRATED LANDSCAPE MANAGEMENT -

Aboriginal collaboration in integrated landscape management is directly contributing to protected areas network growth and integrity.

- Land claims agreements have led to land use planning being initiated in 50% of YT and 66% of NWT.
- First Nations have led, co-partnered or contributed extensively to land use planning for BC's Great Bear Rainforest (6.4 million ha), ON's Whitefeather Forest Initiative (1.3 million ha), NL's central Labrador initiative (7 million ha), SK's Athabasca LUP (12 million ha), and MB's Wabanong Nakaygum Okimawin Initiative on the east side of Lake Winnipeg.

Pimachiowin-Aki Proposed World Heritage Site

Recognizing a shared vision for protecting and caring for their ancestral lands, in 2002 the Pikangikum First Nation invited the Poplar River, Pauingassie, and Little Grand Rapids First Nations to develop a "Protected Areas and First Nation Resource Stewardship Accord". The Accord puts forward the goal of achieving World Heritage Site (WHS) status for a network of linked protected areas and managed landscapes within the First Nations traditional territories. These First Nations are now working with the MB and ON governments to advance WHS status for these Accord lands as well as MB's Atikaki Provincial Park and ON's Woodland Caribou Signature Site. It is one of eleven sites on Canada's World Heritage Tentative List announced by the Minister of the Environment in 2004. This cooperative relationship is striving to safeguard a globally significant boreal forest ecosystem and the living cultural landscape it supports.



Arrowhead from Poplar River, MB.
Photo Credit © Cara Gill, Manitoba Conservation

- Aboriginal partnership in land use planning directly contributes to protected areas integrity, e.g., NL-Innu Nation forest management planning adjacent to the proposed Mealy Mountains NP; ON-MB-First Nation Assembly Protected Areas Accord.

- ENSURING BENEFITS OF PROTECTED AREAS TO ABORIGINAL COMMUNITIES -

Aboriginal rights and benefits are part of the protected areas establishment and management policy or practice of virtually all federal and provincial governments.

- Land claims and other agreements in the territories promote a range of benefits. For example, the NU Inuit Impact Benefit Agreement will ensure joint planning and management with Inuit in all levels of park planning and management, including business opportunities, employment and training.
- Rights and benefits include the continuation of Aboriginal cultural practices within protected areas, continued subsistence harvesting, and employment and economic assistance.
- Broader land use planning is increasingly providing Aboriginal benefits, e.g., ON's Northern Boreal Initiative goal to provide Aboriginal commercial forest opportunities, BC's \$120 million Great Bear conservation funding for sustainable First Nations business ventures.
- Park establishment agreements for new northern national parks include provisions to provide economic opportunities for local communities, including seed capital grants to develop local ecotourism businesses, preferential contracting opportunities and first priority to apply for and receive park business licences, and in some cases, scholarship funds for land claim beneficiaries.

- ABORIGINAL COOPERATIVE MANAGEMENT OF PROTECTED AREAS -

Over half of Canada's protected areas agencies are pursuing forms of Aboriginal cooperative protected areas management, with greatest First Nations shared management in the territories.

- Land claim agreements in the territories provide for the identification of overall protected areas objectives; site-specific cooperative or joint management committees provide direction for park management.
- Implementation of land claim agreements has increased First Nations cooperative management of pre-existing protected areas (e.g. Mississagi Delta PNRP, ON).
- Comprehensive Aboriginal management of protected areas - including park development - has begun in some provinces (e.g. QC's Pingualuit & planned northern parks).
- Provincial cooperative management efforts are often restricted to First Nations implementation of some park operations or First Nations representation on Advisory Committees, though provinces are beginning to seek greater First Nations input into management decisions.
- The level to which protected areas management is informed by traditional knowledge varies across jurisdictions, and may be constrained by limited First Nations capacity.

Promoting Economic Opportunities in Nunavik, Quebec

In 2002, the Mativik Corporation, the Kativik Regional Government and the Government of Quebec signed a partnership agreement on economic and community development in Nunavik. In addition to Pingualuit National Park, this agreement provides for the creation of two other parks by 2007 to support Nunavik tourist development. The Government of Quebec entrusted the Kativik Regional Government with the production of the state of knowledge report and the carrying out of capital and development works for the parks that will be created, as well as the management of operations, activities and services.



*Parc national
des Pingualuit, QC.*

Photo Credit © Pierre Thibault

- PROTECTING ABORIGINAL CULTURE WITHIN PROTECTED AREAS -

Protection of Aboriginal culture is increasing through protected areas goals and site-specific designations in land claims agreements.

- Designation to protect sites of cultural importance is enabled or practiced in 12 of 16 jurisdictions; several provinces and territories (BC, SK, MB, ON, QC, NWT, NU) are pursuing greater opportunities to protect cultural sites via protected areas and land use planning strategies.
- Laws enabling protection of cultural sites are increasingly being implemented, e.g., EC is advancing Edehzhie NWA, NWT—the first NWA identified for protection in part due to its cultural significance.

Incorporating Traditional Knowledge into Park Management

NU's Umbrella Inuit Impact Benefit Agreement for territorial parks ensures the incorporation of Inuit Qaujimajatuqangit (traditional knowledge) and oral history, along with conventional knowledge, into park management.

Protecting Belugas in the Beaufort Sea

The objective of the proposed Tarium Niryutait MPA in the Beaufort Sea is to provide for the protection of beluga whales, their habitat, and the traditional beluga subsistence harvest that is of extreme cultural importance to the Inuvialuit. This would be the first MPA in NWT.



Photo Credit © Fisheries and Oceans Canada

CHAPTER 7 – PRESERVING PRIVATE CONSERVATION LANDS

SUMMARY OF FINDINGS

- Many provinces (SK, MB, ON, QC, NS, NB, PEI, BC) are beginning to formally recognize the contribution of private conservation lands towards meeting their protected areas network objectives, while others are exploring means to do so.
- A diversity of land trust and other conservation organizations are emerging across Canada and using a variety of tools to conserve lands under private ownership. From 1986 to 2003, \$170 million in federal funds were leveraged by environmental organizations to secure or steward 1.8 million ha of lands worth \$3.2 billion.
- A number of important government incentives exist to facilitate private land securement; however, tax and financial barriers continue to act as a disincentive to private land conservation.

CONTEXT

In southern Canada, private lands are often disproportionately important for biodiversity conservation because human settlements and the establishment of private lands are concentrated in the most biologically productive parts of our landscapes. Governments are increasingly partnering with land trusts and other conservation organizations to secure privately held conservation lands in fragmented southern landscapes. They are also using a variety of other important complementary conservation and stewardship tools, such as environmental farm plans, model forests, waterfowl habitat joint ventures, etc.



ANALYSIS

Note that the findings from this chapter have been developed based on both the results of questionnaires provided by protected areas agencies and by additional research and interviews with key individuals in the land trust community.

- GOVERNMENT PARTNERSHIPS -

Governments are increasingly partnering with land trusts and other conservation organizations to secure privately held conservation lands in fragmented southern landscapes as a means to complement and/or fulfill protected areas program objectives.

- Canada's greatest biodiversity is found in fragmented and densely settled southern landscapes, which are largely under private ownership.
- Several jurisdictions report that it is impossible to complete their protected areas networks without the efforts of land trusts securing ecologically significant privately held lands.
- Many provinces (SK, MB, ON, QC, NB, NS, PEI, BC) formally include private conservation lands in their protected areas networks (totalling 400,000 ha), while others are exploring means to account for their contribution.
- Agriculture and Agri-Food Canada administers 89 Prairie Farm Rehabilitation Administration (PFRA) community pastures that together conserve close to 1 million hectares of southern conservation lands in AB, SK & MB.

Agriculture and Conservation Working Hand in Hand

Agriculture and Agri-Food Canada's PFRA community pastures are managed to preserve both the productivity and biodiversity of grassland. Over 80% of these pastures remain in native vegetation, while the remainder has been seeded to forage.



Photos Credit © PFRA

Securing Private Conservation Lands in Nova Scotia

With almost 70% private land ownership, Nova Scotia has had to find innovative ways to facilitate privately protected areas—from amending protected areas legislation and renewing matched-funding partnerships with land trusts, to initiating multi-stakeholder strategies under the Colin Stewart Forest Forum. The province is now developing an Action Plan to remove remaining barriers to private land conservation, based on recommendations of its Private Land Conservation Enhancements (PLACES) Committee.



River Inhabitants Nature Reserve, designated under the Special Places Protection Act (IUCN Ia) in July 2006 with the consent of the owner, Stora Enso Port Hawkesbury Inc., a major forestry company. The reserve is NS's first along a major river floodplain.

Photo credit © David MacKinnon, Nova Scotia Environment and Labour

Province	% of Privately Held Land in Province	Degree that Private Lands are Accounted for in Provincial Protected Areas Network
BC	6%	Mostly complementary; few in formal network
AB	28%	Exploring means to account for private lands in protected areas network
SK	5% in north; 80% in south	396,400 ha (privately owned or administered lands)
MB	15%	5,025 ha (privately administered)
ON	13% (90% in south)	Mostly complementary; few in formal network
QC	8%	7,633 ha (privately administered)
NB	50%	2,941 ha (exploring establishment of protected areas on private lands)
NS	70%	3,394 ha (privately administered)
PEI	90%	1,147 ha (privately administered)
NL	<5%	Complementary

- A DIVERSITY OF CONSERVATION TOOLS -

A diverse range of land trust and other conservation organizations are emerging across Canada and using a variety of tools to conserve lands under private ownership.

- Over 200 independent land trusts are active in Canada.
- These land trusts have secured millions of hectares of ecologically significant lands, although exact amounts have not been tabulated nationally.
- The diversity of securement methods include purchase (BC Land Trust Alliance members own about 200,000 ha in fee simple), easements (45,000 ha registered under the federal Ecogifts program), conservation agreements (188,000 ha in 2001 under ON's Conservation Land Tax Incentive Program), and habitat stewardship (Ducks Unlimited Canada alone has conserved over 10 million ha of lands since 1938 and the Nature Conservancy of Canada has conserved 1.73 million ha since 1962).
- Government-ENGO partnerships have leveraged public funds to implement thousands of stewardship agreements on private lands throughout southern Canada, e.g., \$170 million in federal funds were leveraged by ENGOs in 1986-2003 to secure 1.8 million ha of lands worth \$3.2 billion.

- GOVERNMENT INCENTIVES -

A number of important government incentives exist to facilitate private land securement, but tax and financial barriers continue to act as a disincentive to land conservancy.

- Almost 500 donations or easements of ecologically sensitive land have been registered under Environment Canada's Ecogifts program, totaling >45,000 ha and worth >\$147 million.
- All provinces have legislation allowing for conservation easements, although NL's is very limited.
- The federal government and some provinces (BC, MB, ON, QC, PEI) offer tax benefits for land donations.
- Many provinces (BC, SK, ON, QC, NS) have matched-fund partnerships with land trusts, though this is lacking at the federal level.

Quebec's Focused Effort on Private Land Conservation

The Quebec Protected Areas Strategy includes a specific policy for conservation on private land. Legislative measures have been adopted to create protected nature reserve status on private land. Since 2001, a financial program has been available to organizations or companies dedicated to wetland conservation. This program thus covers 50% to 75% of all the acquisition costs of private property for protected area purposes, with the result that by 2008, over \$45 million will have been invested in protected areas on private land.



Photo Credit ©
Municipalité
régionale de comté
de Lotbinière

APPENDICES

TERRESTRIAL PROTECTED AREAS SUMMARY BRITISH COLUMBIA

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	147	236,783	1.78%
IUCN Category Ib	44	5,010,231	37.6%
IUCN Category II	355	5,809,026	43.6%
IUCN Category III	106	99,725	0.75%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	1	24,368	0.18%
IUCN Unclassified	182	265,853	2.0%
Interim Lands	94	1,224,996	9.2%
Federally Administered			
IUCN Category Ia	4	1,856	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	7	636,760	4.8%
IUCN Category III	1	282	0.0%
IUCN Category IV	1	812	0.0%
IUCN Category V	1	299	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	5	2,160	0.0%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	948	13,313,151	

Percent of land within Protected Areas

IUCN I-IV	12.49%
IUCN V-VI	0.03%
Not Classified	1.58%
Total *	14.09%

* Total size of land and freshwater for British Columbia is 94,473,500 ha (Natural Resources Canada).

MARINE PROTECTED AREAS SUMMARY - BRITISH COLUMBIA

Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)
Terrestrial Protected Areas (Marine Portion) *	114	181,450
Total	114	181,450

* These totals are the marine portions of predominantly terrestrial protected areas, and are therefore included in the above terrestrial protected areas summary.

Protected Areas Strategy

Protected areas strategy in place and is completed.

