



Water Resources Research
National Competitive Grants Program

Fiscal Year 2007 Request for Proposals

**Announcement No. 07HQPA0007
under Section 104(g) of the
Water Resources Research Act of 1984, as Amended
October 12, 2006**

Closing Dates
February 16, 2007 (Investigators)
March 2, 2007 (Institutes)

Department of the Interior
U. S. Geological Survey

National Institutes for
Water Resources

**NATIONAL INSTITUTES FOR WATER RESOURCES
U.S. GEOLOGICAL SURVEY**

**WATER RESOURCES RESEARCH
NATIONAL COMPETITIVE GRANTS PROGRAM
REQUEST FOR PROPOSALS
TABLE OF CONTENTS**

ABSTRACT	1
ELECTRONIC FILING OF PROPOSALS	1
I. INTRODUCTION	2
II. PROGRAM OBJECTIVES	3
III. RESEARCH PRIORITIES	3
IV. PROPOSALS NOT ELIGIBLE FOR FUNDING	4
V. APPLICANT ELIGIBILITY AND PROPOSAL APPROVAL	5
VI. COLLABORATION BY FEDERAL EMPLOYEES	5
VII. FEDERAL FUNDS	5
VIII. MATCHING FUNDS	6
IX. MAXIMUM SIZE AND DURATION OF PROJECT	6
X. PROPOSAL DUE DATE	6
XI. PROPOSAL REVIEW, SELECTION, AND AWARD PROCESS	7
XII. PROPOSAL CONTENTS	7
XIII. PROPOSAL INSTRUCTIONS	8
XIV. PROPOSALS SELECTED FOR FUNDING IN PREVIOUS YEARS	11
ATTACHMENTS	
A APPLICATION FOR FEDERAL ASSISTANCE (SF-424)	12
B BUDGET BREAKDOWN	14
C BUDGET JUSTIFICATION	15
D BUDGET SUMMARY	16
E FOCUS CATEGORIES	17
F USGS PROGRAM CONTACTS	18

**NATIONAL INSTITUTES FOR WATER RESOURCES
U.S. GEOLOGICAL SURVEY**

**WATER RESOURCES RESEARCH
NATIONAL COMPETITIVE GRANTS PROGRAM
REQUEST FOR PROPOSALS
FY 2007**

ABSTRACT

The U.S. Geological Survey in cooperation with the National Institutes for Water Resources requests proposals for matching grants to support research on the topics of water supply and water availability, which are issues of importance nationwide. Proposals are requested on the topics of water supply and availability, including investigations of possible new sources of supply, improvement of impaired waters to usable quality, conservation of existing sources, and limiting growth in demand. Proposals are sought in not only the physical dimensions of supply and demand, but also quality trends in raw water supplies; the role of economics and institutions in water supply and demand; institutional arrangements for tracking and reporting water supply and availability; and institutional arrangements for coping with extreme hydrologic conditions. The amount available for research under this program is estimated to be \$920,000 in federal funds. Any investigator at an institution of higher learning in the United States is eligible to apply for a grant through a Water Research Institute or Center established under the provisions of the Water Resources Research Act of 1984, as amended (<http://water.usgs.gov/wrri/institutes.html>). Proposals involving substantial collaboration between the USGS and university scientists are encouraged. Proposals may be for projects of 1 to 3 years in duration and may request up to \$250,000 in federal funds. Successful applicants must match each dollar of the federal grant with one dollar from non-federal sources. Proposals must be filed on the Internet at <https://niwr.net/> by 5:00 PM, Eastern Standard Time, February 16, 2007 and must be approved for submission to the National Competitive Grants Program not later than 5:00 PM, Eastern Standard Time, March 2, 2007 by the Institute or Center through which they were submitted. The SF-424 (Application for Federal Assistance) portion of the application package must be submitted through the Internet site at <http://www.grants.gov> not later than 5:00 PM Eastern Standard Time, March 2, 2007 by the university at which the Institute or Center is located. The Government's obligation under this program is contingent upon the availability of funds.

