

Office of Science
Notice DE-FG02-06ER06-08

*National Institute for Climatic Change Research,
Center for Riparian and Coastal Ecosystems*

U.S. Department of Energy

**Office of Science Financial Assistance Program Notice
DE-FG02-06ER06-08: National Institute for Climatic Change Research, Center for
Riparian and Coastal Ecosystems**

AGENCY: U.S. Department of Energy
Office of Science

ACTION: Notice inviting cooperative agreement applications.

SUMMARY: The Office of Biological and Environmental Research (OBER) of the Office of Science (SC), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications for a cooperative agreement from U.S. universities to host a new Center for Riparian and Coastal Ecosystems, as part of the new DOE National Institute for Climatic Change Research (NICCR; formerly National Institute for Global Environmental Change, NIGEC).

DATES: Applicants are **required** to submit a two-page preapplication by email. All preapplications, referencing Program Notice DE-FG02-06ER06-08, must be received by March 1, 2006 (preapplications received after this date will not be considered). Preapplications will be reviewed for conformance with the guidelines presented in this Notice and suitability in the technical areas specified in this Notice. It is expected that a response to the preapplications encouraging or discouraging a formal application will be communicated by email to the preapplicants by March 7, 2006.

Only those preapplicants that receive notification from DOE encouraging a formal application may submit full applications. **No other formal applications will be considered.** Formal applications in response to this Notice must **be received by DOE by 8:00 p.m., Eastern Time, April 18, 2006.**

See the "Supplementary Information" section below for specific instructions on the preparation of the preapplication and the formal application.

ADDRESSES: Preapplications must be sent by e-mail to: jeff.amthor@science.doe.gov. Use "Program Notice DE-FG02-06ER06-08" as the subject line of the email.

Formal Applications

Applications submitted to the Office of Science must be submitted electronically through Grants.gov to be considered for award. The Funding Opportunity Number is: DE-FG02-06ER06-08 and the CFDA Number for the Office of Science is: 81.049. Instructions and forms are available on the [Grants.gov](http://www.grants.gov) website. Please see the information below and also refer to the "Funding Opportunity Announcement", Part IV - Application and Submission Information; H. Other Submission and Registration Requirements for more specific guidance on "Where to Submit" and "Registration Requirements." If you experience problems when submitting your application to Grants.gov, please visit their customer support website: <http://www.grants.gov/CustomerSupport>; email: support@grants.gov; or call 1-800-518-4726.

Registration Requirements: There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider and register with [Grants.gov](http://www.grants.gov)). See <http://www.grants.gov/GetStarted>. Use the Grants.gov Organization Registration Checklist to guide you through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in the CCR registration process. Applicants, who are not registered with CCR and Grants.gov, should allow at **least 14 days** to complete these requirements. It is suggested that the process be started as soon as possible.

VERY IMPORTANT - Download PureEdge Viewer: In order to download the application package, you will need to install PureEdge Viewer. This small, free program will allow you to access, complete, and submit applications electronically and securely. For a free version of the software, visit the following Web site: <http://www.grants.gov/DownloadViewer>.

FOR FURTHER INFORMATION CONTACT: Dr. Jeffrey S. Amthor, telephone: (301) 903-2507; e-mail: jeff.amthor@science.doe.gov; fax: (301) 903-8519.

SUPPLEMENTARY INFORMATION: DOE was directed by Congress to establish a National Institute on Global Environmental Change (NIGEC) in FY 1990 at the University of California (UC), Davis. The Congressional language directing DOE to establish NIGEC also specified that it be composed of academic research institutions representing the four principal regions of the United States and that the institutions draw on the scholarly resources within their region to serve DOE's interests. The goal of NIGEC was therefore to mobilize university researchers, from all regions of the country, in the support of the climate change research objectives of OBER. The DOE climate change research program participates in the interagency Climate Change Science Program (<http://www.climatescience.gov>), which helps DOE develop research priorities.

