

**THE COASTAL RESPONSE RESEARCH CENTER (CRRC),
COOPERATIVE INSTITUTE FOR COASTAL AND ESTUARINE ENVIRONMENTAL
TECHNOLOGY (CICEET),
MINERALS MANAGEMENT SERVICE (MMS), and
PRINCE WILLIAM SOUND OIL SPILL RECOVERY INSTITUTE (OSRI)**

FY 2006 Cold Climate Request for Preliminary Proposals

June 6, 2005

The Coastal Response Research Center (CRRC), Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET), Minerals Management Service (MMS) and Prince William Sound Oil Spill Recovery Institute (OSRI) are inviting preliminary proposals for project funding consideration. This request for preliminary proposals (RFP) for FY 2006 includes information on the following:

- (I) Background
- (II) Goals
- (III) Priority Areas for Research and Development
- (IV) General Guidelines and Project Requirements
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- (VI) Preliminary Proposal Narrative Elements
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The calendar for this Cold Climate RFP is:

Preliminary Proposals Due	September 1, 2005 at 4:00 pm ET (U.S.)
Invitation for Full Proposal Submittal	October 3, 2005
Full Proposal Due	December 1, 2005
Peer Reviews Due	January 5, 2006
PI Rebuttals Due	January 12, 2006, 4:00 pm ET (U.S.)
Panel Review Meeting	Late January 2006
Notice of Recommendation for Funding	February 1, 2006
Funding Start Date	Spring 2006*

* All project funding is contingent on the amount of money appropriated for this program through the United States (U.S.) Department of Commerce, the U.S. Department of the Interior and the Prince William Sound Oil Spill Recovery Institute.

Funding available for this RFP solicitation \leq \$1M (U.S.).

I. Background

In 2004, CRRC, CICEET and OSRI formed a partnership for the development and application of new technologies, and/or innovative approaches using existing technologies, to address issues related to oil spill response and restoration in cold climate coastal marine areas and the Great

Lakes. In 2005, MMS joined the partnership. This collaboration will allow the partners to take advantage of pooled funding and resources, while supporting their individual missions.

CRRC is a partnership between the University of New Hampshire (UNH) and the National Oceanic and Atmospheric Administration (NOAA); the goal of the Center is to reduce the consequences of spills and other hazards threatening coastal environments and communities. Additional information about this Center can be found at www.crrc.unh.edu. CICEET is also a partnership between NOAA and UNH and was established as a national center for the development and application of innovative environmental technologies for monitoring, management and prevention of contamination in estuaries and coastal waters (<http://ciceet.unh.edu>). OSRI was established to conduct research and educational and demonstration projects in order to identify and develop the best available techniques, equipment and materials for dealing with oil spills in Arctic and sub-arctic marine environments (www.pws-osri.org). MMS is the Federal agency responsible for managing the nation's natural gas, oil and other mineral resources in Federal waters offshore the U.S. (www.mms.gov). The projects will be funded and administered by the individual partners; the results of the funded projects will be disseminated by all of the partners.

II. Goals

The goals of this partnership for cold climate spill research are to:

1. Conduct research and development on new technologies for preventing, responding to, and recovering from oil spills.
2. Identify and develop cost effective technology and methods for the restoration of spill impacted habitats and ecosystems.
3. Facilitate and promote collaborative research and development and the exchange of ideas to increase collective productivity and the application of the findings to improve technological and operational activities in spill preparedness, response and restoration.
4. Involve students (undergraduate and graduate) to the extent practical in ongoing research, testing, and demonstration activities.

