leveraging capacity from its partners. The Committee further encourages the Service to support deferred maintenance priorities that support recreational and education opportunities relating to urban and underserved youth.

ENERGY AND MINERALS

U.S. GEOLOGICAL SURVEY

Established in 1879, the U.S. Geological Survey [the Survey] serves as the Earth and natural science research bureau for the Department of the Interior and is the only integrated natural resources research bureau in the Federal Government. The Survey conducts research, monitoring, and assessments to contribute to understanding America's lands, water, and biological resources. Its research and data products support the Department's resource and land management needs and also provide the water, biological, energy, and mineral resources information needed by other Federal, State, Tribal, and local government agencies to guide planning, management, and regulatory programs. Scientists, technicians, and support staff of the Survey are located in nearly 400 offices in every State and in several foreign countries throughout the world. The Survey leverages its resources and expertise in partnership with more than 2,000 agencies of Federal, State, local, and Tribal governments; the academic community; nongovernmental organizations; and the private sector.

SURVEYS, INVESTIGATIONS, AND RESEARCH

Appropriations, 2021	$1,315,527,000
Budget estimate, 2022	1,642,437,000
Committee recommendation	1,493,839,000

The bill provides $1,493,839,000 for the U.S. Geological Survey, which is $178,312,000 above the fiscal year 2021 enacted level and $148,598,000 below the budget request. The recommendation supports the priorities identified in the budget request and provides additional resources to the Survey that will enhance its capacity to advance climate resilience, hazard mitigation, and stewardship of land, water, and wildlife. Program changes, instruction, and details follow below and in the table accompanying this explanatory statement.

Ecosystems.—The bill provides $326,491,000 for Ecosystems, which is $67,414,000 above the fiscal year 2021 enacted level and $31,726,000 below the budget request. Program elements of this mission area follow below.

Environmental Health Program.—The bill provides $25,739,000 to the Environmental Health Program, $994,000 above the enacted level and equal to the budget request. The bill continues funding for integrated sensor grants as well as per- and polyfluoroalkyl substances [PFAS] research at no less than the enacted level.

Microplastics.—The Committee appreciates that the Survey is developing a strategic vision for its microplastics research, including a review of the current science gaps and how Survey expertise and capabilities can address those gaps. The Committee encourages the Survey to brief the Committee on its findings after release.

Species Management Research Program.—The bill provides $58,918,000 for the Species Management Research Program, $5,004,000 above the enacted level and $8,000,000 below the budget request. The Committee is aware of long-term hydrological and ecological challenges associated with saline lakes in the Great Basin States and encourages the Survey to address related science needs in tandem with the Integrated Water Availability Assessment for saline lakes that is provided for under the Water Resources mission area.

The bill provides $500,000 to continue competitively awarding grants for applied research to develop a system for integrating sensors. The Committee's expectation remains that by working with partners, such as academic institutions, small businesses, and other government research organizations to submit innovative proposals to perform complementary development of technologies, the Survey can develop a convergent platform that enables existing and future sensor technologies to be deployed in extreme environments where real-time information is required. Additionally, the Committee reminds the Survey of the directive contained in the Consolidated Appropriations Act, 2019 (Public Law 116–6) regarding partnerships for the integration of sensors.

The Committee requests a briefing from the Survey within 180 days of the passage of this act on the merits of funding phenology-related efforts to collect, maintain, and share information on seasonal timing to support resource management, climate adaptation, agriculture, and human health.

Land Management Research Program.—The bill provides $62,503,000 for the Land Management Research Program, $5,822,000 above the enacted level and $12,800,000 below the budget request. The Committee is aware of the work the Survey is performing in critical landscapes, such as the Arctic, Puget Sound, California Bay Delta, Everglades, Great Lakes, Columbia River, and the Chesapeake Bay, and expects this work to continue. The Committee recommends an increase of $1,200,000 for Chesapeake Bay activities.

