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Monthly Review: January 2011

This monthly review 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.

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1. Clean Energy, Science and Education Highlights of State of the Union

President Barack Obama called for increased American innovation and investment in research and development, comparing the present age of innovation to the space race, in his State of the Union address on January 25, 2011. Obama said "This is our generation's Sputnik moment. Two years ago, I said that we needed to reach a level of research and development we haven't seen since the height of the Space Race. And in a few weeks, I will be sending a budget to Congress that helps us meet that goal. We'll invest in biomedical research, information technology, and especially clean energy technology…"

The President stressed the importance of science, technology, engineering and mathematics (STEM) education; clean energy development; and infrastructure improvements, stating that investments in these arenas can spur job creation. He revealed that his budget request will include increased funding for research and development and urged Congress to avoid "cutting the deficit by gutting our investments in innovation and education."

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2. Outlook for President's Fiscal Year 2012 Budget Request

After the State of the Union speech, the White House released a fact sheet that provided some additional guidance relevant to the February 14 President's budget request to Congress. In particular, the fact sheet states: "The President's Budget will help increase the nation's R&D investments, as a share of GDP, to its highest levels since President Kennedy."

The budget will request increases for clean energy research. The fact sheet calls for: "A new commitment to supporting clean energy technology, paid for by ending taxpayer subsidies for fossil fuels: The President's Budget will propose increasing clean energy technology funding by a third compared to 2010, including an expansion of the successful ARPA-E research program and a doubling of the number of Energy Innovation Hubs operating around the country ... The President's Budget will also focus on high-value research on clean energy deployment, including more than doubling investments in energy efficiency and a more than 85 percent increase in renewable energy investment."

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3. National Oil Spill Commission Releases Final Report

The National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling released their final report, Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling, on January 11, 2011. The Oil Spill Commission (OSC) discussed the results and their recommendations with the media and the public in a series of public events.

The commission stressed the urgency and importance of creating a more effective safety and regulation system while maintaining offshore development and fossil fuel energy supplies. They emphasized increasing research and development for offshore oil and gas as well as spill response and containment.

A "culture of complacency" regarding safety standards and regulation within the industry and the federal government led to a series of preventable mistakes that caused the disaster, highlighting what the commission called a systemic problem with offshore drilling. Key recommendations include the formation of an independent safety organization and including the National Oceanic and Atmospheric Administration (NOAA), the U.S. Geological Survey (USGS), the Department of Energy (DOE), the Environmental Protection Agency (EPA) and academia for environmental considerations concerning leasing and risk assessment. The report recommends giving NOAA, the Coast Guard and EPA a role in formulating oil spill response and containment plans. The report discusses the need to research the effects of oil and gas development in less understood frontier areas, such as the Arctic and the Atlantic, and suggests creating a board of experts from NOAA, USGS, DOI, DOE, EPA, professional societies, academia, industry and NGOs to head such research.

The commission recommends that Congress provide annual mandatory funding for oil spill response research. The commission suggests that funding for additional research and safety enforcement could come from portions of fees that drilling companies pay for federal leases and from new regulatory fees that could be imposed.

Congressional response to the report has varied. Senator Barbara Boxer (D-CA), Chairman of the Senate Committee on Environment and Public Works, stated that the report highlighted the need for more safety regulations and plans on supporting legislation to act on the commission's recommendations. Congressman Fred Upton (R-MI), Chairman of the House Energy and Commerce Committee, issued a statement saying the report failed to answer the question of what went wrong and instead spread blame in general. He noted that the results should not be allowed to stunt American petroleum production, increasing dependence

on foreign oil, a position echoed by House Natural Resources Committee Chairman Doc Hastings (R-WA) in his comments.

The American Petroleum Institute (API) has voiced concerns of miscommunication with BOEMRE. The API wants to improve communication so the permitting process for deep-water drilling can resume.

Commission co-chairs Bob Graham and Bill Reilly acknowledged that passing regulatory legislation in a Republican-led House will be difficult, but expressed hope that the recommendations will not go unheeded.

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4. Browner Leaves Climate and Energy Czar Position

Carol Browner has announced that she is leaving her position as the President's climate change and energy advisor. Browner served an important role in the administration's efforts to address the Deepwater Horizon oil spill, but under her tenure the administration did not sign climate change legislation, which was intended to be a major focus of the position. Browner's departure has been expected since late last year. The administration has not suggested a replacement for Browner, which is probably a sign that there will be less focus on climate change by the Obama White House.

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5. Appropriations for FY2011 Update

Leaders of the new Republican-led House have indicated that they would like to cut discretionary spending in upcoming budget deliberations. House Majority Leader Eric Cantor (R-OH) has been leading the charge to reduce spending since the waning days of the 111th Congress when he set-up a website where citizens could propose cuts in domestic programs, particularly to research grants from the National Science Foundation (NSF).

In January, Cantor announced that the House would begin floor debate of a budget for the fiscal year (FY) 2011 on February 14. This is the same day that the President will send his FY 2012 budget request to Congress and three weeks before the continuing resolution (CR) expires. It is an unusually early date to bring a budget plan to the floor of the House, but Cantor indicated he wanted plenty of time for debate and discussion.

The new chairman of the House Appropriations Committee Harold "Hal" Rogers (R-KY) stated on the House floor that the plan is to "make the largest series of spending cuts in history". Indeed the House passed a resolution (H. Res. 38) to reduce FY2011 spending to FY2008 levels. If the schedule moves forward as proposed, then the floor debates could be used to sway congressional and public opinion.

In late breaking news, the House Budget Committee announced spending allocations for the remainder of the fiscal year to save \$74 billion. On February 3, the committee released a fact sheet describing the budget plan.

