

NTU Center for Climate Change and Sustained Development Visit

29 August 2011

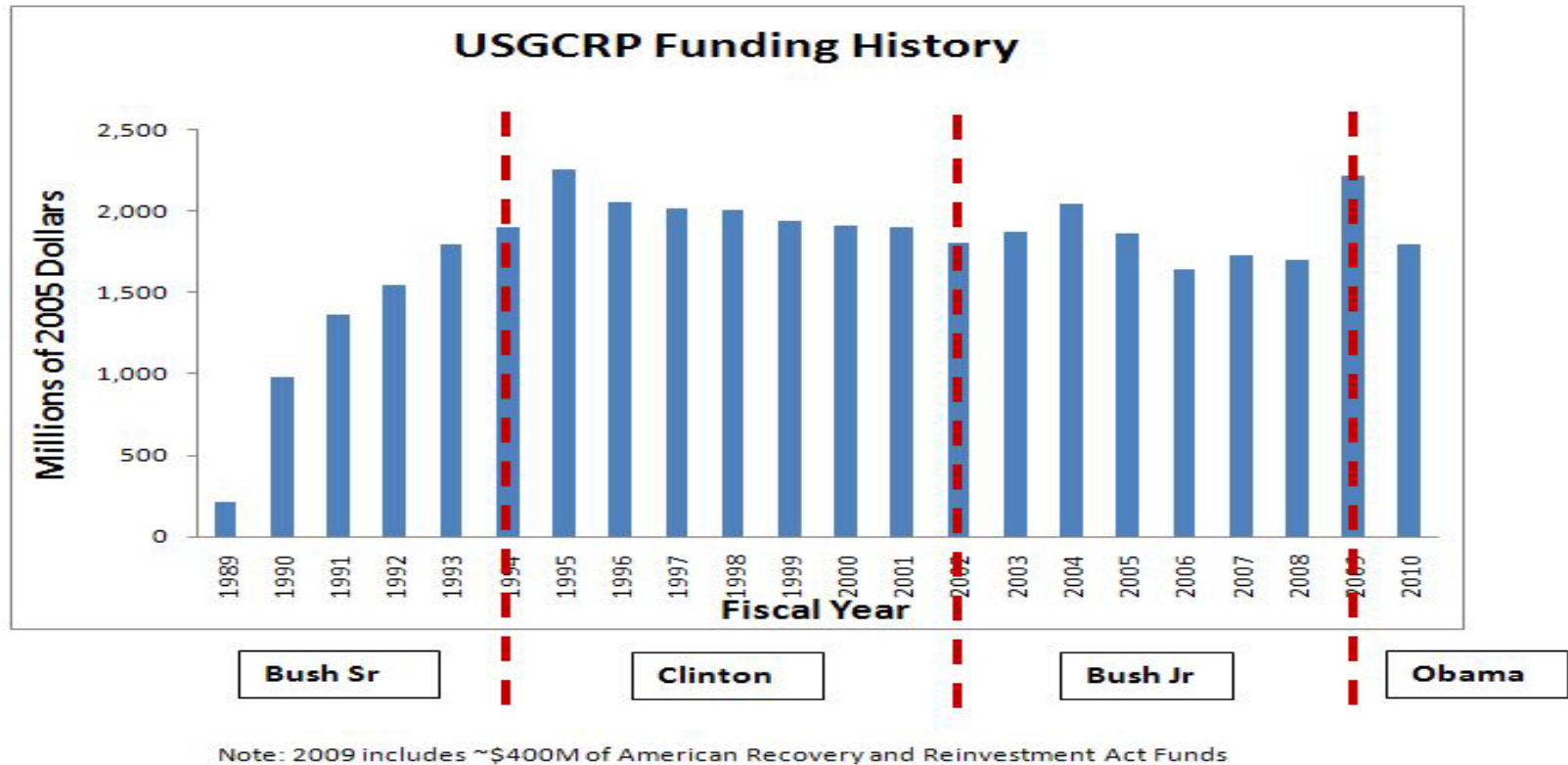
Climate Change and Policy

Jack D. Fellows
UCAR Vice President

Topics

- Brief history of United States climate change politics
- Some ideas on how universities can help make a nation more resilient to climate change.
- Apologies for the United States focus

U.S. Climate Change Politics



- **Bush Sr.** Pro-research investment versus policy action, focused S&T priorities, strong WH leadership, Bretherton Report, great interagency tools and people.
- **Clinton.** Pro-policy action versus research, hundreds of S&T priorities that diffused interagency tools and leadership.
- **Bush Jr.** Little interest in topic. Focus on other policy issues.
- **Obama.** Finishing third year and not much progress. Focus on other policy issues.

