The American Geosciences Institute (AGI) is a recognized federation of more than 50 geodisciplines. Together, AGI provides information and services to geoscientists, serves as a voice of interest in the profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geoscientific community's use of resources, research, and natural hazards, and interactions with the environment.

AGI is pleased to present this summary of the major developments in federal geosciences policy during 2018.

INTRODUCTION

It was a tumultuous year for Congress and the administration. Congress passed over 16 federal policy initiatives and appropriations bills, which affected geoscience agencies. The geosciences faced significant funding reductions, which impacted the availability of data and research in the United States.

The year began with federal government shutdowns, budgeting, and management uncertainty. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

CONGRESS

The 115th Congress was divided between a Republican-controlled Senate and a Democratic-controlled House. The division led to a series of shutdowns and budget negotiations.

The House passed legislation to increase funding for geosciences agencies, but the Senate did not. The House-passed legislation included increased funding for the National Science Foundation, the National Aeronautics and Space Administration, and the National Oceanic and Atmospheric Administration.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

SHARP OF THE CAMERAS

When the 115th Congress began in January, 2017, it was uncertain how it would affect the federal geoscience budget. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.

The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts. The administration sought to reduce the size and scope of the federal government. The Department of the Interior, with its vast geoscience infrastructure, was targeted for significant cuts.
Introduction

It was a tumultuous year for Congress and the administration. Disagreements over federal policy initiatives and legislative priorities within the two chambers of Congress, and between Congress and the administration, resulted in three partial government shutdowns and substantial delays in the appropriations process.

The year began with federal agencies facing budgetary and managerial uncertainty as lawmakers struggled to come to an agreement on discretionary government spending for fiscal year (FY) 2018. Despite the administration’s push to diminish funding levels for many science agencies and programs, Congress largely rejected the proposed cuts and instead provided increased funding across most science agencies.

During his second year in office, President Donald Trump sought to fill more of the key science advisory and leadership positions in the executive branch. Long delays in the nomination and confirmation processes, combined with a particularly high rate of staff turnover within the Trump administration, led to a continuation of 2017’s atmosphere of uncertainty regarding the direction of many science agencies.

As the year drew to a close, the government was in a partial shutdown with several unfinished spending bills for 2019, causing many federal employees to be put on furlough as Congress and the administration continued to tangle over funding for a border wall between the United States and Mexico.

Against this political backdrop, there were many important developments in science policy at the federal level that will impact the work of geoscientists and the applications of geoscience for society moving forward.

Congress
Shape of the Chambers

When the second session of the 115th Congress began on January 3, 2018, two new members were sworn in to the Senate: Doug Jones (D-AL) and Tina Smith (D-MN). Smith was appointed by the governor of Minnesota to replace former Democratic senator Al Franken, who officially resigned on January 2 due to accusations of sexual harassment. Jones replaced Republican predecessor Luther Strange, who had been appointed by the governor of Alabama to fill the seat vacated by former U.S. attorney general Jeff Sessions. Jones defeated Republican candidate Roy Moore in a special election in December 2017 to fill the vacancy for the remainder of the term and became the first Democrat elected to the Senate from Alabama since 1992. Jones’ election narrowed the majority ratio in the Senate to fifty-one Republicans, forty-seven Democrats, and two Independents who typically choose to caucus with the Democrats.

The loss of a Republican senator resulted in renegotiation of committee panel ratios and assignments. Senate leaders announced updated committee assignments on January 9 to reflect a one vote margin between the majority and minority party on all committees. On the Energy and Natural Resources Committee, Smith took Franken’s vacated seat while Senator Shelley Moore Capito (R-WV) filled the seat vacated by Strange. Smith and Senator Deb Fischer (R-NE) joined the Agriculture, Nutrition, and Forestry Committee, which Senator Chris Van Hollen (D-MD) left for the Environment and Public Works Committee. Senator Kamala Harris (D-CA) left the Environment and Public Works Committee and Senator Cory Booker (D-NJ) left the Commerce, Science, and Transportation Committee, both to join the Judiciary Committee. Concurrently, Senator Jon Tester (D-MT) joined the Commerce, Science, and Transportation Committee.

