

## Monthly Review: April 2013

*The American Geosciences Institute's monthly review of geosciences and policy goes out to the leadership of AGI's member societies, members of the AGI Geoscience Policy Committee, and others as part of a continuing effort to improve communications about the role of geoscience in policy. The current monthly review and archived monthly reviews are all available online.*

*Subscribe to receive the Geopolity Monthly Review by email.*

### \*\*\*Announcements\*\*\*

1. **AGI Conducting Assessment of the Sequester's Impact on the Geosciences**
2. **Congressional Visits Day in September - Join Us in DC**
3. **AGI Seeks Geoscience Policy Associate for Critical Issues Program**

### \*\*\*Administration News and Updates\*\*\*

4. **Obama Picks for Commerce Secretary, Transportation Secretary Announced**

### \*\*\*Congressional News and Updates\*\*\*

5. **Appropriations Update for April 2013**
6. **Jewell Confirmed as Secretary of Interior**
7. **Committee Approves Ernest Moniz as New Secretary of Energy**
8. **Hearing on McCarthy for new EPA administrator**
9. **House Passes Helium Bill, Senate Introduces Helium Bill**
10. **Bipartisan Coalition Attempts to Tackle Nuclear Waste**
11. **House Science Chairman Drafts High Quality Research Act**
12. **House Committee Approves Two EPA Bills**

### \*\*\*Federal Agency News and Updates\*\*\*

13. **President Obama Celebrates 150 Years of the National Academy of Sciences**
14. **2012 Carbon Emissions Lowest Since 1994, EIA**
15. **Orbital Successfully Launches Antares Rocket**
16. **Drought Task Force Reports 2012 Drought Not Result of Climate Change**
17. **USGS Report: Toward Establishing a National Assessment of Water Availability**
18. **Judge Rules in BLM Monterey Shale Hydraulic Fracturing Case**
19. **USGS Reports Some Pacific Islands Inundated By End of Century**

### \*\*\*Other News and Updates\*\*\*

20. **Next Generation Science Standards Released**
21. **New Institute for Natural Gas Research**
22. **Business is Beginning to Back Climate Change**
23. **ConocoPhillips Suspends 2014 Arctic Drilling**
24. **Shell Signs Arctic Drilling Agreement with Russia**
25. **Former USGS Director Named *Science* Editor-in-Chief**
26. **Key Reports and Publications**
27. **Key Federal Register Notices**
28. **Key AGI Geoscience Policy Updates**

- **Hearing on FY 2014 Budget Request for NOAA and the Coast Guard (4/23/13)**
- **Hearing on FY 2014 Budget Request for Science Agencies (4/17/13)**
- **Hearing on FY 2014 Budget Request for NSF (4/17/13)**
- **Hearing on Nuclear Waste Programs and Strategies (4/11/13)**
- **Hearing to Review the Nomination of Ernest Moniz as Secretary of Energy (4/09/13)**

### **1. AGI Conducting Assessment of the Sequester's Impact on the Geosciences**

On March 1, the Federal Government's discretionary spending accounts were cut by \$85 billion through the rest of the fiscal year. These across-the-board spending reductions, known as the sequester, were first proposed in 2011 as a penalty so severe they would force Congress to work together to solve the nation's deficit woes. Unfortunately, no agreement on a package of replacement cuts or additional revenue was made in time to avoid the sequester. To assess the sequester's impact on the geosciences, AGI will be administering weekly surveys gauging individuals' experiences with the sequester as it relates to their professional situations. We greatly appreciate your participation, as your responses will provide us with valuable insights and real-life reports about how the sequester is, or, alternatively, is not affecting geoscientists' ability to address our nation's critical needs.

Back to top

### **2. Congressional Visits Day in September – Join Us in DC**

Geoscientists are invited to join organized groups of scientists and engineers for workshops and visits with congressional members and committees at this year's Geoscience Congressional Visits Day (GEO-CVD) on September 17-18, 2013.

Decision makers need to hear from geoscientists. Become a citizen geoscientist and join many of your colleagues for a workshop followed by a day of conducting visits with members of Congress or congressional staff on Capitol Hill to speak about the importance of geoscience research, development, and education.

Please send an email to [mboland@agiweb.org](mailto:mboland@agiweb.org) for more information or to sign up.

Back to top

### **3. AGI Seeks Geoscience Policy Associate for Critical Issues Program**

The American Geosciences Institute, a non-profit federation of 48 geoscientific and professional associations, seeks a policy staff member for the Critical Issues Program, a new initiative to improve the flow of geoscience information to policy makers. This position offers considerable scope to shape the development of the program.