Most Significant Protected Areas Achievements over Past Five Years

- In 2001, BC reached its target of protecting 12% of the province's land base. This was achieved to a large degree through multi-sectoral land use planning processes throughout the province. These processes engaged a wide array of resource users and stakeholders in building a consensus for strategic land and resource use, including the identification of protected areas in accordance with regional targets set by government.
- Implementation of the Pacific Marine Heritage Legacy resulting in the Gulf Islands National Park

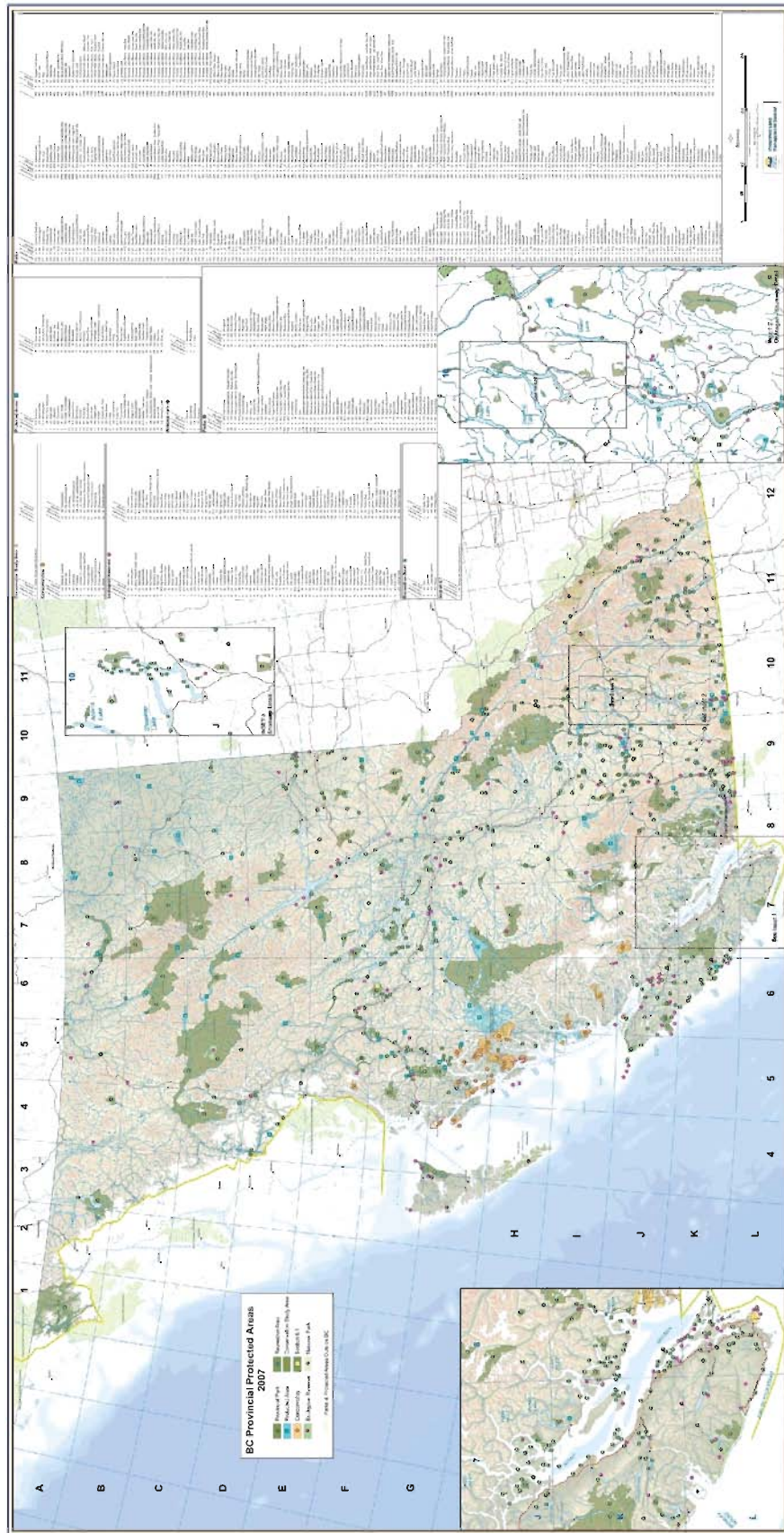
Reserve (2003) and several new provincial parks (2001–2004).

- Planning for and implementation of restoration of natural forest and grassland ecosystems through the reintroduction of fire.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Designation and management planning for 139 new candidate protected areas identified through coastal land and resource management planning and government to government discussions with First Nations.
- Decision with PC on the feasibility of establishing an NP in the South Okanagan Grasslands.
- Continuing to work collaboratively with First Nations.

TERRESTRIAL PROTECTED AREAS SUMMARY BRITISH COLUMBIA



TERRESTRIAL PROTECTED AREAS SUMMARY ALBERTA

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	14	31,792	0.4%
IUCN Category Ib	30	2,179,569	26.4%
IUCN Category II	193	414,540	5.0%
IUCN Category III	15	4,859	0.06%
IUCN Category IV	0	0	0.0%
IUCN Category V	1	9,701	0.12%
IUCN Category VI	14	102,225	1.2%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
Federally Administered			
IUCN Category Ia	2	162	0.0%
IUCN Category Ib	1	12,705	0.2%
IUCN Category II	5	5,392,500	65.4%
IUCN Category III	1	1,135	0.0%
IUCN Category IV	2	46,021	0.6%
IUCN Category V	0	0	0.0%
IUCN Category VI	3	41,314	0.50%
IUCN Unclassified	2	1,730	0.0%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	254	11,881	0.1%
Total	537	8,250,133	

Percent of land within Protected Areas

IUCN I-IV	12.21%
IUCN V-VI	0.23%
Not Classified	0.02%
Total *	12.47%

* Total size of land and freshwater for Alberta is 66,184,800 ha (Natural Resources Canada).

Protected Areas Strategy

Protected areas strategy in place, is current, and is being implemented.

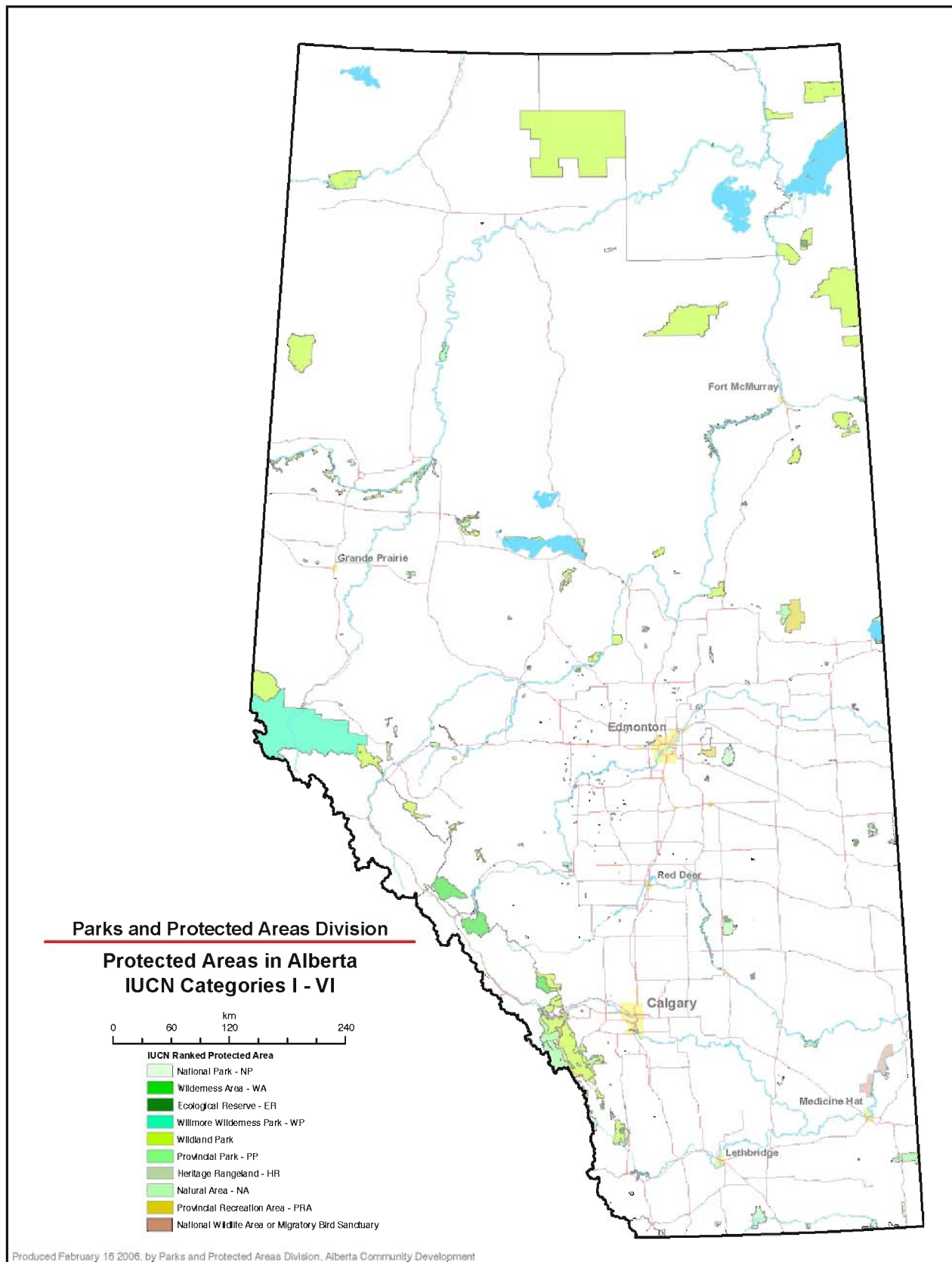
Most Significant Protected Areas Achievements over Past Five Years

- Completion of the Special Places initiative including the establishment of seven new parks and protected areas.
- Increases in budget and staffing, particularly to address aging infrastructure.
- Government commitment to no new industrial activities in parks. Existing commitments will be honoured.
- Establishment of Kakwa-Wilmore Interprovincial Park with BC, Canada's second interprovincial park.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Development of the strategic direction framework and tightening up integration between policy and legislation.
- Boundary consolidation and filling some gaps in the AB protected areas system.
- Given the significant increase in land base through completion of the Special Places initiative, AB is now in the process of developing several tools that will assist with management such as a research strategy, management planning framework and several policies.

TERRESTRIAL PROTECTED AREAS SUMMARY ALBERTA



TERRESTRIAL PROTECTED AREAS SUMMARY SASKATCHEWAN

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	62	659,810	11.1%
IUCN Category Ib	4	455,856	7.7%
IUCN Category II	11	678,763	11.4%
IUCN Category III	385	5,908	0.10%
IUCN Category IV	1486	78,277	1.3%
IUCN Category V	149	51,701	0.87%
IUCN Category VI*	2002	1,733,892	29.2%
IUCN Unclassified	0	0	0.0%
Interim Lands	3	601,983	10.1%
Federally Administered			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	3	484,465	8.2%
IUCN Category III	0	0	0.0%
IUCN Category IV	15	71,225	1.2%
IUCN Category V	2	2,051	0.0%
IUCN Category VI	64	718,833	12.1%
IUCN Unclassified	3	266	0.0%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	419	396,430	6.7%
Other Lands	0	0	0.0%
Total	4608	5,939,460	

Percent of land within Protected Areas

IUCN I-IV	3.73%
IUCN V-VI	3.84%
Not Classified	1.53%
Total **	9.11%

* IUCN Category VI protected areas include SK Watershed Authority lands and Fish and Wildlife Development Fund lands that are measured in quarter sections or portions thereof.

** Total size of land and freshwater for Saskatchewan is 65,191,948 ha (Source: Saskatchewan).

Protected Areas Strategy

Protected areas strategy in place, needs updating, and is being implemented.