We have plenty of policy direction

- 2009 National Research Council Report: Restructuring Federal Climate Research to Meet the Challenges of Climate Change

http://books.nap.edu/catalog.php?record_id=12595

- Reorganize the USCRP around integrated scientific-societal issues.
- Establish a comprehensive climate observing system .
- Develop a new generation of coupled Earth system models.
- Strengthen research on adaptation, mitigation, and vulnerability.
- Initiate a national assessment process.
- Coordinate federal efforts to provide climate services.

- 2010 America's Climate Choices. <http://americasclimatechoices.org/>

- Informing an Effective Response to Climate Change
- Advancing the Science of Climate Change
- Adapting to the Impacts of Climate Change
- Limiting the Magnitude of Future Climate Change

So, why aren't we making more progress?

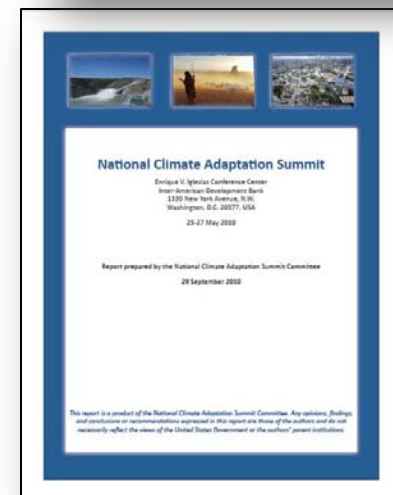
Current U.S. Climate Politics

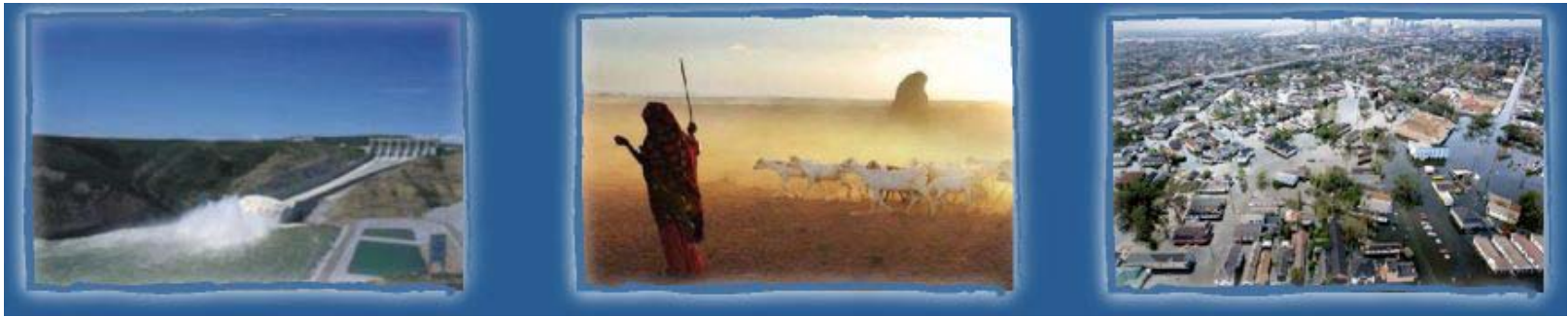
- **Science Community.** Warming unequivocal and likely due to observed increase in anthropogenic GHG concentrations (4th IPCC Assessment).
- **Public.** Yale/George Mason University poll: American's belief that climate change is happening dropped from 71% in Oct 2008 to 57% in Jan 2010. <http://environment.yale.edu/climate/files/PolicySupportJune2010.pdf>
- **Congress.** In 2009, our Congress was not able to pass greenhouse gas mitigation legislation...any hopes for such a bill have been abandoned.
- **Local/Regional Leaders.** Sensing the Federal paralysis and faced with planning for the future, ~80% States have adopted or developing a climate action plan (duplicative; no standards; lack tools, information, scientific support; workforce issues).

UCAR Community

Starting in 2008, UCAR turned its attention to our community's role in making our nation more resilient to a changing climate and associated severe weather, including:

- **2008.** Developed a *Transition Document* that outlined resiliency priorities and the collaborations, tools, and information needed to address this issue. www.ucar.edu/td
- **2009.** Began an effort to build a national network of university-city climate adaptation partnerships and related “toolkits”.
- **2010.** National Climate Adaptation Summit





National Climate Adaptation Summit

- **Origins.** UCAR Board discussion with the President's Science Advisor, Dr. John Holdren, led to UCAR convening the Summit May 2010.
- **Issue.** Many communities are struggling with how to plan for reliable water, food, energy, health, etc services in the face of a changing climate. No Federal strategy, confusion over roles, and what constitutes authoritative information.
- **Goal.** Bring together ~200 users and providers of climate information (50/50) to examine the needs, knowledge, and roles that could help climate research, program, and policy planning at all levels.
- **Summit Report.** Incorporated into the Obama Administration's climate adaptation planning. http://www.joss.ucar.edu/events/2010/ncas/summit_report.html