Primary duties and responsibilities include: creating and maintaining a web-based hub for relevant, timely, understandable geoscience information on critical issues; developing content for the web site; fostering communication between geoscientists, geo-engineers, and policy makers by organizing forums, workshops, and other events; coordinating publications; and providing support to member societies and the geoscience community for policy-related activities.

The preferred candidate will have an M.S. or Ph.D. in the geosciences; a strong, proven interest in promoting awareness and use of the geosciences in the policy process; exceptional, demonstrable, written, online, and oral communication and organizational skills; the ability to work collaboratively. Position will remain open until filled. EOE.

Candidates should submit a cover letter with resume, salary requirements, and the names and contact information of three references (as one Word or PDF document) to [jobs@agiweb.org](mailto:jobs@agiweb.org). Please specify "Policy Associate" in the subject line. Inquiries only to [govt@agiweb.org](mailto:govt@agiweb.org).

Back to top

### **4. Obama Picks for Commerce Secretary, Transportation Secretary Announced**

President Obama announced his nomination of Penny Pritzker for Secretary of Commerce and Anthony R. Foxx for Secretary of Transportation this April.

Penny Pritzker, a member of President Obama's Economic Recovery Advisory Board and the President's Council on Jobs and Competitiveness, would replace former Secretary of Commerce John Bryson, who resigned amid health problems in June 2012. Pritzker serves as the Chairwoman and CEO of Pritzker Realty Group, the Chairwoman and co-founder of Vi, an affiliate of Hyatt hotels, and serves as the Chairwoman of the board of TransUnion, a global financial information company.

Anthony R. Foxx, the current Mayor of Charlotte, NC would replace former Secretary of Transportation Ray LaHood. Although

Foxx's background is not strictly in transportation, he has spearheaded several initiatives as mayor to greatly improve his city's transportation infrastructure, including breaking ground on a new light rail system for the city, and expanding Charlotte's international airport.

[Back to top](#)

## **5. Appropriations Update for April 2013**

President Obama released his fiscal year 2014 budget request this April. AGI monitors proposed funding for 4 major agencies: The Department of Energy (DOE) Office of Science, the Department of Interior (DOI) U.S. Geological Survey (USGS), the National Science Foundation (NSF) Geosciences Directorate, and the National Aeronautics and Space Administration (NASA) Earth sciences programs.

The proposed budget would increase funding for the DOE Office of Science and the Office of Energy Efficiency and Renewable Energy, while continuing to decrease support for Fossil Energy R&D.

The President has requested a 9 percent increase for the USGS over FY 2012.

The Geosciences Directorate of NSF would receive a 5 percent increase over FY 2012 in the new budget.

NASA's Earth Science program would see a 5 percent increase over FY 2012 levels in the FY 2014 budget, while Planetary Science programs would see major mission cuts to cover other facilities such as commercial spaceflight.

[Back to top](#)

## **6. Jewell Confirmed as Secretary of the Interior**

The Senate confirmed Sally Jewell on April 10, 2013 as the 51st Secretary of the Interior with a vote of 87-11. She was sworn in on April 12, 2013 by retired Supreme Court Justice Sandra Day O'Connor.

Jewell was the Chief Executive Officer of Recreational Equipment Inc. (REI). She previously worked as a petroleum engineer for Mobil and as a commercial banker, and has been involved in conservation efforts.

[Back to top](#)

## **7. Committee Approves Ernest Moniz as New Secretary of Energy**

On April 18, 2013, the Senate Committee on Energy and Natural Resources voted 21-1 in approval of Ernest Moniz as the next Secretary of Energy. Moniz's confirmation still needs to be approved by a full Senate vote.

Tim Scott (R-SC) was the lone dissenter. During Moniz's hearing before the committee on April 9, 2013, Moniz would not comment, as Scott requested, on whether the government should complete the Mixed Oxide (MOX) Fuel Fabrication Facility in South Carolina. AGI's hearing summary is available on the web site.

Moniz is a nuclear physicist at the Massachusetts Institute of Technology (MIT) and heads the MIT Energy Initiative (MITEI) and the Laboratory for Energy and the Environment. He previously worked as the Under Secretary of Energy at the Department of Energy (DOE) and Associate Director for Science in the Office of Science and Technology Policy. He also served on the President's Council of Advisors on Science and Technology, the Department of Defense Threat Reduction Advisory Committee, and the Blue Ribbon Commission on America's Nuclear Future.

[Back to top](#)

## **8. Hearing on McCarthy for new EPA administrator**

The Senate Committee on Environment and Public Works held a hearing on April 11, 2013 on whether to accept the nomination of Gina McCarthy as Administrator of the U.S. Environmental Protection Agency (EPA).

