

ARKANSAS GEOLOGICAL SURVEY

Enabling Laws

Act 209 of 2014

A.C.A. §15-55-201, et seq.

Act 708 of 2013

A.C.A §17-32-201, et seq.

History and Organization

The first geologic surveys made from State-appropriated funds go back to 1857-60. A second survey was made from 1871-74. In 1881, the Geological Survey of Arkansas was established under the direction of Dr. John C. Branner and lasted until 1893. During this period, Herbert Clark Hoover, who later became President of the United States, assisted Dr. Branner. For the next 30 years, the Department of Geology conducted a few geologic surveys at the University of Arkansas. In 1923 the Geological Survey of Arkansas was once again established by Act 573 of 1923 under the direction of George C. Branner, the son of John Branner. In 1945, reorganization changed the agency name to the Arkansas Resources and Development Commission, Division of Geology, under the direction of Harold B. Foxhall.

From 1951 to 1995 Norman F. Williams was Director and State Geologist. Reorganization in 1955 established the agency as the Arkansas Geological and Conservation Commission. Act 16 of 1963 changed the name of the organization to the Arkansas Geological Commission. In 1995, William V. Bush became Director and State Geologist. In 2003, Mac B. Woodward was appointed Director and State Geologist. In January 2005 Bekki White was appointed Director and State Geologist. Act 129 of 2007 changed the agency name back to Arkansas Geological Survey.

The mission of the Arkansas Geological Survey is to increase the knowledge of the geology of the State, to stimulate the orderly development and utilization of the State's mineral, water, and fossil fuel resources, while protecting the environment.

The Arkansas Geological Survey (AGS) is organized into four sections: Administrative Services, Information Services, and Technical Services, and the Board of Registration for Professional Geologists, all of which are under the direct supervision of the State Geologist.

The Administrative Services Section consists of fiscal services, human resources and support personnel services. This section provides all the administrative support for the agency.

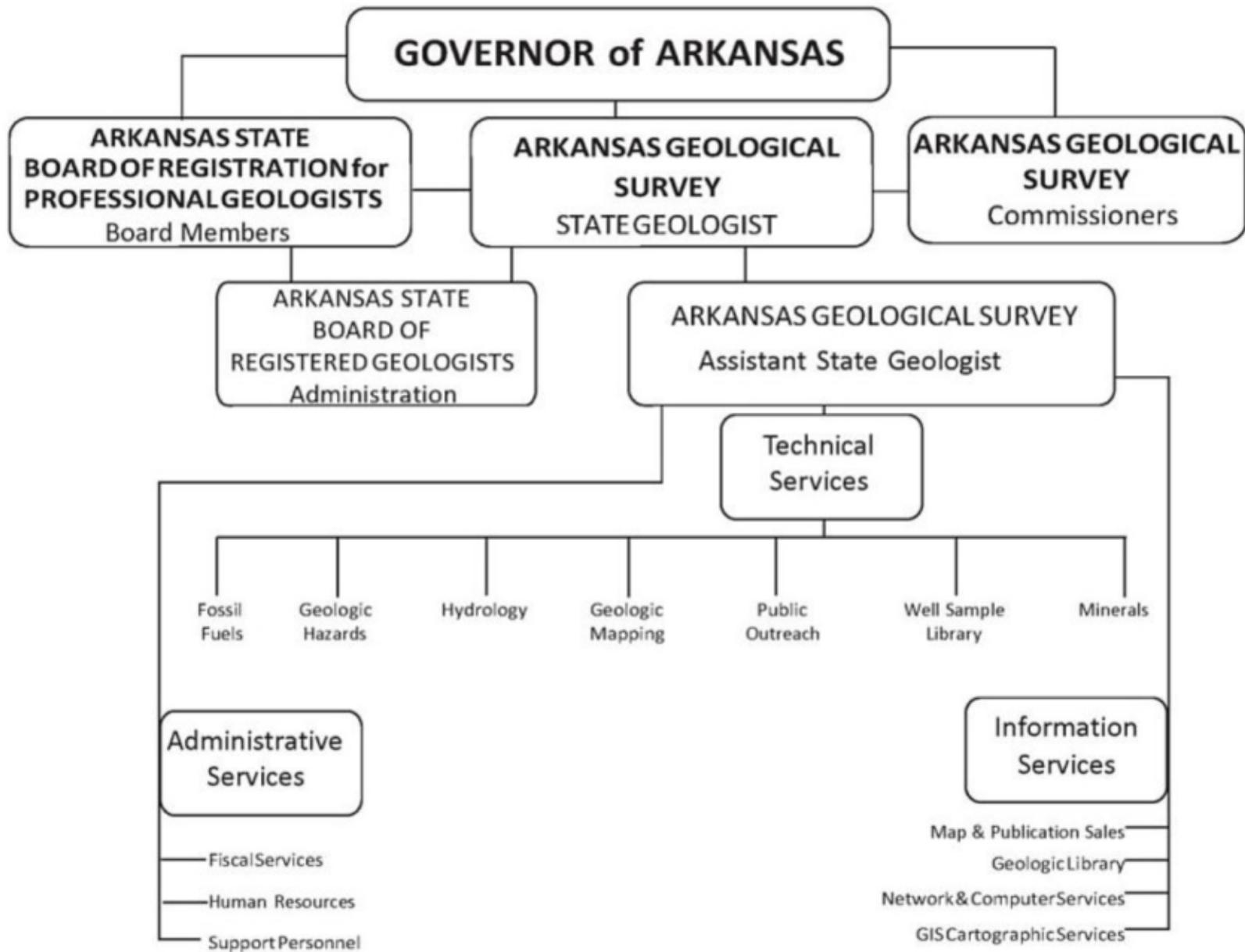
The Information Services Section's primary function is the distribution of information prepared and maintained by the Technical Services Section. This is accomplished through four offices: Map and Publication Sales, Geological Library, Network & Computer Services and GIS Cartographic Services.

