



Association of American State Geologists

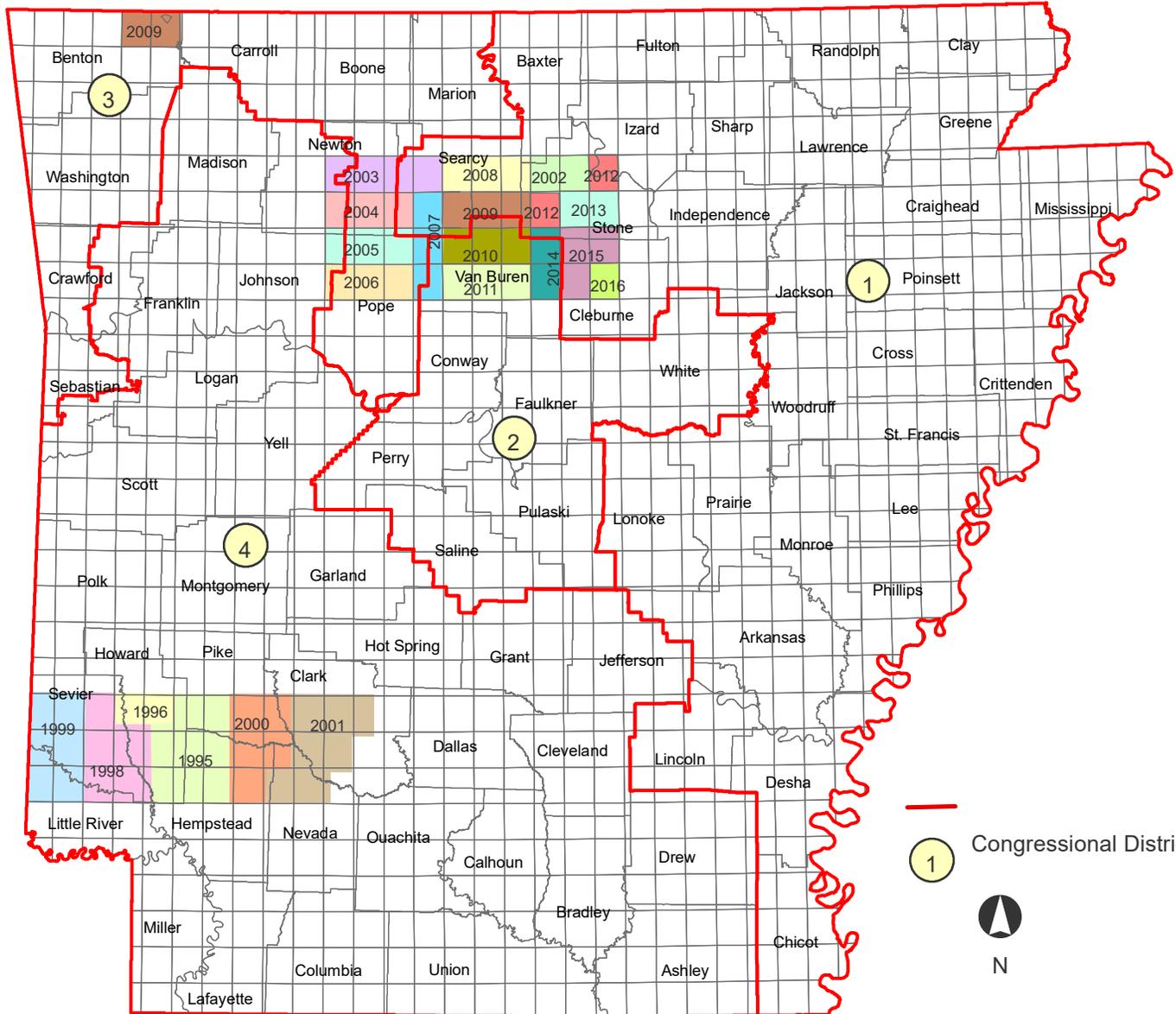


United States Geological Survey



National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping
Areas and years where STATEMAP Projects have taken place.



