

Monthly Review: October 2011

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 Government Affairs Advisory Committee, and other interested geoscientists as part of a continuing effort to improve communications between GAP and the geoscience community. The current monthly review and archived monthly reviews are all available online. Subscribe to receive the Government Affairs Monthly Review by email.

Administration News and Updates

1. **TransCanada's Keystone XL Pipeline Faces Uncertain Future**
2. **Obama Administration Announces Plan to Expedite Grid Projects**
3. **First Lady Speaks on Importance of Women in STEM Fields**

Congressional News and Updates

4. **Appropriations Update for Fiscal Year 2012**
5. **Senators Propose American Energy Roadmap**
6. **House Proposes Bipartisan Legislation for Clean Water Infrastructure**
7. **EPA Under Pressure from House to Delay Emissions Standards**
8. **Chairwoman Boxer Releases Report on Benefits of Strong EPA**
9. **House Passes Arizona Copper Mine Bill**
10. **House Natural Resources Committee Marks Up 21 Bills**
11. **Science Committee Considers Science and Endangered Species Act**
12. **Senate Committee Passes Bill on K-12 Education**
13. **Senator Murkowski Responds to Law of the Sea Op-Ed**

Federal Agency News and Updates

14. **NASA Launches NPP and Considers Rockets**
15. **Salazar Plans to Move Mining Office into BLM**
16. **USGS Finds Fungus Causes White Nose in Bats**
17. **DOI Issues BP and Contractors Violations from Oil Spill**
18. **FWS Release Report on Wetland Losses from 2004-2009**
19. **DOI Finalizes Regional Climate Science Centers**
20. **Pentagon Report Comments on Rare Earth Minerals Supply**
21. **NSF Search for Assistant Director for the Geosciences**
22. **John Bryson Sworn in as 37th Secretary of Commerce**
23. **NOAA Requests Comments on OAR Five-Year Strategic Plan**
24. **Global Change Research Program Releases Ten-Year Strategic Plan**

Other News and Updates

1. **Report Calls for Research on Effectiveness of Climate Remediation Strategies**
2. **Earthquakes and Consequences**
3. **Climate Skeptic's Temperature Analysis Confirms Warming**
4. **AGU Accepting Applications for Spring 2012 Policy Internship**
5. **Key Reports and Publications**

6. Key Federal Register Notices

7. Key AGI Government Affairs Updates

1. TransCanada's Keystone XL Pipeline Faces Uncertain Future

The State Department plans to release its decision to grant a cross-border permit to the proposed TransCanada Keystone XL pipeline by the end of 2011. Environmental groups and several lawmakers are trying to prevent the pipeline from being built. The 1,700 mile long proposed pipeline would transport crude oil from oil sand deposits in northeastern Alberta, Canada to existing Keystone pipelines in Nebraska and Oklahoma and would cost about \$7 billion. Several environmental groups filed a lawsuit with the U.S. District Court of Nebraska on October 5 against TransCanada Corporation for clearing land and moving endangered species in Nebraska to make way for the pipeline before the company had secured a permit from the administration.

Democratic lawmakers are split on the issue. Secretary of State Hillary Clinton received letters in October from Democrats urging her to redo the Environmental Impact Statement, while other lawmakers requested an internal investigation into the handling of the Environmental Impact Statement and National Interest Determination. Representative Ed Markey (D-MA) and others are asking for assurances that the pipeline's product would only benefit U.S. consumers and not foreign nations. Another 22 Democrats sent a letter to President Obama in support of the \$7 billion pipeline.

[Back to top](#)

2. Obama Administration Announces Plan to Expedite Grid Projects

The Obama Administration revealed plans in October to improve the nation's electric grid by expediting federal permitting for seven proposed electric transmission lines across the country. These projects will provide electricity transmission and new jobs in 12 states including Idaho, Oregon, Minnesota, Wyoming, Wisconsin, Nevada, Pennsylvania, and Nevada, according to Secretary of the Interior Ken Salazar. Ensuring the transmission grid is built will support the Department of the Interior's approval of 22 major renewable energy projects on public lands in the western United States that will generate more than 10,000 construction jobs, Salazar said.

"The president has been committed to moving forward with an electrical grid system that is modernized and carries us forward into the 21st century," Salazar said during a call with reporters. "We know that solar, wind, geothermal, nuclear, clean coal and natural gas all play a role, but it is absolutely critical that we have the infrastructure in place to deliver power to our homes, our businesses and our economy."

Nine federal agencies will expedite the approval of the pilot transmission projects; each agency will have specialized points of contact and project managers for each pilot project. Subject matter experts, established at each agency, will deal with transmission issues such as financing and siting.

