



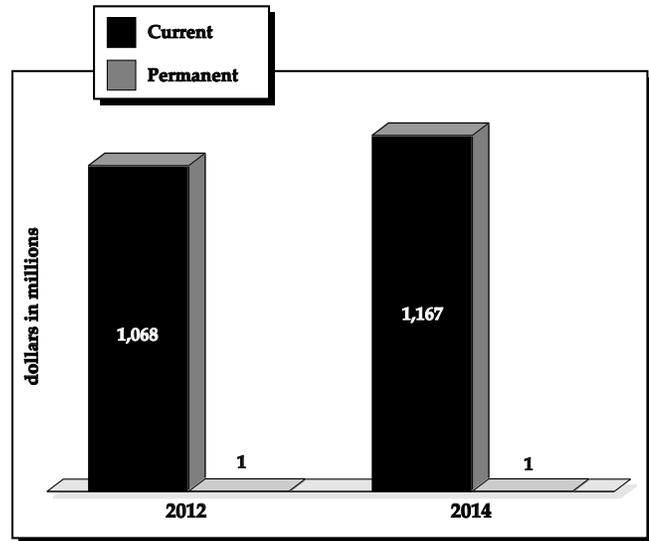
U.S. GEOLOGICAL SURVEY

Mission – The mission of the U.S. Geological Survey is to provide reliable scientific information to describe and understand the Earth, minimize loss of life and property from natural disasters, manage water, biological, energy, and mineral resources, and enhance and protect the quality of life.

Budget Overview – The 2014 USGS budget request is \$1.2 billion, which is \$98.8 million above the 2012 enacted level. The USGS estimates staffing will equal 8,646 full time equivalents in 2014. The 2014 budget reflects the Administration’s commitment to investing in research and development to support sound decisionmaking and sustainable stewardship of natural resources in support of a robust economy and resilient Nation. This funding level will enable USGS to continue to provide world-class science and priorities outlined in the USGS Science Strategy. The budget prioritizes programs that are unique to USGS, have national impacts, and provide monitoring, research, and tools to make science immediately usable by decisionmakers, particularly in support of Interior’s resource and land management missions and trust responsibilities. To optimize investments in these priorities, some targeted reductions were made. Highlights of the budget include increases for priorities in ecosystem restoration, water resources management, sustainable energy development, climate adaptation, and earth observation systems, such as streamgages and light detection and ranging tools which provide critical data to the Nation. Continuation of a hydraulic fracturing research and development effort with the Department of Energy and the Environmental Protection Agency will support research to better understand and minimize potential environmental, health, and safety impacts of energy development through hydraulic fracturing.

New Energy Frontier – The 2014 budget provides \$49.7 million for the Secretary’s New Energy Frontier initiative, \$18.7 million above the 2012 enacted level. A program increase of \$2.0 million is provided for Energy Future and Wildlife Sustainability and an additional \$2.0 million is provided to support agencies responsible for alternative energy permitting on Federal lands. These funds will be used to study geothermal resources as a potential energy

USGS Funding



source and build on current USGS efforts to develop an assessment methodology for wind energy impacts. Included in the request is \$18.6 million, \$13.0 million over 2012, to support the interagency effort to better understand potential impacts of hydraulic fracturing. Funding for other conventional energy programs, including oil, gas, and coal assessments, totals \$21.2 million.

Water Challenges – The 2014 budget provides \$22.5 million for USGS activities in support of the Water Challenges initiative, an increase of \$14.5 million above the 2012 enacted level. The increase will enhance implementation of the WaterSMART Availability and Use Assessment through development of regional water availability models, integration and dissemination of data through online science platforms and databases, and support for the National Groundwater Monitoring Network. In 2014, USGS will begin development of an ecological flows model that integrates hydrological and biological variables, to better understand hydrological needs of ecosystems when making decisions.

