## NEWS RELEASE

## Wilfrid Laurier University



## NSERC funds climate change research in Mackenzie Basin Deltas

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Laurier and Waterloo researchers to reconstruct 1,000 years of hydro-ecological history

For Immediate Release

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WATERLOO (Ont.) – Wilfrid Laurier University is welcoming the holder of a new \$700,000 research chair funded to create 1,000-year drought and flood histories of the Mackenzie Basin Deltas. Brent Wolfe, new to Laurier's department of geography and environmental studies, will lead a five-year study to assess the impact of hydroelectric development and climate conditions on the environmentally sensitive deltas – to better predict what may yet happen.

The Natural Sciences and Engineering Research Council (NSERC) of Canada has approved funding of a northern research chair worth \$140,000 per year for the next five years. As a holder of the chair, Wolfe will work with colleagues at Laurier and University of Waterloo on a paleohydrological and paleoecological reconstruction of the deltas.

A long-term understanding of hydrological, ecological and climate changes is essential to effectively manage natural resources in the region in light of increasing demand on water resources and future climate change and variability. Resource managers, provincial and territorial governments, industry and the scientific community could use the findings to develop ecosystem management plans for this region and others like it.

"Our knowledge of the history of the deltas is very limited and we need to do this research in order to better understand current conditions and predict the impact of future development and climate changes," explains Wolfe. "The area is highly dependent on flooding. Without it the wetlands dry up, which negatively affects vegetation, wildlife and local communities that utilize the deltas' natural resources."

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Wolfe, his colleagues and students will gather data at three points in the Mackenzie Basin – the Peace-Athabasca, Slave and Mackenzie deltas in Alberta and Northwest Territories. Data collection is already underway; the researchers have been studying the Peace-Athabasca Delta for the past two years. In September, the researchers will begin collecting water samples and surface sediment from at least 40 lakes in the Slave Delta. Fieldwork in the Mackenzie Delta will begin in the fall of 2003.

Robert Campbell, dean of the faculty of arts at Laurier, welcomed Wolfe as a strong addition to several research efforts already underway or under development.

"This is a wonderful thing for the faculty because it ties in with and strengthens a number of our key areas," said Campbell. "It's in line with a move to focus on policy and ethics in the department of geography and environmental studies, supports our efforts to revive Canadian studies as a discipline and is very much in line with the faculty's move towards more interdisciplinary programming."

Wolfe officially assumed his position at Laurier, and as one of only six researchers across Canada awarded federally funded chairs for work in northern science, on July 1. To learn more about Wolfe's research – particularly his interest in involving residents along the Peace-Athabasca-Slave-Mackenzie-rivers network – please visit <a href="https://www.wlu.ca/~wwwpa/campus\_update/2002/jul/cu\_07\_24\_02.shtml">www.wlu.ca/~wwwpa/campus\_update/2002/jul/cu\_07\_24\_02.shtml</a>.