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The U.S. Geological Survey (USGS): FY2020 Appropriations Process and Background

Background

The U.S. Geological Survey (USGS) aims to provide unbiased scientific information to describe and understand the geological processes of the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect the nation's quality of life. The USGS is a scientific agency that is housed within the Department of the Interior (DOI). In contrast to other DOI bureaus, it has no regulatory authority and does not manage any major federal land areas. The USGS also collects and stores scientific information in long-term continuous data sets. These data sets range from satellite imagery of land and ecosystem features to streamflow and groundwater data.

Congress created the USGS in 1879 in a portion of a law that is known as the USGS Organic Act (43 U.S.C. §31). The USGS Organic Act defined the initial scope of the USGS:

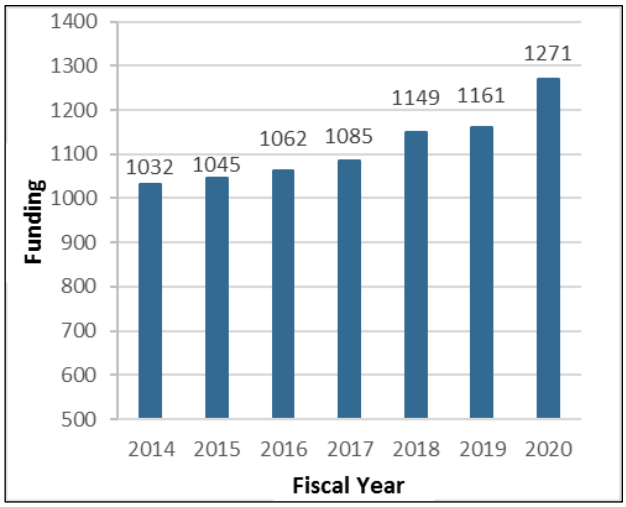
> "[The Director of the USGS] shall have the direction of the United States Geological Survey, and the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain."

Congress has expanded the USGS's scope in legislation since 1879 to include activities beyond studying mineral deposits and mapping. Presently, the USGS conducts scientific activities under six interdisciplinary mission areas: (1) Ecosystems, (2) Land Resources, (3) Energy, Minerals, and Environmental Health (4) Natural Hazards, (5) Water Resources, and (6) Core Science Systems. The USGS also has budget lines for Science Support (administrative activities and information) and Facilities. Congress appropriates funds for the agency through the Interior, Environment, and Related Agencies appropriations laws.

Appropriations

The Further Consolidated Appropriations Act, 2020 (P.L. 116-94), included appropriations for the USGS under Division D, the Department of the Interior, Environment, and Related Agencies Appropriations Act, 2020. Congress appropriated $1.271 billion to the USGS, which is $110 million above the FY2019-enacted level of $1.161 billion (a 9.5% increase; see **Figure 1**).

Figure 1. USGS Annual Appropriations
(nominal $ in millions)



Source: Congressional Research Service (CRS) using data from public laws.

Appropriations for FY2020 are $287 million above the President's FY2020 budget request of $984 million (see **Table 1**). The Trump Administration's FY2020 budget request proposed reductions for many mission areas compared to FY2019 levels. The Administration said the cuts were needed to address "higher priorities." In P.L. 116-94, Congress rejected the proposed cuts and increased funding in all mission areas from FY2019 levels. Congress also rejected the President's proposal to restructure the USGS from six to five mission areas and reorganize programs within a new structure. In the explanatory statement accompanying P.L. 116-94, Congress stated that more information was needed to evaluate whether a budget restructure would achieve the Administration's stated goal of improving efficiency.

Table 1. USGS Funding: FY2019 Enacted, FY2020 Request, and FY2020 Enacted
(nominal $ in millions)

Mission Area or Budget Line	FY2019 Enacted	FY2020 Request	FY2020 Enacted
Ecosystems	156.9	141.0	170.5
Land Resources	158.3	0.0	166.3
Energy, Minerals, and Environmental Health	111.7	86.1	113.5
Natural Hazards	166.3	145.0	170.9

Mission Area or Budget Line	FY2019 Enacted	FY2020 Request	FY2020 Enacted
Water Resources	226.3	179.9	234.1
Core Science Systems	117.9	207.2	137.9
Science Support	102.8	102.9	96.8
Facilities	120.4	121.3	180.9
Total	**1,160.6**	**983.5**	**1,271.0**

Sources: U.S. Department of the Interior Budget Justifications and Performance Information, FY2020, U.S. Geological Survey; P.L. 116-6; and P.L. 116-94.

