

Abstract

Determining Sources, Fate, and Transport of Nitrate and Bacteria

Track: Water Resources

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A procedure has been developed for delineating drainage basins upstream from any given point from the Elevation Derivatives for National Applications data set streams. Basin parameters such as land use, slope, and soil characteristics can then be compared against the water quality in streams draining from the basin, to more precisely predict where higher nitrate or bacteria concentrations are likely to occur. These procedures were used in a U.S. Geological Survey Integrated Partnership study of the Cedar River Watershed, located in Eastern Iowa and Southern Minnesota, where streams contain some of the highest concentrations of nitrate in the nation.

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