Most Significant Protected Areas Achievements over Past Five Years

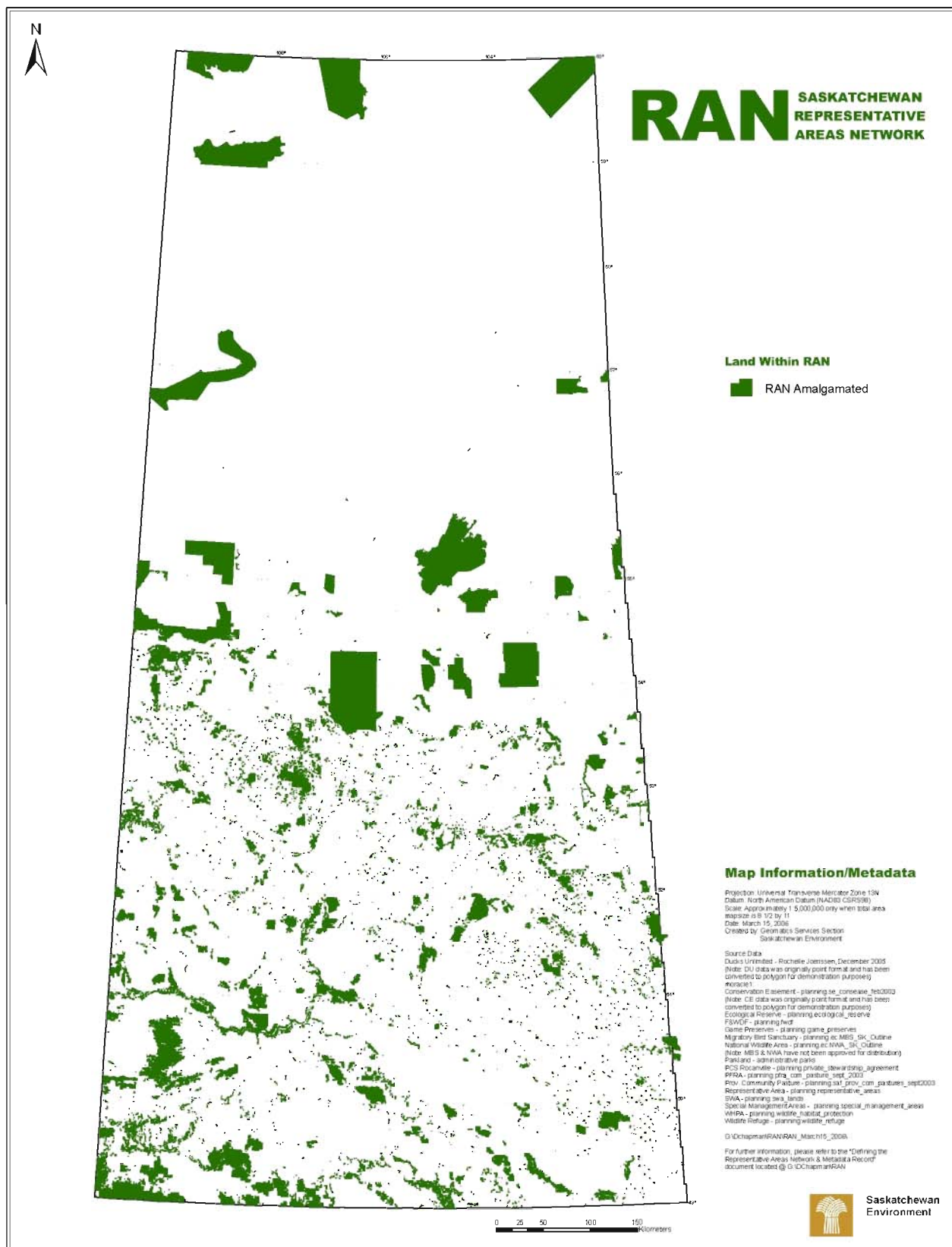
- Gaining representation within each of the 11 ecoregions in the province. Although some ecoregions remain under-represented, a major accomplishment in the past five years has been establishment of protected areas in each of the 11 ecoregions. The protected area system in Saskatchewan has nearly doubled in size since 1997.
- Re-affirming direction for completion of the Representative Areas Network through the Objectives and Actions set in the Biodiversity Action Plan for Saskatchewan's Future (2004-2009).

- Beginning to undertake comprehensive management plans for protected areas (although much work remains to be done yet).

Most Significant Protected Areas Priorities over Next Three to Five Years

- Continue implementation of the Representative Areas Network (RAN) to ensure adequate representation of the province's natural ecosystems.
- Develop and implement policies, guidelines and management plans for all protected areas.

TERRESTRIAL PROTECTED AREAS SUMMARY SASKATCHEWAN



TERRESTRIAL PROTECTED AREAS SUMMARY MANITOBA

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	17	6,286	0.11%
IUCN Category Ib	6	1,571,910	28.7%
IUCN Category II	24	1,116,051	20.4%
IUCN Category III	11	48,050	0.88%
IUCN Category IV	36	82,595	1.5%
IUCN Category V *	8	1,129	0.02%
IUCN Category VI *	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands (IUCN Category II)	14	1,194,510	21.8%
Federally Administered			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	2	1,444,400	26.4%
IUCN Category III	0	0	0.0%
IUCN Category IV **	2	61	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI ***	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands (IUCN Category IV)	2	5,025	0.09%
Other Lands	0	0	0.0%
Total	122	5,470,018	

Percent of land within Protected Areas

IUCN I-IV	8.41%
IUCN V-VI	0.00%
Not Classified	0.00%
Total ****	8.41%

* IUCN categorizing is still under review; Categories V & VI have not been finalized.

** Note that MB does not currently recognize EC administered NWAs (IUCN IV) as part of its protected areas network.

The total lands that MB currently accounts for within its protected areas network is 5.4 million ha, or 8.4% of the province.

*** Excluded are 168,197 ha of Agriculture Canada administered PFRA pastures. These lands will be reviewed in the near future for possible inclusion in MB's Protected Areas Initiative.

**** Total size of land and freshwater for Manitoba is 65,005,345 ha (Source: Manitoba).

Protected Areas Strategy

Protected areas strategy in place, is being implemented, and is being adapted as required.

Most Significant Protected Areas Achievements over Past Five Years

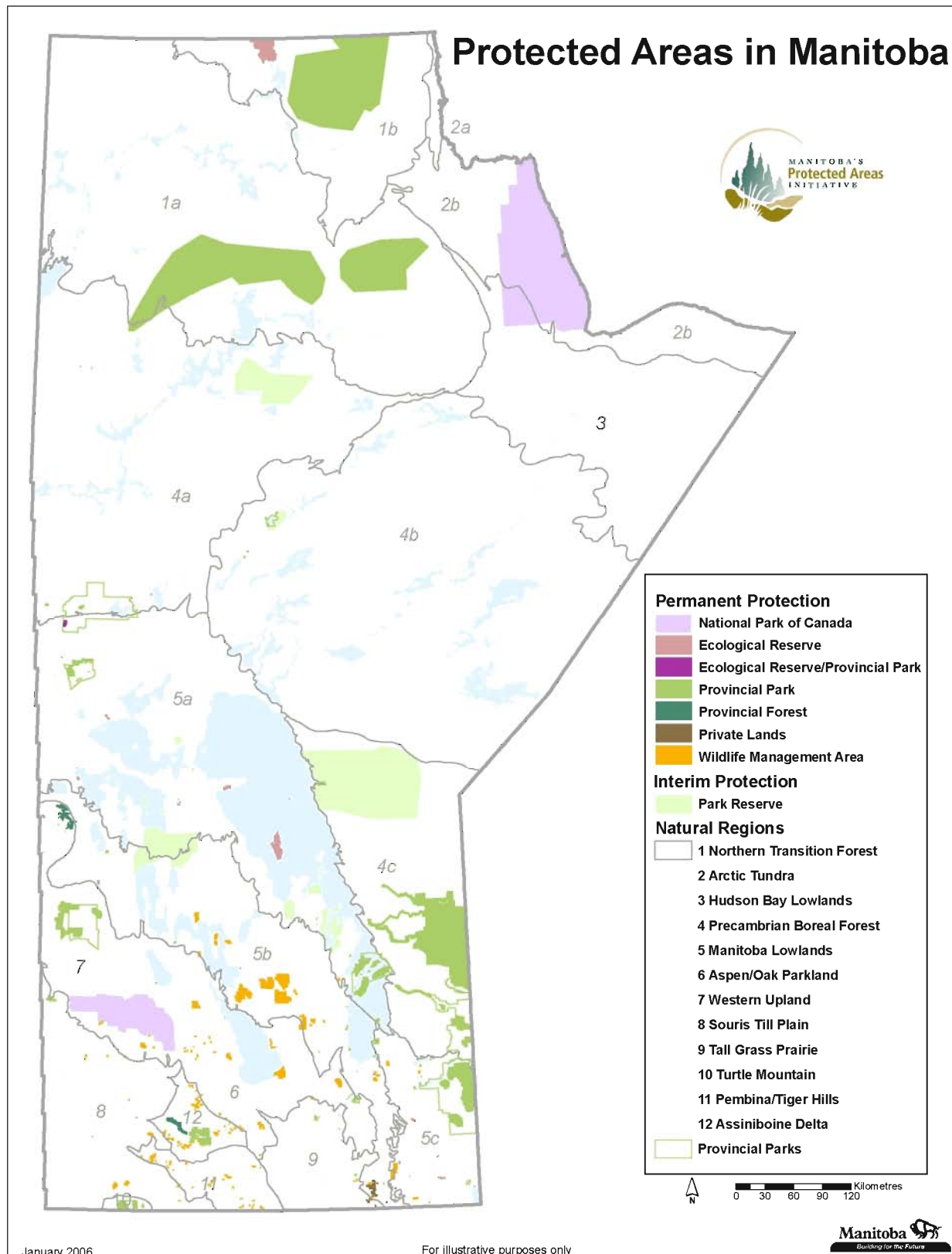
- Five new ecological reserves created between June 2004 and September 2005, after five years with no designations.
- Establishment of the Bell and Steeprock Canyons Protected Area in June 2004 in an area first identified in the mid-1980s as worthy of protection. Although the final area protected was smaller than that required for adequate representation, this was a significant achievement given the high levels of existing resource use commitments, notably forest harvest.
- Recognition of private lands in 2004 (Nature Conservancy of Canada) and 2005 (Manitoba Naturalists Society) in the Tall Grass Prairie Preserve where work began in 1992.

- Manigotagan River and Caribou River having interim designation as park reserves were converted to permanently protected provincial parks.

Most Significant Protected Areas Priorities over Next Three to Five Years

Priority areas include Natural Region 5c (southeast Manitoba), Red Deer Lake Area of Special Interest (northwest Manitoba), Agro-Manitoba (southern Manitoba), Natural Regions 2a and 2b (Arctic Tundra), the Saskatchewan River Forest Section (Natural Region 5a), completion of protected areas in Forest Management License-1 (Natural Region 4c). Several new ecological reserves and two new provincial parks are proposed. An ecosystem management strategy for provincial parks is a priority as is progress on the Pimachiowin-Aki proposed World Heritage Site.

TERRESTRIAL PROTECTED AREAS SUMMARY MANITOBA



TERRESTRIAL PROTECTED AREAS SUMMARY ONTARIO

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	106	113,554	1.2%
IUCN Category Ib	8	4,822,920	49.2%
IUCN Category II	479	3,682,244	37.5%
IUCN Category III	16	7,513	0.08%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified *	0	594,860	6.1%
Interim Lands	33	381,194	3.9%
Federally Administered **			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	5	208,110	2.1%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	647	9,810,396	

Percent of land within Protected Areas

IUCN I-IV	8.19%
IUCN V-VI	0.00%
Not Classified	0.90%
Total ***	9.09%

* Recreation / utilization zone of Algonquin Park

** Excluded are 32,183 ha of National Wildlife Areas (NWAs) and Migratory Bird Sanctuaries (MBSs) that are located in ON and administered by Environment Canada.

*** Total size of land and freshwater for Ontario is 107,870,505 ha (Source: Ontario).

Protected Areas Strategy

Protected areas strategies and frameworks are in place and have been completed, while new strategies have been developed and are being implemented to further complete Ontario's system of protected areas.