Biological Threats and Invasive Species Research Program.—The bill provides $44,031,000 for the Biological Threats and Invasive Species Research Program, $5,782,000 above the enacted level and $80,000 above the budget request. Of the funds provided, the Committee recommends maintaining funding at the fiscal year 2021 enacted level of $3,748,000 for White-nose syndrome [WNS] research. The direction found in Senate Report 116–123 is continued for WNS.

The bill provides $11,000,000 to address Asian Carp issues in the Great Lakes and Upper Mississippi River Basin. In order to effectively control the spread of Asian Carp, the Committee expects all six sub-basins of the Mississippi River Basin will be included in funding opportunities.

The bill provides $700,000 for Coral Disease Research, Detection, and Response as a result of concerns that emerging coral diseases have proven to be a major source of coral mortality, especially along the Florida Reef Tract, and pose significant obstacles to coral reef restoration efforts. The Committee encourages the Department of the Interior to work with the National Oceanic and Atmospheric

Administration, as well as State and territorial government partners, to support coral monitoring, research, and restoration efforts in highly impacted and high priority coral reef habitats in U.S. waters, including in Biscayne National Park and Dry Tortugas National Park.

The bill provides $5,720,000 to research the predominant pathways and mechanisms of the transmission of chronic wasting disease [CWD] in wild, captive, and farmed populations of cervids in North America. In carrying out this research, the Survey may consult, partner, or contract with the Animal and Plant Health Inspection Service, the National Academy of Sciences, State and Federal public and private entities, and any CWD task forces and working groups. In particular, the Committee encourages research and investment into carcass disposal methods to mitigate the spread of CWD, and the Committee urges the Survey to consult with the Environmental Protection Agency, the Federal Emergency Management Agency, and States to develop recommendations for carcass disposal methods that are compliant with relevant Federal clean air and water and solid waste regulations. The Committee also encourages the Survey to work in collaboration with the Fish and Wildlife Service to aid State wildlife agencies in the application of existing human dimensions research to the management and prevention of CWD.

The Committee notes the grave ecological threats and public nuisance posed by many invasive species and directs the Survey to prioritize research, detection, and response efforts on invasive species with extremely high impacts on natural resources, native wildlife populations, and public access and enjoyment, including Burmese Pythons in the Florida Everglades and Big Cypress Swamp, as well as Lionfish in the Gulf of Mexico, Caribbean, and South Atlantic waters.

Climate Adaptation Science Center and Land Change Science Program.—The bill provides $108,300,000 for the Climate Adaptation Science Center and Land Change Science Program, $47,812,000 above the enacted level and $12,500,000 below the budget request. Of this amount, $84,403,000 is provided for National and Regional Climate Adaptation Science Centers activities and $23,897,000 is provided for Land Change Science activities. The Committee continues to believe that the Climate Adaptation Science Center program produces critical actionable science that is invaluable to stakeholders and policy makers. The Committee encourages the Survey to prioritize the funding needs of the Regional Centers and ensure timely processing of their funds. The Committee expects distribution of funds to remain consistent with the allocation methodology used in previous years to ensure all Centers remain open and operational.

Cooperative Research Units Program.—The bill provides $27,000,000 for the Cooperative Research Units Program, $2,000,000 above the enacted level and $1,494,000 above the budget request. The Committee notes that Cooperative Research Units [CRUs] have served as a cooperative network with Interior partners to improve and increase youth involvement and graduate education in science and resources management. The Committee recognizes the value of these programs in building the workforce of to-

morrow and encourages the Survey to develop a plan for addressing vacant research positions and to fill open positions at CRUs as quickly as practicable to support the educational pipeline. The Committee strongly encourages that of the funds provided, $250,000 be provided for research into the causes of malignant melanomas affecting 25 percent or more of brown bullhead (Ameiurus nebulosus) in some northern New England waters and related fishery research at the host institution.

Great Lakes Science Center.—The Committee supports the Great Lakes Science Center's collaboration with the broader Great Lakes Partnership to implement priority science. These resources will ensure delivery of information needed for Great Lakes management decisions. The Committee expects this work to continue at no less than the fiscal year 2021 enacted level.