[Back to top](#)

3. First Lady Speaks on Importance of Women in STEM Fields

The National Science Foundation (NSF) announced a 10-year plan to increase work-family flexibility for men and women in fields of research. Called the "Career-Life Balance Initiative," the plan includes a provision to allow researchers to delay or suspend grants for up to a year because of the birth of a child, adoption or other family obligations.

At a rollout for the new initiative, First Lady Michelle Obama stressed the importance of increasing the role of women in the fields of science and technology. "We need all hands on deck," she stated. "And that means clearing hurdles for women and girls as they navigate careers in science, technology, engineering and math." She said too often women pursuing scientific careers have to compromise or give up on them entirely because of the demands of family.

[Back to top](#)

4. Appropriations Update for Fiscal Year 2012

On November 1, the full Senate passed the Commerce, Justice Science Appropriations (S.1572), Agriculture Appropriations (H.R. 2112) and Transportation Appropriations (S.1596) for fiscal year (FY) 2012 in a mini-bus. The full Senate is expected to consider the Energy and Water Appropriations (H.R. 2354) soon, while Labor, Health and Education Appropriations (S.1599) is ready for full consideration but does not have a suggested timeline for action. This leaves the contentious Interior and Environment Appropriations (draft bill) as the only Senate appropriations bill that has not been acted upon in committee and is thus not close to a vote by the full Senate. The contention over the draft bill and between the House and the Senate is centered on funding for the Environmental Protection Agency (EPA) and whether riders defining EPA regulatory authorities will be allowed. The House Interior and Environment Appropriations Subcommittee Chair Mike Simpson (R-ID) has stated that no bill will pass in the House without riders, while many in the Senate are opposed to riders on the bill.

Please visit AGI Government Affairs FY2012 Appropriations Webpage for more details on recent actions and for comparison

tables of appropriations for geoscience-related programs within different federal agencies. None of the funding levels are final as Congress has much work to do to approve of a budget for FY2012. Congress and the rest of the country are awaiting the proposal of the Joint Select Committee on Deficit Reduction (i.e. the supercommittee) on a plan to reduce the deficit by at least \$1.2 trillion before completing FY2012 appropriations. The supercommittee held a public hearing on October 26 and has requested input from the public. To offer input or read the latest news from the committee please visit their website. The supercommittee's plan is due November 23.

[Back to top](#)

5. Senators Propose American Energy Roadmap

On October 13, 2011 a group of senators introduced a bill that would require the government to create an energy "roadmap" by reassessing its domestic energy resources, technologies, and policies every four years. This bill, entitled the "Quadrennial Energy Review Act of 2011," (S. 1703) is modeled after the Department of Defense's four-year review of its defense strategy and priorities. The legislation is supported by the Bipartisan Policy Center's Energy Project (BPC) and is cosponsored by Senators Mark Pryor (D-AR), Lisa Murkowski (R-AK), Mark Begich (D-AK), Chris Coons (D-DE), Jon Tester (D-MT) and Jeff Bingaman (D-NM). The BPC believes that improved long-term energy planning "would be of great value to investors, producers, and consumers" and put the U.S on the "right track" toward addressing future energy challenges.

[Back to top](#)

6. House Proposes Bipartisan Legislation for Clean Water Infrastructure

On October 11, 2011 members of the House Transportation and Infrastructure Committee introduced bipartisan legislation to invest \$13.8 billion through the Clean Water State Revolving Fund (SRF) over the next five years to create American jobs and improve water quality. The bill, the "Water Quality Protection and Job Creation Act of 2011," (H.R. 3145) was introduced by Representatives Tim Bishop (D-NY), ranking member of the Water Resources and Environment Subcommittee, Nick J. Rahall (D-WV), ranking member of the House Transportation and Infrastructure Committee, Tom Petri (R-WI), and Steven LaTourette (R-OH).

The bill proposes two complimentary initiatives for the long-term financing of wastewater infrastructure through the establishment of direct low-interest loans and loan guarantee programs and a Clean Water Infrastructure Trust Fund. The bill is supported by the National League of Cities and the Water Infrastructure Network, a coalition of 45 organizations that includes the American Society of Civil Engineers, Natural Resources Defense Council and National Association of Clean Water Agencies.

[Back to top](#)

7. EPA Under Pressure from House to Delay Emissions Standards

The Environmental Protection Agency (EPA) was busy in October defending the benefits of a series of emissions standards that the House of Representatives voted to delay. On October 6, 2011, the House of Representatives passed the Cement Sector Regulatory Relief Act of 2011 (H.R. 2681) to prevent the enforcement of new emissions standards for the cement industry and a week later on October 13, the House passed the EPA Regulatory Relief Act of 2011 (H.R. 2250) to delay the emissions standards for boiler and incineration units by 15 months. Along with the delayed Utility MACT standards for coal- and oil-fired power plants, these boiler standards were ordered as part of the Clean Air Act Amendments of 1990 (P.L. 101-549) but have not been implemented because of inaction and lawsuits. Though originally scheduled to release the Utility MACT rules on November 16, EPA Administrator Lisa Jackson has requested a 30-day extension to allow time for sufficient review of public comments. An amendment (H.AMDT.799) attached to the Transparency in Regulatory Analysis of Impacts on the Nation Act of 2011 (H.R. 2401) and a petition from 25 states seek to delay the rules for at least one year. By EPA's own estimates, the two rules would cost a combined \$2.5 billion per year but would save between \$29 and \$72 billion in health care costs.