Senator Richard Shelby (R-AL) became chairman of the powerful Senate Appropriations Committee in April 2018, following Thad Cochran’s (R-MS) resignation from the Senate due to ongoing health issues. Shelby’s appointment to lead this committee with jurisdiction over discretionary spending legislation in the Senate took place just before the twelve appropriations subcommittees launched into hearings on the fiscal year 2019 spending bills. Membership of various appropriations subcommittees shifted with Senator James Lankford (R-OK) joining the Subcommittee on Energy and Water Development and Senator Marco Rubio (R-FL) joining the Subcommittee on the Interior, Environment, and Related Agencies. Senator Cindy Hyde-Smith (R-MS), who was appointed to fill the seat vacated by Cochran, was sworn in as Mississippi’s first female senator on April 9. Hyde-Smith joined the Appropriations Subcommittee on the Interior, Environment, and Related Agencies as well as the Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies.

House committee assignments also shifted in 2018. In January, Representative Ralph Abraham (R-LA-5) was appointed chairman of the Science, Space, and Technology Subcommittee on Oversight, and Representative John Curtis (R-UT-3) joined the Natural Resources Committee to serve on the Energy and Mineral Resources and Federal Lands Subcommittees.

Natural Hazards Policy

Enacted legislation: The Bipartisan Budget Act of 2018, which was enacted in February to provide short-term funding for federal agencies as lawmakers worked on reaching an agreement for the annual appropriations bills, included almost $90 billion to support disaster relief efforts for communities impacted by Hurricanes Harvey, Irma, and Maria and by wildfires in 2017.

Trump approved a long-sought reauthorization for the Federal Aviation Administration (FAA) on October 5?—??concluding nearly two years of drawn-out consideration and amendment of the bill in Congress?—??
providing for aviation safety improvements and extending FAA’s funding for the next five years. The comprehensive legislation contained several provisions related to natural hazards, including emergency supplemental funding to support recovery efforts in the wake of Hurricane Florence. It also included the Disaster Recovery Reform Act (DRRA), which outlined a major set of reforms to address the rising costs of disasters in the United States. The DRRA changes the nation’s approach to disaster spending by increasing federal emphasis on proactive pre-disaster planning and mitigation. Additionally, the FAA reauthorization contained the Geospatial Data Act—a bill to improve coordination, reduce duplication, and increase transparency in the acquisition of geospatial data.

Both chambers of Congress passed a bill to reauthorize the National Earthquake Hazards Reduction Program (NEHRP), providing the first reauthorization for the program since its last authorization expired in 2009. The NEHRP Reauthorization Act of 2018, signed into law by the president on December 11, updates national policy on earthquake hazard research, preparedness, and mitigation. The interagency program is led by the National Institute of Standards and Technology (NIST) in coordination with the Federal Emergency Management Agency (FEMA), the National Science Foundation (NSF), and the U.S. Geological Survey (USGS).

**Considered legislation:** Several other hazards bills were considered this year but did not receive enough support in both chambers for passage into law during the 115th Congress. The National Landslide Preparedness Act and the National Volcano Early Warning and Monitoring System Act, for instance, were two pieces of legislation that proposed codifying or establishing coordinated national systems to improve monitoring and preparedness for their respective hazards.

**Energy and Minerals Policy**

**Enacted legislation:** In addition to providing short-term government funding and supplemental disaster aid for recent hurricanes and wildfires, the Bipartisan Budget Act directed the Department of Energy (DOE) to sell up to $350 million in crude oil from the Strategic Petroleum Reserve (SPR) in 2018 to pay for upgrades to the reserve’s infrastructure, and to sell a total of 100 million barrels of crude oil from the SPR over fiscal years 2022 through 2027. It also extended forty-eight tax credits that expired at the end of 2016, including incentives related to mining safety, renewable energy, nuclear power, biofuel, and carbon capture and storage initiatives.

The president signed the Department of Energy Research and Innovation Act into law on September 28, establishing DOE’s policy for science and energy research and development programs. Over a decade in the making, the act encourages public-private partnerships on research that will accelerate innovation in the energy sector and establishes key research priorities to advance energy technology development.