In her opening statements, Barbara Boxer (D-CA), the Chair of the committee, praised McCarthy's experience, intelligence, energy, and expertise, and described her as one of the "best qualified nominees ever to come before the Committee." She and other Senate Democrats are prepared to support McCarthy's nomination; however, Republicans on the Senate Environment and Public Works Committee are concerned over what they believe to be a lack of transparency in the increasingly contentious agency.

The committee was expected to put the nomination to a vote on May 9, 2013, but the effort was scuttled due to a Republican boycott over their transparency concerns. No new vote has been scheduled.

[Back to top](#)

## **9. House Passes Helium Bill, Senate Introduces Helium Bill**

On April 26, 2013, the Responsible Helium Administration and Stewardship Act (H.R. 527) passed the House in a vote of 394-1.

On April 23, 2013, the Helium Stewardship Act of 2013 (S. 783) was introduced in the Senate. Both bills aim to prevent the impending early closure of the Federal Helium Reserve in October 2013. The reserve provides 42 percent of the domestic and 35 percent of the global helium supply.

H.R. 527 was introduced by Representatives Doc Hastings (R-WA) and Edward Markey (D-MA), chair and ranking member, respectively, of the House Natural Resources Committee. It would keep the Federal Helium Reserve open until nearly all the helium is sold, raise BLM helium prices closer to market value, establish a semiannual helium auction, improve transparency, and

prevent supply disruptions. It would require studies of international and domestic helium resources as well as the development of domestic and global helium demand forecasts, domestic helium use accounts, and assessments and research into the extraction and refining of the isotope helium-3, as well as the viability of creating a facility to separate the isotope helium-3. Three additional amendments were approved before final passage of the bill. Linda Sanchez (D-CA) was the only dissenting vote.

S. 783 was introduced by Senators Ron Wyden (D-OR) and Lisa Murkowski (R-AK), chairman and ranking member, respectively, of the Senate Committee on Energy and Natural Resources. The bill allows the reserve to continue current operations through September 30, 2014, then begins auctioning off 10 percent of the helium per year, and eventually provides helium solely to federal users. The committee will hold a hearing on S. 783 on May 7, 2013.

[Back to top](#)

#### **10. Bipartisan Coalition Attempts to Tackle Nuclear Waste**

A group of bipartisan senators has come together to draft the first comprehensive nuclear waste legislation since the Yucca Mountain discussions were tabled last year. Senators Dianne Feinstein (D-CA) and Lamar Alexander (R-TN) of the Senate Appropriations Subcommittee on Energy and Water Development, along with Senate Energy and Natural Resources Committee Chairman Ron Wyden (D-OR), and Ranking Member Lisa Murkowski (R-AK) released the draft legislation on April 25, 2013. The bill hopes to establish a new agency to manage nuclear waste, provide a consensual process for siting nuclear waste facilities, and to ensure adequate funding for managing nuclear waste.

The draft legislation is open for public comment from experts and stakeholders until May 24, 2013.

[Back to top](#)

#### **11. House Science Chairman Drafts High Quality Research Act**

Lamar Smith (R-TX), chairman of the House Committee on Science, Space and Technology, is drafting legislation titled the High Quality Research Act. The bill aims to alter the criteria that the National Science Foundation (NSF) uses to determine grant awards. The act would require that the NSF director certify that each funded study benefits the nation's "health, prosperity, or welfare, and...national defense;" be of the highest quality; be "ground breaking;" resolve issues of the "utmost importance to society at large;" and not duplicate other federally funded research.

During recent hearings on the proposed fiscal year 2014 budget levels for science agencies, Smith discussed a number of NSF funded studies he deemed questionable. He argued that his bill seeks to make NSF more accountable to taxpayers and prioritize research that will "change our world, expand our horizons and save lives." Smith also requested that acting NSF Director Cora Marrett make available information on the review process for select grants.

Committee Ranking Member Eddie Bernice Johnson (D-TX) responded to Smith's request to Marrett, stating that initiating such an inquiry and involving politics in the peer review process risks "destroy[ing] the merit-based review process at NSF and intrudes political pressure into what is widely viewed as the most effective and creative process for awarding research funds in the world." She argued that no one on the committee is a scientific expert qualified to participate in the peer review process. She noted that no single study can accomplish every goal listed in NSF's selection criteria; rather, it is the collection of studies as a whole that ensures NSF advances all of their goals.

Other objections noted that the lack of duplicative research is contrary to the foundations of the scientific method.

[Back to top](#)

#### **12. House Committee Approves Two EPA Bills**

The House Committee on Science, Space and Technology voted on April 11, 2013 in approval of H.R. 875 and H.R. 1422. The former, approved 18-17, was introduced by James Sensenbrenner (R-WI) and would require that the Environmental Protection Agency (EPA) withdraw approval of gasoline mixed with 15 percent ethanol (E15) in order to conduct further research into potential impacts on car engines. The latter, approved 21-16, aims to reform the EPA's Science Advisory Board and introduce a peer-review system.