ELECTRONIC FILING OF PROPOSALS

Proposals under this announcement must be submitted using the following process:

1. All portions of the proposal, **except the SF-424 (Application for Federal Assistance)** must be submitted through the Internet site at <https://niwr.net/>. Prospective applicants (Principal Investigators) must be registered at the niwr.net site prior to submitting a proposal. Registration does not obligate the registrant to submit a proposal. Proposals will be accepted on the niwr.net site beginning November 1, 2006. Detailed instructions for proposal preparation and submission will be provided online at that time.

2. The SF-424 (Application for Federal Assistance) must be submitted through the Internet site at <http://www.grants.gov/> by the university at which the Water Resources Research Institute or Center approving the proposal is located.

Individuals willing to serve as peer reviewers for proposals submitted under this Announcement are also urged to register on the Internet site at <https://niwr.net/>. Registration does not obligate the registrant to review a proposal.

I. INTRODUCTION

This Request for Proposals (RFP) is issued under the provisions of section 104 of the Water Resources Research Act of 1984 (Public Law 98-242), as amended by Public Laws 101-397, 104-147, and 106-374. Section 104 of the Water Resources Research Act directs the Secretary of the Interior to administer program grants to Institutes and Centers established under the provisions of section 104(a) of the Act. Water Resources Institutes or Centers have been established in each of the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. The Institute in Guam also serves the Federated States of Micronesia and the Commonwealth of the Northern Mariana Islands. The addresses of the 54 Institutes are available on the Internet at <http://water.usgs.gov/wrri/institutes.html>. Responsibility for administration of the State Water Resources Research Institute program has been delegated to the U.S. Geological Survey (USGS).

The 54 Institutes are organized as the National Institutes for Water Resources (NIWR). NIWR cooperates with the USGS in the administration of the State Water Resources Research Institute Program, and the University of Wisconsin Water Resources Institute serves as the lead institute in coordinating the review process (peer reviews, panel review) for this competitive grant program. Questions or comments concerning the review process may be addressed to either John Schefter at the address below or to:

James Hurley
Water Resources Institute
1975 Willow Drive -2nd floor
The University of Wisconsin - Madison
Madison, Wisconsin 53706-1177
(606) 262-1136
hurley@aqua.wisc.edu

Questions or comments concerning this RFP should be directed to:

John Schefter
Chief, Office of External Research
MS 424, U.S. Geological Survey
12201 Sunrise Valley Drive
Reston, Virginia, 20192
Phone: 703-648-6800
schefter@usgs.gov

Kimberly L. Dove
Office of Acquisition and Grants
MS 205, U.S. Geological Survey
12201 Sunrise Valley Drive
Reston, Virginia, 20192
Phone: 703-648-7487
kdove@usgs.gov

II. PROGRAM OBJECTIVES

Section 104(g) of the Water Resources Research Act of 1984 requires that this competitive grant program focus on: “**water problems and issues of a regional or interstate nature beyond those of concern only to a single State** and which relate to specific program priorities identified jointly by the Secretary (of the Interior) and the (water resources research) institutes.”

Objectives of this program also include the following:

- A. Promote collaboration between the USGS and university scientists in research on significant national and regional water resources issues.

Proposals exhibiting substantial collaboration between the USGS and the applicant are encouraged and will receive extra weight in the evaluation and selection process. Collaborative proposals should describe in detail the respective roles of the USGS and the applicant in the proposed work.

Potential applicants seeking collaborative opportunities are encouraged to contact USGS Water Science Center Directors (contact information is available on the Internet at http://water.usgs.gov/district_chief.html). Potential applicants are also encouraged to contact the Water Resources Discipline Research Branch Chiefs and the program contact for water availability and water use (see Attachment F for contact information).

- B. Promote the dissemination and application of the results of the research funded under this program.
- C. Assist in the training of scientists in relevant water resource fields.

Proposals that include a strong educational component (student support) are encouraged, as are proposals from faculty beginning their careers.

The USGS and NIWR prefer that research supported by this program involve substantial collaboration between the USGS and university scientists. Collaboration can range from use of USGS data and information in the research to mutual involvement of USGS and university scientists on projects.

