SUMMARY OF STATEMAP GEOLOGIC MAPPING PROGRAM IN ARIZONA

Fiscal Year	Project Title	State Dollars	Federal Dollars	Total Dollars
1993	Western Arizona: SE Plomosa Mts., 1:12,000; Tank and Palomas Mts., 1:24,000; central Gila Bend Mts., 1:50,000; Salome and Little Horn 30' x 60' sheets, 1:100,000	92,464	80,161	172,625
1994	Northeast of Phoenix: Picketpost Mt., Superstition Mts. SW, 1:24,000; east ½ of Mesa 30' x 60' Quad., 1:100,000; surficial maps of ten 7 1/2' quads northeast of Phoenix	80,000	80,000	160,000
1995	Northeast of Phoenix: Apache Junction and Buckhorn 7 1/2' quads, 1:24,000; Mesa 30' x 60', 1:100,000; surficial maps of five 7 1/2' quadrangles NE of Phoenix	55,000	55,000	110,000
1996	East of Phoenix: Mormon Flat Dam and Horse Mesa 7 1/2' Quadrangles, 1:24,000; surficial map of Theodore Roosevelt Lake 30' x 60' Quadrangle, 1:100,000	136,247	136,247	272,494
1997	East of Phoenix: Five 7 1/2' quads, 1:24,000; Digital maps of Mesa, western Theodore Roos. Dam, Globe 30' x 60' Quads; Surficial maps, Casa Grande area, six 7 1/2' Quads	151,042	151,036	302,078
1998	North and west of Tucson: Sawtooth Mts., Samaniego Hills, Picacho Mts., and Ninetysix Hills, 1:24,000; Surficial maps of Tucson Mts. and Catalina Foothills	135,582	135,577	271,159
1999	Greater Tucson area: Avra Valley, Roskruge Mts, six 7 1/2' quads, 1:24,000; Oracle - Catalina area, two 7 1/2' quads, 1:24,000; Green Valley, four 7 1/2' quads, 1:24,000	127,123	126,401	253,524
2000	Phoenix - Tucson corridor: Mescal - Vail area, four 7 1/2' quads; surficial maps, Tubac area, two 7 1/2' quads; digital maps, Tucson - Phoenix corridor, 1:24,000 and 1:100,000	147,633	145,535	293,168
2001	Phoenix - Tucson corridor: NW Tucson area, 1;24,000; Buckeye Hills, Phoenix area, 1:24,000; Digital compilation, Tucson - Phoenix corridor, 1:24,000 and 1:100,000	227,614	227,325	454,939
2002	Phoenix-Tucson corridor: Sierrita Mts., 1:24,000; Benson-Huachuca City, 1:24,000; digital map compilation, east Phoenix area.	235,414	235,000	470,414
2003	Southern and western Arizona: Hassayampa Plain 1:24,000; Southeast Tucson 1:24,000; Bullhead City 1:24,000; Digital map compilation, Phoenix area.	211,174	210,665	421,839
2004	Southern and western Arizona: San Pedro trough 1:24,000; western Maricopa County 1:24,000; eastern Pima County digital compilation, 1:100,000	220,791	217,439	438,230
2005	Southern and western Arizona: San Pedro trough 1:24,000; Bullhead City 1:24,000; east Yuma 1:24,000; Gila Bend, Casa Grand, San Manuel digital compilations, 1:100,000	199,293	197,977	434,878
2006	Southern and western Arizona: San Pedro trough 1:24,000; Black Canyon City 1:24,000; Maricopa-Stanfield 1:24,000; SE Arizona digital compilation, 1:100,000	202,392	202,392	404,784
2007	Southern and western Arizona: San Pedro trough 1:24,000; NW Mohave County (Detrital Valley) 1:24,000	216,252	215,767	432,019
2008	Southern, central, and western Arizona: Rosemont mine area 1:24,000; Little Chino Valley 1:24,000; NW Mohave County (Detrital Valley) 1:24,000	218,058	217,761	435,819
2009	Yuma area, southwestern Arizona; Chino Valley, central Arizona; eastern Rincon Mountains, southeastern Arizona (all 1:24,000 geologic mapping projects)	195,655	195,221	390,876
2010	Prescott area, central Arizona; NW Mohave County (Detrital Valley), NW Arizona; Florence area, SE Arizona (all 1:24,000 scale geologic mapping projects)	192,181	191,957	384,138
	TOTALS	**3,042,599**	**3,021,461**	**6,064,060**

For the past 50 years Arizona has had one of the fastest population-growth rates in the U.S. Most of the growth has been in the Phoenix and Tucson areas in southern Arizona. Approximately 80% of Arizona's population of 6 million people live in the 20 percent of the State known as the Phoenix-Tucson metropolitan corridor. Population in the rest of the State is also growing rapidly, but populations are much smaller.

In recognition of this large and rapidly growing population, and to follow the intent of the National Geologic Mapping Act to address societal needs, the Arizona Geologic Mapping Advisory Committee strongly recommended that the Arizona Geological Survey give highest priority to completing detailed geologic maps and digital map products in the Phoenix-Tucson corridor. The Arizona Geological Survey has largely completed mapping this area and, as recommended by its Advisory Committee, is directing much new mapping to outlying, smaller communities and developing areas.