Ecosystems – The 2014 budget includes \$180.8 million for the Ecosystems activity, \$22.5 million above the 2012

U.S. GEOLOGICAL SURVEY FACTS

- **Founded by an Act of Congress in 1879.**
- **The Nation's largest water, earth, and biological science and civilian mapping agency.**
- **Employs over 8,500 scientists, technicians, and support staff working in more than 400 locations throughout the United States.**
- **With over 2,000 strategic partnerships, USGS is a primary Federal source of science-based information on ecosystem science, climate and land use change, energy and mineral resources, environmental impacts, natural hazards, water resource use and availability, and updated maps and images for the Earth's features available to the public.**
- **Generates and maintains data from over 8,000 streamgages and over 2,100 earthquake sensors that are available to the public.**
- **Provides direct access to 3.7 million Landsat images spanning the globe from 1972 to present; archives contain 7.6 million air photos dating to 1939 and over 100 other satellite, cartographic, and topographic datasets characterizing the Earth's surface; and available data is provided at no cost to the user.**

enacted level. Through this activity, USGS conducts research and monitoring to better understand how ecosystems are structured and function. Information generated by the Ecosystems activity helps improve management of the Nation's natural resources and address hazards that threaten land, coastlines, and population. The budget includes a program increase of \$3.0 million for research on new methods to eradicate, control, and manage Asian carp in the Upper Mississippi River Basin and prevent entry into the Great Lakes. Program increases are also provided for the following priority ecosystem restoration initiatives: \$1.0 million for the California Bay-Delta, \$901,000 to support fish health and water quality studies for the Klamath Basin Restoration Agreement, and \$1.0 million for research to control and manage invasive species in the Everglades, particularly the Burmese python. Additional program increases totaling \$4.6 million are provided to address brown tree snakes, the white-nose syndrome in bats, coral reef health, new and emerging invasive species of national concern, and ecosystem restoration in the Puget Sound, Columbia River, and Chesapeake Bay. A program increase of \$3.0 million will support efforts to further the science and integration of ecosystems services frameworks into decisionmaking and implementation of efforts to assess and sustain the Nation's environmental capital. Increases are also provided for hydraulic fracturing, WaterSMART, and a \$2.4 million transfer from the Climate and Land Use Change mission area for science support for the Department's bureaus.

Climate and Land Use Change – The 2014 budget provides a total of \$156.0 million for Climate and Land Use Change. This activity provides practical scientific information to inform resilient and adaptive natural resource and land management on a landscape scale. The proposed budget for the Climate Variability subactivity

is \$71.7 million, an increase of \$13.6 million above the 2012 enacted level. The National Climate Change and Wildlife Science Center and the eight Department of the Interior Climate Science Centers are funded at \$35.3 million. This includes a program increase of \$3.5 million for CSC grants, focused on providing translational and applied science needed for decisionmaking, particularly in resource management and biological sequestration. To further collaboration, better leverage resources, and reduce potential for duplication, a program increase of \$3.2 million will support coordination efforts with other Federal climate science entities and ensure that scientific results and products are made available to the public in a centralized, web-accessible format. Also included are program increases of \$2.5 million for applied science and capacity-building in support of tribal climate adaptation needs in each CSC region and \$800,000 for climate adaptation and resiliency research leading to a Vulnerability Assessment Database and Field Guide.

The budget includes a \$3.2 million program increase in the Climate Research and Development program to support climate science priorities such as the identification of long term patterns of drought, improving estimates of potential sea level rise magnitudes and ranges, and ecosystem response to sea level changes. A program increase of \$3.0 million is included to support completion of the national biological carbon sequestration assessment and to develop tools in collaboration with other agencies, to support biological sequestration activities on public lands.

The 2014 request for the Land Use Change subactivity is \$84.3 million, \$1.0 million above the 2012 enacted level. This subactivity ensures Earth observation imagery collected via satellite is available and accessible to users and provides analyses of these data to quantify rates of

land use change, identify key driving forces, and forecast future trends of landscape change. The Landsat program in this subactivity is funded at \$53.3 million, level with 2012, and includes funding for ground systems, satellite operations, and advancement of the science, usability, and centralized sharing of Landsat data, applications, and software. In 2014, USGS will work with the National Aeronautics and Space Administration to analyze user requirements and develop a successor mission to Landsat 8, formerly known as the Landsat Data Continuity Mission. Funding to begin work on the successor mission is provided in the 2014 budget for NASA, which will be responsible for development of Landsat-class land imaging satellites going forward. The USGS will continue its operational role in managing the collection, archiving, and dissemination of Landsat data to users. In addition to an increase for WaterSMART, the budget also includes a program increase of \$757,000 within the Land Change Science program to support rapid disaster response efforts and a program increase of \$1.5 million to support land use science and Chesapeake Bay ecosystem restoration. Increases are partially offset by reductions in several activities within the CLU Mission Area.

