U.S. Department of the Interior
Bureau of Ocean Energy
Management, Regulation, and Enforcement (BOEMRE)
Offshore Energy & Minerals Management
Environmental Studies Program

Program Announcement No. M10AS00007

BOEMRE FY 2011 Alaska Coastal Marine Institute

CFDA No. 15.421

June 29, 2010

I. Funding Opportunity Description

This Program Announcement provides the vehicle for the University of Alaska to submit proposals with matching funds to the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) for consideration for funding in Fiscal Year 2011. This announcement provides general information on suitable topics for research.

The Environmental Studies Program (ESP) of the BOEMRE is offering a cooperative agreement opportunity through the University of Alaska Coastal Marine Institute (CMI) to the University of Alaska – Fairbanks and other units within the University of Alaska system that have the ability to conduct research in topics that serve the public interest of safe and environmentally sound energy production and meet the goals of the BOEMRE Offshore Energy & Minerals Management Program. The Offshore Energy & Minerals Management program oversees the exploration and development of oil, natural gas and other minerals and renewable energy alternatives on the nation's outer continental shelf. Section 1346 of the Outer Continental Shelf Lands Act (OCSLA) mandates the conduct of environmental and socioeconomic studies needed for the assessment and management of environmental impacts on the human, marine, and coastal environments which may be affected by oil and gas, renewable energy, or other mineral development. OCSLA Section 1345 authorizes the use of cooperative agreements with affected States to meet the requirements of OCSLA, including sharing of information, joint utilization of available expertise, formation of joint monitoring arrangements to carry out applicable Federal and State laws, regulations, and stipulations relevant to outer continental shelf operations both onshore and offshore.

The Alaska CMI at the University of Alaska was established to use highly qualified scientific expertise within Alaska to collect and disseminate environmental information needed for OCS oil and gas, renewable energy, and marine minerals decisions; address local and regional OCS-related environmental and resource issues of mutual interest; and strengthen the BOEMRE-State partnership in addressing OCS oil and gas, renewable energy, and marine ecosystem information needs.

BOEMRE seeks studies from the University of Alaska that will provide public benefit in several ways. It will stimulate the application of science to problem solving and protection of natural resources. It will promote educational opportunities in the ocean sciences. It will lead to protection of natural resources of value to subsistence lifestyles. The research will inform the public and resource managers at the local, state and federal level who make decisions about issues relating to offshore oil, gas, renewable energy and other marine minerals.

The most relevant studies will supply information to support the analysis of the potential effects of offshore development, including oil spill risk analysis and mitigation of potential impacts to the human and biological environment.

Results may be cited in Environmental Impact Statements and Environmental Assessments of 5-year leasing plans, offshore leases, exploration plans, and development plans in the Beaufort Sea and Chukchi Sea. Examples of BOEMRE environmental analyses can be seen at http://www.mms.gov/alaska/ref/eis_ea.htm.

Guidance on suitable topics, the application, and submission information follows.

Areas of BOEMRE Interest

Type of studies that may be funded

The general type of studies that may be funded include scientific studies for better understanding marine, coastal or human environments affected or potentially affected by offshore oil and gas or other mineral exploration and extraction on the outer continental shelf; modeling studies of environmental, social, economic, or cultural processes related to OCS gas and oil activities in order to improve scientific predictive capabilities; experimental scientific studies for better understanding of environmental processes, or the causes and effects of OCS activities; projects which design or establish mechanisms or protocols for sharing data or information regarding marine or coastal resources, or human activities to support prudent management of oil, gas and marine mineral resources; and synthesis studies of scientific environmental or socioeconomic information relevant to the OCS gas and oil program. Workshops and literature syntheses will also be considered for funding under this announcement.

Geographic areas of interest

The most relevant geographic areas are Outer Continental Shelf oil and gas lease areas in the Beaufort Sea or the Chukchi Sea. It is extremely unlikely that projects outside of these areas would be supported.

Proposals for topics that may be highly relevant but outside of these geographic areas should be discussed with the CMI Director and BOEMRE contacts in advance of proposal development.

Broad science areas of interest

The most relevant studies will supply information to support the analysis of the potential effects of offshore development, including oil spill risk analysis and mitigation of potential impacts on the biological and human environment.

BOEMRE Environmental Studies Program research focuses on the following broad issues associated with the development of OCS natural gas, oil, renewable energy and minerals: What are the fates and effects of potential OCS-related pollutants (e.g., oil, noise, drilling muds and cuttings, products of fuel combustion) in the marine and coastal environment and atmosphere? What biological resources (such as fish populations) exist, and what resources are at risk? What is the nature and extent of the risk to biological resources? How do OCS activities affect people in terms of jobs and the economy? What are the direct and indirect effects on local culture?

