

**U.S. Department of the Interior
Bureau of Ocean Energy Management (BOEM)
Environmental Studies Program**

Program Announcement No. M20AS00004

**Demonstration Project, Integrating DNA Profiles, Genomics and
Photo-Identification Data**

CFDA No. 15.423

**Revised
March 6, 2020**

I. Funding Opportunity Description

Overview: The Environmental Studies Program (ESP) of the Bureau of Ocean Energy Management (BOEM) is offering a cooperative agreement to complete a demonstration Project on Integrating DNA Profiles, Genomics and Photo-Identification data. The objective of this study is to improve the current computation capabilities for integrating DNA profiles with photo-identification records for assessment and long-term monitoring of marine mammal populations. To provide a standardized database architecture, with associated tools for primary analyses and visualization of individual genetic and genomic profiles as well as spatial-temporal records. An important component of this objective is to develop ‘community standards’ that can be applied across multiple species, as well as multiple investigators, and that promotes data sharing and archiving. Continuation of the development of previously funded work on GeneGIS towards the development of a Web-based, collaborative collection could form a model for similar developments with other species of interest to BOEM.

Authorities: Section 1346 of the OCS 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 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, and 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.

Background: Numerous types of studies have been conducted on cetaceans in the U.S. outer continental shelf (OCS), leading to challenges in the analysis and synthesis of diverse datasets, particularly those from long term studies of populations exposed to anthropogenic impacts. The Marine Mammal Protection Act, National Environmental Policy Act and the Endangered Species Act require BOEM to consider the impacts of energy and mineral extraction activities on cetaceans. Together with others, BOEM has funded many studies where a number of groups have collected biopsy samples for genetic analyses and photographs for individual identification. In addition, many cases of OCS research across program areas and regions included satellite telemetry for studies of habitat use. For example, over the last decade, several publications and reports (e.g., Sperm Whale Seismic Study [SWSS]) refer to collecting large numbers of biopsy samples and photo-identification records and more have been collected. DNA profiles and photo-identification records are increasingly used for defining units of management and for estimating abundance and trends in populations using capture-recapture models. To date, however, there is no catalogue of individual identity for a population or accessible archive that integrates DNA profiles and photo-identification. A Web-based, distributed-access

data archive compatible with the Ocean Biogeographic Information System (OBIS) format can consolidate this data. This type of effort will enable and guide new analyses to inform future management questions regarding cetacean populations, including abundance, range, distribution, and stock identity. A similar information need has been recognized by the Office of Naval Research in their funding of the development of the geneGIS (<http://www.genegis.org/>) tools for the Structure of Populations, Levels of Abundance, and Status of Humpbacks (SPLASH) program on humpback whales in the North Pacific. However, although there are different groups working on including genetics in population assessments such as, for example, GOM Sperm Whales, there is currently no mechanism to centralize/unite these various efforts.

Information needs met by this study include standardization and archiving of DNA profiles from past and ongoing studies, e.g., mtDNA haplotypes for maternal lineages, sex identification and microsatellite genotypes for individual identification. The DNA profiles derived from multi-locus genetic markers are typically laboratory specific and their format is not compatible with public genetic archives such as GenBank® (<http://www.ncbi.nlm.nih.gov/genbank/>). This project will increase management effectiveness and improve estimates of abundance based on either photo-identification or genotype capture-recapture, complementing the conventional use of genetic markers for describing stock structure. Life history parameters based on mortality can also be derived from capture-recapture models. Visual exploration and spatial analyses of 87 individual-based records from DNA profiles and photo-identification records will be improved. This enables investigators and managers to better understand the population structure and abundance as well as mortality events. This proposed project ties-in closely with existing efforts to monitor cetacean ecology in the GOM, Alaska and Atlantic regions, by creating a database framework that affords a directory to biological sample analysis across varying studies using a common Web framework. Information obtained will ensure that BOEM complies fully with environmental regulation and considers the impacts of its programs on these endangered species, while building capacity for further study by other BOEM regions using the same infrastructure.

Purpose: The general goals of this project is to integrate genetic/genomic profiles with distributed photo-identification databases for improved population structure definition in BOEM program areas.

Scope of objectives: Specifically, the objectives of this study are to: 1) Improve the current computation capabilities for integrating DNA profiles with photo-identification records for assessment and long-term monitoring of marine mammal populations. 2) To provide a standardized database architecture for distributed access, with associated tools for primary analyses and visualization of spatial-temporal records. 3) Develop 'community standards' that can be applied across multiple species, as well as multiple investigators, and that promotes data sharing and archiving.

Description of work (tasks)

Task 1. Conduct a facilitated workshop which relevant data stakeholders (Both internal and external to the government) to ensure all available relevant data (genetic, photo-ID) is included in the analysis for marine mammal population monitoring.

