

BUDGET The United States Department of the Interior **JUSTIFICATIONS**

and Performance Information
Fiscal Year 2026

U.S. GEOLOGICAL SURVEY

NOTICE: These budget
justifications are prepared
for the Interior, Environment
and Related Agencies
Appropriations
Subcommittees.



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Executive Summary

Introduction

The FY 2026 USGS budget advances the Administration's priorities to unleash American energy, restore mineral independence, and strengthen national resilience. The budget invests in critical mineral and energy research and mapping to secure supply chains and reduce dependence on foreign sources, consistent with Executive Orders (EO) 14154 *Unleashing American Energy* and EO 14241 *Immediate Measures to Increase American Mineral Production*. The budget supports cutting-edge monitoring and analysis to safeguard communities from natural hazards—including earthquakes, floods, volcanoes, wildfires, and coastal storms—while enhancing national preparedness. Continued funding for water monitoring and modeling supports economic growth and smart resource management through the National Water Census. The USGS maintains vital satellite operations, Earth observation, and 3 Dimensional (3D) geospatial modeling that power infrastructure planning, land use decisions, and energy development.

The budget supports the operation of Landsat 8 and 9 ground and flight operations, continuing the uninterrupted dissemination of Landsat data and products. It restructures the unaffordable Landsat Next mission, which required simultaneous development and launch of three satellites with significantly enhanced capabilities compared to the current Landsat satellites. The USGS will work with the National Aeronautics and Space Administration (NASA) to identify a more affordable architecture for the next Landsat mission to maintain the continuity of Landsat data, which are used by natural resource managers, States, and industry. The budget does not request funding for the Ecosystem Mission Area and all activities within it, except for the invasive carp work, which is funded through the Water Resources Mission Area.

The request continues investments that enhance the country's ability to manage its vast natural resources efficiently and responsibly. The budget advances Energy and Mineral Dominance through a reorganization that moves geologic data and mapping and offshore energy and minerals research activities into a newly named Geology, Energy and Minerals Mission Area. The budget provides funding for the USGS to fully support the Administration's goal to unleash American energy and restore American mineral dominance as outlined in EO 14154 and 14241 and continues the expansion of the Earth Mapping Resources Initiative (Earth MRI) to accelerate domestic mineral and energy resource assessments vital to America's supply chains, manufacturing base, and defense capabilities.

USGS's FY 2026 Budget strengthens America's water security and economic resilience by supporting core programs that partner with over 4,300 public and private organizations. These efforts deliver vital data on water quantity, quality, and use, empowering local communities, farmers, energy producers, and industry leaders to make informed, cost-effective decisions. Continued investment in the USGS streamgaging network ensures timely, accurate information to safeguard lives and property from floods, droughts, and hurricanes, while supporting smart infrastructure planning and resource allocation.

Public safety is a central focus, with continued operation of earthquake early warning, volcano monitoring, coastal and landslide hazard assessments. These investments support the Administration's goal of protecting American lives and property through targeted, cost-effective science solutions. The USGS will also invest in data modernization, including improved digital platforms, cloud services, and user-driven tools that make Federal science more accessible to landowners, local governments, and industry. These efforts reduce duplication, increase transparency, and strengthen partnerships with the private sector.

The FY 2026 Budget allows the USGS to continue to be a practical, responsive science agency that delivers real value to the American people. By focusing on core strengths in energy and mineral resource assessments and supply chain analysis, hazard monitoring, water science, and geospatial data, the USGS will continue to inform decisions that grow the economy, protect communities, and uphold the stewardship of the Nation’s land and resources.

Mission Statement

The USGS, the scientific arm of the Department of the Interior, was established in 1879 (43 U.S.C. 31) for “the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain.” The USGS monitors, analyzes, and predicts current and evolving Earth-system interactions. Through these activities, the USGS delivers reliable and actionable scientific information at scales and timeframes relevant to decision making on critical mineral resources and energy development, minimizing loss of life and property from natural disasters, managing water, and promoting economic growth. The USGS is key to the President’s ongoing commitment to scientific discovery and innovation that supports a robust economy and decision making related to critical mineral and energy needs.

Budget Overview

The FY 2026 Budget request of \$891.6 million supports the Department of the Interior’s mission of natural resource management; delivering natural hazards information that protects public safety and property; providing objective data that informs energy development across the Nation; supporting water infrastructure; and providing access to foundational science, data, imagery, and geospatial frameworks to improve natural resource management.

Summary Table

2026 President’s Budget Submission
(\$000)

Budget Authority	2024 Actual	2025 Notional^{1/}	2026 Request
Current	1,455,434	1,450,197	891,560
Total Current, w/o Supplemental	1,455,434	1,450,197	891,560
Infrastructure Investment and Jobs Act (IIJA) P.L. 117-58			64,000
Transfer: OIG Oversight for P.L. 117-58			-320
Total Current w/Supplemental^{2/}	[1,455,434]	[1,450,197]	955,240

^{1/} Resource levels included are estimates. The President reserves his authority under the “Full-Year Continuing Appropriations and Extensions Act, 2025” (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

^{2/} Supplemental funding reflects amounts made available in the fiscal year, not estimated allocations or obligations.

USGS FY 2026 Priorities Under President Trump's Administration

Unleashing American Energy and Mineral Resources

The USGS plays a vital role in advancing the Administration's goal of unleashing American energy and mineral resources by delivering the geoscientific foundation and mapping necessary to bolster domestic industry. Through extensive research and assessments of oil, gas, coal, geothermal, hydrogen, and other emerging resources, USGS provides objective data that informs energy development across the Nation. These efforts reduce uncertainties for industry and inform permitting by Federal land managers, enabling expanded access to energy resources that fuel American homes, industries, and the economy and providing future opportunities for the domestic energy industry. In parallel, the USGS continues to assess the distribution and potential of key mineral resources on Federal and private lands—particularly those needed for defense, electronics, and high-tech manufacturing.

To reduce U.S. reliance on foreign mineral imports, the USGS leads efforts to collect, analyze, and disseminate high-resolution geologic, geophysical, and geochemical data. This work includes updating nationwide geological maps, conducting airborne surveys, and advancing 3D subsurface modeling. The USGS also collects and manages historic data and maps, and irreplaceable samples, such as rock core from remote Alaska. These tools and collections are essential for identifying untapped critical mineral deposits, including manganese, graphite, and rare earth elements. Through the Earth MRI, the USGS partners with state geological surveys to map regions with high potential for critical mineral development. These efforts directly support EOs 14154 and 14241, which call for decisive action to strengthen domestic mineral supply chains and reduce strategic vulnerabilities.

USGS science also informs streamlined permitting and exploration processes by improving the quality, accessibility, and extent of geologic data. By equipping regulators and developers with resource science, environmental reviews and permitting decisions can proceed more efficiently, reducing delays and uncertainty. Additionally, USGS supports decision-making related to land use, infrastructure, and resource extraction through updated geological hazard models and resource forecasts. This targeted science ensures that Federal and State agencies have the data needed for resource development, consistent with the administration's commitment to revitalizing American energy and industrial capacity.

The USGS is leveraging Artificial Intelligence (AI) and Machine Learning (ML) (AI/ML) to accelerate data driven decision making and modernize mineral and energy assessments. The USGS has demonstrated these techniques for assessing geothermal resources and critical minerals in brines. The USGS has also partnered with the Defense Advanced Research Projects Agency (DARPA) to accelerate data analysis needed for critical mineral resource assessments, reducing time for this step from years to weeks. These innovations directly support Administration priorities by enabling more accurate and timely insights into critical resources.

Restoring U.S. Mineral Dominance

The USGS is central to restoring American mineral dominance by leading the scientific efforts necessary to secure and expand domestic access to critical mineral resources. With many strategic and economic sectors relying heavily on imported minerals, the USGS is working aggressively to identify new domestic sources. In FY 2026, the USGS will continue national mineral resource assessments to better define the location, quality, and accessibility of key critical minerals. The USGS is also mapping seabed minerals in the next frontier in direct support of EO 14285 *Unleashing America's Offshore Critical Minerals and*

Resources. These efforts are being enhanced by ML techniques; for example, the USGS is using machine learning techniques to determine the resource potential of critical minerals in seafloor massive sulfide deposits. Other Federal agencies and offshore exploration companies rely on the USGS for characterization and mapping of the potential for critical minerals of the Outer Continental Shelf (OCS), which at 3.2 billion acres is larger than the land area of the United States.

In direct support of EO 14241, which calls for immediate measures to increase American mineral production, the USGS is modernizing its mineral supply chain analysis. This includes tracking global mineral trade flows, identifying supply risks, and forecasting vulnerabilities in U.S. industrial sectors. The USGS advises a wide range of Federal Agencies and programs from the National Defense Stockpile, Department of Energy's Loan Program Office, and the intelligence community, to the Development Finance Corporation, International Trade Administration, and Export-Import Bank. USGS data underpin the interagency response to recent EOs on energy and minerals, and inform policy actions, section 232 investigations conducted under the Trade Expansion Act, billions in investment decisions, and emergency preparedness strategies, ensuring that U.S. industries and the military are not constrained by unstable or adversarial foreign suppliers. Through the USGS National Minerals Information Center, stakeholders have access to near-real-time data on availability, production, and pricing of dozens of critical minerals.

Further, the USGS supports permitting and exploration activities through the Earth MRI, which is deploying advanced geophysical and geochemical techniques to improve understanding of subsurface mineral potential. These efforts prioritize areas with known data gaps and high potential for discovery of critical minerals. By dramatically improving the scientific foundation for mineral exploration, USGS data reduces investment risk for private developers and shortens project timelines. These coordinated, science-driven efforts enable the United States to reclaim its position as a global leader in mineral production, reduce strategic dependencies, and drive innovation and economic growth.

Enhancing National Preparedness for Natural Hazards

From the Executive Branch to States to local communities across America, people rely on the USGS for real-time situational awareness when disaster strikes. In FY 2026, the USGS will continue to advance national resilience against geologic hazards through real-time monitoring, long-term hazard assessments, and targeted research. Through the Advanced National Seismic System (ANSS), the USGS and its state and university partners operate a nationwide earthquake monitoring network that delivers earthquake alerts and situational awareness products to inform rapid response and public safety decisions. The USGS is at the forefront of applying ML to speed up and improve earthquake detection and earthquake early warning, and identify smaller earthquakes that allow the Nation to map the detailed structure of faults and understand earthquake physics. These advances will allow USGS to more directly address questions of how and why earthquakes occur, when and where they do, and better forecast where they will occur in the future. The USGS will continue to develop and deliver assessments of earthquake hazards that are used in building codes and infrastructure design. The USGS will also continue to provide high-quality, real-time seismic data through the Global Seismographic Network, which is needed for characterizing earthquake impacts to U.S. military facilities overseas, tsunami warnings, and nuclear test detection.

The USGS will maintain its monitoring footprint at the country's highest-threat volcanoes, ensuring readiness to detect and respond to signs of unrest. In FY 2026, the program will be working on the final phase of the next-generation lahar detection system at Mount Rainier, the highest-threat volcano in the

Cascades Range. These improvements are part of implementing the National Volcano Early Warning System (NVEWS), which enhances national preparedness by strengthening real-time monitoring and communication infrastructure at the most dangerous volcanic sites. Volcano observatory scientists are incorporating new ML techniques from seismic monitoring to provide additional constraints on volcanic processes for near real-time analysis of unrest.

The USGS will continue landslide hazard assessments, including characterization of post-wildfire debris flow threats and key support to National Oceanic and Atmospheric Agency's (NOAA's) National Tsunami Warning Center with focused work in southeast Alaska—an area at risk of landslide-generated tsunamis. The USGS Geomagnetism Program will maintain operations that supply real-time geomagnetic data essential for protecting the electric grid and for space weather forecasts issued by NOAA and the U.S. Air Force. In addition, the USGS will sustain marine hazard and resource mapping capabilities, including forecasts of hurricane-driven water levels, waves, and erosion. These forecasts support disaster preparedness and help guide coastal response planning and offshore resource evaluations vital to national energy and mineral strategies. In a partnership with the Department of Defense (DOD), the USGS is using ML to produce maps of the future likelihood of coastal change over the next decade.

Strengthening Water Data and Infrastructure

The USGS supports the Administration's emphasis on modern infrastructure and resource independence through its nationwide water monitoring and modeling activities. In FY 2026, the USGS continues to maintain and enhance its extensive network of over 12,000 streamgages, which deliver real-time data on streamflow, flooding, and drought conditions. These data are essential for managing water supplies for agriculture, energy production, manufacturing, and municipal use—sectors critical to the American economy. In line with the Administration's goals, USGS water data provide the backbone for efficient, locally driven decision-making and strengthens community-level resilience. Additionally, AI/ML is being applied to process observational data and implement advanced quality control techniques, to bring efficiencies to the operation of our networks while ensuring the accuracy and reliability of the information used in models and decision-making.

A key component of this effort is the advancement of water availability modeling through the National Water Census. The USGS is investing in next-generation modeling platforms that incorporate AI/ML to better forecast water demand, supply, and quality across different scenarios. AI/ML technologies are proving effective at increasing the speed and accuracy at which predictions of water flow, quality (such as temperature, salinity and nutrients), and use can be developed at large, national scales. The USGS is using this technology to take advantage of its large, historical water data sets that are critical for AI/ML training and improved predictions of water cycle components. These advanced tools help Federal and State agencies, water utilities, and private industry plan for future infrastructure investments and manage competing demands. Accurate forecasts support irrigation planning, energy generation, industrial output, and urban growth—all without compromising sustainability or economic competitiveness.

USGS science also plays a vital role in responding to water-related disasters and informing infrastructure investments. During floods, hurricanes, or extended droughts, USGS field teams provide rapid, verified hydrologic data that emergency managers rely on to protect communities and critical assets. Additionally, the integration of elevation, land cover, and water data into high-resolution 3D hydrologic models enables better siting of energy facilities, levees, and pipelines—aligning with the Trump administration's focus on

streamlining permitting and boosting domestic infrastructure. By delivering actionable, real-time water science, the USGS helps secure the country's water future and ensures continued economic growth underpinned by reliable water resources.

Modernizing Geospatial and Earth Observation Systems

The USGS continues to lead the country in delivering advanced geospatial and Earth observation capabilities that support energy development, infrastructure siting, natural hazard preparedness, and national security. In FY 2026, the USGS will fully fund operations of the Landsat 8 and Landsat 9 satellites—critical assets that provide consistent, high-resolution land imaging used by government agencies, private industry, and academic institutions. The USGS is also working with NASA to evaluate cost-efficient options for maintaining Landsat data continuity, including potential commercial partnerships. Earth observation data and information from the Landsat satellites are fundamental to the missions of Federal departments and agencies, all 50 States, Tribes, and the US territories, hundreds of academic and non-profit entities, and is widely used across the commercial sector to accelerate economic growth. Landsat remains the most trusted, cost-effective, and reliable source of satellite-based information available for natural resources management.