In September, the Obama Administration sent a letter to EPA Administrator Lisa Jackson requesting a withdrawal of draft ozone standards until 2013. In response, the American Lung Association, the Environmental Defense Fund, the Natural Resources Defense Council, and the Appalachian Mountain Club filed a suit against the administration asking the U.S. Court of Appeals for the District of Columbia Circuit to decide whether the President has the authority to tell Jackson to withdraw the standards.

[Back to top](#)

8. Chairwoman Boxer Releases Report on Benefits of Strong EPA

The Senate Committee on Environment and Public Works majority staff released a report defending the Environmental Protection Agency (EPA) on October 6, 2011. The report entitled, "A Strong EPA Protects Our Health and Promotes Economic Growth," focuses on the health and economic benefits of environmental laws created and enforced by the EPA. Such benefits include a \$300 billion per year clean technology sector that employs about 1.7 million people.

[Back to top](#)

9. House Passes Arizona Copper Mine Bill

On October 26, the House of Representatives passed a bill (H.R. 1904) to exchange roughly 2,400 acres of federal land that includes a large undeveloped copper deposit to Resolution Copper Company in exchange for 5,300 acres of company property. Titled the Southeast Arizona Land Exchange and Conservation Act of 2011, the bill was introduced by Representative Paul Gosar (R-AZ) in May. A series of amendments offered by Democrats Raul Grijalva (D-AZ), John Garamendi (D-CA), Ed Markey (D-MA), and Ben Ray Lujan (D-NM) to require royalties, to exempt certain American Indian sacred and cultural sites from the transfer, to stipulate the use of U.S.-made equipment, and to obligate that the product is processed domestically were rejected.

[Back to top](#)

10. House Natural Resources Committee Marks Up 21 Bills

On October 5, the House Natural Resources Committee passed 21 bills including the Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act of 2011 (H.R. 2842), the Providing for our Workforce and Energy Resources Act (H.R. 2360), the BLM Live Internet Auctions Act (H.R. 2752), and a bill to direct the Department of the Interior to conduct a study of the mineral potential from the shallow and deep seabed of the United States (H.R. 2803).

Meant to ease the installation of small canal and pipeline hydropower development projects, H.R. 2842 passed the committee on a bipartisan vote of 30-12. Both H.R. 2360, which extends the laws governing offshore oil and gas development to apply to offshore renewable energy development, and H.R. 2752, which allows onshore oil and gas lease sales to take place on the internet, passed unanimously. Delegate Eni Faleomavaega of American Samoa introduced H.R. 2803 which would require the Bureau of Ocean Energy Management, Regulation, and Enforcement to conduct a technological capability assessment, survey, and economic feasibility study regarding the production of minerals, not including oil and natural gas, from the shallow and deep seabed of the United States. An amendment by Rep. Doug Lamborn (R-CO) makes the U.S. Geological Survey a co-lead agency and extends the scope of the study to examine the safety and environmental issues associated with deep sea mining. All other bills were related to fisheries, public lands, tribal lands, and endangered species.

[Back to top](#)

11. Science Committee Considers Science and Endangered Species Act

On October 13, 2011, the House Science, Space and Technology Committee, Investigations and Oversight Subcommittee held a hearing entitled, The Endangered Species Act: Reviewing the Nexus of Science and Policy. The hearing generated significant coverage and controversy. Republicans on the committee want to see the Endangered Species Act (Public Law 93-205) overhauled while the Democrats want to see the law sustained to help species and ecosystems. There was discussion about altering or changing scientific results, political pressure on scientists and other concerns about the possible improper use of science for policy. The Democrats on the subcommittee issued a press release defending science on their home page. Republican statements are available on the hearing homepage.

[Back to top](#)

12. Senate Committee Passes Bill on K-12 Education

On October 20, 2011 the Senate Committee on Health, Education, Labor and Pensions approved the Elementary and Secondary Education Reauthorization Act by a vote of 15 to 7. Introduced by Senators Tom Harkin (D-IA) and Mike Enzi (R-WY), the bill follows the Blueprint for Reform released by the Obama Administration in March 2010 and overhauls No Child Left Behind. The bill, which will be sent to the Senate floor for consideration, would provide more flexibility for states and districts, better prepare students for college and careers, focus on low-performing schools, and improve transparency for parents.

