



Report at a glance

Canada's Terrestrial Protected Areas Status Report 2010: Number, Area and Naturalness

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June 29 2011. In 2011, at the close of the first decade of the 21st century, and on the heels of the International Year of Biodiversity, it is timely to take stock of of Canada's assembly of protected areas. Global Forest Watch Canada has released a report titled: ***Canada's Terrestrial Protected Areas Status Report 2010: Number, Area and Naturalness*** (available for download at www.globalforestwatch.ca). This is the first such review of this period. There is an increasing global reliance on protected areas as cornerstones of conservation due to the widespread and increasing impacts of human activities, such as agriculture, forestry, mining, energy developments and urbanization. Protected areas are now considered fundamental to preserving and conserving natural areas, and reducing biodiversity loss.

Canada is well positioned to play a global leadership role on protected areas as Canada is one of the few countries on Earth that holds vast expanses of publicly-owned intact natural areas – “a great blessing that brings an equally great responsibility.”

Acquiring accurate and up-to-date geospatial data for this project was a major challenge until the Conservation Areas Reporting and Tracking System (CARTS)¹ (Canadian Council on Ecological Areas), and the Terrestrial Protected Areas dataset (Commission on Environmental Cooperation [CEC]²) published complementary datasets in October 2010 and December 2010 respectively. These datasets were extremely useful but incomplete for our purposes, for examples: the CARTS dataset did not contain any provincially managed sites for the province of Québec; both agencies did not indicate to what date their dataset was current to; both agencies' datasets were missing some sites contained in provincial/territorial datasets: and, both agencies' datasets were incomplete for Lands under Interim Protection and for protected areas on private lands. Global Forest Watch Canada could not resolve all of these and other data issues. We were however, able to provide an assessment of “Lands under Interim Protection” throughout Canada, as well as Protected Areas and Lands under Interim Protection in the province of Québec.

For the purposes of this report and the associated datasets, we consider two classes of terrestrial lands and freshwaters: Protected Areas and Lands under Interim Protection. Both should be generally free of logging, mining, oil and gas or hydropower developments, although we recognize that there are

exceptions in that a variety of specially-managed industrial and off-highway vehicle activities are taking place within many protected areas. . A site-by-site analysis with the associated legislation would be required to identify which are free of industrial activities by coincidence, law or policy. Protected Areas receive effective legal or regulatory protection at the provincial, territorial or federal jurisdictional levels and Lands under interim protection receive effective legal or regulatory protection, temporarily or otherwise, while negotiations and legal issues are resolved. The various Lands under Interim Protection or portions thereof, may or may not eventually be established as Protected Areas.

In this report, Global Forest Watch Canada set out to answer the following questions:

1. *As of 2010, the International Year of Biodiversity, how much of Canada's terrestrial and freshwater area is allocated to protected areas and where are they?*

- Canada has set aside 8.5% (84.5 million hectares) of its lands and freshwaters as Protected Areas and 3.7% as Lands under Interim Protection (37.5 million hectares). If the existing Lands under Interim Protection were established as Protected Areas, this would increase to 12.2% of Canada.
- Three provinces/territories have more than 10% of their area set aside as Protected Areas: British Columbia at 14.5%, Alberta at 12.6% and Yukon at 11.6%.
- Five provinces/territories have more than 10% of their area set aside as Protected Areas or temporarily set aside as Land under Interim Protection: Nunavut at 10.1%, Alberta at 12.6%, Yukon at 14.3%, British Columbia at 14.6%, and Northwest Territories at 24.1%.
- In terms of major biomes, 12.7% of the Boreal/Taiga is within Protected Areas and Lands under Interim Protection, 12.9% of the temperate ecozones, 11.8% of the Arctic/Subarctic and 4% of the Prairies. Three of fifteen Terrestrial Ecozones have more than 20% of their area set aside as Protected Areas or Lands under Interim Protection: Arctic Cordillera, Taiga Plain, and Pacific Maritime.

2. *Is the allocation of lands and freshwaters to protected areas achieving naturalness, presumably a key conservation objective of protected areas?*

Yes and No.

From two important perspectives, Canada's Protected Areas are achieving the conservation objective of naturalness:

- 1) Anthropogenic access within Canada's Protected Areas is approximately 31% of that within all of Canada (5.3% versus 17.6%), meaning that Canada's protected areas are much more "natural" than Canada as a whole.
- 2) Of the total area within a 10 km buffer surrounding Canada's Protected Areas, almost half (48.6%) of that area is accessed; buffer areas surrounding protected areas are nearly 10 times more accessed than the Protected Areas they surround.

