

ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

- **Federal Agency Name:** National Climatic Data Center, Coastal Services Center, and Climate Program Office, National Oceanic and Atmospheric Administration (NOAA), Department of Commerce
- **Funding Opportunity Title:** FY 2007 Climate and Weather Impacts on Society and the Environment
- **Announcement Type:** Notice of Funding Availability
- **Catalog of Federal Domestic Assistance (CFDA) Number:** 11.473, Coastal Services Center
- **Dates:** For applications submitted through Grants.gov, a date and time receipt indication is included and will be the basis of determining timeliness. Hard copy proposals will be date and time stamped when they are received in the program office. Proposals must be time stamped by Grants.gov or received by the Coastal Services Center no later than 4:00 p.m. Eastern Daylight Time, August 28, 2006.
- **Funding Opportunity Description:** NOAA invites applications to establish a cooperative agreement with the agency under the Climate and Weather Impacts on Society and the Environment (CWISE) program. The agreement will be established between the National Climatic Data Center, the Coastal Services Center, the Climate Program Office and the recipient to further understanding and increase the resiliency of natural, economic and social systems to weather and climate-related environmental stressors through interdisciplinary research, information and services delivery, education and outreach.

FULL ANNOUNCEMENT

I. Funding Opportunity Description

A. Program Objective: NOAA invites applications to establish a four-year cooperative agreement with the agency under the Climate and Weather Impacts on Society and the Environment (CWISE) program. The CWISE program was established in 2003 by the NOAA Coastal Services Center (CSC) and the National Climatic Data Center (NCDC). The mission of CWISE is to enhance the resiliency of natural, economic and social systems to weather and climate-related environmental stressors through interdisciplinary research and application development, information and services delivery, education and outreach. Sea

level change compounded by the potential for increased impacts from storms and extreme weather events can magnify the impacts of coastal hydrologic processes, flood risk, erosion, inundation, and salt-water intrusion. Impacts to human development and natural systems, often lead to major socioeconomic disruption.

NOAA will collaborate with the selected applicant on cooperative research and development activities and provide financial support to enhance the public benefits to be derived from research results, including practical applications of climate and extreme weather event research for coastal communities. The selected applicant will work with NOAA to engage the support of the science and management communities, and ensure that a broad group of constituents will benefit from the products as well as contribute to their design and use. The cooperative agreement will be established based on a common commitment between NOAA offices, particularly the National Climatic Data Center (www.ncdc.noaa.gov) the Coastal Services Center (www.csc.noaa.gov) and the Climate Program Office (www.climate.noaa.gov/cpo_pa/sarp). The selected applicant will also be expected to identify, and as appropriate, establish relationships with other NOAA programs that may benefit from, or collaborate in, the work conducted under the cooperative agreement. Applicants are encouraged to partner with other universities or complementary programs or to develop a consortium of universities or programs. The selected applicant should be familiar with the contents of grant announcement “FY 2007 Information Resource Supporting the Resiliency of Coastal Areas in the U.S. Portion of the Gulf of Mexico” in this same federal register notice and consider applications of this related hazard resiliency work. In addition, CWISE proposed projects should align themselves with two priorities of the U.S. Integrated Earth Observing System (IEOS) effort; improved observations for disaster warnings such as tsunamis and coastal inundation, and the development of an integrated Sea Level Observing System. Finally, this work should contribute to the U.S. Climate Change Science Program (CCSP) effort to understand and provide improved decision support in the area of Human Contributions and Responses to Environmental Change. Specifically, the proposal should include activities that address Question 9.2 of the CCSP Strategic Plan with regards to sea level, inundation and community resilience: What are the current and potential future impacts of global environmental variability and change on human welfare, what factors influence the capacity of human societies to respond to change and how can resilience be increased and vulnerability reduced?

B. Program Priorities: This cooperative agreement is expected to have two main components:

- 1) The production of scientifically verified observational analyses and predictions of the potential impacts of SLC, with emphasis on the associated risks for regions with rising sea levels; and
- 2) The analysis of socioeconomic impacts and the development of decision support tools and methods to enable risk assessment and adaptation related to the effects of sea level rise and inundation.