III. Priority Areas for Research and Development

CRRC, CICEET, MMS and OSRI are collaborating in this effort to conduct research and development on new technologies for responding to oil spills in cold climate coastal marine areas including Antarctica and the Great Lakes. For the purpose of this RFP, cold climate environments are defined as having average annual winter (January, February and March) water temperatures less than or equal to 38° F. Geographical areas of special interest include those subject to severe storms, large waves, and prolonged severely cold weather, and regions that may develop extensive broken or continuous ice. Research areas of interest include developing techniques and technologies applicable to all cold climate oil spills in water with or without ice but of special interest are innovative developments to: detect oil in ice, remove oil from under ice or from broken ice, prevent the spread of spilled oil in ice covered waters or in broken ice, improve the effectiveness and efficiency of response operations, and to restore and recover impacted habitats and ecosystems in cold climate environments.

Specific research areas of interest for this cold climate RFP include:

- **Detection, Containment and Cleanup of Oil Spills:** Improvement and development of the knowledge and technologies used for the detection, containment and cleanup of spilled oil in cold water/broken ice conditions.
- **Exposure and Injury Assessment Tools:** Development of new, cost effective tools that can be rapidly deployed, including technologies, methods, protocols and models and their application for assessing the exposure and injury of marine resources to the presence of oil in the water column, on or under ice, in and among broken ice, in sediments or in

organisms. A proposed tool should result in quantitative data, be simple, rapidly deployable, low cost, and easy to use. A developed tool being applied to a cold climate must be suitable for commercialization.

- **Data Development: Processes and Rates Affecting Oil:** Data and information on the short and long term processes and rates affecting the composition and properties of oil as a function of three dimensional transport, and/or stranding in cold climates. The proposed work may consider the interaction of oil and relevant habitat type (i.e., changes in oil composition, toxicity and effects as a result of habitat type) as a part of this effort. Habitat types must be those of cold climates, as defined above. The results of this work must be quantitative and suitable for modeling.
- **Human Use Valuation of Ecosystems:** Valuation or valuation methods for human use of ecosystem components and attributes (e.g., subsistence fishing and hunting, recreational boating and tourism) impacted by cold climate oil spills. The methods or developed data must be suitable for quantifying lost or diminished use and provide information to monitor the progress of restoration.
- **Habitat Recovery and Restoration Technologies:** Efficient, effective technologies to expedite the recovery and restoration of spill impacted habitats and organisms. The project results must quantitatively demonstrate the effectiveness of the technology.

IV. General Guidelines and Project Requirements

- This RFP solicits projects that support the goals of the partnership.
- Up to \$1,000,000 is available to fund all projects under this solicitation. It is anticipated that two to five projects may be funded. One- and two-year projects will be considered from FY 2006 funds.
- Private-sector applicants may include overhead, but not fee for profit in their budget requests.
- Use your institution's or company's federally negotiated indirect cost or overhead rate. Contact Kimberly Newman (kim.newman@unh.edu) if you have questions.
- Applicants should include travel as a line item in their proposed budgets. Include travel funds to one professional meeting to present research results. Also include travel funds for one trip per year to one of the following locations to make a presentation at a workshop: Prince William Sound Oil Spill Recovery Institute (Cordova, AK); NOAA Headquarters (Silver Spring, MD); NOAA's Office of Response and Restoration (Seattle, WA); MMS Alaska Outer Continental Shelf Regional Office (Anchorage, AK); or the University of NH (Durham, NH).
- Eligible applicants may be affiliated with either U.S. or international academic, governmental, non-profit, or private sector entities or institutions. Considerable experience with cold climate oil spills currently resides outside the U.S. (e.g., Scandinavia, Russia, Canada). Collaborations are encouraged if they strengthen and build capacity on cold climate oil spill response and recovery within the U.S.
- Federal agency personnel may be eligible provided they can document statutory authority to supplement their appropriations with funds from other federal programs and entities. [Note: Such documentation must be submitted with the full proposal, not the preliminary proposal. In some cases, obtaining this documentation can take time so applicants should plan ahead.]
- Federal applicants may not request salary compensation.
- Each applicant is encouraged to create an innovative dissemination plan befitting the potential end users of the proposed research, in addition to the expected publication of scientific or technical journal articles and presentations at conferences. This could include, but is not limited to: collaboration in the proposed work, subject-specific workshops, seminars for coastal managers, procedural handbooks, and web sites.
- Proposals must identify end users of the results/findings. Letters of cooperation/support from these end users must be submitted with the full proposal.