Most Significant Protected Areas Achievements over Past Five Years

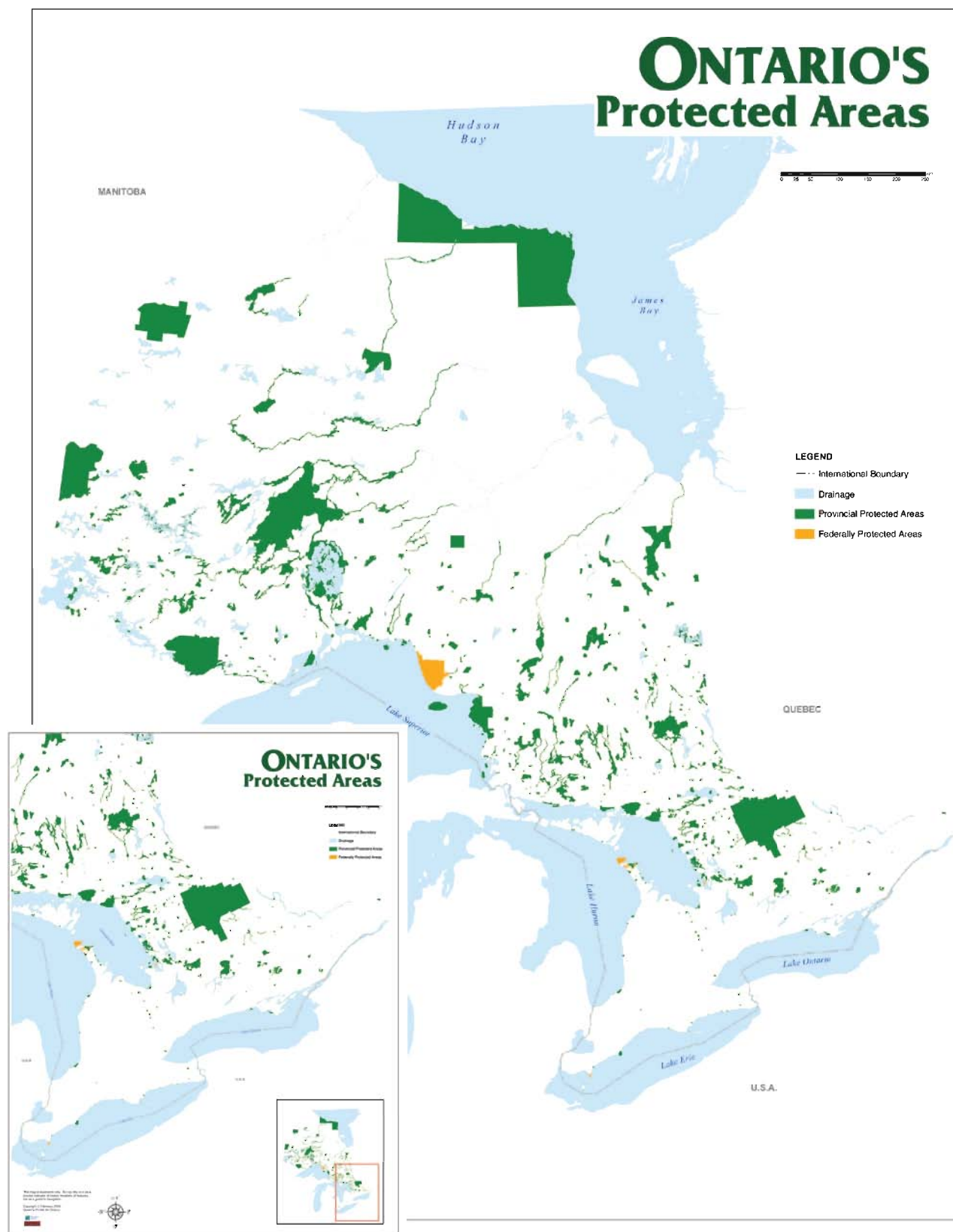
- Initiating the first review in 50 years of the legislation that applies to Ontario's protected areas. The new legislation would make ecological integrity a first priority when planning and managing within parks and conservation reserves.
- Development of the Ontario Biodiversity Strategy, involving a wide range of stakeholders, with resulting broad consensus on the directions and actions. For the first time in Ontario, it provides a framework for actions that will support biodiversity conservation, including the planning and establishment of a sound system of protected areas.

- Advancing Ontario's Living Legacy, which added new parks and protected areas covering over 2 million ha.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Enacting and implementing updated protected areas legislation in Ontario that enhances ecological integrity and the permanent protection of natural and cultural heritage values.
- Implementation of Ontario's Biodiversity Strategy (2005) signals a shift in priorities in the Ontario Government and the Ontario Ministry of Natural Resources towards conserving biodiversity in all its forms, including the diversity of ecological systems.
- Where feasible, work to re-establish and/or retain natural linkages and connectivity on the landscape between natural areas, including protected areas, with a high priority on reducing landscape-level habitat fragmentation in southern Ontario.

TERRESTRIAL PROTECTED AREAS SUMMARY ONTARIO



TERRESTRIAL PROTECTED AREAS SUMMARY QUEBEC

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	131	96,404	1.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	23	712,468	7.6%
IUCN Category III	195	2,816,889	30.2%
IUCN Category IV	78	594,999	6.4%
IUCN Category V	0	0	0.0%
IUCN Category VI	387	52,582	0.56%
IUCN Unclassified	238	3,130,956	33.6%
Interim Lands	5	1,817,200	19.5%
Federally Administered *			
IUCN Category Ia	17	6,940	0.1%
IUCN Category Ib	0	0	0.0%
IUCN Category II	3	92,720	1.0%
IUCN Category III	15	6,700	0.1%
IUCN Category IV	4	3,813	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands **	122	7,633	
Other Lands	0	0	0.0%
Total	1096	9,339,320	

Percent of land within Protected Areas

IUCN I-IV	2.86%
IUCN V-VI	0.03%
Not Classified	3.27%
Total ***	6.17%

* The table includes the terrestrial portion of Environment Canada's 28 Migratory Bird Sanctuaries that are found in QC, but excludes the marine portion of these Sanctuaries.

** These private conservation lands are protected under applicable QC legislation, and are also reported on in provincially administered IUCN Categories III, IV & VI above.

*** Total size of land and freshwater for Quebec is 151,412,800 ha (Source: Quebec).

MARINE PROTECTED AREAS SUMMARY - QUEBEC

Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)
Waterfowl Gathering Areas	352	195,333
Saguenay - St. Lawrence Marine Park	1	113,800
Migratory Bird Sanctuaries (Marine Portion)	28	43,078
Total	381	352,211

Protected Areas Strategy

Protected areas strategy in place, is current, and is being implemented.

Most Significant Protected Areas Achievements over Past Five Years

- The government's adoption of a quantitative objective for protected areas, 8%.
- The government's adoption of a qualitative objective for protected areas, a network representative of Quebec's biological diversity.

- The adoption of a framework law for setting aside territories to be used as protected areas.
- The government's consolidation of "conservation" functions into a single ministry.

Most Significant Protected Areas Priorities over Next Three to Five Years

- The creation of northern parks.
- The establishment of efficient management for protected areas.
- The development of a network representative of Quebec's biodiversity.

TERRESTRIAL PROTECTED AREAS SUMMARY QUEBEC



 Aire protégée

Direction du patrimoine écologique et des parcs
Février 2006

250 km

Développement durable,
Environnement
et Parcs

Québec 

TERRESTRIAL PROTECTED AREAS SUMMARY NEW BRUNSWICK

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	20	3,022	0.1%
IUCN Category Ib	0	0	0.0%
IUCN Category II	18	174,911	73.8%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	25	5,000	2.1%
Federally Administered			
IUCN Category Ia	2	2,441	1.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	2	44,510	18.8%
IUCN Category III	1	622	0.3%
IUCN Category IV	2	1,600	0.7%
IUCN Category V	0	0	0.0%
IUCN Category VI	1	1,990	0.8%
IUCN Unclassified	2	265	0.1%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	33	2,734	1.15%
Other Lands	0	0	0.0%
Total	106	237,095	

Percent of land within Protected Areas

IUCN I-IV	3.15%
IUCN V-VI	0.03%
Not Classified	0.11%
Total *	3.29%

* Total size of land and freshwater for New Brunswick is 7,200,000 ha (Source: New Brunswick).

Protected Areas Strategy

Protected areas strategy in place, is current, and is being implemented.

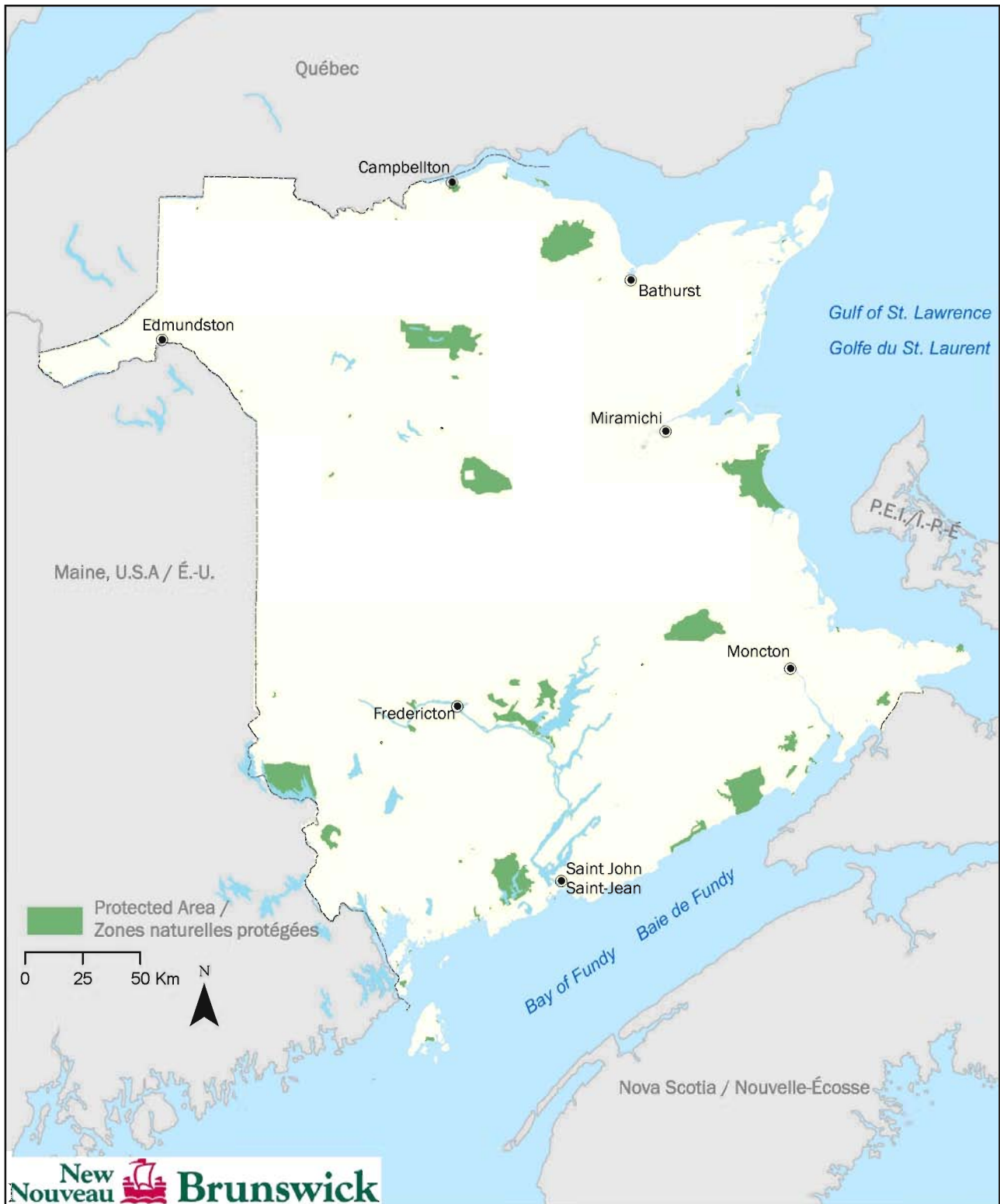
Most Significant Protected Areas Achievements over Past Five Years

- Development of the Protected Natural Areas Act & Regulations.
- Establishment of 10 Local Advisory Committees to develop the management plans for these sites; plus a Scientific Advisory Committee and a Provincial Advisory Committee.
- With passage of the Act, New Brunswick went from 82,000 ha to 255,500 ha of land in protection.
- Establishment of a dedicated Protected Natural Areas Program.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Completion of management plans.
- Progress on enforcement.
- Establishment of Private Land Protected Natural Areas.

TERRESTRIAL PROTECTED AREAS SUMMARY NEW BRUNSWICK



TERRESTRIAL PROTECTED AREAS SUMMARY NOVA SCOTIA

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	11	3,160	0.7%
IUCN Category Ib	33	296,000	62.6%
IUCN Category II	11	10,605	2.2%
IUCN Category III	0	0	0.0%
IUCN Category IV	2	401	0.08%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	17,000	3.6%
Federally Administered			
IUCN Category Ia	7	3,525	0.7%
IUCN Category Ib	0	0	0.0%
IUCN Category II	2	135,170	28.6%
IUCN Category III	0	0	0.0%
IUCN Category IV	3	1,981	0.4%
IUCN Category V	0	0	0.0%
IUCN Category VI	2	995	0.2%
IUCN Unclassified	2	440	0.1%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	2	3,394	0.72%
Other Lands	0	0	0.0%
Total	75	472,671	

Percent of land within Protected Areas

IUCN I-IV	8.20%
IUCN V-VI	0.02%
Not Classified	0.38%
Total *	8.59%

* Total size of land and freshwater for Nova Scotia is 5,500,000 ha (Source: Nova Scotia).

Protected Areas Strategy

Protected areas strategy in place, is current, and is being implemented.