Methods for incorporating climate and sea level change considerations into hazard risk and vulnerability assessment processes and for use in community resilience planning, will be required from this cooperative agreement. Education and outreach geared towards an

appropriate and fully engaged target audience will also be required. The geographic area of interest for this funding opportunity is the United States coast from Texas to Maryland.

In regard to sea level change and coastal inundation, submitted proposals must focus on a minimum of one topic from each of the three main scientific areas of interest: physical processes and impacts; biological and ecosystem impacts; and economic and social impacts and adaptation. The following is a list of example topics under each of the main scientific areas of interest.

1) Physical processes and impacts:

- a. Coastal wave processes and events resulting in coastal erosion and inundation, including seasonality aspects
- b. Potential for increased flood risk related to sea level variability, tides, surge, and wave events

2) Biological/Ecosystem impacts:

- a. Salinity changes and effects on aquatic plants and animals, and water supplies as a function of extreme events, as well as long-term variability
- b. The effects of SLC and variability in estuaries and the ability of the estuaries to mitigate the impacts of, or recover from the impacts of SLC
- c. Ecological modeling of the impacts of sea level rise in coastal regions

3) Economic and Social impacts and adaptation:

- a. Induced modifications in commercial and residential infrastructure and transportation corridors
- b. Employment and related economic changes in coastal regions
- c. Induced population density and attribute changes such as demographic, social, cultural and anthropological
- d. Methods for incorporating extreme weather event and climate-related risks and societal vulnerabilities into community resilience planning

C. Program Authority

Statutory authority for this program is provided under 49 U.S.C. 44720; 33 U.S.C. 883d; 15 U.S.C. 2907; 16 U.S.C. 1451 et seq.; the Global Change Research Act, 15 U.S.C. 2921-2961; and the National Climate Program Act, 15 U.S.C. 2901-2908

II. Award Information

A. Funding Availability: Funding is anticipated to be up to \$600,000 per year for the term of the cooperative agreement. Project funding is contingent upon availability of appropriations and is at the sole discretion of NOAA. No more than one award is anticipated from this announcement.

B. Project / Award Period: This is a multi-year funding opportunity. The length of award is anticipated to be 4 years. Funding for each year's activity is contingent upon the availability of funds from Congress, satisfactory performance and is at the sole discretion of the funding agencies.

C. Type of Funding Instrument: The selected recipient will enter into a 4-year cooperative agreement with NOAA's National Climatic Data Center, Coastal Services Center, and Climate Program Office in the area of climate and weather impacts (including extreme weather events) on society and the environment. A cooperative agreement is utilized in order to facilitate substantial NOAA involvement in the project. Potential contributions of the Coastal Services Center and National Climatic Data Center may include: provide guidance in project scoping; insight into coastal management community needs; guidance in the relevance of social, economic and other human dimension information and analyses; provide access to coastal weather and climate data including buoy and remotely sensed ocean data; and provide insight and access to needs and technical issues of the climate community.

III. Eligibility Information

A. Eligible Applicants are U.S. institutions of higher education, other non-profits, commercial organizations, and state, local and Indian tribal governments.

B. Cost Sharing or Matching Requirement Applicant will be required to contribute at least 5 percent (from non-Federal funds) of the total amount contributed by NOAA each year if the application is approved. This should be reflected and substantiated in the budget.

IV. Application and Submission Information

A. Address to Request Application Package

The standard NOAA application package is available at <http://www.grants.gov>. For applicants without internet access, an application package may be received by contacting Shauna Harris, DOC/NOAA/NOS/Coastal Services Center, 2234 South Hobson Avenue, Charleston, SC 29405; (843) 740-1149; email: Shauna.Harris@noaa.gov.

B. Content and Form of Application Submission

This announcement is a call for proposals for a cooperative agreement with the NOAA National Climatic Data Center, the NOAA Coastal Services Center and the NOAA Climate Program Office. The goal of this agreement is to undertake research and outreach activities to help coastal resource managers include the results of physical and social science related sea level change research in their management decisions. The NOAA entities and the award recipient will work towards this goal by examining the impacts of sea level variability and change and extreme weather events on social and

economic systems and developing insight and tools that can be directly applied to decision making.