Energy, Minerals, and Environmental Health—The 2014 budget includes \$107.4 million for Energy, Minerals, and Environmental Health, \$11.4 million above the 2012 enacted level. This activity includes programs that conduct research and assessments on the location, quantity, and quality of the Nation’s mineral and energy resources. The activity also conducts research on the impacts of human activities that introduce chemical and pathogenic contaminants into the environment and threaten human, animal, and ecological health. The 2014 budget includes program increases of \$2.6 million to address emerging contaminants and pathogens, \$3.0 million to study the environmental impacts of uranium mining, and \$400,000 for Chesapeake Bay and Columbia River ecosystem restoration efforts. In addition to program increases for WaterSMART and research related to wind energy and hydraulic fracturing, the budget also includes a program increase of \$2.1 million to support research on high priority minerals, such as rare earth elements, that are critical to American manufacturing. A net reduction of \$2.4 million in the Minerals Resources Program is included as the program evaluates options to modernize and realign in an era of rapidly changing minerals information and science needs.

Natural Hazards—The 2014 budget provides \$142.6 million for Natural Hazards, \$11.4 million above the 2012 enacted level. This activity provides scientific information and tools to reduce potential fatalities, injuries, and economic loss from volcanoes, earthquakes, tsunamis, and landslides, among others. In addition to program increases to support research related to hydraulic frac-

turing, the budget includes program increases of \$1.8 million to improve rapid disaster response, \$1.2 million for earthquake hazards research and monitoring in the eastern United States, and \$108,000 for enhanced geomagnetism monitoring. The 2014 budget also includes a program increase of \$6.6 million for Coastal and Marine Geology to support marine and coastal science, ecosystem restoration and management, resource and vulnerability assessments, climate adaptation, and enhanced information about and response to coastal storms. A program increase of \$2.0 million is included for the collection of coastal LIDAR data, to be planned and collected in partnership with the 3-D Elevation Program and coordinated with other agencies to implement a national LIDAR program. Increases are offset by reductions in research activities that are of lower national priority.

Water Resources—The 2014 budget includes \$222.9 million for Water Resources, \$13.3 million above the 2012 enacted level. This activity includes programs that collect, manage, and disseminate hydrologic data, model and analyze hydrologic systems, and conduct research and development leading to new understandings of and methods for gathering data. The activities are supported by a national network of streamgages, wells, and monitoring sites, which are leveraged by funds from State, tribal, and local partners. In addition to program increases for activities related to WaterSMART and hydraulic fracturing, a program increase of \$7.2 million for streamgages will fund more than 400 streamgages, strengthening the Federal backbone at high priority sites sensitive to drought, flooding, and the potential effects of climate change. The 2014 budget includes program increases of \$1.0 million for streamgage research and development to lower the costs of next generation streamgage technologies and \$1.0 million to enhance water quality studies. A \$1.0 million program increase is included in the budget to provide water science and technical support to Tribes, in coordination with other relevant Interior offices and in support of tribal trust responsibilities. The budget also includes program increases totaling \$2.9 million for ecosystem restoration efforts in the Chesapeake Bay, California Bay-Delta, Puget Sound, and Upper Mississippi River. These increases are offset by refocusing lower priority work toward these higher priority efforts.