In support of national infrastructure priorities, the USGS is continuing its 3D Elevation Program (3DEP) and the 3D Hydrography Program (3DHP). These initiatives integrate elevation and surface water data into high-resolution 3D models that power decision-making across sectors—from pipeline routing and mine permitting to levee design and disaster mitigation. These models are essential for siting energy projects in remote areas, evaluating flood risks to critical facilities, and optimizing land development strategies. The result is faster, safer, and more cost-effective infrastructure planning that aligns with Federal goals to reduce regulatory barriers and support domestic growth. Nearly 400 different governmental organizations across 19 Federal departments and all 50 States have contributed to the 3DEP initiative and received data to support vital services, new applications, and decisions affecting all sectors of the national economy.

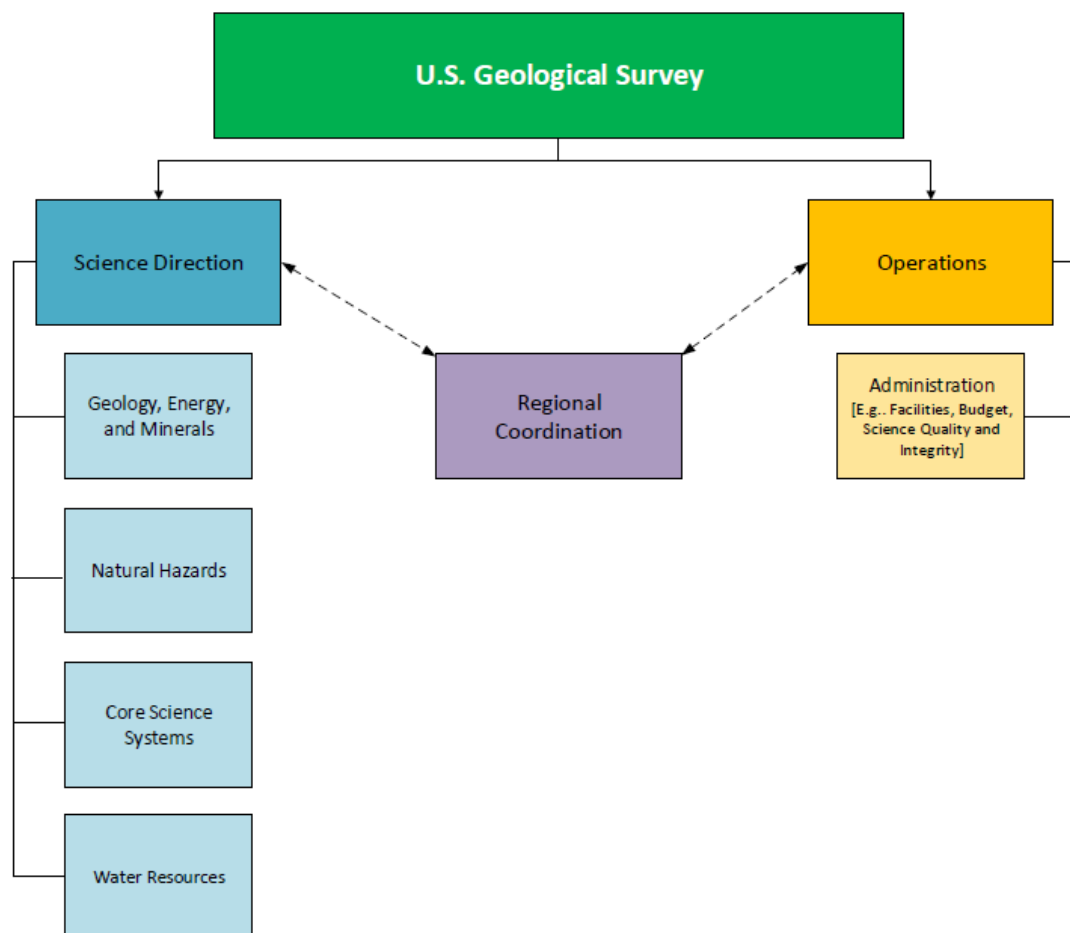
Finally, USGS geospatial science plays a key role in defense readiness, border management, wildfire response, and environmental monitoring. High-performance computing and cloud-based platforms enable rapid delivery of imagery, terrain data, and environmental models to Federal, State, and local stakeholders. By modernizing America's geospatial foundation, the USGS helps the Nation stay competitive, secure, and prepared—consistent with the Trump administration's vision of strong domestic infrastructure, efficient governance, and data-driven public service.

Promoting Science that Supports Economic Growth

The USGS prioritizes science that delivers tangible, practical benefits for the American economy by aligning its activities with the needs of key industries, infrastructure planning, and natural resource management. In FY 2026, the USGS will continue its focus on providing decision-ready data and tools that help sectors like energy, construction, mining, water management, and agriculture make informed, cost-effective decisions. This includes forecasting tools for drought and flooding that protect agricultural output, mineral assessments that support domestic manufacturing, and geospatial mapping that informs site selection and hazard mitigation for infrastructure projects. These capabilities reduce economic risk, lower planning costs, and accelerate private and public investments—advancing the Trump Administration's goal of making American industries more competitive and resilient.

In keeping with the Administration’s emphasis on public-private partnerships, the USGS will continue its collaboration with the private sector, local governments, and academic institutions to ensure science can be applied where it is needed most. Programs such as the Earth MRI, 3DEP, and Landsat satellite systems will continue to be leveraged to streamline permitting processes, inform infrastructure development, and support job creation in rural and energy-producing regions. The USGS is also improving access to its data through cloud-based platforms and modernized tools, enabling Federal, State, and local agencies, as well as the private sector, to build projects with reliable science at their fingertips. By focusing on actionable science that drives productivity, reduces regulatory delays, and enables smarter investments, the USGS helps power the economic engine of the United States in support of national priorities.

Organizational Chart



Account and Activity/SubActivity Details

Account: Surveys, Investigations, and Research

Summary of Requirements Table

Summary of Requirements U.S. Geological Survey - Surveys, Investigations, and Research

Dollars in Thousands (\$000)

Surveys, Investigations, and Research	2024 Actual	2025 Notional^{1/}	2026 Request
Ecosystems			
Total, Ecosystems	[299,377]	292,877	-
Geology, Energy and Minerals			
Energy Resources Program	32,364	[34,699]	[36,935]
Mineral Resources Program	68,729	[75,404]	[69,904]
Total, Geology, Energy and Minerals	[101,093]	155,337	137,073
Natural Hazards			
Total, Natural Hazards	[198,636]	196,126	136,526
Water Resources			
Total, Water Resources	[288,772]	288,772	223,818
Core Science Systems			
Satellite Operations	[95,334]	[95,334]	[81,599]
Total, Core Science Systems	[273,221]	227,987	165,041
Science Support			
Total, Science Support	[105,000]	105,000	80,000
Facilities			
Facilities Maintenance, Modernization and Restoration Program	[74,840]	[74,840]	[54,844]
Total, Facilities	[184,098]	184,098	149,102
Total, Surveys, Investigations, and Research w/o Supplementals	1,455,434	1,450,197	891,560
2022 Infrastructure Investment and Jobs Act (P.L. 117-58)			63,680
TOTAL, Surveys, Investigations, and Research w/ Supplementals	[1,524,089]	[1,521,595]	955,240

^{1/} Resource levels included are estimates. The President reserves his authority under the “Full-Year Continuing Appropriations and Extensions Act, 2025” (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

Appropriations Language

SURVEYS, INVESTIGATIONS, AND RESEARCH

For expenses necessary for the United States Geological Survey to perform surveys, investigations, and research covering topography, geology, hydrology, biology, and the mineral and water resources of the United States, its territories and possessions, and other areas as authorized by the Organic Act of March 3, 1839, as amended (43 U.S.C. 31), and sections 3 and 11 of the Outer Continental Shelf Lands Act, as amended (43 U.S.C. 1332 and 1340); classify lands as to their mineral and water resources; give engineering supervision to power permittees and Federal Energy Regulatory Commission licensees; administer the minerals exploration program as authorized by section 1 of the Act of August 21, 1958, Public Law 85-701 (30 U.S.C. 641); conduct inquiries into the economic conditions affecting mining and materials processing industries as authorized by the provisions at chapter 3 of title 30, United States Code, section 2 of the Mining and Minerals Policy Act of 1970, Public Law 91-631, as amended (30 U.S.C. 21a), and section 8(a)(1) of the Strategic and Critical Materials Stock Piling Revision Act of 1979, Public Law 96-41, as amended (50 U.S.C. 98g(a)(1)), and related purposes as authorized by law; and to publish and disseminate data relative to the foregoing activities; \$891,560,000, to remain available until September 30, 2027; of which \$81,599,000 shall remain available until expended for satellite operations; and of which \$54,844,000 shall be available until expended for deferred maintenance and capital improvement projects that exceed \$100,000 in cost: Provided, That none of the funds provided for the ecosystem research activity shall be used to conduct new surveys on private property, unless specifically authorized in writing by the property owner: Provided further, That no part of this appropriation shall be used to pay more than one-half the cost of topographic mapping or water resources data collection and investigations carried on in cooperation with States and municipalities. Provided further, That of the amount appropriated under this heading, not to exceed \$15,000 may be for official reception and representation expenses.

Note.—This account is operating under the Full-Year Continuing Appropriations and Extensions Act, 2025 (Division A of Public Law 119-4).

ADMINISTRATIVE PROVISIONS

From within the amount appropriated for activities of the United States Geological Survey such sums as are necessary shall be available for contracting for the furnishing of topographic maps and for the making of geophysical or other specialized surveys when it is administratively determined that such procedures are in the public interest; construction and maintenance of necessary buildings and appurtenant facilities; acquisition of lands for gauging stations, observation wells, and seismic equipment; expenses of the United States National Committee for Geological Sciences; and payment of compensation and expenses of persons employed by the Survey duly appointed to represent the United States in the negotiation and administration of interstate compacts: Provided, That activities funded by appropriations herein made may be accomplished through the use of contracts, grants, or cooperative agreements (including noncompetitive cooperative agreements with tribes) as defined in section 6302 of title 31, United States Code: Provided further, That the United States Geological Survey may enter into contracts or cooperative agreements directly with individuals or indirectly with institutions or nonprofit organizations, without regard to section 6101 of title 41, United States Code, for the temporary or intermittent services of students or recent graduates, who shall be considered employees for the purpose of chapters 57 and 81 of title 5, United States Code, relating to compensation for travel and work injuries,

and chapter 171 of title 28, United States Code, relating to tort claims, but shall not be considered to be Federal employees for any other purposes.

Justification of Proposed Language Changes

The 2026 budget proposes no changes to USGS language.

Appropriations Language Citations

A full listing of USGS authorizations is available at the USGS Office of Budget, Planning, and Integration website (<https://www.usgs.gov/about/organization/science-support/budget/authorizations>).

Expiring Authorizations

The USGS has no expiring authorizations to report.

Activity: Ecosystems

The 2026 budget does not request any funding for the Ecosystems Mission Area. The elimination saves U.S. taxpayer money and allows the bureau to focus on higher priority activities, including achieving energy and minerals dominance. Some of the work that has historically been funded through the Ecosystems Mission Area may be continued at the state level and at academic institutions across the country, which are well positioned to focus on issues of regional and local importance. In support of the Presidential Memoranda *Protecting the Great Lakes from Invasive Carp*, the USGS will continue to conduct scientific investigations and modeling of drivers of invasive carps. That work will now be funded through the Water Resources Mission Area.

Ecosystems Funding Table

Activity: Ecosystems
Dollars in Thousands (\$000)

Ecosystems	2024 Actual	2025 Notional ^{1/}	2026 Request
Ecosystems Total	299,377	292,877	0

^{1/} Resource levels included are estimates. The President reserves his authority under the “Full-Year Continuing Appropriations and Extensions Act, 2025” (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

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Activity: Geology, Energy, and Minerals

The 2026 budget request for the Geology, Energy, and Minerals Mission Area is \$137,073,000.

Activity Overview

The Budget advances Energy and Mineral Dominance through a reorganization that moves geologic data and mapping and offshore energy and minerals activities into a newly named Geology, Energy and Minerals Mission Area (GEMMA). America's national security and economic prosperity depend on foundational mapping and scientific information that inform future energy strategies and secure domestic mineral supply chains. The USGS GEMMA is the Nation's primary source of impartial mapping and scientific information on domestic and global geologic resources and their supply chains. The USGS conducts geologic mapping and resource assessments for both traditional geologic resources and emerging resources, including critical minerals, and the potential for geologic storage of energy and energy wastes. The USGS studies the full life cycle of these resources: geologic resource occurrence, extraction, use, disposal, and waste as a resource. This full lifecycle perspective supports the complexities of land management decisions such as water supply requirements for resource development and the potential for reuse of energy and mine wastes. USGS geologic mapping, energy and mineral resource assessments and research, and global mineral supply chain analyses inform sustainable natural resource management; economic, technological, national security, and global trade strategies and investments; and the development of the infrastructure of the future.

The GEMMA supports several EOs, including:

- [EO 14153 *Unleashing Alaska's Extraordinary Resource Potential*](#)
- [EO 14154 *Unleashing American Energy*](#)
- [EO 14156 *Declaring the National Energy Emergency*](#)
- [EO 14213 *Establishing the Energy Dominance Council*](#)
- [EO 14241 *Immediate Measures to Increase American Mineral Production*](#)
- [EO 14261 *Reinvigorating America's Beautiful Clean Coal Industry and Amending Executive Order 14241*](#)
- [EO 14285 *Unleashing America's Offshore Critical Minerals and Resources*](#)

Resource Assessments and Geologic Mapping: The USGS is the primary provider of unbiased, publicly available geologic mapping, and assessments of energy and mineral resources for the United States and globally. These assessments describe the potential for undiscovered geologic resources, including: minerals; oil; natural gas; coal; and uranium. In addition, the USGS assesses emerging geologic resources that are important to maintaining global leadership of the Nation's domestic energy industry. These emerging resources include: geothermal resources for electricity generation, heating, and cooling; gas hydrates; hydrogen; helium; and the potential to store energy and wastes in the subsurface. USGS assessments also characterize the environmental impacts of and constraints on resource extraction, such as the quality and quantity of water and wastes associated with development.

As authorized by the Energy Act of 2020 and the Infrastructure Investment and Jobs Act (IIJA), the USGS is developing assessments of critical mineral resources in mine waste and wastes from energy production. This work informs mine site reclamation and co-production of minerals with energy. USGS assessments are used in permitting and land management decisions and to de-risk industry investments. The Bureau of Land Management's (BLM) energy lease sales and state resource management plans depend on USGS

domestic assessments of resource potential, while USGS global assessments are used by Federal trade and foreign investment agencies to identify potential international trade partners.

Assessments of the Nation's energy and mineral resources depend on detailed geologic maps. In addition to identifying previously undiscovered energy and mineral resources, USGS geologic mapping supports assessing groundwater quality and quantity, identifying the potential for natural hazards like landslides, promoting economic development, land-use decision making, supporting infrastructure projects, and ultimately ensuring national security. A recent cost-benefit study concluded that the value of geologic maps is up to 10 times greater than the production cost.¹

Science to Inform Decisions: USGS geologic mapping, energy and minerals research, and supply chain analysis support energy and mineral independence, and inform resource management decisions by Federal and State land managers and billions of dollars in Federal and private-sector investments. For example, USGS data and mapping of critical mineral and coal resources are informing interagency efforts under EO 14241 and EO 14261. Recent USGS research has stimulated new interagency efforts to reprocess mine wastes for critical minerals as part of the inter-agency federal working group. The USGS provides technical assistance supporting BLM's development of scenarios for the future.