Energy and Minerals Resources.—The bill provides $103,723,000 for Energy and Mineral Resources, $13,682,000 above the enacted level and $36,250,000 below the budget request. The Committee recommends $67,237,000 for the Mineral Resources Program, including at least the enacted level for the Earth Mapping Resources Initiative [Earth MRI] in support of a prioritized nationwide program of topographic, geologic, and geophysical mapping to enhance understanding of the Nation's mineral resource potential to better manage the supply of critical minerals. The Committee expects critical mineral mapping efforts in Alaska to continue, pursuant to the budget request, at no less than the enacted level and directs the Survey to brief the Committee on such efforts within 90 days of enactment of this act. The Committee continues the direction regarding the study on the domestic supply of critical minerals contained in the explanatory statement accompanying Public Law 116–260. The bill provides $36,486,000 for the Energy Resources Program.

Natural Hazards.—The bill provides $197,748,000 for Natural Hazards, $22,264,000 above the enacted level and $10,000,000 below the request. Program elements of this mission area follow below.

Earthquake Hazards Program.—The bill provides $92,637,000 for the Earthquake Hazards Program, $7,234,000 above the enacted level and equal to the budget request. This includes no less than $28,600,000 for continued development and expansion of the ShakeAlert West Coast earthquake early warning [EEW] system. The Committee supports continued efforts to complete and operate the EEW system on the West Coast. The Committee is concerned about the lack of knowledge and offshore real time instrumentation available for the Cascadia subduction zone. Our increased scientific understanding of earthquakes and the ocean environment will benefit from the wealth of offshore data collected and the continued development of an early earthquake warning system for the Cascadia system.

The Committee continues funding at no less than $3,000,000 for regional networks that acquired USArray stations from the National Science Foundation for operations and maintenance as these networks work to incorporate and use all Earthscope data. The Committee is concerned that the updates to the national seismic hazard maps do not consistently include the entire country and di-

rects the Survey to update these maps for all 50 States. This bill provides funding to ensure all the regional networks receive at least the fiscal year 2021 enacted funding level for operations and maintenance, including earthquake early warning and the Central and Eastern U.S. Network [CEUSN].

Volcano Hazards Program.—The bill provides $35,532,000 for the Volcano Hazards Program, $5,266,000 above the enacted level and $2,000,000 above the budget request. The Committee remains concerned that systems and equipment used to monitor, detect, and warn the public of volcanic and seismic hazards, including lahars and earthquakes on high-threat volcanoes, are outdated and inadequate. The recommended funding supports efforts to repair, upgrade, and expand systems and equipment that monitor, detect, and provide early warning of volcanic hazards with a focus on high-threat volcanoes. The bill therefore provides funding of $1,800,000 for early warning of volcanic hazards with a focus on high-threat volcanoes and establishment of the National Volcano Data Center. The Committee also provides $4,145,000 for next generation lahar detection systems.

The Committee is encouraged by the initiation of the National Volcano Early Warning and Monitoring System [NVEWS] in 2019. NVEWS will significantly improve, organize, and modernize volcano monitoring efforts in the United States to mitigate volcanic hazards. The Committee recognizes the efforts of the Survey to complete the two prerequisite steps to NVEWS expansion and upgrades (i.e., analog to digital station conversion of certain monitoring networks and completion of the next generation lahar detection system pilot) and encourages the Survey to accelerate the pace of these activities where possible. The Committee appreciates that the Survey submitted a comprehensive implementation plan in March 2020 and the bill provides $3,672,000 in funding to begin the implementation of NVEWS.