Over in the Senate, the Appropriations Committee announced on February 1 that they would implement a moratorium on earmarks for the session, following a similar pledge already implemented in the House. The moratorium will apply to the FY2011 and FY2012 budget considerations. In related news, there was an interesting measure introduced on January 27. Senators Jeanne Shaheen (D-NH) and Johnny Isakson (R-GA) propose moving the annual federal budget process to a two-year cycle in their Biennial Budget Appropriations Act of 2011 (S.211). Representatives David Drier (R-CA) and Ed Whitfield (R-KY) introduced a similar bill (H.R. 114) in the House on January 5.

Congress will try to complete the FY2011 budget in February or March and additional continuing resolutions are likely. Congress will need to consider raising the federal debt ceiling in May or June and then turn to completing the FY2012 budget. All three of these processes will be acrimonious and difficult as there are significant differences in priorities between the major parties, the House and the Senate and Congress and the Administration.

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6. Appropriations Subcommittees Almost Set

The House Committee on Appropriations will be lead by Chairman Hal Rogers (R-KY) and Ranking Member Norm Dicks (D-WA). There will be twelve subcommittees with responsibility for appropriating funds for specific agencies and programs. The leadership and jurisdiction of the subcommittees of most interest to the geoscience community include:

Agriculture Subcommittee: Chairman Jack Kingston (R-GA) and Ranking Member Sam Farr (D-CA) with responsibilities for research within the Department of Agriculture.

Commerce, Justice, Science Subcommittee: Chairman Frank Wolf (R-VA) and Ranking Member Chaka Fattah (D-PA) with responsibilities for research within NSF, NASA, NOAA, and NIST.

Energy and Water Subcommittee: Chairman Rodney Frelinghuysen (R-NJ) and Ranking Members Pete Visclosky (D-IN) with responsibilities for research at the Energy Department.

Interior, Environment Subcommittee: Chairman Mike Simpson (R-ID) and Ranking Member Jim Moran (D-VA) with

responsibilities for research at the U.S. Geological Survey (USGS) and the Environmental Protection Agency (EPA).

The Senate Committee on Appropriations will be led by Chairman Daniel Inouye (D-HI) and Vice Chair Thad Cochran (R-MS). There will be twelve subcommittees with responsibility for appropriating funds for specific agencies and programs. The leadership has not been finalized, but below are the currently listed leaders and the jurisdiction of the subcommittees of most interest to the geoscience community.

Agriculture Subcommittee: Chairman Herb Kohl (D-WI) and Ranking Member (D-CA) with responsibilities for research within the Department of Agriculture.

Commerce, Justice, Science Subcommittee: Chairman Barbara Mikulski (D-MD) and Ranking Member Richard Shelby (R-AL) with responsibilities for research within NSF, NASA, NOAA, and NIST.

Energy and Water Subcommittee: Leadership is undecided, but this subcommittee will continue to have responsibilities for research at the Energy Department.

Interior, Environment Subcommittee: Chairman Dianne Feinstein (D-CA) and Ranking Member Lamar Alexander (R-TN) with responsibilities for research at the U.S. Geological Survey (USGS) and the Environmental Protection Agency (EPA). Feinstein may become the chair for Energy, so there are likely changes to leadership coming soon.

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7. Senate Committee Leadership Update

The Senate did not see as many changes in committee leadership from the 111th Congress moving in to the 112th as did the House, and the Democrats retained a slight majority after the November elections. The new Chair of the Senate Committee on Agriculture, Nutrition and Forestry is Debbie Stabenow (D-MI) and Charles "Pat" Roberts (R-KS) is now the Ranking Member. John D. Rockefeller IV (D-WV) will continue as Chairman of the Senate Committee on Commerce, Science, and Transportation, and Kay Bailey Hutchinson (R-TX) remains Ranking Member. Rockefeller IV plans to focus on improving infrastructure and strengthening science, technology, engineering and mathematics (STEM) education, and Hutchinson has expressed continued interest in NASA oversight.

Jeff Bingaman (D-NM) and Lisa Murkowski (R-AK) continue as Chair and Ranking Member of the Committee on Energy and Natural Resources, respectively. Murkowski is expected to push for oil and gas development in the Arctic.

Barbara Boxer (D-CA) remains Chairman of the Committee Environment and Public Works and has introduced legislation to monitor contaminants is drinking water and reduce air pollution. Ranking Member James Inhofe (R-OK) is expected to sponsor a bill that would block EPA from regulating greenhouse gases.

The Senate Committee on Health, Education, Labor and Pensions leadership is the same, with Tom Harkin (D-IA) as Chair and Michael Enzi (R-WY) as Ranking Member. The two have plans to rewrite the No Child Left Behind Act.

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8. House Committee Leadership Update

Members and chairs of key House committees have been appointed for the 112th Congress. In the Energy and Commerce Committee, Fred Upton (R-MI) is the Chair and Henry Waxman (D-CA) is the Ranking Member. Subcommittee chairs include Mary Bono Mack (R-CA) for Commerce, Manufacturing and Trade, Ed Whitfield (R-KY) for Energy and Power, John Shimkus (R-IL) for Environment and Economy, and Cliff Stearns (R-FL) for Oversight and Investigations. A leaked Republican agenda for the committee focuses on opposing greenhouse gas regulation, curtailing rising gas prices, and investigating the cost of renewable electricity standards.

In the House Natural Resources Committee Doc Hastings (R-WA) is the Chair and Edward Markey (D-MA) is the Ranking Member. Key subcommittee chairs include Doug Lamborn (R-CO) for Energy and Mineral Resources, Rob Bishop (R-UT) for National Parks, Forests and Public Lands, and Tom McClintock (R-CA) for Water and Power. The committee promises to look closely at federal wild lands policy and energy development, including offshore drilling. The committee held a hearing on the National Oil Spill Commission's report on the Deepwater Horizon disaster on January 26.