The NIGEC was recently reorganized and renamed to the DOE National Institute for Climatic Change Research (NICCR). The NICCR presently consists of four regional centers, each hosted by a different university. The regional centers solicit, recommend, and manage research projects within their respective geographic regions.

Grouping of the 50 states (and District of Columbia) into the four NICCR regions is as follows:

- (1) Western Region: Alaska, Hawaii, Washington, Oregon, California, Idaho, Nevada, Arizona, Utah, Montana, Wyoming, Colorado, and New Mexico.
- (2) Midwestern Region: North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Ohio, and Michigan.
- (3) Southeastern Region: Texas, Louisiana, Arkansas, Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, Tennessee, and Kentucky.
- (4) Northeastern Region: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, West Virginia, the District of Columbia, and Virginia.

The groupings are based on a combination of the number of states in each region, the fraction of the population of the United States living in each region, and the fraction of the Gross Domestic Product of the United States produced in each region.

The four NICCR regional centers are hosted by: The Pennsylvania State University (Northeastern Region), Duke University (Southeastern Region), Michigan Technological University (Midwestern Region), and Northern Arizona University (Western Region). Each host university has a NICCR Principal Investigator and a co-Principal Investigator who operate the center. The four regional centers are supported through cooperative agreements with the DOE SC.

The NICCR solicits research proposals from academic and other non-governmental research institutions that are relevant to the DOE's climate change research priorities. The NICCR carries out a merit (peer) review of proposals received, and recommends meritorious proposals to DOE for funding consideration. The DOE performs a relevancy review of the recommended proposals, and based on availability of appropriated funds, proposals considered of scientific merit and relevant to the DOE's priorities are selected for funding. That funding is provided by DOE to the four NICCR regional centers, which then establish subcontracts with the universities carrying out the selected research projects.

Center for Riparian and Coastal Ecosystem Research

In "Senate Report 109-084 - Energy and Water Appropriations Bill, 2006," Congress directed "that a center be created [by the DOE OBER] that will work in collaboration with the other four regional centers of NICCR and will address the need for the development of methodologies and tools for the understanding and modeling of the impacts of global and regional climatic changes on riparian and coastal" ecosystems throughout the United States. In response to this direction, OBER is carrying out an open competition to select a host university for a fifth NICCR center. The fifth center will solicit and manage research projects related to development of methodologies and tools for the understanding and modeling of the impacts of global and regional climatic changes on riparian and coastal ecosystems in the United States. The selected host university will have a Principal Investigator, and at the option of the host university, a co-Principal Investigator to manage NICCR operations within the fifth center. The fifth NICCR center will be named the "Center for Riparian and Coastal Ecosystem Research" (Center).

After the Center is selected by DOE, a cooperative agreement will be established between the DOE SC and the host university. Initial funding for the cooperative agreement will be for 24 months and will be at an amount necessary to support the administrative activities of the Center (not to exceed \$200,000 per year). After the cooperative agreement is in place, the Center will solicit research proposals from throughout the United States. To do this, the Center will develop a "request for proposals" (RFP). The RFP will include input and oversight from the DOE to ensure that it reflects the DOE's research priorities. The RFP will require preproposals. After the RFP is completed, it will be posted on a NICCR web site (either one created by the Center, or the main NICCR web site hosted by Northern Arizona University at <http://www.niccr.nau.edu>). Following the posting of the RFP, the Center will notify the U.S. academic research community about the posting. It is expected that RFPs will be posted annually. The terms of the RFP may change from year to year based on evolving priorities of SC's climate change research program. It is expected that research projects could include laboratory experimental research, field experimental research, and/or ecological modeling.

The Center and OBER will jointly screen preproposals submitted in response to the RFPs. Formal proposals submitted to the Center will be evaluated by the Center through a peer review panel and/or mail reviews. Based on the technical evaluations (including technical review by OBER as OBER deems necessary) and the terms of reference in the RFPs, the Center will develop a list of proposals recommended for funding by DOE through the Center. The proposals on that list will be subjected to a relevancy review by OBER. The results of the relevancy review will be used to determine a list of research projects to be funded by DOE through the Center, contingent on the availability of funds.