New science area of interest

The potential for renewable energy development such as wind, wave, or ocean current in the offshore (three miles or more offshore) has gained increasing attention and environmental studies related to potential impacts will be given consideration if such resources were developed in the Cook Inlet area.

Beaufort Sea and Chukchi Sea Science Interests

Premised on offshore oil and gas development activities in the Beaufort Sea and Chukchi Sea offshore area, BOEMRE currently sponsors research, and will consider proposals that develop new insights related to the following questions:

- What are the current spatial and temporal use patterns of these planning areas by species that are potentially sensitive, such as marine mammals, seabirds and other birds, or fish, zooplankton, benthic and epibenthics, and primary producers?
- What changes might occur in habitat use, distribution, abundance, movement, or health of key, potentially sensitive species such as waterfowl, polar bears, other marine mammals, fish and lower trophics?
- What refinements are there to our knowledge of major oceanographic and meteorological processes and how do they influence the human, marine and coastal environment?
- What long-term changes in heavy metal and hydrocarbon levels may occur near Beaufort Sea development prospects such as Liberty or regionally along the Beaufort Sea coast?
- What effects might pipeline construction have on nearby marine communities or organisms?
- What changes might occur in sensitive benthic communities such as the Beaufort Sea kelp communities or fish habitats?
- If oil is spilled in broken ice, what will its fate be?
- What role will currents play in distribution of anthropogenic pollutants near development prospects?
- What interactions between human activities and the physical environment have affected potentially sensitive species?
- What changes might occur in socioeconomics and subsistence lifestyles of coastal Alaska communities?
- What are current subsistence harvest patterns and what changes might occur in key social indicators as a result of offshore exploration and development?

Topics not included in this list that you think may be highly relevant should be discussed with the CMI Director.

Additional Information about Potential Upcoming Studies

Brief profiles for many potential upcoming studies can be found in the Alaska Annual Studies Plan.

Uses of study results and information by BOEMRE are explained in the Programmatic Overview in Section 1.3 and detailed in the individual profiles of studies proposed for FY 2011 in Section 2.2 of the Alaska Studies Plan which is available at http://www.mms.gov/Alaska/ess/essp/sp.htm. In addition, examples of ongoing and past BOEMRE studies are available online at http://www.mms.gov/Alaska/ess/index.htm

The annual progress report for ongoing CMI studies may be informative, and can be found at http://www.mms.gov/alaska/ess/cmi/xcmi.htm or on the CMI website at http://www.sfos.uaf.edu/cmi/.

II. Award Information

The ***total*** amount of funding available in FY 2011 is $500,000. The BOEMRE anticipates making cooperative agreement awards in Fiscal Year 2011 for 6 to 8 proposals submitted under this program announcement, however, individual proposals are not restricted to a set level of funding. Work performance under these awards must start before October 1, 2011 and the proposed work must be completed no later than five years from the start date. Additional information regarding multi-year proposals is presented in the "Multi-Year Proposal" section below.

Awards will be cooperative agreements. These involve substantial involvement by BOEMRE scientists in various aspects of study development and/or study conduct.

Multi-Year Proposals:

If the proposed work is such that two years or more are required to complete the research, then a multi-year proposal is appropriate and the applicant is encouraged to write proposals accordingly. However, proposals should clearly define the work to be completed in the first, second, and each succeeding year, and the evaluation panel reserves the option to fund only the first year of a multi-year proposal. The remaining years of funding for a multi-year cooperative agreement are contingent upon the availability of funds and satisfactory progress demonstrated by the recipient. Progress will be determined through technical review of quarterly and annual progress reports and other work identified by the BOEMRE project officer.

III. Eligibility Information

University of Alaska Faculty and Staff are eligible to apply under this announcement. Research projects are required to have a University of Alaska faculty or staff member as the Principal Investigator. Other university researchers and organizations interested in collaborating with the University of Alaska can contact them at the address shown in Section VIII.

Cooperative research between University of Alaska scientists and various state agencies is always encouraged. Section VIII identifies the University of Alaska contact information for these discussions.

One-to-one matching of BOEMRE funds is required but on rare occasions exceptions may be considered. Match cannot include value associated with collection costs for samples previously collected. Match value for instrumentation and other equipment should be adjusted to the period of use within the project relative to the full life cycle for the item.

IV. Application and Submission Information

1. Location of Application Package

All University of Alaska applications must be submitted through the www.Grants.gov portal at "Apply for Grants". Applicants can locate the application package by visiting the Grants.gov portal and searching on CFDA number 15.421 in the Grants.gov search engine.

