Greetings from Washington, D.C.

Science and Politics: An Uneasy Mix

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As a scientist, especially an earth scientist versed in environmental processes, this is a particularly interesting time to be an in-house observer to the congressional process. There is an escalating battle on Capitol Hill over the use of science in the making of public policy. The debate centers on the use of "sound science" in determining federal regulatory policy and on whether sound science is an achievable standard or simply a political slogan. To say that sound science is a campaign slogan may seem absurd, but it appears to be par for the course on the Hill these days. In a contentious election year, every issue, no matter how small, turns into campaign material.

Partisanship in both houses of Congress is unusually fierce at the moment. And partisanship in a oneparty majority system, when both houses of Congress and the White House are dominated by the same party, tends to encourage what some would term "undemocratic" behavior, such as the predominance of partyline voting, holding open of voting times to encourage vote-switching and passage of contentious bills, or blocking of the minority party from legislative debates. These behaviors seem to occur no matter which party is in control of Congress and the executive branch, though memory appears to be extremely short when the formerly dominant party finds itself in the down-trodden minority, and vice versa. I was guick to learn the latter aspect in my very first issue area, forest health. Congressman Jay Inslee, whom I am spending my year working for, is the ranking member

of the Forest Subcommittee and last November was nominated by the House Democratic Leadership to help draft the joint conference report of the Healthy Forests Restoration Act, a bill to authorize forest thinning to prevent wildfire. I was surprised to discover that the deliberation of the joint conference report was a closed process that took place between the original sponsors of the bill and the chairmen of the respective committees. Congressman Inslee and other appointed conferees were not invited to attend any of the pre-conference deliberation, in which the main differences between the House and Senate versions of the bill were hashed out, including the quality of environmental analysis that would be needed prior to approving forest thinning projects, or the definition and proportion of authorized funds to be spent on the wildland-urban interface where forest fires have the most impact on humans. That debate took place between the Chairmen of the House Resources and Agriculture Committees, the Chairman of the Senate Agriculture Committee, and Senators Wyden and Feinstein, who co-authored the Senate bill. The actual conference was a short, public affair in which votes were cast for a predeliberated report, with no discussion of amendments by the other members who were not party to the prior deliberations.

Not to be deterred by my first experience in the political realities of the debate process, I moved on to other issues beyond forest health. In my first few months on the Hill,



I have been tasked with following and providing the kind of role that I believe the Founding Fathers envisioned for Congress: overseeing the ways in which the administration and federal agencies are using science and defining the process of determining scientific validity. Last September, the Office of Management and Budget (OMB), the office within the executive branch that oversees how federal tax dollars and information are used by the government and that produces the president's budget every year, proposed to clarify the way all science used to write federal regulations would be reviewed. The OMB proposal redefined the criteria for selection of experts to serve on federal peer review panels and provided OMB with the authority to restrict or delay the dissemination of any agency findings if it concluded the findings were not adequately peer reviewed. While such an oversight role is an excellent means to verify that only the best available science is used in drafting federal regulations, the OMB proposal has caused a great deal of consternation among the scientific community, as well as on Capitol Hill. During the public comment period that is required by such proposed rule changes, the OMB received more than 6,000 comments from scientists both inside the government and out, including letters from many scientific societies. The "mafia" of current and former congressional science fellows on the Hill has been instrumental in getting members of Congress to understand the peer review process and to respond to the OMB requesting elaboration of the proposed rule. In April, the OMB published a vastly revised bulletin in which many of the public comments were incorporated or addressed, demonstrating that each of these comments was vital to the agency's decision, as a statistic if not as an anecdote. (The revised bulletin on federal peer review, as well as the OMB's response to the public comments, can be found under Information Quality at: www.whitehouse.gov/omb/inforeg/ infopoltech.html.)

The consternation about the OMB proposal to oversee the federal peer review process stems from a growing concern among the broad, nonpartisan scientific community in how the government handles science.

In February, the Union of Concerned Scientists (UCS) published a 36-page report protesting what members viewed as the current administration's policy of interjecting politics into the scientific process. The UCS report cited such practices as censoring and delaying scientific reports produced by federal agencies, filling agency review panels with political appointees, and neglecting to seek external approval on policy. Examples used in the report include the replacement of experts on bioethics panels when their scientific positions did not match administration policies, suppression of data alluding to climate change in an Environmental Protection Agency annual report on the environment, and distortion of scientific findings on reproductive health issues such as the success rate of abstinence-only education or the link between abortion and breast cancer.

The 62 scientists who signed the report, many of whom are leaders in their respective fields and several who formerly held high office in the federal government, conclude that these actions constitute an "alarming pattern" of political interference. They argue that the current administration has shown unprecedented political



and ideological interference with independent scientific inquiry, resulting in misguided policies on a range of critical issues.

The administration's response, offered by John Marburger, director of the President's Office of Science and Technology Policy, counters that no such pattern exists. He argues that the examples cited in the report are simply a congruence of explainable, nonpolitical events.

Widely divergent viewpoints aside, the report has had one interesting effect: it is engendering a lot of talk on Capitol Hill about the current role of science in the policy-making process. The question on the collective mind of Congress is whether science can truly be divorced from politics. If science is to be used as a tool to determine good policy, how weighty a role should it play in the final decision-making, should the science used be purely empirical or a mixture of observation and (inherently more uncertain) modeling, and which scientists should be listened to?

Representative Richard Pombo. Chairman of the House Resources committee, recently stated, "...there is no doubt that science becomes political. It's easy to politicize if you just find the study that supports your argument." Policies are inherently political-they are social decisions made by weighing the priorities of the major stakeholders and deciding on an equitable balance of the public's needs through analysis and a democratic process. Can science, as a social endeavor with societal repercussions, be apolitical? All scientific analysis stems from the individual assumptions and biases of the researcher. There is no absolute fact. With such a large body of existing research, each based on individual biases, there are often many perspectives on any given phenomenon. The dominant paradigm shifts in every scientific discipline are therefore a process of social acceptance of these objective analyses, consensus and change-all achieved through peer review, the process of scientific

validation by democratic means. Such shifts require dominant, vocal personalities, and social networks (e.g., conferences, peer-reviewed publications) in which new ideas and methodologies are shared.

The same is true of the legislative process. Debates in Congress are based on the power and acceptance of the loudest voice. With such an immense country and so much information flowing into the offices on the Hill every minute, many crucial issues can get overlooked. Those issues that do come up often require immediate attention and cannot receive the time and depth to make the kind of well-thought-out decisions which are the mainstay of academia. Congress therefore counts on the timely contributions of constituents and experts who are willing to share their views on any given issue as it comes up. The power of local, constituent voices with credentials is especially forceful in shaping the debate on the floors of the House and Senate. For that reason alone, I urge each GSA member to become an active, engaged citizen and constituent. Make it part of your routine to let your representatives and senators know your opinion on matters that count. Encourage them to sponsor legislation and lend them your expertise, as that may gain them entrance into the final deliberation process. As earth scientists, this is especially critical as the role of science continues to be debated on the Hill, and Congress attempts to define "sound science." They are your representatives, and your voice does count.

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