Landslide Hazards Program.—The bill provides $10,179,000 for the Landslide Hazards Program, $2,141,000 above the enacted level and $1,000,000 below the budget request. In light of the increasing frequency of catastrophic wildfires, the Committee encourages the Survey to prioritize efforts to predict and reduce the risk of post-wildfire landslides. The Committee supports the ongoing effort and collaboration by the Survey, the National Oceanic and Atmospheric Administration, State and local governments to assess landslide potential and hazards and implement tsunami warning capabilities in Prince William Sound, including through the use of physical instrumentation or remote sensing technologies, particularly where the threat of a landslide and tsunami presents the most serious risks to Sound residents, visitors, and property. The Committee encourages the Survey to expand this work to areas in Southeast Alaska that have recently experienced landslides and will continue to face the threat of devastating landslides. Further, the Committee directs the Survey to brief the Committee within 60 days of enactment of this act on what resources are needed to aid the development and deployment of early warning technologies to affected communities.

Geomagnetism Program.—The Committee recommends $5,173,000 for the Geomagnetism Program, $1,059,000 above the

enacted level and $500,000 below the budget request. The bill provides at least the enacted level to advance the collection of magnetotelluric observations of the Earth's naturally occurring electric and magnetic fields in U.S. regions.

Coastal Hazards Program.—The bill provides $47,015,000 for the Coastal Hazards Program, $6,505,000 above the enacted level and $10,500,000 below the request. The Committee supports the Survey's increased focus on enhancing blue carbon and mitigating coastal hazards in light of climate change.

Emergent Hazards.—Within 90 days of enactment of this act, the Survey is directed to brief the Committee on the need and potential of partnering with universities for a scalable, automated system that is capable of rapidly identifying emerging hazard threats and their potential impacts using remote sensing data to provide an impact model product capable of identifying and supporting response to emergent hazard threats.

Water Resources.—The bill provides $297,894,000 for Water Resources, $34,774,000 above the enacted level and $9,500,000 above the budget request. Program elements of this mission area follow below.

Water Availability and Use Science Program.—The bill provides $69,501,000 for the Water Availability and Use Science Program, an increase of $11,514,000 above the enacted level and equal to the budget request. The recommendation includes $13,500,000 for integrated water prediction to continue to utilize the best available technology to develop advanced modeling tools, state-of-the-art forecasts, and decision support systems and to incorporate these capabilities into daily water operations.

The bill includes at least $2,000,000 to complete a groundwater model-based decision support system to support water sustainability decision-making and a basin-wide model and monitoring program for irrigation water-use for the Mississippi Alluvial Plain. In addition, the Survey is provided funds to transition tools and resources produced through the Mississippi Alluvial Plain project into resources that support Integrated Water Availability Assessments in targeted basins of interest including the Gulf of Mexico Coastal Plain.

The bill provides at least $2,000,000 to the Survey to establish a regional Integrated Water Availability Assessment study program to assess and monitor the hydrology of saline lakes in the Great Basin and the migratory birds and other wildlife dependent on those habitats.

The Committee recognizes efforts to utilize technology and models to monitor water loss due to evapotranspiration and make this information available to the public and key decisionmakers. The Committee encourages the Survey to evaluate and develop funding estimates for such a program and directs the Survey to brief the Committee on findings within 180 days of the enactment of this act. The Committee also continues funding for the U.S.-Mexico transboundary aquifer project.

National Groundwater and Streamflow Information Program.—The bill provides $118,151,000 for the National Groundwater and Streamflow Information Program, an increase of $17,478,000 over the enacted level and $5,500,000 above the budget request.

The recommendation includes $34,400,000 to continue with the Next Generation Water Observing System [NGWOS]. The bill provides resources necessary to operate and maintain the fully deployed NGWOS in the Delaware River Basin and the Committee encourages the Survey to continue to study and monitor surface water and groundwater in the lower basin of the Delaware River and to provide geologic mapping of the basin in support of the pilot through the National Geologic Mapping Program. The Committee encourages the Survey to partner, where appropriate, with State and local government officials and with the academic research community. Funding for NGWOS includes $4,500,000 to work with universities and other partners to develop innovative water resource sensor technologies that are scalable to regional and national monitoring networks.