III. RESEARCH PRIORITIES

The following research priorities have been established (levels of priority are not assigned, and the order of listing does not indicate the level of priority):

Proposals are requested on the topics of water supply and availability, including investigations of possible new sources of supply, improvement of impaired waters to usable quality, conservation of existing sources, and limiting growth in demand. Proposals are sought in not only the physical dimensions of supply and demand, but also quality trends in raw water supplies; the role of economics and institutions in water supply and demand; institutional arrangements for

tracking and reporting water supply and availability; and institutional arrangements for coping with extreme hydrologic conditions. Examples of the types of problems that could be addressed include:

- Methods to enhance the long-term reliability of water supplies;
- Indicators of status and trends in water availability based on hydrologic data collected by the USGS and others;
- Management options for preserving or enhancing water availability under drought or flood conditions;
- Improved methods of characterizing and quantifying components of the water cycle;
- Improved estimates of the amount of water required to sustain healthy ecosystems while enhancing supplies for human use;
- Improvements in the assessment of water availability, incorporating technological, institutional, cultural, and economic factors that influence water use and water availability;
- Effects of water regulation and institutional arrangements on availability of water for alternative uses;
- Effectiveness of Best Management Practices (BMPs) in sustaining urban and rural raw water supply quality;
- Institutional characteristics of watershed planning and management organizations that have a demonstrated capability to protect the quality and enhance the reliability of water supply; and,
- Water management in the context of rapid development and conflict for water supply.

For additional information, please see “ Report to Congress: Concepts for National Assessment of Water Availability and Use”, U.S. Geological Survey Circular 1223, available at <http://water.usgs.gov/pubs/circ/circ1223/>

IV. PROPOSALS NOT ELIGIBLE FOR FUNDING

- A. Proposals for research on health effects involving human subjects.
- B. Proposals for research involving oceanography (estuarine research proposals are acceptable).
- C. Proposals submitted by an Institute or Center that has not met reporting requirements on a previous award by the USGS.
- D. Proposals that do not comply with the terms of this Request for Proposals.

V. APPLICANT ELIGIBILITY AND PROPOSAL APPROVAL

Awards are available only to Water Research Institutes or Centers established pursuant to the provisions of section 104 of the Water Resources Research Act and listed at <http://water.usgs.gov/wrri/institutes.html>. However, any investigator at an institution of higher learning in the United States is eligible to apply for an award through a Water Research Institute or Center. All portions of the proposals, **with the exception of the SF-424 (Application for Federal Assistance)**, must be submitted through the website at <https://niwr.net/>. The SF-424 must be submitted through the website at <http://www.grants.gov> by the university at which the Institute or Center is located. Each proposal will then be authorized for inclusion in the national competition by the Director of the Institute or Center in the state in which the university of the principal investigator is located. Proposals requesting matching funds from an Institute or Center are authorized at the discretion of the Institute or Center Director.

When a proposal is filed on the niwr.net site, the Institute or Center in the State in which the university of the principal investigator is located will be notified electronically that a proposal has been filed. The Director of that Institute or Center will subsequently review the proposal for adherence to the terms of this RFP, and then, following the instructions provided at the website, may approve it for further consideration and technical review. The Director may, during this process, contact the principal investigator to discuss possible clarification or changes in the proposal.

VI. COLLABORATION BY FEDERAL EMPLOYEES

- A. Federal employees may, and are encouraged to, collaborate with college or university investigators in this program.
- B. Federal employees may not serve as a principal investigator, but may serve as a co-principal investigator.
- C. Federal employees and agencies may not receive federal funds for any purpose under these awards.
- D. Federal employees and agencies may not serve as a source of matching funds under these awards.
- E. Federal employees must prepare a Statement of Government Involvement, which is to be included with collaborative proposals (See Section XIII.D.21.)

VII. FEDERAL FUNDS

- A. The amount available under this RFP is estimated to be \$920,000 in federal funds. The Government's obligation under this program is contingent upon the availability of funds.
- B. All successful proposals will be fully funded for the entire duration of the project with FY 2007 funds.

VIII. MATCHING FUNDS

- A. Each applicant must match each Federal dollar provided to support each proposed project with not less than one dollar from non-federal sources. States may have different guidelines as to the sources of matching funds - please check with your Institute or Center Director for details.

Note: Guam, the Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands are exempt from the matching requirement.

