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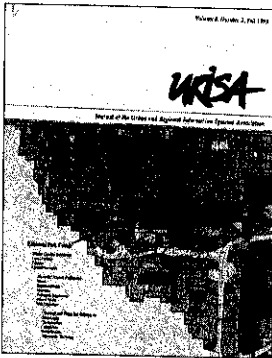
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**Cover:** The cover map represents a portion of the Kinnickinnic River Priority Watershed in Milwaukee, Wisconsin. This map was one of three parts in a project depicting the use of GIS in nonpoint pollution modeling. The overall project (described in the cover feature article on p. 69) won the Project Showcase "Best Map" award at URISA '94 in Milwaukee last August.

The Kinnickinnic River Priority Watershed is part of the metropolitan Milwaukee area and extends across six municipal jurisdictions. None of the streams in the watershed are meeting full biological or recreational potential. Water-quality problems include loss of aquatic habitat, low oxygen, high bacteria, toxic levels of metals, oil and other organic compounds. The use of a GIS in conjunction with an empirical model (Source Loading and Management Model: SLAMM) designed to predict pollutant runoff characteristics in an urban area, proved to be an effective way to assess and display urban nonpoint source pollution. The map links pollutants, their sources, and associated water-quality problems to specific streams within the watershed.

The map, which was produced using ARC/INFO, identifies various densities of residential land use (burgundies), commercial land use (purples), open space (greens and blues) in addition to institutional, industrial and transportation uses. United States Geological Survey 1:100,000 digital line graphs (DLGs) served as a base map, saving time associated with digitizing. A new technique was developed to use the DLGs and large-scale photography (1" = 400') to update a 1:24,000 land use map.

The cover map was produced by Kristine Kuhlman at the Land Information and Computer Graphics Facility at the University of Wisconsin-Madison. The SLAMM model was developed by the Wisconsin Department of Natural Resources.