In addition, USGS mineral supply chain analysis is used to guide Federal decisions and investments in every aspect of the supply chain. The USGS provides extensive data and decision support to DOD for management of the National Defense Stockpile and use of Defense Production Act authorities to invest in domestic rare earth element and other critical mineral supply chains; to the Department of Energy's loan programs; to the Treasury Department supporting implementation of tax incentives supporting domestic critical mineral processing; to foreign investment and credit agencies such as the U.S. International Development Finance Corporation and Export-Import Bank; and to trade negotiators in the Office of the U.S. Trade Representative and the Department of Commerce's International Trade Administration. State agencies, private sector minerals and manufacturing decision-makers, Wall Street market analysts, and foreign trade partners similarly rely on USGS data and analysis.

Unleashing High Quality Geologic Data: The USGS is continuing modern data acquisition and mapping across the Nation, in partnership with States, other Federal Agencies, Universities, Tribes, and industry. The Minerals Resource Program's (MRP) Earth Mapping Resources Initiative (Earth MRI) is collecting an unprecedented volume of foundational data to transform and modernize the Nation's mapping of the surface and subsurface. Since 2019 the Earth MRI has more than tripled our Nation's high resolution data coverage.

The National Geologic and Geophysical Data Preservation Program rescues geologic samples and analyzes them for critical minerals, providing an efficient mechanism to provide new data on our Nation's critical mineral resources. The Energy Resources Program (ERP) work on mapping the Nation's orphaned oil and gas wells. Another example is the U.S. Mineral Deposit Database (USMIN) first developed by the MRP in collaboration with the BLM as the authoritative database of historical and present-day mining sites, which is now supporting Interior's Abandoned Hardrock Mine Reclamation Program.

The USGS is developing AI/ML tools to leverage these robust maps and datasets, and is investing in data standards, data quality, data management, and data delivery to ensure seamless public access to the results of both historic and ongoing large-scale data collection and interpretation. The NCGMP is using AI/ML

¹ Berg, R. C., & Faulds, J. E. (2025). Economic Analysis of the Costs and Benefits of Geological Mapping in the United States of America from 1994 to 2019. *American Geosciences Institute*. <https://doi.org/10.62322/wra5.gs9v>

tools to rapidly identify complex geologic features on maps and to quickly produce derivative products related to Administration priorities, such as maps of sands suitable for hydraulic fracturing, aggregate resources, and locations with high potential for geothermal resources. The USGS MRP is also partnering with DARPA to apply AI tools and techniques to streamline data synthesis workflows for resource assessments, an efficiency that has the potential to significantly accelerate the delivery of critical mineral assessments as called for in the Energy Act of 2020. The Nation has invested heavily in the initial acquisition of these scientific resources and the USGS is making these data and unique assets FAIR (Findable, Accessible, Interoperable, and Reusable).

Geoscience Workforce: The USGS is rebuilding the Nation’s geoscience workforce. This workforce is essential to address future challenges posed by the economy’s vulnerability to mineral supply chain disruptions. ERP and MRP are providing technical assistance to sister agencies, States, and universities in their efforts to rebuild and update expertise in every aspect of the energy and mineral life cycles, from the evolution of energy resources and ore deposits through extraction and processing to waste management. The ERP is creating opportunities for early career professionals to identify and assess energy resources of the future and is leveraging recent graduates’ expertise in AI/ML, and data science to bring new techniques to advance flagship energy resource assessments.

In response to the Energy Act of 2020 section 7002(k)(2-3), the MRP recently sponsored a National Academies of Science, Engineering, and Medicine workshop to identify critical gaps in undergraduate and graduate education and research leading to advanced degrees and a competitive workforce able to advance the Nation’s capacity in the minerals fields. In addition, the USGS offers continuing education courses and cross-disciplinary workshops for other Federal agencies and State Geological Surveys that inform the use of Earth MRI’s new geophysical surveys of the subsurface, new mining, and the recovery of critical minerals from mine wastes, building skills and expanding a knowledgeable workforce that can advance the cutting edge of mineral resources research and assessments.

Geology, Energy, and Minerals Funding Table

Activity: Geology, Energy, and Minerals
Dollars in Thousands (\$000)

Geology, Energy, and Minerals	2024 Actual	2025 Notional ^{1/}	2026 Request
Energy Resources Program	32,364	[34,699]	[36,935]
Mineral Resources Program	68,729	[75,404]	[69,904]
Geology, Energy, and Minerals Total	101,093	155,337	137,073

^{1/} Resource levels included are estimates. The President reserves his authority under the “Full-Year Continuing Appropriations and Extensions Act, 2025” (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

Program: Energy Resources Program

Program Description

The United States is focused on securing our energy future to lower energy prices, meet the rising demand for affordable energy, strengthen economic security, and ensure the American energy industry is best positioned as a global leader over the next century. The ERP is the sole provider of unbiased, publicly available estimates of undiscovered, technically recoverable energy resources for the U.S. (exclusive of the U.S. Outer Continental Shelf). The USGS addresses the challenge of increasing demand for energy resources by conducting basic and applied research on geologic energy resources and the environmental

and economic impacts of energy resource extraction and use. The Program also conducts research on related uses of the subsurface, including storage of energy and wastes from energy resource extraction. This USGS science informs strategic decision-making related to the Nation's reliance on domestic versus foreign resources and the management of energy resources and subsurface pore space on and under Federal and State lands. This information is critical in efforts to meet increased energy demands while simultaneously increasing energy development and ensuring energy security. The ERP's work supports the Energy Act of 2020, and the security of the U.S. energy portfolio.

Energy Resource Assessments and Methods Development: The USGS conducts assessments of many types of traditional and emerging energy resources; the subsurface's storage capacity for energy and wastes from energy resource extraction; and the effects of energy development on other natural resources (including water). The USGS's traditional energy resource assessments estimate the amount of undiscovered oil and gas resources that could be recovered using today's technologies. These assessments identify oil and gas resource potential across the United States and internationally in over 170 petroleum provinces. ERP's foundational geologic, geophysical, and geochemical studies provide information on resource potential as well as the environmental impacts of oil and gas development. These USGS resource assessments are used by a variety of stakeholders including local, Tribal, State, and Federal governments, other land resource managers, the private sector, and the public. In 2025 and 2026, the USGS expects to complete almost a dozen energy resource assessments for significant basins in the United States and abroad.

The USGS also studies and quantifies the Nation's emerging energy resources, including geothermal energy, gas hydrates, and geologic hydrogen. These resources have the potential to further diversify the U.S. energy portfolio and provide opportunities for the energy industry. Geothermal resource assessments quantify traditional hydrothermal systems, enhanced geothermal systems and low temperature geothermal resources across the United States. USGS assessments of carbon dioxide, including the potential for enhanced oil recovery, provide critical information to support the needs of the domestic energy industry. Quantifying the Nation's emerging energy potential informs decision-making on the Nation's energy future and potential economic and environmental implications.

Energy Resources Research: The USGS conducts research on a wide variety of energy resources, including coal, oil, gas, geothermal energy, energy gases such as carbon dioxide and hydrogen, and gas hydrates. This fundamental geologic research enables and accelerates the ERP's geology-based assessments.

The USGS's research addresses the full life cycle of energy resources from how and where resources form and accumulate prior to resource extraction by industry to reclamation, recycling, and disposal once extraction activities are complete. USGS research also informs the potential for co-production of critical minerals and energy, such as lithium in oil and gas and geothermal brines. A recent example is a study demonstrating the potential for lithium recovery in the Smackover formation in Arkansas and Louisiana.

This research is used by a variety of decision-makers, including by industry to identify best practices to limit adverse environmental impacts, and by land use managers and regulators to enhance stewardship of public lands for multiple uses and for national energy and economic security. The USGS continues to invest in data delivery to ensure that energy resources research, assessments, and other information are accessible to a variety of decision-makers.

Justification of Program Changes Narrative: Energy Resources Program

The 2026 Budget request for the Energy Resources Program is \$36,935,000.

Energy Resource Assessments and Scenario Analysis Tools – In FY 2026, ERP will advance assessments of energy resources across the country including those underlying Federal lands and in Alaska. While continuing to research, characterize, and assess the Nation’s traditional and emerging energy resources. These energy resources, including oil, natural gas, coal, geothermal, gas hydrates, and geologic hydrogen, are essential to ensuring continued domestic energy dominance. Funds will be used to expand geologic energy resource assessments to include additional geographic areas and expanded resource types within assessed areas.

Geothermal Energy – Geothermal energy is an important source of baseload electric power in the western U.S. and can help meet heating and cooling needs across the entire country. In FY 2026, the program will accelerate and expand the ongoing update to the national geothermal energy resource assessment directed by the Energy Act of 2020 (P.L. 116-260). Expanding beyond the recently completed assessment of resources from enhanced geothermal systems in the Great Basin, USA to include additional geographic areas.

Program: Mineral Resources Program

Program Description

The Mineral Resources Program (MRP) provides science and data on the full life cycle of mineral resources that are essential to the economy and national security of the Nation. The MRP portfolio includes research and supply chain analysis on mineral potential, production, consumption, recycling, disposal, and interaction with the environment. The MRP maps, studies, and analyzes the global supply, demand, and trade of the full range of mineral commodities that are used in the United States and develops the whole-of-government List of Critical Minerals from these studies. USGS researchers analyze and forecast domestic, foreign, and industrial sectoral dependencies on mineral commodities, and develop methodologies to quantify the Nation’s mineral resources both “still in the ground” and in mine wastes. The USGS also provides relevant, timely, and unbiased scientific data to support government (Federal, State, Tribal, Territories) and private sector decision-making. For example, USGS mineral data and analysis inform Federal land management decisions, public and private sector investments in economically significant supply chains for critical minerals, Federal trade negotiations, and evaluation of mine waste as a potential critical mineral resource in the context of reclamation.

Mineral Information and Supply Chain Analysis: Through the National Minerals Information Center (NMIC) and its regular surveys of the mineral industries, the USGS MRP analyzes mineral production, consumption, sustainability, and availability, and answers more than 2,000 mineral resources inquiries monthly. This work allows decision makers to anticipate supply chain disruptions and ensure dependable supplies of minerals to meet economic and defense needs. The public and private sectors use this information to understand the supply and use of minerals in the economy, and to inform investments in all aspects of supply chains. The USGS has unique expertise in the flow of resources through the global economy and provides a cross-sectoral outlook that other agencies depend on to inform their investments. Agencies that rely on these analyses include the Departments of Commerce, Defense, Energy, and State, intelligence agencies, the Federal Reserve Board, foreign investment and credit agencies including the U.S. International Development Finance Corporation and Export-Import Bank, and the Office of the U.S. Trade

Representative. State agencies, private sector minerals and manufacturing decision-makers, Wall Street market analysts, and foreign trade partners similarly rely on USGS data.

Critical Minerals Focus: The USGS leads a collaborative effort, working through the interagency National Science and Technology Council to solicit input from agencies across the government, to create the whole-of-government List of Critical Minerals that is used to inform investments across the Federal government as well as U.S. industry opportunities. The USGS is currently working to better identify emerging supply risks and evaluate the impact of supply disruptions as part of producing the next whole-of-government List of Critical Minerals to be released later in 2025.

Mineral Resources Research, Surveys, and Assessments: The USGS conducts research on how and where mineral deposits form and develops methods to detect potential mineral resources. This research has resulted in the recognition of new types of mineral deposits and new methods to assess the Nation’s undiscovered resources. The USGS draws on all of this research to evaluate the potential for domestic and global mineral resources ranging from major metals (e.g., copper) to industrial minerals (e.g., construction materials) to low-volume specialty minerals (e.g., rare earth elements).

The USGS has been partnering with the DARPA and Advanced Research Projects Agency—Energy (ARPA-E) on innovative AI/ML techniques to accelerate and improve mineral resource assessments, most recently through the Critical Mineral Assessment with AI-Support (CriticalMAAS) project that concluded in FY 2025. The project produced AI/ML tools and interfaces that will reduce key time-consuming steps in mineral resource assessment workflows from weeks to days. These outcomes mean that USGS will now be able to conduct mineral assessments faster and thus be able to assess more minerals to meet the direction from the Energy Act of 2020 to conduct national resource assessments of each critical mineral.

Critical Minerals Focus: The MRP has initiated a series of assessments on critical minerals and is currently conducting nationwide assessments of the critical minerals graphite and lithium, as well as some of the most important deposit types hosting nickel, cobalt, and platinum group elements. These assessments will help policymakers and land managers strategically determine where to increase investments in domestic production, mine waste reprocessing and other forms of secondary production, and will inform trade agreements with other nations.

The MRP also supports USGS marine minerals mapping and research, which assesses the distribution, composition, and resource potential of seafloor minerals, as well as associated environmental impacts of extraction. USGS is collaborating with the Bureau of Ocean Energy Management and other Federal agencies to develop a comprehensive understanding of offshore seabed areas that hold critical mineral resources.

The USGS is conducting research that identifies the potential for reprocessing valuable minerals from mine wastes, provides science to inform the reclamation of previously mined lands, and identifies emerging challenges and opportunities for future mining. In partnership with the State Geological Surveys, the USGS is developing a national mine waste inventory that will inform future national resource assessments that will include both mineral deposits and minerals in mine wastes (minerals “above ground”) for a more complete picture of the Nation’s mineral resources. The foundation of the inventory is the USMIN database of current and historical mining features in all 50 States and Puerto Rico; the first generation of USMIN was completed in 2023, in collaboration with BLM. Onto that foundation, MRP and State partners are

adding new samples and laboratory analyses of mine waste through Earth MRI-funded cooperative agreements and will be releasing databases with these new data in 2026.

In addition, Interior leads an interagency and intergovernmental collaboration to build on USMIN by compiling existing Federal and State data on historical (abandoned) mine lands managed by the Departments of the Interior, Agriculture, and Energy; the Environmental Protection Agency (EPA); and the Interstate Mining Compact Commission and its State members. MRP is also collaborating through an interagency federal working group with BLM, the Bureau of Indian Affairs (BIA), National Park Service (NPS), Office of Surface Mining Reclamation and Enforcement (OSMRE), U.S. Forest Service, EPA and other Federal agencies to identify pilot sites to demonstrate the potential to recover critical minerals from waste while supporting reclamation, remediation, and restoration.

Critical Minerals Focus: Of the 50 critical minerals on the 2022 List, over half are predominantly byproducts (minerals developed incidental to other minerals' development or processing). Mine waste reprocessing is a potential path to strengthen domestic supplies of these critical minerals.

Earth Mapping Resources Initiative: Earth MRI collaborates with other USGS programs and Federal agencies, State agencies, Tribal governments, and the private sector to collect and analyze foundational geoscience datasets. Earth MRI data are foundational: they benefit many fields. Earth MRI data are essential to understand critical mineral potential, and also for infrastructure, transportation, and land-use planning; hazard assessments for earthquakes, landslides, volcanoes, and floods; water resources management; assessment of the potential for geothermal resources and geologic carbon storage; and emergency response. Earth MRI is rapidly collecting new airborne geophysical, lidar, and hyperspectral data and on-the-ground geologic mapping and geochemistry. Among Earth MRI's geophysical surveys are electromagnetic surveys that, in addition to helping characterize subsurface mineral resources, also support analysis of groundwater resources. Earth MRI's hyperspectral survey of the southwestern U.S. is the largest such survey ever conducted and will be valuable to characterize mineral resources, mine waste sites, acid mine drainage, debris flows, agriculture, and wildfire hazards and impacts. This dramatic acceleration of Earth MRI has been transformative to the field. Earth MRI has not only identified new areas with the potential for domestic critical mineral resources, but has spurred additional State investment in mapping, and rebuilt State Geological Surveys' skills and capacity.

