

Frontiers in understanding climate change and polar ecosystems: Summary of a workshop

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Climate change is already causing observable impacts on many polar ecosystems, but the complexity of these systems, and the fact that they are subject to multiple stressors, makes the prediction of environmental change difficult. Understanding future ecosystem change will require a multi-faceted approach to determine when significant thresholds that irreversibly alter ecosystem dynamics might be reached. To investigate the steps needed to gain better understanding of climate change impacts on polar ecosystems, the National Research Council organized a workshop (in August 2010) to consider the important scientific advances that have been made to date, and to identify gaps in knowledge and emerging research questions. This poster will present five key questions emerging from the workshop that identify new frontiers of knowledge about climate change and polar ecosystem response.