The DOE will provide funds to the host university of the Center to support the selected research projects. This will be done through a supplement to the cooperative agreement. The host university will then establish subcontracts for the selected research projects; for research projects to be conducted by scientists (if any) at the host university, no subcontracts will be needed. **The Principal Investigator of the Center, and other scientists at the host university, will be eligible to apply for research support by DOE through NICCR, but the screening of preproposals and the peer review of associated formal proposals will be conducted by DOE OBER rather than by the Center.**

After the Center establishes appropriate subcontracts with universities conducting the selected research projects, it will track scientific progress of the funded projects, track fiscal activities of the funded projects, report to OBER on the scientific results and significance of the funded projects, and foster and facilitate collaborative research among different scientists and institutions funded by OBER through NICCR. The Center should also foster collaborations between NICCR researchers and the relevant OBER research programs, such as the DOE Program for Ecosystem Research (PER) and the Terrestrial Carbon Processes (TCP) program.

The Center will retain autonomy, but will be held accountable to DOE for the development and funding of an integrated research portfolio that is directly relevant to DOE's climate change research needs as they are related to riparian and coastal ecosystems in the United States. It is expected that research foci of the Center may change over time in parallel with elements of the research priorities of the DOE climate change research program.

It is anticipated that the cooperative agreement establishing and maintaining the Center will be for 5 years, with funding provided on an annual basis after the initial 24-month funding period, contingent on successful annual progress reports from the Center and availability of appropriated funds. Funding for the fourth and fifth years of the cooperative agreement will also be contingent on successful results of a review by an external committee (established by DOE) of the activities of the Center during the third year of the cooperative agreement. The cooperative agreement will be initially funded for 24 months at a level consistent with annual administrative costs of the center (not to exceed \$200,000 per year).

Request for Applications

This notice solicits applications from U.S. universities to host the NICCR Center for Riparian and Coastal Ecosystem Research (Center). The applications should include and describe necessary support of the Principal Investigator and any administrative staff required to carry out all the administrative activities of the Center. Applications must be from a single U.S. university; collaborative or multi-institutional applications will not be accepted.

In the narrative portion of the application, the Center Principal Investigator must demonstrate a strong background in successful research and/or modeling related to impacts of global and regional climatic changes (including sea level rise and/or costal subsidence) on riparian and/or coastal ecosystems in the United States. The application narrative must also specify a strategy for soliciting proposed research to be funded by the DOE through the Center that draws on and takes advantage of the scientific expertise and capabilities for relevant research by academic institutions throughout the United States. That strategy must include preparation of RFPs, advertisement of the RFPs, fostering the submission of proposals that would result in a coherent and well integrated suite of research managed by the Center that is directly relevant to the development of methodologies and tools for the understanding and modeling of the impacts of global and regional climatic changes on riparian and coastal ecosystems in the United States. The strategy must also include screening of preproposals submitted to the Center (in collaboration with OBER), organizing and overseeing the peer review (panel, mail, or a combination) of formal proposals submitted to the Center, and recommendation of research projects to the DOE (based on the peer review of submitted proposals and desire for a well balanced portfolio of research projects). The establishment of appropriate subcontracts to support projects selected for funding by DOE (based on DOE's programmatic, or relevancy, review of proposals recommended by the Center and the availability of funds) must also be described in the narrative.

The narrative portion of the application must also describe how the Center Principal Investigator plans to monitor and report to the DOE Program Manager on the scientific progress of funded research projects. Providing DOE with periodic, timely highlights of successful and significant accomplishments and outcomes of research supported through NICCR will be required. The application must describe how the Center Principal Investigator will foster and facilitate collaborative research among different scientists and institutions. Finally, the application must state a vision for how the Center can provide added value to the present DOE climate change research program. It is especially important that NICCR add value to the core DOE program because of the additional administrative costs involved.

