

BUILDING A STRONGER SCIENTIFIC BASIS FOR LAND-USE PLANNING AND WATERSHED MANAGEMENT-- EFFECTS ON WATER QUALITY AND AQUATIC COMMUNITIES IN NJ STREAMS

by Mark Ayers, Jonathan Kennen, Paul Stackelberg, and Leon Kauffman
USGS, West Trenton, NJ

The LINJ NAWQA Study Area

This poster summarizes major findings about the water-quality affects of land use in New Jersey that emerged from the Long Island–New Jersey Coastal Drainages (LINJ) study conducted between 1994 and 1998 by the U.S. Geological Survey (USGS) National Water-Quality Assessment (NAWQA) Program.

Although hydrology and geology vary across the study area, chemical and biological data indicate that **land use is the primary differentiating factor for water-quality.**

The study design, therefore, focused on improving our understanding of the specific aspects of urban land use that control water quality and the health of aquatic communities.

Urban land use has grown from 22% of the study area in the early 1970s to 33% in 1995, with a corresponding 11% decrease in agricultural and forest land. Population increased about 9% during the same time period.