Adding the designation "space" this year, the House Committee on Science, Space, and Technology will be lead by Chair Ralph Hall (R-TX) and Ranking Member Eddie Bernice Johnson (D-TX). The committee is returning after successful passage of the America COMPETES Reauthorization (H.R. 5116). Authorization of the National Earthquake Hazards Reduction Program (NEHRP), however, was stalled in the Senate and will require a new bill from the SS&T Committee. Subcommittee chairs include: Andy Harris (R-MD) for Energy and Environment, Mo Brooks (R-LA) for Research, Science and Education, and Ben Quayle (R-AZ) for Technology and Innovation.

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9. Energy Bits in Congress

The Administration has indicated that "chunks" of energy policy will be the focus in working with the new 112th Congress.

Indeed in President Obama's State of the Union address, he called for 80 percent of electricity to come from clean energy by 2035, for a million electric vehicles to be on the road by 2015 and for 80 percent of Americans to have access to high speed rail by 2036. With regards to clean energy, the President included wind, solar, nuclear, clean coal and natural gas as clean resources. In response to the President's speech, Congress is looking at revising measures considered in the 111th Congress and incorporating new ideas to meet the challenges put forth by the President and other congressional priorities. In a public address on January 31, Senate Energy and Natural Resources Chairman Jeff Bingaman described the energy priorities for the 112th Congress. Like the president, Bingaman started his talk by highlighting the advances in China, a nation that invested \$51.1 billion in clean energy in 2010. Bingaman called for work on four elements of the energy equation for the United States: 1. Energy research and development; 2. A domestic market for clean energy; 3. Financial tools to provide the capital to build clean energy systems; and 4. Policies to promote clean energy manufacturing. Bingaman noted that only 0.3 percent of gross domestic product (GDP) was spent on clean energy research and development in the U.S. in 2007 and he called for investments in energy technology research. Bingaman has long been a champion of a renewable electricity standard (RES), which would require utilities to garner a percentage of their energy from renewable energy resources. Responding to the President's request for a clean energy standard (CES) that would include nuclear, natural gas and clean coal plus renewables, Bingaman indicated he would consider this idea with his colleagues on the committee. Bingaman also defined clean coal as coal-fired power plants with carbon capture and sequestration. Committee Ranking Member Lisa Murkowski (R-AK) has not indicated a position on CES yet, while Senators Lindsey Graham (R-SC), Tom Carper (D-DE) and Mark Begich (D-AK) have indicated support for some form of CES. Look for Congress to work on several measures that prioritize energy efficiency, some energy standards for electricity generation, some energy technology research and development, and policies to stimulate clean energy infrastructure and manufacturing. Back to top

10. Congress Considers Restricting EPA Climate Change Initiatives

Senator John Barrasso (R-WY) and nine other Republican senators introduced a measure to remove the Environmental Protection Agency's (EPA) authority to regulate greenhouse gas emissions (GHGs). The bill, Defending America's Affordable Energy and Jobs Act, (S.228) was submitted on January 31, 2011. Another measure (S.231) sponsored by Senator Jay Rockefeller (D-WV) would be less restrictive and would only seek to delay the EPA rules for stationary sources by two years.

In the House, Representative Ted Poe (R-TX) and many cosponsors started the first session of the 112th Congress on January 5 with a bill (H.R. 153) to prohibit any funds for EPA to implement any regulations pertaining to GHGs or for any enforcement of any cap and trade program.

Senator James Inhofe (R-OK), who is the Ranking Member on the Environment and Public Works Committee and Representative Fred Upton (R-MI), who is the Chair of the Energy and Commerce Committee, will unveil draft legislation soon that seeks to restrict EPA regulations for GHGs under the Clean Air Act. This flurry of legislative action signals a move away from climate change legislation to efforts to discuss and control any actions taken by EPA to regulate emissions that contribute to climate change.

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11. Policymakers Want Safer Drinking Water

Congress is zeroing in on the Environmental Protection Agency (EPA) and not just in regards to climate change regulations. Many policymakers want the EPA to do more to ensure safe drinking water. California Senators Barbara Boxer and Dianne Feinstein introduced legislation (S.79) to amend the Safe Drinking Water Act to require a standard and advisory for hexavalent chromium in drinking water for vulnerable individuals. Senator Boxer introduced a bill (S.78) to protect vulnerable individuals from perchlorate in drinking water. Senator Frank Lautenberg (D-NJ) intends to introduce legislation to add more potential drinking water contaminants to the growing list of chemicals that EPA regulates. Lautenberg wants standards and rules for gasoline additives like MTBE, pesticides and "fracking chemicals".

Chemicals associated with hydraulic fracturing for oil and gas extraction remain a significant concern for members of Congress. On January 31, Representatives Henry Waxman (D-CA), Ed Markey (D-NJ) and Diana DeGette (D-CO) posted a letter addressed to the EPA about the amount and use of diesel fuel in hydraulic fracturing. They want to know what EPA is doing about potential contamination of drinking water by the diesel fuel and if the past use of diesel fuel violates any part of the Safe Drinking Water Act.

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12. Oil Spill Response Bills in the House

Energy policy in the 112th Congress, while focused on clean energy, will need to consider measures regarding mitigation and response to oil spills in the aftermath of the BP Deepwater Horizon oil spill in April 2010.

On January 5, 2011, Representative Steve Scalise (R-LA) and other co-sponsors, introduced the Gulf Coast Restoration Act (H.R.

56), to establish a Gulf Coast Ecosystem Restoration Task Force and a Gulf Coast Ecosystem Restoration Fund. The bill has been referred to the Natural Resources and Transportation and Infrastructure Committees for consideration.

