

Dear Stern Review-

I am a professor of environmental studies at the University of Colorado where I also direct its Center for Science and technology Policy Research. I have studied the economic impacts of weather and climate extremes for more than a decade. I will be in London and Oxford next week, and on Thursday evening will be lecturing on this subject at Oxford's Environmental Change Institute.

With this note I would like to share some of this research. First I'll point to some summaries and then to some of the peer-reviewed literature that I have been involved in. Many are referenced in the summaries in part 1.

1. While I do not doubt that greenhouse gas emissions affect the climate, to date there is no scientific evidence to indicate that the observed trend of increasing losses related to extreme weather and climate events is related to changes in the economic consequences of extreme events, much less greenhouse gases. Further, looking to the future it is clear that under the various scenarios of the IPCC that with respect to future economic impacts of extreme weather events, continuing growth in wealth and population will overwhelm the impacts of projected changes in climate. In the case of hurricanes we quantify this ratio as lying between 22 to 1 and 60 to 1. This perspective is summarized in the following sources:

Pielke, Jr., R.A., 2005. [Making Sense of Trends in Disaster Losses](http://sciencepolicy.colorado.edu/admin/publication_files/resource-1771-2005.38.pdf), Bridges-OST's Publication on Science & Technology Policy, Vol. 7.
http://sciencepolicy.colorado.edu/admin/publication_files/resource-1771-2005.38.pdf

I have also discussed this in some detail on our weblog in the following places:

http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/000312climate_change_and_r.html

http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/000321climate_change_and_r.html

http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/000537the_other_hockey_sti.html

Here also are 2 opinion pieces on this subject:

Pielke, Jr., R.A. and D. Sarewitz, 2005. [Managing the next disaster](#), Los Angeles Times, September 23.

Sarewitz, D., and R.A. Pielke, Jr., 2005. [Rising Tide](#), The New Republic, January 6.

2. Peer reviewed literature:

Pielke, R. A. 2005 (in press) No trends in hurricane destructiveness, Nature. (contact me for a copy)

Pielke, Jr., R. A. and D. Sarewitz, 2005. [Bringing Society back into the Climate Debate](#), Population and Environment, Volume 26, Number 3, pp. 255-268.

Pielke, Jr., R.A., J. Rubiera, C. Landsea, M. Fernandez, and R.A. Klein, 2003: [Hurricane Vulnerability in Latin America and the Caribbean](#), Natural Hazards Review, 4: 101-114.

Downton, M. and R.A. Pielke, Jr., 2001: [Discretion Without Accountability: Politics, Flood Damage, and Climate](#), Natural Hazards Review, 2(4):157-166.

Pielke, Jr., R.A., and M.W. Downton, 2000: [Precipitation and Damaging Floods: Trends in the United States, 1932-97](#). Journal of Climate, 13(20), 3625-3637.

Pielke, Jr., R. A., R.A. Klein, and D. Sarewitz, 2000: [Turning the Big Knob: Energy Policy as a Means to Reduce Weather Impacts](#). Energy and Environment, Vol. 11, No. 3, 255-276.

Kunkel, K., R. A. Pielke Jr., S. A. Changnon, 1999: [Temporal Fluctuations in Weather and Climate Extremes That Cause Economic and Human Health Impacts: A Review](#). Bulletin of the American Meteorological Society, 80, 6, 1077-1098.

Landsea, C. L., R. A. Pielke, Jr., A. Mestas-Nuñez, and J. Knaff, 1999: [Atlantic Basin Hurricanes: Indices of Climate Changes](#). Climate Change, 42, 89-129.

Pielke, Jr., R. A., and M. Downton, 1999: [U.S. Trends in Streamflow and Precipitation: Using Societal Impact Data to Address an Apparent Paradox](#). Bulletin of the American Meteorological Society, 80(7), 1435-1436.

Pielke, Jr., R.A., and C.W. Landsea, 1999: [La Niña, El Niño, and Atlantic Hurricane Damages in the United States](#). Bulletin of the American Meteorological Society, 80, 10, 2027-2033.

Pielke, Jr., R. A., C. W. Landsea, M. Downton, and R. Muslin, 1999: [Evaluation of Catastrophe Models Using a Normalized Historical Record: Why It Is needed and How To Do It](#). Journal of Insurance Regulation. 18, pp. 177-194.

Pielke, Jr., R. A., and C. W. Landsea, 1998: [Normalized Hurricane Damages in the United States: 1925-95](#). Weather and Forecasting, American Meteorological Society, Vol. 13, 621-631.

Please contact me if I can be of any assistance.

Sincerely,

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