

A Study of Alkalinity and Salinity in the Pockmark Field in Belfast Bay, Maine

This study was designed to examine if there was groundwater venting from the porous sediments of the pockmarks in the pockmark field in Belfast Bay. Alkalinity and salinity data were collected throughout the water column above pockmarks, as well as from reference sites outside the pockmark field. A linear regression was used to compare the alkalinity and salinity data. A Kruskal-Wallis Analysis of Variance (ANOVA) was also used to test for variance within the alkalinity data. The regressions suggested that there was not a correlation, and the ANOVA did not reveal a significant difference within the alkalinity data. However, the data did suggest that the water properties of the Penobscot Bay estuary behave non-conservatively.

Advisor: Joceline Boucher