On January 26, the House Natural Resources Committee Ranking Member, Edward Markey (D-MA) and other House Democrats introduced an oil spill response measure (H.R. 501) to enact many of the recommendations of the President's Oil Spill Commission. The bill would reorganize offshore drilling programs, eliminate the \$75 million liability cap for companies involved in causing oil spills, and initiate a dedicated funding stream for oil spill cleanup research and development. The bill is similar to a measure put forward at the end of the 111th Congress, but has been updated to consider more of the Commission's recommendations. Congressman Rush Holt (D-NJ) also introduced a bill (H.R. 492) to ensure that companies pay the full costs of oil spill clean-up.

Over in the Senate, Senator Robert Menendez (D-NJ) introduced two measures (S.214 and S.215) to ensure that companies pay the full costs of oil spill clean-up while Senator Mark Begich (D-AK) introduced two measures (S.203 and S.204) to require the National Oceanic and Atmospheric Administration (NOAA) to conduct research on oil spill prevention and response in the Arctic and to permit funds from the Oil Spill Liability Trust to be used for NOAA oil spill research.

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13. Congressman Questions Use of Science in Oil Spill Response

Representative Raul Grijalva (D-AZ) sent a letter to President Obama on January 25 questioning the administration's use of science in their response to the BP Deepwater Horizon oil spill. The letter, interspersed with the text of internal government email exchanges, indicates that the administration ignored or altered federal scientists' comments or analyses in its published oil budget report from August of 2010. The oil budget report was used by Carol Browner, Director of the White House Office of Energy and Climate Policy at the time, to publicly state that most of the oil was gone.

The congressman writes "While there is room for legitimate internal debate about scientific issues, this exchange gives the distinct impression that the White House was more concerned about public image than scientific accuracy in describing the effectiveness of its cleanup efforts."

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14. NASA Warns of Inadequate Funding and Time to Accomplish Tasks

The National Aeronautics and Space Administration (NASA) released a "Preliminary Report Regarding NASA's Space Launch System and Multi-Purpose Crew Vehicle" on January 13, 2011 that states the agency does not have enough funding or time to develop and fly a heavy lift vehicle (HLV) and manned capsule by 2016.

Under the NASA Authorization Act of 2010, (S.3729; Public Law 111-267) Congress directed NASA to develop a new heavy lift rocket and crew capsule based on previous designs to send crews and supplies into deep space by 2016 as part of the Space Launch System (SLS). However, NASA said in the report that none of the studied design options are feasible under Fiscal Year 2011 funding levels.

The SLS was developed after the proposed cancellation of the Constellation program (Bush-era rocket and space capsule project). The Obama administration has made it clear it wants to shift manned spaceflight and rocket launches to private industry while NASA focuses on future deep space exploration targets.

Uncertainty about future funding is another source of confusion at the agency. NASA is currently operating at 2010 funding levels under the continuing resolution, and the agency is required to continue all established programs until new legislation is passed. This means \$215 million could be spent on the soon-to-be-cancelled Constellation program by the end of February unless Congress takes action.

The report has garnered strong reactions from leaders in Congress, and congressional response remains somewhat divided on the administration's plan for NASA and spaceflight. Representative Ralph Hall (R-TX), Chairman of the House Committee on Science, Space, and Technology, issued a statement that condemns the cancelling of the Constellation rogram and notes the need for discussions with NASA on the future of the human spaceflight program. Senate Commerce, Science, and Transportation Committee members Kay Bailey Hutchinson (R-TX) and Bill Nelson (D-FL) sent a letter to NASA Administrator Charles Bolden saying the report gives no specific reasons why none of the design options are affordable. The letter emphasizes that the NASA Authorization Act of 2010 "is not an optional, advisory document: it is the law."

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15. BOEMRE Splits and DOI Adds Safety Group for Offshore Drilling

Bureau of Ocean Energy, Management, Regulation and Enforcement (BOEMRE) Director Michael R. Bromwich and Secretary of the Interior Ken Salazar announced the restructuring of the former Minerals Management Service (MMS) and discussed the next steps in revamping the nation's offshore drilling program on January 19, 2011.

Two new bureaus have been created. The Bureau of Ocean Energy Management (BOEM) will be responsible for resource

development, including leasing, and will house a Chief Environmental Officer. The Bureau of Safety and Environmental Enforcement (BSEE) will enforce safety and environmental regulations.

Salazar announced the creation of the Offshore Energy Safety Advisory Committee within the DOI. It will be made up of representatives from government, industry, academia, national labs and various research organizations and will advise the DOI on research and development relating to drilling safety, spill response and containment and drilling testing technology.

While some policymakers welcomed the added safety regulations and measures to improve enforcement, they say that it must not slow down the permit process and lessen domestic oil production.

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16. EPA Delays Greenhouse Gas Permitting for Biomass Fuels

The United States Environmental Protection Agency (EPA) announced January 12 that it will delay for three years setting greenhouse gas (GHG) permitting requirements for industries that use biomass as fuel. In a news release, EPA indicated it will use the additional time to gather more input and analysis from the scientific community. EPA will revisit comments received from a July 2010 Call for Information to better understand whether burning biomass results in a net increase or decrease in emissions. EPA will formulate a decision concerning how to deal with the emissions and whether permits are necessary.

The move signals to some an approval of biomass as a form of clean energy by EPA, while others view it as an indication towards a more moderate approach to regulation. The deferral comes as EPA is enacting controversial permit requirements for newly built and modified facilities that emit large amounts of GHG, such as power plants and refineries.

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17. EPA Releases Guidelines for Hexavalent Chromium in Water Supplies

The U.S. Environmental Protection Agency (EPA) issued guidelines on January 11 to all public water systems on how to monitor and test for hexavalent chromium (chromium-6), a possible carcinogen, in drinking water. The guidelines give recommendations for where to take water samples, how often to take them and which laboratory procedures should be used for detection. The guidelines come in response to a study released by the Environmental Working Group.

The EPA released a draft review of chromium-6 in September 2010 and will release a final human health assessment in 2011. In their news release, the EPA states that it will carefully consider and review the conclusions to determine if a new standard should be set.

