

UNIVERSITY OF CALIFORNIA
WATER RESOURCES CENTER

CALL FOR RESEARCH PROPOSALS

The Water Resources Center, a multi-campus research unit of the University, invites submission of research proposals for consideration of funding beginning on July 1, 2005.

Research Agenda. The Center supports research projects that lead toward understanding, development, protection, and effective utilization of water resources and aquatic ecosystem functions. Studies on water of the surface and underground water bodies, vadose zone, and estuaries are covered. Projects are awarded on the basis of technical merits, relevance to issues in California, and availability of funds. Proposals that focus on phenomena of ocean and oceanic water are not normally considered. Projects dealing with the salinity and drainage issues of cropland in California are not included in this call. Interested parties are directed to the call for proposals of the Salinity and Drainage Program. (<http://www.waterresources.ucr.edu>)

The research subject matter includes the following five general categories:

- Hydrology, climatology and hydraulics
- Aquatic ecosystems
- Water quality
- Water development and management alternatives
- Water law, institutions and policy

A detailed description of the subject matter categories is provided on page 4 of this document. A list of currently funded research projects may be found at the Center's Internet web site: <http://www.waterresources.ucr.edu>

The Center and its advisory boards especially encourage the submission of proposals that address the policy and institutional aspects of water resources management in California and proposals that promote water reuse.

Eligibility. Faculty members and individuals holding University of California PI status are eligible. Only one proposal per principal investigator will be accepted. Funding is restricted to one project per principle investigator in a given year. Proposals from principal investigators of currently funded projects will be considered, only if the current project expires at the commencement of the proposed study.

Researchers in other California-based institutions of higher learning are eligible to receive federal funds through the National Competitive Grants Program administered by the Water Resources Research Institute Program (WRRRI). The Center, as the administrator of WRRRI in California, will issue a separate call for proposals when details for this year's program become available (usually in January of each year).

PROPOSAL DUE DATE: *JANUARY 15, 2005*

WHAT TO SUBMIT: To expedite the reviewing process, research proposals along with budgets and supporting documents should be submitted electronically by the due date above. After recording, the proposals will be made available to the review panels. Proposals should be prepared with MS Word in the format listed below.

In addition to the electronic submission, TWO paper copies of the proposal along with the grant application approval form in accordance with the administrative procedure for grants and contracts at the originating campus must be received at Water Resources Center before February 15, 2005.

WHERE TO SUBMIT:

By E-Mail: cwres@ucr.edu

By Mail: Director
UC Center for Water Resources
4501 Glenwood Drive
Riverside, CA 92501

Questions:

Phone: (951) 827-4327
E-Mail: cwres@ucr.edu

PROPOSAL FORMAT

TITLE PAGE: Provide the following information on this page

PROJECT TITLE: Concise and descriptive.

RESEARCH CATEGORY: Consult categories listed on page 4 to determine which research category the proposal comes under. Select only one category.

PRINCIPAL INVESTIGATOR(S): List name, department, campus, email, telephone, and fax of each PI

DEPARTMENT ACCOUNTING CONTACT: List name, telephone, fax, and e-mail of the accounting officer

EXECUTIVE SUMMARY:

The summary should be a stand-alone document describing the water research problem(s) to be addressed and its relevance to water issues in California, the research approach employed, anticipated outcome of the study, and benefits and/or information expected from the project. As the executive summary will be read by non-specialists of the proposed study, writers are encouraged to describe the proposed work and enunciate the anticipated results and potential benefits in straightforward and non-technical terms.

BODY OF THE PROPOSAL

The proposal should include the following sections:

INTRODUCTION AND OBJECTIVES OF THE PROPOSED RESEARCH. Brief introduction on the nature of the problems to be addressed, justification of proposed work, importance to water resources issues in California and research objectives.

RELATED RESEARCH. Provide a review and relevant literature on the subject to be studied and relate them to the proposed project. For recent recipients of the Center's research grants, briefly describe the outcomes of the funded work and if appropriate, their relationship to the current proposal.

METHODS, PROCEDURES AND FACILITIES. Provide sufficient information to permit evaluation of the technical adequacy of the research approaches and facilities.

INVESTIGATOR'S OVERALL RESEARCH. Describe how the proposed work relates to the overall research program of the principle investigators, particularly relationship to completed projects and potential future funding. Articulate the potential development of larger scale projects upon the conclusion of the proposed study. Indicate if this research is being supported by other sources of funds, the source, amount and duration.