The Technical Services Section is composed of the geologic staff and technical support personnel. Its primary responsibilities are: 1) to search for and provide information on the State's mineral, fossil-fuel (coal, oil and gas), and water resources; 2) to encourage the orderly development of these resources; 3) to maintain current geologic map coverage of the State; and 4) to study and report on the geologic factors affecting the State's environment.

Technical Services is divided into six major activities: Fossil Fuels (oil & gas, lignites & coals); Geohazards (earthquakes, landslides, karst); Hydrology; Geologic Mapping (surface, subsurface); and Public Outreach Minerals (Industrial, metallic, non-metallic). Also under this section is the Well Sample Library.

in 2013, the Arkansas Board of Registration for Professional Geologists was transferred to the Arkansas Geological Survey through A.C.A. § 25-2-104. The primary mission of the Board is to regulate the public practice of geology in Arkansas by registration and certification of qualified geologists and promulgate and enforce the regulations that provide the standards for practicing geology in Arkansas.

In addition to the major activities in the Geological Services Section, the Agency has several cooperative projects with the US Geological Survey (USGS). The AGS has three cooperative programs with the Water Resources Division of the USGS: Groundwater Survey Program, Stream Gauging Program (surface water), and Water Quality Program. Each of these is a 50-50 cooperative program in which the costs are split, but with the majority of the work being done by USGS personnel using their equipment and facilities. These programs provide base-line water data to the public and other users of water data needed in management and protection activities. The selection of sample sites is coordinated with other government agencies that collect water data, in order to eliminate duplication and establish site selection priorities in strategic areas for the public welfare.



Agency Commentary

The Arkansas Geological Survey (AGS) was created by Act 16 of 1963. Agency activities are divided into three major sections: 1) Administrative Services, 2) Technical Services, and 3) Information Services. Activities are primarily supported by General Revenue Funds, except Map and Publication Sales which operates on a revolving cash fund, and the Geology Learning Center which is funded by donations. The AGS receives federally funded grants which operate under a miscellaneous federal grant program. The Earthquake Education and Outreach Program is funded through a grant from State Farm Insurance Group. The AGS also participates in cooperative (50/50 matching) water programs with the U.S. Geological Survey.

The Survey's mission is to serve the people of Arkansas by providing geological information in order to develop and enable effective management of the State's mineral, fossil fuel and water resources while protecting the environment.

In addition to Base Level, the Agency is requesting the following:

- An increase in Salaries and Personal Services Matching totaling \$8,977 for the reclassification of an Administrative Assistant III to an Executive Assistant to the Director.
- A printing budget of \$5,000 for Educational materials. The amount of money that is provided for Educational Supplies and Materials contains only the cost of fuel needed to travel to schools and the cost to hire a STRIVE Teacher for the summer. We have an increase in the need to provide presentations to schools in the state. In order to continue to print Educational posters and pocket guides, a printing budget is needed.

The **Administrative Services** section supports the AGS with fiscal services, human resources, and personnel services. This section provides all the administrative support for the agency as well as physical plant and vehicle maintenance.

The **Technical Services** section is composed of the geologic staff and support personnel. Its primary responsibilities are: 1) to search for and provide information on the State's mineral, fossil-fuel, and water resources; 2) to encourage the orderly development of these resources; 3) to maintain current geologic map coverage of the State; and 4) to study and report on the geologic factors affecting the State's environment.

Technical Services is divided into six major activities: **Fossil Fuels** (oil & gas, lignite & coal); **Geohazards** (earthquakes, landslides, karst); **Minerals** (Industrial, metallic, non-metallic); **Hydrology** (water); **Geologic Mapping** (surface, subsurface); and **Educational Outreach** (Outreach efforts such as the Geology Learning Center fall under this Section but is not an official program). A support group within the

Information Services consisting of Information Technology (IT) and Geographic Information Systems (GIS) assists the geologic staff in collecting and preparing geologic data.

Current geologic map coverage of the State is maintained and other geologic studies are conducted as needed. The current Geologic Map of Arkansas was produced at a 1:500,000 scale. Current **geologic mapping** focuses on smaller areas so that investigations based on the geology are more precise. The geologic information compiled and maintained is necessary for exploration, planning and protection of the mineral resources, and as the framework for numerous environmental studies. The AGS has several ongoing and future mapping projects throughout the State in which part of the work has mineral resource evaluation (identification and location) as a component to the project.

The **Fossil Fuels Section** is responsible for the identification and geologic assessment of the state's fossil fuel resources including oil, condensates, natural gas, coal and lignite. The totality of these resources directly impacts the existing and future economies of the State of Arkansas. For example, the AGS took a leading role in supplying geologic information and research pertaining to the recent development of the Fayetteville Shale natural gas resource. The Fayetteville Shale is responsible for infusing over \$22 billion and 9,500 direct and indirect jobs into the state's economy according to Kathy Deck, Director of the Walton's Center for Business and Economic Research, University of Arkansas, Fayetteville. The AGS also routinely assesses undeveloped areas within the state for the undiscovered potential of oil and natural gas resources and encourages industry to explore these areas by providing new geologic research. The state's coal and lignite resources are routinely assessed and information has been provided to the state's legislature regarding coal-to-liquids potential and newly emerged clean coal technologies.

