

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 currently staffed by 11.24 state-funded FTEs and 13 externally funded temporary full and part-time employees.

The Survey's mission is to provide the state with timely and relevant geologic information. Members of the IGS fulfill this mission through applied geologic research and strong collaborations with federal and state agencies, academia, and the private sector. IGS research focuses on geologic mapping, geologic hazards, hydrogeology, geothermal energy, oil and gas, and metallic and industrial minerals. The Survey's Digital Mapping Laboratory is central to compiling, producing, and delivering new digital geologic maps and publications for the agency. The IGS is also engaged in dissemination of historic mining records, community service, and earth science education. As Idaho grows, demand is increasing for geologic and geospatial information related to energy, mineral, and water resource development, and landslide and earthquake hazards.

Core Functions/Idaho Code

Idaho Code Title 47, Chapter 2, defines the authority, administration, advisory board members, functions, and duties of the IGS.

- **Section 47-201:** Creates the IGS to be administered as a 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 and Economic Development. Specifies for the appointment of a state geologist.
- **Section 47-203:** Defines the duties 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 2018	FY 2019	FY 2020	FY 2021
General Fund	\$1,076,540	\$1,085,100	\$1,123,500	\$1,105,200
Total	\$1,076,540	\$1,085,100	\$1,123,500	\$1,105,200
Expenditures	FY 2018	FY 2019	FY 2020	FY 2021
Personnel Costs	\$880,196	\$974,400	\$896,832	\$516,492
Operating Expenditures	\$165,241	\$105,336	\$140,456	\$368,667
Capital Outlay	\$31,103	\$5,364	\$8,590	\$164,741
Trustee/Benefit Payments	0	0	0	0
Furlough Deduction	N/A	N/A	N/A	\$55,300
State Cut (1%)	N/A	N/A	\$11,200	N/A
COVID-19 State Cut (1%)	N/A	N/A	\$11,200	N/A
State Benefits Reduction	N/A	N/A	\$2,200	N/A
Return to State	N/A	N/A	\$53,022	N/A
Operations/Equipment Funding from Reserves	N/A	N/A	\$58,447	N/A
Total	\$1,076,540	\$1,085,100	\$1,181,947	\$1,105,200
BALANCE			-\$58,447	

Profile of Cases Managed and/or Key Services Provided

Cases Managed and/or Key Services Provided	FY 2018	FY 2019	FY 2020	FY 2021
Square Miles of Geological Mapping	271	269	269	428
Number of Educational Programs for Public Audiences	19	18	48	30
Number of Geologic Reports	8	14	13	15
Number of Geologic Presentations	22	26	25	28
Number of Grants and Contracts	10	10	15	16

FY 2021 Performance Highlights**1. Number of Publications on Geology/Hydrology/Hazards/Mineral Resources**

IGS publications increased from 11 in FY 20 to 18 in FY 21. Publications were focused on a wide array of geoscience issues and resources including mining and exploration, geologic hazards, and regional bedrock and surficial geologic maps. In addition to the 18 published products, IGS staff has produced a large number of informal deliverables, abstracts, and reports on a wide range of statewide relevant topics, including metallic and industrial minerals, natural resources, hydrogeology, oil and gas resources, regional stratigraphy, bedrock and surficial deposits, and geologic databases. The IGS publishes most of its products in-house through the Digital Mapping Laboratory, and nearly all products are made available for free download on the agency website.

2. Externally Funded Grant and Contract Dollars

IGS was funded and supported through 16 grants in FY 21 which consisted of a mix from federal, state, and private industry. Grant and contract dollars increased from \$639,902 in FY 20 to \$662,366 in FY 21. The USGS funding represent the principal source of external support for IGS, with seven concurrent awards in FY 21. In addition, funding from state agency partners (Idaho Department of Water Resources, Idaho Transportation Department, Idaho Office of Emergency Management, and Idaho Department of Lands) has enabled hydrogeologic projects in the Big Lost River Valley and Raft River Valley, the development of a statewide landslide database, an update to Idaho's active fault database, and continuation of abandoned mines/data preservation efforts (in association with USGS). Non-government support from the private sector includes geologic mapping in the De Lamar and Swisher Mountain quadrangles in the historic DeLamar mining district by Integra Resources Inc. and geologic mapping in the Yellow Pine quadrangle adjacent to the Stibnite mining district by Wilmat Petroleum Company.

Part II – Performance Measures

Performance Measure		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Goal 1						
Achieve excellence in collecting and disseminating geologic information and mineral data to the public, governmental agencies, elected officials, educational institutions, civic and professional organizations, and the mining, energy, agriculture, utility, construction, insurance, and banking industries. 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 Statute 33-2505).						
1. Number of Published Reports on Geology/Hydrology/Geohazards/Mineral & Energy Resources Goal 1. Objective A, Measure I	actual	31	11	11	18	-----
	target	39	20	25	11	11
2. Number of Website Viewers Goal 1. Objective B, Measure I	actual	487,249	137,863 ¹	278,919	21,388 ³	-----
	target	NA	NA	NA	140,000	279,000
3. Number of Website Products Used or Downloaded Goal 1. Objective B, Measure II	actual	229,893	----- ²	----- ²	5,621 ³	-----
	target	191,709	215,000	252,882	40,000	40,000
4. Percentage of Survey documents available through these programs Goal 1. Objective C, Measure I	actual	~99%	~99%	~99%	~99%	-----
	target	~99%	~99%	~99%	~99%	~99%
5. Percentage of published Geologic Maps that are uploaded to the national website depicting detailed geologic mapping in Idaho Goal 1. Objective D, Measure I	actual	100%	100%	100%	100%	-----
	target	100%	100%	100%	100%	100%

¹Due to the implementation of a different web statistic tool, the actual measure for FY 19 may be different than what was reported in previous Performance Reports.