[Back to top](#)

13. Senator Murkowski Responds to Law of the Sea Op-Ed

On October 24, 2011 Senator Lisa Murkowski (R-AK) published a rebuttal to a Wall Street Journal Op-Ed by John Bolton and Dan Blumenthal that called for killing the Law of the Sea Treaty. Murkowski supports the ratification of the Law of the Sea by the Senate and points out that a large area in the Arctic Ocean that has energy, mineral and fisheries resources would be off limits to the U.S. if we are not a party to the treaty. The Wall Street Journal continues to be a pivotal place for debates about the Law of the Sea, mostly in the letters and op-ed sections.

[Back to top](#)

14. NASA Launches NPP and Considers Rockets

On October 28, 2011, NASA successfully launched the NPOESS Preparatory Project (NPP) on a Delta 2 rocket from Vandenberg Air Force Base. NPP is a weather and climate satellite that will provide polar orbiting Earth observations for weather forecasting and climate change data.

About a month earlier, NASA announced that it will reconsider Delta 2 rockets for future launches. In 2010, NASA had excluded

the Delta 2 rocket, but a recently released NASA Launch Services-2 contract allows Delta 2 as a rocket choice for future launches. This means that NPP may not be the last launch for a Delta 2 rocket.

Delta 2 rockets have launched about 150 times since 1989 with a 98.7 percent reliability record. These rockets were used to launch the first generation Global Positioning System. As the military moved to using Atlas 5 and Delta 4 rockets, the Delta 2 became nearly obsolete because of costs and a lack of mid-size satellites to launch. Recent failures of the Taurus XL rocket (such as Glory satellite in March 2011 and the Orbiting Carbon Observatory in 2009) have caused concern and a reconsideration of the reliable Delta 2 rockets for NASA missions.

[Back to top](#)

15. Salazar Plans to Move Mining Office into BLM

On October 26, 2011 Department of the Interior (DOI) Secretary Ken Salazar issued a Secretarial Order that will incorporate the Office of Surface Mining Reclamation and Enforcement (OSM) into the Bureau of Land Management (BLM). This effort seeks to further strengthen the bureaus' mining regulations and abandoned mine land reclamation programs. The order will become effective on December 2, 2011 following consultation with the White House Office of Management and Budget, employees, and related congressional committees with responsibilities over these functions. According to the Order, Deputy Secretary David J. Hayes must work with OSM and BLM to develop a schedule, by March 1, 2012, to improve strategies in four primary areas: administrative support functions, environmental restoration of abandoned mine lands, fee collections, and the regulation, inspection and enforcement and state program oversight.

[Back to top](#)

16. USGS Finds Fungus Causes White Nose in Bats

A new finding from the U.S Geological Survey (USGS) on white nose syndrome was published in the journal *Nature* on October 26, 2011. The USGS study concludes the fungal pathogen *Geomyces destructans* causes white nose syndrome in bats. The syndrome owes its name to the fuzzy white fungal spores visible on the nose of an infected bat. Experimental evidence from the study shows that fungal transmission can occur from bat to bat contact, thus conservationists are concerned about the fate of high-quantity, tightly-knit bat colonies that live, mate and hibernate in close quarters.

By attaching itself to the hair and exposed skin of bats, the fungus causes lesions and burns holes in their wings so they can no longer fly. Once it has penetrated the skin, the fungus causes bats to use limited body-fat reserves, retreat deeper into caves or exhibit odd behavior, such as flying in daytime and cold weather when there is limited access to food resources. Because the fungus thrives in cold conditions it targets bats mainly during hibernation season, killing as many as ninety percent of a hibernating bat colony.

Little-brown bats and tricolored bats have been hit hardest by the fungus. Since its discovery in a New York cave in 2006, the fungus has been located in 16 states and 4 Canadian provinces and is traveling westward. The culpability of *G. destructans* was previously questioned when scientists found the fungus on healthy bats in Europe; however, the USGS study has unequivocally linked it to the high bat mortality levels in the eastern U.S.

Though not much can be done to control the spread of *G. destructans*, the U.S. Fish and Wildlife Service (FWS) has asked visitors to stay out of affected areas and has closed off cave access on agency lands. The report says that the effect of the fungus on bats will take a toll on agriculture because bats are the primary predators of agricultural pests such as mosquitoes and beetles. In addition, bats are pollinators and the loss of hordes of bats may harm ecosystems that benefit from pollination. Twelve out of forty five bat species in North America are experiencing white nose syndrome, and scientists predict that the fungus could possibly wipe out some of these species within fifteen years. The FWS has announced that up to \$1 million will be funded for white nose research.

