



OFFICE OF THE UNDER SECRETARY OF DEFENSE  
3000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3000

ACQUISITION  
TECHNOLOGY  
AND LOGISTICS

**JUL 24 2006**

MEMORANDUM FOR DOD COOPERATIVE ECOSYSTEM STUDIES UNITS  
REGIONAL COORDINATORS

SUBJECT: Guidelines for Competition of Cooperative Projects Funded Under the  
Cooperative Ecosystem Studies Units National Network

The Cooperative Ecosystem Studies Units (CESU) National Network provides coordinated research, technical, and educational assistance to federal agencies and their partners through a network of 17 regional partnerships. The Department of Defense has committed to continued participation in the CESU network by signing the revised CESU Memorandum of Understanding (attached). DoD actively participates in seven CESU regions, and has developed the attached fact sheet for use by all DoD representatives.

Recently, questions have arisen concerning the requirement to compete CESU proposals. The following guidelines should be used for all proposed DoD work involving the CESU Network:

- DoD CESU Regional Coordinators shall seek competition within each CESU region through the issuance of a Request for Statement of Interest (SOI) for each proposed CESU project initiated by the DoD. Widespread dissemination of the SOI may be obtained by posting the SOI (sample SOI letter attached) on the website maintained by the host university for the relevant CESU region. Where the number of potentially qualified applicants is limited, a more restricted notice may be made by sending the SOI directly to all qualified CESU partner institutions within the region.
- Under the terms and conditions of all current CESU Cooperative Agreements, the host university and all partner institutions within a CESU region within which DoD is a member may themselves submit a proposal to DoD. In such cases, competition is not required and an SOI is unnecessary.
- DoD CESU Regional Coordinators are not required to issue an SOI for projects that are submitted to DoD for consideration as part of competition-based funding programs such as the DoD Legacy Program, the Strategic Environmental Research and Development Program (SERDP), and the Environmental Security Technology Certification Program (ESTCP).

Adherence to these guidelines will ensure that:

- DoD obtains the best project proposals possible for the research requests it initiates;



- Cooperative agreements are consistent with the DoDGARs requirements for competition;
- Projects comply with 10 U.S.C. 2361; and
- The process will generate a clear and auditable administrative record to support CESU project awards.

If you have any questions, please contact Mr. Pedro Morales at (703) 604-1933.

A handwritten signature in black ink that reads "L. Peter Boice". The signature is written in a cursive style with a large initial "L" and "P".

L. Peter Boice  
Conservation Team Leader  
ODUSD-ESOH

Attachments  
As stated



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**MEMORANDUM FOR DOD COOPERATIVE ECOSYSTEM STUDIES UNITS  
REGIONAL COORDINATORS**

**SUBJECT: Guidelines for Posting Statements of Interest or Requests for Proposals for Potential Cooperative Projects Funded Under the Cooperative Ecosystem Studies Units (CESU) National Network**

The CESU National Network provides coordinated research, technical, and educational assistance to federal agencies and their partners through a network of 17 regional partnerships. The Department of Defense has committed to continued participation in the CESU network by signing the revised CESU Memorandum of Understanding (attached). DoD actively participates in nine CESU regions. All DoD regional representatives should use the attached fact sheet for CESU issues.

The purpose of this memo is to clarify steps to be taken in order to satisfy the need for fairness in competition for all proposed CESU projects initiated by the DoD involving the CESU Network. The following guidelines should be used when posting Statements of Interest (SOI) or when posting Requests for Proposals (RFP) for work involving DoD and the CESU Network:

- DoD shall not engage in the practice of limited or restricted notice of SOI or RFP involving the CESU, and instead aim at a reasonable widespread announcement within each CESU unit membership.
- All announcement material (e.g. Statement of Interest, Request for Proposal) shall be available to members of the CESU community for a minimum of two weeks (10 working days)
- There are two accepted methods for announcing funding opportunities through the CESU; a) Posting of a SOI or RFP on the host university CESU website, b) Directly emailing all CESU representatives listed on the CESU host university website and other interested parties.
- Decisions in response to a SOI or RFP may not take place prior to the completion of the two week period in which the announcement is made public.
- In the best interest for DoD, an SOI may lead to the request of a proposal from more than one institution.

