Housekeeping

• Listening in:
  • Use your computer speakers to listen
  • If you are dialing in or having the webinar dial out to you, please remember to:
    • Keep your phone on mute when you’re not talking
    • Mute your computer speakers to avoid feedback

• Other tips:
  • Use the chat box to ask questions at any time
  • We’ll also leave plenty of time for questions at the end
HOW ELECTIONS AFFECT THE GEOSCIENCES:

NAVIGATING NEW LEADERSHIP
Webinar outline

• Introduction
• Unfinished business—What Congress has left to do
• Panel of Insiders—What’s the Process and How Can Scientists Influence It?
  • The Administration View
  • The Congressional View
• How Can You Get Involved?
• Question & Answer Session
Speakers

• **Brittany Webster**, Public Affairs Specialist, American Geophysical Union

• **Gene Whitney**, Congressional Research Service, Ret., and Chair, National Academies Board on Earth Sciences and Resources

• **Virginia Ainslie**, CEO, Ainslie & Associates

• **Abby Seadler** (*moderator*), Geoscience Policy Manager, American Geosciences Institute
Congressional Unfinished Business

• What geoscience issues or legislation (authorizations and appropriations) will be leftover after this Congress?

• What geoscience issues or legislation (authorizations and appropriations) are on the horizon for next Congress?
Appropriations

• Outlines how money will be spent on federal programs during the next fiscal year

Authorization

• Establishes Federal Programs
30 September (today) is the end of FY2016
Authorization Bills

NASA Reauthorization

America COMPETES Reauthorization

Natural Hazards

Energy Bill
Government Spending In the Future

- $19 Trillion National Debt
- U.S. Deficit
- U.S. Debt
International Agreements

THE KEY ELEMENTS OF THE PARIS AGREEMENT
A text with universal scope, adopted by 195 countries

- **The aim**: to keep the increase in global average temperature to well below 2°C and to 1.5°C if possible.

- **The objective**: to level off greenhouse gas emissions as soon as possible.

- **The principle**: to differentiate between developed and developing countries. Developed countries must lead the way for reduction of emissions and support developing countries in implementing this. Other countries with the ability to do so may also contribute their support on a voluntary basis to achieve this target.

- **The means**: Countries must submit Intended Nationally Determined Contributions (INDCs) which are revised upwards every 5 years. The 1st report is due in 2023. North-South technology transfer.

- **The financing**: From 2020, rich countries must contribute at least $100 billion per year. This amount will be reviewed in 2025.

- **The new mechanism**: loss and damage. Measures must be taken to avert, minimize and address the concrete effects of climate change, in order to help the most vulnerable countries.

- **Entry into force**: 2020 if the Agreement is ratified by 55 countries accounting for 55% of global greenhouse gas emissions.
Speakers

- **Brittany Webster**, Public Affairs Specialist, American Geophysical Union
- **Gene Whitney**, Congressional Research Service, Ret., and Chair, National Academies Board on Earth Sciences and Resources
- **Virginia Ainslie**, CEO, Ainslie & Associates
- **Abby Seadler (moderator)**, Geoscience Policy Manager, American Geosciences Institute
The Administration View

HOW ELECTIONS AFFECT THE GEOSCIENCES:

NAVIGATING NEW LEADERSHIP
“A question about the budget, Mr. President, and, as a followup, may I have a hug?”
### FEDERAL R&D BY DEPARTMENT (OR INDEPENDENT AGENCY)

<table>
<thead>
<tr>
<th>Department</th>
<th>FY2016 Enacted, in millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense</td>
<td>$70,872</td>
</tr>
<tr>
<td>Health and Human Service</td>
<td>31,942</td>
</tr>
<tr>
<td>Energy</td>
<td>14,405</td>
</tr>
<tr>
<td>NASA</td>
<td>12,410</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>6,117</td>
</tr>
<tr>
<td>Agriculture</td>
<td>2,674</td>
</tr>
<tr>
<td>Commerce (NIST, NOAA)</td>
<td>1,913</td>
</tr>
<tr>
<td>Veterans Affairs</td>
<td>1,220</td>
</tr>
<tr>
<td>Interior (USGS)</td>
<td>981</td>
</tr>
<tr>
<td>Transportation</td>
<td>924</td>
</tr>
<tr>
<td>Homeland Security</td>
<td>579</td>
</tr>
<tr>
<td>Environmental Protection Agency</td>
<td>516</td>
</tr>
<tr>
<td>U.S. Agency for International Development</td>
<td>275</td>
</tr>
<tr>
<td>Smithsonian Institution</td>
<td>250</td>
</tr>
<tr>
<td>Education</td>
<td>242</td>
</tr>
</tbody>
</table>