[Back to top](#)

#### **13. President Obama Celebrates 150 Years of the National Academy of Sciences**

On April 29, 2013, President Obama addressed the annual meeting of the National Academy of Sciences (NAS), discussing the vital role of NAS and the importance of science in general. He emphasized his strong support for scientific innovation, promoting the next generation of scientists, and protecting the peer review process from political incursion.

Obama noted the need for continued research on climate change and applauded accomplishments in solar energy, electric vehicles, and Mars rover technology. He expressed concern that budget cuts from the sequester could negatively affect science, and hoped for a return to the level of scientific innovation that the U.S. experienced at the “height of the space race.” He discussed how the nation must invest in producing the next generation of scientists, with a particular focus on bringing more women and minorities into STEM fields.

Obama addressed recent attempts by politicians to question the importance of, and limit grants to, studies in the social and behavioral sciences. He advocated for protecting the peer review grant selection process from politics and biases while “ensur[ing] that we only fund proposals that promise the biggest bang for taxpayer dollars.” He makes clear that social, behavioral, economic, and political sciences are scientific fields and should be treated as such.

NAS was founded 150 years ago, in 1863, by President Abraham Lincoln, and provides advice to the government on scientific issues.

[Back to top](#)

#### **14. 2012 Carbon Emissions Lowest Since 1994, EIA**

The U.S. Energy Information Administration announced that the total combined carbon dioxide emissions from petroleum, natural gas, and coal sources in the U.S. in 2012 reached their lowest recorded annual levels, 5.3 billion metric tons, since 1994. This reduction in emissions is partially attributed to the increased use of natural gas over coal for electricity generation. Low natural gas prices in 2012 allowed it to better compete with coal. Emissions have decreased four out of the last five years with 2010 being the exception.

[Back to top](#)

#### **15. Orbital successfully launches Antares rocket**

On April 21, 2013, NASA commercial spaceflight partner Orbital Sciences Corporation successfully completed its first test launch of its new Antares rocket. The rocket launched from the Mid-Atlantic Regional Spaceport at the NASA Wallops Flight Facility in eastern VA.

The Antares rocket was originally designed to provide a safe and reliable way to resupply the International Space Station (ISS) at relatively low cost. Under a NASA Commercial Orbital Transportation Services (COTS) Space Act Agreement, Orbital Sciences and another COTS partner, Space Exploration Technologies (SpaceX), have worked to develop and demonstrate industry capabilities for commercial spaceflight.

The launch is part of an effort to establish a reliable source for American spaceflight after the retirement of the Space Shuttle. President Obama’s fiscal year 2014 budget requests \$821.4 million for commercial spaceflight cargo and crew development – an increase of \$415.4 million since 2012.

[Back to top](#)

#### **16. Drought Task Force Reports 2012 Drought Not Result of Climate Change**

The National Oceanic and Atmospheric Administration’s (NOAA) Drought Task Force released a report documenting the severe drought that hit the U.S. during 2012. The report titled *An Interpretation of the Origins of the 2012 Central Great Plains Drought*, concluded that the drought had no significant link to climate change or ocean conditions. Rather, the drought was a natural but unpredictable “sequence of unfortunate events.”

According to the report, May through August 2012 marked the driest summer in the U.S. since record keeping began in 1895, eclipsing even the summers of 1934 and 1936 – the driest summers of the Dust Bowl.

Lead author Martin Hoerling cites the lack of moisture from the Gulf of Mexico, high pressure over the Great Plains, and a jet stream set farther north in Canada as the causes of the drought. These rare conditions, he explained, prevented the formation of thunderstorms in the Great Plains.

Hoerling, however, is careful to state that these findings do not discount the validity of climate change, but show instead that events on a short time scale may represent natural rather than man-made variation.

Some climate scientists disagree with the report’s findings, including Kevin Trenberth, head of the Climate Analysis Section at the National Center for Atmospheric Research. Trenberth argues that the report fails to account for the effect of climate change on the region’s snowpack and high pressure system.

[Back to top](#)



## **17. USGS Report: Toward Establishing a National Assessment of Water Availability & Use**

In compliance with the SECURE Water Act, the USGS released a report to Congress outlining their progress toward creating a National Water Census (Water Census). Once completed, the Water Census will serve as a comprehensive source to assess the availability, quality, and usage of the nation's water supply.

The report describes the initial steps and progress made by the USGS in creating the comprehensive assessment. So far, the report has focused on key areas with a history of conflicts over water supply, including Colorado, Delaware, and the Apalachicola-Chattahoochee-Flint River Basins. The Water Census is a part of the Department of Interior's WaterSMART initiative.

