

## PROGRAM INFORMATION SHEET

FY 2005

### U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S

### HUMAN DIMENSIONS OF GLOBAL CHANGE RESEARCH PROGRAM

#### *Goal*

The goal of NOAA's Human Dimensions of Global Change Research Program is to advance our understanding of human response to and planning for the effects of climate variability in the context of multiple and interacting social and environmental pressures. The Program supports investigation into how decision makers perceive the effects of climate and how they process and use new scientific findings and information relevant to climate and its impacts. To ensure that society as a whole gains from the emerging knowledge and forecasting capabilities of global change science, we also encourage research directed toward the nature of participation in these decision processes and identification of practices, operations, individuals, and/or organizations affected or influenced by changed decisions. This Program is designed to advance the knowledge necessary to build local, regional, and national capacity to reduce vulnerability to climate related impacts.

#### *Current Funding Priority:*

In past years, the Human Dimensions of Global Change Research Program (HDGCR) has supported a collection of individual efforts that have covered a variety of sectors as well as global locations. This year, in an effort to both synthesize what we have learned in a particular sector and link it to an emerging NOAA priority, the HDGCR announcements is focused on the decision support and water management arenas.

The HDGCR Program is soliciting proposals for 12 – 18 month duration with total budgets not to exceed \$150,000 that can synthesize and/or expand decision support research to develop tools, resources, methods, and models required by water managers in expanding management options to take advantage of or reduce exposure to climate variability and change. Examples of topics that could be explored are: a synthesis of work on exposure and vulnerability in water management systems, the utilization of climate information in assessing the value and economic viability of water management practices, the range of climate-related impacts (across time scales) important to water managers, the development of evaluation criteria for water management and decision support, and the utilization of tools for adaptation.

An important objective of the program is to provide feedback to the climate science and forecasting community on the level of usefulness of the current climate science products and information being produced and how the information could be more effectively

communicated and disseminated. Thus, included in the project's final report should be a plan for determining how best to provide feedback on the insights/results from the resulting research projects to members of the forecasting community, such as those at NOAA's Climate Prediction Center or the International Research Institute (IRI) for climate prediction.

If the synthesis option is chosen: there are no set guidelines for methodology; however the final product should include a report that includes a synthesis of the topic area, its relevancy to NOAA's goals, identified gaps in research in this area, and guidance for future studies and the direction of the field.

If the expansion of decision support research option is chosen: inclusion of decision makers is strongly encouraged. PIs must be specific when identifying the decision makers, what decisions are key to the proposed study, how decision makers will be included throughout the project, and how decision outcomes will be evaluated.

### *Approach*

Multidisciplinary teams of investigators are often needed to address the complex issues at hand. These teams can be comprised of different social science disciplines or across the disciplines of social and natural sciences. In the past, many of the successful proposed approaches have integrated social with natural or physical science components to form a more comprehensive analysis of the dynamics of climate-human interactions. (Please note that support for extensive modeling of the physical system is more appropriately handled through climate science programs both within the other sections of the Office of Global Programs and other agencies.)

Studies can be focused on regions in the US or overseas where the impacts of climate variability are acute. If the US research team is undertaking work outside the US, they must present evidence of strong collaborations with local researchers and institutions (e.g., NGOs, extension services, state and local governments, representative private sector organizations) in the region of study. Letters of support from local collaborators should be included with the proposal.

We would also like to encourage creative methods of conveying the results of work done under the grant or more general knowledge about climate-human interactions to the broader community. For example, information can be displayed on websites, in non-scientific newsletters, on CDs, on short video documentaries that can be copied and disseminated, etc. We require successful grant applicants to provide some digital video and/or photographs of fieldwork (if applicable). These could be used in future NOAA websites, presentations and/or publications.

Applicants whose proposals are chosen for funding will be expected to undertake an ongoing dialogue with NOAA's Climate and Societal Interactions group of which the Human Dimensions research program is one element. Part of this dialogue may consist of a Principal Investigators meeting of funded projects to discuss common questions and

frameworks to be addressed in the new research projects. See our web page for examples of past projects (<http://www.ogp.noaa.gov/mpe/csi/econhd/index.htm>).

### *Proposal submission*

The full guidelines for proposal submission can be found in the NOAA FY 2005 call for proposals for its Climate and Global Change Grants Program ([www.ogp.noaa.gov](http://www.ogp.noaa.gov)). However, investigators are advised to include the following information in their proposals.