- **WHAT ARE THE FEDERAL GEOSCIENCE AGENCIES AND HOW DO THEY ESTABLISH THEIR LONG-TERM AND SHORT-TERM PRIORITIES?**
- **HOW DO POLITICAL CHANGES AFFECT THOSE PRIORITIES?**

Yellow text indicates agencies and departments with significant proportion of geoscience

1. Creation and Authority. The U.S. Geological Survey (USGS) was established by the Organic Act of March 3, 1879 (20 Stat. 394; 43 U.S.C. 31), et seq. which provided for "the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain." The Act of September 5, 1962 (76 Stat. 427; 43 U.S.C. 31(b)) expanded this authorization to include such examinations outside the national domain. Topographic mapping and chemical and physical research were recognized as an essential part of the investigations and studies authorized by the Organic Act, and specific provision was made for them by Congress in the Act of October 2, 1888 (25 Stat. 505, 526).

A. Following the early work on classification of land available for irrigation, provision was made in 1894 for gaging the streams and determining the water supply of the United States (28 Stat. 398). Authorizations for publication, sale, and distribution of material prepared by the USGS are contained in several statutes (43 U.S.C. 41-45; 44 U.S.C. 1318, 1320).

B. As a result of congressional action in 1996 (P.L. 104-134, 100 Stat. 1321), the USGS incorporated the biological research functions of the former National Biological Service and the minerals functions conducted by the Bureau of Mines.

USGS Mission

The USGS serves the Nation by providing 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 our quality of life.
(d) OBJECTIVES OF AERONAUTICAL AND SPACE ACTIVITIES.—The aeronautical and space activities of the United States shall be conducted so as to contribute materially to one or more of the following objectives:

1. The expansion of human knowledge of the Earth and of phenomena in the atmosphere and space.
2. The improvement of the usefulness, performance, speed, safety, and efficiency of aeronautical and space vehicles.
3. The development and operation of vehicles capable of carrying instruments, equipment, supplies, and living organisms through space.
4. The establishment of long-range studies of the potential benefits to be gained from, the opportunities for, and the problems involved in the utilization of aeronautical and space activities or peaceful and scientific purposes.
5. The preservation of the role of the United States as a leader in aeronautical and space science and technology and in the application thereof to the conduct of peaceful activities within and outside the atmosphere.
6. The making available to agencies directly concerned with national defense of discoveries that have military value or significance, and the furnishing by such agencies to the civilian agency established to direct and control nonmilitary aeronautical and space activities, of information as to discoveries which have value or significance to that agency.
7. Cooperation by the United States with other nations and groups of nations in work done pursuant to this chapter and in the peaceful application of the results thereof.
8. The most effective utilization of the scientific and engineering resources of the United States, with close cooperation among all interested agencies of the United States in order to avoid unnecessary duplication of effort, facilities, and equipment.
9. The preservation of the United States preeminent position in aeronautics and space through related research and development related to associated manufacturing processes.
EVERY AGENCY OR INSTITUTION HAS A MISSION: NOAA

President Richard Nixon established the National Atmospheric and Oceanic Administration by Executive Order in 1970.

Reorganization Plan #4

Immediately after publication of Our Nation and the Sea, Congress responded by beginning deliberations on the creation of the new agency. The concept was also incorporated into President Nixon’s Advisory Council on Executive Organization. This Council recommended that a new National Oceanic and Atmospheric Administration which would combine some elements of the Department of Interior with the Environmental Services Administration (ESSA) of the Department of Commerce.

