



WATER RESOURCES RESEARCH GRANT PROPOSAL

Title: Geochemistry of Dissolved Organic Carbon in the Big Sioux Basin, Eastern South Dakota

Duration: September 1997 - August 2000

Federal Funds: Year 1- \$21,195 Year 2-
\$20,710 Year 3- \$18,095

Non-Federal Funds: \$40,018
\$40,246 \$39,680

Principal Investigator:

James A. Rice

South Dakota State University Department of Chemistry & Biochemistry Brookings, SD

Congressional District Where Research is to be Conducted: First District of South Dakota

Statement of Critical Regional or State Water Problem:

The surface- and ground-waters of the Big Sioux Basin supply water to most municipalities and rural, domestic wells in eastern South Dakota. Groundwater aquifers have large storage capacity and very rapid recharge characteristics. Recharge is primarily by water percolating through the soil which makes them susceptible to contamination by anthropogenic and autochthonous organic substances present in the soil.