National Climate Adaptation Summit



Users Panel



Interior Dep
Secretary David
Hayes



Ag Sec Tom Vilsack



NOAA Adm Jane
Lubchenco



Gov Richardson and HUD Dep Sec Ron Sims



Sci Advisor John Holdren



Andy Revkin, NY Times

Organizations Attending the Summit

American Association of State Highway and Transportation Officials	Joint Global Change Research Institute	Stratus Consulting Inc.
American Society of Civil Engineers	Metropolitan Transportation Authority, NYS	Subcommittee on Disaster Reduction
Analysis Group	Metropolitan Water District of Southern California	Susanne Moser Research & Consulting
Argonne National Laboratory	Miami-Dade County	Tampa Bay Water
Arizona State University	Moffatt & Nichol	The Ecosystems Center
Assoc. of Metropolitan Water Agencies	NASA Goddard Inst. of Space	The Kresge Foundation
California Energy Commission	NASA Headquarters	The Nature Conservancy and Chicago Wilderness
Center for Clean Air Policy	National Academy of Sciences	The Port Authority of New York and New Jersey
Center for Disease Control	National Center for Atmospheric Research	U.S. Agency for International Development
Ceres	National Grid	U.S. Department of Agriculture
Chicago Climate Exchange	National Institute for Environmental Health Sciences	U.S. Department of Energy
City of Chicago Dept. of Environment	National Research Council	U.S. Department of Environmental Protection
City of Keene, New Hampshire	National Sciences Foundation	U.S. Department of the Interior
City of Los Angeles	National Wildlife Federation	U.S. Department of Transportation
City of Phoenix	New Mexico Environment Department	U.S. Geological Survey
Climate Institute	New Mexico Governor	U.S. House Science & Technology Committee
Climate Science Watch	New Mexico State Police	U.S. Navy
Climate Wire	New York City Department of Environmental Protection	U.S. Senate Committee on Commerce, Science, and Transportation
CNA	NOAA	Union of Concerned Scientists
Con Edison	Noblis, Inc.	United Tribes of Michigan
Council on Environmental Quality	NYC Mayor's Office of Long-Term Planning & Sustainability	University Corporation for Atmospheric Research
CU-NOAA Western Water Assessment	Oak Ridge National Laboratory	University of Alaska Fairbanks
Department of Homeland Security	Office of Assistant Secretary of Army for Civil Works	University of Arizona
Department of Housing and Urban Development	Office of New Mexico Governor Bill Richardson	University of California
Dept. Global Ecology, Carnegie Institution	Office of the President, Arizona State University	University of Illinois
EcoAdapt	Oregon Climate Change Research Institute	University of Maryland, College Park
Electric Power Research Institute	Pace U. / New York Times	University of Michigan
Environmental and Energy Study Institute	Pacific Coast Shellfish Growers Association	University of Washington
Environmental Law & Policy Center	Pew Center on Global Climate Change	University of Wisconsin-Madison
ExxonMobil Research and Engineering Company	Portland Water Bureau	USFS Rocky Mountain Research Station
Gade Environmental Group, LLC	Public Health - Seattle & King County	Washington Department of Ecology
Georgetown Climate Center	Reinsurance Association of America	Water Services City of Phoenix
Google	Resources for the Future	Wesleyan University
Hunter College/CUNY	Russian Embassy	Western Governors Association
ICF International	San Francisco PUC/Water Utility Climate Alliance	Wharton School University of Pennsylvania
ICLEI USA	Seattle Public Utilities	White House Assistant to the President for Energy and Climate Change
Institute for Business & Home Safety	Smithsonian	White House Council on Environmental Quality
Institute for Sustainable Communities	South Carolina Department of Health and Environmental Control	White House Office of Management and Budget
Inter-American Development Bank	Southern Climate Impacts Planning Program, Adaptation Network	White House Office of Science and Technology Policy
Iowa State University	Southern Nevada Water Authority	WJLA Television Station
		World Wildlife Fund

2010-2011 Workforce Focus

- **Resiliency Interest.** Through these efforts UCAR has identified ~65 universities interested/involved in university-city climate adaptation partnerships and ~100 universities interested/involved in climate adaptation curriculum development.
 - UCAR is leading an effort to develop a “portable and flexible” national climate adaptation curriculum program.
 - Working on better ways to communicate climate science both in the classroom and with the public.
 - Building a network of climate adaptation partnerships and toolkits.
- **Summary.**
 - World is changing rapidly
 - Our role as climate scientists is changing.
 - It will take “the” community to deal with this and some very different way of thinking