Then Secretary of Commerce, Maurice Stans, noting that ESSA would comprise more than two-thirds of this new Agency (some 10,000 employees and an estimated FY 1970 budget of approximately $200 million) countered with a proposal to, at least

NOAA's Mission: Science, Service and Stewardship

1. To understand and predict changes in climate, weather, oceans and coasts;
2. To share that knowledge and information with others; and
3. To conserve and manage coastal and marine ecosystems and resources.

http://www.history.noaa.gov/legacy/noaahistory_3.html
EVERY AGENCY IS REQUIRED TO DEVELOP AND UPDATE STRATEGIC PLANS CONSISTENT WITH ITS MISSION

230.1 What is an agency Strategic Plan?

The GPRA Modernization Act 2010 aligns strategic planning with the beginning of each new term of an Administration, requiring every Federal agency to produce a new Strategic Plan by the first Monday in February following the year in which the term of the President commences. The Strategic Plan, therefore, presents the long-term objectives an agency hopes to accomplish at the beginning of each new term of an Administration, describing what it should attempt to do, the resources required to do it, and the benefits or results that will be achieved as a result.

SECTION 230—AGENCY STRATEGIC PLANNING

The Strategic Plan will define the agency mission, long-term goals, strategies planned, and the approaches it will use to monitor its progress in addressing specific national problems, needs, challenges, and opportunities related to its mission. It explains the importance of the goals, appraises the agency’s capabilities, assesses the operating environment and provides for evaluations and other studies to inform agency actions. The Strategic Plan should explain why goals and strategies were chosen, discussing the relevant evidence supporting the selected goals and strategies. Because many agency missions, programs
AGENCY STRATEGIC PLANS ARE PUBLICLY AVAILABLE

Strategic Plans are not scheduled to align with terms of political offices.

1-year, 5-year, 10-year, etc.
HOW ARE AGENCY PRIORITIES PUT INTO ACTION ANNUALLY?

Broad priorities are derived from an agency’s mission and strategic plan. Agencies accommodate short-term change or needs by shifting funding among their science priorities within their annual budget according to scientific developments and driven by Presidential and Congressional priorities:

- Understanding Ecosystems and Predicting Ecosystem Change
- Energy and Minerals For America’s Future
- Climate Variability and Change
- Water Census of the United States
- National Hazards, Risk, and Resilience Assessment
- Role of Environment and Wildlife in Human Health

(Example: Priorities shown are Six Science Directions from USGS Strategic Plan)
1. Promoting Sustainable Economic Growth and Job Creation through Innovation
2. Moving Toward Cleaner American Energy
3. Understanding and Responding to Global Climate Change and Its Impacts
4. Observing our Planet
5. Promoting Advanced Manufacturing and Industries of the Future
6. Improving Americans’ Health through Innovation in Life Sciences, Biology, and Neuroscience
7. Strengthening Our National and Homeland Security through Science and Technology
8. Innovating in Information Technology and High-Performance Computing
9. Informing Better Stewardship of the Ocean and the Arctic
10. Growing Agriculture Research for Future Generations
11. Expanding Our Capabilities in Space
12. Nanotechnology R&D
13. Bridging the Barriers from Lab-to-Market
14. Preparing Our Students with Skills through Science, Technology, Engineering, and Mathematics (STEM) Education

This list is given to the agencies 18 months before the beginning of the fiscal year ...and don’t forget to notice what’s NOT on the list.
U.S. GLOBAL CHANGE RESEARCH PROGRAM FUNDING 2000 - 2016

TOTAL FUNDING ($ MILLIONS)

FISCAL YEAR

Includes NSF, NOAA, Energy, Agriculture, Interior

Election: November 8, 2016

We learn who the new President is.

Inauguration: January 20, 2017

President’s budget submission: February 6, 2017
WHO MAKES THE BUDGET DECISIONS?

How do the President’s priorities get to the scientists?

President/VP*

OMB* ← OSTP, CEQ, etc.