Senators Barbara Boxer (D-CA) and Dianne Feinstein (D-CA), introduced S. 79, a bill to set a deadline for EPA to establish chromium-6 levels in drinking water.

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18. BLM to Designate More Wild Lands

Secretary of Interior Ken Salazar has issued an order (No. 3310) that would expand wild lands designation to Bureau of Land Management (BLM) areas that preserve "Wilderness Characteristics". The order would create an additional class of lands, complementing those that are already designated as Wilderness Areas and those that are pending designation, called Wilderness Study Areas.

Mining and energy interests have opposed the order, on the grounds that it would restrict the beneficial development of natural resources on those lands. The Chair of the House Appropriations Interior subcommittee, Mike Simpson (R-ID), plans to hold a joint hearing of authorizers and appropriators to review the change in policy. Court cases regarding the policy are also pending. In October, Uintah County sued the Obama Administration for contradicting a Bush-era agreement that would leave lands in northeastern Utah free from wilderness protection.

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19. DOE Releases Critical Materials Strategy

The Department of Energy (DOE) released a report in December outlining the department's activities to secure the beneficial use of critical materials in the U.S. energy industry. The report entitled Critical Materials Strategy follows months of supply constraints of critical rare earth elements (REE), and it estimates that REEs could become scarcer if renewable energy is rapidly deployed in the next decade. Five REEs (dysprosium, neodymium, terbium, europium and yttrium) are identified as most critical in the short term, due to a lack of production and their importance to industry. The report outlines existing U.S. government programs for securing these and other critical materials and describes materials strategies from other nations as well. Back to top

20. DOI Releases Five Year Strategic Plan

The Department of the Interior (DOI) released their fiscal year 2011-2016 strategic plan in January 2011. The plan sets out five major goals and sets priorities within these goal areas. The goals include: 1. Provide natural and cultural resource protection and experiences; 2. Sustainably manage energy, water and natural resources; 3. Advance government-to-government relationships with

Indian Nations and honor commitments to insular areas; 4. Provide a scientific foundation for decision making; and 5. Build a 21st century Department of the Interior.

Secretary of the Interior Salazar noted, "This new strategic plan ensures science has its rightful place as a primary source for the Interior Department's decision making process" and the plan does place needed importance on science as a foundation of the department.

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21. Interior Releases Science Integrity Guidelines

On January 28, 2011, the Department of the Interior released specific guidelines for "integrity of scientific and scholarly activities the Department conducts and science and scholarship it uses to inform management and public policy decisions." The guidelines are part of Secretarial Order Number 3305 and are the first specific guidelines from a federal agency to follow the White House Office of Science and Technology Policy's memorandum on scientific integrity.

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22. USGS Releases Methods for Assessing Carbon Sequestration

On January 13, the United States Geological Survey (USGS) released a report outlining the methods to be used to quantify and assess carbon storage and sequestration, greenhouse-gas fluxes and possible sequestration techniques in ecosystems throughout the United States.

The USGS published the report as a requirement under Section 712 of the Energy Independence and Security Act of 2007 (EISA; Public Law 110-140). The law mandates the Department of the Interior (DOI) to develop a methodology for measuring carbon stocks and sequestration and fluxes of three principle greenhouse gases: carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O). It requires DOI to assess ecosystems in the U.S. and to investigate the potential of sequestering carbon in terrestrial ecosystems to reduce greenhouse gas emissions and mitigate climate change. The assessment should be completed in about three years.

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23. NASA/NOAA: 2010 Tied for Warmest Year on Record

Climate records show that 2010 has tied for the warmest year on record, according to a NASA news release and a monthly report from the National Oceanic and Atmospheric Administration (NOAA). Global air temperature measurements were taken from land- and sea-based measurements and find no statistical difference between average temperatures for 2010 and 2005. The announcement comes as several peer-reviewed journal articles have reported alarming predictions for a warming planet. *Nature Geoscience* published an article in January that reported sustained warming for at least 1,000 years, regardless of future carbon dioxide emissions. This climate inertia results from positive feedbacks such as melting permafrost and less ice cover, according to the study. Another study in *Nature Geoscience* reports that melting glaciers could contribute to as much as 16.1 centimeters of sea level rise. Areas such as the Alps and New Zealand are expected to see the most rapid loss of glaciers and may experience diminished stream flows in the spring, according to the report. The Intergovernmental Panel on Climate Change (IPCC) estimates that under current emissions scenarios, melting of ice sheets and glaciers could raise sea level 18 to 59 centimeters over the next century. Despite these projected changes, a new U.S. Geological Survey (USGS) study suggests that arctic sea ice loss and extinction of polar bears can still be averted if atmospheric carbon dioxide concentrations are stabilized at 450 parts per million.

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24. Education Department Finishing Rules on Commercial Colleges

The Department of Education is working to finish regulations on federal student aid rules for commercial colleges. There has been significant debate about whether commercial colleges are taking advantage of students by advertising an education that will lead to a high quality job while charging high tuitions that put students in financial difficulties. Data indicates that 25 percent of students who attended commercial colleges defaulted on their loans compared to 10.8 percent at public institutions and 7.6 percent at private non profit institutions for loans due in 2008. The Government Accountability Office also found problems with commercial colleges and Congress has requested the new regulations from the Education Department to deal with these problems. Starting in 2012, the Education Department will take away eligibility for federal student aid from institutions that have 3 consecutive years of loan default rates greater than 30 percent. Other rules are still being finalized and there has been heavy lobbying from proponents and opponents of commercial colleges regarding the rules.