- B. Matching funds shall be obligated during the period of performance.
- C. The matching requirement should be met during each 12-month budget period.
- D. Matching funds obligated shall be reflected on line 10.b of each Financial Status Report, Standard Form 269A.
- E. Matching funds may contain indirect costs and non-federal salaries and benefits. The applicant's negotiated indirect cost rate (NICR) may be applied to **both** qualifying federal and non-federal direct costs, and the result used to satisfy part of the matching requirement under the non-federal share. The NICR shall not be applied to tuition and equipment costs. **Federal funds shall not be used to pay indirect costs.**

IX. MAXIMUM SIZE AND DURATION OF PROJECT

- A. Applicants shall not request total federal funds exceeding \$250,000 per project.
- B. Proposed projects may be of 1 to 3 years in duration, with discrete 12-month budget periods.

X. PROPOSAL DUE DATE

Investigators must file their proposals on the Internet at <https://niwr.net/> prior to 5:00 PM Eastern Standard Time, February 16, 2007. Only proposals filed by that time will be transmitted to the National Grants Competition.

Institutes or Centers must approve the proposals filed by investigators in their State prior to 5:00 PM Eastern Standard Time, March 2, 2007. Only proposals approved by that time will be transmitted to the National Grants Competition.

The SF-424 portion of the application package must be filed electronically at <http://www.grants.gov> prior to 5:00 PM Eastern Standard Time, March 2, 2007.

XI. PROPOSAL REVIEW, SELECTION, AND AWARD PROCESS

Each proposal which meets the requirements of this RFP will be evaluated by: 1) written peer reviews from qualified scientists or managers in the area of the proposed research, and 2) a selection panel consisting of Institute directors, university scientists, and USGS employees experienced in water resources research. Proposals will be reviewed according to the following criteria:

25 Points: Relevance and Importance. Does the proposal focus on a water problem or issue of a regional or interstate nature of concern to more than one State and does it directly address a research priority described in Section III? Does it deal with a subject of particularly high importance to present and future water resources management programs? Does the proposal include collaboration with the USGS if appropriate?

25 Points: Scientific Merit. Does the proposal have potential to expand the fundamental knowledge in its specific area(s)? Is it scientifically sound? Is the investigator cognizant of past work? Is the proposal well written, organized, and complete?

10 Points: Feasibility. Are the objectives, methodologies, designs, and techniques adequate and completely described? What is the likelihood of success given the methods and time frame proposed?

10 Points: Information Transfer. Does the proposal actively address the eventual transfer of results to user groups? Does it actively address the impact that the results could have?

10 Points: Training. Does the proposal have a strong educational component and provide for student support? Is the principal investigator near the beginning of his or her career?

10 Points: Qualifications of the Investigators. Are the qualifications of the investigators commensurate with the proposed research? Are the facilities and equipment adequate?

10 Points: Budget. Is the budget reasonable and adequate for the work proposed? The principal investigator's salary is an acceptable budget item, but should not exceed one or two months per year.

Proposals recommended for funding will be forwarded to the USGS for review and approval. Awards will be made directly to the **Water Resources Research Institute or Center** through which the proposal was submitted. The target award date is July through September with a USGS-preferred project start date of September 1, 2007. The project start date must be no later than September 30, 2007

XII. PROPOSAL CONTENTS

Each proposal shall consist of the following items:

- A. SF 424, Application for Federal Assistance [Attachment A]

- B. Signed Matching Funds Commitment Letter
- C. Suggested Reviewers
- D. Research Proposal, including a Budget Breakdown (Attachment B), Budget Justification (Attachment C) and Budget Summary (Attachment D)

Attachment B (Budget Breakdown), Attachment C (Budget Justification) and Attachment G (Budget Summary) should be considered worksheets; during the proposal submission process, these data will be entered into forms on the website. Upon completion of the submission process, the actual Attachments will be generated from these form entries and bundled with your application package.

XIII. PROPOSAL INSTRUCTIONS

Prior to submission of a proposal, all principal investigators must be registered at <https://niwr.net/>. Registration involves providing basic contact information (name, address, phone, e-mail address, etc.) to a Web form, and subsequently being provided with a user ID and password. This ID and password may be used to update one's contact information, to submit proposals, and to be kept informed of the proposal review process, including final notification of awards. Individuals already registered should not register again.