The application should include a budget for all anticipated administrative costs of carrying out the proposed activities of the Center. The administrative budget must include costs for two trips per year by the center Principal Investigator (and co-Principal Investigator, if desired by the Principal Investigator) to the Washington, DC, area for meetings with the Program Manager. For budget preparation purposes, each trip should be estimated to be 3 days in duration. The budget should include resources required to maintain a public web page associated with the Center's activities, including the research projects funded at other institutions.

Program Funding

Annual budgets for administrative costs of the Center, including support of the Principal Investigator to carry out administrative duties, and other staff needed to carry out administrative duties, are expected to be less than \$200,000 per year. **PLEASE NOTE:** the budget request in response to this Notice should be for one 24-month budget period for Center administrative costs, followed by three 12-month budget periods for Center administrative costs. Administrative costs cannot exceed \$200,000 during any 12-month period.

It is anticipated that up to \$1,500,000 will be available to support multiple research projects to be managed by the Center each year, contingent on the availability of appropriated funds. These funds would be provided to the host university through a supplement to the cooperative agreement after the selection of research projects to be funded. They should not be included in the budget request in the application. This amount will include charges the host university makes to establish and maintain subcontracts to other universities and non-governmental research institutions. Out year support for research is expected to remain constant for the duration of the cooperative agreement. It is expected that most individual research projects (subcontracts) funded through the Center will have three-year durations, with out-year support contingent on the availability of funds, progress of the research, and DOE's evolving programmatic needs. The Center's host university will be eligible for up to 25% of the research support administered through the Center. The same 25% limit will apply to other individual institutions (i.e., no individual university or research center will be eligible for more than 25% of the research funding administered through the Center). The Center Principal Investigator, and other scientists at the host university, will be eligible for research awards, but technical reviews of their proposals (if any) will be coordinated by DOE rather than by the Center.

Preapplications

A two-page preapplication **is required** prior to submission of a full application.

The first page of the preapplication should identify the (1) institution (proposed host university); (2) Principal Investigator's name, telephone number, and e-mail address; and (3) a clear and concise description of the proposed strategy for soliciting and selecting research projects to be funded by the DOE through the Center. That strategy must include annual preparation of "requests for proposals" with input and oversight from OBER, screening of preproposals submitted to the Center (in collaboration with OBER), peer review (panel, mail, or a combination) of proposals submitted to the Center, recommendation of research projects to the DOE based on the peer review of submitted proposals, and establishment of appropriate

subcontracts to support projects that are selected for funding by the DOE based on DOE's programmatic (relevancy) review of recommended proposals. The first page of the preapplication should also briefly state how progress of funded projects will be monitored by the Center and communicated to OBER, and how the Center will foster collaborative research among different institutions funded through the NICCR.

The second page of the preapplication must be a curriculum vitae that highlights the Principal Investigator's expertise and background in successful research and/or modeling related to impacts of global and regional climatic changes (including sea level rise and/or coastal subsidence) on riparian and/or coastal ecosystems in the United States. It should include any relevant management of multi-institutional research projects and/or synthesis activities.

Preapplications will be screened and potential applicants will be notified if a formal application is encouraged. Please note that notification of a successful preapplication is not an indication that an award will be made in response to the formal application. **Formal applications will be accepted only from applicants encouraged to submit a formal application.**

Merit Review

Applications will be subjected to formal merit (peer) review and will be evaluated against the following criteria which are listed in descending order of importance codified at 10 CFR 605.10(d):

1. Merit of the Proposed Cooperative Agreement;
2. Appropriateness of the Proposed Method or Approach;
3. Competency of the Applicant's Personnel and Adequacy of Proposed Resources; and
4. Reasonableness and Appropriateness of the Proposed Budget.