- Proposals will be reviewed before funding for National Environmental Policy Act (NEPA) compliance for all projects conducted within the U.S. before funding. The PI is responsible for obtaining all of the necessary permits for conducting the research. NEPA compliance and timely acquisition of the necessary permits may be a factor in determining whether an otherwise suitable project is funded.
- Proposals recommended by OSRI will be reviewed before funding by the OSRI Advisory Board for compliance with legislated mandates and strategic objectives.
- PIs whose proposals are recommended for funding will be required to submit a QA plan prior to funding approval (see www.crrc.unh.edu/gaqc.pdf for an example).
- Recommended projects involving the development of models will require validation and verification documentation.
- Applicants are encouraged to use existing facilities and to coordinate efforts with existing facilities such as: MMS's OHMSETT facility, Prince William Sound Science Center, Cold Regions Research and Engineering Laboratory, and Barrow Arctic Science Consortium.

V. Guidelines for Preliminary Proposal Preparation

Instructions for electronically submitting the preliminary proposals are given in Section VII. The electronic submittal process will dictate how proposal elements are individually submitted in the available fields. Be familiar with the PI information pages (including CV fields), the proposal narrative elements, and the standard budget page before preparing the preliminary proposal. Prepare the preliminary proposal so that it adheres to the guidelines below. The use of a Word document version that can be cut and pasted into the preliminary proposal fields is highly recommended. Please note that graphics cannot be submitted as part of the preliminary proposal submission process.

- The proposal narrative must address elements 1 - 9 using a maximum of three single-spaced pages and a minimum font size of 12.
- Institutional documentation of federally negotiated indirect cost rates is not required for preliminary proposals.

VI. Preliminary Proposal Narrative Elements

1. Describe the priority area to be addressed by the project. Include its significance to cold climates. Provide the names of federal, state and/or local personnel contacted regarding application of project results.
2. Describe the project objectives and how they relate to the specific goals of the CRRC, CICEET, MMS and OSRI partnership and the objectives of this Cold Climate RFP.
3. Describe the methods that will be used to meet project objectives.
4. Describe how the proposed project is innovative or novel.
5. Describe how the proposed project may be applied to other regions (i.e., How transferable is the project from one cold climate region/habitat to another?).
6. Describe the end product (technology, method, information) and its use to the cold climate oil spill community. Indicate the time frame within which it can be applied.
7. Describe the roles and responsibilities of the project participants.
8. Describe how the project results will be disseminated to the cold climate oil spill community.
9. Identify end user partner(s) (i.e., individuals or entities) and explain why these particular partner(s) were chosen. Letters of cooperation/support are not required for the preliminary proposal.
10. Include a project timeline with appropriate milestones.
11. Provide an itemized budget justification, including a description of how indirect costs are calculated. If necessary, describe other support being provided for any and all aspects of this project. Include relevant personnel, dates and funding amounts.

Note: Items 10 and 11 are not included in the three page narrative limit.

VII. Overview of Preliminary and Full Proposal Submission and Review

Applicants must submit their preliminary proposal electronically via the CRRC website at www.crrc.unh.edu on or before Thursday, September 1, 2005 at 4:00 pm ET (U.S.). Access to the submission page is available at the "Funding Opportunities" link. Any questions or comments regarding the submittal process can be sent to Kimberly Newman at kim.newman@unh.edu.

Prior to submittal, applicants will be asked to indicate that their preliminary proposal has not been submitted elsewhere. Preliminary proposals will not be fully submitted until the "Submit" button is clicked. A confirmation email will be sent to the email address provided once the proposal is fully submitted. Be aware that if you do not receive this email confirmation, your preliminary proposal has probably not been received. It is the PI's responsibility to be sure the submittal has been received. Only electronic submittals via the website will be accepted.