The **Geohazards Section** is responsible for the study of geologic hazards or geohazards in the State of Arkansas. A geohazard is a geologic condition, either natural or manmade, that poses a potential danger to life and property. Arkansas has its share of geohazards, including earthquakes, landslides, karst (sinkholes), man-induced subsidence (mine collapses and yard-holes), floods and radon. Occurrences of geohazards are investigated (delineated and documented) by the AGS Geohazards Section. This ongoing research leads to a better understanding of geologic hazards for mitigation and educational outreach activities in Arkansas. The AGS owns and operates the Arkansas Seismic Network (ASN). The ASN consists of six state-of-the-art permanent broadband seismic stations strategically placed within selected state parks across Arkansas. The goal of the ASN is to establish better and more uniform earthquake detection outside of the New Madrid Seismic Zone (NMSZ). The ASN is operated and maintained in cooperation with the Arkansas Geological Survey (AGS), Center for Earthquake Research and Information (CERI) at the University of Memphis, and Arkansas State Parks (ASP). Information on geohazards is provided to the public through the AGS website via a series of publications and maps.

The **Minerals** section provides information on the State's minerals and encourages their orderly development. The agency serves as a point of contact for industry personnel gathering information on the mineral resources we have available in the state. Continuing the American standard of living requires the mining of 7.1 billion tons of rocks and minerals annually to make the things we use and depend on every day

(Mineral Information Institute data). That's 3.7 million pounds for every person in the USA and with 300 million people in the USA who expect to live comfortably and affordably, mining has to occur somewhere. Although accurate production data are not readily available, bromine brine, crushed stone (sandstone, limestone, dolostone, and syenite), sand, and gravel have been the most valuable industrial materials mined in recent years. The agency website has a searchable database on the mine locations, commodities and status, and the agencies core and well cutting repository. Descriptions of the industrial minerals and metallic mineral and USGS annual reports on the non-fuel resources can also be located on our website.

The **Hydrology or water** section continues to provide information to the public regarding depth to water producing formations and amounts of water available. The AGS has created a web accessible file of over 150,000 water well completion reports that have been scanned. This agency is working with the USGS to get water well information into a common data system.

Educational outreach is particularly important for the public. General interest projects that lead to publications pertaining to minerals, rocks, and fossils are especially popular with the public. The AGS has recently begun a State Park Series and a Roadside Geology Guide Series. These publications along with geology trail guides are frequently requested by the public. The AGS maintains a good working relationship with the public by answering questions daily regarding: 1) mineral, rock, and fossil identification, 2) the geology of their property, 3) water availability, 4) oil and gas, and 5) questions pertaining to earthquakes. The AGS visits classrooms in Arkansas and provides presentations to an average of 42 schools per year. We continue to produce posters, pocket guides, and other resources for the teachers and the general public. We also work with Educational Cooperatives and Stem Centers in the state to lead three teacher workshops in the summer pertaining to geology, and following the Arkansas Science Curriculum, so that teachers can meet their earth science goals in the classroom.

The **Information Services** section's primary functions are preparation, storage, and distribution of data, reports, and maps prepared and maintained by the Technical Services section. This is accomplished through the Map and Publication Sales Office, Geological Library, and Network and Computer Services. With the increasing demand for maps in digital format, we are, in an orderly fashion, digitizing the geology of Arkansas.

The **Map Re-Sale** appropriation provides for the authorization to operate from a revolving cash fund, using a portion of the money collected from the sale of maps, publications, and reproduction charges.

The **Geological Library** is the repository of geologic and mineral information collected for more than 150 years. Most of this information is in a paper format. A data archival system is being established to provide for the storage, preservation, and archival of subsurface and surface geological data, samples, and publications. This information provides a "catalogue" of AGS information that is easily accessible. The purpose of this program is to insure that this data is preserved for future generations of Arkansas citizens.

The **Network and Computer Services** allows the Survey to function more efficiently in-house as well as to provide information to the public via our website. The AGS is in the process of developing databases and geodatabases. We have developed a geodatabase of all field points and geological data pertaining to geologic mapping. Databases of geophysical well logs, cores, cuttings, and water well logs have been developed and are available to the public.

The AGS has three **Cooperative Programs with the U.S. Geological Survey (USGS) Water Resources Division**. These cooperative programs with the Water Resources Division include 1) Stream Gauging Program (surface water), 2) Water Quality Program, and 3) Ground Water Survey. These programs provide for collection, evaluation, and development of data relating to the State's surface and ground water resources. Information from these programs is important to the development and protection of the State's water supply and is critical to the agencies that regulate and manage the State's water resources. Specifically, these funds are used to collect and analyze surface and ground water samples (Water Quality Program); installation and monitoring of continuous-record stream gauging stations (Stream Gauging Program); and research in subsurface geology relating to ground water (Ground Water Survey). The Ground Water Survey includes regular water-level measurements of wells in the critical Sparta Aquifer in south Arkansas and the Quaternary Aquifer in east Arkansas.

The **State Geologic Mapping Program** receives federal funds from the Department of the Interior for geologic mapping, research and data collection, and data preservation. Within this program are three grants awarded to the AGS: 1) STATEMAP, 2) National Geological and Geophysical Data Preservation Program, 3) Brown Dense Research.

STATEMAP is a cooperative (50/50 matching) grant with the USGS National Cooperative Geologic Mapping Program that pays the salary of one field geologist to conduct geologic field studies and mapping with an AGS staff geologist in north-central Arkansas. The program involves the geologic mapping of three quadrangles selected by the State Mapping Advisory Committee. This cooperative project is part of the National Geologic Mapping Act mandated by Congress in 1992. The AGS has participated in this grant program since 1996. This ongoing project will aid in the development and management of the mineral resources of the area and greatly expand the knowledge of the geology of the state.

The National Geological and Geophysical Data Preservation Program (NGGDPP) is a cooperative (50/50 matching) grant with the USGS. It allows the AGS to hire an extra help person to digitize and preserve reports in the library. This program was authorized by Section 351 of the Energy Policy Act of 2005 (Public Law 109-58, Sec. 351). Objectives of the Program as outlined in the Act are to: 1) Archive geologic, geophysical, and engineering data, maps, well logs, and samples; 2) provide a national catalog of such archival material; and 3) provide technical and financial assistance related to the archival material. This project will aid the Survey in preserving and digitizing data in the library and provide an accessible database for the public.