(Department Sec*)

(assist Sec*/DAS*)

Agency Director or Administrator*

Program Officer

Project Chief

Scientists

Agencies within Departments

USGS
NOAA
DOE
DOD
NIH

Permanent Non-political Staff

Independent Agencies

NSF
NASA
EPA

- *PASC: Presidential Appointment – Senate Confirmed (“politicals”)
- ~1000-1400 political appointees require Senate confirmation

https://www.gpo.gov/fdsys/pkg/GPO-PLUMBOOK-2012/content-detail.html
ADMINISTRATION

BUDGET

- President*
- OMB*
- Department*
- Agency*
- Program
- Scientists

CONGRESSIONAL BUDGET

Senate
- Floor vote*
- Appropriations* Committee
- 12 Appropriations* Subcommittees
- Budget* Resolution

House
- Floor vote*
- Appropriations* Committee
- 12 Appropriations* Subcommittees
- Budget* Resolution

Conference Committee*

* Political – People could change at election
WHAT CAN INDIVIDUALS DO TO HELP?

1. Vote
1. Understand your agency’s mission, science plan and priorities
1. Educate yourself about your agency’s budget
1. Know the rules of your institution for engagement
1. Network & join forces: Join AGI, AGU or other professional society and participate in agency, department, and Hill visits
1. Seek to **educate** decision makers rather than to persuade or lobby
1. Emphasize how geosciences address National needs
1. Make science policy a part of your career growth: gov’t needs savvy experts
The Congressional View

HOW ELECTIONS AFFECT THE GEOSCIENCES:

NAVIGATING NEW LEADERSHIP
TRANSITION IN BOTH
THE WHITE HOUSE
AND
CONGRESS
HAS NOT OCCURRED IN EIGHT YEARS!

. . . . . AND MAY NOT OCCUR AGAIN
UNTIL 2020
OR 2024
NOW is the time
to take
EFFECTIVE ACTION
to
INCREASE FEDERAL GEOSCIENCE INVESTMENT
Advocacy efforts target House and Senate candidates to stress the need for increased geoscience funding.

Now to Election Day 2016

Would this candidate make an effective member of the House or Senate science committee?
OCT to DEC 2016

Advocacy actions in support of the highest possible funding for geoscience programs in FY 2017 Appropriations Bills
• Commerce, Justice, Science (NSF, NASA, NOAA)
• Energy & Water (DOE)
• Interior & Environment (USGS, EPA)
Action Calendar for Geoscience

**NOV – DEC 2016**

- Presidential Transition Team develops budget priorities and a roster of Cabinet and Agency leadership appointees
- Advocacy actions in support of geoscience with members of the Presidential Transition Team

**DEC - 2016**

- Congress must enact appropriations for the remainder of FY 2017
- Congressional Committee assignments are made
Action Calendar for Geoscience

2017

ADVOCACY REQUESTS MADE EARLY IN THE YEAR ARE MUCH MORE EFFECTIVE THAN REQUESTS FILED AFTER CONGRESSIONAL COMMITTEES BEGIN DRAFTING LEGISLATION
JAN – SEPT 2017

Advocacy in support of geoscience determines the level of funding provided for these programs in FY 2018 appropriations and reauthorization bills.

BOTH APPROPRIATIONS AND REAUTHORIZATION BILLS BEGN MARK UP AS SOON AS APRIL 15!
JAN 2017

House and Senate elect a Speaker, Majority and Minority Leaders, and others for their leadership teams. Committee appointments are announced.

Congressional Budget Committees develop parameters for the FY 2018 Budget Resolution. This Budget Resolution will cap total defense and non-defense discretionary funds available in each fiscal year for FY 2018 and subsequent fiscal years. These totals constrain both geoscience appropriations and science agency reauthorizations.

New President and the White House team finalize budget priorities and work with OMB to complete the Executive Branch FY 2018 budget proposal.

Confirmation hearings begin for Presidential appointees to Cabinet and other Executive Branch leadership positions.
FEB 2017

House and Senate leaders of both parties work with the President to develop legislation to increase the debt limit.

Advocacy in support of a new fiscal agreement to increase defense and non-defense discretionary spending for FY 2018 (and possibly FY 2019 also) as part of a debt ceiling “deal”

- Non-defense (NDD) increase must match defense (DOD) increase
- Emphasis on the value of geoscience to both national security and medical research
FEB 2017

President issues the FY 2018 Executive Branch Budget proposal.

Authorizing Committees hold hearings on the President’s budget and other issues, and work on their “Views and Estimates” reports for the Budget Committees. These reports provide information about reauthorization bills likely to be considered and each bill’s overall costs for FY 2018 and future fiscal years.

Congressional Budget Committees continue work on a draft FY 2018 Budget Resolution.

