

Abstract

Examining Relations Between Nitrogen Loads and Land Use Utilizing GIS

Track: Modeling

Author(s): Nathan Carse

Nitrogen loads in two Central Ohio watersheds were measured at seven locations and compared with land use data for these watersheds. The hypothesis for this study is that higher nitrogen loads per square kilometer will be found in the Big Darby Creek watershed compared with urban sections of Alum Creek due to the extensive use of nitrogen-based fertilizers in the Big Darby watershed. The land use data derived from 1994 and 1998 Landsat Thematic GIS data, when compared to nitrogen load per square kilometer, indicated a correlation between the change in land use percentage and the change in loading within each watershed.

Nathan Carse

Capital University

Biology

Biology Department

2199 E. Main St.

Columbus , OH 43209

USA

Phone: (614)-487-1040

E-mail: ncarse@glec-oh.com