The following sections summarize USGS Mission Areas and selected funding recommendations from Congress's explanatory statement accompanying P.L. 116-94.

Ecosystems Mission Area

The Ecosystems Mission Area conducts biological and ecological science to inform natural resource management decisions. Congress rejected the President's proposal to eliminate the Cooperative Research Units (CRU) Program and instead increased funding from $18.4 million in FY2019 to $24.0 million in FY2020. CRUs are intended to enhance graduate education in fisheries and wildlife science through research partnerships with the USGS, state natural resource agencies, universities, and other stakeholders. Under the mission area, invasive species received $23.3 million, of which $10.6 million is for Asian carp research.

Land Resources Mission Area

Congress retained the Land Resources Mission Area, which maintains observational networks and databases of land and climate change information, rejecting the President's request to eliminate the mission area and consolidate its programs in Ecosystems and Core Science Systems. The National Land Imaging Program, which operates the Landsat remote sensing satellite system, received $98.9 million—same as FY2019. Congress reduced funding for Land Change Science by $5.0 million compared to FY2019 due to the completion of biological carbon sequestration assessments. Funding for Climate Adaptation Science Centers, which includes developing a Midwest Climate Adaptation Science Center, increased by $13 million compared to FY2019.

Energy, Minerals, and Environmental Health Mission Area

The Energy, Minerals, and Environmental Health Mission Area conducts scientific research and assessments related to energy, minerals, and environmental health. Congress rejected the Administration's proposal to eliminate Environmental Health and provided $23.5 million for program activities on contaminant biology, unconventional oil and gas, toxic substances hydrology, and harmful algal blooms. Congress funded the President's proposal of $10.6 million for mapping and surveying critical minerals through the Earth Mapping Resources Initiative.

> Critical minerals, according to USGS, are "mineral commodities that have important uses and no viable substitutes, yet face potential disruption in supply, and are defined as critical to the Nation's economic and national security."

The Earth Mapping Resources Initiative, justified by the Administration as helping to reduce U.S. dependence on foreign nations for critical mineral supplies, includes surveying for critical minerals in Alaska, the midcontinent, and the western United States through public-private partnerships.

Natural Hazards Mission Area

The Natural Hazards Mission Area provides scientific information to reduce losses from natural hazards. Nearly half of the mission area funding is for earthquake hazards ($84.9 million), including earthquake early warning and the advanced national seismic system. The geomagnetism program supports the National Space Weather Strategy and received increased funding to continue a national magnetotelluric survey started by other federal agencies.

Water Resources Mission Area

The Water Resources Mission Area monitors water resources and conducts research to improve water resource management. Congress increased Cooperative Matching Funds by $1.8 million compared to FY2019 by providing $63.5 million to partner with nonfederal cooperators for water survey and science activities. Congress rejected the Administration's proposal to eliminate the Water Resources Research Act funding and instead provided $10 million to support Water Resources Research Institutes.

Core Science Systems Mission Area

The Core Science Systems Mission Area focuses on the mapping mission of USGS. The President's budget request proposed transferring some programs in Land Resources to Core Science Systems, thus increasing the overall funding request to the mission area. Congress rejected the proposed transfer and provided less funding to the mission area than the budget request but included an additional $10 million compared to FY2019 for both national cooperative geologic mapping and the national geospatial program.

Science Support

Congress decreased Science Support funding by reducing administration and management funding by $6 million compared to FY2019 and the President's budget request.

Facilities

Congress provided an additional $61 million in FY2020 compared to FY2019 for deferred maintenance and capital improvement under Facilities. The increase included funding to build a new facility for hydrologic instrumentation to replace USGS facilities that were impacted by the 2018 eruption and earthquake at Kilauea, Hawaii.

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