To Cathrine Lund Myhre Coordinator of the THAW project team

Durham, 9 November 2010

## **Letter of support**

On behalf of the Water System Analysis group at the University of New Hampshire I express our interest and support to the *Trends and Hazard in the Arctic Warming* (THAW) project under the EU FP7 program. The multidisciplinary consortium of scientists in the project team is targeted at developing environmental projections in the circumpolar permafrost regions and evaluation of the feedbacks with climate system. Inherent part of this study is hydrological change in the Arctic.

In the UNH we developed the web-based Regional Integrated Hydrological System for the Pan-Arctic Land Mass (ArcticRIMS), http://rims.unh.edu/. This system contains spatially and temporally harmonized data sets for pan-Arctic hydrology and meteorology, significant part of which constitute data on permafrost hydrology. Our Pan-Arctic data is one of the world best in terms of completeness, spatial coverage, and data record length, and we would be happy to collaborate with the THAW project team on the exploration of these data and study of the feedbacks between the hydrological changes in the Arctic and dynamics of the other components of the climate system, i.e. permafrost and carbon dynamics, with the ultimate goal to improve our understanding of the global climate change.

We strongly support the proposed TREND research and wish the entire consortium to win the competition of the EU FP7 call.

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