[Back to top](#)

17. DOI Issues BP and Contractors Violations from Oil Spill

The Department of the Interior (DOI) issued on October 12, 2011 fifteen violation notices to BP, Transocean, and Halliburton for violating a number of offshore drilling rules associated with the Deepwater Horizon oil spill. Transocean, the owner of the Deepwater Horizon rig, and Halliburton, the drilling services company, each received four violation notices, while BP received five. These notices, called "incidents of non-compliance," (INCs) involve a maximum civil penalty of \$40,000 per violation per day for each of the three companies. The announcement of these notices came a month after the Coast Guard and Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) Joint Investigation Team Report was released and one day before a House Committee on Natural Resources oversight hearing on the report.

DOI will allow a 60-day appeal period after which the department will review potential civil penalties. A Transocean spokesman announced the company's intent to appeal, while a Halliburton spokeswoman said that the company "reserves its right to appeal." A BP spokesman said the company will respond to DOI "in due course" after the company reviews the citations.

[Back to top](#)

18. FWS Release Report on Wetland Losses from 2004-2009

In its most recent report on the state of the nation's wetlands, the Fish and Wildlife Service (FWS) announced that wetland losses have slowed in the contiguous United States from 2004-2009 but still amounted to a net loss of 62,300 acres. The report, Status and Trends of Wetlands in the Conterminous United States 2004-2009, found that the rate of gains increased by 17% from the previous 1998-2004 study period, but losses increased by 140%. Found in all of the lower 48 states, wetlands serve as storm buffers, reduce water pollution through natural filtering processes and provide habitat to many flora and fauna. The largest losses occurred in the forested wetlands of the Southeast mainly due to land use change, a heavy hurricane season in 2005, and climate change impacts.

[Back to top](#)

19. DOI Finalizes Regional Climate Science Centers

The Department of the Interior (DOI) has finalized the organization of eight new Climate Science Centers (CSC). The centers will provide climate science and information on regional landscape stressors to federal, state and local land managers. They will work in consultation with the regional Landscape Conservation Cooperatives and will serve as regional hubs for the National Climate Change and Wildlife Science Center within the U.S. Geological Survey.

The Alaska CSC will be centered at the University of Alaska-Fairbanks; the Southeast CSC will be hosted by North Carolina State University; the Northwest CSC will be supported by a consortium of three universities – Oregon State University, the University of Washington, and the University of Idaho; the Southwest CSC has six hosting organizations; the North Central CSC will be led by Colorado State University; the Northeast CSC will be hosted by the University of Massachusetts – Amherst; the South Central CSC will be located at the University of Oklahoma; and the Pacific Islands CSC will be located at the University of Hawaii – Manoa.

[Back to top](#)

20. Pentagon Report Comments on the Future of Rare Earth Minerals

The Department of Defense (DOD) recently released its Annual Industrial Capabilities Report to Congress, which comments on the future of America's role in the rare earth minerals market. The report deemed it "essential" for the Pentagon to establish non-Chinese sources of rare earth minerals. Although China has recently lowered export quotas, making access to these resources more difficult and raising rare earth mineral prices, analysts believe that the U.S. could increase its production of rare earths and become resource independent from China.

Molycorp Inc., the leading producer of rare earth minerals in the U.S., has recently announced its goal to explore for heavy rare earth elements in hopes of meeting global demand. The report recommends that the Pentagon open a line of communication with Molycorp and other companies about DOD assistance plans and possible "special authorities" for developing defense-critical industries.

Though DOD's use of rare earth minerals is a much smaller percentage than civilian use, the report suggests the Pentagon establish a communications plan with the commercial industry to ensure prioritization lest a shortage occur. The Pentagon has been advised to develop risk mitigation strategies for heavier rare earth elements and better understand its overall mineral needs.

[Back to top](#)

21. NSF Search for Assistant Director for the Geosciences

The National Science Foundation (NSF) has announced a search for an Assistant Director for Geosciences (GEO), to be appointed in July of 2012. The new Assistant Director for GEO will be replacing Tim Killeen who has served in the position since July of 2008. The Assistant Director manages the GEO Directorate comprised of three divisions: Atmospheric and Geospace Sciences, Earth Sciences, and Ocean Sciences. The Assistant Director provides leadership and guidance to multiple international and interagency programs in the geosciences. The ideal candidate will possess "outstanding leadership qualifications, a deep sense of scholarship, a grasp of the issues facing research and education in the geosciences, and the ability to serve effectively as a key member of the NSF policy and management team." NSF is especially interested in identifying women, members of minority groups, and persons with disabilities for consideration. Recommendations, applications, and supporting materials should be sent to the AD/GEO Search Committee.