[Back to top](#)

## **18. Judge Rules in BLM Monterey Shale Hydraulic Fracturing Case**

A U.S. District Court Judge for the Northern District of California, Paul Grewal, ruled that the Bureau of Land Management (BLM) violated the National Environmental Policy Act (NEPA) in exempting two oil and gas leases in Monterey County from producing a full environmental impact statement. Grewal stated that BLM incorrectly assumed that only a single well would be drilled, failed to account for technological advances, and needed to address potential impacts of hydraulic fracturing on the lease sites. The leases were approved in September 2011.

[Back to top](#)

## **19. USGS Reports Some Pacific Islands Inundated By End of Century**

On April 11, 2013, the U.S. Geological Survey (USGS) released a report which found that low-lying Pacific Islands may face inundation due to sea-level rise earlier than previously predicted. The report projects that significant washover and inundation could impact infrastructure and agriculture during the 21st century. As opposed to examining only the impacts of sea-level rise, this report accounts for both sea-level rise and the subsequently higher wave action that it induces.

Researchers found that storm waves impacted by sea-level rise could be three to four times taller than current waves. These waves, combined with a sea-level rise of 2 meters, could inundate 91 percent of Midway's Eastern Island. Alternatively, models that only account for sea-level rise predicted 19 percent inundation. Even though islands may not be fully inundated, increased storm washovers could lead to salt incursion into shallow fresh groundwater and agricultural soil.

While the study examined the unpopulated Northwest Hawaiian Islands of Midway and Laysan, these islands exhibit morphologies typical of many populated Pacific islands, such as the Republic of the Marshall Islands and the Federated States of Micronesia.

The full title of the report is Forecasting the Impact of Storm Waves and Sea-Level Rise on Midway Atoll and Laysan Island within the Papahānaumokuākea Marine National Monument—A Comparison of Passive Versus Dynamic Inundation Models.

[Back to top](#)

## **20. Next Generation Science Standards Released**

The Next Generation Science Standards for K-12 science education were released on April 10, 2013. The Standards recommend which scientific concepts students in U.S. public schools should understand at different points in their education.

Under the new guidelines, students will be expected to take a more hands-on role in science classes by developing questions and experiments rather than following a prescribed set of instructions. Climate change features prominently in the standards, which advocate for teaching students about anthropogenic influences on Earth's climate.

Twenty-six states, the National Research Council (NRC), the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve were the leading contributors in developing the Standards. Developers based the Standards on the 2011 NRC report, A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas. Implementation of the standards is voluntary.

[Back to top](#)

## **21. New Institute for Natural Gas Research**

Pennsylvania State University announced the establishment of their new Institute for Natural Gas Research (INGaR). Research will concentrate on four main areas: discovery and exploration; extraction and stimulation; infrastructure and water; and utilization and chemical conversion.

Created by the College of Earth and Mineral Sciences and College of Engineering, INGaR will work with the Marcellus Center for Outreach and Research (MCOR) to conduct independent, interdisciplinary research on natural gas. Turgay Ertekin, professor of petroleum and natural gas engineering, and Andrew Zydney, professor of chemical engineering, will be interim co-directors of the institute until a permanent director is named.

[Back to top](#)

## **22. Business is Beginning to Back Climate Change**

Big-time businesses are beginning to back measures to mitigate climate change. 33 firms, including Intel Corp., General Motors,

Nestle SA, eBay Inc., Starbucks Corp., and Nike Inc., among others, implored Congress in a “Climate Declaration” to act fast against the threat of climate change. The declaration, authored by the Business for Innovative Climate & Energy Policy (BICEP) coalition, a subsidiary of Ceres, hopes to pressure Congress to tighten restrictions against greenhouse gases.

[Back to top](#)

### **23. ConocoPhillips Suspends 2014 Arctic Drilling**

On April 10, 2013, ConocoPhillips announced that they will not pursue exploratory drilling in the Chukchi Sea off the coast of Alaska in 2014. Although confident in their ability to operate safely in the Arctic, ConocoPhillips considered further investment in the 2014 drilling season unwise given “regulatory uncertainty” as Arctic-specific drilling regulations are developed.

ConocoPhillips joins Shell in suspending arctic exploration following the March 2013 release of the Department of the Interior (DOI) Review of Shell’s 2012 Alaska Offshore Oil and Gas Exploration Program. In the review, DOI recommended the creation of a comprehensive, integrated, Arctic-specific plan outlining all stages of operation. The review cited a need for additional preparation, improved containment systems, and better management practices before production continues.

[Back to top](#)

### **24. Shell Signs Arctic Drilling Agreement with Russia**

On April 8, 2013, Royal Dutch Shell plc (Shell) and Gazprom Neft, Russia’s state-run oil producer, signed an agreement for a joint venture in offshore oil exploration and development in the Russian Arctic, in the Chukchi Sea and the Pechora Sea.

