

The Geology of Capitol Hill

Paul K. Doss, GSA Visiting Scholar, Past Chair, GSA Geology and Public Policy Committee

Spring “fieldwork” with Kasey White, GSA’s Geoscience Policy Director, took us to more than 40 offices on Capitol Hill, targeting members of congressional Appropriations Committees and communicating the societal benefits of the geosciences.

What is geoscience on Capitol Hill today? It is largely perceived as climate change research. Of course this is a generalization; many legislators know the role of geoscience in natural hazards, resources, and energy development, and a few even respect the role of geoscience in understanding climate change. But in today’s Congress, ignorance about the breadth of the geosciences dominates.

Public lands are an important resource for many geologists. For me, they’ve included Indiana Dunes National Lakeshore, Everglades, Acadia, and Yellowstone National Parks, and Manistee National Forest, where “Michigan water wars” pitted resource advocates against bottled-water producers in courts and protest lines. These, plus efforts in local government (Doss, 1994; Doss, 2000) provided my understanding that public policy must be informed by Earth science. GSA leadership has recognized GSA’s role in these efforts; GSA President Claudia Mora wrote in support for the March for Science, “It is the role of GSA to directly and positively engage policy makers across the political spectrum and at national to local levels” (www.geosociety.org/GSA/News/Releases/GSA/News/pr/2017/17-13.aspx).

Also, my two terms as member and chair of GSA’s Geology and Public Policy Committee (GPPC) illuminated a persistent reality. Geologists, largely, do not engage well in the policy process. If we’ve improved, it’s clear from today’s policy “climate” we waited too long.

In the 1990s, House Speaker Newt Gingrich crafted his “Contract with America” that included abolishing the U.S. Geological Survey. That proposal, introduced by Representative John Kasich (R-OH), once came within six votes of passing. From Kasich’s office, “We haven’t heard a single voice” speak for the Survey, only media inquiries (www.paloaltoonline.com/weekly/morgue/cover/1995_Feb_1.USGS0001.html). In GPPC talking points then were the importance of the USGS, the agencies it served, and programs it fulfilled. For example, not a single congressional staffer contacted knew that the USGS conducted stream-gaging.

A quarter-century later, here we are with higher stakes. In the U.S. alone, 50 million more people depend on fewer non-renewable resources, more urbanized and fragmented land, an aging water-supply infrastructure, more eroded soils, and an increased international supply of necessary minerals. All while natural systems are responding in unpredictable ways to global climate change.

In his 2011 GSA Presidential Address, John Geissman (2012, p. 13) said, “We cannot deny that several activities and factors are presently conspiring to make what we describe, and take for granted, as life on our only home more and more unsustainable.”

Our nation’s need for what geoscience offers is at its highest. I suggest that geology is under siege within the public-policy sphere. Attempts in Congress to reduce funding for geosciences due to its role in climate science research threatens the entire spectrum of benefits our science provides.

Elected officials work for you and make impactful decisions on your behalf. Although geologists differ on matters of resource use, environmental protection, energy “policy,” or land use—that’s OK. Any time an elected official hears “geology” with respect to societal importance, everyone benefits. We must inform decision makers and educate policy developers. They will make decisions; it’s our responsibility to help them understand the data needed to make *informed* decisions.

Your representatives must hear what NASA Earth Science does—it’s more than climate science; what NOAA does—it’s more than sea-level rise; what NSF geoscience funding provides to their district; and what the Department of the Interior supports (USGS, NPS, EPA, BLM).

The geoscience community knows Earth is in flux. Societies also evolve. Demographics change, exposing populations to new, previously unforeseen hazards. Technological advancement demands new mineral resources. Energy consumption sustains the search for non-renewable energy reserves. Infrastructure degrades in response to earth movements and weathering agents. Geoscience understands these things. Individual citizen geoscientists must show our policy makers the elegance of that understanding, over and over again.

REFERENCES CITED

- Doss, P.K., 1994, Constructed wetlands: Can and will we engineer a viable ecosystem?, in Fleming, J.R., and Gemery, H.A., eds., *Science, Technology and the Environment: Multidisciplinary Perspectives*: Akron, Ohio, Univ. of Akron Press, p. 173–196.
- Doss, P.K., 2000, Geology and community planning: An Earth Scientist in City Hall, in Schneiderman, J., ed., *The Earth Around Us: Maintaining a Livable Planet*: New York, W.H. Freeman & Co., p. 244–253.
- Geissman, J., 2012, The importance of the global professoriate in the geosciences—The students we are teaching, and learn from, today may represent the last great hope: *GSA Today*, v. 22, no. 1, p. 12–16.