From the perspective of a large number of small protected areas, over half (57.8%) of Canada's total number of protected areas are more than 25% anthropogenically accessed. The vast majority of these are located in southern Canada.

In addition to answering the above two key questions, we also performed additional analyses and produced maps related to Watersheds and North American and Global comparisons:

Area of Fundamental Watersheds set aside as protected areas

Over two-thirds (67.5%) of Canada's 1,051 Fundamental Drainage Areas (sub-sub-basin level watersheds) have less than 5% of their areas secured as Protected Areas.

Canada within a World context

Canada is still below the global average in terms of percent of terrestrial protected areas (8.5% of the country versus 12.9% globally), yet has made significant recent progress (3.7% under interim protection, some of which eventually will be in protected areas). However, it is difficult to compare Canada and global datasets as they differ in completeness and dates of establishment.

Our experience with this project has led us to make five data-related recommendations:

1. *In order to track progress over time, geospatial data on individual protected areas should include historical dates of legislated changes of the establishment and related boundary changes.* Currently, the available geospatial datasets only include the most current boundary and most recent legislated date with no historical information.
2. *In addition to already-providing historical dates of establishment of individual new protected areas, Canada and its provinces/territories should provide a date-stamp of various protected areas datasets to enable users to understand the date that each dataset is current to –* Currently, no information is provided as to when each jurisdiction updates its protected areas dataset and submits it to CARTS and to the Commission on Environmental Cooperation.
3. *Canada should more accurately and comprehensively assess and report on the full extent of our protected areas networks on national and international scales –* This should include, as a minimum, private conservation lands and lands under interim protected area designations. All lands and freshwaters that receive protection according to national and international standards should be given credit.
4. *Canada should resolve discrepancies and inconsistencies as to how the various jurisdictions allocate their respective protected areas to IUCN categories –* Unless there has been a dramatic improvement since 2004³ in how some of the provinces allocate their respective protected areas to an IUCN category, there are still omissions, discrepancies and inconsistencies as to how this is done across Canada.
5. *An organization such as the Canadian Council on Ecological Areas, through CARTS, and participating agencies should continue to update and regularly produce iterations of authoritative and publicly accessible protected areas datasets.* This will avoid confusion and duplication.

The Government of Canada has stated that Canada has set aside 9.9% of its lands as protected areas as of 2005 in 8,475 areas; 8.6% in Protected Areas and 1.3% in Lands under Interim Protection, resulting in

a growth of approximately 19% since 2000. Although accurate comparisons are not possible as the Government of Canada does not make the dataset used to derive its figures publicly available, this compares to our 2010 calculations of 12.2% of Canada's terrestrial area set aside (3.7% in Lands under Interim Protection and 8.5% in Permanent Protected Areas).

Global Forest Watch Canada's goal is to ensure that there is regular compilation and publication of national, provincial and territorial protected areas information. It is a significant endeavor to compile, create and update a Canada-wide dataset of protected areas, and fortunately, the Canadian Council on Ecological Areas, through CARTS, and participating agencies have recently endeavoured to produce Canada's authoritative and publicly accessible protected areas layer.

