

H.R. 5688: the Global Change Research and Data Management Act that Congressman Udall plans to introduce in the 108th Congress follow.

Comments/Suggestions on H.R. 5688

The proposed bill has a number of very excellent components including the perspective that humans are altering the climate in multiple diverse ways and that global change is much more than just a climate issue. Line 6 on page 6, for example, where the concept of vulnerability is introduced is a good example of this broad perspective.

However, there are sections of the text that still focus on carbon dioxide and other well-mixed greenhouse gases as the dominant mode of human intervention in the climate system. Moreover, instead of focusing on predicting global change effects (which has failed with respect to the last 20 years), the emphasis should be on increasing societal resiliency to the spectrum of plausible future environmental conditions, as well as assessing what is actually predictable. For example, on page 8, instead of listing as "predictive modeling", this should be replaced by "assessment of predictability". Similarly, on page 10, line 5, it should read "the assessment of predictability using quantitative models of the earth system". The text on page 13, lines 6-8, provides an example of the over confidence in our ability to predict the future climate. Indeed, how do we even validate projections for the period 25 to 100 years into the future, before they even occur!

The next few lines on this page (9-12) perpetuate the impression that greenhouse gas emissions are the dominant reason for climate change, which is clearly not the case (e.g. aerosol emissions and land use change are also first order human caused climate change forcings). Section 303 even more thoroughly accepts the premise that the largest global change problem involves the greenhouse gases; this miscommunication needs to be corrected.

On page 14, lines 22-25, it is important to recognize that biogeochemical cycles and the atmosphere are components of climate. As presented it implies that climate is external to these two components.

I hope these comments are useful as you prepare the final version of the Bill. I am also providing links to an overview paper that I wrote, the 2001 policy statement by the AASC, and my testimony to the House Oversight Committee this past summer. An appropriately modified Bill certainly would be supported by the AASC. We would be glad to work with you in completing it.

Submitted by Roger A. Pielke Sr. President of the American Association of State Climatologists (AASC).

January 19, 2003