The **National Coal Resources Data System (NCRDS)** began as a cooperative venture between the USGS and State geological agencies in 1975 and focused on the stratigraphy and chemistry of coal. The NCRDS is now a database in the USGS Energy Resources Program to provide information of rock formations from U.S. coal fields. This program now provides a grant to collect, interpret, correlate, and encode other energy related stratigraphic (rock formation) data. The AGS received a grant to characterize the Brown Dense, a subsurface producing zone, within the Smackover Formation.

The **Geology Learning Center (Museum Expenses)** is an appropriation that provides for the authorization to spend money donated to the AGS Geology Learning Center (GLC). The GLC is part of the educational arm of the agency with the purpose of giving student and citizens of all ages' exposure to rocks, minerals, fossils, and fossil fuels. The GLC has five display areas and receives funding and exhibit material from donations.

Audit Findings

DIVISION OF LEGISLATIVE AUDIT
AUDIT OF :
ARKANSAS GEOLOGICAL SURVEY
FOR THE YEAR ENDED JUNE 30, 2012

Findings

The Agency is responsible for maintaining time and leave records for all employees and establishing proper controls to ensure compliance with state personnel policies. The Agency utilizes AASIS for maintaining available leave balances for all employees. Per Governor's Policy Directive 5, normal working hours are Monday through Friday from 8:00 am to 4:30 pm. Deviations are allowed, provided that an official "flex-time" policy has been established and approved by the Governor.

Per review of time and leave recorded for five individuals in three months, DLA staff noted one instance of an employee who reported sick leave without documented approval by a supervisor and four instances where the amount of leave reported in AASIS was less than the amount approved by the supervisor. Additionally, it was observed that employees often worked atypical hours, including partial days, and were allowed to make up time away from work later in the pay period or on weekends, even though no formal policy regarding alternate work schedules had been approved.

Recommendations

Establish and obtain approval for an official flex-time policy and document each employee's regularly-scheduled work hours. We further recommend that any time away from work during an employee's regularly-scheduled work hours be recorded as leave. If the approved flex-time policy allows for individuals to make up time away from work at a later time, these deviations from regularly-scheduled work hours should be properly approved and documented. Furthermore, we recommend the Agency strengthen its controls and procedures related to annual/sick leave usage to ensure that the leave recorded is accurate, consistent, and properly approved.

Agency Response:

Agency has studied the entire procedure for time and leave. Procedures have been changed to strengthen controls over work schedules, documentation of leave, and work hours.

DIVISION OF LEGISLATIVE AUDIT
 AUDIT OF :
 ARKANSAS GEOLOGICAL SURVEY
 FOR THE YEAR ENDED JUNE 30, 2012

Findings

In accordance with Ark. Code Ann. § 19-4-702, agencies are allowed to pay carryover obligations up to 45 days after the end of the fiscal year, but the carryover obligations "shall be charged against appropriations and fund cash balances of the fiscal year in which the obligations were incurred." An additional Code provision allows for claims to be submitted to the Arkansas State Claims Commission for payment. It was noted that the Agency made a payment of \$23,788 in fiscal year 2012 for expenses incurred in fiscal year 2011. Supporting documentation indicated that the Agency and the vendor intentionally delayed the billing of a portion of the fiscal year 2011 expense so that it would not be recognized as an accounts payable at June 30, 2011, but would be treated as a fiscal year 2012 expense since all of the "adjusted" appropriation and funding for fiscal year 2011 had been used.

Recommendations

Comply with state laws and regulations pertaining to the proper recognition and payment of accounts payable.

Agency Response:

Director and staff will comply with state laws and regulations pertaining to proper recognition and payment of accounts payable.

AGS received budget cuts late in the year and did not have the monies to pay the last balance of a grant with USGS that funds the Arkansas's water programs; water quality, stream gaging and ground water survey. There was concern that the lack of money would affect the cooperative funding of the grant. Director realizes this was not the proper way to handle the situation. Director will make sure this will not happen again.

State Contracts Over \$50,000 Awarded To Minority Owned Businesses Fiscal Year 2014

None

Employment Summary

	Male	Female	Total	%
White Employees	13	8	21	88 %
Black Employees	0	2	2	8 %
Other Racial Minorities	1	0	1	4 %
Total Minorities			3	12 %
Total Employees			24	100 %

Publications

A.C.A. 25-1-201 et seq.

Name	Statutory Authorization	Required for		# of Copies	Reason(s) for Continued Publication and Distribution	Unbound Black & White Copies Produced During the Last Two Years	Cost of Unbound Copies Produced During the Last Two Years
		Governor	General Assembly				
Board of Registration for Professional Geologists and Geologists-in-Training in Arkansas	A.C.A. 17-32-207	N	N	0	Public Record Publication and distribution is mandated by law, effected by internet distribution.	0	0.00

Department Appropriation Summary

Historical Data

Agency Request and Executive Recommendation

Appropriation	2013-2014		2014-2015		2014-2015		2015-2016					2016-2017						
	Actual	Pos	Budget	Pos	Authorized	Pos	Base Level	Pos	Agency	Pos	Executive	Pos	Base Level	Pos	Agency	Pos	Executive	Pos
166 State Operations	2,067,653	27	2,047,527	27	2,099,141	27	2,066,881	27	2,080,858	27	2,076,992	27	2,067,987	27	2,081,964	27	2,078,098	27
169 Map Resale	16,506	0	100,000	0	100,000	0	100,000	0	100,000	0	100,000	0	100,000	0	100,000	0	100,000	0
210 State Geologic Mapping Program	148,948	1	219,272	1	222,923	1	219,406	1	219,406	1	219,406	1	219,406	1	219,406	1	219,406	1
54U State Farm Grant	992	0	35,910	0	36,000	0	36,000	0	36,000	0	36,000	0	36,000	0	36,000	0	36,000	0
873 Geology Museum	0	0	8,894	0	9,025	0	9,025	0	9,025	0	9,025	0	9,025	0	9,025	0	9,025	0
F44 Reg for Prof Geo	31,959	1	62,641	1	69,887	1	63,149	1	63,149	1	63,149	1	63,149	1	63,149	1	63,149	1
N32 Geological Research - Landslide/Sinkhole	0	0	0	0	0	0	0	0	0	0	110,000	1	0	0	0	0	110,000	1
Total	2,266,058	29	2,474,244	29	2,536,976	29	2,494,461	29	2,508,438	29	2,614,572	30	2,495,567	29	2,509,544	29	2,615,678	30