House and Senate leaders reach a preliminary decision about whether to pursue budget reconciliation legislation to cut entitlement and mandatory spending.

If necessary, Congress completes action on any remaining FY 2017 appropriations bills.
MARCH 2017

Congressional Committee hearings on budget, funding, revenue, policy, and reauthorization issues continue.

MARCH 15, 2017

Deadline for Congressional action to raise the debt ceiling.

Appropriations and Authorizing Committees with jurisdiction over geoscience programs hold hearings which identify areas of Congressional concern

Deadline for House and Senate Budget Committees to pass their FY 2018 Budget Resolutions. These actions may be delayed, especially if the President postpones release of his/her FY 2018 Executive Branch Budget proposal
Action Calendar for Geoscience

APR – SEPT 2017

Authorizing Committees develop and pass legislation to reauthorize, and possibly restructure, science and other agencies.

Authorization levels in these bills limit appropriations for geosciences in current and future fiscal years.

ADVOCACY IN SUPPORT OF HIGHER AUTHORIZED SPENDING FOR GEOSCIENCE PROGRAMS IS CRITICAL
APRIL 15, 2017

House and Senate Budget Committee deadline for passage of a compromise version of the FY 2018 Budget Resolution

MAY 15, 2017

Once the FY 2018 Budget Resolution passes, appropriations Subcommittees begin action on FY 2018 spending bills

MAY 15, 2017

Appropriations Committees may begin action on FY 2018 spending bills if Congress has failed to agree on a Budget Resolution
How Can You Get Involved?

• Important dates:
  • Last day of regular order before election day: Today
  • Election day: Tuesday, November 8th
  • Congressional recess: October 1st through November 14th
  • 115th Congress begins: January 3rd, 2017

• Before the election:
  • District visits during congressional recess
  • Contact your representatives

• After the election:
  • Keep contacting your representatives!
How Can You Get Involved?

• Visit: http://actioncenter.agu.org/
• Visit: http://www.americangeosciences.org/policy/how-elections-affect-geosciences-take-action

• Connect with us!
  • Brittany Webster – bwebster@agu.org
  • Abby Seadler – aseadler@agiweb.org
Thank You

Any Questions?
EXTRA SLIDES:

Available to be referenced during Q&A
Figure 1: Composition of the Proposed FY 2016 Budget
Total Outlays = $4.0 trillion
(outlays in billions of dollars)

- Net Interest: $283
- Defense Discretionary: $528
- Nondefense Discretionary: $495
- [Defense R&D]: $77
- [Nondefense R&D]: $69
- Other Mandatory: $670
- Medicaid: $351
- Medicare: $583
- Social Security: $938

R&D figures above are current AAAS estimates of proposed budget authority. Source: Budget of the United States Government FY 2016. Projected deficit is $474 billion. © 2015 AAAS
President's Proposed $1.15 Trillion Discretionary Budget (FY 2017)

- Social Security, Unemployment & Labor: $31.7 billion - 3%
- Energy & Environment: $41.3 billion - 4%
- International Affairs: $41.4 billion - 4%
- Medicare & Health: $58.6 billion - 5%
- Housing & Community: $68.5 billion - 6%
- Government: $69.0 billion - 6%
- Education: $72.8 billion - 6%
- Veterans' Benefits: $75.4 billion - 7%
- Transportation: $24.7 billion - 2%
- Food & Agriculture: $12.8 billion - 1%
- Military: $622.6 billion - 54%

Source: OMB
NASA R&D BUDGET (1976 TO 2016)

Source: AAAS R&D report series, based on OMB and agency R&D budget data.
Includes conduct of R&D and R&D facilities.
** - Latest estimates. FY 2017 is the President's request.
USGS R&D BUDGET (1976 TO 2016)

Source: AAAS R&D report series, based on OMB and agency R&D budget data.
Includes conduct of R&D and R&D facilities.

