

## Greetings from Capitol Hill!

### Final Report: 2003–2004 Congressional Science Fellow

Michèle Koppes



#### Threading Science through the Needle of Politics: Lessons Learned from the Hill

My congressional science fellowship ended this past December with the conclusion of the 108th Congress. Although I am no longer a first-person observer of the political process, the lessons I learned from my time in “the belly of the beast,” so to speak, were invaluable. I took this fellowship because I was interested in how science was being used in federal policymaking and to understand how researchers might better communicate their work to lawmakers. These issues had been on my mind for many years owing to my research focus on glacial dynamics and its contribution to understanding global climate change. Thanks to GSA and the U.S. Geological Survey, I am gratified to have seen firsthand the application of science in the policy process, and on several occasions, witnessed scientists effectively communicate the relevance of their work to the political debate.

I spent my fellowship year in the office of Rep. Jay Inslee, who represents the 1st District of Washington State. Congressman Inslee, newly reelected to his fifth term in Congress, is considered on the far left of the political spectrum today. Though his office had never taken on a congressional fellow before, I was drawn to his office by his interest in science and in divorcing data from politics. More importantly, I would have the opportunity to work with him closely on environmental and energy issues pertaining to the House Resources Committee on which he sits. The Resources Committee has oversight over all agencies in the Department of the Interior, including most of the agencies interested in the geosciences such as the U.S. Geological Survey, Bureau of Land Management, U.S. Forest Service, and National Park Service. I looked for-

ward to the opportunity to see the earth sciences applied to debate and decision-making in the committee hearings, as well as the opportunity to question representatives from the various agencies directly about policy proposals and budgets.

Contrary to my expectations, however, many of the issues that came up in relationship to the environment and natural resources during the 108th Congress came through proposed actions and executive orders from the administration rather than through legislation debated by the House Resources Committee. Some examples of these actions include a repeal of the Roadless Rule to require state governors to petition the Forest Service to protect federal forests in their states from new road building, the grounding of long-range tanker planes used by the Forest Service for fighting wildfire from the air, revised National Oceanic and Atmospheric Administration policies for the designation of several species of hatchery salmon as identical to their wild counterparts, revised mitigation strategies for fish passage around federal hydropower dams on the Columbia and Snake Rivers, and plans to open the National Petroleum Reserve in Alaska for development. These quite substantive actions were not debated by Congress or the Resources Committee; rather, they were published with provision for public comment in the Federal Register. In several cases, the proposed actions were opposed by many of the scientists working within the federal agencies that would be subjected to the rule change. In response to these executive orders, members of Congress have the recourse to draft legislation or, like every other citizen, write letters to the administration in support of or opposition to the proposed action. I spent a good part of my time on Capitol Hill composing letters to the White House to express

the sentiment of Congressman Inslee regarding these proposed policies.

With the exception of policy driven by executive order, I had the opportunity to sit in on all Resource Committee hearings, briefings, and behind-closed-door negotiations, seeing first-hand both the making of policy and the politics that drive most legislative agendas. One of the most interesting political debates I participated in was the closed-door deliberations over the Wild Sky Wilderness Act, which came up for a hearing in the Resources Committee. Wild Sky is a proposed wilderness area in western Washington whose unique attributes include swaths of low-level temperate forest in the valley floors (i.e., prime timber harvest areas) and proximity to the two million people who reside in Puget Sound. Though the bill had passed the Senate twice in the previous two years and had a groundswell of support in Washington State, it became caught in the political crossfire between the bill's sponsors and the chairman of the Resources Committee over personal interpretations of the 1964 Wilderness Act, in particular over the definition of what constitutes land “untrammied by man” that could be proposed for wilderness designation (Wild Sky includes many low-lying areas that had been logged at the turn of the century). Congressman Inslee was particularly concerned with including the low-level valley floors in the wilderness area for the protection of aquatic habitat (particularly salmon spawning grounds, the great emblem of the Pacific Northwest), protection of water sources from soil influx due to erosion of logging roads, and protection of old growth forest for wildlife habitat. Arguments for the ecological merits of the region, however, took a back seat to the debate over what constitutes a human legacy in the landscape. Unfortunately, the legislation suffered the additional crossfire of being used as a campaigning tool by both Rep. George Nethercutt and Sen. Patty Murray in the race for the state senate seat and was ultimately not brought to a vote due to its political ramifications in the upcoming election.

