

## Part I – Agency Profile

### Agency Overview

The Idaho Geological Survey (IGS) is the lead state agency for the collection, interpretation, and dissemination of geologic and mineral data for Idaho. The agency has served the state since 1919 and prior to 1984 was named the Idaho Bureau of Mines and Geology. The agency is staffed by about ten state-funded FTEs and 15-20 externally funded temporary and part-time employees.

Members of the Idaho Geological Survey staff acquire geologic information through field and laboratory investigations and through cooperative programs with other governmental, academic, and private sector alliances. The Idaho Geological Survey provides timely and meaningful information to the public, industry, academia, and legislative decision makers by conducting geologic mapping, geohazard assessments that focus on earthquakes and landslides, mineral and energy resource assessments, groundwater and hydrology research, and educational and outreach opportunities. The Survey’s Digital Mapping Laboratory is central to compiling, producing, and delivering new digital geologic maps and publications for the agency. The Idaho Geological Survey is also engaged in the collection and compilation of data and information pertaining to abandoned and inactive mines in the state, earth science education, and a newly added focus of petroleum geology assessments. As Idaho grows, demand is increasing for geologic and geospatial information related to population growth, energy-mineral and water-resource development, landslide hazards, and earthquake monitoring.

### Core Functions/Idaho Code

Idaho Code Title 47, Chapter 2, defines the authority, administration, advisory board members, functions, and duty of the IGS. The section contents:

- **Section 47-201:** Creates the IGS to be administered as special program at the University of Idaho. Specifies the purpose as the lead state agency for the collection, interpretation, and dissemination of geologic and mineral information. Establishes a Survey advisory board and designates advisory board members and terms.
- **Section 47-202:** Provides for an annual meeting of the advisory board, and location of the chief office at the University of Idaho. Specifies the director of the IGS report to the President of the University through the Vice President for Research. Specifies for the appointment of a state geologist.
- **Section 47-203:** Defines the duty of the IGS to conduct statewide studies in the field and in the laboratory, and to prepare and publish reports on the geology, hydrology, geologic hazards, and mineral resources of Idaho. Provides for establishment of a publication fund. Allows the Survey to seek and accept funded projects from and to cooperate with other agencies. Allows satellite offices at Boise State University and Idaho State University.
- **Section 47-204:** Specifies the preparation, contents, and delivery of a Survey Annual Report.

### Revenue and Expenditures

Revenue	FY 2016	FY 2017	FY 2018	FY 2019
General Fund	\$824,200	\$1,123,300	\$1,076,540	\$1,085,100
<b>Total</b>	<b>\$824,200</b>	<b>\$1,123,300</b>	<b>\$1,076,540</b>	<b>\$1,085,100</b>
Expenditures	FY 2016	FY 2017	FY 2018	FY 2019
Personnel Costs	\$745,726	\$853,400	\$880,196	\$974,400
Operating Expenditures	\$65,899	\$134,696	\$165,241	\$105,336
Capital Outlay	\$12,575	\$135,204	\$31,103	\$5,364
Trustee/Benefit Payments	0	0	0	0
<b>Total</b>	<b>\$824,200</b>	<b>\$1,123,300</b>	<b>\$1,076,540</b>	<b>\$1,085,100</b>

**Profile of Cases Managed and/or Key Services Provided**

Cases Managed and/or Key Services Provided	FY 2016	FY 2017	FY 2018	FY 2019
Square Miles of Geological Mapping <sup>1</sup>	214	587	271	269
Number of Educational Programs for Public Audiences	19	14	19	18
Number of Geologic Reports	10	11	8	14
Number of Geologic Presentations	9	9	22	26
Number of Website Viewers (no robot searches)	398,400	453,562	487,249	402,834 <sup>2</sup>
Number of Grants and Contracts	7	11	10	10

**Red Tape Reduction Act**

Each agency shall incorporate into its strategic plan a summary of how it will implement the Red Tape Reduction Act, including any associated goals, objectives, tasks, or performance targets. This information may be included as an addendum.

