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The U.S. Geological Survey (USGS): FY2023 Appropriations and Background

Background

The U.S. Geological Survey (USGS)—a scientific agency housed with the Department of the Interior (DOI)—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 also collects scientific information for long-term data sets. These data sets range from satellite imagery of land and ecosystem features to streamflow and groundwater data. In contrast to other DOI bureaus, USGS has no regulatory authority and does not manage any major federal lands.

Congress created the USGS in 1879 in 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 related to ecosystems and natural hazards. The USGS conducts scientific activities under interdisciplinary mission areas, and each mission area has its own budget line. The USGS also has budget lines for Science Support (administrative activities and information) and Facilities. Congress typically appropriates funds for the agency through annual Interior, Environment, and Related Agencies appropriations acts.

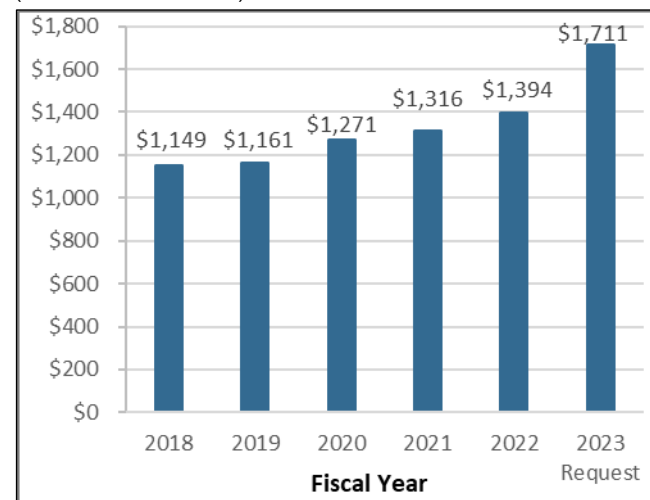
FY2023 Budget Request

The President's budget request for USGS appropriations in FY2023 is \$1.711 billion, which is \$317 million more than the FY2022 enacted level of \$1.394 billion (nearly a 23% increase; **Figure 1**). For FY2022, the President requested a 25% increase over the FY2021 level of \$1.316, and Congress provided a 6% increase in annual appropriations.

In 2021, Congress also provided the USGS with \$537 million in supplemental appropriations in the Infrastructure Investment and Jobs Act (IIJA; P.L. 117-58) and P.L. 117-43. Congress made \$266 million of these supplemental funds available in FY2022, with the remainder available in subsequent fiscal years. For FY2023 under the IIJA, Congress provided \$64 million for the USGS Earth Mapping Resources Initiative (MRI) and \$5 million for the National Geological and Geophysical Data Preservation Program. The USGS has provided information on how the agency plans to spend this funding, which is to support

scientific information and data for infrastructure investments, particularly those using mineral resources.

Figure 1. USGS Annual Appropriations, FY2018 to FY2022 and FY2023 Budget Request
(nominal \$, in millions)



Source: Congressional Research Service (CRS), based on enacted appropriations laws.

Table 1. USGS Funding: FY2021 and FY2022 Annual Appropriations and FY2023 Budget Request
(nominal \$, in millions)

Mission Area or Budget Line	FY2021 Enacted	FY2022 Enacted	FY2023 Requested
Ecosystems	259.1	277.9	375.7
Energy and Mineral Resources	90.0	95.2	147.0
Natural Hazards	175.5	186.0	219.8
Water Resources	263.1	285.9	302.7
Core Science Systems	252.7	263.8	348.8
Science Support	95.7	99.7	129.2
Facilities	179.4	184.8	188.1
Total	1,315.5	1,394.4	1,711.3

Sources: FY2023 U.S. Geological Survey Budget Justification, P.L. 116-260, and P.L. 117-103.

Notes: Table figures may not add to totals shown due to rounding and a \$1.0 million FY2022 Congressionally Directed Spending item.

The following sections summarize USGS mission areas and selected programs in the FY2023 budget request.

Ecosystems Mission Area

The Ecosystems mission area houses five programs and the agency's cooperative research units to conduct biological and ecological science to inform natural resource management decisions. The FY2023 budget requests an increase of \$97.8 million above the FY2022 enacted level of \$277.9 million. Specifically, the budget request proposes an increase of \$33.8 million above the FY2022 enacted level of \$51.9 million for the National and Regional Climate Adaptation Science Centers. These university-based centers conduct research to help resource managers understand the impacts of climate change and develop climate adaptation strategies. Similar to the FY2022 budget request, other requested funding increases across the mission area for FY2023 include activities to support conservation science and adaptive management of DOI land, quantify ecosystem services, reduce threats of invasive species and wildlife diseases, and understand climate impacts on ecosystems.

