

New York State Water Resources Institute at Cornell University
and New York State Department of Environmental Conservation,
Hudson River Estuary Program

**REQUEST FOR APPLICATIONS UNDER THE
WATER RESOURCES RESEARCH GRANT PROGRAM**

Administered by the U.S. Geological Survey, Department of the Interior and
NYS Department of Environmental Conservation, Hudson River Estuary Program

Closing Date: November 23, 2009

Scope and Program Priorities

The **New York State Water Resources Institute (WRI)** and the **New York State Department of Environmental Conservation (DEC) Hudson River Estuary Program (HREP)** invite New York's higher education faculty to submit research or outreach proposals that will contribute to better watershed management in New York State.

The primary objective of this program is to bring innovative science to watershed planning and management. Proposals that support the strategic goals of the DEC HREP are encouraged since HREP helps fund the WRI grants program. Many of the HREP goals are relevant to other regions of New York State and there is no geographic requirement that the proposed work be conducted within the Hudson River Estuary or its watershed.

Specific areas of interest include:

- 1) Research that addresses key knowledge gaps or issues of emerging importance to New York's water resources;
- 2) Projects that integrate scientific, legal, planning and/or social expertise to build comprehensive strategies for watershed management; and
- 3) Novel outreach methods that enhance the communication and impact of science-based innovation.

This solicitation is available on the Internet at:
<http://wri.eas.cornell.edu/>

Important considerations:

- Proposals must be received **by 5pm on Monday, November 23, 2009.**
- Proposal budgets **must reflect a \$2 non-federal match for each grant dollar.**

- Proposals must be submitted by **faculty having an affiliation with a university or college based in New York** and qualified to conduct research, through their institution's grant application process.
- Projects may start on or after March 1, 2010 and must be completed by February 28, 2011.
- Total available funding is about \$90,000. Projects may request **up to \$20,000**. About half of the funds are from the Federal Water Resources Research Act administered by the US Department of the Interior, Geological Survey, and the remainder are from the Hudson River Estuary Program.
- Charging overhead costs on these grant funds is prohibited. Foregone overhead may be used as a contribution to the non-federal matching requirement.
- Proposals not eligible for funding include:
 - Research on health effects involving human subjects or their surrogates.
 - Research involving oceanography. *NOTE: Estuarine research proposals are suitable if they are relevant to the Hudson River Estuary and its watershed.*

Note: The US Department of the Interior's FY2010 budget has not been approved. NYS WRI reserves the right to amend this solicitation.

For questions about this RFA, contact:

Professor Susan Riha
Director, NYS Water Resources Institute
Voice: (607) 255-1729
Email: sjr4@cornell.edu

I. Areas of Interest for the Hudson River Estuary Program

PI's are encouraged to submit research proposals that address watershed and tributary needs identified by the HREP, especially those described in Goals 4 and 6 of the 2010-2014 HRE Action Agenda (http://www.dec.ny.gov/docs/remediation_hudson_pdf/hreaa2010dd.pdf) and below.

However, proposals are not confined to the Hudson River Estuary; they can address similar needs in any New York State Watershed.

The Hudson River Estuary Program seeks to:

- Assist communities with characterizing their watershed and developing, prioritizing, and implementing water resource protection and restoration strategies.
- Engage watershed municipalities as leading partners in water resource planning and protection including understanding and taking into account the potential impacts of climate change and extremes.
- Identify opportunities to restore rivers and streams to free-flowing condition, by removing or mitigating impacts from barriers, such as 'perched' culverts and dams.
- Implement floodplain and streamside (riparian) protection and restoration initiatives.
- Encourage options for high quality commercial, residential and industrial development sites that incorporate components of green infrastructure, better site design, landscape ecology, and low impact development techniques to conserve habitat and water resources.
- Foster changes in local codes and ordinances that will lead to improvements in environmental quality, particularly in regards to reducing the impacts of stormwater runoff.
- Train educators and community leaders about water resource planning and management tools, and the role land use law plays in local resource protection.
- Protect adequate instream flow needs of aquatic resources, while maintaining human needs.

For more information on the Hudson River Estuary Watershed program please consult:

<http://www.dec.ny.gov/lands/4920.html> or contact Scott Cuppett (845) 256-3029, Email: swcuppet@gw.dec.state.ny.us

II. CALENDAR

1. Oct. 21, 2009 Requests for proposals released.
2. **Nov. 23, 2009 Proposals due. (5 pm)**
3. Dec. 14, 2009 Finalists notified.
4. Dec./Jan. 2009 Finalists update proposals if necessary.
5. Jan. 15, 2010 Submission of finalist packages to USGS for ratification.
6. Mar. 1, 2010 First eligible spending by approved projects.