Funding Sources		%		%		%		%		%		%		%		%		
Fund Balance	4000005	155,593	6.4	168,120	6.3		173,320	6.5	173,320	6.5	173,320	6.2	217,584	8.0	217,584	8.0	217,584	7.7
General Revenue	4000010	2,067,653	84.9	2,047,527	77.3		2,066,881	77.3	2,080,858	77.4	2,066,881	74.3	2,067,987	76.1	2,081,964	76.2	2,067,987	73.2
Federal Revenue	4000020	89,272	3.7	219,272	8.3		219,406	8.2	219,406	8.2	219,406	7.9	219,406	8.1	219,406	8.1	219,406	7.8
Non-Revenue Receipts	4000040	14,084	0.6	72,100	2.7		72,100	2.7	72,100	2.7	72,100	2.6	71,500	2.6	71,500	2.6	71,500	2.5
Cash Fund	4000045	47,774	2.0	140,545	5.3		140,645	5.3	140,645	5.2	140,645	5.1	140,385	5.2	140,385	5.2	140,385	5.0
Federal Funds-ARRA	4000244	59,676	2.5	0	0.0		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Interest	4000300	126	0.0	0	0.0		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Inter-agency Fund Transfer	4000316	0	0.0	0	0.0		0	0.0	0	0.0	110,000	4.0	0	0.0	0	0.0	110,000	3.9
Total Funds		2,434,178	100.0	2,647,564	100.0		2,672,352	100.0	2,686,379	100.0	2,782,352	100.0	2,716,862	100.0	2,730,839	100.0	2,826,862	100.0
Excess Appropriation/(Funding)		(168,120)		(173,320)			(177,891)		(177,891)		(167,780)		(221,295)		(221,295)		(211,184)	
Grand Total		2,266,058		2,474,244			2,494,461		2,508,438		2,614,572		2,495,567		2,509,544		2,615,678	

Variation in fund balance is due to unfunded appropriation in (166) State Operations, (169) Map Resale, (54U) State Farm Grant, and (873) Geology Museum.

Agency Position Usage Report

FY2012 - 2013						FY2013 - 2014						FY2014 - 2015					
Authorized in Act	Budgeted			Unbudgeted	% of Authorized Unused	Authorized in Act	Budgeted			Unbudgeted	% of Authorized Unused	Authorized in Act	Budgeted			Unbudgeted	% of Authorized Unused
	Filled	Unfilled	Total	Total			Filled	Unfilled	Total	Total			Filled	Unfilled	Total	Total	
29	30	1	31	-2	-3.45 %	31	26	5	31	0	16.13 %	29	26	3	29	0	10.34 %

FY13 Budgeted Positions exceeds Authorized due to positions authorized through the Miscellaneous Federal Grant process.

Analysis of Budget Request

Appropriation: 166 - State Operations

Funding Sources: HUA - Miscellaneous Agencies Fund

The Arkansas Geological Survey's (AGS) appropriation for State Operations is funded entirely by general revenue. In this program, data is accumulated, analyzed, and disseminated to provide knowledge of the geology and hydrogeology of the State to stimulate orderly development and encourage effective management and utilization of the State's minerals, fossil fuels, and water resources in an environmentally responsible manner.

Base Level Regular Salaries and Personal Services Matching include the continuation of the previously authorized 2015 1% Cost of Living Adjustment and Career Service Payments for eligible employees. Personal Services Matching also includes a \$10 increase in the monthly contribution for State employee's health insurance for a total State match per budgeted employee of \$420 per month. Base Level salaries and matching do not include appropriation for Merit Pay Increases. The Base Level request for Regular Salaries includes board member stipend payments. The Base Level salary of unclassified positions reflects the FY15 line item maximum plus the previously authorized 2015 1% Cost of Living Adjustment.

The Agency's Change Level request total \$13,977 in appropriation and new general revenue funding and reflect the following:

- Regular Salaries and Personal Services Matching of \$8,977 each year for the reclassification of an Administrative Specialist III (C112) to an Executive Assistant to the Director (C118).
- Operating Expenses of \$5,000 each year for printed materials requested by Arkansas K-12 schools and fuel costs associated with in-person school visits.

The Executive Recommendation provides for the Agency Request in appropriation only with the exception of the reclassification of the Administrative Specialist III (C112) to an Executive Assistant to the Director (C118), which is recommended as a Business Operations Specialist (C116).

