

Canada's unique wetlands under threat: report

March 16 2011, by Michel Comte



The Canadian Rockies are reflected on the Bow Valley River in Alberta. Canada, which has the world's largest intact forest, must do more to protect the one-of-a kind natural treasure, which increasingly is under threat from large-scale industrial activity, a new report said Wednesday.

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The first of its kind survey by the Pew Environment Group shows

Canada's [boreal forest](#) contains more unfrozen freshwater than any other ecosystem, totaling more than 197 million acres of surface fresh water.

The Pew Center said the forest must be made off-limits to forestry and mining to preserve millions of lakes and thousands of rivers critical to forming [Arctic sea ice](#).

"When you look at a color-coded map of the world's (unspoiled) freshwater reserves (marked in blue), it's just shocking to see all the blue in Canada," the study's lead author Jeffrey Wells told AFP.

Canada possesses one quarter of the planet's wetlands, half the world's lakes larger than one square kilometer in size, five of the 50 largest rivers and the single largest remaining unpolluted fresh water body, Great Bear Lake.

Canadian boreal lakes and river delta sediment, [peatlands](#) and wetlands are also the largest on-land carbon storehouse in the world, storing more than 400 trillion pounds of carbon, the study said.

Maintaining its flows, which contribute a majority of the freshwater input into the Arctic Ocean, is critical to forming Arctic ice as they decrease the salinity of the sea water, allowing it to freeze more quickly and easily.

Forestry, oil and gas extraction, mining, and hydropower generation is rapidly increasing and negatively impacting the quality and quantity of boreal water and the surrounding ecosystems, the study warned.

Lakes have been drained to access minerals underneath or to dispose of tailings and other mine waste. Erosion after logging is increasing amounts of silt and water flowing into rivers, and on a large scale can reduce regional precipitation. The construction of [hydroelectric dams](#)

meanwhile has destroyed or degraded wetlands.

The boreal development footprint is currently 728,000 square kilometers (180 million acres).

Canada has already set aside 185 million acres from development, including key wetland and river areas, representing more than 12 percent of the 1.2 billion-acre forest.

But, the report concludes that governments should protect entire river, lake and wetland ecosystems by keeping intact at least 50 percent of Canada's boreal forest.

It also demands adherence to "sustainable" development in the rest of the forest.

The analysis is the first compilation of decades of research on Canadian boreal water reserves from more than 200 peer-reviewed scientific studies, government reports and other sources.

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