Adherence to these guidelines will ensure that:

- DoD obtains the best project proposals possible for the research requests it initiates;

- Cooperative agreements are consistent with the DoD Grants and Agreements Regulations (DoDGARs) requirements for competition;
- Projects comply with 10 U.S.C. 2361; and
- The process will generate a clear and auditable administrative record to support CESU project awards.

This memo clarifies and supplements guidance from our office dated July 24, 2006. If you have any questions, please contact Mr. Pedro Morales at (703) 604-1933.

A handwritten signature in black ink that reads "L. Peter Boice". The signature is written in a cursive style with a large initial "L" and "P".

L. Peter Boice  
Conservation Team Leader  
ODUSD-ESOH

Attachment  
As stated



REPLY TO  
ATTENTION OF:

**DEPARTMENT OF THE ARMY**  
ENGINEER RESEARCH AND DEVELOPMENT CENTER, CORPS OF ENGINEERS  
CONSTRUCTION ENGINEERING RESEARCH LABORATORY  
P.O. BOX 9005  
CHAMPAIGN, ILLINOIS 61826-9005

April 5, 2006

**REQUEST FOR STATEMENTS OF INTEREST  
NUMBER W9132T-06-SOI-0007  
PROJECT TO BE INITIATED IN 2006**

**Project Title: EFFECTS OF MILLIMETER WAVE CARBON FIBERS ON  
AQUATIC ORGANISMS**

Responses to this Request for Statements of Interest will be used to identify potential investigators for a project to be funded by the Engineering Research Development Center (ERDC) which investigates acute and sublethal toxic effects of millimeter wave carbon fibers (MMCF) on aquatic organisms. Approximately \$30,000 is expected to be available to support this project. Additional funding may be available for follow on work in subsequent fiscal years to the successful Recipient/Awardee.

**Background:**

The Department of Defense which is a participant of the CESU Network manages nearly 25 million acres of land, and the natural and cultural resources found there. DoD's primary mission is national defense. DoD's conservation program supports this mission by ensuring realistic training areas, and managing its resources in ways that maximize available land, air, and water training opportunities. DoD land management issues and objectives have many similarities to other federal, state, and private land management programs.

The work proposed here ties into current CERL research to study the acute and sublethal effects of military smokes and obscurants on aquatic threatened and endangered species. While other projects are investigating fog oils, colored smokes, and graphite flakes, this project expands the set to include millimeter wave carbon fibers, the newest member of the obscurant family. Our exposure chamber allows for release and dispersion of the smoke, or a combination of smokes, into a controlled, contained space. Open jars within the chamber contain numbers of aquatic organisms. Over time, the smoke components in the air begin to deposit on the water surfaces. Depending on the release times and deposition times, we can tightly control the amount of smoke chemicals that deposit on the water surface. The chamber is cleared of smoke and the jars are observed for acute toxic effects or the organisms are removed for measurement of sublethal effects. In this way, the potential environmental effects of smokes release and subsequent deposition in the aquatic ecosystem may be measured. In addition, this knowledge can be used to mitigate or eliminate deleterious effects by altering training protocol.

### **Brief Description of Anticipated Work:**

The goal is to quantify and describe the acute toxicity of MMCF and the sublethal effects that can disrupt aquatic life. Ingestion is the primary route examined in this work. MMCF will be disseminated or sprinkled onto aquatic systems, either alone or in combination with fog oil and graphite flakes. Several different aquatic organisms will be employed to observe effects on prey species, bottom feeders and filter feeders. This work will involve:

- 1) Measure acute toxicity of various types of carbon fibers (e.g., metal coated, uncoated, etc.) to the water fleas, *Ceriodaphnia dubia* and *Daphnia magna*.
- 2) Determine if *Daphnia magna* ingests carbon fibers, and if so, whether or not ingestion of carbon fibers impacts fecundity.
- 3) Determine if the Asian clam, *Corbicula fluminea*, and the amphipod, *Hyalella azteca*, ingest carbon fibers and if ingestion impacts growth of these organisms.
- 4) Write one journal article describing the toxicity effects from the above objectives.