Appropriation Summary

Appropriation: 166 - State Operations
Funding Sources: HUA - Miscellaneous Agencies Fund

Historical Data

Agency Request and Executive Recommendation

Commitment Item		Historical Data			2015-2016			2016-2017		
		2013-2014 Actual	2014-2015 Budget	2014-2015 Authorized	Base Level	Agency	Executive	Base Level	Agency	Executive
Regular Salaries	5010000	1,299,325	1,290,167	1,341,188	1,302,975	1,310,286	1,307,138	1,303,875	1,311,186	1,308,038
#Positions		27	27	27	27	27	27	27	27	27
Extra Help	5010001	11,550	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
#Extra Help		4	20	20	20	20	20	20	20	20
Personal Services Matching	5010003	424,161	427,358	427,951	433,904	435,570	434,852	434,110	435,776	435,058
Operating Expenses	5020002	222,421	207,791	207,791	207,791	212,791	212,791	207,791	212,791	212,791
Conference & Travel Expenses	5050009	3,997	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Professional Fees	5060010	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Data Processing	5090012	0	0	0	0	0	0	0	0	0
Capital Outlay	5120011	0	0	0	0	0	0	0	0	0
Water Quality Program	5900046	19,500	19,500	19,500	19,500	19,500	19,500	19,500	19,500	19,500
Stream Gauging	5900047	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
Ground Water Survey	5900048	31,710	31,711	31,711	31,711	31,711	31,711	31,711	31,711	31,711
Mineral Exploration	5900050	25,989	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000
Total		2,067,653	2,047,527	2,099,141	2,066,881	2,080,858	2,076,992	2,067,987	2,081,964	2,078,098
Funding Sources										
General Revenue	4000010	2,067,653	2,047,527		2,066,881	2,080,858	2,066,881	2,067,987	2,081,964	2,067,987
Total Funding		2,067,653	2,047,527		2,066,881	2,080,858	2,066,881	2,067,987	2,081,964	2,067,987
Excess Appropriation/(Funding)		0	0		0	0	10,111	0	0	10,111
Grand Total		2,067,653	2,047,527		2,066,881	2,080,858	2,076,992	2,067,987	2,081,964	2,078,098

Change Level by Appropriation

Appropriation: 166 - State Operations
Funding Sources: HUA - Miscellaneous Agencies Fund

Agency Request

Change Level		2015-2016	Pos	Cumulative	% of BL	2016-2017	Pos	Cumulative	% of BL
BL	Base Level	2,066,881	27	2,066,881	100.0	2,067,987	27	2,067,987	100.0
C01	Existing Program	5,000	0	2,071,881	100.2	5,000	0	2,072,987	100.2
C10	Reclass	8,977	0	2,075,199	100.4	8,977	0	2,076,305	100.4

Executive Recommendation

Change Level		2015-2016	Pos	Cumulative	% of BL	2016-2017	Pos	Cumulative	% of BL
BL	Base Level	2,066,881	27	2,066,881	100.0	2,067,987	27	2,067,987	100.0
C01	Existing Program	5,000	0	2,071,881	100.2	5,000	0	2,072,987	100.2
C10	Reclass	5,111	0	2,071,881	100.2	5,111	0	2,072,987	100.2

Justification

C01	Agency requests \$5,000 in Operating Expenses meet the growing needs by Arkansas schools for printed materials (books, posters, pocket guides) and in-person presentations. The request also includes the additional fuel costs to travel to schools around the state and participation in the Department of Education STRIVE teacher program.
C10	The Agency requests the reclassification of one (1) position from an Administrative Assistant III (C112) to an Executive Assistant to the Director (C118). The Director relies on this employee to assist with the managerial duties of the agency. This position assists with preparing forms and requests to OPM. The employee also assumes responsibility for fiscal tasks such as assisting management with monitoring budget issues related to projects and grants.

Analysis of Budget Request

Appropriation: 169 - Map Resale

Funding Sources: MWA - Geology Map Resale Revolving Fund

The Arkansas Geological Survey utilizes this appropriation to operate a Map Resale Program. Funding for the Arkansas Geological Survey's Map Resale appropriation is obtained from the sale of geological and topographical maps to the general public. These proceeds are deposited into the Agency's revolving fund, as authorized in A.C.A. §19-4-1804.

The Agency Request is for Base Level of \$100,000 in each year of the 2015-2017 Biennium.

The Executive Recommendation provides for the Agency Request. Expenditure of appropriation is contingent upon available funding.

Appropriation Summary

Appropriation: 169 - Map Resale

Funding Sources: MWA - Geology Map Resale Revolving Fund

Historical Data

Agency Request and Executive Recommendation

Commitment Item	2013-2014 Actual	2014-2015 Budget	2014-2015 Authorized	2015-2016			2016-2017		
				Base Level	Agency	Executive	Base Level	Agency	Executive
Resale Revolving Fund 5900046	16,506	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Total	16,506	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Funding Sources									
Fund Balance 4000005	30,329	27,907		7	7	7	0	0	0
Non-Revenue Receipts 4000040	14,084	72,100		72,100	72,100	72,100	71,500	71,500	71,500
Total Funding	44,413	100,007		72,107	72,107	72,107	71,500	71,500	71,500
Excess Appropriation/(Funding)	(27,907)	(7)		27,893	27,893	27,893	28,500	28,500	28,500
Grand Total	16,506	100,000		100,000	100,000	100,000	100,000	100,000	100,000

Expenditure of appropriation is contingent upon available funding.

Analysis of Budget Request

Appropriation: 210 - State Geologic Mapping Program

Funding Sources: FAL - Geology Federal

The Arkansas Geological Survey (AGS) utilizes this appropriation for the federal portion of the following program activities: National Coal Resources Data System (NCRDS) project to collect, interpret, correlate and encode point-source coal and other energy-related stratigraphic data; the State Geologic Mapping Program to coordinate collection of data and formulation of maps displaying the location and quantity of minerals in specific areas of the State; and the Geothermal ARRA grant awarded to allow the Geological Survey to populate the National Geothermal Data System. Federal funding is received from the US Department of Energy and the US Department of Interior.

Base Level Regular Salaries and Personal Services Matching include the continuation of the previously authorized 2015 1% Cost of Living Adjustment and Career Service Payments for eligible employees. Personal Services Matching also includes a \$10 increase in the monthly contribution for State employee's health insurance for a total State match per budgeted employee of \$420 per month. Base Level salaries and matching do not include appropriation for Merit Pay Increases.