The bill provides at least $1,500,000 for the Survey to install streamgages on certain transboundary rivers, including those at risk from mining pollution originating in Canada, including in the Kootenai watershed; at least $1,500,000 for implementation of the baseline strategy for transboundary rivers, as outlined by the Survey's Water Quality Baseline Assessment for Transboundary Rivers; and $120,000 for the streamgage on the Unuk River. The Committee directs the Survey to continue to expand its streamgage monitoring of transboundary watersheds and to work with the Environmental Protection Agency to ensure the relevant equipment is deployed to the Kootenai watershed to support the agency's work to evaluate and reduce transboundary pollution. The Committee continues the direction that the Survey enter into a formal partnership with local Tribes and other Federal agencies as necessary in the area to develop a water quality strategy for the transboundary rivers.

The bill provides $500,000 for maintaining operational capacity within the existing super-gage network along the Ohio River in basins containing unique geology, distinct soils, and a significant agricultural presence. The Committee recognizes the on-going monitoring of critical water budget components in the Klamath Basin to provide the information needed to assess controls of inflow to Upper Klamath Lake from surface water and groundwater, improve snowmelt prediction, and forecast impacts of drought and other drivers on water availability for both human and ecological uses and the bill provides $1,000,000 to expand this work.

Hydrological Science Talent Pipeline.—The Committee believes that robust participation with universities in the hydrologic sciences is essential to building a talent pipeline as well as building capacity to support future hydrological research and operational efforts. To support this, the bill provides an additional $2,000,000 within the Water Availability and Use Science Program and $2,000,000 within the National Groundwater and Streamflow Information Program above the enacted levels to pursue such cooperative research agreements with an emphasis on locations where the Survey has pending hydrological facilities as well as where there are other Federal operational hydrologic resources.

National Water Quality Program.—The Committee recommends $95,242,000 for the National Water Quality Program, an increase of $1,782,000 over the enacted level and equal to the budget re-

quest. The Committee continues funding to support per- and polyfluoroalkyl substances research. The Committee directs the Survey to consult with States and Tribes to determine priority mapping areas for PFAS contamination. Within funds provided, the Committee directs the Survey to prioritize advanced testing capable of detecting suites of PFAS compounds and individual PFAS chemicals in the environment to support nationwide sampling for these chemicals in estuaries, lakes, streams, springs, wells, wetlands, and soil. The Committee is supportive of the Survey's efforts to understand groundwater vulnerability, specifically in shallow fractured bedrock terrain, and directs this work to continue.

Water Resources Research Act Program.—The bill provides $15,000,000 for the Water Resources Research Act (Public Law 88–379) Program, $4,000,000 above the enacted level and $4,000,000 above the budget request. The recommendation includes $1,500,000 for research on the control and management of aquatic invasive species in the Upper Mississippi River region.

Status and Trends.—The Committee recommends an additional amount of $1,000,000 in congressionally directed spending for Status and Trends for the Survey to work with the State of Alaska to develop an implementation plan to be completed within 2 years in order to put Shake Alert/Earthquake Early Warning in Alaska. Further detail on this project is located in the table titled Congressionally Directed Spending accompanying this explanatory statement.

Core Science Systems.—The bill provides $267,902,000 for Core Science Systems, $15,214,000 above the enacted level and $73,972,000 below the budget request. The recommendation includes $111,492,000 for the National Land Imaging Program; $28,703,000 for the Science Synthesis, Analysis, and Research Program; $40,581,000 for the National Cooperative Geological Mapping Program; and $87,126,000 for the National Geospatial Program.

The National Geospatial Program funding includes no less than $36,655,000 for the 3DEP program and no less than $10,000,000 for the Alaska mapping and map modernization initiative, which includes modernizing Alaskan hydrography datasets. The recommendation supports the continued operations of the Alaska Mapping Executive Committee [AMEC]. The National Geospatial Program will continue its role in advancing the goals, objectives, and approaches collaboratively developed as part of the AMEC Alaska Coastal Mapping Strategy, to include collection and distribution of topography and orthoimagery in coastal areas.