In his first term in Congress in 1992, Congressman Inslee represented the 4th district of Washington east of the

Cascades, which encompasses the Hanford Nuclear Reservation, the Department of Energy (DOE) site where the original plutonium atomic bombs were manufactured. As the resident congressional representative, he became heavily involved in issues of nuclear safety, worker safety, and waste clean-up at Hanford, as well as other DOE sites, and has continued to be vocal on nuclear waste issues since. One of my first tasks was to draft amendments and colloquies in opposition to DOE efforts to reclassify high-level nuclear waste as lower level waste for the purposes of expediting required clean-up efforts at federal nuclear sites (and thereby reducing the amount of waste slated to be vitrified and sent to Yucca Mountain). I was also tasked with drafting amendments to prevent the DOE from continuing its practice of dumping low-level and mixed low-level nuclear waste in unlined soil trenches at the Hanford site. Hanford continues to be one of the most contaminated Superfund sites in the country, with the very real danger of a contaminated groundwater plume of high toxicity migrating toward the Columbia River. The clean-up process is so complex, in part due to lack of record-keeping at the dawn of the nuclear era, and due to the numerous parties involved in the clean-up (primarily the DOE, the EPA, and the state of Washington), that continuous and solid oversight remains elusive.

One other reason I was eager to work for Congressman Inslee was his interest in climate change and the potential ramifications of global warming on biodiversity and geopolitics. During my tenure on the Hill, Congressman Inslee helped introduce the Climate Stewardship Act in the House (originally introduced by Senators McCain and Lieberman in the Senate), a bill to cap greenhouse gas emissions at 2000 levels by 2010 through a market-based system of tradable allowances. In working on this issue for the congressman, I was party to strategy sessions among the cosponsors in the House and Senate as well as environmental lobbyists working on emissions issues to promote the legislation in both houses of Congress. The goal was to get a sufficient number of sponsors to sign on to the legislation in

order to pique the interest of the appropriate committee chairmen and party leaders to get the bill a hearing in committee and a vote on the floor. While the findings of the Intergovernmental Panel on Climate Change (IPCC) had previously been introduced to the Hill on several occasions, and the administration had developed the Climate Change Science Program (CCSP), whose findings of contemporary change and potential impacts continued to be disseminated in Congress, many members of Congress were reticent to consider any legislation to curb greenhouse gases given the political outcry over the Kyoto Protocol. New strategies to start the discussion included tailoring studies of the regional and local impacts of climate change, the economic impacts and the benefits of early adoption of technologies for the industrial sector, and the impacts of climate change on particularly vulnerable social groups to share with individual members of Congress and their staff.

The one take-home message from my time in Congress is the extent to which science is being politicized on Capitol Hill. Nowhere was this more evident than in the climate change debate, where efforts by scientists to communicate to Congress advances in the understanding of climate change have been obscured by policymakers, lobbyists, and some scientists themselves into two polarized camps: those who claim that current climate change



is insignificant or of non-anthropogenic origin and those who predict a high potential for irreversible, abrupt climate change in the near future and advocate a precautionary approach to anthropogenic contributions. Unfortunately, these perspectives are becoming increasingly entrenched on Capitol Hill, with new research only being disseminated on the Hill to support the argument of one camp or the other. The polarization manifests itself as a battle of competing hearings and briefings for congressional staff, organized on one hand by the Energy & Environment Institute (lobbying for advocates of climate change policy, in particular adopting the Climate Stewardship Act in the House and Senate) and sponsored by Senator McCain and the Congressional Climate Caucus, and on the other hand by the George Marshall Institute and the Cooler Heads Coalition, lobbying for additional research for and a less fatalistic view toward regulated anthropogenic contributions to global warming, supported by Senator Inhofe. The briefings are highly distilled showdowns of the debate occurring in the scientific literature, packaged to promote the personal agenda of the “camp” that sponsored the briefing.