The Agency Request is for Base Level of \$219,406 in each year of the 2015-2017 Biennium.

The Executive Recommendation provides for the Agency Request.

Appropriation Summary

Appropriation: 210 - State Geologic Mapping Program

Funding Sources: FAL - Geology Federal

Historical Data

Agency Request and Executive Recommendation

Commitment Item	Historical Data			Agency Request and Executive Recommendation			Agency Request and Executive Recommendation		
	2013-2014 Actual	2014-2015 Budget	2014-2015 Authorized	2015-2016			2016-2017		
				Base Level	Agency	Executive	Base Level	Agency	Executive
Regular Salaries 5010000	33,201	37,332	40,607	37,332	37,332	37,332	37,332	37,332	37,332
#Positions	1	1	1	1	1	1	1	1	1
Extra Help 5010001	0	11,591	11,591	11,591	11,591	11,591	11,591	11,591	11,591
#Extra Help	0	2	2	2	2	2	2	2	2
Personal Services Matching 5010003	12,407	14,349	14,725	14,483	14,483	14,483	14,483	14,483	14,483
Operating Expenses 5020002	33,184	156,000	156,000	156,000	156,000	156,000	156,000	156,000	156,000
Conference & Travel Expenses 5050009	0	0	0	0	0	0	0	0	0
Professional Fees 5060010	0	0	0	0	0	0	0	0	0
Data Processing 5090012	0	0	0	0	0	0	0	0	0
Capital Outlay 5120011	0	0	0	0	0	0	0	0	0
ARRA 5900052	70,156	0	0	0	0	0	0	0	0
Total	148,948	219,272	222,923	219,406	219,406	219,406	219,406	219,406	219,406
Funding Sources									
Federal Revenue 4000020	89,272	219,272		219,406	219,406	219,406	219,406	219,406	219,406
Federal Funds-ARRA 4000244	59,676	0		0	0	0	0	0	0
Total Funding	148,948	219,272		219,406	219,406	219,406	219,406	219,406	219,406
Excess Appropriation/(Funding)	0	0		0	0	0	0	0	0
Grand Total	148,948	219,272		219,406	219,406	219,406	219,406	219,406	219,406

Analysis of Budget Request

Appropriation: 54U - State Farm Grant

Funding Sources: NGC - Geology Private Grants

The State Farm Grant is a privately funded grant donated by State Farm in order to increase earthquake awareness throughout the State. The appropriation provides outreach to the citizens of the State in the form of town hall meetings. In these meetings a geologist will give a presentation on earthquake basics and preparedness techniques.

The Agency Request is for Base Level of \$36,000 in each year of the 2015-2017 Biennium.

The Executive Recommendation provides for the Agency Request. Expenditure of appropriation is contingent upon available funding.

Appropriation Summary

Appropriation: 54U - State Farm Grant

Funding Sources: NGC - Geology Private Grants

Historical Data

Agency Request and Executive Recommendation

Commitment Item		Historical Data			Agency Request and Executive Recommendation			Agency Request and Executive Recommendation		
		2013-2014 Actual	2014-2015 Budget	2014-2015 Authorized	2015-2016			2016-2017		
					Base Level	Agency	Executive	Base Level	Agency	Executive
Operating Expenses	5020002	992	35,910	36,000	36,000	36,000	36,000	36,000	36,000	36,000
Conference & Travel Expenses	5050009	0	0	0	0	0	0	0	0	0
Professional Fees	5060010	0	0	0	0	0	0	0	0	0
Data Processing	5090012	0	0	0	0	0	0	0	0	0
Capital Outlay	5120011	0	0	0	0	0	0	0	0	0
Total		992	35,910	36,000	36,000	36,000	36,000	36,000	36,000	36,000
Funding Sources										
Fund Balance	4000005	11,287	10,410		0	0	0	0	0	0
Cash Fund	4000045	0	25,500		25,500	25,500	25,500	25,500	25,500	25,500
Interest	4000300	115	0		0	0	0	0	0	0
Total Funding		11,402	35,910		25,500	25,500	25,500	25,500	25,500	25,500
Excess Appropriation/(Funding)		(10,410)	0		10,500	10,500	10,500	10,500	10,500	10,500
Grand Total		992	35,910		36,000	36,000	36,000	36,000	36,000	36,000

Analysis of Budget Request

Appropriation: 873 - Geology Museum

Funding Sources: NGC - Geology Cash

The Geology Museum and Learning Center (GLC) is funded by donations collected by the Agency. The GLC is part of the educational arm of the Agency with the purpose of giving students and citizens exposure to rocks, minerals, fossils, and fossil fuels through its five (5) display areas.

The Agency Request is for Base Level of \$9,025 in each year of the 2015-2017 Biennium.

The Executive Recommendation provides for the Agency Request. Expenditure of appropriation is contingent upon available funding.

Appropriation Summary

Appropriation: 873 - Geology Museum

Funding Sources: NGC - Geology Cash

Historical Data

Agency Request and Executive Recommendation

Commitment Item		Historical Data			2015-2016			2016-2017		
		2013-2014 Actual	2014-2015 Budget	2014-2015 Authorized	Base Level	Agency	Executive	Base Level	Agency	Executive
Museum Expenses	5900046	0	8,894	9,025	9,025	9,025	9,025	9,025	9,025	9,025
Total		0	8,894	9,025	9,025	9,025	9,025	9,025	9,025	9,025
Funding Sources										
Fund Balance	4000005	1,058	1,069		0	0	0	0	0	0
Cash Fund	4000045	0	7,825		7,725	7,725	7,725	7,625	7,625	7,625
Interest	4000300	11	0		0	0	0	0	0	0
Total Funding		1,069	8,894		7,725	7,725	7,725	7,625	7,625	7,625
Excess Appropriation/(Funding)		(1,069)	0		1,300	1,300	1,300	1,400	1,400	1,400
Grand Total		0	8,894		9,025	9,025	9,025	9,025	9,025	9,025

Expenditure of appropriation is contingent upon available funding.