The bill fully funds the budget request for Satellite Operations and Landsat 9. The Committee recognizes the value of the Remote Sensing State Grants program and directs the Survey to continue funding the grant program at the enacted level to ensure the ongoing viability of the program nationwide. The Committee recognizes efforts to utilize technology and models to assess and make public information on land level change, particularly in areas facing major coastal land loss challenges like the North-Central Gulf of Mexico and Central Atlantic Coastal Plain. The Committee encourages the Survey to evaluate and develop funding estimates for such a program and directs the Survey to brief the Committee on findings

within 180 days of the enactment of this act. The recommendation includes $1,500,000 for the National Digital Trails project.

Science Support.—The bill provides $114,271,000 for Science Support, an increase of $18,537,000 above the fiscal year 2021 enacted level and $7,150,000 below the budget request. The recommendation includes $84,055,000 for the Administration and Management Program, including fully funding the Scientific Integrity, Diversity, and Support budget request and the Diversity, Equity, Inclusion, and Accessibility Initiative. The recommendation includes $30,216,000 for the Information Services Program and fully funds the request for Information Technology Support for Research and Development, including Cloud and High-Performance Computing.

BUREAU OF OCEAN ENERGY MANAGEMENT

The Bureau of Ocean Energy Management [Bureau or BOEM] is responsible for resource evaluation, environmental review, leasing activities, and lease management for the Nation's offshore energy and minerals resources.

OCEAN ENERGY MANAGEMENT

Appropriations, 2021	$192,815,000
Budget estimate, 2022	227,781,000
Committee recommendation	227,781,000

The bill provides $227,781,000 for Ocean Energy Management, $34,966,000 above the enacted level and equal to the request. This amount will be partially offset with the collection of offsetting rental receipts and cost recovery fees totaling $43,000,000.

Renewable Energy.—The bill provides $45,818,000 for renewable energy activities, $17,353,000 above the enacted level and equal to the request.

The Committee expects the Bureau to continue to coordinate with the Department of Energy on renewable energy research, exchange information with coastal States, and work with stakeholders to study new wind energy areas through its intergovernmental task forces, including continuing existing and launching new data collection campaigns in the Gulf of Maine. As the Bureau refines the permitting process, it must include steps to understand existing ocean uses by consulting early and often with the commercial fishing industry and other stakeholders, for which the Rhode Island Ocean Special Area Management Plan provides a model. The Bureau must also enhance its partnership with the National Oceanic and Atmospheric Administration to support research and incorporate mutual data and recommendations on the siting and development of offshore wind projects. When new offshore facilities are approved and constructed, they should be required to use the best available technology to monitor and mitigate avian impacts, especially for migratory bird populations. The Bureau is directed to notify the Committee prior to issuing leases that would allow wind turbines to be constructed or located less than 22 nautical miles from the State of North Carolina shoreline.

Conventional Energy.—The bill provides $62,336,000 for conventional energy activities, $1,849,000 above the enacted level and

Semiquincentennial Sites	10,000	.....	10,000	.....	+10,000
Historic Preservation Fund Projects	.....	.....	15,772	+15,772	+15,772
Total, Historic Preservation Fund	144,300	151,800	180,072	+35,772	+28,272
Construction					
General Program:					
Line item construction and maintenance	131,788	146,700	152,700	+20,912	+6,000
Emergency and unscheduled	3,848	20,848	10,848	+7,000	−10,000
Housing	2,922	2,933	2,933	+11	.....
Dam safety	1,247	1,247	1,247	.....	.....
Equipment replacement	13,474	33,424	13,474	.....	−19,950
Planning, construction	15,183	15,183	15,183	.....	.....
Construction program management	45,180	33,421	39,921	−5,259	+6,500
General management plans	10,265	24,807	16,807	+6,542	−8,000
Total, Construction	223,907	278,563	253,113	+29,206	−25,450
Land Acquisition and State Assistance					
Rescission	−23,000	.....	.....	+23,000	.....
Centennial Challenge	15,000	15,000	15,000	.....	.....
TOTAL, NATIONAL PARK SERVICE	3,122,651	3,497,206	3,463,410	+340,759	−33,796
UNITED STATES GEOLOGICAL SURVEY					
Surveys, Investigations, and Research					
Ecosystems:					
Environmental Health:					
Contaminant biology	10,397	11,100	11,100	+703	.....
Toxic substances hydrology	14,348	14,639	14,639	+291	.....
Subtotal	24,745	25,739	25,739	+994	.....
Species Management Research	53,914	66,918	58,918	+5,004	−8,000
Land Management Research	56,681	75,303	62,503	+5,822	−12,800
Biological Threats and Invasive Species Research	38,249	43,951	44,031	+5,782	+80