Each proposal must be submitted through the website at <https://niwr.net/> and shall be prepared and submitted in accordance with the specific instructions provided at that site. Submission will require two distinctly different actions: (1) submission of specified information as text directly into a Web form and (2) "depositing" at the website a document file containing a detailed description of the work being proposed. This file may be prepared using the word processing software of choice, but must be translated to PDF format prior to being deposited. **(Detailed instructions for preparing and submitting this file, and verifying its submission, will be provided at the website when it is opened for receiving proposals, on November 1, 2006.)**

Applications must contain the following sections and adhere to the following guidelines:

- A. Application for Federal Assistance, SF 424.** (Attachment A)
 - a. The **official applicant is the Water Resources Research Center or Institute** through which the application is submitted.
 - b. The information on the SF-424 must pertain to that Institute/Center and its host university.
 - c. **The SF-424 must be submitted electronically at <http://www.grants.gov> by the university at which the Water Resources Research Center or Institute is located.** Further instructions can be found at <http://www.grants.gov>: click on "For Applicants" on the left side of the screen.
 - d. The SF-424 must request the total amount of Federal funds for the full duration of the project.

B. Matching Funds Commitment Letter. The applicant shall provide an institutional cost-sharing agreement (letter) signed by an official authorized to commit the applicant to all or part of the matching share or a third party, in-kind contribution signed by an official authorized to commit the third party.

1. The matching funds commitment letter is to be faxed to the number provided on the niwr.net website prior to final approval of the application on the website by the Institute or Center.
2. The original, signed, letter retained in the Institute's or Center's files. If the proposal is selected for funding, the Institute or Center will be requested to send these documents by mail or parcel delivery so as to be received at the following address within 5 business days of notification that the proposal has been selected for funding:

Office of Acquisition and Grants
Attn: Kimberly L. Dove
MS 205, U.S. Geological Survey
12201 Sunrise Valley Drive, Reston, Virginia 20192

C. Suggested Reviewers. Provide the names and contact information for no more than six (6) suggested reviewers having expertise in the field of the proposal as requested by the Web form at the niwr.net website, including street address, city, state, zip code, phone, fax, email address and subject areas. Suggested reviewers MAY NOT be from your State. In fairness to all applicants, it is requested that no reviewers be contacted other than by the USGS or NIWR.

D. Research Proposal. Each proposal shall consist of the following 24 elements. Items numbered 1 through 13 are to be entered in the Web forms provided at the niwr.net website.

1. Title. Concise but descriptive.
2. Project Type. Select "Research" if not pre-selected by the system.
3. Focus Categories. Choose a maximum of three focus categories from the list provided (Attachment E), with the most preferred focus category first.
4. Research Category. Choose from the following the one category that most closely applies: Social Sciences, Ground-water Flow and Transport, Water Quality, Biological Sciences, Engineering, or Climate and Hydrologic Processes.
5. Keywords. Enter keywords of your choice descriptive of the work.
6. Start Date. Enter the requested beginning date for the project. The target award date is July through September with a USGS-preferred project start date of September 1, 2007. The project start date must be no later than September 30, 2007.
7. End Date. Enter the estimated end date for the project.

8. Principal investigator(s). Provide name, academic rank, university, email address and phone number of ALL principal investigators.
9. Congressional District of the university where the work is to be conducted.
10. Abstract. Provide a brief (one-page) description of the problem, methods, and objectives in the space provided at the Internet site. Please be as descriptive as possible in the space allowed. **The abstract will be distributed to prospective reviewers to elicit their interest in providing a review.**
11. Budget Breakdown, as requested by the Web form (See Attachment B).
12. Budget Justification, as requested by the Web form (See Attachment C).
13. Budget Summary, as requested by the Web form (See Attachment D).

Budget Note: Multi-year projects will be fully funded with FY 2007 funds. The budget must be complete for all years of the project.

Items 14 through 24 are to be "deposited" as a file document in PDF format on the niwr.net website. Note: **This document shall not exceed 12 single-spaced pages, with 12 point font and at least 1 inch margins, including tables, pictures, graphs, figures, and appendices, but excluding resumes (item 24) and literature citations/references (item 23).** Upon submission of your application components, the entire package will be available in PDF format for your inspection and final approval. **You are responsible for verifying the approval, including compliance with the 12-page limit. Proposals exceeding the 12-page limit will not be considered in the competition.** If editing is required, you must edit the document using your word processor and resubmit the document.