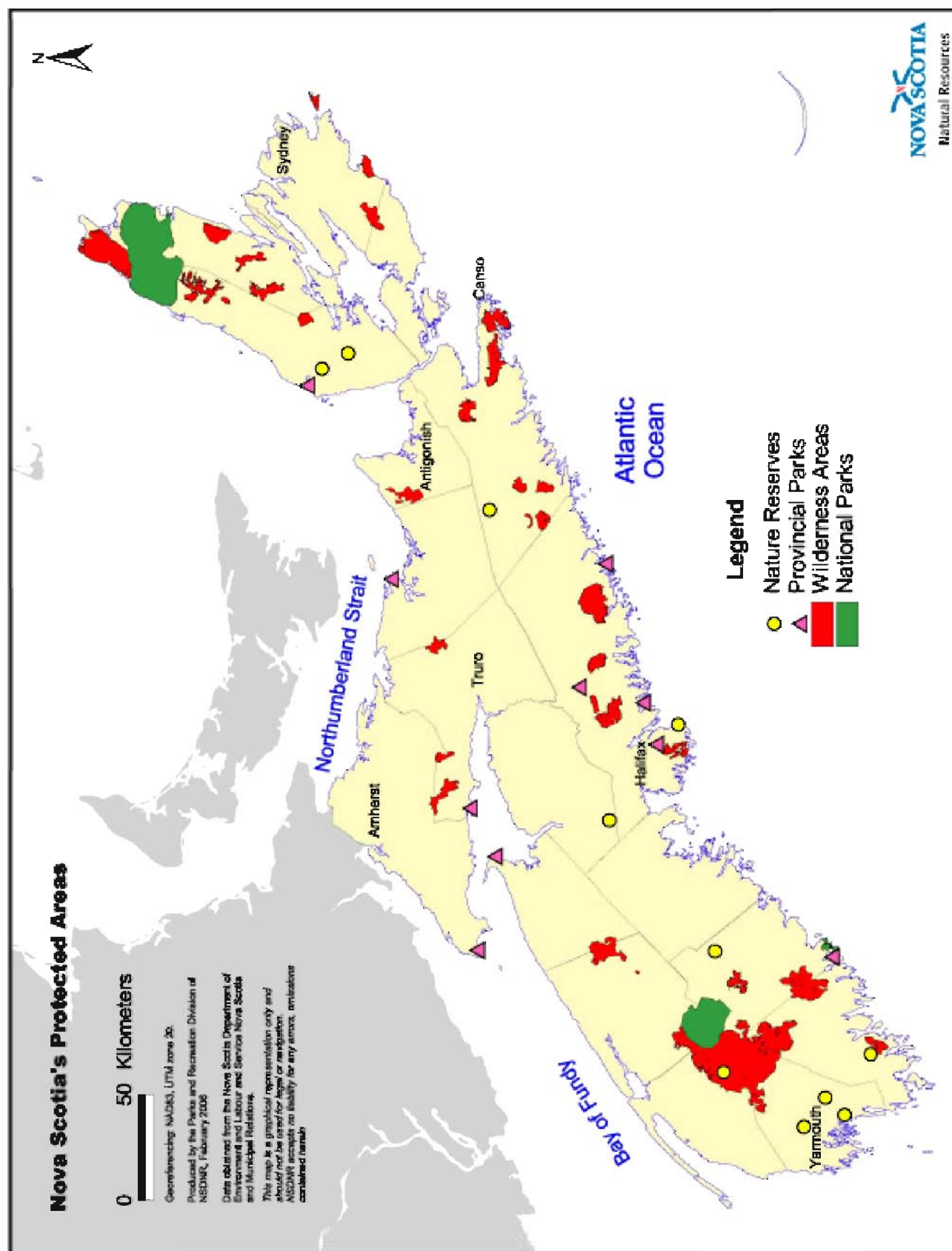
Most Significant Protected Areas Achievements over Past Five Years

- Designation of two new wilderness areas, four new nature reserves and addition to existing nature reserve.
- Establishment of Colin Stewart Forest Forum to consider options for completing Nova Scotia's protected areas system.
- Development of management plan for Tobetic Wilderness Area through a stakeholder advisory group process (two or more years).

Most Significant Protected Areas Priorities over Next Three to Five Years

- Progress in completing protected areas system; initially through Colin Stewart Forest Forum process.
- Enhanced management of established protected areas through development and implementation of management plans and improved enforcement and outreach.
- Acquisition of private inholdings and priority adjacent properties, and related implementation of PLACES committee recommendations for securing critical private lands.

TERRESTRIAL PROTECTED AREAS SUMMARY NOVA SCOTIA



TERRESTRIAL PROTECTED AREAS SUMMARY PRINCE EDWARD ISLAND

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	0	0	0.0%
IUCN Category III	34	3,383	18.9%
IUCN Category IV	87	8,754	48.8%
IUCN Category V	7	816	4.5%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
Federally Administered			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II *	1	1,823	10.2%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	1	130	0.7%
Interim - National Parks	1	1,891	10.5%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	53	1,147	6.4%
Other Lands	0	0	0.0%
Total	184	17,944	

Percent of land within Protected Areas

IUCN I-IV	2.47%
IUCN V-VI	0.14%
Not Classified	0.56%
Total **	3.17%

* PEI and Parks Canada have differing calculations of the amount of land contained within PEI National Park.

** Total size of land and freshwater for PEI is 566,000 ha (Source: PEI).

MARINE PROTECTED AREAS SUMMARY - PRINCE EDWARD ISLAND

Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)
Terrestrial Protected Area (Marine Portion) *	1	87
Total	1	87

* These totals are the marine portions of predominantly terrestrial protected areas, and are therefore included in the above terrestrial protected area summary.

Protected Areas Strategy

Protected areas strategy in place, needs updating, and is being implemented.

Most Significant Protected Areas Achievements over Past Five Years

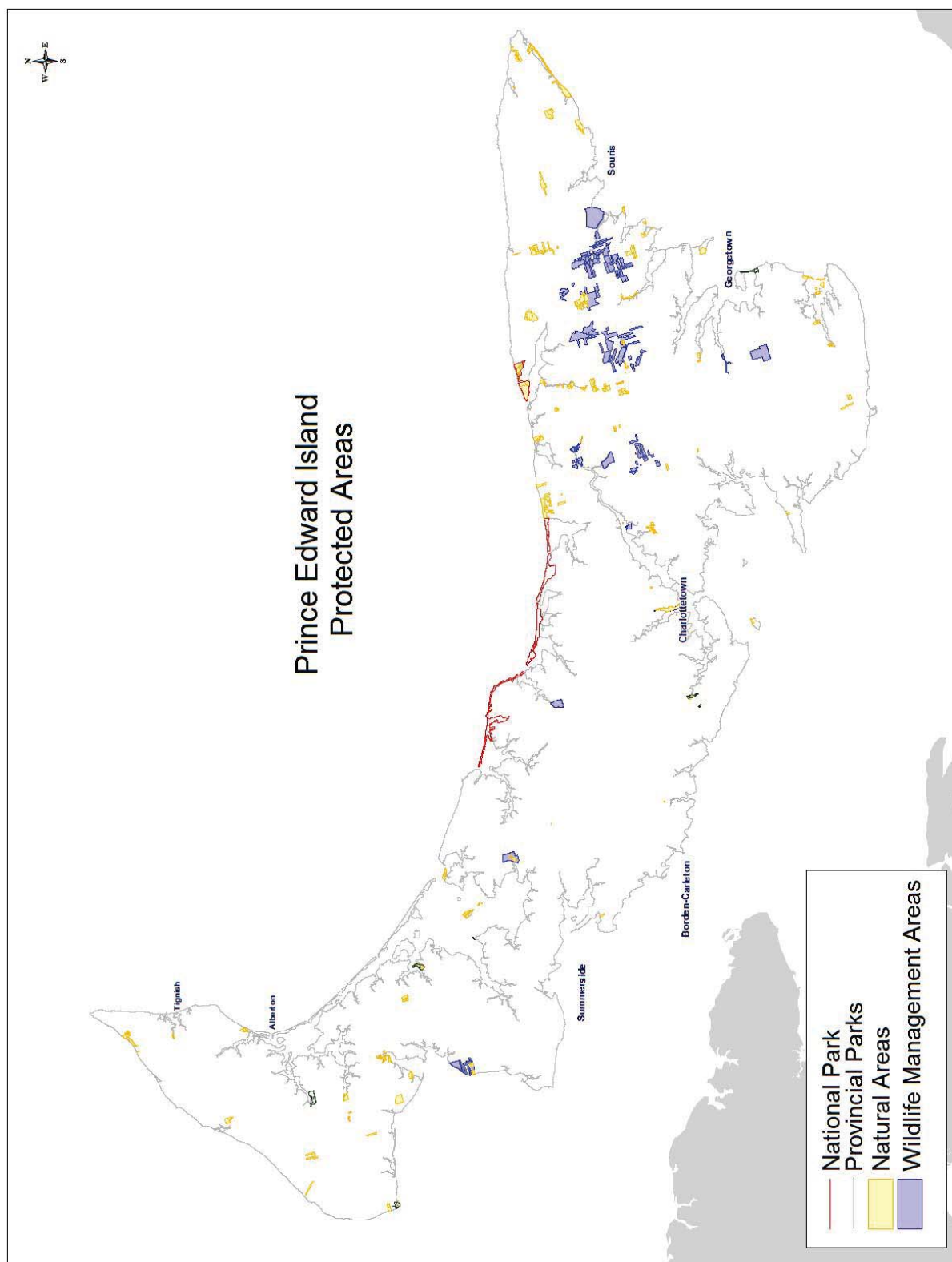
- The establishment of seven new Wildlife Management areas (most larger than previously protected areas) totalling 4,000 hectares. These lands conserve much of the wetland acquired by the Eastern Habitat Joint Venture through North American Waterfowl Management Plan.
- Acquisition by Island Nature Trust and Eastern Habitat Joint Venture partners of Bird Island in Malpeque Bay.

- Acquisitions of Boughton Island by the Nature Conservancy of Canada, assisted by provincial and federal governments (currently being completed).

Most Significant Protected Areas Priorities over Next Three to Five Years

- Retaining areas currently protected.
- Still hope to expand the candidate list for woodland.
- Coastal ponds (barrier beach / barrachois ponds) are under accelerated threat from cottage subdivision developments and public demand for shoreline access. Large amounts of acquisition dollars are needed to acquire and protect these sites. As well, sea level rise is a concern in most coastal areas of PEI.

TERRESTRIAL PROTECTED AREAS SUMMARY PRINCE EDWARD ISLAND



TERRESTRIAL PROTECTED AREAS SUMMARY NEWFOUNDLAND AND LABRADOR

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Provincially Administered			
IUCN Category Ia	16	18,054	1.0%
IUCN Category Ib	2	396,500	21.6%
IUCN Category II	27	94,291	5.1%
IUCN Category III	6	287	0.02%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	5	137,523	7.5%
IUCN Unclassified	1	94	0.01%
Interim Lands	0	0	0.0%
Federally Administered			
IUCN Category Ia	2	166	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	4	1,191,360	64.8%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	63	1,838,275	

Percent of land within Protected Areas

IUCN I-IV	4.19%
IUCN V-VI	0.34%
Not Classified	0.00%
Total *	4.53%

* Total size of land and freshwater for Newfoundland and Labrador is 40,572,000 ha (Source: Newfoundland and Labrador).

MARINE PROTECTED AREAS SUMMARY - NEWFOUNDLAND AND LABRADOR

Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)
Ecological Reserve (Marine Portion) *	6	15,200
Total	6	15,200

* These totals are the marine portions of predominantly terrestrial protected areas, and are therefore included in the above terrestrial protected area summary.

Protected Areas Strategy

Protected areas strategy being developed.