Analysis of Budget Request

Appropriation: F44 - Reg for Prof Geo

Funding Sources: NGC - Prof Geo Board

The Board of Registration for Professional Geologists was created by Act 701 of 1987. The primary duty of the Board is to regulate the public practice of geology in the State of Arkansas by registration and certification of qualified geologists. The Board is a cash agency funded from application, registration, and renewal fees charged pursuant to Arkansas Code Annotated §17-32-307.

Base Level Regular Salaries and Personal Services Matching include the continuation of the previously authorized 2015 1% Cost of Living Adjustment and Career Service Payments for eligible employees. Personal Services Matching also includes a \$10 increase in the monthly contribution for State employee's health insurance for a total State match per budgeted employee of \$420 per month. Base Level salaries and matching do not include appropriation for Merit Pay Increases.

The Agency Request is for Base Level of \$63,149 in each year of the 2015-2017 Biennium.

The Executive Recommendation provides for the Agency Request. Expenditure of appropriation is contingent upon available funding.

Appropriation Summary

Appropriation: F44 - Reg for Prof Geo

Funding Sources: NGC - Prof Geo Board

Historical Data

Agency Request and Executive Recommendation

Commitment Item		Historical Data			Agency Request and Executive Recommendation			Agency Request and Executive Recommendation		
		2013-2014 Actual	2014-2015 Budget	2014-2015 Authorized	2015-2016			2016-2017		
					Base Level	Agency	Executive	Base Level	Agency	Executive
Regular Salaries	5010000	13,720	30,713	36,868	31,020	31,020	31,020	31,020	31,020	31,020
#Positions		1	1	1	1	1	1	1	1	1
Extra Help	5010001	678	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
#Extra Help		0	1	1	1	1	1	1	1	1
Personal Services Matching	5010003	8,152	12,153	13,244	12,354	12,354	12,354	12,354	12,354	12,354
Operating Expenses	5020002	9,409	14,775	14,775	14,775	14,775	14,775	14,775	14,775	14,775
Conference & Travel Expenses	5050009	0	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Professional Fees	5060010	0	0	0	0	0	0	0	0	0
Data Processing	5090012	0	0	0	0	0	0	0	0	0
Capital Outlay	5120011	0	0	0	0	0	0	0	0	0
Total		31,959	62,641	69,887	63,149	63,149	63,149	63,149	63,149	63,149
Funding Sources										
Fund Balance	4000005	112,919	128,734		173,313	173,313	173,313	217,584	217,584	217,584
Cash Fund	4000045	47,774	107,220		107,420	107,420	107,420	107,260	107,260	107,260
Total Funding		160,693	235,954		280,733	280,733	280,733	324,844	324,844	324,844
Excess Appropriation/(Funding)		(128,734)	(173,313)		(217,584)	(217,584)	(217,584)	(261,695)	(261,695)	(261,695)
Grand Total		31,959	62,641		63,149	63,149	63,149	63,149	63,149	63,149

Analysis of Budget Request

Appropriation: N32 - Geological Research - Landslide/Sinkhole

Funding Sources: NCG - Landslides/Sinkholes Research

The Arkansas Geological Survey has received an increase in reports of mudslides and sinkholes in various areas of the state. The Agency's goal is to provide knowledge of these geohazards to the State of Arkansas, various stakeholders, and the general public in order to further its mission of environmentally responsible management of the State's geological resources.

The Executive Recommendation provides for an increase of \$110,000 in appropriation and one (1) position only for Geological Research in order to:

- Hire a full-time Professional Geologist (Grade C121).
- Upgrade the Arkansas Geological Survey's network infrastructure to transmit and receive large data files.

This effort will be funded by an interagency transfer from the Arkansas Oil & Gas Commission. The funds from the inter-agency transfer will be deposited into a cash fund.

Appropriation Summary

Appropriation: N32 - Geological Research - Landslide/Sinkhole

Funding Sources: NCG - Landslides/Sinkholes Research

Historical Data

Agency Request and Executive Recommendation

Commitment Item	2013-2014 Actual	2014-2015 Budget	2014-2015 Authorized	2015-2016			2016-2017		
				Base Level	Agency	Executive	Base Level	Agency	Executive
Regular Salaries 5010000	0	0	0	0	0	39,199	0	0	39,199
#Positions	0	0	0	0	0	1	0	0	1
Personal Services Matching 5010003	0	0	0	0	0	13,978	0	0	13,978
Geological Research 5900046	0	0	0	0	0	56,823	0	0	56,823
Total	0	0	0	0	0	110,000	0	0	110,000
Funding Sources									
Inter-agency Fund Transfer 4000316	0	0		0	0	110,000	0	0	110,000
Total Funding	0	0		0	0	110,000	0	0	110,000
Excess Appropriation/(Funding)	0	0		0	0	0	0	0	0
Grand Total	0	0		0	0	110,000	0	0	110,000

Change Level by Appropriation

Appropriation: N32 - Geological Research - Landslide/Sinkhole
Funding Sources: NCG - Landslides/Sinkholes Research

Executive Recommendation

Change Level		2015-2016	Pos	Cumulative	% of BL	2016-2017	Pos	Cumulative	% of BL
C02	New Program	53,177	1	53,177	100.0	53,177	1	53,177	100.0
C19	Executive Changes	56,823	0	110,000	206.9	56,823	0	110,000	206.9

Justification

C19	The Executive Recommendation provides for a new cash appropriation. The Executive Recommendation also provides for an increase of \$110,000 in appropriation only for Geological Research in order to hire a full-time Professional Geologist (Grade C121) and upgrade the Arkansas Geological Survey's network infrastructure to transmit and receive large data files.
-----	--