Core Science Systems—The 2014 budget provides \$137.2 million for Core Science Systems, \$22.9 million above the 2012 enacted level. This activity provides the Nation with access to science, information, and geospatial frameworks used to manage natural resources and plan for and respond to natural hazards. Biologic and geologic data archives and geospatial data in The National Map provide critical data about the Earth, its complex processes and natural resources. The budget includes a program increase of \$9.0 million to coordinate and imple-

ment the Big Earth Data Initiative for the Department of the Interior. This interagency initiative will improve access to and use of data from the satellite, airborne, terrestrial, and ocean-based Earth observing systems that the Department, and particularly the USGS, invest millions of dollars in every year. These investments in data will provide wide-ranging benefits in natural resource management and hazard mitigation, by providing access to information critical for decisionmaking, scientific discovery, and technological innovation.

The USGS also will work with other mission areas to centralize and consolidate data sets, software applications, models, and other tools into a streamlined online format to promote greater accessibility, collaboration, and a reduction in duplication. The 2014 budget includes a program increase of \$9.0 million for the 3-D Elevation Program to collect LIDAR data, which are used for a wide range of critical applications including mapping, agriculture, flood inundation prediction, and ecosystem restoration. Data collection will be coordinated with other agencies to implement a national LIDAR program. In conjunction with this effort, a program increase of \$1.0 million will enhance LIDAR data collection and mapping in Alaska. In addition to increases for WaterSMART and hydraulic fracturing, the budget also includes program increases totaling \$2.3 million for data preservation activities, ecosystem informatics, coastal and ocean science, and

ecosystem restoration activities in the Columbia River and Puget Sound. These increases are partially offset by a reduction in lower priority activities.

Administration and Enterprise Information – The 2014 budget includes \$115.6 million for Administration and Enterprise Information, a \$1.3 million decrease below the 2012 enacted level. This activity funds the executive, managerial, and accounting activities, information technology, and bureau support services of USGS. The budget includes a program increase of \$1.0 million to put young Americans to work providing science to support the protection, restoration, and enhancement of public and tribal lands and waters. The AEI activity includes a reduction of \$3.1 million in administrative services within the USGS.

Facilities – The 2014 President's budget request provides \$104.5 million for Facilities, \$4.1 million above the 2012 enacted level. This activity provides safe, functional workspace, laboratories, and other facilities needed to accomplish the USGS scientific mission. The increase will be used to reduce the facilities footprint nationwide by consolidating and improving the efficiency of space and real property.

Fixed Costs – Fixed costs of \$10.4 million are fully funded in the budget.

SUMMARY OF BUREAU APPROPRIATIONS

(all dollar amounts in thousands)

Comparison of 2014 Request with 2012 Enacted

	2012 Enacted		2014 Request		Change	
	FTE	Amount	FTE	Amount	FTE	Amount
Current						
Surveys, Investigations, and Research.....	5,466	1,068,032	5,531	1,166,855	+65	+98,823
Subtotal, Current.....	5,466	1,068,032	5,531	1,166,855	+65	+98,823

Comparison of 2014 Estimates with 2013 Estimates

	2013 Estimates		2014 Estimates		Change	
	FTE	Amount	FTE	Amount	FTE	Amount
Permanent						
Operations and Maintenance of Quarters.....	0	40	0	42	0	+2
Contributed Funds.....	11	1,122	6	1,081	-5	-41
Subtotal, Permanent.....	11	1,162	6	1,123	-5	-39
Reimbursable, Allocation, and Other						
Reimbursements.....	2,823	0	2,838	0	+15	0
Allocation.....	14	0	27	0	+13	0
Working Capital Fund.....	204	0	244	0	+40	0
Subtotal, Reimbursable, Allocation, Other.....	3,041	0	3,109	0	+68	0