[Back to top](#)

22. John Bryson Sworn in as 37th Secretary of Commerce

On October 20, 2011 the Senate confirmed John Bryson to be the next Secretary of Commerce. As part of his post, he will oversee

the National Oceanic and Atmospheric Administration and the National Institute of Standards and Technology. Former Secretary of Commerce Gary Locke left in August to serve as Ambassador to China. Although Bryson was nominated in May, his confirmation was put on hold by a group of senators who would not move any nominees until the administration and Congress had completed three free-trade agreements. Those agreements were approved on October 13 and Bryson was confirmed a week later by a 74-26 vote.

[Back to top](#)

23. NOAA Requests Comments on OAR Five-Year Strategic Plan

The National Oceanic and Atmospheric Administration's (NOAA) Office of Oceanic and Atmospheric Research (OAR) is NOAA's primary research office and is seeking public comments on its draft five-year strategic plan.

[Back to top](#)

24. Global Change Research Program Releases Ten-Year Strategic Plan

On September 30, 2011, the U.S. Global Change Research Program (USGCRP) released for public comment its Strategic Plan for 2012-2021. The plan acknowledges the need for a strong scientific foundation in order to effectively respond to global change. As such, it has developed a four-pronged approach, divided into "goals," that will guide the program for the next ten years. The four goals are to advance science, inform decisions, sustain assessments, and communicate and educate. The public is invited to provide comments and feedback on the USGCRP plan by November 29, 2011.

[Back to top](#)

25. Report Calls for Research on Effectiveness of Climate Remediation Strategies

The Bipartisan Policy Center's (BPC) Task Force on Climate Remediation released its report titled "Geoengineering: A National Strategic Plan for Research on the Potential Effectiveness, Feasibility, and Consequences of Climate Remediation Technologies," which calls for a coordinated federal research program to explore the potential effectiveness, feasibility, and consequences of climate remediation technologies. The task force is made up of 18 leaders from the fields of natural science, social science, science policy, foreign policy, national security, and from environmental communities. The group collectively argued that managing risk is a critical principle of effective climate policy and that remediation cannot be substituted for mitigation and adaptation strategies. Climate remediation proposals, according to the report, generally fall into two broad categories, carbon dioxide removal and solar radiation management. The report maintains that it is too premature to deploy these climate remediation technologies and the U.S. should instead undertake a Climate Remediation Research Program (CRRP) to better understand the risks, costs, and feasibility of these approaches.

The task force presented two rationales for recommending a CRRP—the growing physical risks of climate change, and the geopolitical and national security risks that will ensue following deployment of climate remediation technologies by some other countries. Collaboration of the proposed CRRP with the White House Office of Science and Technology Policy has been recommended, due to the possibility that this climate remediation research may pose risks and raise new ethical, legal and social issues of broad public concern. Furthermore, the report encourages the U.S. to promptly work with nations that have the necessary scientific, technologic, and financial qualifications to establish common norms and expectations for such research in order to facilitate future agreements on the deployment of climate remediation technologies.

This task force was originally named the "Geoengineering" task force but has been renamed to more appropriately describe its efforts to counteract climate change and greenhouse gas emissions.

[Back to top](#)

26. Earthquakes and Consequences

A magnitude 7.1 earthquake in Eastern Turkey caused extensive damage and fatalities, particularly in the cities of Van and Ercis in Turkey. A technical summary is available from the United States Geological Survey (USGS). Much smaller magnitude events rattled San Francisco, Oregon, southern Texas and Oklahoma City during October with little reported damage.

On October 20, about 8.6 million people, mostly in California, participated in the 2011 Great California Shakeout earthquake drill. The purpose of the drill is to help people and communities to prepare for a large magnitude event in seismically active regions. The USGS, Federal Emergency Management Agency and the National Science Foundation worked with state agencies and others to organize a successful outreach, awareness and practice scenario.

The North Anna nuclear power plant remains shutdown after it automatically shut down during the magnitude 5.8 Virginia earthquake on August 23, 2011. The Nuclear Regulatory Commission (NRC) has not approved a restart, even though the utility company Dominion Power indicates the plant is ready. The NRC is concerned that the earthquake shaking exceeded the design limits and wants further inspection of the plant.

The Fukushima Dai-ichi nuclear power plant in Japan remains in a tenuous state of containment and clean-up after the destruction caused by the March 11, 2011, magnitude 9 Tohoku earthquake and tsunami. The reactors and other areas remain off limits to

humans because of the risk of high radiation exposure so robots and other machinery is being used to build containment around high risk areas. Measurements of radioactivity in Japan by various groups and individuals have yielded a range of high to low levels of contamination within and outside the evacuation zone. These reports have raised concerns about safety outside the evacuation zone. On October 21, 2011 the Norwegian Institute for Air Research published a report that indicates the radioactive emissions were twice as high as indicated by the Japanese government. These conclusions are based on about 1,000 measurements in Japan, Europe and the United States. NOVA has posted a one-hour documentary, *Surviving the Tsunami*, which gives eyewitness accounts of tsunami survivors and discusses some new understanding about the earthquake mechanisms (i.e. subduction zone displacement plus movement of splay faults in the overlying sedimentary wedge) that led to such a destructive tsunami.