III. APPLICANT ELIGIBILITY

Faculty in any institution of higher learning in New York State is eligible to apply for awards.

IV. SELECTION CRITERIA

An evaluation panel will rate proposals according to the following criteria:

1. Relevance of the Proposed Research/Information Dissemination Activity. Extent to which the application addresses the priority topics in this RFA. Documentation of supporting local partners or agencies, and collaborative funding.
2. Quality of the workplan. Technical merit of the proposal, probability of successful completion, qualifications of the principal investigator and other team members, availability of appropriate equipment and facilities, and transferability of project outcomes to other areas in New York State.
3. Awareness of Previous and On-going Work. Evidence that the investigators are building upon relevant literature and existing projects in New York State. Proposals that duplicate prior work will not be funded.
4. Use of Students. The extent to which the proposed research uses students in a capacity to

further their training as scientists, engineers, or other technical professionals.

5. Involvement and capability improvement for local watershed partners. Extent to which the work is likely to improve the capability of government agencies or community-based watershed groups to address water quality management, watershed conservation and science needs.

V. APPLICATION SUBMISSION

Submit your application by any one of the following:

US Mail or express mail:

ATT: Stephen Shaw
New York State Water Resources Institute
Earth & Atmospheric Sciences
1022 Bradfield Hall, Cornell University
Ithaca, NY 14853-1901

Electronic mail: sbs11@cornell.edu

Email may be used for all of your proposal except the cover page (see section VI.A). The separate cover page should be sent to arrive express or regular mail by November 23, 2009

Acceptable formats: Microsoft Word for Windows; Corel Word Perfect version 8 or earlier; ASCII text; Microsoft Rich Text Format. Use an Internet standard attachment format such as MIME or UUENCODE.

NYS WRI will acknowledge all applications shortly after receipt. Contact us if your application is not acknowledged by November 25, 2009.

VI. APPLICATION CONTENTS

A. Cover page

You may submit a form from your institution, or a letter, that contains the following information:

1. Contact information for one principal investigator and one official associated with grant processing for your institution who has knowledge of your application.
2. Evidence that you have institutional permission to submit the proposal.
3. A statement committing your institution to provide matching funds.

For Cornell University applicants only: An original "Form 10" having signatures through the Dean's level is necessary and sufficient. NYS WRI will arrange OSP reviews for finalists.

B. Workplan.

A proposal workplan shall consist of the following elements. **Use no more than five pages for the proposal**, not counting principal investigator resumes or budget forms.

1. Title.

(Items 2 and 3 will be supplied by NYS WRI for finalists.)

4. Duration. (month/year to month/year).
5. Federal funds requested.
6. Non-Federal (matching) funds pledged.
7. Principal investigator(s) name(s) and university.
8. Congressional district.
9. Statement of critical regional or State water problems. Include an explanation of the need for research, who wants it, and why (one paragraph maximum).
10. Statement of results or benefits. Specify the type of information that is to be gained and how it will be used (one paragraph maximum).
11. Nature, scope, and objectives.
12. Methods, procedures, and facilities. Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives. Information dissemination proposals should specifically define target audiences, media, dissemination tactics, and evaluation methods.
13. Related work. Show by literature and communication citations the similarities and dissimilarities of the proposed project to completed or on-going research on the same topic. Show why your work does not duplicate that done by others before.
14. Investigator's qualifications. Include a resume(s) of one or two principal investigator(s). **No resume shall exceed two pages.**

15. Training potential. Estimate the number and level of graduate and undergraduate students, by field of study and degree, that are expected to receive training in the project.

C. Budget

Supply:

- A one page "Budget breakdown", compatible with the form on the last page of this package; and
- A one page budget substantiation for line items as required below (narrative).