	As of July 1, 2019
Number of Chapters	N/A
Number of Words	N/A
Number of Restrictions	N/A

**FY 2019 Performance Highlights**

**1. Number of Publications on Geology/Hydrology/Hazards/Mineral Resources**

Eleven new geologic publications were published by the IGS in FY19. Publications are focused on a wide array of geoscience issues and resources including hydrogeology, metallic and industrial minerals, oil and gas resources, geologic hazards, such as active faults and landslides, regional bedrock and surficial geologic maps, and geologic databases. The IGS publishes the majority of its products in-house through the Digital Mapping Laboratory which are made available for free download on the agency website.

**2. Number of Website Products Delivered/Used**

It has been a year since our new website launched in June 2018. The new website offers an easy-to-use, faceted search function that allows visitors to quickly find and access geologic publications. Nearly all IGS publications (over 970) are available for free download.

**3. Cumulative Percent of Idaho’s Area Covered by Modern Geologic Mapping**

Modern geologic mapping is a necessary service of the IGS which is used to identify important economic and geologic resources and to understand complex geologic phenomenon that may negatively impact citizens or the state’s infrastructure (roads, dams, and buildings). Legislative decision makers, state regulatory agencies, and developers of residential and commercial properties rely heavily on modern geologic mapping from the IGS to make sound business and public safety decisions. As of FY19, the IGS has mapped 38.2% of the state with modern high-resolution geologic mapping at a scale of mostly 1:24,000. For the last 20 years the IGS has continuously secured federal grants from the U.S. Geological Survey (USGS) to assist with modern geologic mapping in Idaho, and this effort will continue into the foreseeable future.

**4. Externally Funded Grant and Contract Dollars**

Externally funded grants are critical to accomplish the mission and legislative mandate of the IGS. All geologists are expected to seek and apply for externally funded grants on an annual basis or to apply for multi-year grant awards. The IGS typically has a healthy mix of grant awards from federal, state, and private industry that permits the advancement of geoscience research projects throughout the state. The USGS often makes up the largest portion of externally funded grant awards for the IGS; during FY19 the IGS had three concurrent grant awards from the USGS. Non-government support from the private sector includes geologic mapping and

<sup>1</sup> It was determined that square miles of geologic mapping were calculated incorrectly in the past. Calculations have been corrected in this report.

<sup>2</sup> Number of Website Viewers reported is a minimum estimate.

resource assessment at the reactivated DeLamar Mine, Owyhee County, by Integra Resources Inc. and geologic mapping adjacent to the newly explored Stibnite mining district, Valley County, by Wilmat Petroleum Company.

**Part II – Performance Measures**

Performance Measure		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
<b>Goal 1</b>						
Achieve excellence in collecting and disseminating geologic information and mineral data to the mining, energy, agriculture, utility, construction, insurance and banking industries, educational institutions, civic and professional organizations, elected officials, governmental agencies, and the public. Continue to strive for increased efficiency and access to survey information primarily through publications, website products, in-house collections, and customer inquiries. Emphasize website delivery of digital products and compliance with new revision of state documents requirements (Idaho Code 33-2505).						
1. Number of Published Reports on Geology/Hydrology/Geohazards/Mineral & Energy Resources Goal 1. Objective A	actual	39	25	31	11	-----
	target	35	37	39	20 <sup>3</sup>	25 <sup>3</sup>
2. Number of Website Products Used or Downloaded Goal 1. Objective B	actual	185,635	204,770	229,893	----- <sup>4</sup>	-----
	target	180,000	191,709	191,709	215,000	252,882
3. Percentage total of Survey documents available through these programs Goal 1. Objective C	actual	~99%	~99%	~99%	~99%	-----
	target	~99%	~99%	~99%	~99%	~99%
4. Percentage of Geologic Maps that are uploaded to this national website depicting detailed geologic mapping in Idaho Goal 1. Objective D	actual	100%	100%	100%	100%	-----
	target	100%	100%	100%	100%	100%
<b>Goal 2</b>						
Promote, foster, and sustain a climate for research excellence. Develop existing competitive strengths in geological expertise. Maintain national level recognition and research competitiveness in digital geological mapping and applied research activities. Sustain and build a strong research program through interdisciplinary collaboration with academic institutions, state and federal land management agencies, and industry partners.						
5. Increase the geologic map coverage of Idaho by mapping priority areas of socioeconomic importance. Identify and study areas with geologic resources of economic importance and identify and study areas that are predisposed to geologic hazards. Goal 2. Objective A	actual <sup>5</sup>	36.9%	37.6%	37.9%	38.2%	-----
	target	36.4%	37.8%	37.8%	40.5%	39.1%
6. Increase externally funded grant and contract dollars with a particular focus of securing new sources of funding from the private sector. Goal 2. Objective B	actual	\$498,034	\$439,898	\$393,622	\$396,556	-----
	target	\$531,085	\$457,794	\$457,794	\$467,923	\$485,000