Exxon Mobil Corp., Norway’s Statoil, and Italy’s Eni already have deals to drill in the Russian Arctic. Shell postponed its U.S. Arctic drilling plans following management and technical problems experienced offshore Alaska during the 2012 season.

[Back to top](#)

### **25. Former USGS Director Named *Science* Editor-in-Chief**

The American Association for the Advancement of Science (AAAS) has named Marcia McNutt as the 19th editor-in-chief of *Science*. McNutt, the former director of the U.S. Geological Survey (USGS), will begin her new role on June 1, 2013. *Science* was founded in 1880 and McNutt will be its first female editor-in-chief.

[Back to top](#)

### **26. Key Reports and Publications**

#### **\*\*\*National Academies\*\*\***

#### **Prepublication: Adapting to a Changing World—Challenges and Opportunities in Undergraduate Physics Education**

The National Research Council’s (NRC) Committee on Undergraduate Physics Education Research and Implementation examined the state of undergraduate physics education and physics education research, and provided recommendations for improvements. The report notes that approximately one percent of students taking introductory physics graduate with an undergraduate degree in physics. NRC advocates for continued research into effective physics education strategies, and for implementation of knowledge gained from such research.

#### **Prepublication: Levees and the National Flood Insurance Program: Improving Policies and Practices**

The Federal Emergency Management Agency’s (FEMA) requested that the National Research Council (NRC) examine how levees are treated in the National Flood Insurance Program (NFIP) and provide recommendations for improvement. The report looks at risk analysis, flood insurance, risk reduction, and risk communication. It recommends that NFIP employ a modern risk analysis with updated methods and computational mapping to better estimate inundation and damage probability for areas behind levees. These developments would allow insurance pricing based on individual risk.

#### **An Evaluation of the U.S. Department of Energy’s Marine and Hydrokinetic Resource Assessments**

At the request of the Department of Energy (DOE), the National Research Council evaluated DOE’s assessment of marine and hydrokinetic resources in the U.S., including tidal, wave, ocean current, ocean thermal, and in-stream hydrokinetic resources. NRC noted that DOE needed a “conceptual framework” that outlines theoretical, technical, and practical resource levels as well as “coordination and consistency” in their methodology and terminology. Assessments should also account for a region’s socioeconomic and environmental leanings while making information publicly accessible. The report critiques the choice to represent total resource as a single number as opposed to breaking down the value into individual locations for more practical use.

#### **\*\*\*Congressional Research Service\*\*\***

#### **FutureGen: A Brief History and Issues for Congress**

Future Gen—created in 2003 by President Bush—and Future Gen 2.0—created in 2010 by President Obama—represent clean coal initiatives to develop the first coal-fired power plant incorporating carbon capture and sequestration (CCS) technology. The project has faced a number of challenges including “rising costs of production, ongoing issues with project development, lack of incentives for investment from the private sector, time constraints, and competition with foreign nations.” These challenges may affect the ability to complete the project by 2015 when project funding ends.

**\*\*\*Government Accountability Office (GAO)\*\*\***

**NASA: Assessments of Selected Large-Scale Projects**

The Government Accountability Office (GAO) examined the National Aeronautics and Space Administration's major projects, with the exception of the James Webb Space Telescope, in terms of cost and schedule. Nine projects experienced no increase in cost or delay of launch while three saw an increase in cost and schedule delay. Two of these three projects suffered setbacks due to circumstance beyond the project's control.

**Energy: Federal Support for Renewable and Advanced Energy Technologies**

In 2012, 22 percent of U.S. energy production came from nonfossil fuel resources. The Government Accountability Office (GAO) recently issued two reports: Wind Energy: Additional Actions Could Help Ensure Effective Use of Federal Financial Support, and Department of Energy: Status of Loan Programs. This statement provides the key points of each report.

During fiscal year 2011, nine federal agencies implemented 82 wind initiatives with seven duplicating support for the same project. Regarding loan programs, the Department of Energy (DOE) offers that Title XVII Innovative Technology Loan Guarantee Program (LGP) and Advanced Technology Vehicles Manufacturing (ATVM) loan program. DOE has \$34.8 billion in loan guarantee authority and \$170 million in credit subsidies. \$15.1 billion of the former is proposed to be applied to 13 active LGP projects and all of the latter to active energy efficiency and renewable energy projects.