The USGS is also investing in data delivery to maximize the accessibility and utility of both new and historical datasets. This effort includes developing new tools for accessing and analyzing the vast amount of data collected by the Earth MRI. The USGS is also partnering with other agencies and with technologists to increase access to legacy mining information and statistics on mineral production, trade, and supply chains.

Critical Minerals Focus: In order to prioritize data collection for Earth MRI, the USGS collaborated with State Geological Surveys and other partners to publish a map of mineral systems across the [Nation](#) relevant and important to critical minerals, as well as a [database](#) of known critical mineral deposits. This work resulted in the Nation's first map highlighting areas that may contain each of the 50 minerals on the 2022 whole-of-government List of Critical Minerals. This map helps prioritize new geologic, geochemical, topographic, geophysical, and geospatial mapping and data acquisition, and informs both industry and land managers of areas with potential for subsurface critical mineral resources.

Program: National Cooperative Geologic Mapping Program

Program Description

Under the National Geologic Mapping Act of 1992 (P.L. 102-285) and subsequent reauthorizations, the USGS National Cooperative Geologic Mapping Program (NCGMP) (1) creates and maintains the Nation's official archive of National geologic maps and associated datasets, the National Geologic Map Database (NGMDB); and (2) through robust partnerships with State Geological Surveys and universities, systematically produces detailed geologic mapping and the three dimensional models of the earth's surface and subsurface. The USGS is the global leader in these innovation and modeling efforts. The NCGMP conducts geologic mapping and funds systematic development of geologic maps and three-dimensional geologic framework models at various scales. To date, about 20% of the Nation has been mapped at scales equal to or more detailed than 1:24,000, and about 55% of the Nation has been mapped at scales equal to or more detailed than 1:100,000. These geologic maps and models are essential to the Nation's economic prosperity, land management, and innovation. The more detailed scale supports identifying previously undiscovered mineral resources, managing energy resources, developing new infrastructure, geotechnical engineering, and mitigating natural hazards.

The NCGMP includes the following three major components:

- (1) **Federal geologic mapping component:** which includes the National Geologic Map Database (NGMDB) and FEDMAP which is conducting geologic mapping in Alaska and the lower 48 States. This Federal component provides the expertise and infrastructure to coordinate and manage most geologic mapping activities in the United States. The NGMDB is a Trusted Digital Repository that is designated as the official archive of the Nation's geologic maps and supporting geologic data on both Federal and private lands. This database has more than 200,000 unique users per month, many of which are from the mining, energy, and infrastructure industries, and various land-use planning entities.
- (2) **State geologic mapping component (STATEMAP):** which accelerates detailed geologic map coverage of the Nation and addresses critical Administration priorities such as public safety, natural hazards, and infrastructure, as well as energy, mineral, and water resources, in collaboration with State Geological Surveys; and
- (3) **Geologic mapping education component (EDMAP):** which trains the next generation of geologic mappers in skillsets such as machine learning and artificial intelligence to accelerate development the Nation's geoscience workforce responsive to Administration priorities.

NCGMP and the State Geological Surveys house most of the Nation's geologic mapping expertise, a crucial skillset as domestic industry invests in mineral development. The NCGMP leverages these skills to deliver more robust mapping products for the Nation. For example, NCGMP recently initiated an effort to modernize the national geologic map. This new relational database provides standardized, queryable geologic map information, providing new, compiled information about potential energy and critical mineral deposits, likelihood of aggregate resource availability, and other resources relevant to National security and economic development. The data served also are an essential underpinning of the USGS Earth MRI.

Program: National Geological and Geophysical Data Preservation Program

Program Description

Under the Energy Policy Act of 2005 and subsequent authorizations, the National Geological and Geophysical Data Preservation Program (NGGDPP) promotes the preservation and availability of geologic, geophysical and engineering data supporting national mapping initiatives. The NGGDPP provides grants to State Geological Surveys, and funds projects in Interior's bureaus to document, modernize, and archive these valuable and irreplaceable assets and make them available to the public. The NGGDPP provides an efficient mechanism to collect data supporting the mapping of domestic energy and mineral resources needed for EO 14154 and EO 14156.

The NGGDPP manages two repositories that house the largest collection of rock core and cuttings available to the public. In addition, the NGGDPP maintains multiple user-friendly catalogues that provide access to the decades of information about critical minerals, rare earth elements, and energy resources associated with samples in each of the repositories. These catalogues ensure data and sample information are easy for the USGS, State Geological Surveys, and the public to find, access and reuse. These catalogues are an efficient and effective avenue for quickly producing maps and summaries associated with mineral and energy resources. Specifically, NGGDPP catalogues include the Registry of Scientific Collections (ReSciColl), the National Index of Borehole Information (NIBI), and the USGS Geological Materials Repository. ReSciColl includes metadata records describing geological, geophysical, and biological collections and provides an efficient mechanism for promoting the discovery and reuse of scientific assets, including across the State Geological Surveys. The National Index of Borehole Information (NIBI) is a one-stop web application for the discovery of and direct access to subsurface data and samples which scientists use for subsurface modeling and characterization. NIBI easily facilitates the search, access and re-use of these highly valuable and geographically distributed geological and geophysical resources. Finally, the USGS Geological Materials Repository (GMR) provides consultation, training and repository services for the management of USGS scientific working collections. The GMR ensures valuable scientific working collections are available to promote and extend the use of these resources for continued scientific inquiry into the future.

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Activity: Natural Hazards

The 2026 Budget request for the Natural Hazards Mission Area is \$136,526,000.

Activity Overview

Natural hazards pose an ongoing threat to lives, property, and infrastructure, causing billions of dollars in damage each year across the United States. The Natural Hazards Mission Area (NHMA) carries out the USGS's Federal responsibility to deliver real-time warnings and situational awareness, long-term assessments, and targeted research on a wide range of hazards, including earthquakes, landslides, volcanic eruptions, coastal inundation and erosion, and geomagnetic storms. For hazards such as tsunamis and space weather, the NHMA directly supports the warning responsibility of the NOAA, and other Federal or State agencies. The actionable scientific information provided by the USGS directly contributes to public safety, national security, and economic stability, enabling risk-informed decision making at all levels. The NHMA works closely with local, State, Tribal, territorial, and Federal partners, as well as private industry, to guide priorities and ensure that hazard science is timely, relevant, and effective. Through these collaborations, the USGS helps build a more resilient, hazard-ready Nation.

Natural Hazards Funding Table

Activity: Natural Hazards
Dollars in Thousands (\$000)

Natural Hazards	2024 Actual	2025 Notional ^{1/}	2026 Request
Natural Hazards Total	198,636	196,126	136,526

^{1/} Resource levels included are estimates. The President reserves his authority under the "Full-Year Continuing Appropriations and Extensions Act, 2025" (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

Program: Earthquake Hazards Program

Program Description

In 2024, half of the U.S. population was at risk from potentially damaging earthquakes. Annualized earthquake losses to American infrastructure are estimated at \$14.7 billion per year.² The USGS provides the scientific information, situational awareness, and knowledge necessary to reduce deaths, injuries, and economic losses from earthquakes and earthquake-induced tsunamis, landslides, and soil liquefaction.

The USGS Earthquake Hazards Program (EHP) is the applied Earth science component of the National Earthquake Hazards Reduction Program (NEHRP) Through NEHRP, the USGS partners with FEMA, National Science Foundation (NSF), and National Institute of Standards and Technology (NIST) to reduce earthquake losses in the United States. To affect loss reduction, the EHP supports a highly coordinated set of monitoring, hazards assessment, applied research, and risk translation and communication activities in at-risk regions nationwide. Through the National Earthquake Information Center (NEIC), the USGS is the only U.S. agency that continuously reports on current domestic and worldwide earthquake activity. Through the ANSS, the USGS and its State and university partners monitor and report on earthquakes nationwide.

² Jaiswal, K.S., Rozelle, J., Tong, M., Sheehan, A., McNabb, S., Kelly, M., Zuzak, C, and Bausch, D.-2023, Hazus® estimated annualized earthquake losses for the United States: Federal Emergency Management Agency, FEMA P-366, 7 p.

Built on the ANSS, *ShakeAlert*, a west coast earthquake early warning (EEW) system, can deliver seconds of advanced warning to people and systems ahead of earthquake shaking. In FY 2026, the USGS will, in cooperation with States and other partners, work to operate, and maintain the *ShakeAlert* EEW system in certain high priority regions of the U.S. West Coast.

Through the USGS National Seismic Hazard Model, the EHP provides the basis for seismic provisions in the Nation's building codes, which affect nearly two trillion dollars' worth of new construction annually in the United States.³ The USGS also issues timely aftershock forecasts following potentially damaging earthquakes within the United States and its Territories and provides similar forecasts following significant global earthquakes in support of Federal and international partners.

In FY 2026, the EHP will continue to provide universities, State geological surveys, and private institutions with earthquake hazards applied research grants and cooperative agreements in certain high-priority regions. This funding supports earthquake research in high-risk areas nationwide and contributes to the maintenance and operation of the ANSS.

Program: Volcano Hazards Program

Program Description

There are approximately 170 potentially active volcanoes in the United States and its territories. Volcanic eruptions are among the most destructive natural phenomena and can have significant social and economic impacts. The mission of the USGS Volcano Hazards Program (VHP) is to enhance public safety and minimize social and economic disruption from volcanic unrest and eruption. Through the VHP, USGS scientists monitor active and potentially active volcanoes, assess their hazards, and conduct targeted research to better understand volcanic processes. This work enables the USGS to provide assessments of volcano hazards, warnings of potential volcanic impacts, volcanic activity alerts, and other information to authorities and the public. These warnings and forecasts enable emergency responders, land managers, and the public to mitigate the risk to life and property. The USGS has evaluated the Nation's volcanoes to determine the monitoring levels needed commensurate with the threat they pose.

The National Volcano Early Warning System (NVEWS) is being implemented by USGS and will ensure that the Nation's volcanoes are monitored at levels commensurate with their threat. This enables scientists to improve the timeliness and accuracy of hazard warnings, making it possible for citizens to take proper and timely action to reduce risk. NVEWS seeks to improve the capabilities of groups that address volcanic eruptions, including: (1) increased partnerships with local governments and emergency responders; (2) advancing automation to improve 24/7 monitoring of volcanoes; and (3) advanced and unified systems to distribute data to operational scientists, responding agencies, and the public.

As part of the NVEWS implementation, the VHP will be working through the final phase of the next-generation lahar (volcanic mudflow) detection system at Mount Rainier. In FY 2026 USGS will install monitoring sites along the White River to improve lahar detection; once all stations in this drainage are installed, the Rainier lahar detection system will be complete. In FY 2026, limited lahar-monitoring capability expansion will occur at other Cascades volcanoes. The USGS will install two permanent volcano

³ U.S. Census Bureau. [Press Release](#); U.S. Census Bureau, 2024. And USGS Circ 1544

monitoring stations at Mount Adams in Oregon and scope for volcano monitoring station sites at Mount Baker in Washington.

The VHP is primarily executed by the USGS Volcano Science Center (VSC), which operates five volcano observatories with State and academic partners. The observatories are organized into distinct geographic areas of responsibility:

- Hawaiian Volcano Observatory – Hawaii and American Samoa
- Cascades Volcano Observatory – Idaho, Oregon, and Washington
- Alaska Volcano Observatory – Alaska and the Commonwealth of the Northern Mariana Islands
- California Volcano Observatory – California and Nevada
- Yellowstone Volcano Observatory – Arizona, Colorado, Montana, New Mexico, Utah, and Wyoming

Under the leadership of the VSC, each observatory is responsible for volcano monitoring, community preparedness (including the development and regular practice of volcano hazard emergency response plans), managing volcanic crises, and coordinating research in their areas of responsibility.

Program: Landslide Hazards Program

Program Description

Landslides, which occur in all 50 States and many territories, can threaten lives, damage property and infrastructure. Widespread landslides can accompany big storms or earthquakes, impacting broad areas and hindering rescue and recovery efforts. For example, in 2024, rainfall associated with Hurricane Helene generated thousands of landslides across southern Appalachian States causing loss of life, impacting transportation and other lifelines, and hampering response, recovery, and rebuilding. The USGS Landslide Hazards Program (LHP) is the only Federal program dedicated to landslide hazard science and conducts targeted studies to understand landslide initiation and mobility processes. This understanding is used to (1) develop methods and models for landslide hazard assessment, (2) develop and deploy systems to monitor threatening landslides, and (3) develop methods and tools for landslide early warning and situational awareness. Program activities are targeted toward the types of landslides that result in human and economic losses in the United States, such as those with long travel distances, those initiated by heavy rainfall, and those exacerbated by the effects of wildfire. The USGS assists Federal, State, and local agencies through landslide site evaluations and provides strategies for reducing ongoing and future impacts from landslides. The LHP deploys near-real-time monitoring systems at active landslide sites to gather continuous movement, rainfall, and hydrologic data needed to understand the mechanisms of landslide occurrence and mobility and forecast future behavior. Such data and understanding form the scientific underpinnings for early warning of conditions that may trigger landslides.

The LHP began cooperative work with the National Weather Service (NWS) in 2005 to deliver alerts for debris flows from recently burned areas in southern California. Since then, this limited-scale project has provided essential guidance to emergency, land, and transportation managers for burned areas in the U.S. In FY 2026, the LHP NWS will continue to build on recent scientific advances to expand the project to other parts of the U.S. to meet the intent of the National Landslide Preparedness Act.

In 2021, the National Landslide Hazard Preparedness Act was enacted and directs the Secretary of the Interior, acting through the Director of the USGS, to establish a program to identify risks and hazards from landslides, reduce losses, protect communities at risk, and improve communication and emergency

preparedness. In response, the USGS published a [National Strategy for Landslide Loss Reduction](#) and formed an Interagency Coordinating Committee on Landslide Hazards. In FY 2026, the Interagency Committee will support the implementation of the National Landslide Hazard Preparedness Act.

The USGS is working to develop and deliver actionable landslide hazard and risk modeling with an emphasis on areas recently burned by wildfire. The USGS is also continuing efforts to meet requirements set out in the National Landslide Preparedness Act by developing a Federal capacity to deploy scientists and assets that can provide technical assistance to Federal land managers, State geological surveys, and State and local emergency management. Work is being conducted in partnership with technical expertise from State, academic, and private sectors and data and products and will benefit land and emergency managers at all levels as well as the general public across the United States and Territories with landslide risk.

In FY 2026, the LHP will continue to collect data and conduct analyses to assess the landslide hazard in southeast Alaska and continue surveilling landslide movement of the unstable slopes at the terminus of the Barry Glacier to inform the National Tsunami Warning Center and land and emergency managers of potential hazards.