- Proposals should sufficiently build on what is already known from the published literature about the proposed topic (e.g., value of climate information, decision making under uncertainty, use/transfer of new scientific information, integrated modeling of natural and human systems, sectoral analyses.) A publications list from prior NOAA HDGCR projects is available on our web site.
- It is essential that investigators describe in extensive detail the proposed methodology and how it will be accomplished, a plan, which includes the roles of the investigators and how the team will interact and integrate the multiple components, must be clearly specified. Investigators who will not be requesting funds for salaries must also be listed along with their estimated time of commitment. The proposal should also include a dissemination plan for the study's results.
- In addition, please provide a minimum of four names of potential mail reviewers that NOAA could use to review your project. If we use your suggestions, these reviewers will have to sign a document that assures that there is no conflict of interest on their part in reviewing your proposal.

Competition for funding in this program continues to be very strong. We encourage cost-sharing arrangements between agencies. The program normally receives about seventy letters of intent for proposed research projects, and less than half of those are encouraged for submission of full proposals. Of the full proposals submitted, only about 10-15% are selected for funding. Program funds are expected to be extremely limited again. For further information, contact Dr. Nancy Beller-Simms, 1100 Wayne Avenue, Suite 1225, Silver Spring, MD 20910; telephone: (301) 427-2089, ext 180; or e-mail: [Nancy.Beller-Simms@noaa.gov](mailto:Nancy.Beller-Simms@noaa.gov)

### *Sources of background information for developing a relevant proposal*

At the request of NOAA, the National Research Council (NRC) of the National Academy of Sciences developed a science plan for the area of the human dimensions of seasonal-to-interannual climate variability. The published NRC plan, [Making Climate Forecasts Matter](#), lays out the state of knowledge and a series of critical research questions, and it provides a valuable set of references. All researchers interested in the NOAA Human Dimensions program are highly encouraged to read this book, particularly chapter six on

Scientific Priorities. The full book is available on the National Academy Press web site at <http://books.nap.edu/catalog/6370.html>.

In addition, global change science over the last few years has embraced the importance of decision relevance within the process of research planning (see Global Environmental Change: Research Pathways for the Next Decade, and Our Changing Planet FY 2003). Two NRC reports, Our Common Journey and The Science of Regional and Global Change: Putting Knowledge to Work, begin to chart the course toward global change science agendas designed specifically to address broader issues of sustainability and vulnerability. NOAA's Human Dimensions Program is fully consistent with and supportive of these developments and encourages those responding to this announcement to be cognizant of these trends. Finally, applicants should be cognizant of work being prepared with the Climate Change Science Program (see [www.climatescience.gov](http://www.climatescience.gov)).

### *References*

Coping With Climate: A Way Forward. Summary for Policymakers. A Multi stakeholder Review of Regional Climate Outlook Forums Conducted at an International Workshop; October 16-20, 2000; Pretoria, South Africa; 2001. Palisades, N.Y.: International Research Institute.

International Research Institute for Climate Prediction. Communication of Climate Forecast Information Workshop Proceedings, June 6<sup>th</sup>–8<sup>th</sup>, 2001. Palisades, N.Y. International Research Institute.

National Research Council. 1999 *Global Environmental Change, Research Pathways for the Next Decade*. Report of the Committee on Global Change Research, Board on Sustainable Development, Policy Division, National Research Council. Washington, D.C.: National Academy Press.

National Research Council. 1999 *Making Climate Forecasts Matter*. Report of the Panel on the Human Dimensions of Seasonal-to-Interannual Climate Variability. P.C. Stern and W.E. Easterling, eds. Washington, D.C.: National Academy Press.

National Research Council. 1999 *Our Common Journey: A Transition Toward Sustainability*. Report of the Board on Sustainable Development, National Research Council. Washington, D.C.: National Academy Press.

National Research Council. 2001 *The Science of Regional and Global Change: Putting Knowledge to Work*. Report of the Committee on Global Change Research. Washington, D.C.: National Academy Press.

US Global Change Research Program 2003. *Our Changing Planet: The FY 2003 Global Change Research Program: A Report by the Subcommittee on Global Change Research*, Washington, D.C.: National Science and Technology Council.