**Commercial Spent Nuclear Fuel: Observations on the Key Attributes and Challenges of Storage and Disposal Options**

The almost 70,000 metric tons of commercial spent nuclear fuel in the U.S. currently resides at 75 reactor sites across 33 states. This report updates information on the Department of Energy's (DOE) spent nuclear fuel disposal and storage efforts and largely builds on information from previous Government Accountability Office (GAO) testimonies. GAO outlines the history and challenges of the Yucca Mountain project, citing particularly the lack of support at the state level for the project. The report also examines prospects of interim storage and developing an alternate geologic repository.

**Science, Technology, Engineering, and Mathematics Education: Governmentwide Strategy Needed to Better Manage Overlapping Programs**

The Government Accountability Office (GAO) reviewed the 209 federal STEM education programs that existed in fiscal year 2010. The programs were administered by 13 federal agencies and cost over \$3 billion. Of these programs, GAO found that 83 percent overlapped with at least one other program in some part. Effective evaluations of the impact of many programs were lacking. GAO recommends that the Office of Science and Technology Policy (OSTP) lead the National Science and Technology Council (NSTC) in better organizing and consolidating federal STEM programs.

**Emergency Preparedness: NRC Needs to Better Understand Likely Public Response to Radiological Incidents at Nuclear Power Plants**

In the aftermath of the March 11, 2011 Japanese tsunami and ensuing nuclear accident at the Fukushima Daiichi nuclear power plant, the Government Accountability Office (GAO) reviewed the emergency preparedness of U.S. nuclear power plants. In the U.S., the Nuclear Regulatory Commission (NRC) assists with emergency preparedness of a plant while the Federal Emergency Management Agency (FEMA) helps with preparedness of the surrounding local and state authorities. Preparedness plans extend to a 10-mile area around the plant, GAO recommends that the NRC and FEMA should take into account areas outside this 10-mile zone in planning responses and evacuations.

Back to top

**27. Key Federal Register Notices**

**ED** – The Department of Education announced the availability of applications for new awards through the Minority Science and Engineering Improvement Program. Applications are due May 31, 2013. [Monday, April 1, 2013 (Volume 78, Number 62)]

**EPA** – The Environmental Protection Agency is withdrawing the direct final rule published February 19, 2013 titled Greenhouse Gas Reporting Rule: Revision to Best Available Monitoring Method Request Submission Deadline for Petroleum and Natural Gas Systems Source Category. [Tuesday, April 2, 2013 (Volume 78, Number 63)]

**DOE** – The Department of Energy's State Energy Advisory Board is holding an open meeting on June 25 and 26, 2013 from 9:00 a.m. to 5:00 p.m. [Thursday, April 4, 2013 (Volume 78, Number 65)]

**EPA** – The Environmental Protection Agency's Hydraulic Fracturing Research Advisory Panel is holding a public meeting on May 7, 2013 from 9:30 am to 6:00 p.m. and May 8, 2013 from 8:00 a.m. to 6:00 p.m. A public teleconference will be held on May 16, 2013 from 1 pm to 5 pm. [Friday, April 5, 2013 (Volume 78, Number 66)]

**NOAA** – The National Oceanic and Atmospheric Administration has extended the comment period of the Supplemental Draft Environmental Impact Statement for the Effects of Oil and Gas Activities in the Arctic Ocean. Comments are due by June 27,



2013. [Wednesday, April 10, 2013 (Volume 78, Number 69)]

**NOAA** – The National Oceanic and Atmospheric Administration’s National Climate Assessment and Development Advisory Committee is holding an open meeting via conference call on May 13, 2013 from 3:00 p.m. to 5:00 p.m. [Thursday, April 11, 2013 (Volume 78, Number 70)]

**EPA** – The Environmental Protection Agency announced proposed amendments to the August 16, 2012 final new source performance standards for the oil and natural gas sector. Comments are due May 13, 2013. If a public hearing is requested by April 17, 2013, comments will be due May 28, 2013. [Friday, April 12, 2013 (Volume 78, Number 71)]

**EPA** – The Environmental Protection Agency is requesting nominations for scientific experts to serve on the Clean Air Scientific Advisory Committee and on the Science Advisory Board (SAB), and six SAB committees. Appointments are expected to be made by the beginning of fiscal year 2014. Nominations are due May 13, 2013. [Friday, April 12, 2013 (Volume 78, Number 71)]

**NSF** – The National Science Foundation announced the renewal of the Advisory Committee for International Science and Engineering for an additional two years. [Friday, April 12, 2013 (Volume 78, Number 71)]

**EPA** – The Environmental Protection Agency’s Office of Ground Water and Drinking Water, Standards and Risk Management Division's Technical Support Center is holding a public meeting and webinar regarding drinking water testing for unregulated contaminants on or under consideration for the Contaminant Candidate List. [Tuesday, April 16, 2013 (Volume 78, Number 73)]

