

**LTA The Land
Of British**



**Trust Alliance
Columbia**

**204-338 Lower Ganges Road, Salt Spring Island, B.C. V8K 2V3
www.landtrustalliance.bc.ca 250-538-0112 fax 538-0172**

January 17th, 2008

FOR IMMEDIATE RELEASE

SCIENCE PROVES THAT BRITISH COLUMBIA'S EXISTING FORESTS, GRASSLANDS AND WETLANDS ARE THE LARGEST DEFENCE AGAINST GLOBAL WARMING IN CANADA

Oceans and terrestrial (land-based) ecosystems remove about 50 to 60 percent of human-caused greenhouse gas emissions... and curb more intense global climate change.ⁱ Globally, forest ecosystems contain more than half of all terrestrial carbon and account for about 80 percent of the exchange of carbon between terrestrial ecosystems and the atmosphere. British Columbia forests have some of the highest carbon stores in Canada averaging 311 tonnes per hectare with some coastal forests holding 600 to 1,300 tonnes per hectare. Based on the average estimates, the total carbon stored by BC's forests amounts to 88 times Canada's annual greenhouse gas emissions. (989 times BC's GHG annual emissions – the equivalent of the annual electricity use of 8.5 billion households, or keeping 14 billion cars off the road for one year.).ⁱⁱ This stored carbon is worth an estimated total of \$774 billion, or \$62 billion per year (\$1,072 per hectare.)

The Land Trust Alliance of British Columbia (LTABC) has just released a landmark report, ***Mitigating and Adapting to Climate Change through the Conservation of Nature***, authored by economic and climate change experts, Sara J. Wilson and Dr. Richard J. Hebda. Sara is a leading Canadian researcher on Ecological Economics, which is an emerging field that values nature's services. Dr. Richard J. Hebda is an adjunct associate professor, Biology, Schools of Earth and Ocean Sciences and Environmental Studies at the University of Victoria and a respected, published author and presenter on climate change.

The LTABC commissioned report highlights the wisdom of investing in mother nature's intact ecosystems as a means of both adapting to and mitigating the significant effects of climate change. In British Columbia, virtually all discussions and proposed solutions to the increasing concerns about climate change are about energy, transportation and other technological advances. Very little attention has been paid to our forested lands, grasslands and wetlands – the critical role that existing ecosystems play actively conserving vast stores of carbon-reducing GHG emissions to the atmosphere. The most effective way to benefit from the carbon storage values of natural ecosystems is to prevent or mitigate their conversion to other uses and keep them healthy. This is exactly what BC Land trusts do.

The Land Trust Alliance of BC is an umbrella group of BC's land trusts, providing education, research and resources and outreach to the public on conserving our natural and cultural diversity. Land Trusts have been on the increase in the last 10 years, directly protecting more than half a million acres of land in that time, larger than the greater Vancouver area. Land trusts work with private landowners and volunteers in their communities on voluntary restoration and stewardship projects. The more than 30 land trusts in BC also work to permanently protect land through registering conservation covenants on private lands and regional parks; this means that even when the land changes hands, the features protected in the covenant must remain intact, or the landowner will face enforcement proceedings. Land trusts also work with many partners, including landowners, businesses, government agencies and the

Building a Culture of Conservation

public to acquire and conserve lands outright. One example of a recent acquisition which will protect Victoria's watersheds and drinking water was facilitated by one of these land trusts: TLC, The Land Conservancy of British Columbia.

According to the LTABC's report authors, Wilson and Hebda: *"The consequences of land use and thus mitigation choices are most obvious when looking at the accumulated CO₂ effects in the atmosphere. By the end of 50 years, a converted BC coast forest may have released hundreds of tonnes per hectare of carbon as CO₂ into the atmosphere and contributed to climate change. An equivalent area of replanted forest will not have had any positive effect on atmospheric CO₂ for decades. Depending on the specific conditions, the replanting strategy may not even have caught up to the steadily accumulating benefits of removed CO₂ by a conserved old forest for half a century. Like the proverbial turtle, the slow and steady CO₂ removal benefits of a conserved old forest ends up ahead even of a replanted stand in the short and medium term."*

Conserving natural ecosystems provides an as yet untapped opportunity for meeting the Climate Change challenge. Healthy resilient landscapes provide adaptation options and benefits for citizens and the economy. Conserving healthy ecosystems is a cost effective way to ensure a reliable supply of clean water and mitigate inevitable extreme climatic events such as floods and droughts. They also protect biodiversity and the ecological services that drive our economies and less tangible values directly linked to the quality of life in BC.

British Columbia can meet and exceed its GHG Climate Change emissions targets by including increased conservation of the living and dead carbon of existing ecosystems in its policy measures and programs.

For further information or to view the entire report including photos and graphs, contact the Land Trust Alliance of British Columbia, 250-538-0112, www.landtrustalliance.bc.ca

-30-

Media inquiries can be directed to:

Sheila Harrington, Executive Director
Land Trust Alliance of BC
Sheila@landtrustalliance.bc.ca
250-333-8575

Dr. Richard Hebda, report co-author
Biology, Schools of Earth and Ocean Sciences
& Environmental Studies, University of Victoria
hebda@shaw.ca
250-652-6863

Sara J. Wilson, report co-author
Principal, Natural Capital Research & Consulting
sarajwilson@dccnet.com
604-886-3205

Funding for the creation of the report: The Real Estate Foundation of British Columbia
The Bullitt Foundation, Ducks Unlimited Canada

Funding for dissemination of the report: VanCity Community Fund, Mountain Equipment Coop

ⁱ Solomon, S. et al. 2007. Technical Summary. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Solomon, S., Qin, D., Manning, M., Chen, Z., Marquis, M., Averyt, K.B., Tignor, M. and H.L. Miller (eds.). Cambridge University Press. Cambridge, UK.

ⁱⁱ Canada's 2005 GHG emissions were 747 million tonnes CO₂ equivalent. British Columbia's 2004 GHG emissions were 66.8 million tonnes. BC's forests store 18 billion tonnes of carbon (66,075 Mt CO₂).