Most Significant Protected Areas Achievements over Past Five Years

- In 2005 Torngat Mountains National Park Reserve (9,700 km²) was established after representatives of the province, the Government of Canada, and the Labrador Inuit Association signed the Land Transfer Agreement and the Labrador Inuit Land Claims Agreement.
- In 2003 Mistaken Point Extension Emergency Ecological Reserve was established. An extension to the existing Mistaken Point Ecological Reserve, this reserve is one of the world's most significant fossil sites and captures the oldest complex life forms found anywhere on Earth,

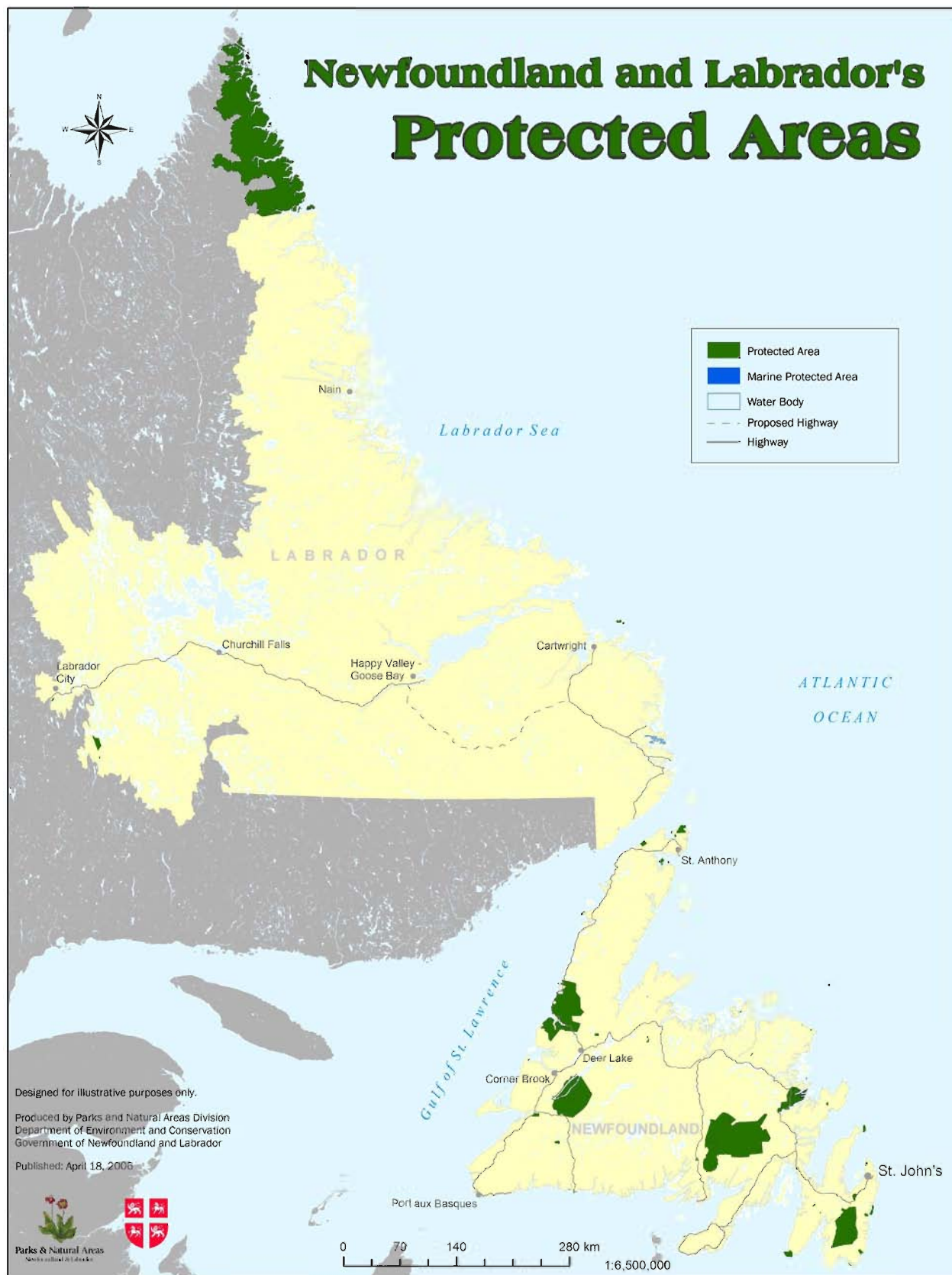
including those in the Mistaken Point assemblage (575 to 560 million years old).

- In 2002 the Little Grand Lake Provisional Ecological Reserve (731 km²) was established. The reserve protects critical habitat for the endangered Newfoundland marten, as well as protecting portions of three of the province's ecodistricts.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Releasing a Discussion Document on the proposed Protected Areas Strategy for public consultations.
- Advancing the establishment of the proposed Mealy Mountains National Park.
- Improving protected area management effectiveness, for example, improved research and monitoring, management plans, and reporting.

TERRESTRIAL PROTECTED AREAS SUMMARY NEWFOUNDLAND AND LABRADOR



TERRESTRIAL PROTECTED AREAS SUMMARY YUKON

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
<i>Territorially Administered</i>			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	1	521,340	8.1%
IUCN Category II	2	222,614	3.5%
IUCN Category III	2	18,522	0.29%
IUCN Category IV	2	105,550	1.6%
IUCN Category V	0	0	0.0%
IUCN Category VI	2	341,400	5.3%
IUCN Unclassified	0	0	0.0%
Interim Lands	9	1,185,149	18.5%
<i>Federally Administered</i>			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	3	3,610,830	56.2%
IUCN Category III	1	5,488	0.1%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim National Parks	0	0	0.0%
<i>Other Administered</i>			
Aboriginal Lands	2	409,035	6.4%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	24	6,419,928	

Percent of land within Protected Areas

IUCN I-IV	9.28%
IUCN V-VI	0.71%
Not Classified	3.30%
Total *	13.28%

* Total size of land and freshwater for Yukon is 48,345,000 ha (Source: Yukon).

Protected Areas Strategy

Individual protected areas opportunities are being considered through the land claims process. Upon completion of remaining land claims, Yukon may consider the need to develop a representative protected areas network.

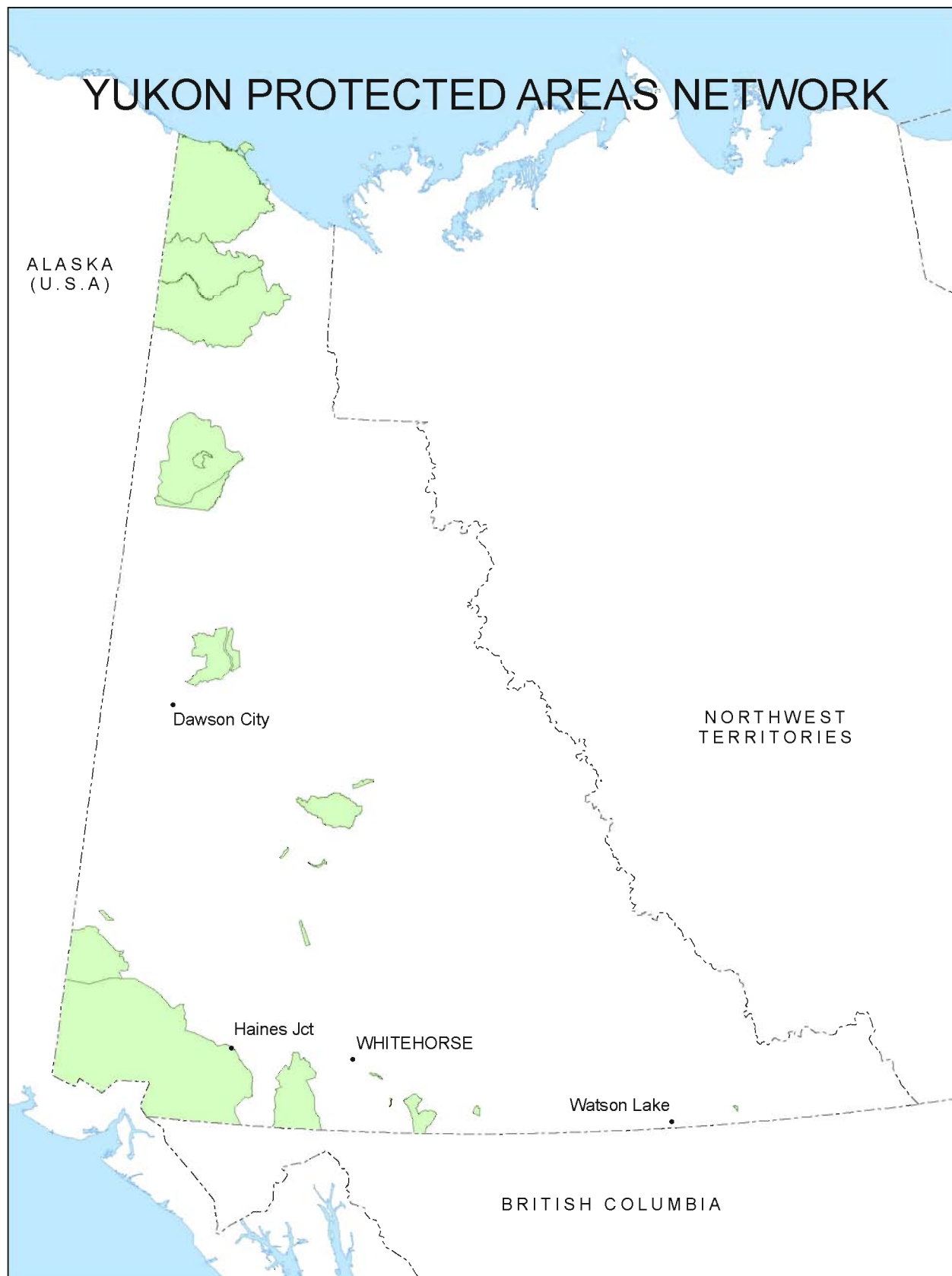
Most Significant Protected Areas Achievements over Past Five Years

- Establishment of Ni'inlii Njik (Fishing Branch) Ecological Reserve (169 km²), Wilderness Preserve (5,000 km²) and Habitat Protection Area (1,000 km²) in 1999, including the involvement of the Nature Conservancy and First Nations in purchasing and relinquishing mineral claim in-holdings.
- Finalization of Tombstone Territorial Park (2,500 km²) boundaries (1999) and establishment (2004), including the voluntary relinquishment of mining claims and titled industrial lands by over 85% of rights holders.
- Commencing to implement management plans and start field operations for Tombstone and Fishing Branch.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Settle the three remaining First Nations land claim agreements, which may potentially result in the creation of one new territorial park and the expansion of one existing park.
- Commence park and habitat protection area management planning processes for up to six areas established pursuant to settled First Nations land claim agreements.
- Continue to implement park and habitat protection area management plans and start field operations.
- Continue to provide biophysical, conservation and ecological land classification information to regional land use planning commissions; and contribute to YT's integrated resource management process as well as to environmental assessments pursuant to the Yukon Environmental and Socio-Economic Assessment Act when conservation aspects of development initiatives are considered.

TERRESTRIAL PROTECTED AREAS SUMMARY YUKON



TERRESTRIAL PROTECTED AREAS SUMMARY NORTHWEST TERRITORIES

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
<i>Territorially Administered</i>			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	1	2,179,119	15.7%
IUCN Category II *	1	3,126	0.02%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V *	1	10,400	0.08%
IUCN Category VI **	1	627,506	4.5%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
<i>Federally Administered</i>			
IUCN Category Ia	2	17,200	0.1%
IUCN Category Ib	3	2,163,100	15.6%
IUCN Category II	4	4,325,100	31.2%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim National Wildlife Area	1	2,524,029	18.2%
Interim National Parks	2	1,265,000	9.1%
<i>Other Administered</i>			
Aboriginal Lands ***	2	163,867	1.2%
Interim Aboriginal Lands ****	1	574,867	4.1%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	19	13,853,314	

Percent of land within Protected Areas

IUCN I-IV	6.46%
IUCN V-VI	0.47%
Not Classified	3.37%
Total *****	10.31%

* Hidden Lake and Gwich'in Territorial Parks were established under the Territorial Parks Act. However, subsurface rights are not withdrawn.

** Mackenzie Bison Sanctuary is recognized under the NWT Wildlife Act; surface and subsurface rights withdrawn.

*** Aboriginal Lands are the protected areas established under Sahtu (Kelly Lake) and Tlicho (Ezodziti) Agreements.

**** Interim Aboriginal Lands are the Conservation Zones identified under the approved Gwich'in Land Use Plan.

***** Total size of land and freshwater for Northwest Territories is 134,416,236 ha (Source: Northwest Territories).

Protected Areas Strategy

NWT protected areas strategy in place, is current, and is being implemented. NWT PAS is a partnership among GNWT, Indian and Northern Affairs Canada, Aboriginal governments (Inuvialuit, Gwich'in, Sahtu, Dehcho, Akaitcho, NWT Metis Nation, North Slave Metis Association), environmental organizations (World Wildlife Fund Canada, Canadian Parks and Wildlife Society, Ducks Unlimited Canada) and industry (Canadian Association of Petroleum Producers, NWT Chamber of Mines).

