

THE GLOBE AND MAIL

Researchers urge shift in environment management

The Globe and Mail

Fri 05 Dec 2008

Page: S2

Section: British Columbia News

Byline: Mark Hume

Dateline: VANCOUVER

VANCOUVER -- British Columbia has become a last refuge for a growing number of species in North America, but if the "biodiversity ark" is to be maintained in the face of global warming, government will have to change the way it manages the environment.

That's the conclusion reached by researchers at Simon Fraser University who have formed a group known as the Adaptation to Climate Change Team that is exploring the risks of global warming and proposing possible policy responses.

In its first report, released this week, the group argues the B.C. government needs to shift to a model "that integrates ecosystem management with the resource-based economy," and brings land and water management under one umbrella organization.

The group's lead policy author, Jon O'Riordan, a former deputy minister of sustainable resource management in B.C., says the government has many environmental initiatives under way, but it is not moving fast enough and lacks overall co-ordination, putting the environment and the provincial economy at risk.

"Our ecosystems provide a rich array of services such as: controlling flooding, helping to clean drinking water sources, storing carbon and moderating air and water temperatures," he writes in the report.

"Climate impacts will have such profound effects on these values that a significant adjustment in governance of these resources is required. ... Otherwise, the combination of habitat fragmentation by uncoordinated human activities, together with unprecedented changes in temperature and precipitation, will impact the province's economic health and impair the ability for the environment to function."

Mr. O'Riordan says the situation poses "profound threats to B.C.'s unique biodiversity ark."

The report notes that ecosystems "lose their natural resilience to change when they become simplified due to losses in their component parts caused by human disturbance and natural processes, including climate change."

Mr. O'Riordan says the massive pine beetle infestation that has swept across B.C. is an example of that, and he warns that the biggest impact of global warming is yet to come.

B.C.'s temperature is expected to rise by up to seven degrees over the next 70 years, with precipitation predicted

to decrease in the summer by up to 50 per cent, while rising in the winter by up to 25 per cent.

"Overall, these changes will have profound impacts on the structure of forests, hydrology, pest infestation, and the frequency and severity of wildfires. These problems, together with reduced salmon populations and increasing floods and droughts, will deeply compromise community economic viability. Current government policies are ill equipped to handle this double threat to human and ecosystem well being."

Mr. O'Riordan writes that several ministries make land- and water-use decisions in B.C., but the government has no way to assess the cumulative effects of those decisions.

"As a result, biodiversity is threatened and natural capital is being drawn down," he writes.

Eric Kimmel, a policy analyst and author of an annex to the report, says the government should also factor into its management plans the economic value of ecological services such as carbon storage, temperature moderation and water conservation.

"The costs of environmental damage, the depletion of natural capital, and the full value of indirect ecosystem services do not show up on accounting balance sheets," he writes. "As a result, natural capital is often undervalued and not accounted for in the decision-making process."