**Considered legislation:** The first half of 2018 featured abundant legislative proposals and congressional committee discussions aiming to boost DOE research and modernization. The House passed four bills to support research facilities and programs at DOE national laboratories on February 13. Several months later, at the end of June, the House passed three more bills that would support and expand science programs at DOE. Despite strong bipartisan support and approval of those seven bills in the House, none of them saw any further action after being sent to the Senate for consideration.

Dating back to early January, the House Energy and Commerce Committee held a series of six hearings concerning DOE modernization efforts in 2018. The committee considered proposals to carry out a pilot program for leasing underutilized SPR facilities to the private sector or foreign governments, to improve the nation’s nuclear industry competitiveness in global markets, and to protect the U.S. electric grid and energy
supply chain from cyberattacks. In March, the committee discussed potential improvements to emergency response in the face of physical threats from natural disasters, such as the damaging aftermath of Hurricane Maria that left roughly 150,000 residents in Puerto Rico without power for over six months. The committee also discussed the role of the new DOE Office of Cybersecurity, Energy Security, and Emergency Response, which was established on February 14.

Land and Water Policy

Enacted legislation: Two important water-related bills became public law in October. First, the Save Our Seas Act of 2018 was signed into law on October 11, less than a month after it was introduced in the Senate and quickly passed through both chambers of Congress. The Save Our Seas Act reauthorizes the National Oceanic and Atmospheric Administration’s (NOAA) Marine Debris Program through FY 2022. The program works to reduce ocean pollution and expand clean-up efforts worldwide. Second, the America’s Water Infrastructure Act of 2018 was signed into law on October 23. The water infrastructure bill reauthorizes and updates the biennial Water Resources Development Act (WRDA), allowing for investments to improve U.S. water infrastructure, and contains additional provisions to advance drinking water infrastructure.

Following extended negotiations in Congress, the president signed the Agriculture Improvement Act of 2018 into law on December 20. This legislation, commonly referred to as the “farm bill,” modified and reauthorized numerous programs within the U.S. Department of Agriculture through FY 2023, setting national policy for agriculture, nutrition, conservation, and forestry for the next five years.

Considered legislation: On November 13, the House passed a bill to reauthorize the activities of the National Cooperative Geologic Mapping Program (NCGMP) through FY 2023, sending the bill to the Senate for consideration. The program, overseen by USGS, produces detailed geologic maps of the United States that can be used for a variety of applications, such as land-use management, natural resource conservation, and hazards mitigation. NCGMP was last reauthorized in 2009 and set to expire at the end of FY 2018.

Congress was unable to agree upon and pass a reauthorization for the Land and Water Conservation Fund (LWCF), which is a program that supports protection of federal public lands and waters and voluntary conservation on private land. The LWCF directs federal proceeds from offshore oil and gas leases toward recreational opportunities and conservation efforts. Both the House and Senate proposed versions of the LWCF bill that aimed to permanently reauthorize the program. However, the two bills had some key differences, particularly relating to the specified funding level, which set up hurdles preventing the bill’s final passage in 2018. The previously authorized funding expired on September 30; although the authority to carry out the program does not expire, the LWCF cannot accrue funds until the program is reauthorized. Lawmakers sought to address the backlog of maintenance at U.S. national parks this year by proposing to establish a new funding program that uses a portion of revenue from energy development on federal lands. The Senate Energy and Natural Resources Subcommittee on National Parks held a hearing in July to discuss their proposed legislation, the Restore Our Parks Act. Two weeks later, members of the House Committee on Natural Resources introduced a similar bill, the Restore Our Parks and Public Lands Act, and held a hearing to discuss the bill in September. The year ended with both the House and Senate bills awaiting further action in their respective chambers.
Science Education and Workforce Policy

**Enacted legislation:** In line with the administration’s workforce policy initiatives, Congress passed the Strengthening Career and Technical Education for the 21st Century Act, which President Trump signed into law on July 31. The bill reauthorizes the Perkins Act of 2006—which is the main piece of federal legislation that funds career and technical education (CTE)—for six years, covering FY 2018 through 2023, and provides amendments to help more Americans enter the workforce with the skills necessary to compete for and succeed in high-skilled, in-demand careers. The new law allows state and local governments to set their own goals for CTE programs and requires them to report on progress toward those goals.