A programmatic review panel (composed of scientists, practitioners and researchers) will evaluate preliminary proposals. Selections for full proposal submission will be made, in part, using the programmatic evaluation criteria in Section VIII. Notifications and invitations for full proposal submission will occur by October 3, 2005. **Full proposals will not be accepted from individuals who have not: 1) submitted a preliminary proposal, and 2) upon programmatic review, been invited to submit a full proposal.** The deadline for full proposal submission is December 1, 2005. A separate set of guidelines will be given to PIs invited to submit full proposals. Full proposals will be subject to peer review. PIs will be given the opportunity to rebut the peer reviews. The full proposals, peer reviews, and rebuttals will be considered by a review panel that will make funding recommendations to OSRI, MMS, CICEET, and CRRC staff who will make the final funding decision.

VIII. Preliminary Proposal Evaluation Criteria

An initial review of preliminary proposals will be conducted to assess their compliance with the RFP. Any preliminary proposals that are deemed "non-compliant" will be eliminated from the competition, and the applicants will be notified. Non-compliant proposals are those that 1) are incomplete or 2) do not specifically address one or more of the research priorities and/or organizational missions as stated in this RFP.

Criteria for evaluation of preliminary proposals are shown below and weighted as indicated.

1. Assuming the proposed work is technically feasible; will the project have a significant impact on oil spill management in cold climates? (20%)
2. Does the proposed project directly address one of the priority research areas cited in the RFP and is it consistent with the partners' goals for this solicitation? (20%)
3. Are the proposed methods appropriate and are they likely to be effective in achieving the objectives of the project? (10%)
4. Is the timeline for achieving the proposed objectives appropriate and realistic? (5%)
5. Is the proposed project (i.e., methods and/or technologies) innovative? (10%)
6. Is the proposed technology/methodology transferable to other cold climate locations? (5%)
7. Will the end product (technology, method, information) be useful to the cold climate community within a reasonable time period? (5%)
8. Are the backgrounds and experience of the investigators appropriate for the proposed project? (5%)
9. Does the proposed project include strategies for technology transfer/information dissemination to the cold climate oil spill response and restoration community? (5%)

10. Does the proposed project include an appropriate end user partner(s)? (10%)
11. Are the budget and schedule appropriate for the proposed work? (5%)

IX. Whom to Contact with Questions

For inquiries regarding the general content of an application or your submission, please contact Kimberly Newman (603-862-0832; kim.newman@unh.edu).

Alternatively, you may contact:

Nancy E. Kinner, Ph.D.
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X. Frequently Asked Questions (FAQ)

1. Is this RFP limited to marine habitats including Antarctica or are Great Lakes projects included as well?

Projects focused in the Great Lakes region will be permitted providing they fit the cold climate criteria.

2. Can the proposal be emailed rather than submitted online?

Only preliminary proposals submitted via the online submittal area will be reviewed and considered for full proposal submittal. Access to the online submittal area is made through the CRRC website (www.crrc.unh.edu); click on "Funding Opportunities" to review the RFP and initiate your preliminary proposal submittal.

3. This RFP addresses cold climate regions; will there be other RFPs that include a broader range of climate zones?

CRRC (www.crrc.unh.edu), CICEET (www.ciceet.unh.edu) and MMS (www.mms.gov) release annual RFPs that are applicable in other regions. Please see the "Funding Opportunities" links on these websites for additional funding opportunities.

4. Are state or federal employees eligible to submit preliminary proposals?

Both state and federal personnel are eligible to submit preliminary proposals. Federal agency personnel may be eligible provided they can document statutory authority to supplement their appropriations with funds from other federal programs and entities. However, federal applicants may not request salary compensation.

5. I have set up my username and password, why can't I login to the website and enter my preliminary proposal?

Once your username and password have been set up, you will receive a confirmation email which provides a link to access the submittal area. If you do not receive an email confirmation and you have a spam filter, please check to see if the filter has captured the email. You will not be able to login until you receive the confirmation email.