

REQUEST FOR PROPOSALS

DELAWARE WATER RESOURCES CENTER

2010 Graduate Fellowships in Water Resources

The *Delaware Water Resources Center* announces the availability of two graduate fellowships in water resources. These graduate fellowships will support the ongoing efforts of the state of Delaware to protect and improve water quality and to ensure a safe and adequate water supply for all desired end uses. Application information can be found on the *Delaware Water Resources Center's* web site: <http://ag.udel.edu/dwrc/fellowships.html>.

Proposal Criteria and Focus Areas:

Proposals must clearly address areas that are of direct relevance to priority water resource issues in Delaware. Innovative, multi-disciplinary research projects, both basic and applied in nature, are preferred. Some areas of particular interest are:

Water Quality:

- Sources, fate, and transport of ground and surface water pollutants
- Climate change effects on water quality
- Nutrient management in agricultural or non-agricultural settings
- Protection and restoration of wetlands and other aquatic ecosystems
- Management and control of stormwater runoff
- Quantifying responses of aquatic ecosystems to pollutant inputs
- Treatment and disposal of on-site sewage and wastewaters
- Remediation of contaminated soils and sediments
- Sources and control of pathogenic bacteria in drinking waters

Water Supply:

- Climate change effects on water supply
- Agricultural irrigation impacts on water supply
- Re-use of treated wastewaters for irrigation
- Identification and protection of ground water aquifer recharge areas
- Biosecurity and protection of water supplies
- Regional management of water supplies
- Water conservation and demand management
- Preventing saltwater intrusion to potable water supplies

Fellowships will be renewed up to a maximum of three years provided satisfactory progress toward project objectives is maintained. Graduate Fellows are required to: (i) make a presentation each year describing their progress at a meeting that will be organized by the *Delaware Water Resources Center*; and (ii) prepare an annual report that summarizes their accomplishments and submit it to the *Delaware Water Resources Center*.

Proposal Submission and Evaluation:

Proposals must contain the following components and are limited to ten pages of text (excluding CV and budget).

Project Justification and Objectives
Literature Review
Proposed Methodology
Project Timeline
Budget
Short CV for each project investigator

The *Delaware Water Resources Center* will provide a stipend of \$20,500 and \$2,000 for travel expenses and supplies annually for each graduate fellow. Consequently, the maximum annual budget for each proposal is \$22,500 (3-year budget is \$67,500). A 2:1 match is required for all proposals. Indirect costs are not allowed on federal funds but are allowed on the non-federal match. Final decisions on proposals will be made by a review panel established by the *Delaware Water Resources Center* and will be announced no later than March 5th, 2010.

Submit an electronic copy of the proposal (MS Word) by February 15th, 2010 to:

Dr. Tom Sims
Director, *Delaware Water Resources Center*
Email Proposal to: jtsims@udel.edu

The Delaware Water Resources Center:

The *Delaware Water Resources Center* is a member of the National Institute of Water Resources, a network of research institutes in the 50 states, trust territories, and the District of Columbia. Each of these water resources research institutes conducts basic and applied research to solve water problems unique to each area. The specific programmatic responsibilities of all members of the NIWR are as follows:

1. To plan, conduct, and arrange for research that fosters: (i) the entry of new research scientists into the water resources fields; (ii) the training and education of future water scientists, engineers, and technicians; (iii) the exploration of new ideas that address water problems or expand our understanding of water-related phenomena; and (iv) dissemination of research results to water managers and the public.
2. To cooperate closely with other colleges and universities in the state that have demonstrated responsibility for research, information dissemination and graduate training, to develop a statewide program designed to resolve state and regional land and water problems.

The *Delaware Water Resources Center* is administered by the College of Agriculture and Natural Resources (CANR) of the University of Delaware. The Director of the *DWRC* is Dr. Tom Sims, CANR Associate Dean and Professor in the Department of Plant and Soil Sciences (jtsims@udel.edu).