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25. Supreme Court Backs NASA Background Checks

Scientists and engineers challenged the federal government's right to ask personal questions in background checks for employment at NASA's Jet Propulsion Laboratory (JPL). On January 19, 2011, the Supreme Court ruled that the government can

ask personal questions and the questions are not an invasion of personal privacy. In fact, several justices indicated the constitution does not offer the right to "informational" privacy. The scientists and engineers are contractors, who are employed by the California Institute of Technology, which runs JPL for the federal government. Federal employees have been subject to such personal questions for a long time, but federal contractors came under the same background checks starting in 2005.

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26. Colorado Approves First Uranium Mill in 25 Years

Colorado has approved the first uranium mill to be built in the U.S. in over 25 years. On January 4, the state's Department of Public Health and Environment approved Energy Fuels Inc.'s application for a license to operate a joint uranium-vanadium mill in the Western Colorado town of Naturita. Energy Fuels, a Canadian company, owns two uranium mines in proximity to the mill and plans to process 500 tons of ore per day, enough to fuel 2,000 megawatts of nuclear power, according to the company. Local opposition groups have raised concerns that Energy Fuels has not set aside sufficient funds to finance clean up of contaminated groundwater and soil that could result from the tailings disposal. Please see the health department's press release and Energy Fuels web page on the mill for further details.

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27. China Drafts New Mining Laws to Reduce Pollution

China has drafted new pollution standards that may constrain the domestic production of critical materials. China currently produces 97% of the world's rare earth element (REE) supply and recently established export quotas that have created global supply constraints. China secured its place as the number one producer of REEs partly through lax environmental standards. Those standards drove down costs and forced other mines to abandon production, but lower pollution limits and more regular enforcement may reverse that trend. The new standards will be released as soon as February. The standards were approved by China's Ministry of Environmental Protection in December of 2010.

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28. Study: Advanced Biofuels Could Replace 58 Percent of World's Liquid Fuel

A new peer-reviewed study has indicated that 10 to 58 percent of the world's liquid fuel consumption could be replaced by advanced biofuels grown on marginal lands. The study identified grassland, shrubland, and savannahs worldwide that could be harvested for biofuels without displacing agriculture or pasture. Those gains can only be realized from cellulosic and other advanced biofuels, the study emphasizes. The findings were published in the January 1 issue of *Environmental Science and Technology* and was partially funded by the Energy Biosciences Institute, a joint project of BP, two universities, and the Lawrence Berkeley National Laboratory.

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29. Court Case to Impact University Patents

The influential Bayh-Dole Act of 1980 is being questioned in court on the basis of a dispute between Stanford University and Roche Ltd., an international pharmaceutical company. The act permitted universities and researchers to file patents for items and technologies that were created through the use of government funds. In *Stanford v. Roche*, the contract between an individual Stanford researcher and Roche is in dispute. Stanford insists that, because the research was initially performed under a grant to the university, it retains the rights to patents pursuant to the Bayh Dole Act.

More than 50 universities and science societies have joined Stanford in the case by filing "friend of the court" briefs. Former Senator Birch Bayh (D-IN) has filed a brief as well, stating his intention to favor the rights of universities over individual inventors.

Stanford initially lost the suit in a federal district court, but the Supreme Court has decided to hear the case on February 28, 2011. Amicus Briefs from the Association of Public and Land-Grant Universities (APLU brief) and other organizations are available online.

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30. National Science Tests Show Room for Improvement

The National Assessment of Educational Progress (NAEP) released the results of the 2009 science tests for grades 4, 8 and 12. Only about thirty percent of students across grade levels were proficient in science and proficiency percentages decreased as students advanced in grade levels. There were also gender, racial/ethnic and geographic discrepancies with females, minorities and southern states scoring lower than their respective comparison groups. The exams test knowledge of physical science, life science and Earth and space sciences. The 2009 exams used a different framework so comparisons cannot be made to previous NAEP tests. Back to top

31. Two States Introduce "Teach the Controversy" Education Bills

Oklahoma (House Bill 1551 and Senate Bill 554) and Missouri (House Bill 195) legislators introduced measures to allow teachers

to teach the controversies about evolution and other scientific theories (e.g., global warming or human cloning) as well as accepting student's beliefs on the different subjects.

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32. Welcome Spring 2011 AAPG/AGI Geoscience and Policy Intern

The spring 2011 intern is Dana Thomas. Dana completed her Bachelor of Science degree in Geology at Louisiana State University in August of 2010. She graduated summa cum laude and was the LSU Outstanding Geology Senior for 2010. She served as a field assistant in the Beartooth Mountains of Montana and as a laboratory assistant for clay mineral analysis with Professor Ray Ferrell. She was an active member of the LSU Geology Club, organizing educational visits to K-12 classes and coordinating member field trips. She spent a summer as a geology intern for Southwestern Energy Company analyzing a potential oil field. Within the community, Dana has devoted more than 4 years of time as a swim instructor for Crawfish Aquatics of Baton Rouge and as a Reading Friend for Volunteers in Public Schools in Baton Rouge. She started her internship in January 2011 after traveling through Asia..

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33. Key Reports and Publications

Government Accountability Office (GAO)

Nuclear Nonproliferation: Comprehensive U.S. Planning and Better Foreign Cooperation Needed to Secure Vulnerable Nuclear Materials Worldwide

Released December 15, 2010. In April, 2009 President Obama announced an international plan to secure all weapons-grade nuclear materials within 4 years. The Department of Energy's (DOE) National Nuclear Security Administration (NNSA) has coordinated specifically with Russian agencies to identify and secure weapons-grade materials in Russia. The Russian commitment to this program has been questioned, however, and it is likely that the NNSA will not meet the deadline for transferring responsibility to Russian agencies by 2013. Political sensitivities have prevented more thorough assessment and security work in China and India as well. To address these difficulties, the GAO recommends that Congress extend the deadline for transferring responsibility to Russian authorities, and that the NNSA develop a more detailed assessment of facilities to be secured and a more detailed implementation plan to complete the President's initiative.