14. Title. Please use the same title as was entered in the Web form under item 1, above.
15. Statement of regional, interstate, or multi-state water problem. Include an explanation of the need for the project, who wants it, and why.
16. Statement of results or benefits. Specify the type of information that is to be gained and how it will be used.
17. Nature, scope, and objectives of the project, including a timeline of activities.
18. Methods, procedures, and facilities. Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
19. Related research. Demonstrate by literature and communication citations the similarities and dissimilarities of the proposed project to completed or on-going work on the same topic.

20. Training potential. Estimate the number of graduate and undergraduate students, by degree level, who are expected to receive training in the project.
21. Statement of Government Involvement. If a Federal employee will collaborate on the project, provide a detailed description of the role and responsibilities of the Federal collaborator in the proposed research project. (Caution: see Item VI, above)
22. Information Transfer Plan. Describe the plan for disseminating information on the results of the research and promoting their application. Each plan should define the subject matter and the problems to be addressed, identify the target audience, indicate the strategies to be employed (e.g., workshops, publications), and identify the cooperators (e.g., Cooperative Extension Service).
23. Literature Citations/References
24. Investigator's qualifications. Include a resume(s) of the principal investigator(s). No resume shall exceed two pages or list more than 15 pertinent publications.

If letters of support for the application are provided, they should be faxed to the number on the website at <https://niwr.net/>. Please provide the title of the project, as it appears in item 1 above, in the letter and the application system-generated project number on the letter or fax cover sheet. **Letters of support do not count against the 12-page limit.**

XIV. PROPOSALS SELECTED FOR FUNDING IN PREVIOUS YEARS

Total Funds Available, Number of Proposals Received and Funded, and the Minimum and Maximum Federal Funds Awarded, by Year.

Year	Total Funds Available	Number of Proposals Received	Number of Proposals Funded	Minimum. Federal Funds Awarded	Maximum. Federal Funds Awarded
1999	\$1,000,000	68	10	\$13,833	\$183,650
2000	\$1,000,000	106	8	\$41,937	\$216,999
2001	\$1,000,000	75	9	\$84,294	\$150,000
2002	\$1,000,000	75	8	\$103,134	\$157,586
2003	\$1,000,000	76	6	\$92,839	\$233,953
2004	\$950,000	45	8	\$69,246	\$170,596
2005	\$950,000	49	8	\$63,014	\$172,842
2006	\$920,000	61	8	\$58,155	\$250,000

Descriptions of the projects selected for funding since 1999 are provided at <http://water.usgs.gov/wrri/projects.html>. The research priorities established for FY 2007 are similar to those for FY 2004, FY 2005, and FY 2006, but differ from those of previous years.

APPLICATION FOR FEDERAL ASSISTANCE

		2. DATE SUBMITTED	Applicant Identifier
1. TYPE OF SUBMISSION: Application <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	<input type="checkbox"/> Pre-application <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	3. DATE RECEIVED BY STATE	State Application Identifier
		4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier
5. APPLICANT INFORMATION			
Legal Name:		Organizational Unit:	
Organizational DUNS:		Department:	
Address: Street:		Name and telephone number of person to be contacted on matters involving this application (give area code)	
City:		Prefix:	First Name:
County:		Middle Name	
State:	Zip Code	Last Name	
Country:		Suffix:	
6. EMPLOYER IDENTIFICATION NUMBER (EIN): <input type="text"/> - <input type="text"/>		Phone Number (give area code)	Fax Number (give area code)
8. TYPE OF APPLICATION: <input type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es) (See back of form for description of letters.) <input type="checkbox"/> <input type="checkbox"/> Other (specify)		7. TYPE OF APPLICANT: (See back of form for Application Types) Other (specify)	
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: <input type="text"/> - <input type="text"/> TITLE (Name of Program):		9. NAME OF FEDERAL AGENCY:	
12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.):		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:	
13. PROPOSED PROJECT Start Date: Ending Date:		14. CONGRESSIONAL DISTRICTS OF: a. Applicant b. Project	
15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?	
a. Federal	\$.00	a. Yes. <input type="checkbox"/> THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON DATE: b. No. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E. O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	
b. Applicant	\$.00		
c. State	\$.00		
d. Local	\$.00		
e. Other	\$.00		
f. Program Income	\$.00		
g. TOTAL	\$.00		
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.		17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? <input type="checkbox"/> Yes If "Yes" attach an explanation. <input type="checkbox"/> No	
a. Authorized Representative			
Prefix	First Name	Middle Name	
Last Name		Suffix	
b. Title		c. Telephone Number (give area code)	
d. Signature of Authorized Representative		e. Date Signed	