Program: Global Seismographic Network Program

Program Description

The Global Seismographic Network (GSN) is a network of over 100 globally distributed high-quality seismic stations, approximately two-thirds of which are currently operated by the USGS. The GSN is a partnership between the USGS and the NSF and is implemented in partnership with the EarthScope Consortium and many other entities. It provides the highest-quality real-time seismic data needed for global earthquake alerts and situational awareness products, tsunami warnings, national security (through nuclear test treaty monitoring and research), seismic hazard assessments and earthquake loss reduction, as well as research on earthquake sources and the structure and dynamics of the Earth.

GSN stations transmit real-time data continuously to the USGS NEIC in Golden, CO, where that data are used to rapidly determine the locations, depths, magnitudes, and other parameters of earthquakes worldwide, in conjunction with data from other networks. GSN data allows for the rapid determination of the location and orientation of the fault that caused the earthquake and provides an estimate of the length of the fault that ruptured during the earthquake, which are both essential for modeling earthquake impacts. An additional important aspect of GSN activities is evaluating, developing, and advancing new technologies for seismic instrumentation, sensor installation, and seismic data acquisition and management.

GSN operation is accomplished in cooperation with domestic and international partners who, in most cases, provide facilities to shelter the instruments and personnel to oversee the security and operation of each station. USGS responsibilities include station maintenance and upgrades, overseeing telecommunications, troubleshooting problems and providing major repairs, conducting routine service visits, training station operators, providing limited financial aid in support of station operations at sites lacking a host organization, and ensuring data quality and completeness.

In FY 2026, the USGS will continue to provide high-quality real-time seismic data through the GSN, prioritizing sites that meet the needs of national risk reduction activities.

Program: Geomagnetism Program

Program Description

The Geomagnetism Program provides data and information on short-term and long-term variations in the strength and direction of the Earth's magnetic field, including the intensity of magnetic storms. These data and information are provided through operation of a network of geomagnetic observatories and research and analyses related to geomagnetic hazards that threaten the economy and national security. Magnetic storms, caused by interactions between the Earth's magnetic field and the Sun, can produce beautiful auroras but can also disrupt electric-power grids and communications, reduce GPS accuracy, affect satellite operations, enhance radiation levels for astronauts and high-altitude pilots, and interfere with directional drilling for oil and gas.

The Geomagnetism Program is involved in the Space Weather Operations, Research, and Mitigation (SWORM) sub-committee, under the National Science and Technology Council Committee on Homeland and National Security. SWORM is an interagency collaboration that includes the Department of Homeland Security (DHS), NOAA, NASA, DOD, NSF, and Department of Energy (DOE), and coordinates Federal activities responsive to the National Space Weather Strategy and Action Plan (NSW-SAP). The Geomagnetism Program provides real-time data to SWORM agencies, oil drilling services companies, geophysical surveying companies, and several international partners, including the International Real-time Magnetic Observatory Network (INTERMAGNET), an organization with a worldwide membership drawn from institutes operating geomagnetic observatories who coordinate geomagnetic monitoring around the world. Data, products, and services from the USGS are also used by the electric-power industry to evaluate geomagnetic storm risk.

The USGS operates 14 geomagnetic observatories across the U.S. (six in the contiguous States), supporting NOAA's Space Weather Prediction Center (SWPC), the U.S. Air Force 557th Weather Wing, and numerous other customers and Federal agencies. For example, USGS observatory data are used by NOAA's SWPC, and by the U.S. Air Force, for issuing geomagnetic warnings and forecasts. The Program also operates about two dozen variometer geomagnetic stations, co-located with USGS Earthquake Hazards Program monitoring sites. USGS geomagnetism research is conducted in collaboration with the Colorado School of Mines, the NOAA SWPC, and the NASA Community Coordinated Modeling Center. The USGS also works with private entities that are affected by space weather and geomagnetic activity, including electric-power grid companies and the oil and gas drilling industries. In the oil and gas industry, for example, drill operators need to know the exact direction that their drill bits are going to maximize oil production and avoid collisions with other wells. One way to accomplish this is to install a magnetometer—a sort of modern-day "compass"—in a drill-string instrument package that follows the drill bit. Simultaneous measurements of the magnetic field in the drill hole are combined with those monitored by the USGS to produce a highly accurate estimate of the drill bit position and direction.

Through the SWORM sub-committee, the USGS works with NOAA SWPC to produce hazard maps of the induced electric field in the crust due to geomagnetic storms. These results, now incorporated into a real time product, will help power-grid companies improve the resilience of their systems to magnetic storms, as required by the Federal Energy Regulatory Commission (FERC). Power grid operators will use these results to design mitigation strategies for geomagnetic storms, and the space weather alerting agencies will use the resulting electric field model to issue improved forecasts and nowcasts for space weather alerts. The Geomagnetism Program will continue magnetotelluric (MT) survey efforts, building upon a national survey

of the conterminous United States. This work targets improving U.S. electrical grid resilience, improving forecast models for geomagnetic storms, and aids in mineral resource assessments. FY 2026 efforts will focus on areas of highest geoelectric hazard identified in the National survey. Collection of this MT data is critical for modeling the Earth's electric field, used to assess the impact of electrical storms. This work is responsive to priorities established in the NSW-SAP, as well as related initiatives for pursuing induction hazard research. This broad collaboration includes scientists from NASA, NOAA, the Institute for Defense Analyses, FERC, FEMA, and NSF.

Program: Coastal/Marine Hazards and Resources Program

Program Description

The Coastal/Marine Hazards and Resources Program (CMHRP), the only Federal science program focused on the geology and processes of coastal and marine landscapes, provides scientific information, applications, and tools to support evolving challenges related to public safety, development, economic growth, and resource management from the deep sea to estuarine and coastal environments, where 40 percent of the population lives and works.⁴ USGS unique capabilities and expertise address the country's needs for coastal and marine science-based products on a national scale by supporting the priorities and objectives of the Administration, Interior and other Federal agencies. In FY 2026, CMHRP projects will strategically focus on the coastal and marine hazards portfolio, providing information that helps Federal partners, local officials, resource managers, emergency personnel, and other ocean and coastal stakeholders. These efforts will maintain public safety and national security by providing public officials with a better understanding of the risks associated with natural disasters and other disruptions. Coastal changes due to storms, changes in sediment supply, human alterations, and long-term cumulative changes over decades pose substantial risk to communities across the Nation. USGS is the primary Federal provider of tools to anticipate and respond to physical change along our Nation's coasts and the consequences of geologic and oceanographic processes causing coastal change that impacts communities, infrastructure, and resources. USGS operational, real-time forecasts of erosion and coastal inundation for all weather conditions, including coastal storms and hurricanes, provide the public with reliable, nationally consistent guidance on pending threats to coastal communities. To address needs related to long term planning for resilient coasts, USGS scientists assess past changes such as land loss, erosion, and flooding, and develop projections of future changes due to extreme storms and sea level change that result from longer-term processes, as well as their impacts on coastal environments and communities.

In FY 2026, the CMHRP will maintain scientific studies and assessments of coastal hazard impacts to protect the Nation's people, environment, and infrastructure from short- and long-term coastal hazards. USGS assessments of marine environments and potential geohazards – such as submarine earthquakes and landslides – provide critical information that helps Federal partners, resource managers and other stakeholders identify and prepare for future hazards as well as reduce risk to offshore operations, coastal communities, and infrastructure. Ocean observations, marine mapping expertise, and engineering capabilities are utilized in both rapid response and repeated surveys that characterize continental shelf, slope and deep-sea geology and processes, identify marine-sourced earthquake and landslide hazards, and inform the development of offshore energy, critical mineral resources, and other resource needs. This

⁴ National Oceanic and Atmospheric Administration. Economics and Demographics. <https://coast.noaa.gov/states/fast-facts/economics-and-demographics.html>

CMRHP expertise will continue to support work in the Geology, Energy and Minerals Mission Area focused on marine minerals and gas hydrates assessments.

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Activity: Water Resources

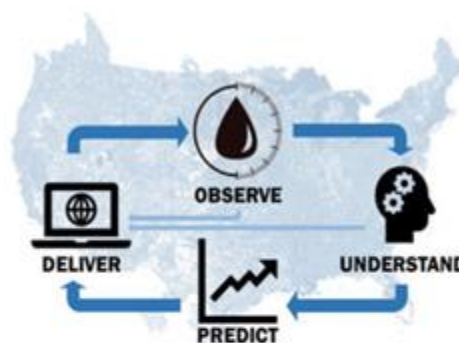
The 2026 Budget request for the Water Resources Mission Area is \$223,818,000.

Activity Overview

Water information is fundamental to national and local economic well-being, protection of life and property, and effective management of the Nation's water resources. Beginning in 1888 with the National Streamgaging Program on the Rio Grande River under the direction of John Wesley Powell, the USGS has become one of the largest providers of *in situ* water data in the world. The Water Resources Mission Area (WMA) works with partners to monitor, assess, conduct targeted research, and deliver information on a wide range of water resources and conditions including streamflow, groundwater, water quality, and water use and availability. These activities support an overarching science strategy to observe, understand, predict, and deliver water science to the Nation.

As the Nation moves forward in the 21st century, the USGS is integrating its water science activities to better address the greatest water resource challenges. Through integrated activities funded through the three WMA budget programs, the USGS will continue to serve society by providing data and tools that resource and land managers can use to manage water resources. In FY 2026 the WMA will focus on the following science priorities:

- **Advancing USGS water observing systems.** The USGS will continue to operate and maintain the highest priority Next Generation Water Observing System (NGWOS) monitoring infrastructure in select basins while continuing to work with the private sector to advance water observing techniques, methods, and instrumentation for eventual migration into our national monitoring networks to expand the availability of water data. In addition, the USGS will continue to operate its National Streamgaging Network in cooperation with over 1,500 partners. As part of the Streamgaging Network, the USGS will support approximately 3,430 locations in the Federal Priority Streamgaging Network, which provide long-term, real-time water data at locations that meet National needs for forecasting/operations, water rights/compacts/decrees, and tracking sentinel trends and extremes.
- **Delivering Integrated Water Availability Assessments (IWAAs).** These stakeholder-driven assessments draw from the delivery of periodically updated predictions of water availability, water quantity, quality, and use. At the national scale, the USGS will continue working to deliver Version 1b of the National Water Availability Assessment Report (National Report) by 2026. Version 1b will include historical trends; improve predictions of water quantity and quality for inclusion in the National Report; enhance models of water use for all eight categories of use reported by USGS; and work to integrate these components with indicators of drought and wildfire to provide future scenarios of water availability.



The above science processes (observe, understand, predict, and deliver) are necessary for acquiring reliable and actionable information about water availability. If one is overlooked, the others are limited. For example, if observing systems are not advanced, understanding is limited as is the ability to build better models for prediction. This is why science integration is critical and a priority at the USGS.

- ***Integrated water prediction capabilities.*** The USGS is focusing water prediction models on the simulation of elements that make up the core components of water availability. Major components of water availability are streamflow, groundwater, water demand, and water quality. These components will be simulated with an emphasis on new AI/ML methods. These AI/ML models, in conjunction with existing national models, will be used to inform data collection needs, areas in need of prediction improvements, and quantifying available water for the Nation.
- ***Modernizing USGS water data infrastructure.*** The National Water Information System (NWIS) is the USGS enterprise system supporting the storage, processing, and delivery of real-time and historic water data. To ensure NWIS can manage current and new data produced by all WMA activities into the future, integrate water data from multiple agencies and sectors, and continue to deliver data and model results to the public, funding from across the WMA programs is used to support activities to modernize NWIS IT infrastructure, data systems and delivery. In FY 2026, the USGS will transition its multi-year effort to modernize NWIS to an operational stance while maintaining low-level modernization efforts to assure efficient operations and that it remains a modern system into the future. A focus will be on enhancing data delivery data through applications such as Water Data for the Nation, the National Water Dashboard, HIVIS (camera imagery), WaterAlert and new web services.

Cooperative Matching Funds

Much of WMA work with partners is supported by a unique subset of funds referred to as Cooperative Matching Funds (CMF). Required by law to be matched at least 50:50 by State, local, or Tribal partners, CMF is matched by over 1,800 of these partners to monitor and assess water resources in every State, and U.S. protectorate and territory. The flexibility of CMF allows USGS and its partners to respond to significant or emerging water issues in a timely manner. CMF are found in all three of the budget programs: Water Availability and Use Science; Groundwater and Streamflow Information; and National Water Quality.

Water Resources Funding Table

Activity: Water Resources
Dollars in Thousands (\$000)

Water Resources	2024 Actual	2025 Notional ^{1/}	2026 Request
Water Resources Total	288,772	288,772	223,818

^{1/} Resource levels included are estimates. The President reserves his authority under the “Full-Year Continuing Appropriations and Extensions Act, 2025” (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

Program: Water Availability and Use Science Program

Program Description

The Water Availability and Use Science Program (WAUSP) fulfills the goals established by Congress in the SECURE Water Act (Public Law 111-11, Section 9508) by investing in national models and assessments that improve the Nation’s understanding of water availability. Specifically, the WAUSP develops data releases, publications, assessment reports, and web-based delivery of model results that systematically provide information that allows resource managers to assess the quantity and use of the Nation’s water. The WAUSP focuses on conducting national water availability assessments; developing methods to estimate water cycle components; and evaluating trends in water availability. In addition, the WAUSP supports

efforts to develop techniques to evaluate water availability, advance the models and infrastructure that support assessments, and deliver tools that resource managers can use to support resource planning. The Water Availability and Use Science Program contributes science that is required to meet EO 14154, EO 14156, and EO 14241.

The National Water Census (NWC)

The goal of the USGS NWC is to provide nationally consistent, well-documented information on water quantity, quality, and use that will allow resource managers to assess the Nation's water availability and inform decision-making. The USGS supports this goal by investing in efforts to assess and provide information on the inputs, the outputs, and changes in available water.

Integrated Water Availability Assessments (IWAAs): IWAAs are assessments that are critical to the development and delivery of the NWC and that will provide periodically updated predictions of water availability. At a national scale, the USGS will continue delivering two primary products in FY 2026, a web-based product that conveys simulated water conditions and trends across the U.S. and a regularly recurring 5-year National Water Availability Assessment Report (National Report). The WAUSP supports this effort by developing and refining models that use monitoring data to simulate water cycle components and factors that influence water availability. The USGS is currently providing daily estimates for a variety of water cycle components, including precipitation, streamflow, soil moisture, groundwater recharge, evapotranspiration, snowpack, snowmelt, and total runoff.

Water Use, Ecological Flows, and Drought: In order to fully deliver the National Water Census, the USGS will develop the capacity to assess and understand not only the traditional hydrologic components of the water cycle but also economically significant components of demand. The USGS is focused on developing nationally consistent models of water use that report monthly estimates and will include uncertainty to help resource managers assess model quality. Reporting additional major water use components will begin in FY 2026 when the USGS includes existing models of thermoelectric, irrigation, and public supply water withdrawals with the addition of models for industrial, mining, domestic self-supplied, aquaculture, and livestock water withdrawals. The USGS will also identify, evaluate, and predict changes in water availability and forecast the onset, severity, and duration of hydrologic drought.