The electronic submission system requires several preliminary registration steps before the actual proposal can be submitted (go to www.grants.gov. and click on the red "Get Registered" link on the left for the instructions). The application will be submitted according to the format provided below. Following this format ensures that every application contains all essential information and is evaluated equitably. *Additional information about proposal submission, project deliverables, and examples of application formats can be found at the Coastal Marine Institute website: http://www.sfos.uaf.edu/cmi/.*

2. Content and Form of Applications

The application process begins by downloading Adobe 8.1, 9.0, 9.1, or 9.2 at http://grantsgov.tmp.com/static2007/help/download_software.jsp#adobe811. The Adobe software will enable the applicant and all interested parties to view and complete the following required application forms:

SF-424 Application for Federal Assistance
SF-424a Budget Information
SF-424b Assurances – Non-Construction Programs
Project Narrative Form
Budget Narrative Form
University of Alaska Budget Form and Budget Justification
GG Certification Regarding Lobbying Form
(Complete the Optional SF-LLL Lobbying form if lobbying has occurred)

3. Proposal Cover Sheet

The cover sheet of the proposal shall contain the following information:

Project Title:
Principal Investigator(s):
Name:
Address:
Phone:
FAX:

Email:
Name of university/department:
Contact information for Technical and Administrative Negotiations
Project Status: New/Continuation
Project Duration: (years)
Proposed Start Date:
Proposed Draft Final Report Submission Date:
Proposed Completion Date:
Amount Requested From BOEMRE:
Amount and Source of Non-Federal Match:
Total Project Cost:
Signature, Name and Contact Information of University Principal Investigators:
Proposal Endorsement, including Signature, Name and Contact Information of Sponsoring University Department Dean or Institute Director:
Signature, Name and Contact Information of Vice-Provost, Office of Special Programs, University of Alaska:

4. Proposal Text

The proposal text and budget should be no longer than 25 pages not including literature citations, resumes and budget information. The text for multi-year proposals may be up to 35 pages. Please include the following in the Proposal.

a. Abstract
b. Background/Relevance to BOEMRE Issues, Information Needs, and Research Topics - Give a brief introduction to the research problem. State how the proposal addresses BOEMRE goals. Explain why the work is important. Specify the contribution to science related to oil and gas development and the benefits that society will receive from the study. Proposals should describe why the research is important to Alaska offshore oil and gas development issues. Provide a brief summary of findings or outcomes of any prior work you have completed in this area.
c. Objectives/Hypotheses - Clearly define goals of the project.
d. Methods/Analyses - List all references to which you refer in text and references from your past work in the field that the research problem addresses. Be sure to identify references as journal articles, chapters in books, abstracts, maps, digital data, etc.
e. Data Management, Data Security and Data Archiving Plan: Copy of data files to be delivered to BOEMRE and a copy archived with National Oceanographic Data Center (NODC), or National Environmental Satellite, Data, and Information Service (NESDIS).
f. Logistics plan
g. Safety management
h. Permits/Interagency coordination/Local Coordination
Local involvement/Traditional knowledge/Outreach: <u>The BOEMRE considers involvement of local residents in the design and execution as well as</u>

dissemination of research data and results to be an integral and crucial aspect of projects funded by this program.

Applicants are strongly encouraged to actively involve local residents in the study and to disseminate research results to the local community, the scientific community and appropriate professional organizations; local, State, regional and Federal agencies; and the general public. The BOEMRE encourages the Recipients to publish project reports in scientific and technical journals.

i. Project management/Staffing plan - List the University Principal Investigator first, followed by the names of other individuals. Indicate the role for each participant in the project (oceanographer, geochemist, field assistant, etc.). Include a brief vita for each identified participant. Emphasize previous experience in the field of study that the proposal addresses.
j. Performance Measures – Applicants shall suggest measures that can be used to monitor project progress, including that of sub-awardees e.g. quality and timely deliverables, draft peer review articles. These performance measures will be incorporated in the cooperative agreement award.
k. Letters of Commitment - At the time of the proposal submission, the letters of commitment by matching funds grantors, contractors, and sub-grantees may be submitted without final signatures. However, signed letters of commitment must be delivered to CMI and transmitted to BOEMRE by December 1, 2010.
l. Project Deliverables and Planned Products - List product(s) (reports, analyses, maps, digital data, etc.) that will be delivered during the performance period. Quarterly, annual, draft and final reports and draft and final technical summaries are required. Images and data are also standard deliverables. A draft publication with plans to submit results to peer-review journals is also encouraged. Include annual presentations at CMI research reviews and annual presentations in Anchorage at a meeting to be designated by BOEMRE (e.g. a BOEMRE Information Transfer Meeting, Alaska Marine Science Symposium) in the proposal and budget.
m. Reports and Publications from Previous CMI Support
n. Reports and Publications Relevant to Current CMI Proposal
o. Budget - In addition to SF-424a Budget Information form in item 2 above include information in a format which provides personnel, travel, services, supplies, equipment, tuition, and indirect costs on an annual basis for both the requested BOEMRE funds and for the anticipated match funds.
p. UAF Budget Spreadsheet and Budget Justification (see item 5 “Budget Narrative” below)
q. Names and contacts for three suggested Peer Reviewers
r. Timeline (including deliverables)
s. Critical starting dates (e.g. for season-limited field work)

