



Association of American State Geologists



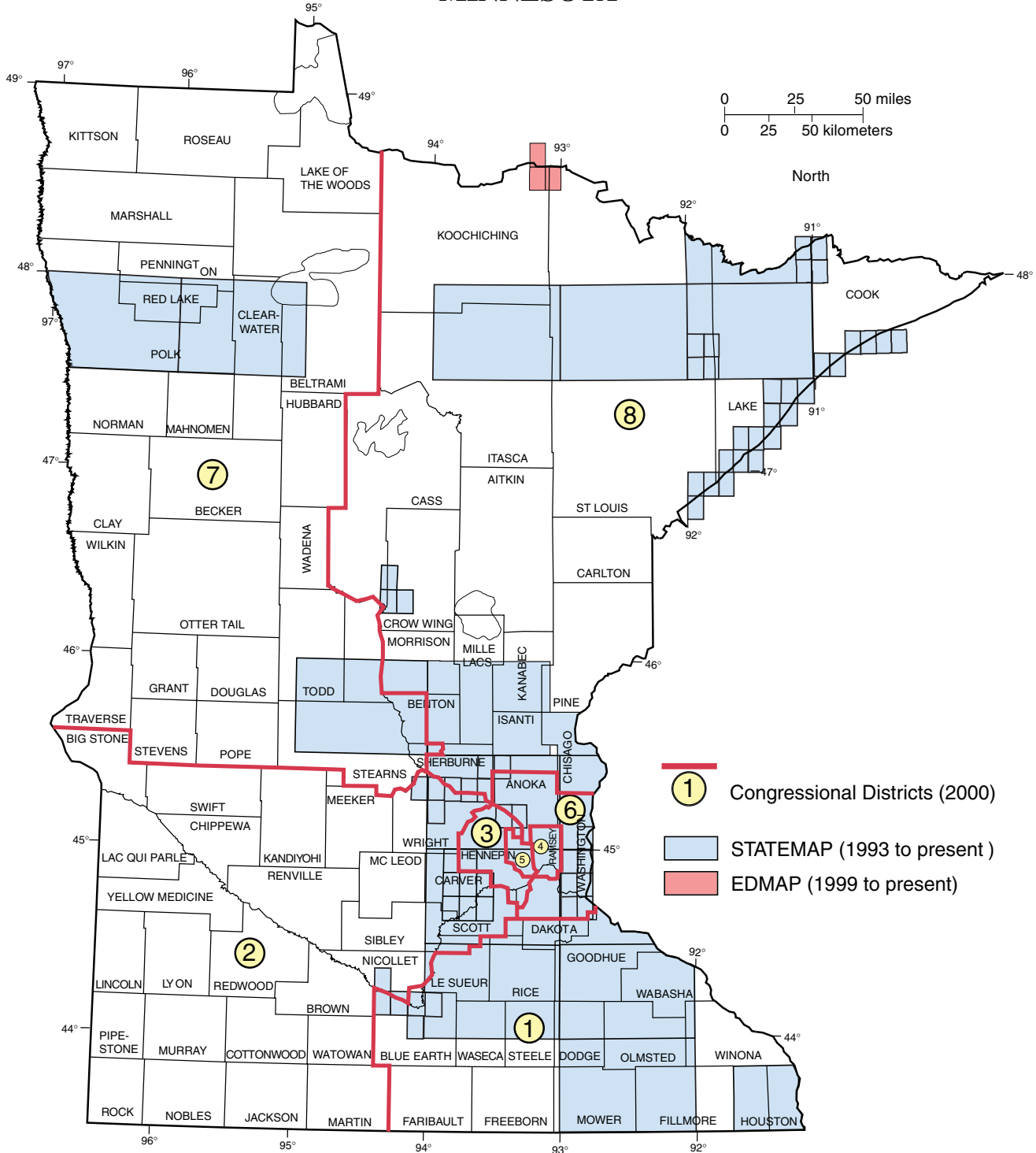
United States Geological Survey



National Cooperative Geologic Mapping Program

STATEMAP/EDMAP Component: States compete for federal matching funds for geologic mapping

MINNESOTA



Contact information

Minnesota Geological Survey

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U.S.G.S. Geologic Mapping Program Office

Program Coordinators: Peter T. Lyttle (703/648-6943)
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<http://ncgmp.usgs.gov/>