Model Development, Infrastructure, and Information Delivery

Integrated Water Prediction (IWP): Through identification of the science and technological needs that will serve the Nation's long-term hydrologic prediction capacity at the national, regional, watershed, and local scale, the USGS is developing the modeling framework, software architecture, and standards needed to support robust, efficient, and sustainable water prediction capabilities. In FY 2026, the USGS will continue working through an IWP program to develop nationally consistent approaches for predicting and forecasting water quantity and quality conditions, changes, and outcomes for water availability. Leveraging AI/ML modeling approaches designed to consider water quantity, quality, and use, IWP tools will be used to support broader USGS goals such as delivery of the National Water Census and National Integrated Water Availability Assessment report.

Program: Groundwater and Streamflow Information Program

Program Description

The Groundwater and Streamflow Information Program (GWSIP) collects, manages, and disseminates high-quality and reliable water information in real-time and over the long-term. The information is critical for managing the Nation's water resources and anticipating and responding to water hazards that can result in loss of life and property. Serving as one of the largest water data holders in the world, the USGS partners with more than 1,500 Federal, regional, State, Tribal, and local agencies to maintain and manage its water monitoring networks for emergency response, flood forecasting, reservoir management, water-use restrictions, drinking water deliveries, permit compliance, water-quality studies, recreational safety, and other activities. The long-term data supplied by the program are a critical component to sustaining the viability of industries such as agriculture, fishing, and outdoor recreation and are used for decisions related to water-supply planning, aquifer storage and recovery, infrastructure design, floodplain and ecosystem management, energy development, and resolution of water disputes.

Observing Systems

Water monitoring networks are foundational in understanding the Nation's hydrologic systems; they provide information that is critical for defining, using, and managing water resources. The GWSIP primarily supports the networks that provide data on water quantity (water levels and streamflow), while also investing in next-generation water observing systems designed to integrate monitoring for water quantity, quality, and use.

National Streamgaging Network: The GWSIP supports the collection and delivery of streamflow or water-level information at more than 12,000 sites. The data are served online and form the basis for decisions related to protection of life and property from hazards, such as floods; cost-effective management of freshwater that is safe and available for drinking, irrigation, energy, industry, recreation, and ecosystem health; and national, State, Tribal, and local economic well-being.

Federal Priority Streamgage (FPS) Network: The FPS Network is a subset of the National Streamgaging Network and was conceived in 1999 to be a core, federally funded network to address long-term Federal information needs, such as forecasting (primarily supporting flood forecasts and triggering operational drought or emergency declarations), regulating interstate and international water compacts and decrees, and tracking sentinel trends. These sites are supported through a combination of USGS and local, State, and Federal partner funding — only around one-quarter are fully funded by the USGS.

Anticipating the evolution of Federal stakeholder water-data needs, and advances in monitoring technologies in the 25 years since the network's inception, the USGS launched a [re-evaluation of the priorities for the FPS network](#) by soliciting feedback from Federal agency stakeholders to understand how it can better serve their needs in the next decade. Based on this feedback, the USGS modified the original network priorities and eligibility criteria along with corresponding revisions to the list of eligible FPS locations in FY 2025.

Next Generation Water Observing System (NGWOS): In an effort to modernize observing networks for the purpose of delivering more and new types of water data for the Nation, the USGS has developed a strategy for implementing a NGWOS. Select watersheds are serving as innovation incubators for advanced water quantity and quality monitoring using a mixture of monitoring equipment in the water, ground, and air. The NGWOS program is also conducting research and development with universities and the private

sector to advance water observing techniques, methods, and instrumentation for eventual migration into our national monitoring networks.

Data Systems

National Water Information System (NWIS): In FY 2026, the USGS will complete the modernization of NWIS, the enterprise system that supports water data transmission, storage, processing and delivery. Moving forward, USGS advancements will focus on ensuring NWIS can efficiently manage new data and data types, incorporate uncertainty and automated processing of data, and deliver data in more user-friendly formats, through applications such as Water Data for the Nation, the National Water Dashboard, HIVIS (camera imagery), WaterAlert and new web services.

Program: National Water Quality Program

Program Description

The National Water Quality Program (NWQP) supports the data collection, assessments, and modeling needed to quantify the quality of freshwater resources. The long-term data, assessments, and models supported by the NWQP are used for decisions related to water-supply planning, aquifer storage and recovery, infrastructure design, floodplain management, energy development, and water dispute resolutions. In FY 2026, NWQP will also provide Invasive Carp work in the Great Lakes watersheds.

National Water Census (NWC)

The NWQP invests in the NWC by evaluating the water-quality aspects of water availability. Differences in water quality directly affect the availability of water for various uses (e.g., public supply, irrigation, energy development).

Integrated Water Availability Assessments (IWAAs): The NWQP invests in IWAAs through efforts focused on developing water availability indicators related to water quality that will convey periodic snapshots of current conditions and national trends. In FY 2026, the USGS will enhance current understanding of water temperature and salinity issues during periods of drought; and will improve USGS capacity to model the influence of hydrologic change for economically significant aquatic species. The USGS is also applying new machine learning methods to improve the accuracy and interpretability of indicators of water quality related to economically important fish.

Water Prediction and Information Delivery/Data Systems

Integrated Water Prediction (IWP): The NWQP invests in IWP by leveraging AI/ML modeling approaches designed to consider water quality, IWP tools will be used to support broader USGS goals such as delivery of the National Water Census and National Integrated Water Availability Assessment report. While these activities are supported by both the NWQP and the Water Availability and Use Science Program, NWQP funding supports activities that focus on incorporating water-quality processes into water prediction for a holistic view of water availability.

Observing Systems

The USGS operates a suite of surface water and groundwater networks that provide real-time data on water levels, streamflow, and a variety of water-quality parameters such as dissolved oxygen, pH, specific conductance, and temperature, as well as discrete water-quality data on contaminants such as arsenic, nitrate, metals, pesticides and PFAS.

National Surface Water Quality Network (NSWQN): The NSWQN is the only nationally designed, long-term monitoring network for tracking the quality of rivers, streams with consistent, comparable data collection and analytical methods at all sites. NSWQN data is primarily collected through discrete sampling at sites; however, a growing number of sites have sensors that provide continuous, real-time water-quality conditions. Through NGWOS, new sensors and instruments will be developed and implemented to measure more types of contaminants on a continuous basis and deliver information to users in real-time. In FY 2026, the USGS will continue monitoring at approximately 75 surface-water sites in the NSWQN covering important environmental settings (e.g., small agricultural and urban watersheds, large inland and coastal rivers, and minimally disturbed reference watersheds).

National Groundwater Quality Monitoring Networks (NGWQMN): The USGS monitors groundwater quality conditions through an enterprise of more than 80 long-term networks across the U.S. These groundwater-quality monitoring networks track water quality conditions in principal aquifers across the U.S. Concentrations of constituents are compared to benchmarks established for the protection of human health. Users can access an online tool to see how concentrations of these constituents in groundwater are changing during decadal periods across the Nation. In FY 2026, the USGS will continue sampling through these networks.

Invasive Carp

Invasive Carp in the Great Lakes Watersheds: The USGS will continue to conduct scientific investigations and modeling of drivers of invasive carps pursuant to the Presidential Memorandum, “*Protecting the Great Lakes from Invasive Carp*”. The USGS will continue to provide science methods and models to guide technology development for potential integration into the design and operation of navigational locks, and will continue to evaluate behavioral deterrents for invasive carp (e.g., carbon dioxide, underwater acoustic deterrent systems, bubble curtains etc.). The USGS will continue to document these technologies for water resource managers with accompanying decision support tools to inform best placement and improve decision support tools to model implementing various management alternatives throughout the Mississippi River basin.

Program: Water Resources Research Act Program

In order to focus on higher priorities, the Budget proposes to discontinue this program.

Activity: Core Science Systems

The 2026 budget request for the Core Science Systems Mission Area is \$165,041,000.

Activity Overview

The USGS is the Federal agency responsible for mapping the geologic, geographic, and land features of the United States. The USGS, through the Core Science Systems (CSS) Mission Area, conducts detailed surveys and distributes high-quality and highly accurate topographic, hydrographic, and biogeographic maps and remotely sensed data to the public. Mapping accuracy enabled by cutting-edge technologies allows precise planning for: recreational use on public lands; permitting with Interior partners; critical mineral resources assessments; energy development; transportation and pipeline infrastructure projects; land change and flood prediction at regional, local, and neighborhood scales; emergency response; and hazards mitigation.

The physical structure of the Earth underpins all life on it. The precise maps and data products that the USGS delivers from its cutting-edge Earth surveys and explorations help the Nation better understand the planet and, ultimately, aid in every aspect of human society, from economic planning to natural disaster prediction and response to natural resources management. The CSS fulfills the USGS role as the primary national civilian mapping agency and is responsible for topographic mapping in support of Federal and State requirements, national geospatial coordination in support of Interior and the Federal Geographic Data Committee; geospatial mapping and applications through the Civil Applications Committee; and satellite operations and remote sensing. In addition, the CSS provides:

- research, modeling, and analysis of land change dynamics, in support of agriculture, forestry, natural resource management, and public safety;
- computational analytics and synthesis and integration of USGS national data sets, in support of modeling and forecasting;
- high-performance computing and data management and storage in support of energy and mineral assessments,
- management of the network of libraries in support of USGS Earth science research and evidence-based science.

The USGS, through CSS, uses a mix of commercial and non-commercial imagery to support the Nation's economic development, land use management, and resilience to severe weather and other natural hazards events. Additionally, the CSS houses the USGS Chief Data Officer with delegated authority from the Interior Chief Data Officer to support the lifecycle and manage the portfolio of data assets from the bureau, champion data inventory, quality and dissemination, and engage with data users and evaluation units within the organization.

The USGS, through CSS, is the primary Federal steward of high-quality civil geospatial data and provides access to the public through The National Map, the Federal Geospatial Platform, the National Land Cover Database, USGS Earth Explorer, the National Biogeographic Map, and the Protected Areas Database of the United States. The CSS also operates Landsat satellites and data systems necessary to understand, monitor, and detect changes that affect the Nation's natural and agricultural resources, economy, public safety and national security.

Core Science Systems Funding Table

Activity: Core Science Systems

Dollars in Thousands (\$000)

Core Science Systems	2024 Actual	2025 Notional ^{1/}	2026 Request
National Land Imaging Program			
Satellite Operations	[95,334]	[95,334]	[81,599]
Core Science Systems Total	273,221	227,987	165,041

^{1/} Resource levels included are estimates. The President reserves his authority under the “Full-Year Continuing Appropriations and Extensions Act, 2025” (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

Program: National Geospatial Program

Program Description

The National Geospatial Program (NGP) provides vital mapping information depicting the topography, natural landscape, and built environment of the United States. The USGS provides this information through The National Map, a compilation of nationwide topographic mapping products and geospatial datasets encompassing elevation, hydrography, structures, boundaries, and transportation data, including trails. The USGS supports Interior’s responsibilities for national geospatial coordination and carries out the USGS’s government-wide leadership responsibilities for elevation, hydrography and watershed boundaries, structures, and geographic names. As one of the cornerstones of the USGS, The National Map has many uses ranging from recreation to natural resources development to emergency response. The National Map is easily accessible and leveraged by users of all types including sophisticated commercial mapping platforms (e.g., Esri, Google Maps), data analytics companies, all levels of government, and the public. The National Map products and services allow users to enhance their recreational experiences, make life-saving decisions, and support scientific missions. Americans rely on the USGS’s publicly available data and mapping to remain informed and to stay healthy and safe.

3D National Topography Model (3DNTM): The 3D National Topography Model (3DNTM) is a national initiative that integrates USGS 3D Elevation Program and 3D Hydrography Program data to create a comprehensive three-dimensional model of the entire U.S., providing updated and detailed elevation and hydrography information for various applications.

The 3DNTM improves and enables applications such as critical mineral detection, energy extraction, flood risk management, landslide hazards, infrastructure development, precision agriculture, and others by collecting a new, higher quality generation of elevation and hydrography data that also includes inland bathymetry data. 3DNTM data supports national priorities including EO 14153 and the National Landslides Preparedness Act.

Published Maps, Products, and Services – The USGS is the primary civil mapping agency, producing topographic maps for the Nation for more than 140 years. In addition to the standard digital US Topo map product, the USGS has embarked on a new paradigm of generating and delivering topographic maps through investments in topoBuilder, a new cloud-based platform that enables users to request and receive custom, on-demand topographic maps.

The **Federal Geographic Data Committee** is an interagency committee that develops and implements Federal geospatial data policies and standards to deliver accurate, reliable data essential for resource management and disaster response. It guides the development of the National Spatial Data Infrastructure by promoting collaboration among Federal, State, and local governments.

Program: Science Synthesis, Analysis, and Research Program

Program Description

The Science Synthesis, Analysis and Research (SSAR) Program provides analysis and synthesis of scientific data and information within interdisciplinary research to improve understanding and use of natural resources for economic growth, national security, and safeguarding communities. This program accelerates research and decision-making through data science, information and data delivery, advanced computing, and artificial intelligence. The SSAR Program ensures that data are strategically managed, integrated, and easily available to decision makers and others as they focus on issues associated with Earth science processes.

The SSAR Program supports the Earth science community by offering interdisciplinary approaches, expertise, tools, data; nurtures strategic partnerships; and leverages resources to advance scientific discovery. The SSAR program also provides the long-term management and public distribution of scientific resources and data that are collected, processed, analyzed, and reused by researchers. USGS researchers also rely on the program's high-performance computing, data management expertise, and the USGS Library to address science challenges and administration priorities.

Scientists conduct complex analyses using advanced research computing capacity, including powerful supercomputers, large data transfer and storage, training, and expert consulting. Policymakers, land resource management decision-makers, emergency responders and scientists rely on immediate access to this timely, well-curated, high-quality science to make well-informed decisions. The SSAR Program brings expertise in data analytics and information synthesis to ensure that USGS science is timely, relevant, and applied to support the long-term prosperity and safety of the American public.

Program: National Land Imaging Program

Program Description

Our Nation's economic security, environmental vitality, and ability to respond to the impacts of natural hazard events rely on the USGS's continuous monitoring of the Earth's land surfaces, surface waters, and coastal regions. The USGS National Land Imaging (NLI) Program, through its USGS Earth Resources Observation and Science (EROS) Center in Sioux Falls, South Dakota, provides the world's largest civilian archive of remotely sensed Earth observations. This information empowers research and decision-making by land resource managers in all 50 States, Tribal lands, and U.S. territories.

The USGS is responsible for U.S. civil operational land surface observations through its Landsat satellite missions that are designed, launched, and operated in collaboration with NASA under both agencies' Sustainable Land Imaging (SLI) partnership. This partnership ensures continued, long-term operational provision of global land, water, and coastal remote sensing data to Americans on a free and open basis. Through EROS, the USGS operates the Landsat 8 and Landsat 9 satellites, continuing the world's longest operational civil satellites with simultaneous full spectrum coverage including visible, near- to short-wave and thermal infrared sensors. The thermal and short-wave infrared sensors help measure the Earth's surface

temperature and detect differences in moisture content in soils and plants, which are crucial for informing water use management in Western States. These satellites provide continued, foundational Earth observations to hundreds of thousands of government, commercial, educational, and research users across the Nation. Landsat's unique 50-plus--year data record enables the Nation's users to record, study, understand, and better manage landscape change at local, regional, and global scales.