**Attachment A: SF-424
INSTRUCTIONS FOR THE SF-424**

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0043), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

This is a standard form used by applicants as a required face sheet for pre-applications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

Item:	Entry:	Item:	Entry:																
1.	Select Type of Submission.	11.	Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.																
2.	Date application submitted to Federal agency (or State if applicable) and applicant's control number (if applicable).	12.	List only the largest political entities affected (e.g., State, counties, cities).																
3.	State use only (if applicable).	13.	Enter the proposed start date and end date of the project.																
4.	Enter Date Received by Federal Agency Federal identifier number: If this application is a continuation or revision to an existing award, enter the present Federal Identifier number. If for a new project, leave blank.	14.	List the applicant's Congressional District and any District(s) affected by the program or project																
5.	Enter legal name of applicant, name of primary organizational unit (including division, if applicable), which will undertake the assistance activity, enter the organization's DUNS number (received from Dun and Bradstreet), enter the complete address of the applicant (including country), and name, telephone number, e-mail and fax of the person to contact on matters related to this application.	15.	Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15.																
6.	Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service.	16.	Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process.																
7.	Select the appropriate letter in the space provided. <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">A. State</td> <td style="width: 50%;">I. State Controlled Institution of Higher Learning</td> </tr> <tr> <td>B. County</td> <td>J. Private University</td> </tr> <tr> <td>C. Municipal</td> <td>K. Indian Tribe</td> </tr> <tr> <td>D. Township</td> <td>L. Individual</td> </tr> <tr> <td>E. Interstate</td> <td>M. Profit Organization</td> </tr> <tr> <td>F. Intermunicipal</td> <td>N. Other (Specify)</td> </tr> <tr> <td>G. Special District</td> <td>O. Not for Profit Organization</td> </tr> <tr> <td>H. Independent School District</td> <td></td> </tr> </table>	A. State	I. State Controlled Institution of Higher Learning	B. County	J. Private University	C. Municipal	K. Indian Tribe	D. Township	L. Individual	E. Interstate	M. Profit Organization	F. Intermunicipal	N. Other (Specify)	G. Special District	O. Not for Profit Organization	H. Independent School District		17.	This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes.
A. State	I. State Controlled Institution of Higher Learning																		
B. County	J. Private University																		
C. Municipal	K. Indian Tribe																		
D. Township	L. Individual																		
E. Interstate	M. Profit Organization																		
F. Intermunicipal	N. Other (Specify)																		
G. Special District	O. Not for Profit Organization																		
H. Independent School District																			
8.	Select the type from the following list: <ul style="list-style-type: none"> • "New" means a new assistance award. • "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date. • "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation. If a revision enter the appropriate letter: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">A. Increase Award</td> <td style="width: 50%;">B. Decrease Award</td> </tr> <tr> <td>C. Increase Duration</td> <td>D. Decrease Duration</td> </tr> </table> 	A. Increase Award	B. Decrease Award	C. Increase Duration	D. Decrease Duration	18.	To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)												
A. Increase Award	B. Decrease Award																		
C. Increase Duration	D. Decrease Duration																		
9.	Name of Federal agency from which assistance is being requested with this application.																		
10.	Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested.																		

BUDGET BREAKDOWN*

Project Number: (Number will be provided by the application system)

Project Title:

Cost Category		Federal	Non-Federal	Total
1.	Salaries and Wages	\$	\$	\$
	- <u>Principal Investigator</u>			
	- _____			
	- _____			
	- _____			
	Total Salaries and Wages	\$	\$	\$
2.	Fringe Benefits			
3.	Supplies			
4.	Equipment			
5.	Services or Consultants			
6.	Travel			
7.	Other direct costs			
8.	Total direct costs			
9a.	Indirect costs on federal share	XXXXXXXXXX XXXXXXXXXX		
9b.	Indirect costs on non-federal share	XXXXXXXXXX XXXXXXXXXX		
10.	Total estimated costs	\$	\$	\$
Total Costs at Campus of the University on which the Institute or Center is located.		\$	\$	\$
Total Costs at other University Campus Name of University:		\$	\$	\$