### **Materials Requested for Statement of Interest/Qualifications:**

Please provide the following via e-mail attachment to:  
joyce.i.roberts@erdc.usace.army.mil (Maximum length: 2 pages, single-spaced 12 pt. font).

1. Name, Organization and Contact Information
2. Brief Statement of Qualifications (including):
  - a. Biographical Sketch,
  - b. Relevant past projects and clients with brief descriptions of these projects,
  - c. Staff, faculty or students available to work on this project and their areas of expertise,
  - d. Any brief description of capabilities to successfully complete the project you may wish to add (e.g. equipment, laboratory facilities, greenhouse facilities, field facilities, etc.).

**Note:** A proposed budget is NOT requested at this time.

**Review of Statements Received:** Based on a review of the Statements of Interest received, an investigator or investigators will be invited to prepare a full study proposal. Statements will be evaluated based on the investigator's specific experience and capabilities in areas related to the study requirements.

**Please send responses or direct questions to:**

ERDC Lead: Joyce Roberts  
U.S. Army Engineer Research and Development Center (ERDC)  
Construction Engineering Research Laboratory (CERL)  
2902 Farber Drive  
Champaign, IL 61822  
Joyce.I.Roberts@erdc.usace.army.mil

**Timeline for Review of Statements of Interest:** Review of Statements of Interest will begin April 11, 2006. This Request for Statements of Interest will remain open until an investigator team is selected.



# Cooperative Ecosystem Studies Units National Network



## Cooperative Ecosystem Studies Units

In 1998, P.L. 105-391 (Sec. 203) authorized and directed the Secretary of the Interior “to enter into cooperative agreements with colleges and universities, including but not limited to land grant schools, in partnership with other Federal and State agencies, to establish cooperative study units to conduct multi-disciplinary research...”. In response and under existing cooperative agreement authorities, Interior developed a network of Cooperative Ecosystem Studies Units (CESU).

In 1999, the CESU Network was created with the signing of an interagency Memorandum of Understanding (MOU). The objective of the CESU network is to provide research, technical assistance, and training to federal land management, environmental and research agencies and their partners. The CESU Network’s broad scope includes the biological, physical, social, and cultural sciences needed to address natural and cultural resource management issues at multiple scales and in an ecosystem context.

Three key elements comprise each CESU: federal agencies, the host university, and partner institutions (with a requirement of at least one minority institution in each region). Each CESU has a managers’ committee with the responsibility of defining the CESU’s role and mission statement, a strategic plan, and annual work plans. CESU agreements allow each of the participating federal agencies to efficiently transfer funds and duty station employees to university partners while maintaining responsibility for agency-sponsored activities within CESUs.

CESUs 17 biogeographic regions are linked together to form the CESU Network. The Department of Defense became a federal agency partner in the CESU network through an amendment to the MOU in 2000. The US Army Corps of Engineers joined in 2005 to use CESU on USACE managed lands.

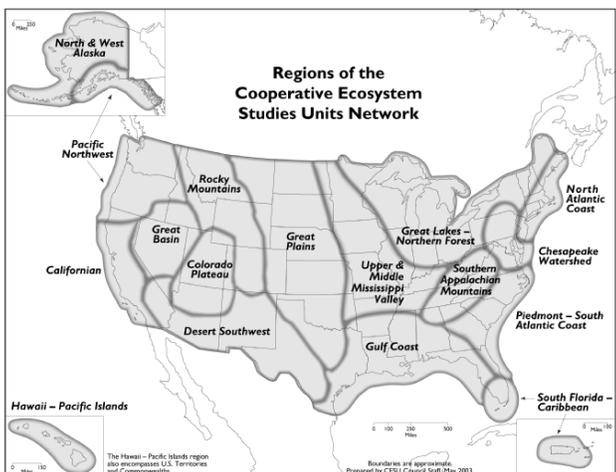
## DoD’s participation in the CESU Network

The CESU Network is led by the National CESU Council comprised of representatives from each federal agency signatory of the CESU MOU.