Roles and Responsibilities

By working in a cooperative partnership, the unique skills, capabilities, and experiences of the two Centers, the Climate Program Office and the award recipient will be combined to offer an opportunity for each organization to further its goals. In their proposals, applicants shall explicitly propose the respective roles and responsibilities of the Centers, the Climate Program Office and the award recipient. The nature of a cooperative agreement is such that the NOAA entities will provide substantial involvement in the project. Potential contributions of the Coastal Services Center and National Climatic Data Center may include: provide guidance in project scoping; insight into coastal management community needs; guidance in the relevance of social, economic and other human dimension information and analyses; provide access to coastal weather and climate data including buoy and remotely sensed ocean data; and provide insight and access to needs and technical issues of the climate community. Potential contributions of the Climate Program Office may include: guidance on project scoping; insight related to the challenges and opportunities provided by integrated, problem-focused social science research on climate issues; connectivity to the broader community of decision support oriented climate research; forums for communicating research results, including information about research and product gaps to the climate research community; and insight regarding the development of research applications in concert with decision makers.

Recipients are responsible for the following: 1) proposing the scope and methodology of the project (within the context of the framework and priorities contained in this document), conducting the proposed research, managing the project and coordinating with the NOAA Centers and Program Office; 2) developing and collaborating with appropriate partners in the physical and social sciences related to sea level change; 3) developing quantitative data and metadata for expected sea level change and variability in the area of interest; 4) determining the impacts of sea level variability and change, as well as coastal inundation and erosion on the environment, society, economy, and biology of the coastal zone; 5) determining how the products should be organized to maximize usefulness within the user community; and 6) helping with the distribution of the products to the coastal management community and providing training in their use and application.

Proposals must include a project narrative giving detail on the proposed work to be performed by the recipient, the NOAA Coastal Services Center, National Climatic Data Center, and Climate Program Office as appropriate. Proposals must also include plans to accomplish such tasks, the related benefits and the monetary costs. Proposals must not exceed 15 single-spaced, 8.5" x 11" length pages in a 12-point font. The title page, abstract, budget details, vitae, current and pending support, Federal grant application package forms, and any other appendices are not included in the 15 page limit. Proposals must include the following:

1. Title Page - Both the principal investigator (PI) and the institutional representative must be identified by full name, title, organization, telephone number, fax number, email address, and postal address. The total amount of Federal funds being requested should be listed for each budget period.
2. Abstract - An abstract must be included and should contain an introduction of the problem, rationale, and a brief summary of the work to be completed. The abstract must appear on a separate page, headed with the proposal title, institution name, and names of investigators.
3. Project Introduction / Background - Introduce the project and give a brief history of the problem to be solved or the research to be conducted.
4. Results from Prior Research - The results of related projects supported by NOAA and other agencies must be described, including their relation to the currently proposed work. Reference to each prior research award must include the title, agency, award number, name of PI, period of award and total award amount. This section must be a brief summary and must not exceed two pages total.
5. Project Description - The proposed project must be completely described including identification of the problem, scientific and decision support oriented objectives, proposed methodology, relevance to the objectives and priorities of this program, identification of project partners and their roles (including decision makers), milestones, timelines, desired outcomes, and planned methods for communicating the results of this project. Ideally, the schedule would identify results/outcomes throughout the duration of the project, as opposed to generating all findings/results in just the final year. Multi-year proposals must state their efforts by year.
6. Budget - The proposal must include total and annual budgets corresponding with the objectives provided in the project description. Cost sharing must be indicated as Federal and non-Federal shares, divided into cash and in-kind contributions. Travel costs must be reasonably explained in terms of actual trip details or, if such detail is unavailable, the basis for such charges including destination or estimated mileage, method of travel, cost per mile and duration, number of travelers, and per diem rate for lodging, meals, and incidental expenses. Direct costs must be detailed to the extent practicable, including the information regarding the rate of and total compensation received by Project personnel. Indirect costs are anticipated and must be identified.
7. Vitae - Abbreviated curriculum vitae should be included for each principal or co-principal investigator. Reference lists should be limited to all publications in the last three years with up to five other relevant papers. The vita(e) must be included as an appendix.
8. Current and Pending Support - For each investigator, submit a list which includes project title, supporting agency with grant number, investigator months, dollar value,

and duration. Requested values must be listed for pending support. This information must be included as an appendix.