HIGHLIGHTS OF BUDGET CHANGES

By Appropriation Activity/Subactivity

APPROPRIATION: Surveys, Investigations, and Research

	2013 Full Year CR	2012 Enacted	2014 Request	Change from 2012
Ecosystems				
Status and Trends	21,733	21,733	21,871	+138
Fisheries	22,172	22,172	26,827	+4,655
Wildlife	47,978	46,978	50,785	+3,807
Environments.....	36,620	36,120	44,473	+8,353
Invasive Species.....	13,824	12,824	18,250	+5,426
Cooperative Research Units	18,441	18,441	18,566	+125
Subtotal, Ecosystems	160,768	158,268	180,772	+22,504
Climate and Land Use Change				
Climate Variability	58,189	58,189	71,741	+13,552
Land Use Change	83,350	83,214	84,251	+1,037
Subtotal, Climate/Land Use Change	141,539	141,403	155,992	+14,589
Energy, Minerals, and Environmental Health				
Mineral Resources	48,760	48,760	46,357	-2,403
Energy Resources	28,820	27,570	31,001	+3,431
Contaminant Biology	9,180	9,180	13,955	+4,775
Toxic Substances Hydrology	10,580	10,580	16,134	+5,554
Subtotal, Energy, Minerals, and Environmental Health	97,340	96,090	107,447	+11,357
Natural Hazards				
Earthquake Hazards	54,379	53,879	57,924	+4,045
Volcano Hazards	24,122	24,122	24,698	+576
Landslide Hazards	3,168	3,168	3,693	+525
Global Seismographic Network.....	5,151	5,151	5,166	+15
Geomagnetism.....	2,004	2,004	2,127	+123
Coastal and Marine Geology	42,221	42,821	48,954	+6,133
Subtotal, Natural Hazards	131,045	131,145	142,562	+11,417
Water Resources				
Groundwater Resources.....	8,731	8,731	12,722	+3,991
National Water Quality Assessment	61,570	61,570	62,043	+473
National Streamflow Info Program	28,977	28,977	36,245	+7,268
Hydrologic Research/Development	12,667	11,417	16,365	+4,948
Hydrologic Networks and Analysis.....	30,597	29,797	31,480	+1,683
Cooperative Water Program.....	62,632	62,632	63,014	+382
Water Resources Research Act Prog	6,490	6,490	1,000	-5,490
Subtotal, Water Resources.....	211,664	209,614	222,869	+13,255
Core Science Systems				
Science Synthesis, Analysis, and Research	25,888	25,388	36,143	+10,755
Natl Cooperative Geologic Mapping ...	25,901	25,901	28,259	+2,358
National Geospatial Program.....	63,188	62,988	72,772	+9,784
Subtotal, Core Science Systems	114,977	114,277	137,174	+22,897

APPROPRIATION: Surveys, Investigations, and Research (continued)

	2013 Full Year CR	2012 Enacted	2014 Request	Change from 2012
Administration and Enterprise Information				
Science Support	91,786	91,786	91,010	-776
Security and Technology	25,028	25,028	24,548	-480
Subtotal, Administration and Enterprise Information	116,814	116,814	115,558	-1,256
Facilities				
Rental Payments and Operations and Maintenance	93,141	93,141	97,201	+4,060
Deferred Maintenance and Capital Improvement	7,280	7,280	7,280	0
Subtotal, Facilities	100,421	100,421	104,481	+4,060
TOTAL APPROPRIATION (w/o transfers)	1,074,568	1,068,032	1,166,855	+98,823
Transfers	0	806	0	-806
TOTAL APPROPRIATION (w/ transfers)	1,074,568	1,068,838	1,166,855	+98,017

