Seeing the forests for the trees

By: Julee Boan (published in Viewpoint for the Thunder Bay Chronicle-Journal on January 6, 2007)

More than 4,500 people in Thunder Bay attended the recent showing of the film "An Inconvenient Truth", a testament to the interest in Northern Ontario about the sources and implications for climate change. Across Canada, communities are recognizing that we are facing serious choices – and the repercussions of inaction are as much economic as they are environmental.

The film's emphasis was mainly on decreasing oil consumption; however, we also now realize that our northern forests may play a critical role in mitigating climate change impacts. Although they also contribute carbon to the atmosphere, Canada's boreal forests and peatlands represent a massive storehouse of carbon, and act like a carbon "bank account". It's estimated that the amount of carbon stored in the boreal region is the equivalent of more than 300 years of Canada's total carbon emissions.

This raises an important question, "What are our boreal forests really worth?"

Last year, the Pembina Institute released a ground-breaking report estimating the economic value for the broad range of ecological goods and services provided by Canada's boreal forests. Ecosystem services include benefits such as climate stabilization, clean water supply, erosion control and sediment retention, habitat, recreation and cultural use – just to name a few.

The results of the study are certainly provocative. The net market value (the net contribution to Canada's Gross Domestic Product from boreal timber harvesting, mineral, oil and gas extraction, and hydroelectric generation) of boreal natural capital extraction in the year 2002 was $27.8 billion dollars. Perhaps surprising to most Canadians is that the estimated total non-market value of boreal ecosystem was $93.2 billion. The study estimates that the non-market value of boreal ecosystem services is 2.5 times greater than the net market value of boreal natural capital extraction.

According to the report, the ecosystem services with the highest economic value include flood control and water filtering by peatlands—$77.0 billion; pest control services by birds in the boreal forests—$5.4 billion; nature related activities—$4.5 billion; flood control, water filtering, and biodiversity value by non-peatland wetlands—$ 3.4 billion; and net carbon sequestration by the boreal forest-$1.85 billion. Most of these ecosystem services go unaccounted for in conventional economic decision-making.

The study is significant. It suggests that the ecological and socio-economic benefits of boreal forests, in their current state, may be significantly greater than the market values

derived from all current industrial development—forestry, oil and gas, mining, and hydroelectric energy—combined. In other words, the trees are worth more standing.

As we rebuild and strengthen our northern economies, we need to be asking some important questions. What is the true value of conserving the boreal region's ecosystems for current and future generations of Canadians and global citizens? Will carbon credits for preserving boreal regions be available for purchase? Can northern communities capitalize on preserving forests as part of their economic development? How much of our forests should be set aside from industrial development – left in our "bank account" for non-consumptive economic benefits?

Environment North believes Canada should adopt a more precautionary and conservative approach to decision making with respect to the boreal region. We challenge our political leaders to consider the full economic value of the many ecological goods and services of the boreal region when making decisions about its future.