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The U.S. Geological Survey (USGS): FY2021 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; and support the management of water, biological, energy, and mineral resources. The USGS is a scientific agency 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 lands. The USGS also collects and stores scientific information in long-term 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 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.

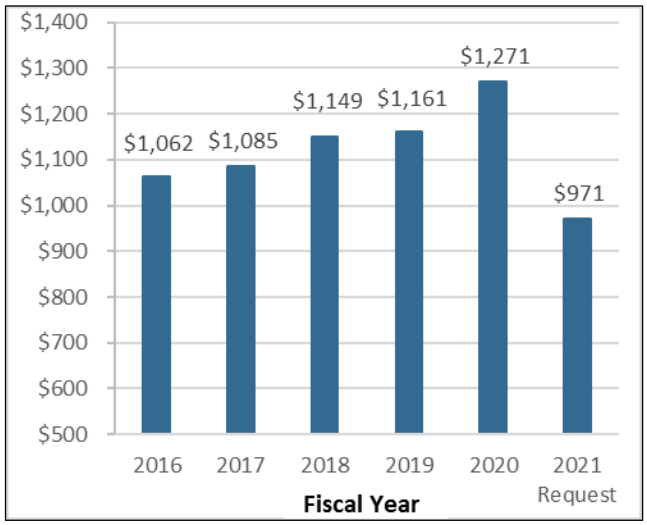
Since 1879, Congress has expanded the USGS's statutory authorities to include activities beyond studying mineral deposits and mapping. Presently, the USGS conducts scientific activities under six interdisciplinary mission areas: (1) Ecosystems; (2) Land Resources; (3) Energy, Minerals, and Environmental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

Appropriations

The President's budget request for FY2021 USGS appropriations is $971.2 million, which is $299.8 million less than the FY2020 enacted level of $1,271.0 million (a 23.6% reduction; **Figure 1**). The FY2021 request, if enacted, would be the lowest funding amount for the USGS since the FY2006 enacted level of $965.3 million. The request proposes restructuring the USGS from six to five mission areas and reorganizing mission areas with new programs. The request also includes changing the structure of the USGS Director's Office—splitting the deputy director position into two deputy positions (i.e., one for operations and one for administration and policy) and establishing a new chief scientist position.

Figure 1. USGS Annual Appropriations, FY2016-FY2020 and FY2021 Request

(nominal $, in millions)



Sources: Congressional Research Service (CRS) using data from public laws and U.S. Department of the Interior, *Budget Justifications and Performance Information*, FY2021, U.S. Geological Survey.

Under the FY2021 request, all mission areas and budget lines, besides Core Science Systems, would receive reductions in funding from FY2020 enacted levels (**Table 1**). (Core Science Systems would receive a net reduction when discounting the transfer of the National Land Imaging Program from Land Resources to this account.) The largest reductions from the FY2020 enacted levels would be for the Ecosystems Mission Area (approximately 25%) and Facilities (approximately 29%).

Table 1. USGS Funding: FY2019 Enacted, FY2020 Enacted, and FY2021 Request

(nominal $, in millions)

Mission Area or Budget Line	FY2019 Enacted	FY2020 Enacted	FY2021 Request
Ecosystems	156.9	170.5	127.3
Land Resources	158.3	166.3	0
Energy, Minerals, and Environmental Health	111.7	113.5	91.2
Natural Hazards	166.3	170.9	138.0
Water Resources	226.3	234.1	180.8
Core Science Systems	117.9	137.9	212.0
Science Support	102.8	96.8	94.2

Mission Area or Budget Line	FY2019 Enacted	FY2020 Enacted	FY2021 Request
Facilities	120.4	180.9	127.6
Total	**1,160.6**	**1,271.0**	**971.2**

Sources: U.S. Department of the Interior, *Budget Justifications and Performance Information*, FY2021, U.S. Geological Survey; P.L. 116-6; and P.L. 116-94.

Note: Land Resources would be eliminated and funding transferred to Core Science Systems and Ecosystems.

The following sections summarize USGS mission areas and selected programs from the FY2021 budget proposal.

Ecosystems Mission Area

The Ecosystems Mission Area conducts biological and ecological science to inform natural resource management decisions. The budget request proposes consolidating research currently spread across five existing Ecosystem programs into three new programs and one new center: the Species Management Research Program, Land Management Research Program, Biological Threats Research Program, and Climate Adaptation Science Center. The request also proposes eliminating the Cooperative Research Units (CRU) Program (CRUs received $24 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.

Energy, Minerals, and Environmental Health Mission Area

The Energy, Minerals, and Environmental Health Mission Area includes scientific research and assessments related to energy, minerals, and environmental health. The FY2021 request proposes eliminating the Environmental Health Program, which supports studies of the effect of contaminants and pathogens on humans and other organisms. In FY2020, Congress appropriated $10.6 million for mapping and surveying critical minerals through a new Earth Mapping Resources Initiative. The FY2021 budget request includes $10.6 million to continue this initiative.

> Critical minerals, according to the 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."

Natural Hazards Mission Area

The Natural Hazards Mission Area provides scientific information to reduce losses from natural hazards. For FY2021, the Administration proposes to reduce funding for the Earthquake Hazards Program by 29% compared to FY2020 enacted levels. Most of this reduction would affect earthquake early warning activities.

Water Resources Mission Area

The Water Resources Mission Area monitors water resources and conducts research to improve water management. The budget request proposes restructuring the mission area to create two new programs and eliminate the Water Resources Research Act Program. The proposed Water Observing Systems Program would combine the current Groundwater and Streamflow Information Program, which encompasses over 10,000 streamgages, and some water quality monitoring activities.

Core Science Systems Mission Area

The Core Science Systems Mission Area focuses on the mapping mission of the USGS. Under the proposed restructuring, the National Land Imaging Program and some components of the Land Change Science Program would transfer to Core Science Systems from Land Resources. The National Land Imaging Program operates the Landsat land remote sensing satellite system, including two active satellites. The program currently is preparing Landsat 9, the latest satellite in the series, for a FY2021 launch.

Potential Issues for Congress

The Administration has requested 23.6% less funding for the USGS in FY2021 compared to FY2020 enacted levels. Since FY2017, Congress has increased funding levels for the USGS as compared with the Administration's request. For example in FY2020, Congress provided a 9.5% increase over prior-year funding levels, despite the Administration's request for a 15.3% decrease. The Administration stated that its proposed reductions for FY2021 allow the budget to address other priorities.

Similar to the FY2020 budget request, the Administration's FY2021 budget request proposes restructuring the USGS from six to five mission areas and reorganizing mission areas with new programs. Congress rejected the FY2020 proposal and stated in the explanatory statement accompanying P.L. 116-94 that more information was needed to evaluate whether a budget restructuring would achieve the Administration's stated goal of improving efficiency. Congress may reevaluate the restructuring proposal and any additional information provided by the USGS during the FY2021 appropriations process to determine if the realignments achieve benefits asserted by the Administration.

The priorities and scope of the USGS's activities and mission also are potential issues for Congress. Some contend that USGS activities have expanded beyond the scope of the USGS Organic Act. They note that USGS involvement in researching ecosystem restoration, species, and environmental health, for example, strays from the USGS's primary mandate reflected in its Organic Act. These observers would like to see more effort given to geological and energy-related work by the USGS. Some stakeholders counter this claim by noting that the USGS has expanded its scope in response to congressional authorizations and direction. Further, they contend that the USGS's mission has changed over time to reflect the scientific needs of DOI and the country.

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