The Budget restructures the unaffordable Landsat Next mission, which required simultaneous development and launch of three satellites with significantly enhanced capabilities compared to the current Landsat satellites. USGS will work with NASA to identify a more affordable architecture for the next Landsat mission. The joint agency USGS/NASA Sustainable Land Imaging program will study various options, including commercial satellite capabilities. Agencies will explore where modifying requirements could result in significant savings while still ensuring continuity of existing Landsat data and products, including Landsat 8 and Landsat 9's thermal infrared capabilities.

The USGS processes and distributes Landsat data and maintains the long-term Landsat data archive. Through its partnership with commercial cloud data services, the USGS has exponentially increased the amount of Landsat data products accessed by users: from tens of millions to billions of accesses each year.

In addition to Landsat data, the NLI Program also funds the USGS National Uncrewed Systems Office in Denver, Colorado, to enable the broad use of Uncrewed Aircraft Systems (UAS) technology across the USGS. UAS observations support multiple USGS science applications, including hazards assessments. These data can also complement Landsat observations to maximize user need satisfaction across the science community.

The USGS National Civil Applications Center (NCAC) uses Earth observations from military and U.S. Intelligence Community sensors to detect wildland fires, compile Incident Commanders' wildfire response maps, and to monitor global volcanoes for aviation safety and local government information. The NCAC also manages the interagency Civil Applications Committee, which oversees and facilitates appropriate Federal civil agency access to, and use of, military, intelligence, and commercial Earth observations. These observations are used extensively by Interior, USGS, and numerous agencies for disaster response, environmental monitoring, and scientific research.

Activity: Science Support

The 2026 budget request for Science Support is \$80,000,000.

Activity Overview

The USGS Science Support activity provides funding and resources toward business and information services that are crucial to conducting quality science, including internal controls; budget and performance; publishing; monitoring and evaluation of science quality and integrity; information assurance; information management and technology services; strategic planning; facilities, safety, property, materials management, and the Freedom of Information Act (FOIA). Science Support provides policy and analysis services related to technology transfer, intellectual property, agreement reviews, and directive management. Included under the Science Support umbrella are the offices of the Director; Administrative Services; Budget and Performance; Publishing; the FOIA Office; Science Quality and Integrity; and critical business liaisons in some areas that coordinate unique mission needs with the Department's consolidated administrative functions. The consolidated administrative functions include information management technology, finance, communications, human resources, international programs, civil rights, acquisition, and financial assistance.

Science Support also includes the executive leadership and management that provide guidance, direction, and oversight for all USGS science activities. The Science Support team aids USGS science by providing science and operational leadership and oversight, including ensuring fiduciary responsibility, and verifying the validity and quality of USGS science.

Science Support Funding Table

Activity: Science Support
Dollars in Thousands (\$000)

Science Support	2024 Actual	2025 Notional ^{1/}	2026 Request
Science Support Total	105,000	105,000	80,000

^{1/} Resource levels included are estimates. The President reserves his authority under the "Full-Year Continuing Appropriations and Extensions Act, 2025" (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

Program: Administration and Management Program

Program Description

The Administration and Management Program provides funding and resources toward business and information services that are crucial to conducting quality science, including internal controls; publishing; budget and performance; monitoring and evaluation of science quality and integrity; facilities, safety, security, bureau directives, technology transfer, and strategic planning.

Administration and Management program also performs critical business functions such as bureau-wide leadership and direction; establishing organizational vision, mission, goals, and scientific priorities; planning, obtaining, and managing necessary resources, including people, budget authority, facilities, and equipment; providing resource management systems; implementing statutory and regulatory requirements and monitors and enforcing compliance; and supporting Interior's centralized administrative and business services, including the USGS roles recently consolidated.

The program also monitors and enhances the integrity, quality, and health of USGS science through oversight and development and enforcement of standards for scientific rigor and integrity through strong practices, policy, and supporting USGS programs.

Program: Information Services Program

Program Description

The Information Services (IS) Program provides funding and resources to the critical Information Management & Technology (IMT) foundation for the USGS science mission by implementing advances in IMT and using them to facilitate research, data gathering, analysis, modeling, scientific collaboration, enhance computing capacity, knowledge management, and efficiencies in both business and administrative processes. These resources support numerous IMT services, such as the USGS information security and assurance program; network capacity and cloud services; telecommunications and customer support; portfolio management; application development and delivery programs; and support the Interior IMT activities through the Interior's Working Capital Fund. The IS program also provides funding for the Freedom of Information Act office.

Activity: Facilities

The 2026 budget request for the Facilities Mission Area is \$149,102,000.

Activity Overview

The USGS Facilities activity provides safe, functional workspace to accomplish the bureau's scientific mission, with an emphasis on the USGS mission driving facility needs. The goal of Facilities is to meet bureau science needs while optimizing facility locations and functionality of workspace and reducing costs. The USGS defines facilities as all sites where USGS activities are housed, and mission-related work is conducted. Facilities typically provides space for offices, laboratories, storage, and parking, as well as shared support for conference rooms and other common space uses. USGS research vessels are also considered facilities for funding purposes. Rent costs, basic facility operations, and security are funded and performed through this program, as is facility maintenance which, in compliance with Federal, State, and local standards, provides a safe working environment for employees, visiting partners, and customers.

USGS partners with other Federal agencies, State and local governments, universities, and the private sector to provide appropriate space for USGS scientists and other staff. Collaboration with these partners supports the USGS's scientific work and facilitates communication of the results of this work to the public, emergency managers, and the scientific community. In these instances, the USGS occupies space in return for science-related services or space is acquired as part of a larger cooperative agreement. Typically, the USGS pays a reduced rental rate or the cost of operations and maintenance when in partner space. Co-locations with other bureaus, agencies, or universities is a space management strategy that advances science, creates partnerships, and facilitates recruitment of new talent.

Facilities Funding Table

Activity: Facilities			
<i>Dollars in Thousands (\$000)</i>			
Facilities	2024 Actual	2025 Notional^{1/}	2026 Request
Facilities Maintenance, Modernization and Restoration Program	[74,840]	[74,840]	[54,844]
Facilities Total	184,098	184,098	149,102

^{1/} Resource levels included are estimates. The President reserves his authority under the "Full-Year Continuing Appropriations and Extensions Act, 2025" (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

Program: Rental Payments and Operations and Maintenance Program

Program Description

The Rental Payments and Operations and Maintenance Program provides the USGS with funding needed to pay for annual rent and operations and maintenance costs. Rental payments are made to the General Services Administration (GSA), other Federal sources, private lessors, and cooperators for space occupied by the USGS. The USGS has unique facility and modern laboratory space requirements to support science functions and relies on a mix of owned, leased, and other agency provided space to meet those needs. The USGS collaborates closely with the Department of the Interior and the GSA to effectively right-size its portfolio by aligning its resources and facilities with current mission needs and operational efficiency. This partnership involves assessing the agency's spatial and infrastructural requirements, strategically consolidating assets, and optimizing real estate solutions to support scientific research and data collection. Through this collaborative approach, USGS ensures that its facilities are positioned to support the utilization

of the Nation's natural resource assets and ensures that infrastructure and modernization investments simultaneously serve the public and meet Administration priorities.

The 2026 Budget will allow the USGS to:

- Begin funding the annual operating and maintenance costs for the following new facilities that will become operational in FY 2026:
 - The Hawaiian Volcano Observatory in Hawaii Volcanoes National Park, HI.
 - Energy and Minerals Research Facility, Golden, CO.
- Coordinate facility planning with science planning to provide safe, high-quality workspace aligned with science needs.
- Continue supporting the USGS scientific mission by providing facilities with unique space requirements.
- Begin to decommission 1.1 million square feet of USGS facilities
- Implement cost savings initiatives through space consolidations in alignment with Administration priorities.

Program: Facilities Maintenance, Modernization and Restoration Program

Program Description

Facilities Maintenance, Modernization, and Restoration (FMMR) funding provides for construction, modernization, and maintenance/repair projects on USGS-owned and maintained assets and infrastructure. Funding is provided to the highest-priority facility requirements in support of USGS mission needs. Prioritization follows annual Interior budget guidelines and funding is primarily directed toward projects that stabilize, restore, replace, or improve life-cycle performance of assets that are mission critical or mission dependent. Projects that facilitate space consolidation, improve utilization, and reduce the bureau space footprint also receive FMMR funding as do other facilities maintenance and management activities that identify, document, track, and remediate deferred maintenance needs.

Current levels of lifecycle investments will likely result in a decreased Deferred Maintenance and Repair (DM&R) backlog as the majority of funding is directed to critical priority construction projects, consolidations, modernizations and divestitures. This USGS lifecycle management strategy invests in the construction of mission-critical buildings to ensure that USGS activities are supported into the future.

The following table depicts how those funds will be used. This allocation reflects current plans; however, it is subject to change.

Project Title	Description	Funding Request (\$000)
Divestiture and Consolidation Efforts	USGS will begin to divest itself of science centers utilized by the Ecosystems Mission Area (EMA).	46,180
Denver Federal Center	Phase 2 - Colorado University Boulder Lease Consolidation to Building 95	5,800
Perform Condition Assessments and Engineering Support	Condition Assessments identify maintenance and capital improvement needs. Engineering services support funded projects and conduct surveys to	1,000

Project Title	Description	Funding Request (\$000)
	determine asbestos-related cleanup, environmental and disposal cost.	
Support Bureau Maintenance Management System	The Facility Maintenance Management System (FMMS) is the USGS's implementation of the commercial maintenance-management software application Maximo™. The FMMS system supports efficient operation and maintenance of USGS facilities by providing accurate maintenance information for bureau managed facilities.	864
Program and Project Management	This activity provides contract architectural, engineering, management and design services for complex projects, particularly for developing project requirements and cost estimates.	1,000
Total		54,844

The Department and USGS are working to improve performance measurement for construction projects, including a measure that projects are on time and on budget. Taxpayers' dollars deserve to be spent efficiently and on projects that provide the greatest benefits to the American people and our treasured resources.

Major Infrastructure Project Description

Divestiture and Consolidation Efforts

In alignment with the budget request, the USGS will prioritize the decommissioning of the Ecosystems Mission Area facilities. The USGS Ecosystems Mission Area primarily operates from a wide variety of centers in over 150 unique locations. Many of these centers have multiple field stations geographically dispersed from the main center. Within the unique locations, centers often share space within other EMA centers. Some of these locations have multiple uses (office, lab, warehouse, and ware yard) and some may be for a single purpose including storage. Below is a list of EMA centers.

- EMA Office of the Associate Director
- Alaska Science Center – Interdisciplinary center, partially EMA
- Climate Adaptation Science Centers
- Columbia Environmental Research Center
- Eastern Ecological Science Center
- Forest and Rangeland Ecosystem Science Center
- Fort Collins Science Center
- Great Lakes Science Center
- National Wildlife Health Center
- Northern Prairie Wildlife Research Center
- Northern Rocky Mountain Science Center
- Pacific Island Ecosystems Research Center
- Southwest Biological Science Center
- Upper Midwest Environmental Sciences Center

- Western Ecological Research Center
- Western Fisheries Research Center
- Wetland and Aquatic Research Center

Funding will be used to decommission and conduct the environmental cleanup required at EMA center locations, as well as operate the facility until facilities are fully decommissioned and, if owned, sold. The cost of decommissioning and environmental cleanup at each center will vary greatly based on the type of space, location, contaminants present, and complexity of its laboratories. EMA center locations are made up of multiple types of space: owned, leased (GSA or other), interagency or cooperative agreements, and in-kind. Costs to close operations at remote locations may be higher based on associated unique transportation and/or shipping requirements. Many include complex laboratories with specific design requirements, chemicals and other contaminants, and specialized equipment. The activities and associated costs required to decommission and cleanup laboratories will increase with more complex and specialized laboratories. It is expected to take up to four years to decommission and cleanup all centers.

Denver Federal Center – Colorado University Boulder Lease Consolidation to Building 95

The data sheet for this project is provided below.

U.S. GEOLOGICAL SURVEY

Project Data Sheet

Total Project Score/Ranking: Bureau Priority Project-Space Consolidation/2
 Planned Funding FY 2026: \$5,800
 Funding Source: Lifecycle Investment Five Year Plan

Project Identification

Project Title: Colorado University Boulder Lease Consolidation to Building 95
 Project Number: 6011485
 Unit/Facility Name: Denver Federal Center
 Region/Area/District: 1
 Congressional District: 03
 State: CO

Project Justification

DOI Asset Code	FRPP Unique Id#	API:	FCI-Before:
35100000	IB14001000036020000002	85	0.00

Project Description:

This is a bureau priority space consolidation project and therefore the DOI scoring criteria for existing owned assets is not applicable. The Water Resources Mission Area (WMA) supports infrastructure utilized by the Water Science Centers which includes: 1) data storage and transmission framework; 2) observational equipment procurement, testing and validation; 3) research that improves the understanding of the water cycle; 4) national labs that support testing of water and liquid samples used in thousands of studies; 5) models that build predictive capability into our data collection efforts; 6) and tools that disseminate this information to the public and resource managers on the landscape. A key factor in being able to implement

these resources are the facilities where the work is conducted. This project focuses on the WMA laboratory and office spaces located in both Boulder Colorado on the campus of the University of Colorado and Building 95 on the Denver Federal Center campus.

Building 95 was constructed in 1999 to serve as the home of the National Water Quality Lab (NWQL), a world renowned and cutting-edge operation that supports labs across the United States and abroad and serves as the centralized resource for testing water samples at the USGS. The NWQL is part of the Office of the Chief Operating Officer, Laboratory and Analytical Services Division (LASD) and operates labs in Reston Virginia, Moffett Field, California, and Boulder, Colorado. Building 95 is also occupied by the Geology, Geophysics and Geochemistry Science Center (G3) and the Geosciences and Environmental Change Science Center (GEC).

The USGS is constructing dedicated space for G3 on the Colorado School of Mines campus which is slated for occupancy during FY 2027. The space that G3 is vacating in Building 95 is not readily releasable to GSA, so it must remain on USGS' inventory along with the responsibility of vacant space costs. The USGS plans to vacate their currently leased WMA space at the University of Colorado Boulder campus and consolidate laboratory operations into Building 95. Approximately 8,000 square feet of the current G3 space would be modernized to accommodate cutting edge research laboratory operations that are currently being conducted at the much older and inadequate University of Colorado Boulder campus leased space.

GSA and USGS worked with Baxter Hodell Donnelly Preston, Inc. to assess the space needs of our Boulder operations. A space plan and program of requirements has been drafted with cost estimates for the modernization efforts for the former G3 footprint. This plan includes reconfiguring current space to expand lab operation capabilities, installing mechanical and electrical systems required for the lab, and interior finishes (flooring, walls, ceiling, furniture, etc.). The management of the project will be undertaken by USGS and GSA. An architecture/engineering firm (A&E) will be hired to design and administer the project onsite. The WMA contracted with GSA to hire a design firm to provide an analysis of the current space at University of Colorado Boulder and the space that was being vacated by G3. The Reimbursable Work Authorization was issued in May of 2021 for \$179,445,52 and the final report was delivered to USGS in May of 2022 with a cost estimate of \$4,730,707. To account for inflation, the costs outlined on this Project Data Sheet are inflated by 10% annually from the initial 2022 estimated costs to arrive at a total estimated budget of \$6,244,986.