Last, but not least, the Seismological Society of America has published a special volume of *Seismological Research Letters* with 19 papers about the February 22, 2011 magnitude 6.2 Christchurch earthquake in New Zealand. This event devastated Christchurch, but has been forgotten beyond New Zealand in the face of subsequent events. The volume provides important data and analyses while providing greater understanding of earthquake processes, earthquake engineering and lessons for improving resilience and reducing losses.

[Back to top](#)

27. Climate Skeptic's Temperature Analysis Confirms Warming

Richard Muller, a physics professor at University of California, Berkeley and a team of researchers analyzed global observations (i.e., about 1.6 billion temperature reports on land from 15 archives) and found the average global temperature has increased, consistent with previous work (especially the work of the U.S.'s National Aeronautics and Space Administration and National Oceanic and Atmospheric Administration, and the U.K.'s Met Office and Climatic Research Unit). The Berkeley Earth Surface Temperature Project is supported by private donations and the U.S. Department of Energy. Some of the private donations are from people or groups associated with climate skepticism and Muller has been considered a climate skeptic by some. Muller has suggested that previous work might be biased or in error. The perceived skepticism and suggestions of inaccuracies have made Muller a controversial figure. Muller wrote an Op-Ed about the project's recent unpublished results for the *Wall Street Journal* and he confirms the data is robust and the Earth is warming.

[Back to top](#)

28. AGU Accepting Applications for Spring 2012 Policy Internship

The American Geophysical Union (AGU) Public Affairs department is accepting applications for a spring internship. This is an opportunity for undergraduates, graduate students, and recent grads to learn more about the intersection of public policy and Earth and space science. The Public Affairs intern will work closely with the Public Affairs and Outreach staff. This internship provides an opportunity to learn about the public policy process first-hand and to gain knowledge about Earth and space science policy issues. Applications will be reviewed on a rolling basis and the anticipated start date is February 1, 2012.

[Back to top](#)

29. Key Reports and Publications

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

Deepwater Horizon Oil Spill: Actions Needed to Reduce Evolving but Uncertain Financial Risks

In response to Congressional Requesters, the Government Accountability Office (GAO) conducted a study that discusses the uncertain and ever-changing financial costs to the federal government after oil spill occurrences, specifically the Deepwater Horizon spill of 2010. Acknowledging that a large portion of oil spill costs are closely tied to BP and other responsible parties, the GAO has recommended that Congress set an Oil Liability Trust Fund cap per oil spill incident based on net expenditures, extend the barrel tax used to finance oil spill responses, and improve procedures for future significant spills. This is the third of report of this type released by the GAO.

Yucca Mountain: Information on Alternative Uses of the Site and Related Activities

Given the uncertainty of the future of Yucca Mountain, the Government Accountability Office (GAO) conducted a study to evaluate the geographical, structural and geophysical characteristics of the site that may be relevant in considering potential alternative uses. The GAO also looked at stakeholders' proposed alternative uses, experts' evaluations of them, and possible challenges in pursuing them. The report suggests five broad categories of alternative uses: nuclear and radiological uses, defense and homeland security activities, information technology uses, energy development and storage, and scientific research. In addition to the costliness of these proposed uses, experts have noted that Yucca Mountain's characteristics are not critical to these proposed projects, thus they could be taken elsewhere.

Environmental Protection Agency: Management Challenges and Budget Operations

Originally submitted as testimony to the House Committee on Energy and Commerce Subcommittee on Oversight and

Investigations, the Government Accountability Office (GAO) reported on the management of the Environmental Protection Agency's (EPA) workload, workforce, and real property, the EPA's coordination with other agencies for effective resource utilization, and the EPA's budget justification. The GAO found that the EPA could use improvements in all three of these categories, specifically better analyzing its remaining workload to help inform budget estimates, establishing a working group or formal mechanism to develop common goals and clarify plans for assessing progress, and improving clarity for its budget justifications.

Climate Monitoring: NOAA Can Improve Management of the US Historical Climatology Network

Overseen by the National Oceanic and Atmospheric Administration (NOAA), the U.S. Historical Climate Network (USHCN) monitors the nation's climate and analyses long term surface temperature trends. In response to recent claims that many USHCN stations do not meet NOAA siting standards, the Government Accountability Office (GAO) conducted a study to investigate the criteria with which NOAA chose station sites, whether these stations meet siting standards, and how NOAA performs quality control of these standards. The report recommends that NOAA enhance its information systems to centrally collect information to manage the USHCN and develop a policy on how to address stations that do not meet standards.