5. Budget Narrative

This information will provide more details than the SF-424A form (step 2 above) and will provide adequate information for the Contracting Officer to conduct a detailed analysis of the costs to determine they are reasonable, allowable and allocable. Please include the following:

a. Salaries and Wages. List names, positions, and rate of compensation. If contract employees are hired, include their total time, rate of compensation, job titles, and roles.
b. 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.
c. Lab Analyses. Briefly itemize cost of all analytical work.
d. Supplies. Enter the cost for all tangible property. 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.
e. 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 include a full justification and a dealer or manufacturer quote, if available. General-purpose equipment (used for purposes other than this project) 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.
f. 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.
g. 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. Applicants should include in the proposal a plan to present findings at two major meetings, one of which will be the BOEMRE Information Transfer Meeting held in Anchorage, Alaska and the other subject to post-award guidance.
h. Publication costs. Show the estimated cost of publishing the results of the research, including the final report. Include costs of drafting or graphics, reproduction, page or illustration charges, and a minimum number of reprints. Applicants should include in the proposal a plan to present findings at two major meetings, one of which will be the BOEMRE Information Transfer Meeting held in Anchorage, Alaska and the other subject to post-award guidance.
i. Digital Images. All projects should plan to provide BOEMRE with no less than 20-30 digital images related to the research activity.

j. Other direct costs. Itemize the different types of costs not included elsewhere; such as, shipping, computing, equipment-use charges, or other services.
k. Total Direct Charges. Totals for items a - j.
l. Indirect Charges (Overhead). Indirect cost/general and administrative (G&A) cost. Show the proposed rate, cost base, and proposed amount for 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.
m. Amount proposed. Total items k and j.
n. Multi-year projects. The Applicant shall provide summary information as well as a detailed budget for each year.

V. Application Review Information

Proposals will be reviewed by BOEMRE, the CMI Technical Steering Committee, and external peer reviewers. Reviewers have expertise in the Federal offshore oil and gas program and/or the specific scientific discipline of the proposal. Evaluation Criteria for the panel is as follows:

Evaluation Criteria. All proposals will be evaluated in accordance with the following criteria:

1. **Relevance to BOEMRE Mission**
   Is the proposed study relevant to BOEMRE mission, information needs and issues stated in the Announcement? Does it fit within the type of studies to be funded?

2. **Scientific quality and impact:**
   Is the proposed study of high scientific quality that insures a high likelihood of scientific success? Are high quality, clear hypotheses provided? Are the tools selected for research appropriate?

3. **Work plan/ Methodology**: Is the strategy clear and designed for success? Are proposed methods adequate to meet objectives? Are the geographic areas selected for study appropriate? Are logistics, safety, and permits/interagency coordination adequately addressed? Does the timeline match the proposal and reality? Are the scientific objectives appropriate for proposed time frame? Does the timeline provide for submission of the draft final report six months before project end date to ensure adequate time for review, revision, editing, and printing?

4. **Planned Products and Dissemination of Results:**
   Will the products respond to BOEMRE needs? Are the products clearly defined? Are the results planned to be disseminated through outreach and published in a peer-reviewed form? Does the proposal indicate PI will submit database in format compatible with BOEMRE GIS and include metadata compliant with current Federal Geographic Data Committee standards? Does the proposal indicate data will be archived with the National Environmental, Satellite, and Data Information

Service/National Oceanographic Data Center (NESDIS/NODC) or National Ice Data Center (NIDC)?

5. **Budget Justification and Clarity:**
   Is the staff sufficient to accomplish the proposed goals? Are field expenses, supplies, lab work, and other expenses appropriate? Are expenses adequately itemized? Is adequate match demonstrated? Is a preliminary Letter of Commitment of match included?