For this competition, special emphasis will be placed on a demonstrated expertise by the applicant in research related to the research focus identified above and the quality of the plan for soliciting, developing, managing, and monitoring a portfolio of research projects that will add value to the ongoing DOE climate change research program.

Note that external peer reviewers are selected with regard to both scientific expertise and absence of conflict-of-interest issues. Both federal and non-federal reviewers may be used, and submission of an application constitutes agreement that this is acceptable to the investigator and the submitting institution.

Submission Information

Other information about the development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in 10 CFR Part 605, and in the Application Guide for the Office of Science Financial Assistance Program. Electronic access to the Guide is available at: <http://www.science.doe.gov/grants/grants.html>.

The following is a list of essential items that an application must contain:

1. The Face Page SF-424 (R&R) - completed and signed by appropriate officials.

2. Budget Page(s) (OMB Number: 4040-0001) using U.S. dollars, with supporting written justification sufficient to evaluate the costs of the proposed project. List and explain cost-sharing arrangements, if any. One budget page should be used for the first 24-month period, and three budget pages should be used for the three succeeding 12-month periods (one budget page per year for the third, fourth, and fifth years). Only costs associated with administering the Center (not conducting the research projects) should be included in the budget.

3. Other Project Information

a. A one-page abstract (on a page by itself). The abstract should include: name of the proposed host university; name of the principal investigator and the principal investigator's email address and phone number; name of the co-principal investigator (if any) and the co-principal investigator's email address and phone number; a summary of the project narrative, including the technical qualifications of the principal investigator.

b. Project Narrative: A detailed description of the proposed administration of the Center. Essential components of the narrative are described above. The narrative and is limited, including text, tables (if any), figures (if any), and figure legends (if any), to **15 pages maximum** (8.5 x 11-inch pages of single-spaced, standard 11-point type with 1-inch margins). It should contain enough background material in the Introduction to demonstrate the technical qualifications of the principal investigator (and co-principal investigator, if any). The major part of the narrative should be devoted to a description and justification of the proposed Center activities, including details of the methods and approaches to be used. It should indicate which project personnel will be responsible for which activities. It must clearly state how the proposed Center would add value to the DOE climate change research program.

The Title Page of your narrative must include the following information:

Applicant/Institution:

Street Address/City/State/Zip:

Principal Investigator:

Address:

Telephone Number:

Email:

DOE/Office of Science Program Office:

DOE/Office of Science Program Office Technical Contact:

c. Bibliography of Literature: A list of all scientific articles cited in the narrative.

d. Biographical Sketches: Detailed information about the background and experience of the principal investigator (and co-principal investigator, if any) including references to relevant publications. Biographical sketches are limited to two pages for the principal investigator, and two pages for the co-principal investigator (if any).

e. Facilities and Resources: Include information on the experience of the applicant's organization, its facilities, and resources that would be relevant to successful operation of the Center.

f. Statement of all current and pending support for the principal investigator and co-principal investigator (if any), including the time devoted to each project by the principal investigator and co-principal investigator (if any).

g. Conflict of Interest Document (no page limit): This document should be provided in table or spreadsheet form only as an appendix to the full application at the time of submission. The document should consist of a list, in the form of a single alphabetized table, with the full names (Last name, first name, middle initial) of all people having a conflict of interest with the principal investigator or the co-principal investigator (if any). Conflicts to be identified are: (1) Ph.D. thesis advisors or advisees, (2) collaborators or co-authors for the past 48 months, including postdoctoral advisors or advisees, and (3) any other individuals in the scientific research community with which the investigator(s) has financial ties (please specify type). Members of current Advisory Committees who receive reimbursement for travel or honoraria should be included in this last category.

h. Letters of support, endorsement, or collaboration should not be included.

The Catalog of Federal Domestic Assistance (CFDA) number for this program is 81.049, and the solicitation control number is ERFAP 10 CFR Part 605.

Martin Rubinstein
Director
Grants and Contracts Division
Office of Science

Posted on the Office of Science Grants and Contracts Web Site
January 13, 2006.