C. Submission Date and Time

The deadline for receipt of proposals is 4:00 p.m. Eastern Daylight Time on August 28, 2006. For proposals submitted through <http://www.grants.gov>, a date and time receipt indication is included and will be the basis of determining timeliness. Hard copy proposals will be date and time stamped when they are received in the program office. Hard copy proposals should be sent to Shauna Harris, DOC/NOAA/NOS/Coastal Services Center, 2234 South Hobson Avenue, Charleston, SC 29405. Proposals received after the deadline will not be reviewed.

D. Intergovernmental Review

Applications under the Center's LCR Program are subject to Executive Order 12372, "Intergovernmental Review of Federal Programs." It is the state agency's responsibility to contact their state's Single Point of Contact (SPCO) to find out about and comply with the state's process under EO 12372. To assist the applicant, the names and addresses of the SPOCs are listed in the Office of Management and Budget's home page at <http://www.whitehouse.gov/omb/grants/spoc.html>

E. Other Submission Requirements

Applications should be submitted through Grants.gov APPLY. For applicants without internet access, send applications to: 2234 South Hobson Avenue, Charleston, South Carolina 29405-2413. If the Grants.gov Web site is not used, the applicants must submit one set of originals (signed) and two copies of the proposals and related forms to the Coastal Services Center. No e-mail or fax copies will be accepted. All project proposals must total no more than 10 pages (double spaced, 12-point font, and exclusive of appendices). Appendices should be limited to materials that directly support the main body of the proposal (e.g., support letters, resumes, lists of data sources, maps). Letters of support may be mailed separately, but must be received by the deadline. All appendix material must be unbound. Any US Postal Service correspondence, except for applications, should be sent to the attention of Stephanie Fauver, NOAA Coastal Services Center, room 214, 2234 South Hobson Avenue, Charleston, South Carolina, 29405-2413.

F. Other Information

Please note that applicants using Grants.gov must locate the downloadable application package for this solicitation by the Funding Opportunity Number or the CFDA number (11.473). Applicants will be able to download a copy of the application package, complete it off line, and then upload and submit the application via the Grants.gov site. Grants.gov will provide information about submitting a proposal through the site as well as the hours of operation. After electronic submission of the application, applicants will receive an automatic acknowledgement from Grants.gov that contains a Grants.gov

tracking number.

To use Grants.gov, applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number and be registered in the Central Contractor Registry (CCR). Allow a minimum of five days to complete the CCR registration. (Note: Your organization's Employer Identification Number (EIN) will be needed on the application form.)

Applicants are strongly encouraged not to wait until the application deadline date to begin the application process through Grants.gov.

V. Application Review Information

A. Evaluation Criteria

1. Importance and/or relevance and applicability of proposed project to the program goals (25 percent).

This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities. This will include: How well does the proposal demonstrate that the project will enhance the understanding of the impacts of sea level change and inundation? Does the proposal clearly explain a logical progression of activities and links with desirable partners to achieve the stated goals? Does the proposal support the development of decision support tools for the effects of sea level change? Does the proposal recognize potential ties with the Federal Funding Opportunity "FY 2007 Information Resource Supporting the Resiliency of Coastal Areas in the U.S. Portion of the Gulf of Mexico" also found in this announcement?

2. Technical and scientific merit (30 percent).

This criterion assesses whether the proposed approach is technically sound and innovative, if the methods are appropriate, whether there are clear project goals and objectives. Questions relevant to this criterion include: Is the approach appropriate for the stated goals and objectives? Are the goals and objectives achievable within the proposed time frame? Do the proposed approaches incorporate current advances in the understanding sea level variability and change and its impacts?

3. Overall qualifications of the applicants (15 percent).

This criterion evaluates whether the applicant and project personnel possess the necessary education, experience, training, facilities, and administrative resources to accomplish the proposed project. The proposals should demonstrate that personnel are capable of conducting a project of the scope and scale proposed and have current knowledge of the research area/topic. Are key investigators from other departments

or institutions included as appropriate to capitalize on available expertise?

4. Project costs (10 percent).

This criterion determines whether the budget is realistic and commensurate with the proposed project needs and time frame, is reasonable in terms of the costs associated with the required tasks to be performed, and that the cost effectiveness of the project is optimized through strategic partnerships with collaborating institutions, agencies, or private sector partners.