As of 2007, DoD has joined in the Chesapeake Watershed, Desert Southwest, Gulf Coast, Upper and Middle Mississippi Valley, Hawaii-Pacific Island, Colorado Plateau, Californian, Piedmont South Atlantic, and the Southern Appalachian Mountain CESUs.

## How to use CESU Agreements

Each CESU is competitively established under a single cooperative agreement. Each CESU’s cooperative agreement provides a detailed explanation of the conditions and provisions governing all CESU projects; each CESU agreement provides the basis for initiating cooperative projects between the participating federal agencies and partner institutions. An installation’s natural or cultural resource manager is responsible for developing a SOW for the desired project and for



The CESU Network is organized through 17 Biogeographic Regions. DoD is a Federal member of the Desert Southwest, Gulf Coast, Chesapeake Watershed, Upper and Middle Mississippi Valley, Hawaii-Pacific Island, Colorado Plateau and Southern Appalachian Mountain CESUs.

coordinating with the DoD CESU Regional Coordinator regarding the selection of a partner institution and the project's principal investigator.

After selection of the principal investigator and partner institution, a grants officer is responsible for creating the modification to the existing Cooperative Agreement. All the terms and conditions of the agreement are already negotiated, thus reducing the amount of time for project implementation.

### **Partnership Objectives**

- Provide resource managers with high-quality scientific research, technical assistance, and training.
- Deliver research and technical assistance that is timely, relevant to resource managers, and needed to develop and implement sound adaptive management approaches.
- Ensure the independence and objectivity of research.
- Create and maintain effective partnerships to share resources and expertise.
- Encourage professional development of federal scientists.
- Manage federal resources effectively.

### **Benefits to DoD**

DoD's participation in CESUs allows all DoD Services to benefit from:

- Fast access to, and implementation of, cooperative agreements with partner institutions.
- Access to high quality science and training of Federal employees at universities.
- Opportunities to reduce cost through partnerships and interagency collaboration.
- A reduced, Network-wide overhead rate of 17.5%.
- A broadened scope of scientific services.
- Multidisciplinary problem-solving at several ecological scales.
- Increased partnership opportunities among federal agencies, universities and scientists.
- Increased research, technical assistance, and education for resource managers.
- Professional development opportunities for agency scientists and employees.
- Improved collaboration between natural and cultural resource managers.
- An expanded constituency for federal science.

### **DoD's Participation**

From 2001-2007 DoD has funded over 80 projects through the CESU totaling over \$11M. These projects have provided access to high quality scientists from a number of universities in the pool of over 180 member institutions in the CESU Network. In addition, DoD's CESU projects have resulted in savings through cost avoidance of approximately \$3 million in the past four years.

### **DoD's expansion through CESU**

As of August 2007, the Department of Defense is exploring the possibilities of expanding its presence in the CESU Network. Future plans for DoD may include membership in the, Rocky Mountains, North Atlantic Coast, and Great Plains CESUs.

The US Army Corps of Engineers-Civil Works joined the CESU Network in June 2005. The Corps is a separate entity from DoD in the Network. Prior to 2005, the Corps' access to CESUs was permitted only for work on military installations through DoD participation.

In 2006 the US Army Corps of Engineers-Civil Works joined the Upper and Middle Mississippi Valley, Gulf Coast, the South Florida-Caribbean, and the Great Lakes-Northern Forest CESUs.

The DoD National CESU Coordinator's office is the primary point of contact to assist installation managers in contacting DoD Regional Coordinators.

**For more information on how to contact your DoD Regional CESU Coordinator please contact**

ODUSD(I&E)EM-CO  
Attn: DoD CESU National Coordinator  
1225 South Clark Street, Suite 1500  
Arlington, VA 22202-4336

For a list of all Biogeographic regions and partner institutions visit:  
<http://www.cesu.org/index.html>

*Fact sheet last updated August 2007*