Scope of Benefits (SB):

This project meets the Administration priority of utilizing available federally owned space and vacating commercially leased space. The lease with the University of Colorado Boulder is expiring on September 30, 2025. The cost benefits related to upgrading laboratory space in Building 95 are significant.

The reconfigured space will replace the aging lab space at the University of Colorado Boulder and co-locate all Denver area Laboratory and Analytical Services Division (LASD) labs within WMA into a single location. The synergies between the existing NWQL and other LASD labs planned for co-location will drive an overall smaller space footprint and reduce annual lease costs by almost \$1 million. USGS research labs have direct impacts on the NWQL operations since they drive laboratory methodologies that can be put into production in the NWQL. The co-location of labs and scientists will enhance and expedite research through to operations.

Investment Strategy (IS):

The WMA has \$408,000 invested in a Working Capital fund for the consolidation of space at the University of Colorado Boulder campus.

The remaining project cost is planned to be funded by the Lifecycle Investment Plan in FY 2025 for design costs of \$500,000 and the construction contract is planned to be funded in FY 2026 at \$5,800,000. The WMA will continue to invest in the WCF during the course of this project to help reduce the dependency on the Lifecycle Investment Plan funds, to cover contingencies, and to pay for related move costs of the laboratory operations to Building 95.

Consequences of Failure to Act (CFA):

The current laboratory space is aging, increasing the chance of mission failure each year.

Failing to complete this project of modernization and consolidation into Building 95 would result in the WMA choosing one or a combination of the following:

1. Renew the lease at the University of Colorado Boulder campus at a cost of almost \$1 million annually. In addition to this lease renewal the G3 space in Building 95 would remain a liability for USGS and cost the Bureau an additional \$437,000 annually.
2. Forgo consolidation and invest in minor tenant improvements at the University of Colorado Boulder campus space and lose potential partnership with the NWQL. The G3 space remains unutilized.
3. Reduce the scope of the project to the level of WCF investments available at the time of design, which may only involve bringing over a portion of our laboratories and will not address modernization needs to produce cutting edge lab research.

Ranking Categories

Category	Percent	Score
FCI Rating:	n/a	#.##
API Rating:	n/a	###.##
API/FCI Score:	(20%)	##.##
SB Score:	(40%)	##.##
IS Score:	(20%)	##.##
CFA Score:	(20%)	##.##
Total Score:	(100%)	##.##

Combined ranking factors = (0.20 x API/FCI score) + (0.40 x SB score) + (0.20 x IS score) + (0.20 x CFA score)

Capital Asset Planning

Capital Plan Business Case Required: Yes

VE Study: N/A Scheduled Completed

Project Costs and Status

Project Cost Estimate (this PDS):

Activity	Dollars in thousands	Percent
Maintenance Work:	\$ 0	0
Modernization/Renewal Work:	\$ 0	0
Divestiture Work:	\$ 0	0
Total:	\$ 0	0

Project Funding History:

History	Dollars in thousands
Funded to Date:	\$ 500

FY 2026 LIP Funding (this PDS):	\$	5,800
FY 202# Other Funding (this PDS):	\$	0
Future Funding to Complete Project:	\$	0
Total:	\$	6,300

Class of Estimate:

B

Estimate Escalated to:

FY2026/Q1

Planning and Design Funds:

Planning Funds Received in	FY202#	\$	0
Design Funds Received in	FY2025	\$	500

* These amounts for planning and design are included in the total formulated to the FY 2026 budget on this project data sheet.

Major Milestones

Construction Award/Start

- Scheduled: FY2027/Q2
- Actual: FY202#

Project Complete

- Scheduled: FY2029/Q2
- Actual: FY202#/Q#

Project Data Sheet

Prepared / Last Updated: 05/25

Annual Operations & Maintenance Costs \$

Current: \$1,425,637

Projected: \$437,767

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Activity: Working Capital Fund

Activity Overview

The Working Capital Fund (WCF) is used for expenses necessary to furnish materials, supplies, equipment, work, and services in support of the USGS programs, and as authorized by law, to Federal and non-Federal entities.

The WCF consists of the following components:

- **The WCF Investment Component** provides a mechanism to assist USGS managers in planning for and acquiring goods and services that are too costly to acquire in a single fiscal year or that, due to the nature of services provided, requires a multi- as opposed to a single-year basis of funding. Investments are supported by documented investment plans that include estimated acquisition/replacement costs, a schedule of deposits, and approval of the plans, deposits, and expenditures by designated USGS officials.
- **The WCF Fee-for-Service Component** provides a continuous cycle of client services for fees established in a rate-setting process established by designated USGS officials. Fees are predicated upon both direct and indirect costs associated with providing the services, including amortization of equipment required to provide the services.
- **The GSA Buildings Delegation Component** is used to manage funds received under the delegated authority for the J.W. Powell Building and Advanced Systems Center in Reston, VA, as provided by 40 U.S.C. 121 (d) and (e) (formerly subsections 205 (d) and (e) of the Federal Property and Administrative Services Act of 1949, as amended, and 40 U.S.C. 486 (d) and (e), respectively). Delegated functions include building operations, maintenance, cleaning, overseeing fire and life safety, maintaining high voltage switchgear and fire alarms, recurring repairs, minor alterations, historic preservation, concessions, energy management and security. Because of the size of the Reston buildings and the need to expend the facility funds in a manner corresponding to GSA's no-year funding (Federal Buildings Fund) mechanisms and the GSA National Capital Region long-range capital improvement plan, no-year funding is a prerequisite to administering the delegation. Public Law 104–208, Section 611, provides that, for the fiscal year ending September 30, 1997, and thereafter, any department or agency that has delegated authority shall retain that portion of the GSA rental payment available for operation, maintenance, and repair of the building and the funds shall remain available until expended. This component was established in 2004 to provide the USGS with this no-year flexibility.

Appropriation Language and Citations

P.L. 101-512 Department of the Interior and Related Agencies Appropriations Act, 1991. This authority established a Working Capital Fund account in 1991. The Telecommunications Amortization Fund was included as part of the WCF and all balances of the Telecommunications Amortization Fund existing at the end of 1990 were transferred to the WCF. These balances were to be used for the same purposes as originally authorized.

P.L. 103-332 Department of the Interior and Related Agencies Appropriations Act, 1995. This authority expanded the use to partially fund laboratory operations and facilities improvements and to acquire and replace publication and scientific instrumentation and laboratory equipment.

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Other Exhibits

Compliance with Section 403

This section describes details related to any assessments to, or within, the USGS to support bureau-wide services and functions to support governmentwide, DOI-wide, bureau-wide and regional administrative functions, headquarters, and central operations as required in Section 403 Division E of the Consolidated Appropriations Act, 2024 (P.L. 118-42).

	2026 Estimate (\$000)
Department of the Interior Working Capital Fund and Payments to Other Federal Agencies	\$271,900
<i>WCF Centralized Billings</i>	\$24,995
<i>WCF Direct Billings</i>	\$15,350
<i>*Consolidated DOI Business Functions</i>	\$124,800
<i>Worker's Compensation Payments</i>	\$1,680
<i>Unemployment Compensation Payments</i>	\$505
<i>GSA Rental Payments</i>	\$104,570
Bureau Administrative Costs	\$78,517
<i>Shared Program Costs</i>	\$49,668
<i>Bureau-Level Costs</i>	\$28,849
Reimbursable Overhead	\$50,000

**Estimates for Consolidated DOI Business Functions based on the annualized costs of personnel consolidated into DOI for the associated business functions. Does not account for non-personnel costs.*

Department of the Interior Working Capital Fund and Payments to Other Federal Agencies

Working Capital Fund

Dollars in Thousands (\$000)

Activity	2025 Notional ^{1/}			2026 Estimate		
	Central	Direct	TOTAL	Central	Direct	TOTAL
OS Shared Services	1,558	323	1,881	1,467	332	1,799
OS Activities	6,951	1,082	8,033	7,483	1,192	8,675
IT Shared Services	11,221	13,473	24,694	12,174	12,815	24,989
Interior Business Center	3,813	972	4,785	3,870	1,011	4,881
TOTAL, WCF Billing	23,543	15,850	39,393	24,994	15,350	40,344

^{1/} Resource levels included are estimates. The President reserves his authority under the "Full-Year Continuing Appropriations and Extensions Act, 2025" (P.L. 119-4) to revise 2025 spending within the amounts provided by Congress.

The Department's Working Capital Fund was established pursuant to 43 U.S.C. 1467, to provide common administrative and support services efficiently and economically at cost. The Fund is a revolving fund, whereby capital is expended to provide services for customers who pay for the services. Customers consist

of the Department's bureaus and offices, as well as other Federal agencies. Through using centrally provided services, the Department standardized key administrative areas, such as commonly used administrative systems, support services, business functions, and centrally managed departmental operations that are beneficial to the bureaus and offices.

Centralized billing is used whenever the product or service being provided is not severable or it is inefficient to bill for the exact amount of product or service being procured. Customers are billed each year using a pre-established basis that is adjusted annually to reflect change over time. These bills are paid for by both the Administrative and Management and the Information Services subactivities within Science Support, and payment may be adjusted accordingly between these lines during the year of execution based on the enacted appropriation.

Direct billing is used whenever the product or service provided is severable but is executed through a time and materials reimbursable support agreement or similar contractual arrangement.

Bureau Administrative Costs

Shared Program Costs

The USGS maintains a portion of its budget submission for other bureau-wide support and science-related activities. These costs are in addition to what may be needed to adequately pay for science support. These funds are used for initiatives that may be unfunded mandates, are crosscutting in nature, or respond to new bureau priorities and emerging scientific issues.

The funding for the initiatives in the Shared Program Costs are assessed at the budget activity level and distributed proportionately based on total appropriated funds for the mission area; or proportionately based on total funds for the mission area. These initiatives are vetted each year with the Executive Leadership Team of the USGS and approved by the Director.

Bureau-Level Costs

The USGS manages overhead costs at two levels—the bureau and science center. Bureau-level costs include headquarters executive, managerial, supervisory, administrative, and financial functions, and bureau-wide systems. Funding appropriated to the Science Support budget subactivities pays much of the bureau-level costs. For this reason, bureau-level costs collected on reimbursable support agreements are deposited within Science Support program areas as well (see the Reimbursable overhead section below). Additionally, the USGS may allocate costs for these activities typically funded out of the Science Support program to the direct appropriation for those programs when those costs exceed amounts allocated to Science Support subactivities in the appropriation. At the 2025 CR level, these costs are approximately three and a half percent of the science program appropriations. Taken as a whole, costs to support science mission areas are estimated at about 12 percent of the USGS operating budget and up to 12 percent of appropriated programmatic funding could be used to adequately pay for science support costs. These costs may be considered shared program costs.

At the science center level, as there generally is not a direct appropriated funding source to pay the local overhead (common services) costs, both the direct appropriated and reimbursable funding are assessed to cover science center-level costs. Science center common services costs include center costs that are not directly attributable to a specific activity or project, such as managerial, supervisory; administrative; and financial functions and related systems; as well as costs incidental to providing services and products, such

as postage, training, miscellaneous supplies, and materials. During 2024, the cost for the local overhead totaled \$203 million.

Reimbursable Overhead

The USGS assesses a bureau overhead rate, estimated to remain at 12 percent, on reimbursable work from non-Interior customers to recoup their share of bureau-level costs. In some cases, the USGS assesses a special or reduced rate when it can be demonstrated that indirect costs are substantially and consistently less than the norm and the amount collected covers the full costs, such as with pass-through funding where the USGS does not perform any of the actual work.

In recognition of the USGS role as the science bureau for the Department of the Interior, the USGS is continuing to give Interior bureaus and offices a "preferred" customer rate on overhead charges for a significant portion of reimbursable work, to the extent that cost share funds are available within the USGS budget to cover the uncovered overhead costs. Cost Centers may charge up to 22 percent for the preferred rate, which will cover both bureau and center-level common services costs. Of the 22 percent, 7 percent will be applied to bureau costs (the same as in previous years), and the remaining 15 percent is applied to common services costs.

The Associate Director for Budget, Finance, and Analysis establishes the USGS bureau special rate for each fiscal year. The special rate for 2026 is estimated to remain at three percent. Cost centers do not charge more than the bureau special rate for facilities-related costs or their standard common services rate when funding is approved for a bureau-level special rate. Special rates are applied under the following circumstances:

- When the USGS receives funds from a non-USGS organization and awards a grant to a third-party entity.
- When the USGS receives funds from one or more non-USGS organizations to support, under USGS leadership, a strategic science objective that includes the USGS passing through funds to one or more third-party entities.
- When the USGS receives funds from a non-USGS organization for the purpose of the customer acquiring services through the Cartographic Services or the Remotely Sensed Data Contracts. The special rate helps encourage other Federal agencies to use these contracts for cartographic services and remotely sensed data, rather than establishing and managing their own contracts, and ensures greater data consistency using common service providers.
- Equipment purchase required for new project; cost of the equipment is a major portion of the total agreement funds; and equipment will be USGS property.
- Interagency detail work assignments of a USGS employee to a non-USGS agency when space and administrative support are provided at no charge.
- Funds received with specific legal authority to award a grant which will be transferred to a third-party entity.

Good Accounting Obligation in Government Act Report

The Good Accounting Obligation in Government Act (GAO-IG Act, P.L. 115-414), enacted January 3, 2019, requires that agencies report the status of each open audit recommendation issued more than one year prior to the submission of the Agency's annual budget justification to Congress. The Act requires agencies

to include the current target completion date, implementation status, and any discrepancies on closure determinations by the GAO.

DOI leadership takes audit follow-up very seriously and considers our external auditors, including the GAO and OIG, valued partners in not only improving the Department's management and compliance obligations but also enhancing its programmatic and administrative operations. As stewards of taxpayer resources, the Department applies cost-benefit analysis and enterprise risk management principles in recommendation implementation decisions. The Department's GAO-IG Act Report is available at the following link: <https://www.doi.gov/cj>.

Infrastructure Investment and Jobs Act (IIJA) 2026 Spend Plan

Appropriations Table

The Act provides \$64.0 million to USGS in 2026 for the programs and activities shown in the table below.

U.S. Geological Survey
Infrastructure Investment and Jobs Act Funding
(Dollars in thousands \$000)

Account Name	Program Name	FY 2026
Geology, Energy, and Minerals	Earth Mapping Resources Initiative	64,000
Office of the Inspector General	Directed Transfer	-320
	(0.5% of all project funding)	
USGS, Total		63,680

Project Descriptions

The USGS plays an essential role in providing a broad range of science to other Federal, State, and local government agencies, Tribal communities, private industry, and the general public. The USGS is utilizing IIJA funds to invest in the advancement of science through the Earth Mapping Resources Initiative.

Earth Mapping Resources Initiative (Earth MRI)

Funding is available for obligation in years 2025 - 2027 to identify areas with potential critical mineral resources. The IIJA directs the USGS to accelerate efforts to carry out the fundamental resources and mapping mission of the USGS by:

- Providing integrated topographic, geologic, geochemical, and geophysical mapping.
- Accelerating the integration and consolidation of geospatial and resource data.
- Providing interpretation of mineral resources data on the subsurface and above ground.