When preparing your budget, we require that you use the following definitions for *direct* and *indirect* costs:

1. Direct costs. Direct costs are those costs which can be identified specifically with a particular research or information dissemination project, an instructional activity or which can be directly assigned to such activities relatively easily with a high degree of accuracy. Identifiable benefit to the research or information dissemination work rather than the nature of the goods and services involved is determining factor in distinguishing direct from indirect costs of research agreements. Typical transactions chargeable to an agreement as direct costs are the compensation of employees for performance of work under the agreement, including related staff benefit and pension plan costs to the extent that such items are consistently treated by the educational institution as direct rather than indirect costs; the costs of materials consumed or expended in the performance of such work; and other items of expense incurred for the agreement, including extraordinary utility consumption. The cost of materials supplied from stock or services rendered by specialized facilities or other institutional service operations may be included as direct costs of agreements provided such items are consistently treated by the institution as direct rather than indirect costs and are charged under a recognized method of costing or pricing designed to recover only actual costs and conforming to generally accepted cost accounting practices consistently followed by the institution.
2. Indirect costs (non-Federal share only). Indirect costs are those that have been incurred for common or joint objectives and therefore cannot be identified specifically with a particular project, an instructional activity, or any other institutional activity. At educational institutions such costs normally are classified under the following functional categories: (a) General administration and general expenses; (b) Research

administration expenses; (c) Operation and maintenance expenses; (d) Library expenses; and (e) Departmental administration expenses.

There are some requirements specific to matching funds:

- A. The applicant shall have its matching funds committed by February 2, 2010 if the applicant's proposal is chosen as a finalist. Commitment means that the applicant shall supply NYS WRI with 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.
- B. Matching funds shall be obligated during the period of performance.
- C. Matching funds may contain indirect costs including those that would have been charged to the grant were they allowable.

Applicants should consult with NYS WRI on questions relating to matching funds.

Instructions for Budget Breakdown Page

1. Salaries and wages. Identify individuals or categories of salaries and wages, estimated hours or percent of time, and the rate of compensation proposed for each person or category. Explain amounts included for projected increases if the rate of pay shown is higher than the current rate of pay. Identify each person with a task in the project. Tuition remission and other forms of compensation 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 the work.
2. Fringe benefits labor overhead. Indicate the rates/amounts in conformance with normal accounting procedures. Explain what costs are covered in this category and the basis of the rate computations. Indicate whether rates are used for proposal purposes only or whether they are also fixed or professional rates for billing purposes.
3. Equipment. Show the cost of all special-purpose equipment necessary for achieving the objectives of the project. "Special-purpose equipment" means scientific equipment having a useful life of more than 1 year and having an acquisition cost of \$5,000 or more per item. Each item should be

itemized and justified. General-purpose equipment must be purchased from the applicant's operating funds. Title to non-expendable personal property shall be vested solely with the Recipient. Under no circumstances shall property title be vested in a sub-tier recipient.

4. Supplies. Include the cost of office, laboratory, computing, and field supplies separately. Provide detail on any specific item which represents a significant portion of the proposed amount. If fabrication of equipment is proposed, list parts and materials required for each and show costs separately from the other items.
5. Services or consultants. Identify the tasks or problems for which such services would be used. List the contemplated sub-recipients by name (including consultants), the estimated amount of time required, and the quoted rate per day or hour. If known, state whether the consultant's rate is the same as s/be has received for similar services or under Government contracts or assistance awards.
6. Travel. State the purpose of the trip and itemize the estimated travel costs to show the number of trips required, the destinations, the number of people traveling, the per diem rates, the cost of transportation, and any miscellaneous expenses for each trip. Calculations of other special transportation costs (such as charges for use of

applicant-owned vehicles or vehicle rental costs) should also be shown.

7. Publication cost.
8. Other direct costs. Itemize the different types of costs not included elsewhere; such as, shipping, telemetry, computing, equipment-use charges, age dating, or other services. Provide breakdown showing how the cost was estimated; for example, computer time should show the type of computer, estimated time of use, and the established rates.
9. Total direct costs. Total items 1 through 8.
10. Indirect cost/general and administrative (G&A) cost. Show the proposed rate, cost base, and proposed amount for allowable indirect costs based on the cost principles applicable to the Applicant's organization. If the Applicant has separate rates for recovery of labor overhead and G&A costs, each charge should be shown. Explain the distinction between items included in the two cost pools. The Applicant should propose rates for evaluation purposes which they are also willing to establish as fixed or ceiling rates in any resulting award.
11. Amount proposed. Total items 9 and 10.
12. Total project cost. Total Federal and non-Federal amounts, if any.

BUDGET BREAKDOWN *

Proposed Start Date: _____ Proposed Completion Date: _____

Project Title: _____

Principal Investigator(s): _____

Cost Category	Federal	Non-Federal	Total
1. <u>Salaries and wages:</u>	\$ _____	\$ _____	\$ _____
- Principal Investigator			
- _____			
- _____			
- _____			
- _____			
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	_____	_____	_____
9. Indirect costs	XXXXXXXXXXXXXX	_____	_____
10. Total estimated cost	\$ _____	\$ _____	\$ _____

* Use additional sheets to incorporate the supporting information requested.