5. Outreach and education (20 percent).

This criterion assesses whether the project involves a focused and effective education and outreach strategy regarding NOAA's mission to understand and predict environmental change and protect the Nation's natural resources. Questions relevant to this criterion include: Does the proposed project demonstrate that the target user community has been fully identified and engaged in development of the desired project outcomes? Does the proposal demonstrate that information generated by the project will reach a well defined and appropriate target audience and have a positive impact on the decision making processes of the audience?

B. Review and Selection Process

An initial administrative review/screening is conducted to determine compliance with requirements/completeness. All proposals will be evaluated and individually ranked in accordance with the assigned weights of the above evaluation criteria by at least three independent peer reviewers. The merit reviewer's ratings are used to produce a rank order of the proposals. The Selecting Official will award in the rank order unless the proposal is justified to be selected out of rank order based upon one or more of the selection factors provided below. The Selecting Official will select no more than one proposal for award. The Selecting Official may negotiate the funding level of the proposal. The Selecting Official will make the final recommendation for award to the Grants Officer, who is authorized to obligate the funds and execute the award.

C. Selection Factors

The merit review ratings shall provide a rank order to the Selecting Official for final recommendation to the Grants Officer. The Selecting Official shall award according to rank order unless the proposal is justified to be selected out of rank order based upon one or more of the following factors:

1. Availability of funding
2. Balance/distribution of funds:
 - a. Geographically.
 - b. By type of institution.

- c. By type of partners.
 - d. By research areas.
 - e. By project types
3. Whether this project duplicates other projects funded or considered for funding by NOAA or other Federal agencies.
 4. Program priorities and policy factors.
 5. Applicant's prior award performance.
 6. Partnerships and/or participation of targeted groups.
 7. Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the NOAA Grants Officer.

D. Anticipated Announcement and Award Dates

Funding is anticipated to begin April 1, 2007. The start date on proposals should be on or after April 1, 2007.

VI. Award Administration Information

A. Award Notice

Applications recommended for funding by the selecting official will be forwarded to the GMD by the Program Office. The applicant will be notified by the program office, either by email or letter that their application was forwarded to GMD. The applicant must be aware that the notification by the program office is NOT the official award notice. Official notification happens only when the applicant receives an award notice from the Grants Officer either by postal mail or electronically. Unsuccessful applications for all Center programs will be destroyed and not returned to the applicant.

B. Administrative and National Policy Requirements

1. Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements

Administrative and national policy requirements for all Department of Commerce awards are contained in the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 30, 2004 (69 FR 78389). A copy of the notice may be obtained at <http://www.gpoaccess.gov/fr/search.html>.

2. National Environmental Policy Act (NEPA)

Applicants whose proposed projects may have an environmental impact should furnish sufficient information to assist proposal reviewers in assessing the potential environmental consequences of supporting the project.

NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals which are seeking NOAA federal assistance opportunities. Detailed information on NEPA can be found at the following NOAA NEPA web site: <http://www.nepa.noaa.gov/>, including our NOAA Administrative order 216-6 for NEPA, http://www.nepa.noaa.gov/NAO216_6_TOC.pdf, and the Council on Environmental Quality implementation regulations, http://ceq.eh.doe.gov/nepa/regs/ceq/toc_ceq.htm.

Consequently, as part of an applicant's package, and under their description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species, and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g. The use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems.). In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting of an environmental assessment if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. The failure to do so shall be grounds for not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

C. Reporting

Grant recipients will be required to submit financial and performance (technical) progress reports. Instructions for submitting financial and progress reports will be provided by NOAA Grants Management Division. All reports will be submitted electronically through the NOAA Grants On-Line System.

VII. Agency Contact(s)

Administrative questions should be directed to Shauna Harris by telephone (843) 740-1149, by fax (843) 740-1315, or by e-mail Shauna.Harris@noaa.gov. Technical questions on the CWISE announcement should be directed to Stephanie Fauver, by telephone (843) 740-1287, by fax (843) 740-1329, or by e-mail Stephanie.Fauver@noaa.gov. Technical questions on

the “FY 2007 Information Resource Supporting the Resiliency of Coastal Areas in the U.S. Portion of the Gulf of Mexico” announcement should be directed to Jeff Adkins by telephone (843) 740-1244, by fax (843) 740-1315, or by e-mail Jeffery.Adkins@noaa.gov.