The Women in Aerospace Education Act was signed into law on December 11. This legislation directs NASA to encourage the recruitment of women and individuals in underrepresented groups into internships and fellowships relevant to the aerospace sector. It also permits certain grants awarded by NSF to support internships at NASA and national laboratories. On December 31, the Innovations in Mentoring, Training, and Apprenticeships Act was signed into law directing NSF to award grants in support of improving associate degree programs and training opportunities in STEM fields.

**Considered legislation:** Various legislative measures were proposed throughout 2018 seeking to encourage diversity in STEM. Though this bill did not reach a vote in the Senate, the House passed the Building Blocks of STEM Act, which would direct NSF to more equitably allocate funding through the Discovery Research PreK-12 program for studies focusing on early childhood, and further encourage research and programs aimed particularly at increasing the participation of young girls in STEM and computer science activities.

**Outlook for The 116th Congress**

The results of the November 6 midterm elections will shape geoscience-related legislative priorities for the next two years and beyond. The Democratic Party won control of the House, while the Republican Party retained control of and expanded their majority in the Senate. For the House, this means that Democrats will gain the committee chairmanships—with the power to set the committee agenda and preside over meetings and hearings—and ultimately decide which bills come to the floor for a vote in the 116th Congress. Divided control of the two chambers will make it challenging for lawmakers to pass any major legislation in the next two years without substantial bipartisan support.

House and Senate Republicans and Senate Democrats chose their leadership on November 14 for the next Congress. Senate Majority Leader Mitch McConnell (R-KY) and Minority Leader Chuck Schumer (D-NY) will remain at the top of their respective caucuses. Senator John Thune (R-SD) will become the majority whip—the second-highest ranking spot for Senate Republicans, whose task is to ensure party discipline in the federal legislature—and relinquish his chairmanship of the Commerce, Science and Transportation Committee. Senator Dick Durban (D-IL) will retain the minority whip slot for Senate Democrats. House Majority Leader Kevin McCarthy (R-CA-23) and Majority Whip Steve Scalise (R-LA-1) will remain in their leadership positions for the Republicans as they become the minority party in the House. On November 28, House Democrats elected Minority Whip Steny Hoyer (D-MD-5) to serve as majority leader and Representative James Clyburn (D-SC-6), previously the assistant Democratic leader, to be majority whip. House Democrats also nominated Minority Leader Nancy Pelosi (D-CA-12) to serve as speaker of the House, which the entire chamber officially approved as their first order of business at the start of the new session on January 3, 2019.

The leadership of committees began taking shape with some key changes in place shortly after the new
session commenced. Senator Roger Wicker (R-MS) was named as the new chairman of the Commerce, Science, and Transportation Committee, and Senator Maria Cantwell (D-WA) was named as the new ranking member. Additionally, Senator Joe Manchin (D-WV) is taking over for Cantwell as the ranking member of the Energy and Natural Resources Committee.

# Budget

## Fiscal Year 2018

As has become increasingly common in recent decades, there were significant delays in the appropriations process determining federal agency budgets for FY 2018. The twelve annual appropriations bills were not enacted by the start of the fiscal year on October 1, 2017, and Congress had to rely on passing a series of continuing resolutions that provided temporary coverage for agencies to continue operations while lawmakers negotiated the final appropriations bills. The federal government partially shut down for three days after the Senate rejected a short-term spending agreement that had been approved in the House to keep agencies funded past January 19, 2018, when existing funds were set to expire. The shutdown ended on January 22, when both chambers of Congress and the president approved another continuing appropriations bill for FY 2018 to extend previous funding levels for federal agencies and programs through February 8. Just seventeen days later, the government went into another partial shutdown on February 9?—??this time for just under nine hours?—??until Congress and the president approved a bill that postponed their deadline, yet again, to reach a final budget agreement for FY 2018. This bill, the Bipartisan Budget Act of 2018, provided funding for federal agencies at FY 2017 levels until March 23, 2018, raised the caps on both defense and nondefense spending for FY 2018 and FY 2019, increased the national debt limit through March 1, 2019, and provided emergency supplemental funding for disaster relief efforts.