** - Latest estimates. FY 2017 is the President's request.
Source: AAAS R&D report series, based on OMB and agency R&D budget data.
Includes conduct of R&D and R&D facilities.
** - Latest estimates. FY 2017 is the President's request.
Federal Research Funding By Performer, 1953-2012

Obligations in millions of constant FY 2015 dollars

Source: NSF, National Center for Science and Engineering Statistics, National Patterns of R&D series based on national survey data. *FY 2012 data is preliminary. **Federally-funded research and development centers. © 2015 AAAS
Billions of constant FY 2016 Dollars

Source: 1975-1994 figures are from the NSF federal funds survey; remainder is from AAAS R&D reports. FY 2016 are estimates, FY 2017 is the President's request. © 2016 AAAS
Federal Research Funding by Discipline as a Share of GDP, 1978-2015

Source: National Science Foundation, Federal Funds for Research and Development series. FY 2014 and 2015 are preliminary. GDP figures are from OMB. © 2015 AAAS
Senate science committees

Agriculture, Nutrition, and Forestry - Sen. Pat Roberts, Chair  Sen. Debbie Stabenow, Ranking Member


Subcommittee on Space, Science, and Competitiveness – Sen. Ted Cruz, Chair

Energy and Natural Resources – Sen. Lisa Murkowski, Chair  Sen. Maria Cantwell, Ranking Member

Environment and Public Works – Sen. James Inhoff, Chair  Sen. Barbara Boxer, Ranking Member

House science committees

Agriculture – Rep. K. Michael Conoway, Chair

Energy and Commerce – Rep. Fred Upton, Chair

Natural Resources – Rep. Rob Bishop, Chair

Energy and Mineral Subcommittee – Rep. Doug Lamborn, Chair

Water, Power, and Oceans Subcommittee – Rep. John Fleming, Chair

Science, Space, and Technology – Rep. Lamar Smith, Chair


Environment Subcommittee – Rep. Jim Bridenstine, Chair

Research and Technology Subcommittee – Rep. Barbara Comstock, Chair

Space Subcommittee – Rep. Brian Babin, Chair
SCIENCE IN THE REPUBLICAN CAMPAIGN PLATFORM 2016

America’s Natural Resources: Agriculture, Energy, and the Environment
   Abundant Harvests
   A New Era in Energy
   Environmental Progress

SCIENCE IN THE DEMOCRATIC CAMPAIGN PLATFORM 2016

Create Good-Paying Jobs
   Pursuing Our Innovation Agenda: Science, Research, Education, and Technology
Combat Climate Change, Build a Clean Energy Economy, and Secure Environmental Justice
   Building a Clean Energy Economy
   Securing Environmental and Climate Justice
   Protecting Our Public Lands and Waters
Ensure the Health and Safety of All Americans
   Enabling Cutting-Edge Medical Research
12 Appropriations Subcommittees

U.S. House of Representatives

1. **Agriculture, Rural Development, Food and Drug Administration, and Related Agencies**, which oversees funding for the USDA (except the Forest Service) and other agencies;
2. **Commerce, Justice, Science, and Related Agencies**, which oversees funding for the Department of Commerce, the Department of Justice, NASA, and other agencies;
3. **Defense**, which oversees funding for the military, the intelligence community, and other national defense related agencies;
4. **Energy and Water Development**, which oversees funding for the Department of Energy, the U.S. Army Corps of Engineers, and other agencies;
5. **Financial Services and General Government**, which oversees funding for the Department of the Treasury, the Executive Office of the President, and other government functions;
7. **Interior, Environment, and Related Agencies**, which oversees funding for the Department of the Interior, the EPA, the U.S. Forest Service, and a number of independent agencies;
8. **Labor, Health and Human Services, Education, and Related Agencies**, which oversees funding for the Department of Education, the Department of Health and Human Services, the Department of Labor, and other agencies;
9. **Legislative Branch**, which oversees funding for the House of Representatives (the Senate Legislative Branch oversees funding for the U.S. Senate), the U.S. Capitol, the Library of Congress, and other legislative branch functions;
10. **Military Construction, Veterans Affairs, and Related Agencies**, which oversees funding for military construction (including military housing), the Department of Veterans Affairs, and related agencies;
11. **State, Foreign Operations, and Related Programs**, which oversees funding for the U.S. State Department, USAID, and related programs;
12. **Transportation, Housing and Urban Development, and Related Agencies**, which oversees funding for the Department of Transportation, HUD, and related agencies.

Most geoscience is funded through the yellow-highlighted Subcommittees.