INVESTIGATOR QUALIFICATIONS. Provide biographical information to illustrate the qualifications of principal investigators and co-investigators. Resume for each principle investigator should not exceed two pages or list more than 15 pertinent publications.

STUDENT TRAINING. Water Resources Center encourages the use of its funds to support student research training. List the name and describe the academic background, degree program enrolled, and expected completion date of the student to be supported. If the student to be supported has not yet been identified, describe the training opportunity the proposed study will offer.

BUDGET. Normally, research grant awards of the Water Resources Center are one or two years in duration with total annual budgets between \$15,000 and \$30,000. The norm is exceeded only where there are compelling justifications. No indirect cost is allowed. Faculty on nine-month appointment may request salary supplement for summer, up to one month of full time equivalent for each year funded. Salary and wages and employee benefits for Postgraduate Research Assistants (PGRA) or Staff Research Assistants/ Associates (SRA) will not be considered, except for special circumstances. Funding requests for supporting PGRA/SRA shall not exceed those that would be authorized for the annual support of a graduate student. Requests for purchasing equipment are discouraged. Approvals for equipment purchase (\$1,000 and more) are rare and must be deemed as essential to conduct the research. The Center will not provide funds toward the purchase of computers and printers. See Attachment I for itemized budget table.

SUPPORTING LETTERS. Supporting letters are not required. If the proposed research is considered significant to stakeholders, letters from affected resource management agencies and other public entities may be submitted along with the proposal.

RESEARCH CATEGORIES

CATEGORY I: HYDROLOGY, CLIMATOLOGY AND HYDRAULICS

Encompass the physical processes governing water transformations through atmosphere, over land, and in natural water bodies, aquifers and man-made conduits. Examples of investigations include studies of precipitation and stream flow; weather pattern; climate modification; micrometeorological processes linking atmospheric water, solar energy, water use by plants (commercial, exotic and native), and available soil moisture; modeling of hydrologic and hydraulic processes; and the development of databases.

CATEGORY II: AQUATIC ECOSYSTEMS

Encompass basic observational, analytical and theoretical knowledge about aquatic environments and ecosystems. Research areas of interest include biological, chemical and physical mechanisms that govern the behavior of aquatic ecosystems, including the classification, transport and impact of pollutants. Also included are constructed ecosystems for water reclamation; wetland management; impacts of land use practices on aquatic habitats; role and effect of non-native species, and reconstruction ecology.

CATEGORY III: WATER QUALITY

Encompasses all aspects of water quality management. Topics include sources and the nature of contamination; effects of contamination on human health, plant and wildlife; wastewater treatment and reclamation processes; and retrospective evaluations of the effectiveness and impacts of different strategies utilized in California for improving water quality, in particular water reuse, and for preventing water quality degradation.

CATEGORY IV: WATER DEVELOPMENT AND MANAGEMENT ALTERNATIVES

Encompass economic and systems analyses approach for formulating and evaluating water resources planning, development, and management alternatives. Topics include policies and programs directed at increased water savings and water reuse; development of models for use in planning and operating water supply systems; conjunctive use of surface and subsurface storage; water markets and water pricing; and development of improved criteria for water project planning.

CATEGORY V: WATER LAW, INSTITUTIONS AND POLICY

Encompasses all aspects of institutional framework (policies, laws, administrative processes, and regulations) for developing and managing water resources. Topics include: institutional arrangements for managing water scarcity and ground water; taxes, fees and user charges for watershed management or related objectives; potential institutional conflicts associated with specific water development and management alternatives; and the evolution of water management institutions in California. There is an especially compelling need for studies that involve analytical investigations of alternative policies for management of California's limited water resources.

FORMAT FOR BUDGET REQUEST

TITLE: _____

Primary Investigator/Team Leader: _____

| COST CATEGORY ITEMS | Year One | Year Two |
|--------------------------------------|----------|----------|
| SALARIES & WAGES | | |
| Principal Investigator(s) | \$ | \$ |
| Student Research Assistant(s) | \$ | \$ |
| Other Professional/PGRA | \$ | \$ |
| Fringe Benefits (Show rate and base) | \$ | \$ |
| <i>SUBTOTAL</i> | \$ | \$ |
| EXPENSES | | |
| Supplies & Expenses | \$ | \$ |
| Travel | \$ | \$ |
| Other (Specify) | \$ | \$ |
| <i>SUBTOTAL</i> | \$ | \$ |
| <i>TOTAL</i> | \$ | \$ |