Detail of Budget Changes

	2014 Change from <u>2012 Enacted</u>		2014 Change from <u>2012 Enacted</u>
TOTAL APPROPRIATION	+98,823		
Ecosystems	+22,504	Ecosystem Priority	
Status and Trends	+138	Everglades	+1,000
General Program Reduction	-145	Great Lakes Restoration Initiative	
Fixed Costs	+283	Asian Carp Control Framework	+2,000
Fisheries Program	+4,655	Upper Mississippi River	
Ecosystem Priority		Asian Carp Control	+1,000
Klamath Basin Restoration Agreement	+901	New and Emerging Invasives of	
Hydraulic Fracturing	+2,200	National Concern	+874
WaterSMART Water Quality Enhancement	+1,386	General Program Reduction	-59
General Program Reduction	-172	Fixed Costs	+111
Fixed Costs	+340	Cooperative Research Units	+125
Wildlife Program	+3,807	General Program Reduction	-132
Energy Future and Wildlife Sustainability	+2,000	Fixed Costs	+257
White-nose Syndrome	+1,505	Climate and Land Use Change	+14,589
General Program Reduction	-320	Climate Variability	+13,552
Fixed Costs	+622	Climate Adaptation and Resiliency	
Environments Program	+8,353	Vulnerability Assessment Database	
Coral Reef Health	+442	Field Guide	+800
Ecosystem Priority		Interagency Coordination	+3,223
California Bay Delta	+1,000	Tribal Climate Science Partnerships	+2,500
Chesapeake Bay	+615	Translational Science Grants	+3,500
Columbia River	+300	Emerging Science Needs	+3,172
Puget Sound	+369	Biologic Carbon Sequestration	+2,958
Sustaining Environmental Capital	+2,000	Geologic Carbon Sequestration	-532
National Ecosystems Services Framework ...	+1,000	General Program Reduction	-300
General Program Reduction	-283	Science Support for Interior Bureaus	
Science Support for Interior Bureaus		Internal Transfer	-2,358
Internal Transfer	+2,358	Fixed Costs	+589
Fixed Costs	+552	Land Use Change	+1,037
Invasive Species	+5,426	Ecosystem Priority	
Brown Tree Snake	+500	Chesapeake Bay	+500
		Land Use Science	+1,000

Detail of Budget Changes
Surveys, Investigations, and Research (continued)

	2014 Change from 2012 Enacted		2014 Change from 2012 Enacted
Rapid Disaster Response		Volcano Hazards.....	+576
Scenarios and Crisis Response.....	+757	Rapid Disaster Response	
WaterSMART.....	+136	Early Warning Networks.....	+400
National Civil Applications Program		General Program Reduction	-188
Civil Applications Committee	-576	Fixed Costs	+364
North America Data Buy.....	-1,000	Landslide Hazards	+525
General Program Reduction	-236	Rapid Disaster Response	
Fixed Costs	+456	Early Warning Networks.....	+500
Energy, Minerals, and Environmental Health	+11,357	General Program Reduction	-27
Mineral Resources	-2,403	Fixed Costs	+52
Rare Earth Elements Research.....	+1,000	Global Seismographic Network.....	+15
High Priority Research on Critical Minerals	+1,130	General Program Reduction	-17
Minerals Resources	-1,000	Fixed Costs	+32
Minerals Information.....	-1,157	Geomagnetism.....	+123
Research and Assessment.....	-2,803	Enhanced Monitoring.....	+108
General Program Reduction	-439	General Program Reduction	-17
Fixed Costs	+866	Fixed Costs	+32
Energy Resources	+3,431	Coastal and Marine Geology.....	+6,133
Alternative Energy Permitting		Science for Coastal and Ocean Stewardship.....	+5,750
on Federal Lands	+2,000	Enhanced Coastal Storm Response Capability	+850
Hydraulic Fracturing.....	+1,250	3-D Elevation Program	
General Program Reduction	-189	Enhanced Elevation for the Nation	
Fixed Costs	+370	Coastal LIDAR	+2,000
Contaminant Biology.....	+4,775	Great Lakes Beach Health Study.....	-600
Ecosystem Priority		Management-Supporting	
Chesapeake Bay	+100	Habitat and Service Mapping.....	-2,150
Columbia River.....	+100	General Program Reduction	-300
Hydraulic Fracturing.....	+1,400	Fixed Costs	+583
WaterSMART		Water Resources	+13,255
Water Quality Enhancement.....	+1,000	Groundwater Resources.....	+3,991
Emerging Contaminants/Chemical Mixtures...	+1,000	Hydraulic Fracturing.....	+2,100
Pathogens and Contaminants.....	+611	WaterSMART	
Environmental Impacts of Uranium Mining.....	+500	Groundwater Network.....	+627
General Program Reduction	-67	Baseflow, Recharge, and Regional	
Fixed Costs	+131	Availability.....	+1,200
Toxic Substances Hydrology.....	+5,554	General Program Reduction	-69
Ecosystem Priority		Fixed Costs	+133
Chesapeake Bay	+100	National Water Quality Assessment.....	+473
Columbia River.....	+100	Ecosystem Priority	
WaterSMART		California Bay Delta	+1,000
Water Quality Enhancement.....	+1,800	Chesapeake Bay	+500
Emerging Contaminants/Chemical Mixtures...	+1,000	Upper Mississippi River	+200
Environmental Impacts of Uranium Mining.....	+2,500	WaterSMART	
General Program Reduction	-57	National/Regional Synopsis and Surveys....	+500
Fixed Costs	+111	Predictive Models.....	+500
Natural Hazards.....	+11,417	Program and Information Management	+500
Earthquake Hazards	+4,045	Water Quality Enhancement.....	+1,800
Hydraulic Fracturing.....	+1,700	Methods Development and Assessments	-5,000
Rapid Disaster Response		General Program Reduction	-500
Robust Monitoring Networks.....	+850	Fixed Costs	+973
Eastern U.S. Earthquake Research and		National Streamflow Information Program	+7,268
Assessment/Transportable Array in		Streamgages.....	+7,161
Central and Eastern U.S.....	+1,200	General Program Reduction	-114
General Program Reduction	-312	Fixed Costs	+221
Fixed Costs	+607	Hydrologic Research and Development.....	+4,948