Most Significant Protected Areas Achievements over Past Five Years

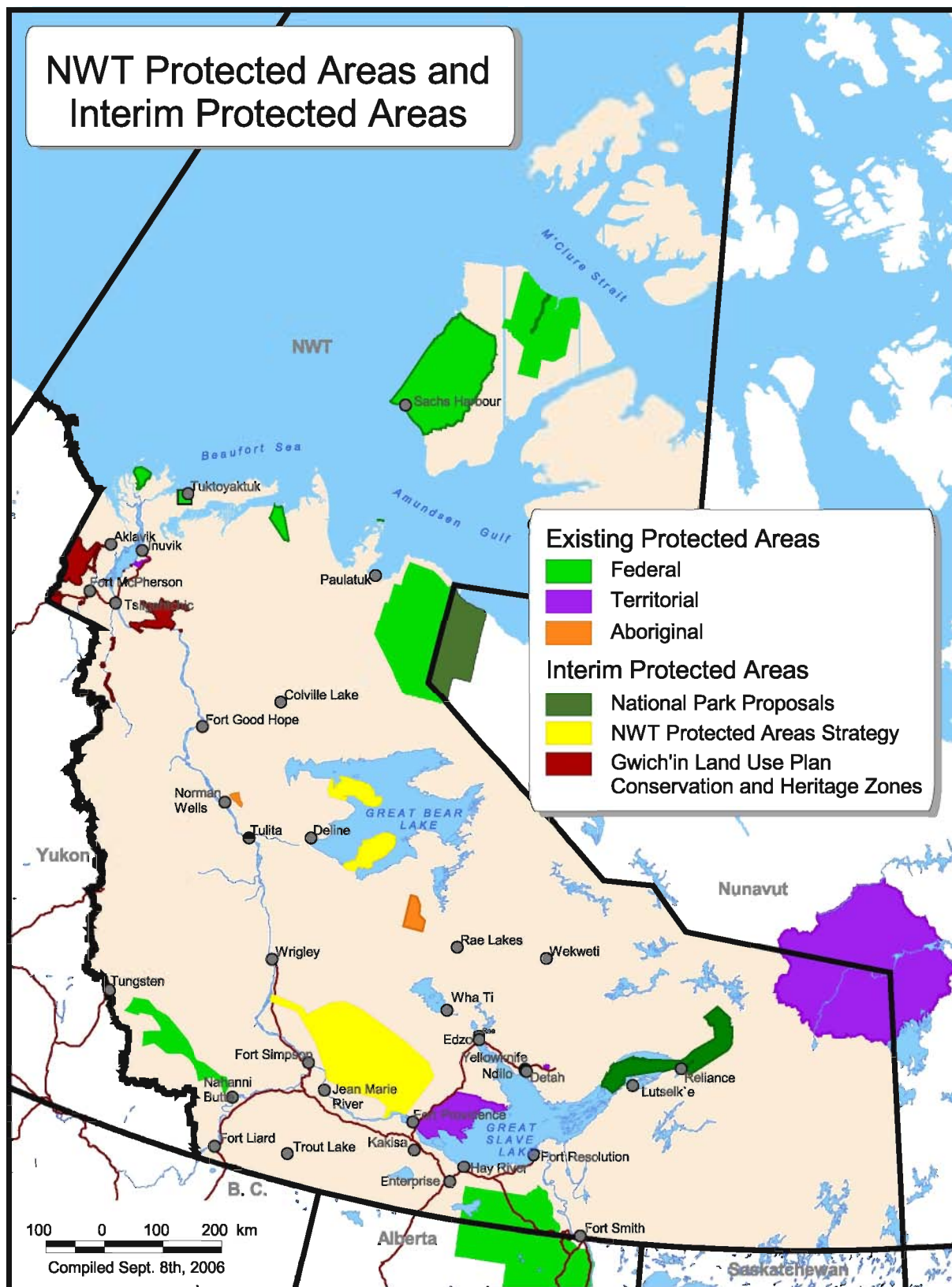
- Acknowledgement of the importance of reserving a network of culturally significant and ecologically representative areas prior to or concurrently with the development of the pipeline through the funding of the Mackenzie Valley Five Year Action Plan.

- Achieving interim protection for two candidate protected areas under the NWT PAS: Edéhzhie and Sahyoe/Edacho.
- Engaging 16 NWT communities to date in the process of protecting their special natural and cultural areas through the NWT PAS.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Building community capacity to identify and review a network of protected areas representative of the 16 ecoregions in the Mackenzie Valley, establish interim protected areas, and evaluate the network.
- Identifying, gaining support, and advancing "Goal 2" (ecologically representative) areas in those ecoregions that are underrepresented.
- Funding for agencies to sponsor and manage protected areas.

TERRESTRIAL PROTECTED AREAS SUMMARY NORTHWEST TERRITORIES



TERRESTRIAL PROTECTED AREAS SUMMARY - NUNAVUT*

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
<i>Territorially Administered</i>			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	0	0	0.0%
IUCN Category III	5	9,025	0.04%
IUCN Category IV	0	0	0.0%
IUCN Category V	2	142,058	0.61%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
<i>Federally Administered</i>			
IUCN Category Ia	4	313,387	1.3%
IUCN Category Ib **	9	10,921,155	47.0%
IUCN Category II ***	5	9,967,400	42.9%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim - National Parks	2	1,870,000	8.1%
<i>Other Administered</i>			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	27	23,223,025	

Percent of land within Protected Areas

IUCN I-IV	10.13%
IUCN V-VI	0.07%
Not Classified	0.89%
Total ****	11.09%

* Until such time as a PAS is developed, Nunavut differentiates between lands that have surface and sub-surface rights withdrawn (National Parks, National Wildlife Areas, and the Thelon Game Sanctuary, totalling 6.5%), Territorial Park lands that include withdrawal of surface rights only (0.07%), and lands that include withdrawal of seasonal surface rights only, including Migratory Bird Sanctuaries, Territorial Wildlife Sanctuaries, and Territorial Critical Wildlife Areas (4.27%).

** This includes the Thelon Game Sanctuary (3,174,140 ha), administered by Indian and Northern Affairs Canada under the Territorial Lands Act.

*** Note that Bylot Island MBS (1,263,500 ha) has been excluded from these totals, as the entire sanctuary overlaps with a portion of Simlik National Park.

**** Total size of land and freshwater for Nunavut is 209,319,000 ha (Natural Resources Canada).

Protected Areas Strategy

The NU government supports the development of a protected areas strategy, but feels that the Government of Canada (through Indian and Northern Affairs Canada) must take the lead on its development.

clarifies the extent to which the NU Government and the Nunavut Wildlife Management Board can restrict or limit harvesting by Inuit. The Act also addresses wildlife management in a way that fully takes into account Inuit Qaujimajatuqangit.

Most Significant Protected Areas Achievements over Past Five Years

- Completion of Territorial Parks IIBA – Fulfills NLCA obligations related to Territorial Parks, supports park establishment, and establishes meaningful joint management at community & territorial levels.
- Completion of Thelon Game Sanctuary Management Plan – The Management Plan has been approved by all appropriate organizations in Nunavut (Baker Lake HTO, Kivalliq Inuit Association, Nunavut Tunngavik Inc., Nunavut Wildlife Management Board), and the governments of Nunavut and Canada. The NWT and Dene agree with the spirit and intent of the plan but could not formally approve it pending negotiations of their land claims.
- The new Nunavut Wildlife Act - It includes many provisions from the NLCA, which defines the harvesting rights of Inuit and

Most Significant Protected Areas Priorities over Next Three to Five Years

- New Parks Act/Program – identify roles for parks and special places, ensure classifications appropriate for NU, provide for a zoning system, reflect Inuit Qaujimajatuqangit, reflect the NLCA & IIBA, and based on legislative & regulatory best practices, including principles/purposes & authorities.
- Implementation of IIBA – pending adequate funding from Canada through NLCA Implementation Contracts. Will provide for/facilitate establishment of Community and NU Joint Planning and Management Committees, completion of Parks Act/Program, Management Plan Frameworks, management plans, master plans and resource inventories.
- Devolution (estimated for 2008) – will allow NU a greater say in how lands are managed.

TERRESTRIAL PROTECTED AREAS SUMMARY NUNAVUT



TERRESTRIAL PROTECTED AREAS SUMMARY ENVIRONMENT CANADA

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Federally Administered			
IUCN Category Ia	46	386,356	2.70%
IUCN Category Ib	13	9,945,262	69.58%
IUCN Category II	6	1,271,855	8.90%
IUCN Category III	20	19,450	0.14%
IUCN Category IV	33	127,480	0.89%
IUCN Category V	3	2,350	0.02%
IUCN Category VI	6	10,338	0.07%
IUCN Unclassified	16	5,801	0.04%
Interim Lands	1	2,524,029	17.7%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	144	14,292,921	

Percent of Canada with Environment Canada administered Protected Areas

IUCN I-IV	1.18%
IUCN V-VI	0.0%
Not Classified	0.25%
Total *	1.43%

* Total size of land and freshwater for Canada is 996,057,134 ha, based on jurisdiction statistics.

MARINE PROTECTED AREAS SUMMARY - ENVIRONMENT CANADA

Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)
National Wildlife Area (Marine Portion) *	13	152,317
Migratory Bird Sanctuary (Marine Portion) *	51	1,417,145
Total	64	1,569,462

* These totals are the marine portions of predominantly terrestrial protected areas, and are therefore included in the above terrestrial protected area summary.

Protected Areas Strategy

Environment Canada's Protected Areas Strategic Plan is in the final stages of completion, and is currently being implemented.

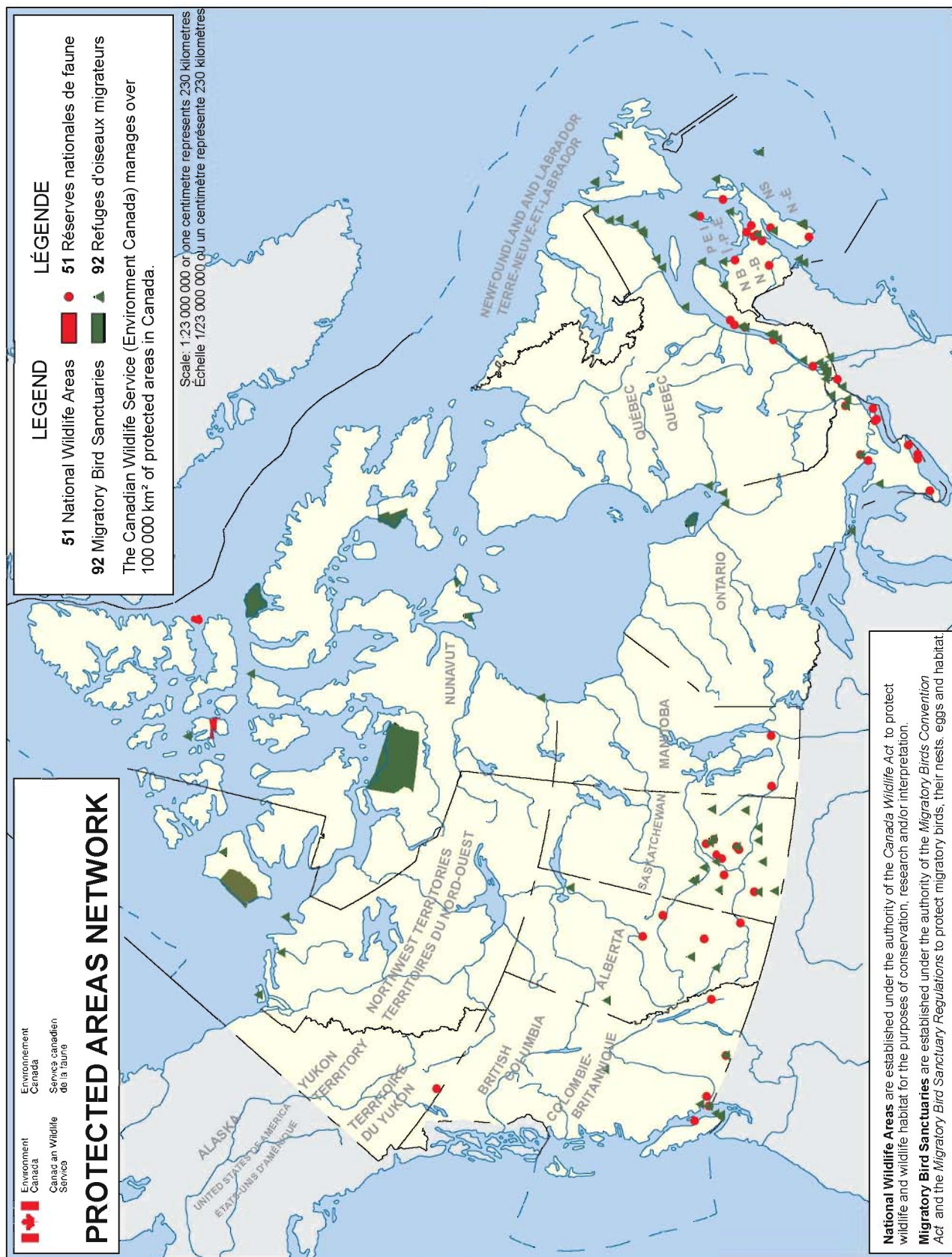
Most Significant Protected Areas Achievements over Past Five Years

- Establishment of a Strategic Plan and associated policy and procedure manual for the network.
- Legislative change under the Species at Risk Act allowing for the designation of NWAs on federal lands not owned by Environment Canada.
- Establishment of Suffield NWA in partnership with the Department of National Defence.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Securing dedicated resources to enable effective management of the network.
- Reorientation of network growth policy and science to target priority habitats in support of preserving broad ecosystem functioning at the landscape level.
- Opportunities for growth of the network in northern Canada, in partnership with Aboriginal communities, territorial governments and INAC.
- Address health and safety liability concerns within existing network.