Congressional Research Services (CRS)

Clean Air Issues in the 112th Congress

Released January 4, 2011. The Environmental Protection Agency (EPA) has proceeded with greenhouse gas regulations and other Clean Air Act rules that were harshly criticized by the 111th Congress. The foremost of these rules were Best Available Control Technology (BACT) requirements for greenhouse gas emissions from stationary sources. Several attempts to reduce EPA's authority and extent of those regulations failed to pass the House and Senate. The EPA has also addressed sulfur dioxide, nitrogen oxide, and mercury emissions rules after the Bush Administration's Clean Air Interstate Rules (CAIR) were struck down in court. Though the CAIR cap and trade program was ruled to be inconsistent with federal laws, similar cap and trade programs might be authorized and legally protected by legislation in the 112th Congress. This report describes the legal and political environment surrounding these, and other regulatory actions, by the EPA.

Deepwater Horizon Spill: The Fate of the Oil

Released December 16, 2011. The federal government has estimated that about 200 million gallons (4.9 million barrels) of oil were spilled during the BP Deepwater Horizon disaster in the Gulf of Mexico. On August 4 and November 23, that total was detailed in reports from a technical working group, the Oil Budget Calculator Science and Engineering Team. According to the team, 17 percent of the oil was recovered directly from the wellhead, 5 percent was burned at the surface, 3 percent was skimmed, 16 percent was chemically dispersed, 13 percent was naturally dispersed and 24 percent either dissolved or evaporated. The remaining 22 percent of the oil is unaccounted for and may be in the water column, buried or cleaned up from beaches, or may have settled on the sea floor. This report concludes that a complete accounting will likely never be available, but the perceived threat of the remaining 22 percent, or lack thereof, may be politically significant.

Keeping America's Pipelines Safe and Secure: Key Issues for Congress

Released December 13, 2011. Gas and oil pipelines in the U.S. are considered vulnerable to natural disasters, terrorist attacks, and disruption due to poor maintenance. Recent pipeline incidents in San Bruno, California and Marshall, Michigan have drawn increased attention to pipeline safety, and recent reviews have suggested a need for more regular maintenance and upgrades. The federal pipeline safety program oversees implementation of upgrades and new safety rules, but authorization of the program lapsed at the end of FY2010. The program is now under a continuing resolution until March 4, 2011. This report reviews other pipeline safety bills introduced in the 111th Congress, including measures to increase the number of safety inspection personnel, require more shut-off valves, and solicit more timely communication of pipeline disruptions.

Safe Drinking Water Act (SDWA): A Summary of the Act and It's Major Requirements

Released December 10, 2011. The Safe Drinking Water Act (SDWA) is the primary regulation addressing the safety of drinking water in the U.S. from contamination and disruption. The act was established in 1974 and amended in 1983 and 1996. It establishes standards for the treatment of potable water supplies, finances water infrastructure projects, regulates underground injection of wastes, and attempts to protect water sources through a range of programs. This report reviews the key programs administered under SDWA and presents statistics on public water systems in the U.S.

Litigation Seeking to Establish Climate Change Impacts as a Common Law

Released December 10, 2011. In the absence of congressional action to prevent climate change, five major lawsuits have been brought forth in U.S. courts, claiming damages incurred through the public nuisance of greenhouse gas emissions. The most high profile case, *Connecticut v. American Electric Power Co., Inc.*, involves eight states that are suing five major greenhouse gas emitters in the U.S. The case will be heard by the Supreme Court in the spring of 2011. In another case, *Comer v. Murphy Oil USA*, gulf coast property owners are suing oil, coal, and chemical companies for contributing to global warming and property damage via Hurricane Katrina. A third court case, *Native Village of Kivalina v. ExxonMobil Corp*, involves 25 Eskimo natives who are suing ExxonMobil for island and cliff erosion that may be accelerated due to climate change. This report provides the legal context for federal common law and more fully describes the three active court cases and two that have been closed.

National Academy of Sciences (NAS)

Describing Socioeconomic Futures for Climate Change Research and Assessment: Report of a Workshop

Released December, 2010. The potential implications of climate change on human society are well known, but their impact on socioeconomic conditions is more difficult to predict. This study concludes that little research has been done to predict the socioeconomic changes that may accompany climate change, and how those changes affect society's capacity for adaptation and mitigation. Increased computing power and other investments can enhance the research capabilities for addressing these uncertainties.

Letter Report Assessing the USGS National Water Quality Assessment Program's Science Plan

Released January, 2010. The U.S. Geological Survey is reviewing its plans for the third decade of the National Water Quality Assessment (NAWQA) Program. The new period of planning and data collection (Cycle 3) approaches the nation's water quality as a dynamic entity. Furthermore, the key planning document for that period, the Cycle 3 Science Plan, calls for water quality forecasting. The National Research Council (NRC) approves of The Science Plan and the technical provisions it contains. The Science Plan should do more, however, to clarify the need for dynamic water quality data, according to the NRC. Program outputs and potential outcomes should be defined so as to highlight their significance to water quality planning.