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2021 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL FOR FISCAL YEAR 2022—Continued

[In thousands of dollars]

Item	2021 appropriation	Budget estimate	Committee recommendation	Committee recommendation compared with (+ or −)	
				2021 appropriation	Budget estimate
Climate Adaptation Science Centers and Land Change Science:					
National and Regional Climate Adaptation Science Centers	41,335	84,403	84,403	+43,068	
Land Change Science	19,153	36,397	23,897	+4,744	−12,500
Subtotal	60,488	120,800	108,300	+47,812	−12,500
Cooperative research units	25,000	25,506	27,000	+2,000	+1,494
Total, Ecosystems	259,077	358,217	326,491	+67,414	−31,726
Energy and Mineral Resources:					
Mineral resources	59,869	86,237	67,237	+7,368	−19,000
Energy resources	30,172	53,736	36,486	+6,314	−17,250
Total, Energy and Mineral Resources	90,041	139,973	103,723	+13,682	−36,250
Natural Hazards:					
Earthquake hazards	85,403	92,637	92,637	+7,234	
Volcano hazards	30,266	33,532	35,532	+5,266	+2,000
Landslide hazards	8,038	11,179	10,179	+2,141	−1,000
Global seismographic network	7,153	7,212	7,212	+59	
Geomagnetism	4,114	5,673	5,173	+1,059	−500
Coastal/Marine hazards and resources	40,510	57,515	47,015	+6,505	−10,500
Total, Natural Hazards	175,484	207,748	197,748	+22,264	−10,000
Water Resources:					
Water Availability and Use Science Program	57,987	69,501	69,501	+11,514	
Groundwater and Streamflow Information Program	100,673	112,651	118,151	+17,478	+5,500

National Water Quality Program	93,460	95,242	95,242	+1,782	.....
Water Resources Research Act Program	11,000	11,000	15,000	+4,000	+4,000
Total, Water Resources	263,120	288,394	297,894	+34,774	+9,500
Status and Trends	.....	.....	1,000	+1,000	+1,000
Total, Status and Trends	.....	.....	1,000	+1,000	+1,000
Core Science Systems:					
National Land Imaging	106,865	116,892	111,492	+4,627	−5,400
(Satellite Operations)	(84,337)	(84,788)	(84,788)	(+451)	.....
Science, synthesis, analysis, and research	25,972	98,803	28,703	+2,731	−70,100
National cooperative geologic mapping	40,397	40,581	40,581	+184	.....
National Geospatial Program	79,454	85,598	87,126	+7,672	+1,528
Total, Core Science Systems	252,688	341,874	267,902	+15,214	−73,972
Science Support:					
Administration and Management	73,787	91,205	84,055	+10,268	−7,150
Information Services	21,947	30,216	30,216	+8,269	.....
Total, Science Support	95,734	121,421	114,271	+18,537	−7,150
Facilities:					
Rental payments and operations & maintenance	104,719	110,146	110,146	+5,427	.....
Deferred maintenance and capital improvement	74,664	74,664	74,664	.....	.....
Total, Facilities	179,383	184,810	184,810	+5,427	.....
TOTAL, UNITED STATES GEOLOGICAL SURVEY	1,315,527	1,642,437	1,493,839	+178,312	−148,598
BUREAU OF OCEAN ENERGY MANAGEMENT					
Ocean Energy Management					
Renewable energy	28,465	45,818	45,818	+17,353	.....
Conventional energy	60,487	62,336	62,336	+1,849	.....