TERRESTRIAL PROTECTED AREAS SUMMARY ENVIRONMENT CANADA



TERRESTRIAL PROTECTED AREAS SUMMARY PARKS CANADA

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Federally Administered			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	42	27,527,883	89.8%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI	0	0	0.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	4	3,135,000	10.2%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	46	30,662,883	

Percent of Canada with Parks Canada administered Protected Areas

IUCN I-IV	2.76%
IUCN V-VI	0.00%
Not Classified	0.31%
Total *	3.08%

* Total size of land and freshwater for Canada is 996,057,134 ha, based on jurisdiction statistics.

MARINE PROTECTED AREAS SUMMARY - PARKS CANADA

Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)
National Marine Conservation Area	1	11,500
Saguenay - St. Lawrence Marine Park	1	113,800
National Park (Marine Portion) *	11	938,000
Total	13	1,063,300

* These totals are the marine portions of predominantly terrestrial protected areas, and are therefore included in the above terrestrial protected area summary.

Protected Areas Strategy

Protected areas strategy in place, is current, and is being implemented.

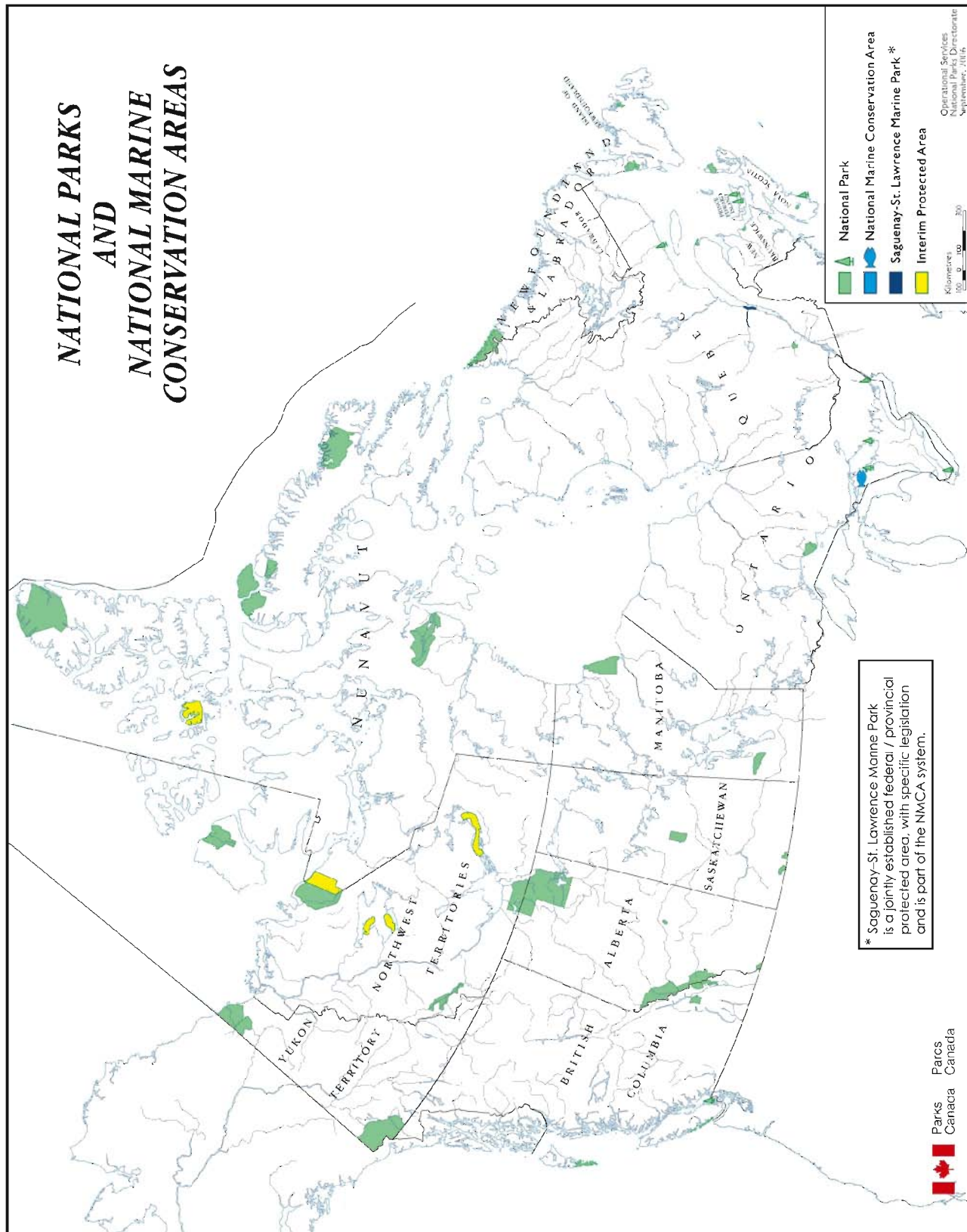
Most Significant Protected Areas Achievements over Past Five Years

- Establishment of Torngat Mountains NPR, and Ukkusiksalik, Gulf Islands national parks;
- New legislation for national parks and national marine conservation areas (Canada National Parks Act, 2000, and the Canada National Marine Conservation Areas Act, 2002;
- Ecological integrity established as the first priority in all aspects of the management of national parks through legislation, policy and practice.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Completely achieving the remaining goals established in the Government's 2002 Action Plan to create 10 new national parks and 5 new national marine conservation areas and expand 3 existing national parks by 2008.
- Implementing the Parks Canada ecological integrity program to achieve better understanding of the national park ecosystems, improved ecosystem health, increased regional partnerships and enhance Canadians' knowledge, awareness and support for ecological integrity.
- Providing memorable visitor experiences, increasing public support for protected areas and addressing changing demographics to build support for national parks and national marine conservation areas.

TERRESTRIAL AND MARINE PROTECTED AREAS SUMMARY PARKS CANADA



TERRESTRIAL PROTECTED AREAS SUMMARY AGRICULTURE CANADA

Land Classification	No. of Protected Areas	Area Protected (ha)	% of Total
Federally Administered			
IUCN Category Ia	0	0	0.0%
IUCN Category Ib	0	0	0.0%
IUCN Category II	0	0	0.0%
IUCN Category III	0	0	0.0%
IUCN Category IV	0	0	0.0%
IUCN Category V	0	0	0.0%
IUCN Category VI *	65	755,864	100.0%
IUCN Unclassified	0	0	0.0%
Interim Lands	0	0	0.0%
Other Administered			
Aboriginal Lands	0	0	0.0%
Interim Aboriginal Lands	0	0	0.0%
Private Lands	0	0	0.0%
Other Lands	0	0	0.0%
Total	65	755,864	

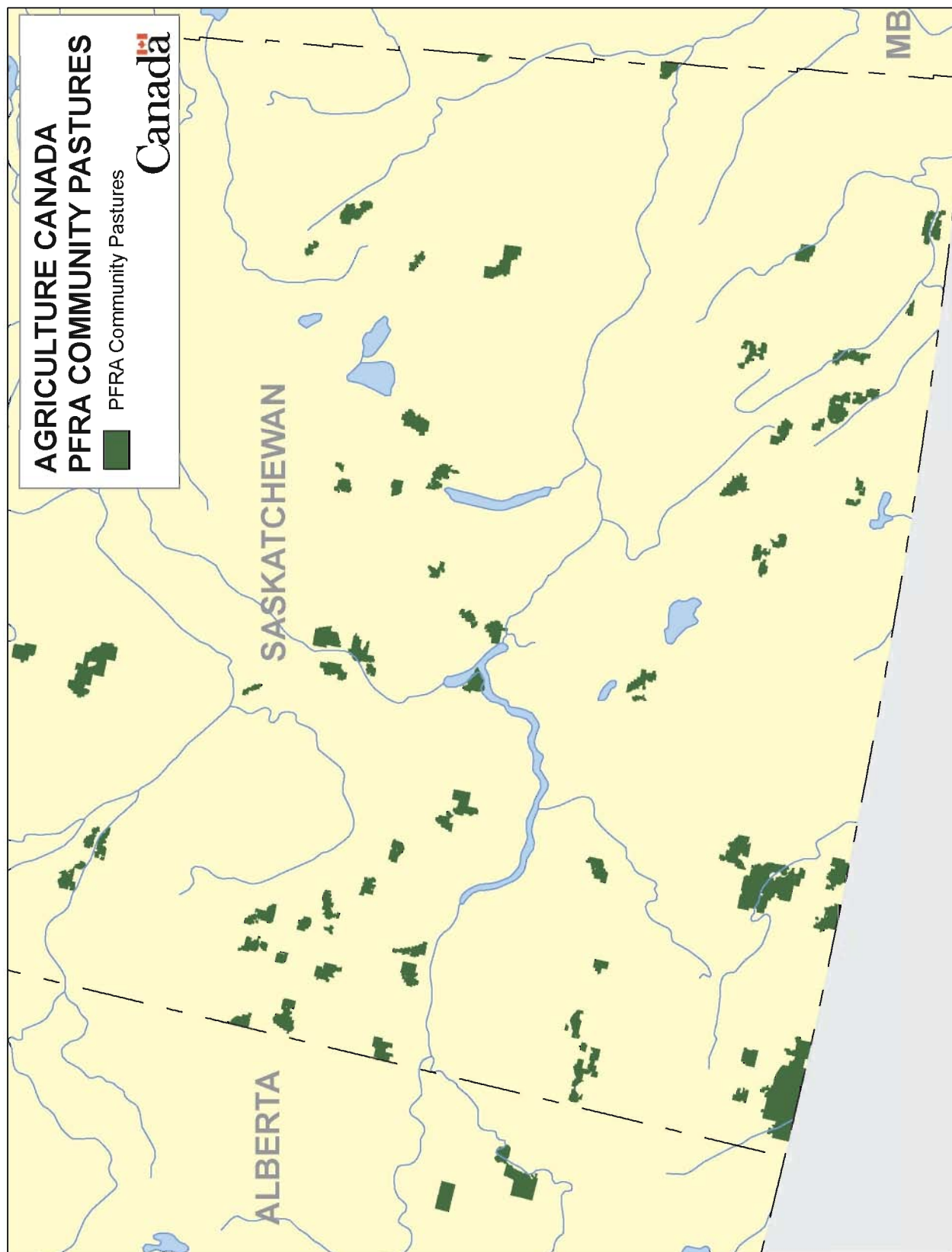
Percent of Canada with Agriculture Canada administered Protected Areas

IUCN I-IV	0.0%
IUCN V-VI	0.08%
Not Classified	0.0%
Total **	0.08%

* Excluded are 168,197 ha of Agriculture Canada administered PFRA pastures in MB. These lands will be reviewed in the near future for possible inclusion in MB's Protected Areas Initiative.

** Total size of land and freshwater for Canada is 996,057,134 ha, based on jurisdiction statistics.

TERRESTRIAL PROTECTED AREAS SUMMARY AGRICULTURE CANADA



MARINE PROTECTED AREAS SUMMARY

DEPARTMENT OF FISHERIES AND OCEANS

Type of Marine Protected Area	No. of Marine Areas	Marine Area Protected (ha)
Marine Protected Area	5	253,530
Total	5	253,530

Protected Areas Strategy

DFO's Marine Protected Areas Strategy is completed and currently being implemented within an ecosystem-based integrated oceans management framework.

Most Significant Protected Areas Achievements over Past Five Years

- Establishment of five Oceans Act (1996) Marine Protected Areas: Endeavour Hydrothermal Vents in 2003, Gully in 2004, and Basin Head, Eastport and Gilbert Bay in 2005.
- Development of a Federal Marine Protected Areas Strategy (2005), with Parks Canada and Environment Canada, to guide the establishment of a coordinated and complementary network of marine protected areas.
- Canada's Oceans Strategy (2002) and Oceans Action Plan (2005) reflect the commitment to designate marine protected areas to conserve and protect important and sensitive marine environments, as well as species at risk within an integrated oceans management planning context.

Most Significant Protected Areas Priorities over Next Three to Five Years

- Continue with the designation of the additional Marine Protected Areas of Interest.
- Further the development of management plans for existing Marine Protected Areas, including monitoring and reporting components.
- Further scientific knowledge to advance protection of ecologically significant and sensitive areas and species.
- Identify, within the five Large Oceans Management Integrated Management Planning Areas, potential Marine Protected Areas of Interest for assessment and potential designation.
- Give effect to the Federal Marine Protected Areas Strategy by identifying MPA candidates to strengthen the deferral network.
- Work with other levels of government to expand the federal marine protected areas network into a national marine protected areas network.

MARINE PROTECTED AREAS SUMMARY DEPARTMENT OF FISHERIES AND OCEANS

