Funding Opportunities for Climate Change Research

Bob MacDonald
ARS Coordinator for Partnerships and Grants

Funding Sources

- Think outside the box – climate change a key issue in all aspects of agriculture
  - NIFA funded project on food safety and mycotoxins from their climate change program
  - Vice versa

Funding Sources

- NASA – many from earth observation to modeling
- NSF – macrosystems biology to geophysical
  - Belmont Forum and Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI) 2013 International Opportunities Fund
- DOE Office of Science– modeling to biology to environmental
  - DOE Joint Genome Initiative (JGI) and Environmental Molecular Sciences Laboratory (EMSL) – biogeochemistry, carbon cycling

Funding Sources

- Climate Change and Emissions Management Corporation (CCEMC) – Biological Greenhouse Gas Management
- NOAA Climate Program Office
- USAID and Gates Foundation
- USGS Cooperative Ecosystems Studies Units
  - Chesapeake Watershed CESU

Funding Sources

- NIFA
  - Climate change – not this year, next year likely to address key gaps not previously supported
  - Foundational
  - Food Security
  - Water Resources

Funding Sources

- Multi-Agency Programs
  - NASA/NIFA/DOE/NOAA Carbon Cycle Science
  - NSF/NIFA Water Sustainability and Climate
  - NSF/NIFA Decadal and Regional Climate Prediction using Earth System Models (EaSM)
  - NSF/NIH/NIFA Ecology and Evolution of Infectious Diseases
  - DOD/EPA/DOE Strategic Environmental Research and Development Program (SERDP) – water, species, ecosystems

HOW U.S. SCIENCE AGENCIES FARED IN THE 2014 BUDGET

($ in billions)

	2013 Budget	2014 Request	2014 House mark	2014 Senate mark	2014 Actual	% change
National Institutes of Health	28.92	31.10	none	30.95	**29.93**	*3.5%*
National Science Foundation	6.884	7.626	6.994	7.425	**7.172**	*4.2%*
Research	5.543	6.213	5.676	6.018	**5.809**	*4.8%*
Education	0.833	0.880	0.825	0.880	**0.846**	*1.6%*
DOE Office of Science	4.621	5.153	4.653	5.152	**5.071**	*9.7%*
Advanced Research Projects Agency - Energy	0.252	0.379	0.050	0.379	**0.280**	*11.1%*
National Institute of Standards and Technology	0.769	0.928	0.784	0.947	**0.850**	*10.5%*
Science & tech labs	0.580	0.694	0.609	0.703	**0.651**	*12.2%*
Census Bureau	0.905	0.982	0.844	0.982	**0.945**	*4.4%*
USGS	1.012	1.167	0.967	1.095	**1.032**	*2.0%*
NASA	16.9	17.7	16.6	18.0	**17.6**	*4.1%*
Science Office	4.78	5.02	4.78	5.15	**5.15**	*7.7%*
Agricultural Research Service	1.019	1.303	1.074	1.123	**1.123**	*10.2%*
National Institute of Food & Agriculture	0.656	0.801	0.718	0.772	**0.772**	*17.7%*
Agriculture and Food Research Initiative	0.276	0.383	0.29	0.316	**0.316**	*14.5%*
NOAA Office of Atmospheric Research	0.336	0.472	0.348	0.446	**0.416**	*23.8%*