Such polarization reflects the importance of the need for scientific representation in the debate, and more importantly, the policymakers’ understanding of the semantics of scientific uncertainty. It is my belief that scientists are one of the most underrepresented groups in Congress. Without a messenger, the scientific data are often lost to those who would be able to use it most in decision-making. Scientists are professionally trained to analyze, not advocate, and are often wary of the fine line to be crossed between the two. Unfortunately, the lack of advocacy for the importance of science in general and for particular findings of social importance manifests itself as decreased federal funds being allocated to the National Science Foundation, the U.S. Geological Survey, and the National Institutes of Health. To prevent such funding shortfalls, there is a need to sell the value of science to both the public and directly to those who set federal budget and scientific

priorities. For earth scientists, sometimes this means marketing our assets in the face of large natural and humanitarian disasters, such as the recent tsunami in the Indian Ocean, the earthquake in Iran in 2003, the recent landslides in California, or the floods in the Midwest. These, unfortunately, are the best times to lobby for funding the geosciences at all levels, while the consequences of geologic hazards are in the news and on the radar screen of lawmakers who are poised to take preventive action.

There are many in the federal government who, like Congressman Inslee, see the value in promoting and using science in formulating sound economic and social policies. They need the scientists’ help, however, in understanding the data outside of the political lens through which much of the information is transmitted to the Hill. They also need our backing in raising their voices in support of

science amidst the constant clamor of the federal government. Although there are a number of professional societies that support congressional science fellows and congressional visits each year, there are yet many more congressional offices whose only link to the scientific community is through the voices of their constituencies.

*This manuscript is submitted for publication by Michèle Koppes, 2003–2004 GSA–U.S. Geological Survey Congressional Science Fellow, with the understanding that the U.S. government is authorized to reproduce and distribute reprints for governmental use. The one-year fellowship is supported by GSA and by the U.S. Geological Survey, Department of the Interior, under Assistance Award No. 02HQGR0141. The views and conclusions contained in this document are those of the author and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. government. Koppes can be reached at [koppes@u.washington.edu](mailto:koppes@u.washington.edu).*

### **CORDILLERAN SECTION**

*(Joint meeting with American Association of Petroleum Geologists)*

April 29–May 1, 2005

Fairmont Hotel, San José, California

**Information:** Jonathan Miller, San José State University, Department of Geology, 1 Washington Square, San José, CA 95192-0102, (408) 924-5015, [jsmiller@email.sjsu.edu](mailto:jsmiller@email.sjsu.edu)

### **NORTH-CENTRAL SECTION**

May 19–20, 2005

University of Minnesota, Minneapolis, Minnesota

**Information:** Carrie Jennings Patterson, University of Minnesota, Minnesota Geological Survey, 2642 University Ave. W., St. Paul, MN 55114-1032, (612) 627-4780, ext. 220, [carrie@umn.edu](mailto:carrie@umn.edu), or Barbara Lusardi, University of Minnesota, Minnesota Geological Survey, 2642 University Ave. W., St. Paul, MN 55114-1032, (612) 627-4780, ext. 212, [lusar001@umn.edu](mailto:lusar001@umn.edu)

### **ROCKY MOUNTAIN SECTION**

May 23–25, 2005

Mesa State College, Grand Junction, Colorado

**Information:** Rex Cole, Mesa State College, Department of Physical & Environmental Science, 1100 North Ave., Grand Junction, CO 81501-3122, (970) 248-1599, [rcole@mesastate.edu](mailto:rcole@mesastate.edu)