On March 23, Congress finally passed a $1.3 trillion omnibus spending bill?—??combining all twelve of the annual appropriations bills into a single package?—??that would fund the federal government through September 2018. This omnibus bill, the Consolidated Appropriations Act of 2018, mostly rejected the deep cuts to science agencies that were proposed by the Trump administration’s FY 2018 budget request. Instead, the bill increased funding for many science agencies?—??an action made possible by the increased budget caps agreed to in the Bipartisan Budget Act.

## Fiscal Year 2019

President Trump released his FY 2019 budget request on February 12, 2018, formally initiating the annual appropriations process. The $4.4 trillion budget proposal prioritized defense, border security, infrastructure, and opioid-specific initiatives, while significantly reducing funds for many domestic programs, including science agencies. Since the president’s FY 2019 request was developed and finalized before Congress passed the Bipartisan Budget Act of 2018, the White House released a last-minute addendum to account for some of the extra funds allowed by the new budget caps. The addendum restored some funding for science agencies that would have otherwise been slated for deep cuts in the president’s original request. The updated request sought funding for most science agencies ranging from the same as their FY 2017 enacted funding levels down to 25 percent cuts. The major exception to this was NASA, which received support for increased funding in the president’s request.

In September, Trump signed two minibus spending packages into law that allocated funds for certain agencies through FY 2019. The first package, H.R. 5895, combined three appropriations bills: Energy and
Water, Legislative Branch, and Military Construction and Veterans Affairs. The second package, H.R. 6157, contained appropriations for the Departments of Education, Defense, Labor, and Health and Human Services. With the start of FY 2019 quickly approaching and negotiations still in progress for other departments, such as the Department of the Interior (DOI) and the Environmental Protection Agency (EPA), Trump approved a continuing resolution included with H.R. 6157 that provided short-term funding for those remaining agencies at FY 2018 levels until December 7, giving Congress more time to agree upon the FY 2019 appropriations while narrowly avoiding another government shutdown.

On December 6, Congress passed a continuing resolution that extended current funding levels through December 21 for federal agencies still lacking final appropriations for FY 2019. President Trump signed the bill just before the previous stopgap spending measure expired on December 7. Nevertheless, as the December 21 deadline drew near, Congress and the White House were still at an impasse over border security funding that consequently forced another partial government shutdown. The year ended with several unfinished spending bills leaving DOI and EPA, among other agencies, facing a funding lapse until another short-term resolution or permanent funding deal is reached for FY 2019.

### Administration

President Trump delivered his first State of the Union address on January 30, 2018, one year after his inauguration. He covered a range of policy issues focusing on immigration, infrastructure, workforce, and the economy. The president called upon Congress to produce a bill that generates at least $1.5 trillion for new infrastructure investment and added that any such bill must also streamline the permitting and approval process. President Trump’s main geoscience-related priorities throughout the year emerged as building a strong STEM workforce, modernizing water system infrastructure, and increasing transparency of data used in federal regulatory science.

### Nominations

On January 3, the Senate disapproved of and returned ninety-eight nominations to the president. Trump resubmitted several of those nominations to the Senate on January 8 seeking to fill key science positions in his administration. The list of nominees included Barry Myers to be administrator of NOAA, James Bridenstine to be administrator of NASA, Andrew Wheeler to be deputy administrator of EPA, Kathleen Hartnett White to be chair of the Council on Environmental Quality (CEQ), and Steven Gardner to be director of the Office of Surface Mining Reclamation and Enforcement (OSMRE).

Not long afterward, the administration withdrew its controversial nomination of White to lead CEQ in February. White’s nomination drew significant criticism for her past comments on climate change and it became apparent that she could not win enough favorable support for approval in Congress. In June, the White House announced its new nominee to lead CEQ, Mary Neumayr, who had been helping lead CEQ as the chief of staff and highest-ranking official at the time. Gardner also later withdrew his nomination for OSMRE director in September, attributing his decision to frustration over the prolonged ethics review and vetting process.

