

NEW ATLAS REVEALS RAPID DISAPPEARANCE OF THE LAST GREAT INTACT BOREAL FORESTS OF ALBERTA

EDMONTON, April 2, 2009 – An atlas of Alberta's last great intact forest landscapes released today by Global Forest Watch Canada reveals a dramatic reduction in large blocks of Alberta's natural boreal forest landscapes due to the expansion of industrial activities in recent decades.

"We examined old and new satellite images for the three quarters of Alberta that are covered by forest regions and combined what we saw with existing information," said Peter Lee, Executive Director of Global Forest Watch Canada. "What we saw and mapped is an astonishing scale and pace of industrial allocations and disturbances – primarily logging and oil, bitumen and natural gas developments – which have occurred throughout most of the province's forest regions since 1990, but mainly within the province's boreal forests."

The maps and analyses in the two-part atlas, titled "The Last Great Intact Forests of Canada: Atlas of Alberta," which track changes from 1990-2007, paint a stark picture of industry's impacts on air, water, land and wildlife within Alberta's forest regions. The 118 maps in the Atlas show that less than 40% of the more than 500,000 km² of Alberta's forest regions (which cover 3/4 of the province) remain within ecologically intact forest landscape blocks over 5,000 ha in size.

Recent industrial disturbances are intensive over large areas; for example, 42.3% of the 94.8 km² Township 57, Range 23 (west of the 5th Meridian) in Alberta's Foothills (Hinton area) has been disturbed by clearcuts and oil and gas activity since 1990.

Recent industrial disturbances have also been extensive over a broad swath of forest land in western and northern Alberta: more than 130,000 km² or 26% of forest is less than 1 km from some level of disturbance caused by industry between 1990 and 2001.

For forest regions outside of protected areas, 36% have experienced some level of disturbance by industry since 1990.

Other significant examples of findings of the Atlas include:

Threats to important wildlife species: The Atlas provides maps that reveal the dramatic declines in the ranges of a wide variety of species, including:

- Woodland caribou: Only 115,000 km², or 23.5%, of the historic range remains occupied by mostly declining sub-populations of Woodland caribou and only 46,000 km² of the remaining area of occurrence still consists of intact forest landscapes;
- Grizzly bear: Only 228,000 km², or 34.4%, of the historic distribution of Grizzly bear remains occupied, with only 67,000 km² of this remaining area of distribution still consisting of intact forest landscapes;
- Fish: 122,000 km², or 67.0%, of the historic regional range of Bull Trout remains occupied by mostly declining sub-populations; thirty rivers located along the southern, heavily-industrialized portions of Alberta's forest landscapes are showing probable declines in Arctic Grayling populations with 50% of the Arctic Grayling populations facing significant declines; by 1998, 12 of 27 Alberta Walleye fisheries that were identified as ranging from "good" to "excellent" prior

to 1976 were classified as collapsed, while 13 were vulnerable, and only 2 were stable.

Rapidly expanding province-wide oil and gas footprint: In 2006-07, energy companies operated almost 227,000 wells, 20,690 oil batteries and associated satellites, 817 gas plants, 12,243 gas batteries, 4,726 compressor stations, and a pipeline network of more than 392,000 km. EnCana Corporation and Canadian Natural Resources Limited together drilled more than 25% of all the oil and gas wells drilled in the 2000-2008 period.

Effects of bituminous sands industrial operations on air, water, land: Using a series of environmental indicators for the bituminous (tar/oil) sands industrial facilities, the Atlas shows that there is a wide range of potentially serious ecological problems including:

- Destruction of large areas of boreal forest ecosystems for infrastructure, open-pit mines and operations, and toxic disposal sites (5,000 ha in 1974 and 65,000 ha by 2008);
- Indications of leaking harmful chemicals from toxic tailings lakes into surface water and groundwater [e.g., naphthenic acids found in a stream at levels 15 times greater than background levels; polycyclic aromatic hydrocarbons (PAHs) found in a stream at levels 3.4 to 13.8 times those of natural levels; rising levels of chloride concentrations in groundwater wells];
- Inadequate maintenance of air quality monitoring stations: equipment used to monitor air quality in the Athabasca bituminous sands region has repeatedly failed tests and many of the problems could be caused by improper maintenance;
- Hydrogen sulfide releases from bitumen plant sites repeatedly exceed government guidelines (the hourly air quality objective for hydrogen sulphide in the bituminous sands area was exceeded 361 times in 2007, a dramatic increase from the 28 occurrences three years earlier);
- Multiple overlapping industrial commitments on the same forest land in the bitumen sands region: within the 140,000 km² region, there are 200,000 km² of individual industrial allocations, indicative of massive overlap for a variety of industrial interests.

Logging and logging tenures: The annual area logged in Alberta in 2007 (81,754 ha) was 3.8 times the area logged in 1975 (21,682 ha). Long term tenure allocations of public forest lands to logging companies total over 205,000 km², with 4 companies (Alberta-Pacific Forest Products, Tolko and associated companies, Daishowa-Marubeni International, and Weyerhaeuser Company Limited) controlling almost 70% of all logging tenures.

Encroaching industrial disturbances within Aboriginal traditional lands: There have been rapid industrial allocations and disturbances within and adjacent to First Nations traditional lands. For example, the Traditional Land of the Athabasca Chipewyan First Nation in northeastern Alberta and downstream of the bituminous sands facilities has multiple and overlapping industrial allocations and activities: there are 2,200 active petroleum wells and 12,200 abandoned petroleum wells and 15% of the land is covered by oil sands leases, 27% by uranium claims, 14% by diamond claims, and 16% by logging tenures.

Protected areas: Industrial disturbances are rapidly encroaching on Alberta's protected areas, especially in the Alberta Foothills region.

Greenhouse gases: Alberta cannot absorb, through natural sequestration, its accelerating industrial carbon emissions and thus is increasingly exporting them to the rest of Canada and the planet.

Peter Lee notes, "the preparation and release of this Alberta atlas was triggered by the Alberta Government's Land-use Framework released in December 2008. The government's framework acknowledges that the province's land, air and water are not unlimited and can be exhausted or degraded by overuse. In fact, the government's framework states that 'we have reached a tipping point.'

"Despite the multiple disturbances and rapidly expanding threats to Alberta's boreal forest landscapes, and despite the declining ranges and populations of key focal species, large ecologically intact boreal forest landscapes do remain. However, only one-third of these intact forests have been protected so far, providing opportunities for further conservation and stewardship on the remaining 126,000 km² of intact forest landscapes: 106,000 km² in northern Alberta and 20,000 km² in southern Alberta," concludes Lee.

Contact:

Peter Lee, Executive Director
Global Forest Watch Canada
780-422-5989 or cell 780-914-6241

For more information: The Global Forest Watch Canada report, *The Last Great Intact Forests of Canada: Atlas of Alberta* (Parts I & II) and maps from the report are available for download on the GFWC website: www.globalforestwatch.ca.

Global Forest Watch Canada was formed to provide 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.