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34. Key Federal Register Notices

DOE—The DOE is revising its policies under the National Environmental Protection Act (NEPA) and will issue 20 new categorical exclusions and remove 2 categorical exclusions, 1 environmental assessment, and 2 environmental impact statement categories. [Monday, January 3, 2011 (Volume 76, Number 1)]

BOEMRE—The Bureau of Ocean Energy Management, Regulation and Enforcement is holding scoping meetings for its 2012-2017 outer continental shelf (OCS) leasing plan. The meetings will be held on the Gulf Coast and in Alaska beginning February 15. [Tuesday, January 4, 2011 (Volume 76, Number 2)]

USACE—The U.S. Army Corps of Engineers (USACE) is holding 9 public meetings to review its plans for the Great Lakes and Mississippi River Interbasin Study (GLIMRIS). The first meetings will be held on January 11 in Buffalo, New York and January 13 in Cleveland, Ohio. [Tuesday, January 4, 2011 (Volume 76, Number 2)]

EPA—The EPA has established a Total Maximum Daily Load (TMDL) for nitrogen, phosphorous, and sediment in the Chesapeake Bay. [Wednesday, January 5, 2011 (Volume 76, Number 3)]

USACE—The Corps of engineers is seeking comments on its draft National Wetlands Plant List, for the purpose of identifying

and delineating wetlands. Comments must be submitted on or before March 7.[Thursday, January 6, 2011 (Volume 76, Number 4)] **FEMA**—The Federal Emergency Management Agency's (FEMA) Advisory Committee is meeting on January 26 in Washington, DC. [Tuesday, January 11, 2011 (Volume 76, Number 7)]

EPA—EPA Office of Brownfields and Land Revitalization is making available supplementary funds for brownfield remediation that were previously allocated through a competitive process. \$8 million in grants will be allocated for grantees who have previously demonstrated attainment of program goals. Requests for funding must be submitted by February 17, 2011. For further instructions, see the full Federal Register notice. [Tuesday, January 18, 2011 (Volume 76, Number 11)]

NRC—The Groundwater Task Force of the NRC will hold a briefing on February 24. This meeting will be webcast live on the NRC web site. An agenda and other meetings will be listed on the NRC web site as well. [Tuesday, January 18, 2011 (Volume 76, Number 11)]

EPA—The EPA is holding a public hearing and extending the comment period for revisions to its Mandatory Reporting of Greenhouse Gases Rule. On December 26, EPA proposed delaying the requirement for reporting of certain data elements. Comments on this change will be received through March 7, 2011. The EPA will hold a public hearing as well on February 3 in Washington, DC. An agenda and further information on the hearing will be available on EPA's GHG rulemaking web page. [Wednesday January 19, 2011 (Volume 76, Number 12)]

FEMA—FEMA is requesting comments on its National Incident Management System (NIMS) training plan. NIMS coordinates disaster preparedness and emergency response efforts among state, local, tribal, and federal government entities. Comments must be received by February 22. [Thursday, January 20, 2011 (Volume 76, Number 13)]

NWTRB—The Nuclear Waste Technical Review Board (NWTRB) will meet on February 16 in Las Vegas, Nevada to discuss DOE management and disposal of spent nuclear fuel and high level radioactive waste. An agenda of the meeting will be available on the Board's web site. The meeting will include opportunity for public comment. [Thursday, January 20, 2011 (Volume 76, Number 13)]

CEQ—The Council on Environmental Quality (CEQ) is issuing final guidance on how federal agencies review mitigation for environmental impact statements. The guidance requires that agencies more actively review progress of mitigation activities. The full document is available on the CEQ web site. [Friday, January 21, 2011 (Volume 76, Number 14)].

EPA—The Clean Air Scientific Advisory Committee (CASAC) will meet February 15 and 16 in Chapel Hill, North Carolina to discuss EPA's final policy analysis on National Ambient Air Quality Standards (NAAQS). The Oxides of Nitrogen (NOx) and Sulfur Dioxide (SO2) Secondary Review Panel will discuss EPA's recent review of NAAQS. [Monday, January 24, 2011 (Volume 76, Number 15)].

NASA—The NASA Advisory Council is meeting on February 10 at NASA headquarters in Washington, DC. [Monday, January 24, 2011 (Volume 76, Number 15)].

NSF—The Committee on Equal Opportunities in Science and Engineering (CEOSE) is meeting on February 8 and 9 in Arlington Virginia. The committee will discuss ongoing efforts to broaden participation of underrepresented groups in science and engineering. [Monday, January 24, 2011 (Volume 76, Number 15)].

NSF—The Committee on Equal Opportunities in Science and Engineering (CEOSE) is seeking recommendations for new members. Recommendations must be sent to Dr. Margaret Tolbert by March 14, 2011. [Monday, January 24, 2011 (Volume 76, Number 15)].

OSTP—The National Ocean Council (NOC) is developing a strategic action plan to implement the Final Recommendations of the Interagency Ocean Policy Task Force. The NOC is seeking public comment through April 29, 2011, and plans to release a draft of the action plan in the summer of 2011. [Monday, January 24, 2011 (Volume 76, Number 15)].

EPA—EPA has denied petitions to reconsider its final rule promulgating new National Ambient Air Quality Standards (NAAQS) for sulfur dioxide. [Wednesday, January 26, 2011 (Volume 76, Number 17)].

EPA—The Clean Air Scientific Advisory Committee (CASAC) will hold two public teleconferences on February 18 and March 3, for reconsideration of the National Ambient Air Quality Standards (NAAQS) for ozone. [Wednesday, January 26, 2011 (Volume 76, Number 17)].

FEMA—FEMA is seeking new members for its National Advisory Council, which reviews federal strategies for disaster preparedness and response. [Thursday, January 27, 2011 (Volume 76, Number 18)].

NSF—NSF is seeking comment on its new information collection activities for grant applicants and awardees. Comments should be mailed or emailed by March 28. [Thursday, January 27, 2011 (Volume 76, Number 18)]. Back to top

35. Key AGI Government Affairs Updates

- Hearings on Energy Policy (1/31/11)
- Hearings on Environmental Policy (1/31/11)

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Monthly Review prepared by Linda Rowan, Staff of Government Affairs Program, Matthew Ampleman, AAPG/AGI Fall 2010 Intern and Dana Thomas, AGI/AAPG Spring 2011 Intern.

Sources: Associated Press, AAAS, Environment and Energy Daily, Greenwire, New York Times, Washington Post, Science Magazine, National Academies Press, Government Accountability Office, Thomas, House of Representatives, U.S. Senate, the White House, Department of the Interior, and Environmental Protection Agency.

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.

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