The Senate unanimously confirmed the appointment of James Reilly to be director of USGS on April 9, just a few months after the former astronaut and petroleum geologist was nominated for the position at the end of January. Reilly previously served as a technical advisor on space operations for the U.S. Air Force’s National Security Space Institute, following a thirteen-year career at NASA and fifteen years as chief
geologist at Enserch Exploration, Inc. In April, the Senate voted near party lines to confirm Wheeler as EPA deputy administrator and along party lines to confirm Bridenstine as NASA administrator. Wheeler is now leading EPA as the acting administrator after numerous ethics investigations led former administrator Scott Pruitt to resign on July 5. Trump officially nominated Wheeler in January 2019 to permanently take on the position.

On December 15, Trump announced that Interior Secretary Ryan Zinke would be stepping down at the end of the year. The president has yet to name a nominee for Zinke’s successor. Meanwhile, Deputy Secretary David Bernhardt is taking charge as acting secretary.

The Senate approved a series of energy and environment nominees as one of its last acts before the end of the 115th Congress on January 2, 2019. Among those confirmed nominees were Mary Neumayr to be chairwoman of CEQ and Kelvin Droegemeier to be director of the White House Office of Science and Technology Policy. Droegemeier is a meteorologist specializing in severe weather events, and his nomination was widely praised by senators on both sides of the aisle during his August 2018 nomination hearing.

Myers’ nomination did not reach the Senate floor for a vote before the end of the 115th Congress, leaving NOAA to operate without a Senate-confirmed administrator for two years now—a record for the position’s vacancy. Since October 2017, the agency has been headed by Timothy Gallaudet, assistant secretary of commerce for oceans and atmosphere and acting administrator of NOAA. Despite support for Myers from most Republicans, Democrats have adamantly pushed back on his nomination, expressing concerns over his potential conflicts of interest.

Reorganization

The administration has been seeking to improve the efficiency and accountability of the executive branch, pursuant to President Trump’s 2017 Executive Order (EO) 13781. On June 21, 2018, the Office of Management and Budget released a plan to reform and reorganize certain departments and agencies of the federal government. The plan outlined over eighty recommendations for structural realignment across the executive branch, including proposed changes to NSF, DOE, NASA, EPA, DOI, and the Department of Education.

Details of DOI’s widely-anticipated reorganization plan were initially laid out in a meeting with senior officials in January. In August, Secretary Zinke released a revised reorganization proposal that would establish twelve unified regional boundaries for all agencies and bureaus within DOI. Under the new proposed structure, agencies such as the National Park Service, the Bureau of Reclamation, the Bureau of Land Management, and USGS would consolidate their existing, separately-defined regions into the same regional boundaries, in an effort to reduce administrative redundancy, shift resources to the field, and improve interagency coordination between different government bodies within DOI. In November, an agency official announced the appointment of regional facilitators who will organize agency bureaus into the twelve unified regions to be implemented by July 1, 2019. However, those plans are likely to be impacted by Zinke’s end-of-year resignation, pending a new presidential appointment to take over as head of the department.

Rulemaking

EPA released a new proposed rule, “Strengthening Transparency in Regulatory Science,” on April 30 that would require the agency to use only publicly accessible and reproducible data in developing its regulations.
While the initial comment period was limited to thirty days?—??the minimum requirement for public comment on a proposed rule?—??EPA extended the comment period until August 16 after receiving extensive feedback from stakeholders indicating that more time was needed to adequately respond to such an impactful rule. EPA’s proposed transparency rule currently awaits further action by Acting Administrator Andrew Wheeler. Toward the end of the year, DOI implemented a similar, new policy that the agency said is meant to boost transparency and integrity of the science that it uses to make decisions. DOI issued Secretarial Order 3369, “Promoting Open Science,” on September 28 mandating that officials only use scientific studies or findings whose underlying data are publicly available and reproducible, with few exceptions. Unlike EPA’s pending policy, DOI’s open science order was not a proposed rule, so it took effect immediately.