**COAST GUARD** – The Coast Guard and the Research and Innovative Technology Administration are requesting comments on use and continuation of the Nationwide Differential Global Positioning System. Comments should be submitted by July 15, 2013. [Tuesday, April 16, 2013 (Volume 78, Number 73)]

**DOD** – The Department of Defense announced the withdrawal of a proposed rule regarding encouraging contractors to develop science, technology, engineering, and mathematics (STEM) programs. [Wednesday, April 17, 2013 (Volume 78, Number 74)]

**DOE** – The Department of Energy’s National Coal Council is holding an open meeting on May 16, 2013 from 4:00 p.m. to 5:00 p.m. and May 17, 2013 from 9:00 a.m. to 12:00 p.m. Submit requests to make an oral statement at least five business days prior to the meeting. [Thursday, April 18, 2013 (Volume 78, Number 75)]

**USGS** – The U.S. Geological Survey announced the release of the Draft National Shoreline Data Content Standard for public review. Submit comments by July 31, 2013. [Thursday, April 18, 2013 (Volume 78, Number 75)]

**EPA** – The Environmental Protection Agency’s National Environmental Education Advisory Council is cancelling the May 22, 2013 and June 19th, 2013 teleconference meetings announced February 21, 2013. [Tuesday, April 23, 2013 (Volume 78, Number 78)]

**EPA** – The Environmental Protection Agency issued a final action on its reconsideration of issues in the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Coal- and Oil-fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units. [Wednesday, April 24, 2013 (Volume 78, Number 79)]

**DOI** – The Department of the Interior is requesting nominations for individuals to serve on the U.S. Extractive Industries Transparency Initiative (USEITI) Advisory Committee. The board seeks an individual from the industry sector but is also accepting candidates from government and civil society sectors to appoint should future vacancies occur. Nominations are due May 24, 2013. [Friday, April 26, 2013 (Volume 78, Number 81)]

**DOE** – The Department of Energy’s Office of Energy Efficiency and Renewable Energy is holding an open teleconference of the State Energy Advisory Board on May 16, 2013 from 3:30 p.m. to 4:00 p.m. Submit requests to make oral statements at least five days in advance. [Monday, April 29, 2013 (Volume 78, Number 82)]

**DOI** – The Department of the Interior’s Office of Natural Resources Revenue is holding a meeting of the Indian Oil Valuation Negotiated Rulemaking Committee in Lakewood, CO on June 4 and 5, 2013; August 6 and 7, 2013; and September 16 and 17, 2013 from 8:30 a.m. to 5 p.m. The public will have the opportunity to comment between 2 p.m. and 3 p.m. on June 5, August 7, and September 17, 2013. [Monday, April 29, 2013 (Volume 78, Number 82)]

**BOEM** – The Bureau of Ocean Energy Management’s Outer Continental Shelf (OCS) Scientific Committee is holding an open meeting in New Orleans on May 14, 2013 from 9:00 a.m. to 5:00 p.m.; May 15, 2013 from 8:30 a.m. to 5:00 p.m.; and May 16, 2013 from 10:00 a.m. to 4:30 p.m. [Monday, April 29, 2013 (Volume 78, Number 82)]

**EPA** – The Environmental Protection Agency is extending the deadline for submitting information on the potential impacts of hydraulic fracturing on drinking water. Data and scientific literature should be submitted by November 15, 2013. [Tuesday, April 30, 2013 (Volume 78, Number 83)]

**NSF** – The National Science Foundation’s Advisory Committee for Social, Behavioral and Economic Sciences is holding an open meeting on May 20, 2013 from 9:00 a.m. to 5:15 p.m. and May 21, 2013 from 9:00 a.m. to 12:15 p.m. [Tuesday, April 30, 2013

(Volume 78, Number 83)]

[Back to top](#)

## **28. Key AGI Geoscience Policy Updates**

[Back to top](#)

\*\*\*\*\*

Monthly Review prepared by Wilson Bonner, Abby Seadler and Kimberley Corwin 2013 AAPG/AGI Spring Intern.

Sources: Associated Press, AAAS, Environment and Energy Daily, Greenwire, National Academies Press, Government Accountability Office, Open CRS, Thomas, House of Representatives, U.S. Senate, the White House, Department of Energy, Department of the Interior, National Aeronautics and Space Administration, Environmental Protection Agency, National Science Foundation, National Oceanic and Atmospheric Administration, Nuclear Regulatory Commission, Department of Commerce, United Nations, Department of Education, Department of Defense, Department of State, Federal Emergency Management Agency, U.S. Global Change Research Program, Bureau of Land Management.

\*\*\*\*\*

This monthly review goes out to members of the AGI Geoscience Policy Committee, the leadership of AGI's member societies, and others as part of a continuing effort to improve communications about the role of geoscience in policy.

Compiled May 13, 2013.

---