

C08-O02

A DECADE OF ARCTIC COASTAL RESEARCH

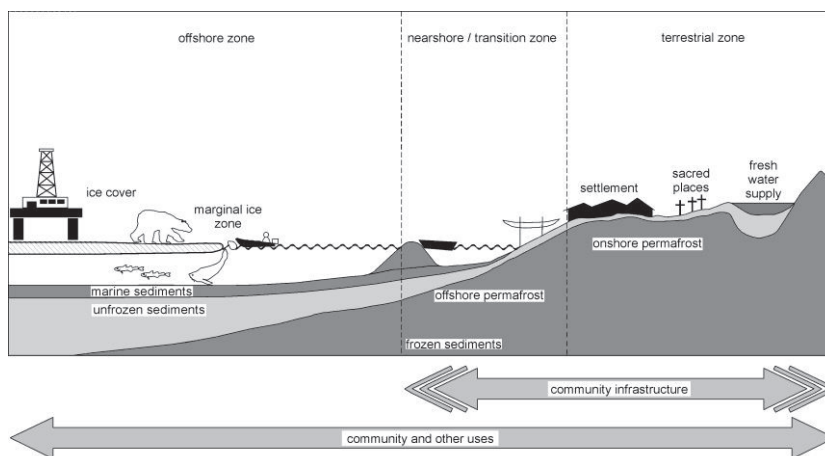
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The International Conference on Arctic Research Planning II (ICARP II) set the agenda for arctic coastal research for the last decade in a science plan on arctic coastal processes. It identified three sets of key research questions in the physical science, ecology and socioeconomics, and proposed the establishment of a circumpolar network of observatories to pursue these questions in a co-ordinated manner. Research highlights of the last ten years included: (i) A cluster of 16 International Polar Year (IPY, 2007-2009) projects focussed on the Arctic coast; (ii) the State of the Arctic Coast report¹ and the Arctic Coastal Dynamics database²; (iii) A better understanding of the link between environmental forcing and coastal geomorphodynamics was generated by multiple groups looking at linkages between observed and projected climate change and observation of coastal change; (iv) This has led to the emergence of the coast as an important and



climate-sensitive component of arctic shelf ecosystems, particularly with respect to land-to-ocean fluxes of sediment, carbon and nutrients; (v) There was a growing recognition that the role of coastal communities in generating and applying knowledge should be intrinsic to scientific inquiry. The advances in the past decade of arctic coastal science provide opportunities for future progress (figure³).

¹ Forbes, D. L. et al. 2011 State of the Arctic Coast Report.

² Lantuit, H. et al. 2012

³ Overduin, P. P. & Couture, N. 2007 Arctic Coastal Dynamics II Science Plan