<sup>3</sup> This benchmark/target, considering number and scope, is to be equal to or greater than the last full fiscal year reported. IGS has a few very large publications with a much larger scope in FY 19-20; therefore, the benchmark for number of publications is less than the last full fiscal year reported.

<sup>4</sup> We do not have the data to calculate this measure at this time due to the ongoing implementation of a different web statistic tool on our new website.

<sup>5</sup> It was determined percentage of geologic map coverage was calculated incorrectly in the past. Calculations have been corrected in this report.

Performance Measure		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
<b>Goal 3</b>						
Support knowledge and understanding of Idaho’s geologic setting and resources through earth science education. Achieve excellence in scholarly and creative activities through collaboration and building partnerships that enhance teaching, discovery, and lifelong learning.						
7. Number of educational programs provided to public and private schools and the public at large. Goal 3. Objective A	actual	19	14	19	18	-----
	target	9	19	19	15	19

**Performance Measure Explanatory Notes**

For Goal 1, Objective A; Goal 1, Objective B; and Goal 3, Objective A the benchmarks are to be greater than or equal to the actual measures from the previous year. Since the Strategic Plan, which is where we determine our benchmarks/targets, is due before the end of the fiscal year when we are able to calculate our performance measures, we rely more on the actual measures from the last full fiscal year reported. For example, when setting the benchmarks for FY19 we did not have the actual measures for FY18 yet since those are calculated at the end of the fiscal year, so we used the FY17 actual measures to determine the benchmarks.

**FY 19 Grants and Contracts**

*Data Preservation 11:* R.S. Lewis (U.S. Geological Survey, July 2018-August July 2019, \$24,127).

*Development of a Statewide Landslide Inventory Database:* Zach Lifton (Idaho Transportation Department, October 2018-October 2020, \$90,114).

*Geologic Mapping in the Preston, Weiser, Salmon, and Elk City areas:* R.S. Lewis and D.M. Feeney (U.S. Geological Survey STATEMAP Program, June 2018-May 2019, \$159,330).

*Geologic Mapping in the Preston, Weiser, Salmon, and Elk City areas:* R.S. Lewis and D.M. Feeney (U.S. Geological Survey STATEMAP Program, May 2019-May 2020, \$164,417).

*Geologic Mapping of the Swisher Mountain and De Lamar quadrangles:* V.S. Gillerman and D.M. Feeney, (Integra Resources Inc., May 2019-December 2020, \$103,261).

*Geologic Mapping in the Yellow Pine quadrangle* (Wilmot Petroleum Company, May 2019-September 2010, \$39,999).

*Groundwater Budget for the Big Lost River Valley:* A. Clark (Idaho Department of Water Resources, December 2018-October 2021, \$125,000).

*Idaho Department of Lands Abandoned Mine Lands Project, Task 4:* R.S. Lewis (Idaho Department of Lands, February 2017-February 2019, \$121,918).

*Idaho Department of Lands Abandoned Mine Lands Project, Task 5:* R.S. Lewis (Idaho Department of Lands, March 2019-November 2020, \$141,677).

*LiDAR Training and Outreach:* Zach Lifton (Federal Emergency Management Agency, September 2018-September 2019, \$6,247).

**For More Information Contact**

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