

Title: Attenuation of Landscape Signals through the Coastal Zone: A Basin-wide Analysis for the US Great Lakes Shoreline, Circa 2002-2010

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We compare statistical models developed to describe a) the relationship between watershed properties and Great Lakes coastal wetlands with b) the relationship developed between watershed properties and the Great Lakes nearshore. Using landscape metrics from the GLEI project (Danz et al. 2007; Niemi et al. 2007) and sites (in the case of wetlands as well as the nearshore) or continuous in situ tow tracks (only in the case of the nearshore) to represent the entire US shore, we contrasted the geographic and spatial patterns of model predictions of chloride and specific conductivity in wetlands and the nearshore. Differences in concentrations and spatial patterns in the models are used to infer the level of dilution of conservative ions and further, changes in non-conservative nutrients with flows through the coastal zone.

Oral presentation