On December 11, EPA and the Department of the Army proposed a revised definition of “waters of the United States” to clarify federal authority under the Clean Water Act in a more understandable way. The Waters of the United States (WOTUS) rule, also known as the Clean Water Rule, was first published in 2015 under the Obama administration. Complex legal battles have erupted since the WOTUS rule was finalized and continue to cause uncertainty regarding the legality of enforcing the rule across the country. A U.S. court of appeals placed a nationwide hold on implementing the WOTUS rule in October 2015, which was lifted by a Supreme Court ruling on January 22, 2018. The Supreme Court ruling prompted the Trump administration to publish another rule in February 2018 that delayed the WOTUS rule’s applicability date until 2020, providing more time for EPA to adjust the rule’s requirements. The proposed revision would limit where federal regulations apply and clearly outline what would be considered “waters of the United States” as well as specific exclusions from the definition.

**Executive Orders**

DOI released its final list of critical minerals in May 2018, as directed by the president in a 2017 executive order. The final list remained unchanged from the draft list proposed in February 2018, despite public comments requesting the addition of several other minerals and the removal of uranium. DOI indicated that this list of critical minerals, while “final,” is not a permanent list; the list will be dynamic and updated periodically to reflect current data on mineral resource supply, demand, and concentration of production, as well as current policy priorities. The executive order also directed the development of a report outlining strategies to reduce U.S. vulnerability to supply disruptions of critical minerals; this report is expected to be released in early 2019.

In June, President Trump signed EO 13840, “Ocean Policy to Advance Economic, Security, and Environmental Interests of the United States,” revoking and replacing much of the previous administration’s ocean policy. EO 13840 seeks to improve interagency coordination, public access to data, and engagement with marine industries, the scientific community, and other stakeholders. On signing this order, Trump became the third consecutive president to issue an executive order calling for the coordinated and comprehensive management of coastal and ocean resources.

Trump also issued EO 13845, “Establishing the President’s National Council for the American Worker,” in July. The council will develop a national strategy that fosters coordination among government entities, private industry, and nonprofit organizations and promotes access to affordable, relevant, and innovative education and skills-based job training.

Just before the end of the year, Trump issued EO 13855, “Promoting Active Management of America’s Forests, Rangelands, and other Federal Lands to Improve Conditions and Reduce Wildfire Risk.” This order
empowers federal land managers, states, and other landowners to more effectively clear material that may fuel wildfires and encourages them to better coordinate fire management efforts by agreeing on a set of shared priorities.

AGI Policy Program

AGI’s Geoscience Policy Program supports well-informed public policy by providing information and facilitating dialogue between the geoscience community and decision makers, primarily at the federal level. AGI works closely with its member societies to ensure that the geosciences are strongly represented in the federal policymaking process. Throughout the year, AGI, often in collaboration with other societies, submits statements to Congress and the administration regarding the importance of geoscience funding, programs, and related issues. View AGI’s policy positions at www.americangeosciences.org/policy/policy-positions. Every month, AGI publishes the Geoscience Policy Monthly Review as part of a continuing effort to keep geoscientists and other audiences informed about relevant federal policy updates. Visit www.americangeosciences.org/policy/?news-briefs to see past news briefs and subscribe to the Monthly Review.

AGI released a 2018 update of Geoscience in Your State, a series of fifty factsheets that quantify vital Earth science contributions to the economy, public health, and safety of every U.S. state. The factsheets are designed for communicating the importance of the geosciences to federal policymakers, so they focus on national programs and cover the same major topics for each state. The factsheets are freely available for public use at www.americangeosciences.org/policy/factsheet/states. AGI encourages geoscientists from across the nation to engage in the federal policy process, as individuals or through their scientific or professional organizations, and invites participation in the annual Geoscience Congressional Visits Day in Washington D.C. on September 10–11 2019. Read more at www.americangeosciences.org/policy/geo-cvd. AGI also offers policy internships and fellowships. For more information and to apply, visit www.americangeosciences.org/policy/internships-and-fellowships. Please send questions or comments to govt@americangeosciences.org.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.
You are free to share or distribute this material for non-commercial purposes as long as it retains this licensing information, and attribution is given to the American Geosciences Institute.