



Association of American State Geologists



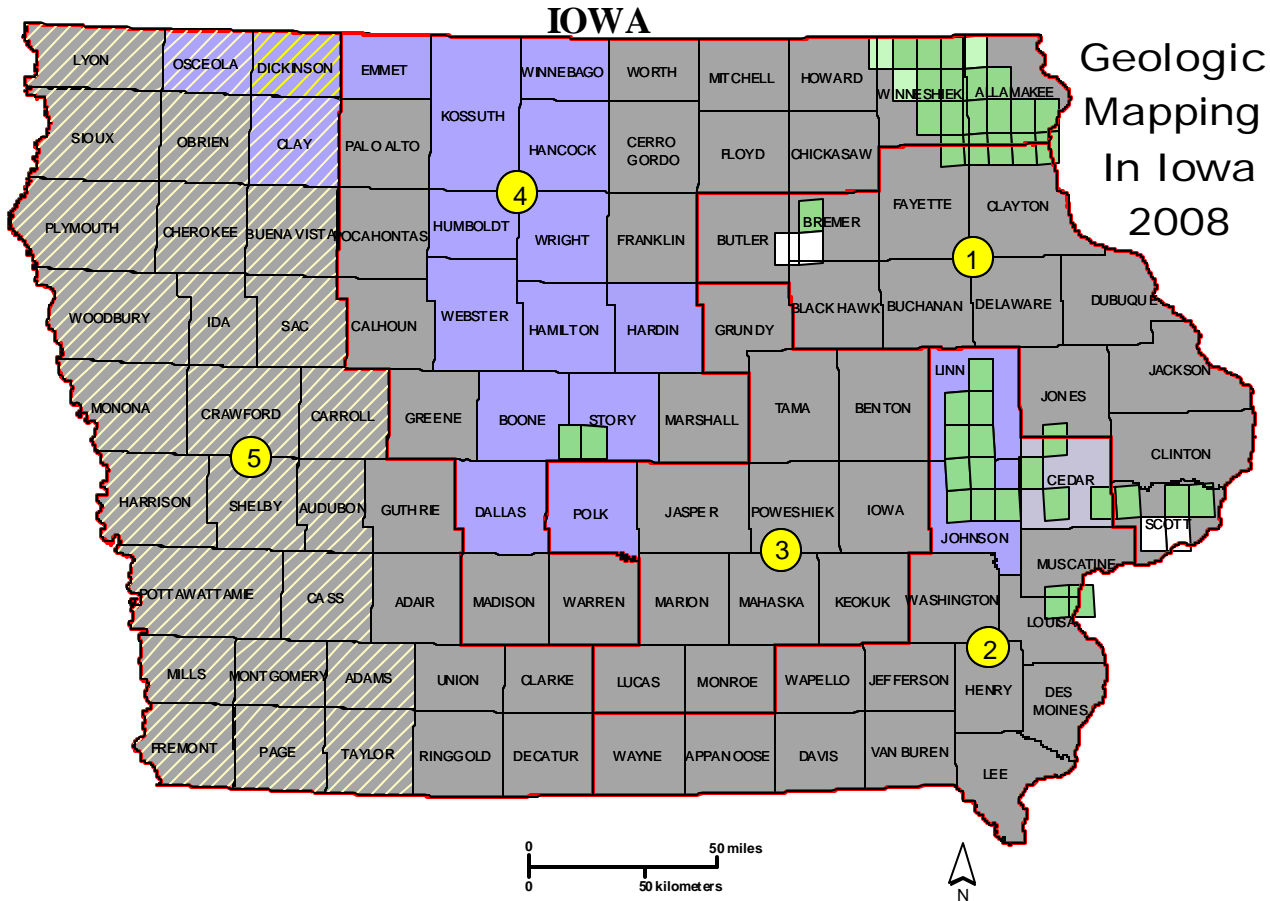
Iowa Geological Survey

United States Geological Survey



National Cooperative Geologic Mapping Program

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



STATEMAP Funding (FY1993 through FY2008)

- 5 Congressional District Numbers
- Congressional District Boundaries
- Completed 1:24,000 scale geologic maps
- In-progress 1:24,000 scale geologic maps
- Completed 1:100,000 scale surficial geologic maps
- In-progress 1:100,000 scale surficial geologic maps
- Completed bedrock geologic maps
- FY08 1:24,000 scale geologic maps
- FY08 1:250,000 scale Loess Thickness Map