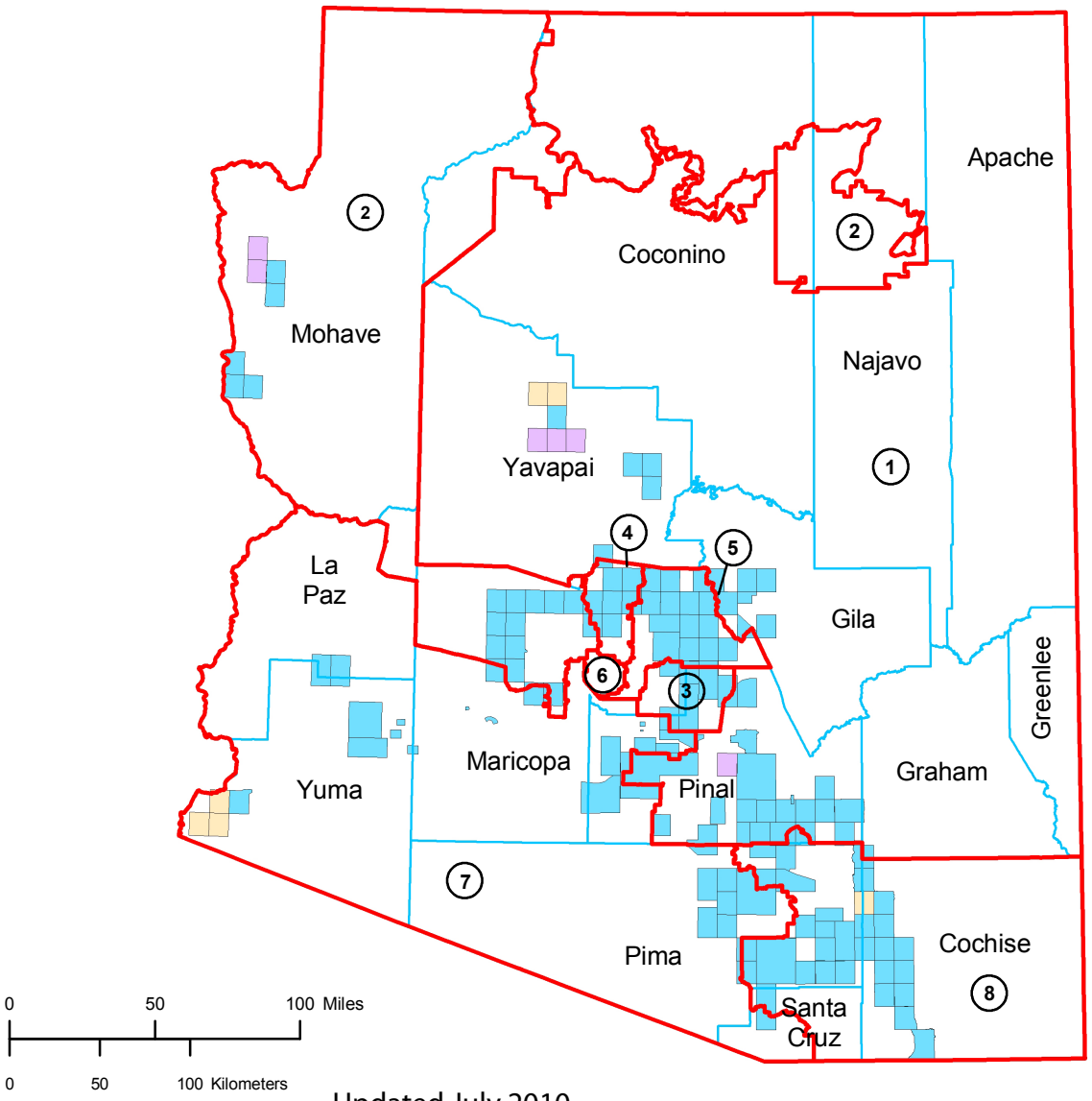
In a recent outcome of geologic mapping in Arizona, a building-materials company was able to locate groundwater sources that they needed to open a quarry. In a letter dated Oct. 1, 2008, Robert A. Lindsell Jr., of Granite Construction Co. stated the following: "...over the last 20 years I have used many of the AGS's detailed geologic maps to gain valuable insight into the nuances of Quaternary basin deposition in the Tucson and Yuma areas as it applies to potential sand and gravel sources. Additionally, I used a series of maps between the Tortolita Mountains and the Durham Hills to locate a detachment fault that I targeted for water production at depth. This produced two very successful wells in an area where water did not exist in the shallow basin fill alluvium. Without knowing where the detachment fault was and the opportunity to consult with the AGS on its approximate dip angle, the two projects would not have gone forward."

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



Updated July 2010

Geologic Maps funded by STATEMAP, Arizona, 1994-2010

Map Legend

- County boundaries
- Congressional District boundaries
- (6) Congressional District Numbers

Geologic Maps (Open-File Reports and Digital Geologic Maps)

- 1:24,000-scale bedrock and surficial mapping
- In Progress 1:24,000-scale bedrock and surficial maps
- Planned1:24,000-scale bedrock and surficial maps

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