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Lake Michigan Green Bay: nearshore variability

We conducted a high-resolution survey in the nearshore of Lake Michigan's Green Bay at a 15 meter contour using towed electronic instrumentation. The 365 km survey was conducted Aug 18-21, 2010. We also conducted four cross-contour tows. Along the survey tracks we sampled fixed stations (7) to collect calibration data and other parameters not observed by the in situ electronic sensors. With the towed sensor data we constructed a comprehensive representation of spatial variability in the nearshore. We analyzed for potential signals within the variability that may be correlated to landscape characteristics of the adjacent coastal watersheds using multivariate stepwise regressions. The correlation to landscape character explained a large amount of the variation in specific conductivity, beam attenuation, fluorescence, and NO_3^- (r^2 ; 0.84, 0.78, 0.74, and 0.40 respectively). The survey provided an overview of variability in the nearshore of Green Bay Lake Michigan. *This abstract does not necessarily reflect USEPA policy.*