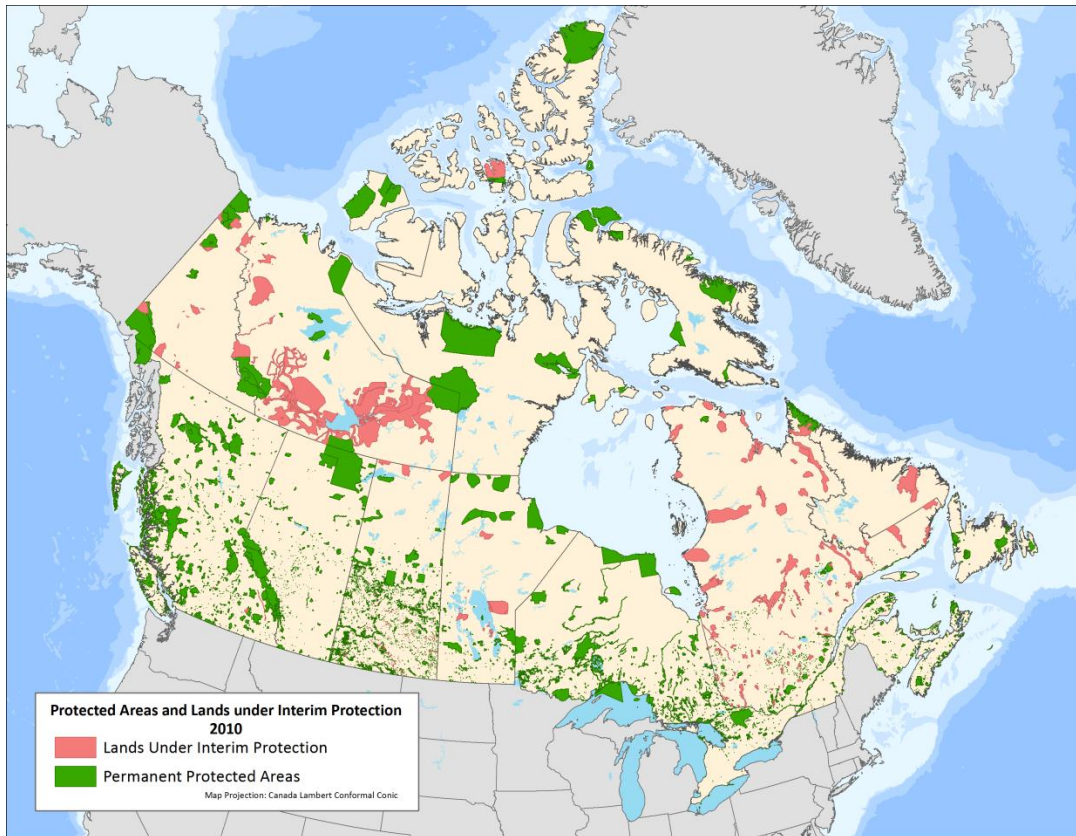
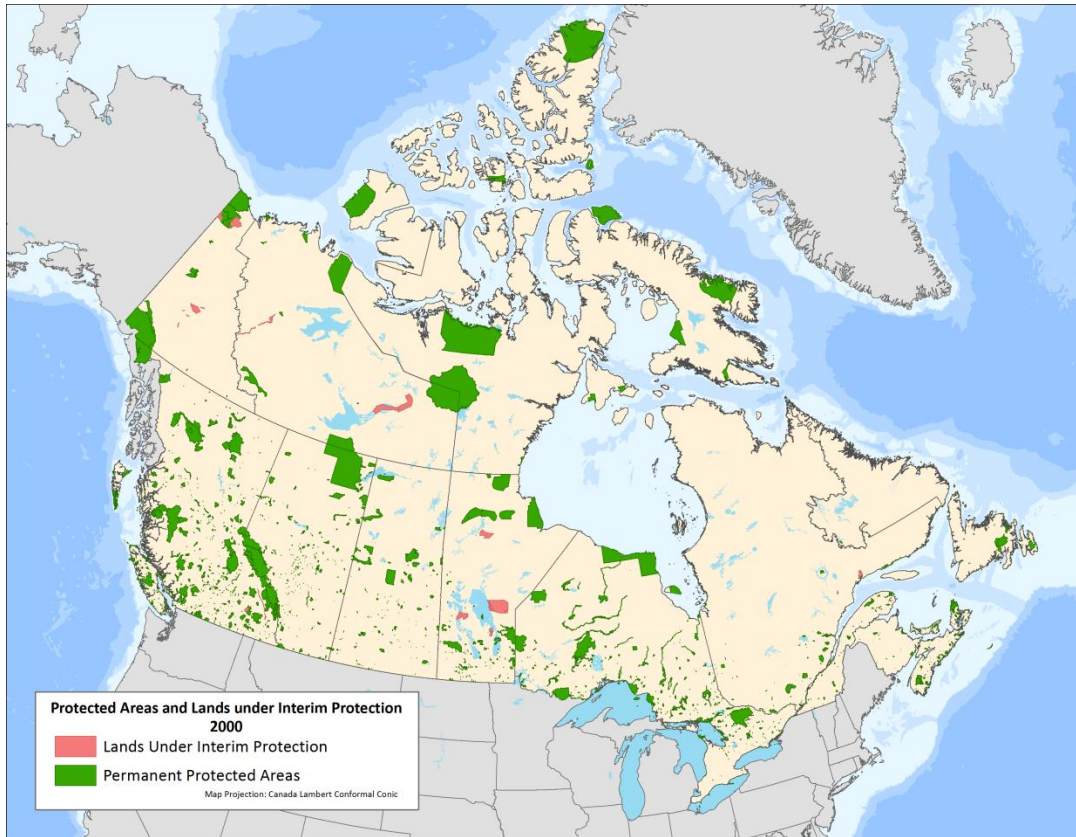
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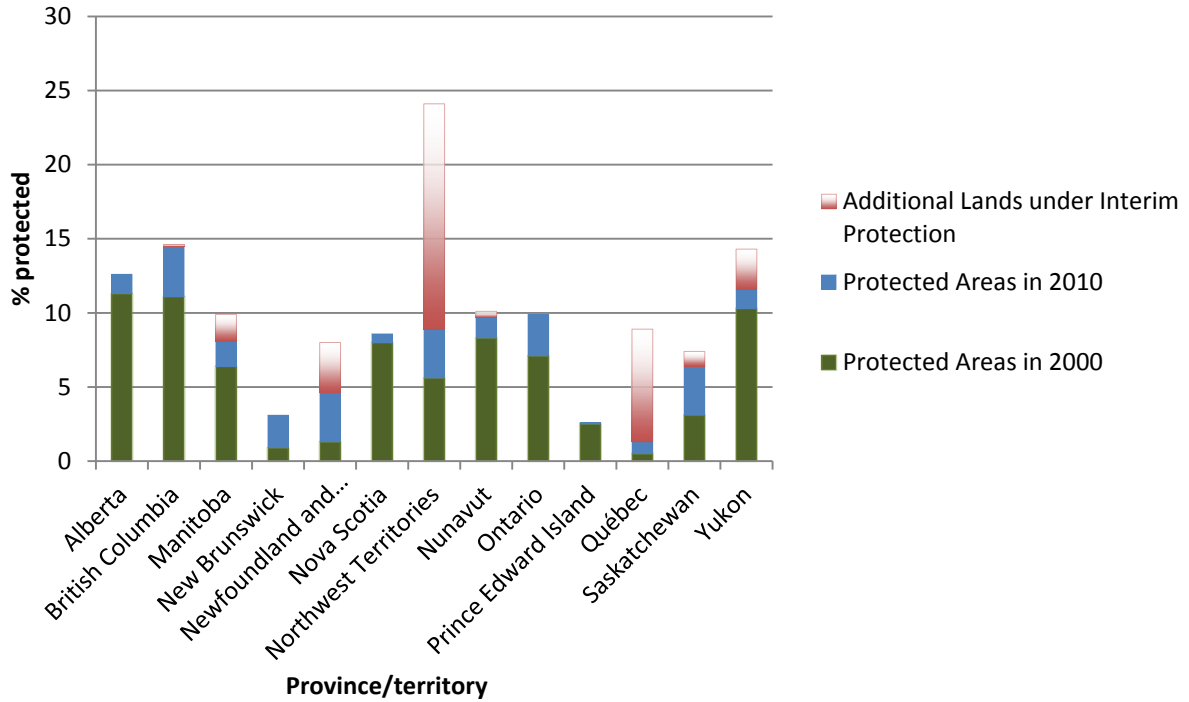
¹ Canadian Council on Ecological Areas. 2010. Protected Areas in Canada – Conservation Areas Reporting and Tracking System. Available at: http://www.ccea.org/en_carts.html

² Commission on Environmental Cooperation. 2010. Terrestrial Protected Areas. Available at: http://www.cec.org/Page.asp?PageID=924&ContentID=2979&AA_SiteLanguageID=1

³ Swinnerton, G.S., & Buggey, S. (2004). Protected Landscapes in Canada: Current Practice and Future Significance. *The George Wright Forum*, 21(2), 78-92.



Percent of each province and territory designated as Protected Areas 2000 and 2010 and Lands under Interim Protection as of 2010





Global Forest Watch Canada provides access to more complete information about development activities in Canada's forests and their environmental impacts. We are convinced that providing greater information about Canada's forests will lead to better decision-making on forest management and use, which ultimately will result in forest management regimes that provide a full range of benefits for both present and future generations.

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