6. **Experience/Competence of Research Personnel:** Have the applicants demonstrated (through bibliographic references, previous experience, awards, etc.) that they are capable of doing the proposed research? Have the applicants demonstrated a thorough knowledge of the scientific problem? Is the PI(s) a UA faculty or staff member who will be substantially involved in the proposed study? Was past research completed in a competent and timely fashion? Were results and data published in peer-reviewed scientific or technical journals? For recent CMI award recipients: Was the CMI study completed in a competent and timely manner? Were reporting requirements from previous CMI awards satisfied? Were results and data published in peer-reviewed scientific or technical journals?

VI. Award Administration Information

The recipient is responsible for managing the day-to-day operations of the cooperative agreements and sub-awards to ensure compliance with applicable Federal statutes, regulations and policies. The recipient is also responsible for meeting the performance goals identified in the Proposal Text.

Acceptance of a Federal Financial Assistance award from the Department of the Interior (DOI) Bureau of Ocean Energy Management, Regulation, and Enforcement carries with it the responsibility to be aware of and comply with the terms and conditions of award. Acceptance is defined as the start of work, drawing down funds, or accepting the award via electronic means. Awards are based on the application submitted to, and as approved by BOEMRE, and are subject to the terms and conditions incorporated either directly or by reference in the following:

- Program legislation\regulation.
- Special terms and conditions.
- Code of Federal Regulations/Regulatory Requirements, as applicable (Contact the Contracting Officer with any questions regarding the applicability of the following):

2 CFR Part 175 Trafficking Victims Protection Act of 2000

2 CFR 1400 Nonprocurement Debarment and Suspension

43 CFR 12(A) Administrative and Audit Requirements and Cost Principles for Assistance Programs

43 CFR 12(C) Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

43 CFR 12(E) Buy American Requirements for Assistance Programs

43 CFR 12(F) Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and other Non-Profit Organizations

43 CFR 18 New Restrictions on Lobbying

43 CFR 43 Governmentwide Requirements for Drug-Free Workplace (Financial Assistance)

Reporting

The BOEMRE will conduct oversight and monitoring of the work progress and financial status of each cooperative agreement by requiring the following, at a minimum:

1. Federal Cash Transactions Reports

The recipient must submit the Standard Form 425, Federal Financial Report and, when necessary, its continuation form if funds are withdrawn in advance of expenditures. The BOEMRE will use the form to monitor the cash advanced to the recipient, and to obtain disbursement or outlay information for each cooperative agreement.

2. Performance and Financial Status Reporting Requirements

Reporting requirements for the projects are regulated by 43 CFR Part 12. These regulations specify basic cooperative agreement reporting requirements including performance and financial reports. BOEMRE will work closely with the recipient to incorporate appropriate performance and financial reporting requirements into each cooperative agreement award, consistent with 43 CFR Part 12. These regulations provide some flexibility in determining the appropriate content and frequency of performance and financial reports. At a minimum, however, the reporting schedule will require the recipient to report their progress at least quarterly through the established CMI reporting process and yearly submission of financial status reports.

3. Single Audit Requirements

Nonfederal entities that expend financial assistance of $500,000 or more in Federal awards must have a single or a program-specific audit conducted for that year. Nonfederal entities that expend less than $500,000 in Federal awards are exempt from Federal audit requirements for that year, except as noted in Circular No. A-133.

4. Technical Reporting Requirements

Quarterly Reports, Annual Progress Reports, Draft and Final Reports, and Draft and Final Technical Summaries are required. Details are available at:
http://www.mms.gov/alaska/ess/SectionJ/sectionj.htm

VII. Agency Contacts

Grants.gov:
Technical questions concerning the application process:
Grants.gov Help Desk at:
Phone: 1-800-518-4726
Email: support@grants.gov

Program Announcement and Cooperative Agreement Questions:
Procurement Operations Branch
381 Elden Street, MS 2101
Herndon, Virginia 20170
Attn: Ms. Christy Tardiff
Phone (703) 787-1367
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Program Offices:
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VIII. Other Information

Dissemination of Research Results. The BOEMRE considers dissemination of research data and results to be an integral and crucial aspect of projects funded by this program. Applicants are strongly encouraged to disseminate research results to the scientific community and appropriate professional organizations; local, State, regional and Federal agencies; and the general public. The BOEMRE encourages the Recipients to publish project reports in scientific and technical journals.

Planning Horizon for Field Work. BOEMRE cannot guarantee award notifications will be given by the beginning of calendar year 2011. Therefore, proposals should carefully consider logistical lead times and plans for field work. Plans for field work before June 2011 may not be feasible.

University of Alaska Coastal Marine Institute Contact Information:

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