Contact Information

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

Year	Project Title	State Dollars	Federal Dollars	Total Project Dollars
1994-1995	Murfreesboro, Nathan, Nashville, McCaskill, Mineral Springs North, Mineral Springs South, Columbus, and Washington 7.5-min quadrangles	\$33,987	\$25,000	\$58,987
1995-1996	Center Point and Dierks 7.5-min quadrangles	\$13,037	\$10,000	\$23,037
1997-98	Geneva, Lockesburg, Silver Ridge, Falls Chapel, and Ben Lomond 7.5-min quadrangles	\$43,410	\$41,210	\$84,620
1998-99	DeQueen, Chapel Hill, Horatio, Cerrogordo, Arkinda, Winthrop 7.5-min quadrangles	\$40,889	\$40,825	\$81,714
1999-2000	Antoine, Delight, Pisgah, Piney Grove, and Blevins 7.5-min quadrangles	\$38,327	\$38,311	\$76,638
2000-2001	Arkadelphia, Hollywood, Okolona North, Okolona South, Gurdon, Prescott East, and Prescott West 7.5 quadrangles	\$42,292	\$38,110	\$80,402
2001-2002	Onia and Fifty-Six 7.5 quadrangles	\$46,437	\$45,377	\$91,814
2002-2003	Parthenon, Mt. Judea, Eula, and Snowball 7.5-min quadrangles	\$52,160	\$50,595	\$114,951
2003-2004	Deer, Lurton, and Moore 7.5-min quadrangles	\$49,760	\$48,865	\$98,625
2004-2005	Fort Douglas, Sand Gap and Smyrna 7.5 min quadrangles	\$64,138	\$64,138	\$128,276
2005-2006	Treat, Simpson and Solo 7.5 min quadrangles	\$73,582	\$52,934	\$126,516
2006-2007	Witts Springs, Tilly and Lost Corner 7.5 min quadrangles	\$92,344	\$81,882	\$174,226
	Idabell 1:100,000 quadrangle			
2007-2008	Marshall, Harriet and Landis 7.5 min quadrangles	\$75,537	\$71,365	\$146,902
	Dequeen 1:100,000 quadrangle			
2008-2009	Cannan, Leslie, Oxley, Pea Ridge and Garfield 7.5 min	\$104,705	\$104,704	\$209,409
2009-2010	Alread, Botkinburg and Old Lexington 7.5 min quadrangles	\$64,851	\$64,833	\$129,684
2012-2011	Rex, Clinton and Scotland 7.5 minute quadrangles	\$70,328	\$67,110	\$144,410
2011-2012	Fox and Sylamore 7.5 minute quadrangles	\$74,082	\$72,153	\$146,235
2012-2013	Mt. View and Mt. View SW 7.5 minute quadrangles	\$71,897	\$65,440	\$137,337
2013-2014	Shirley and Fairfield Bay 7.5 minute quadrangles	\$63,055	\$59,272	\$122,327
2014-2015	Parma, Prim, and Greers Ferry 7.5 minute quadrangles	\$74,405	\$72,220	\$146,625
2015-2016	Brownsville 7.5 minute quadrangle	\$45,569	\$45,569	\$91,138

TOTALS	1,234,792	\$1,159,914	\$2,394,705
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The Arkansas Geological Survey is an active participant in the STATEMAP part of the National Cooperative Geological Mapping Program (NCGMP), having participated since 1995. Arkansas recognizes the importance of geological mapping as a tool for decision makers who have a need to understand the nature, composition, and distribution of earth materials.

Geologic mapping has been and is an important information gathering tool. This information is used for informed decision making and for the protection of the state's resources. The more accurate the geologic information is the better developers and planners decision making abilities can be to protect the environment and serve the public equally.

The geologic map of the Greers Ferry quadrangle and other quadrangles in Van Buren and Cleburne Counties were recently used by the Senior Petroleum Geologist at the Arkansas Oil and Gas Commission (AOGC). The Fayetteville Shale play overlaps part of the area where recent STATEMAP mapping has taken place. One of the AOGC's regulatory functions is to ensure the protection of fresh water zones in the subsurface. After many reports from water well owners that their water wells were going dry as a result of inferior surface casing, the geologist at the AOGC undertook an investigation using the orientation of joints in the area. That geologist used the joint frequency diagram on the Greers Ferry quadrangle and others in the area to determine if there was a direct link between the gas and water through natural fractures. He found that although there are predominant joint strikes in the area, it is impossible to prove any direct link between the gas well surface casing and the water wells along natural fractures.

Since Arkansas began its participation in the STATEMAP Program, it has completed 75 surficial maps at a scale of 1:24,000 and three quadrangles at a 1:100,000 scale. One 7.5 minute geologic quadrangle map in northwest Arkansas will be completed by July 1, 2017.