Detail of Budget Changes
Surveys, Investigations, and Research (continued)

	2014 Change from <u>2012 Enacted</u>		2014 Change from <u>2012 Enacted</u>
Ecosystem Priority		National Cooperative Geologic Mapping.....	+2,358
California Bay Delta	+982	Hydraulic Fracturing	+2,000
Puget Sound	+200	WaterSMART	
Hydraulic Fracturing	+2,200	Information Management	+200
WaterSMART		General Program Reduction	-165
Streamflow and Stressors to Hydrology	+300	Fixed Costs	+323
Streamgauge Research and Development.....	+1,000	National Geospatial Program.....	+9,784
General Program Reduction	-280	Ecosystem Priority	
Fixed Costs	+546	Columbia River	+354
Hydrologic Networks and Analysis.....	+1,683	Puget Sound	+450
WaterSMART		WaterSMART	
Ecological Flows	+746	Information Management	+200
Ecological Water Science.....	+100	3-D Elevation Program	
Estimating Water Budget.....	+100	Enhanced Elevation for the Nation -	
Program and Information Management	+1,400	LIDAR	+9,000
Data Collection and Research.....	-867	Alaska Mapping	+1,044
General Program Reduction	-219	Federal Geographic Data Committee	-1,697
Fixed Costs	+423	General Program Reduction	-460
Cooperative Water Program	+382	Fixed Costs	+893
WaterSMART		Administration and Enterprise Information.....	-1,256
Water Use Research	+1,500	Science Support	-776
Streamflow Estimation.....	+500	Earth Scientists for Tomorrow -	
NAQWA Related Studies	+1,000	Youth in the Great Outdoors.....	+1,000
Tribes	+1,000	Reduction to Administrative Services	-1,906
Interpretive Studies/ Assessments	-4,000	General Program Reduction	-22
General Program Reduction	-403	Fixed Costs	+152
Fixed Costs	+785	Security and Technology	-480
Water Resources Research Act Program	-5,490	Reduction to Administrative Services	-1,229
Water Resources Research Act Program	-5,490	General Program Reduction	-165
General Program Reduction	-4	Fixed Costs	+437
Fixed Costs	+4	Fixed Costs IT Transformation	+477
Core Science Systems.....	+22,897	Facilities.....	+4,060
Science Synthesis, Analysis and		Rental Payments and Operations	
Research Program.....	+10,755	and Maintenance	+4,060
Ecosystem Priority Eco Informa.....	+800	Operations and Maintenance Efficiencies	
Hydraulic Fracturing	+185	to Reduce Facilities Footprint	+6,385
Geological/ Geophysical Data Preservation	+400	General Program Reduction	-868
Science for Coastal and Ocean Stewardship.....	+300	Fixed Costs Including Rent.....	-1,457
Earth and Environmental Observations		Subtotals for Changes Across Multiple Subactivities	
Innovation and Applications-		Fixed Costs	[+10,438]
Big Earth Data Initiative	+9,000		
General Program Reduction	-100		
Fixed Costs	+170		