National Academy of Sciences (NAS)

The National Weather Service Modernization and Associated Restructuring: A Retrospective Assessment

Following the decade-long Modernization and Associated Restructuring (MAR) of the National Weather Service (NWS), the National Research Council provided a comprehensive assessment of the \$4.5 billion project. Although the MAR better integrated science into NWS activities and improved outreach and coordination with weather information users, it also had many challenges and affected career paths and personal lives of many field office employees. The report addresses the past modernization and some lessons learned to support future improvements to the NWS.

[Back to top](#)

30. Key Federal Register Notices

DOE – The Department of Energy (DOE) and National Science Foundation have given notice that their Nuclear Science Advisory Committee has been renewed for a two-year period starting on September 30, 2011. [Thursday, October 6, 2011 (Volume 76, Number 194)]

NOAA – The National Oceanic and Atmospheric Administration (NOAA) has announced the schedule of its forum entitled, "Trends and Causes of Observed Changes in Heat Waves, Cold Waves, Floods and Drought." The forum will take place from November 8-10, 2011 in Asheville, North Carolina. Members of the public are invited to RSVP. [Tuesday, October 11, 2011 (Volume 76, Number 196)]

DOE – The Energy Efficiency and Renewable Energy Agency has announced an open meeting of the Biomass Research and Development Technical Advisory Committee. The meeting will be held from November 8-9, 2011. [Thursday, October 13, 2011 (Volume 76, Number 198)]

NRC – On October 13, 2011 the Nuclear Regulatory Commission issued a new regulatory guide entitled, "Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants." [Thursday, October 13, 2011 (Volume 76, Number 198)]

DOI – The Department of the Interior has issued a final rule that contains regulations that will be separated between the Bureau of Safety and Environmental Enforcement and the Bureau of Ocean Energy Management. [Tuesday, October 18, 2011 (Volume 76, Number 201)]

DOI – The Ocean Energy Safety Advisory Committee will be holding an open meeting on November 7-8, 2011 in Washington, D.C. Attendance is on a first-come-first-served basis. [Tuesday, October 18, 2011 (Volume 76, Number 201)]

NIST – The Advisory Committee on Earthquake Hazards Reduction is holding an open meeting on November 8-9, 2011 in Washington, D.C. Anyone wishing to attend this meeting must register by close of business Tuesday, November 1, 2011, in order to attend. [Tuesday, October 18, 2011 (Volume 76, Number 201)]

NSF – The Advisory Committee for Polar Programs has announced an open meeting on November 14-15, 2011 in Arlington, VA. [Tuesday, October 18, 2011 (Volume 76, Number 201)]

NOAA – The National Climate Assessment and Development Advisory Committee is holding an open meeting on November 16-17, 2011 in Boulder, CO. Seating will be available on a first come, first served basis, and members of the public must RSVP in order to attend all or a portion of the meeting. [Thursday, October 20, 2011 (Volume 76, Number 203)]

EPA – The Environmental Protection Agency has announced that the public comment period for the August 23, 2011 proposed rule titled, "Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews," has been extended to November 30, 2011. Public comments can be made on the regulatory web site. [Friday, October 28, 2011 (Volume 76, Number 209)]

NRC – The Advisory Committee on Reactor Safeguards (ACRS) will be holding a subcommittee meeting on U.S. Evolutionary Power Reactor on November 14-15, 2011 in Rockville, MD. [Monday, October 31, 2011 (Volume 76, Number 210)]

[Back to top](#)

31. Key AGI Government Affairs Updates

- [Hearing on Nuclear Waste \(10/31/11\)](#)
- [Hearing on National Ocean Policy \(10/31/11\)](#)
- [Hearing on Shale Gas and Water Resources \(10/24/11\)](#)
- [Update on Energy Policy \(10/18/11\)](#)
- [Hearing on Coal R&D \(10/17/11\)](#)
- [Hearing on BP Oil Spill Investigation \(10/17/11\)](#)
- [Hearing on International Space Station \(10/17/11\)](#)
- [Hearing on Shale Gas Production \(10/6/11\)](#)

[Back to top](#)

Monthly Review prepared by Wilson Bonner and Linda Rowan, Staff of Government Affairs Program; Erin Camp AAPG/AGI Fall 2011 Intern.

Sources: Associated Press, AAAS, Environment and Energy Daily, Greenwire, New York Times, Washington Post, 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, Wall Street Journal, Federal Register, Bipartisan Policy Center, Seismological Society of America, Public Broadcasting Station

This monthly review goes out to members of the AGI Government Affairs Program (GAP) Advisory Committee, the leadership of AGI's member societies, and other interested geoscientists as part of a continuing effort to improve communications between GAP and the geosciences community that it serves. For additional information on specific policy issues, please visit the web site or contact us at govt@agiweb.org.
Compiled November 3, 2011.