Energy and Mineral Resources Mission Area

The Energy and Mineral Resources mission area includes scientific research and assessments related to energy and minerals. The FY2023 budget requests an increase of \$51.8 million above the FY2022 enacted level of \$95.2 million for the mission area. Under the Energy Resources Program, the request includes an increase of \$25.2 million above the FY2022 enacted level of \$31.5 million to support activities related to geologic carbon sequestration, as well as greenhouse gas inventory and reduction tools for federal lands. Under the Mineral Resources Program, the request includes an increase of \$26.6 million above the FY2022 enacted level of \$63.7 million to support supply chain research and assessments of potential new sources of critical minerals, and mine waste research and assessment in support of reclamation and potential mineral recovery.

Natural Hazards Mission Area

The Natural Hazards mission area provides scientific information to reduce losses from natural hazards. The FY2023 budget requests an increase of \$33.8 million above the FY2022 enacted level of \$186.0 million for the mission area, including a \$19.1 million increase for the Coastal and Marine Hazards and Resources Program to improve coastal hazard modeling and forecasting, coastal resilience and risk reduction, and assessing carbon sequestration in coastal environments (i.e., blue carbon). The increase also includes \$9.9 million in additional funding above the FY2022 enacted level for subduction zone and induced seismicity science and observation infrastructure upgrades under the Earthquake Hazards Program.

Water Resources Mission Area

The Water Resources mission area monitors water resources and conducts research to improve water management. The FY2023 budget requests an increase of \$16.8 million above the FY2022 enacted level of \$285.9 million for the mission area, including increased funding for the Water Availability and Use Science Program and for the Groundwater and Streamflow Information Program (GSIP). Under GSIP, the Next Generation Water Observing

System, initiated in FY2018, would receive \$30.9 million to pilot technology in selected watersheds. Federal Priority Streamgages, the "backbone" network of federal streamgages, would receive \$30.3 million. The budget request includes \$64.5 million of Cooperative Matching Funds for activities across Water Resources—a decrease of \$1 million compared to FY2022 funding.

Core Science Systems Mission Area

The Core Science Systems mission area generally focuses on the USGS's mapping activities and supports science across the agency. The mission area also includes the National Land Imaging Program, which operates Landsat satellite program, among other activities. The FY2023 budget requests an increase of \$85.0 million above the FY2022 enacted level of \$263.8 million, which includes

- an increase of \$30.0 million for decision support tools to evaluate risks and trade-offs for land management decisions regarding climate response and resilience;
- an increase of \$24.6 million for the creation of an American Conservation and Stewardship Atlas, by using the USGS's Protected Areas Database, to inform conservation decisions for the Administration's America the Beautiful Initiative; and
- an increase of \$10.0 million for the Federal Geographic Data Committee to create a federal climate data portal that would geospatially integrate climate-relevant data, tools, and information from across the government to guide nonfederal government and commercial decision making regarding climate change.

Science Support and Facilities Budget Lines

The Science Support budget line includes funding to provide business services and information technology management to operate USGS science programs. The FY2023 budget requests an increase of \$29.5 million above the FY2022 enacted level of \$99.7 million for the budget line, which would fund initiatives that aim to strengthen scientific integrity and diversity, invest in cloud and high-performance computing, and transition USGS's sedan fleet to zero-emission vehicles, among other activities.

The Facilities budget line includes funding for rent, facility operations and maintenance, and deferred maintenance and repair. The FY2023 budget requests an increase of \$3.3 million above the FY2022 enacted level of \$184.8 million.

Issues for Congress

The President's FY2022 budget requested to increase USGS funding by 25% over FY2021 funding; Congress provided a 6% increase (\$317 million) in annual appropriations and \$537.0 million in supplemental appropriations (in P.L. 117-43 and the IJA) for FY2022. In the IJA, Congress also provided the USGS with \$69.0 million for FY2023, which Congress may take into consideration when determining annual appropriations for the USGS in FY2023. In FY2022, Congress also included a \$1 million Congressionally Directed Spending (CDS) item for the USGS. Congress may also consider whether to fund additional such items in FY2023.

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