² We did not have the data to calculate this measure due to the ongoing implementation of a different web statistic tool on our website. An estimate for this measure for FY 19 was reported in the FY 21 Strategic Plan in error.

³ We launched our new website and started collecting web stats on April 29, 2021, so these measures are only for the period between April 29, 2021 and June 30, 2021. Caution should be used when comparing FY 21 web stats to previous years as we started using a new web statistic tool on April 29, 2021. The number of website viewers extrapolated over the entire fiscal year would be 123,622, and the number of website products used or downloaded would be 32,489.

Performance Measure		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Goal 2						
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.						
6. 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, Measure I	actual	37.9%	38.2%	38.2%	38.7%	-----
	target	37.8%	40.5%	39.1%	38.6%	38.6%
7. 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, Measure I	actual	\$393,622	\$396,556	\$639,902	\$662,366	-----
	target	\$457,794	\$467,923	\$485,000	\$500,000	\$500,000
Goal 3						
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.						
8. Number of educational programs provided to public and private schools and the public at large. Goal 3. Objective A, Measure I	actual	19	18	48	30	-----
	target	19	15	19	18	18

Performance Measure Explanatory Notes

For Goal 1, Objective A, Measure I, the target for the number and scope of published reports is to be equal to or greater than the last full fiscal year reported, given comparable scope and staffing levels, as stated in the Strategic Plan. For the FY 22 benchmark, this corresponds to 11 publications produced in FY 20. The Strategic Plan specifies the number of publications produced each year is dependent on the scope of the publications; some years we publish many small-scope publications, and other years we focus on a few large-scope publications.

FY 21 Grants and Contracts

Abandoned Mine Lands Project, Task 5: R.S. Lewis (Idaho Department of Lands, March 2019-April 2021, \$141,677).

Abandoned Mine Lands Project, Task 6: R.S. Lewis (Idaho Department of Lands, April 2021-March 2023, \$169,445).

Data Preservation 12: R.S. Lewis and V.S. Gillerman (U.S. Geological Survey Data Preservation Program, July 2019-July 2020, \$67,496).

Data Preservation 13: R.S. Lewis and V.S. Gillerman (U.S. Geological Survey Data Preservation Program, July 2020-July 2021, \$68,505).

Detailed Mapping of the Holocene- and Late Quaternary-Active Traces of Northern Utah/Southern Idaho Active faults: Collaborative Research with Idaho Geological Survey and Utah Geological Survey: Z.M. Lifton (U.S. Geological Survey National Earthquake Hazard Reduction Program, July 2019-December 2020, \$28,218.56).

FY 21 Grants and Contracts (continued)

Development of a Statewide Landslide Inventory Database: Z.M. Lifton (Idaho Transportation Department Research Grant, October 2018-December 2020, \$90,114).

Geologic Mapping of De Lamar and Swisher Mountain 7.5' Quadrangles: V.S. Gillerman and D.M. Feeney (Integra Resources, May 2019-June 2021, \$ 103,261).

Geologic Mapping in the Idaho Cobalt Belt: R.S. Lewis (U.S. Geological Survey Earth-MRI Program, August 2019-October 2021, \$100,000).

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 2020-May 2021, \$162,342).

Geologic Map Schema Databases for Weiser, Salmon, and Rexburg: R.S. Lewis and D.M. Feeney (U.S. Geological Survey STATEMAP Program, June 2020-May 2021, \$156,050).

Geologic Mapping in the Yellow Pine quadrangle: R.S. Lewis (Wilmat Petroleum Company, May 2019-September 2020, \$39,999).

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

Mapping and Neotectonic Investigation of the Sawtooth Fault, Central Idaho: Collaborative Research with Idaho Geological Survey, Idaho State University, and BGC Engineering, Inc.: Z.M. Lifton (U.S. Geological Survey National Earthquake Hazard Reduction Program, June 2021-May 2022, \$23,528.60).

Raft River Valley Hydrogeologic Investigation Phase 1: A.L. Clark (Idaho Department of Water Resources, December 2019-November 2020, \$107,500).

Raft River Basin Hydrogeologic Investigation – Phase 2 (Hydrogeologic Framework and Water Budget): A.L. Clark (Idaho Department of Water Resources, January 2021-December 2023, \$375,000).

Update to Idaho's Active Fault Database: Z.M. Lifton (Idaho Office of Emergency Management, October 2020-July 2021, \$40,945.00).

For More Information Contact

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