



The American Geophysical Union (AGU) is an international nonprofit community of 130,000 scientists and their university and private sector partners. We are the largest Earth and space science association in the world, and our headquarters is the first net zero energy commercial renovation in Washington, D.C.

Our mission is to promote discovery in Earth and space science for the benefit of humanity. To advance this mission, AGU is pleased to support and assist the Biden-Harris Transition Team and Administration in addressing the four simultaneous crises you have identified as your top priorities: COVID-19 and future pandemics, our crippled U.S. economy, climate change, and racial inequities in income, education, healthcare, housing, and opportunity.

A strong, diverse, and inclusive scientific enterprise is necessary to meet these challenges. We offer the following recommendations for immediate action in your first 100 days to assure the Biden-Harris Administration successfully launches and sustains this critical effort.

We invite you to call on us for help. Our membership includes, but is not limited to, outstanding scientists and leaders in the fields of climate change; environmental assessment, threat mitigation, and resilience; natural hazards and geoengineering; long- and short-term weather forecasting; atmospheric and ocean sciences; rare earth sciences; and STEM education.

We would also welcome the opportunity to show you, when the situation allows for it, our headquarters building, which utilizes innovative strategies and technologies to decrease energy usage and shrink the building's carbon footprint, including one of the first municipal sewer heat exchange systems in the U.S. AGU intends for the building to be used for public and education and to promote research and replication, in the hope that the building will serve as an example and inspiration for future sustainability projects.

Please don't hesitate to stay in touch with AGU's CEO and Executive Director, Randy Fiser at rfiser@agu.org or Vice President of Public Affairs, Lexi Shultz at ashultz@agu.org.

A. Process Recommendations

1. Appoint a White House Science Advisor

We request that a Director of the Office of Science and Technology Policy be named rapidly and be given a joint appointment as White House Science Advisor to signal that receiving sound science advice is a top priority for the Biden-Harris Administration. This appointment will also ensure that evidence-based science can be incorporated consistently across all federal agencies in an integrated government-wide strategy directly targeted toward your top four priorities. Such an advisor would be in a unique position to leverage the collaborative nature of the scientific community to shape a "build back better" future for our nation.

Due to the integral role of this Science Advisor, we urge you to appoint an individual not only with top scientific credentials and an understanding of rigorous scientific methods and the need for

collecting, preserving and sharing scientific data, but also excellent communication skills and a respect for the value of science engagement with society.

2. Restore the Federal Scientific Workforce

Thousands of government scientists left federal agencies during the Trump Administration. The resulting shortage of career scientists is a particular problem at the Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA), the National Weather Service (NWS) and other federal science agencies. These positions must be filled promptly if we are to address the crises facing our nation.

Of note are the science agency offices that were abruptly moved out of the Washington, D.C. area, resulting in the loss of a significant number of career scientists, many of which were not replaced when these agencies opened at their new locations. Specifically, a transparent and deliberative process is urgently needed to identify optimal locations and appropriate scientist recruitment for the offices of the United States Geological Survey (USGS), the Bureau of Land Management (BLM), and the U.S. Department of Agriculture's Economic Research Service (ERS) and National Institute of Food and Agriculture (NIFA). These offices require sufficient scientific expertise to properly collect and interpret critical climate change data, support environmentally sound land use and agricultural decisions, and identify safe processes for finding and mining rare earth elements in the U.S.

B. Policy Recommendations

1. Provide a Minimum Real 4% Increase for Science Agencies in the FY 2022 Budget

Federal science agency budgets, apart from some health accounts, have remained essentially flat for a decade, and have not increased as a percent of the overall U.S. budget for nearly four decades. Combining this flat funding with the uncertainty created by years of continuing resolutions and government shutdowns, the scientific enterprise has been put at a marked disadvantage. To counter this trend, we ask that all federal science agencies receive at least a real four percent increase in the proposed FY 2022 budget, which will enable, among many other advances, alternative energy innovation; the teams and technology enabling us to fight COVID-19; evidence-based responses to climate change; and research helping us identify the scope of and remedies for racial disparities.

Such an increase was recommended by the American Academy of Arts and Sciences in their 2014 report, *Restoring the Foundation: The Vital Role of Research in Preserving the American Dream*. This funding need is reaffirmed in their AAAS 2020 report, *The Perils of Complacency - America at a Tipping Point in Science and Engineering* ([The Perils of Complacency \(amacad.org\)](https://www.amacad.org/publications/the-perils-of-complacency)).

2. Rescind the Following Trump Administration Executive Orders and Actions:

- [Withdrawing from the Paris Climate Accord](#)

- [Executive Order 13957](#): Creating Schedule F in The Excepted Service
- [Executive Order 13950](#): Presidential Executive Order on Combating Race and Sex Stereotyping
- [Executive Order 13875](#): Evaluating and Improving the Utility of Federal Advisory Committees
- [Executive Order 13868](#): Promoting Energy Infrastructure and Economic Growth
- [Executive Order 13807](#): Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects
- [Executive Order 13783](#): Promoting Energy Independence and Economic Growth
- [Executive Order 13780](#): Protecting the Nation from Foreign Terrorist Entry into the United States
- [Executive Order 13771](#): Reducing Regulation and Controlling Regulatory Costs
- [Presidential Proclamation](#) restricting entry for Chinese graduate students & researchers

3. Stay Order granting Ligado access to L-band spectrum wavelengths that are adjacent to GPS signals and institute guidelines to protect climate and weather data from 5G interference

We ask that the Biden-Administration balance the need for secure weather, water, and climate data with the needs of the telecommunications sector when it comes to spectrum management. Specifically, we ask that [one private company not put life-saving data at risk](#), and that the overall approach to 5G balance [the recommendations from NOAA and NASA against those of the FCC](#). Additionally, to meet the spectrum needs of essential weather, water, and climate services, we request robust funding for spectrum innovation and to broaden the spectrum innovation community.

4. Rescind the Following Rules/Agency Actions Implemented or Begun:

- Actions Undermining Scientific Integrity:
 - [Scientific Transparency Rule \(EPA\)](#)
 - [Forbidding EPA grantees from serving on scientific advisory panels \(EPA\)](#) (In Effect)
- Actions Undermining International Scientific Collaboration:

- Rule restricting duration of stay for student visas (DHS)
- Modification of exemption to Student and Exchange Visitor Program (SEVP) (DHS)
- AGU urges continuation of this program throughout the COVID-19 pandemic
- Rule restricting specialty occupation definition for H1-B visas (DHS)
- Rule replacing H1-B lottery with salary-ordered selection (DHS)
- Add'l Information Collection for Visas (83 FR 13806 and 83 FR 13807) (State) (In Effect)
- Actions Undermining Efforts to Address Climate Change
 - Waters of the U.S. Rule (WOTUS) (EPA, DoD) (In Effect)
 - National Environmental Protection Act (NEPA) Rollbacks (CEQ) (In Effect)
 - [HHS proposal to sunset all regulations](#)

5. Reinstate the Following Regulations & Agency Actions Related to Climate Change

- Clean Power Plan (EPA)
- Stream Protection Rule (DoI)