Federal Fiscal Year	Project Title, Scale	State Dollars	Federal Dollars	Total Project Dollars
1993	Digitization of data from COGEOMAP projects (1987-92)	\$14,461	\$11,980	\$26,441
1994	Bedrock Geology of Houston County (eastern half) 1:100,000	\$18,000	\$18,000	\$36,000
1995	Bedrock Geology of Houston County (western half) 1:100,000	\$15,000	\$15,000	\$30,000
1996	Surficial Geology of the Shakopee quadrangle, 1:24,000 Surficial Geology of the Anoka quadrangle, 1:100,000	\$33,529	\$33,529	\$67,058
1997	Surficial Geology of the Jordan East and Victoria quadrangles, 1:24,000	\$36,734	\$36,733	\$73,467
1998	Surficial Geology of the Jordan West and Mound quadrangles, 1:24,000 Surficial Geology of the Stillwater and Hastings quadrangles, 1:100,000	\$41,515	\$41,515	\$83,030
1999	Surficial Geology of the Waconia quadrangle, 1:24,000 Surficial Geology of the St. Paul and Rochester quadrangles, 1:100,000	\$65,867	\$65,867	\$131,734
2000	Surficial Geology of the Watertown & Belle Plaine N quadrangles, 1:24,000 Surficial Geology of the Gull Lake, Baxter & Brainerd quadrangles, 1:24,000 Surficial Geology of the St. Cloud quadrangle, 1:100,000	\$76,942	\$76,912	\$153,854
2001	Surficial Geology of the Faribault quadrangle, 1:100,000 Surficial Geology of the Elk River & Big Lake quadrangles, 1:24,000 Surficial and Bedrock Geology of the French River & Lakewood quadrangles, 1:24,000 Bedrock Geology of the Babbitt NE & Knife River quadrangles, 1:24,000	\$156,081	\$156,081	\$312,162
2002	Surficial Geology of the Crown & Lake Fremont quadrangles, 1:24,000 Surficial Geology of the Knife River quadrangle, 1:24,000 Surficial and Bedrock Geology of the Two Harbors quadrangle, 1:24,000 Bedrock Geology of the Castle Danger quadrangle, 1:24,000 Bedrock Geology of the Mankato East and West quadrangles, 1:24,000 Bedrock Geology of the Vermilion Lake quadrangle, 1:100,000	\$135,147	\$135,141	\$270,288
2003	Surficial Geology of the Monticello & Silver Creek quadrangles, 1:24,000 Surficial Geology of the Castle Danger quadrangle, 1:24,000 Bedrock Geology of the Split Rock Point quadrangle, 1:24,000 Bedrock Geology of the Judson & Good Thunder quadrangles, 1:24,000 Bedrock Geology of the Ely quadrangle, 1:100,000	\$125,987	\$125,987	\$251,974
2004	Surficial Geology of the Annandale quadrangle, 1:24,000 Surficial Geology of the Buffalo West quadrangle, 1:24,000 Surficial Geology of the Austin quadrangle, 1:100,000 Bedrock Geology of the Two Harbors NE & Babbitt quadrangles, 1:24,000 Bedrock Geology of the Babbitt SE and SW quadrangles, 1:24,000 Bedrock Geology of the Courtland & Cambria quadrangles, 1:24,000 Bedrock Geology of the Stillwater & Hudson quadrangles, 1:24,000	\$149,554	\$149,554	\$299,108
2005	Surficial Geology of the Crookston quadrangle, 1:100,000 Bedrock Geology of the Schroeder, Tofte & Little Marais quadrangles, 1:24,000 Bedrock Geology of the St. Paul Park, Prescott & Vermillion quadrangles, 1:24,000 Bedrock Geology of the Hastings quadrangle, 1:100,000	\$149,562	\$149,562	\$299,124
2006	Surficial Geology of the Fosston quadrangle, 1:100,000 Bedrock Geology of the Big Fork quadrangle, 1:100,000 Bedrock Geology of the Lutsen quadrangle 1:24,000 Bedrock Geology of the Coon Rapids quadrangle 1:24,000	\$140,030	\$140,032	\$280,062
2007	Surficial Geology of the Mora quadrangle 1:100,000 Bedrock Geology, topography and subsurface database of Duluth, Duluth Heights & West Duluth quadrangles 1:24,000 Bedrock Geology of Deer Yard Lake & Good Harbor Bay quadrangles, 1:24,000 Bedrock Geology of the Cavity Lake Fire area, 1:24,000	\$158,804	\$158,804	\$317,608
2008	Surficial Geology of the Duluth, Duluth Heights & West Duluth quadrangles, 1:24,000 Bedrock Geology of the Anoka & Lake Elmo quadrangles, 1:24,000 Bedrock Geology of Chisago County, 1:100,000	\$148,830	\$148,830	\$297,660
3/5/2008	TOTALS	\$1,466,043	\$1,463,527	\$2,929,570

STATEMAP STATEMENT OF OUTCOME

The Minnesota Geological Survey and McKeever Well Drilling have cooperated for many years to improve our understanding of the geology of the North Shore of Lake Superior, and to improve the quality and reliability of wells drilled in that area. McKeever has provided the MGS with well cuttings and opportunities to conduct downhole geophysical logging operations on water wells under construction. This has greatly improved the information available to MGS to support map-making. In turn, the maps have extended predictability in drilling conditions and potential yields into areas in which the driller has little or no experience. This relationship has affected most of the bedrock geologic maps in this area supported by STATEMAP, EDMAP, and CoGeoMap, but particularly the maps listed here.

Published Maps:

M-170 Bedrock geology of the Schroeder quadrangle, Cook County, Minnesota. T.J. Boerboom, J.C. Green. 2006. Scale 1:24,000.

M-171 Bedrock geology of the To e quadrangle, Cook County, Minnesota. T.J. Boerboom, J.C. Green, P. Albers, J.D. Miller, Jr. 2006. Scale 1:24,000.

M-174 Bedrock geology of the Lutsen quadrangle, Cook County, Minnesota. T.J. Boerboom, J.C. Green. 2007. Scale 1:24,000.

Maps under construction:

Bedrock geology of the Deer Yard Lake quadrangle, Cook County, Minnesota. T.J. Boerboom, J.C. Green. Scale 1:24,000.

Bedrock geology of the Good Harbor Bay quadrangle, Cook County, Minnesota. T.J. Boerboom, J.C. Green. Scale 1:24,000.