Contact Information

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**SUMMARY OF STATEMAP GEOLOGIC
MAPPING PROGRAM IN IOWA**

Federal Fiscal Year	Geologic Mapping Project Title and Scale	State Dollars	Federal Dollars	Total Project Dollars
93	Surficial Geologic Maps of Letts and Blanchard 1:24,000 Quadrangles	\$9,000	\$9,000	\$18,000
94	Surficial Geologic Maps of Cedar Rapids North and Marion 1:24,000 Quadrangles and Bedrock Geologic Map of Linn County 1:100,000	\$40,000	\$39,095	\$79,095
95	Surficial Geologic Maps of Cedar Rapids South and Central City 1:24,000 Quadrangles	\$30,090	\$30,000	\$60,090
96	Surficial Geologic Maps of Bertram 1:24,000 Quadrangle and Linn County 1:100,000 Digital Compilation Bedrock Geologic Map of Northwestern Iowa, 1:250,000	\$68,179	\$68,179	\$136,358
97	Digital Compilation Bedrock Geologic Map Northeastern Iowa, 1:250,000	\$52,800	\$52,800	\$105,600
98	Surficial Geologic Maps of Des Moines Lobe of Iowa: Kossuth, Winnebago, Hancock and Wright Counties 1:100,000	\$79,618	\$79,618	\$159,236
99	Surficial Geologic Map of Des Moines Lobe of Iowa: Hamilton and Webster Counties 1:100,000	\$60,720	\$60,720	\$121,470
00	Surficial Geologic Maps of Des Moines Lobe of Iowa: Boone and Story Counties 1:100,000. Surficial Geologic Maps of Huxley and Slater 1:24,000 Quadrangles. Digital Compilation Bedrock Geologic Map of North-Central Iowa, 1:250,000	\$96,121	\$96,120	\$192,241
01	Surficial Geologic Map of Des Moines Lobe of Iowa: Dallas and Humboldt Counties 1:100,000. Surficial Geologic Maps of Ely and Swisher 1:24,000 Quadrangles: Johnson County Developing Area Project. Digital Compilation Bedrock Geologic Map of South-Central Iowa, 1:250,000	\$163,750	\$163,750	\$327,500
02	Surficial Geologic Map of Des Moines Lobe of Iowa: Polk County 1:100,000. Surficial Geologic Maps of Tiffin and Iowa City West 1:24,000 Quadrangles: Johnson County Developing Area Project. Digital Compilation Bedrock Geologic Maps of Southwest and East-Central Iowa, 1:250,000.	\$188,090	\$188,090	\$376,180
03	Surficial Geologic Map of Des Moines Lobe of Iowa: Dickinson and Emmet Counties, 1:100,000. Surficial Geologic Map of Iowa City East 1:24,000 Quadrangle; Geologic Map of Johnson County, 1:100,000. Digital Compilation Bedrock Geologic Map of Southeast Iowa, 1:250,000. Surficial Geologic Map of McCausland 1:24,000 Quadrangle: Scott County Developing Area Project.	\$192,829	\$192,829	\$385,658
04	Surficial Geologic Map of Des Moines Lobe of Iowa: Clay and Osceola Counties, 1:100,000. Developing areas; Surficial Geologic Maps of Dixon and Eldridge 1:24,000 Quadrangles in Scott County. Impaired Watersheds; Surficial Geologic Map of Decorah 1:24,000 Quadrangle in Winneshiek	\$142,491	\$142,491	\$284,964
05	Surficial Geologic Map of Des Moines Lobe of Iowa: Hardin County; 1:100,000. Impaired Watersheds in Northeast Iowa: Surficial Geologic Maps of Bluffton and Freeport 1:24,000 Quadrangles; Bedrock Geologic Map of the Yellow River Watershed; 1:100,000 scale. Cooperative Mapping with NRCS: Surficial Geologic Maps of the Rochester and Bennett 1:24,000 Quadrangles.	\$187,167	\$187,167	\$374,334
06	Impaired Watersheds in Northeast Iowa: Surficial Geologic Maps of Burr Oak and Highlandville 1:24,000 Quadrangles. Cooperative Mapping with NRCS: Surficial Geologic Maps of the Cedar Bluff, Stanwood and Bremer 1:24,000 Quadrangles.	\$118,310	\$118,310	\$236,620
07	Impaired Watersheds in Northeast Iowa: Surficial and Bedrock Geologic Maps of Cresco NE, Dorchester and Ridgeway Quadrangles. Cooperative Mapping with NRCS in Cedar County Final Phase: Surficial and Bedrock Mapping 1:100,000 maps.	\$170,293	\$170,293	\$340,586
08	Developing Areas Mapping: Surficial and Bedrock Geologic Mapping of the Davenport West and Davenport East Quadrangles. Cooperative Mapping with NRCS in Bremer County Surficial and Bedrock Geologic Mapping of the Shell Rock Quadrangles and Bedrock Mapping of the Waverly Quadrangle. Digital Compilation Mapping of the Quaternary Geology of Iowa: Loess Thickness Map of Western Iowa (1:250,000)	\$196,292	\$196,292	\$392,584
	TOTALS	\$1,794,754	\$1,794,754	\$3,589,508

STATEMAP OF OUTCOME

The STATEMAP component of the National Cooperative Geologic Mapping Program has enhanced the Iowa Geological Survey's (IGS) ability to produce geologic maps. Iowa's mapping program addresses priority state-wide issues with longer term goals in mind.

The Iowa STATEMAP program's focus is on four key areas:

1) Developing Areas Mapping in urban areas, 2) Cooperative Mapping with the Natural Resources Conservation Service (NRCS) and the Iowa Cooperative Soil Survey (updates of county soil surveys in rural and urban areas), 3) Impaired Watershed Mapping-Northeast Iowa's Upper Iowa River Valley (shallow bedrock-karst region) and; 4) Digital Compilation Mapping-regional scale Bedrock and Surficial Geologic Mapping projects.

Input from the advisory panel has recommended mapping in areas with environmental concerns, related to groundwater quality and land-use planning issues. IGS and the advisory panel recognize the need for maps of varying scales to address the complex environmental issues facing urban and rural Iowans. Issues in developing urban areas center around residential and commercial development along major transportation corridors, rapid subdivision expansion on the fringes of urban areas and related problems with septic system siting, aggregate potential (identification and protection of resources), sensitive area identification, and water quality and quantity issues. In rural areas, issues are focused on the proper siting of animal confinement facilities, water quality and water quantity, watershed management, nutrient management, wetland delineation and protection, and aggregate potential mapping.

The Iowa Geological and Water Survey (IGWS) has recently embarked on a ten-year project to characterize and develop predictive models of the state's major aquifers. In the first phase, bedrock and surficial geologic map information has been invaluable in defining and modeling the Lower Dakota Aquifer in Northwest Iowa. Such models and information are essential for addressing concerns with water conservation, well interference, water-supply and well head protection issues. It is anticipated that as this project progresses, other major aquifers across the state will be mapped utilizing geologic information collected and entered into databases as part of the STATEMAP program.