* This form is provided as a worksheet only

BUDGET JUSTIFICATION*

Project Number: (Number will be provided by the application system)

Project Title

<p>Salaries and Wages. Provide estimated hours and the rate of compensation proposed for each individual. (Tuition remission and other forms of compensation paid as or in lieu of wages to students performing necessary work are allowable provided that the tuition or other payments are reasonable compensation for the work performed and are conditioned explicitly upon the performance of necessary work.)</p>
<p>Fringe Benefits. Provide the overall fringe benefit rate applicable to each category of employee proposed in the project.</p>
<p>Supplies. Indicate separately the amounts proposed for office, laboratory, computing, and field supplies.</p>
<p>Equipment. Identify non-expendable personal property having a useful life of more than one (1) year and an acquisition cost of more than \$5,000 per unit. If fabrication of equipment is proposed, list parts and materials required for each, and show costs separately from the other items.</p>
<p>Services or Consultants. Identify the specific tasks for which these services, consultants, or subcontracts would be used. Estimate amount of time required and the hourly or daily rate.</p>
<p>Travel. Provide purpose and estimated costs for all travel.</p>
<p>Other Direct Costs. Itemize costs not included elsewhere, including publication costs. Costs for services and consultants should be included and justified under “Services or Consultants (above).”</p>
<p>Indirect Costs. Provide negotiated indirect (“Facilities and Administration”) cost rate.</p>

* This form is provided as a worksheet only.

BUDGET SUMMARY*

Project Number: (Number will be provided by the application system)

Project Title:

COST CATEGORY	Federal First Year	Non- Federal First Year	FEDERAL SECOND YEAR [#]	NON- FEDERAL SECOND YEAR [#]	FEDERAL THIRD YEAR [#]	NON- FEDERAL THIRD YEAR [#]	TOTAL ALL YEARS [#]
1. SALARIES AND WAGES	\$	\$	\$	\$	\$	\$	\$
2. Fringe Benefits/Labor Overhead	\$	\$	\$	\$	\$	\$	\$
3. Supplies	\$	\$	\$	\$	\$	\$	\$
4. Equipment	\$	\$	\$	\$	\$	\$	\$
5. Services or Consultants	\$	\$	\$	\$	\$	\$	\$
6. Travel	\$	\$	\$	\$	\$	\$	\$
7. Other Direct Costs	\$	\$	\$	\$	\$	\$	\$
8. TOTAL DIRECT COSTS (sum of 1- 7)	\$	\$	\$	\$	\$	\$	\$
9. Indirect Costs		\$		\$		\$	\$
11. Amount Proposed (8 + 9)		\$		\$		\$	\$

* This form is provided as a worksheet only.

Multi-year projects only.

ACID DEPOSITION	ACD
AGRICULTURE	AG
CLIMATOLOGICAL PROCESSES	CP
CONSERVATION	COV
DROUGHT	DROU
ECOLOGY	ECL
ECONOMICS	ECON
EDUCATION	EDU
FLOODS	FL
GEOMORPHOLOGICAL PROCESSES	GEOMOR
GEOCHEMICAL PROCESSES	GEOCHE
GROUNDWATER	GW
HYDROGEOCHEMISTRY	HYDGEO
HYDROLOGY	HYDROL
INVASIVE SPECIES	INV
IRRIGATION	IG
LAW, INSTITUTIONS, AND POLICY	LIP
MANAGEMENT AND PLANNING	M&P
METHODS	MET
MODELS	MOD
NITRATE CONTAMINATION	NC
NON POINT POLLUTION	NPP
NUTRIENTS	NU
RADIOACTIVE SUBSTANCES	RAD
RECREATION	REC
SEDIMENTS	SED
SOLUTE TRANSPORT	ST
SURFACE WATER	SW
TOXIC SUBSTANCES	TS
TREATMENT	TRT
WASTEWATER	WW
WATER QUALITY	WQL
WATER QUANTITY	WQN
WATER SUPPLY	WS
WATER USE	WU
WETLANDS	WL

WATER USE AND WATER AVAILABILITY

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