Workshop organization duties may include the following;

1. Assemble invite list in coordination with BOEM that includes a one page summary of workshop goals and any proposed read ahead materials.
2. Contractor will provide a facilitator or graphic facilitator.
3. Draft initial invite letter
4. Contractor will develop an agenda in concert with the BOEM principal investigator including specific times for remote participants to join.
5. Put together an attendee list for workshop attendees that includes name, affiliation, title, and email contact information
6. Arrange travel requirements for all non-government staff
7. Ensure remote participation is adequate and able to be used by a wide audience with little technical understanding.
8. Organize presentations
9. Conduct effectiveness evaluation
10. Select and distribute read-ahead materials
11. Manage all details surrounding in-person meetings. For example, How do we want chairs set up in the room, are there enough outlets, personal microphones
12. Support communications with attendees
13. Liaise for technical needs for workshop location, including technical support for attendees.
14. Ensure all attendees have a workshop packet of background information
15. Make materials available as a downloadable pdf and in print.
16. Ensure attendee presentations are loaded on a computer
17. Collect all attendee presentations for inclusion in a workshop report.
18. A summary draft report of the workshop and facilitation graphics will be provided within 30 days of the workshop in the accepted BOEM format for inclusion in the Environmental Studies Information System

Task 2. Produce a comprehensive workshop report that consists of background information, summaries of presentations, why and how and conclusions were drawn.

Task 3. Develop ‘community standards’ that can be applied across multiple species, as well as multiple investigators, and that promotes data sharing and archiving of genetic/genomic records with photo-identification data.

Task 4. Improve the current computation capabilities for integrating DNA profiles with photo-identification records for assessment and long-term monitoring of marine mammal populations.

Task 5. Provide a standardized database architecture framework for distributed access, with associated tools for primary analyses and visualization of spatial-temporal records.

Task 6. Incorporate distributed computing and artificial intelligence to improve ability to gather, verify, quality control data products.

Task 7. Create a minimum of two animated gifs, one informational graphic in support of non-technical science communications. This can include basic explanation of subject matter, methods, or focus species.

Study Area: Implementation of this study should focus on species which co-occur in the vicinity of BOEM permitted activities and have ample genetic and photo-id data.

II. Award Information

The ***total anticipated*** amount of funding available in FY 2020 is approximately \$200,000, with additional funds in subsequent fiscal years, subject to the availability of funds, and noting that funds requested for the final year of performance shall comprise a minimum of 15% of the project's total anticipated budget request. Although the study proposal may not have a total budget exceeding \$350,000 in funds requested from BOEM, Matching contributions from the applicant are encouraged but not required. BOEM anticipates making one cooperative agreement award in Fiscal Year 2020 for 1 proposal submitted under this program announcement.

Work performance under this award must start before October 1, 2020 and the proposed work must be completed no later than twenty four (24) months from the start date. Additional information regarding multi-year proposals is presented in the "Multi-Year Proposal" section below.

This Program Announcement describes the specific project that may be awarded to the universities or eligible groups identified. All awards are premised on receipt of an acceptable proposal. This is not an open solicitation for proposals.

This announcement is specifically to announce intent to undertake the following project:

- **Project Title:** Demonstration Project, Integrating DNA Profiles, Genomics and Photo-Identification Data
- **Open to:** Pacific Northwest Cooperative Ecosystem Studies Unit

No other proposals are requested at this time.

The award will be a cooperative agreement (with the exception of tasks performed by Federal partners – see Eligibility Information below). This involves substantial involvement by BOEM scientists in various aspects of study development and/or study conduct.

Multi-Year Proposals:

Proposals shall clearly define the work to be accomplished each year. BOEM reserves the option to fund only the first year of a multi-year proposal. Funding for subsequent years of a multi-year cooperative agreement is 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 BOEM Project Officer. Funds requested for the final year of performance shall comprise a minimum of 15% of the project's total anticipated budget request.

III. Eligibility Information

The specific project identified in Section 2 is intended for the organizations identified through the Pacific Northwest Cooperative Ecosystem Studies Unit (CESU) (<http://www.cesu.edu>). However, cooperative research (establishment of teams) is encouraged. Applicants may not be outside of the Pacific Northwest CESU; however, the applicant may include subcontracts to non-profit organizations, private institutions of higher education, private companies or public and state-controlled institutions of higher education within their proposal.

Contributions of matching funds towards these efforts, either as cash or in-kind contributions (such as salary, equipment, etc., or a combination of both) is strongly encouraged. Match cannot include value associated with collection costs for data/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. Matching dollars cannot be from other federal funding sources. Further information can be located at 2 CFR 200.306.

Federal entities as partners are allowed, however the tasks performed by the Federal partner and the associated budget must be presented separately by the Federal partner. Other non-federal organizations may be partners and their tasks and budgets should be included in the non-profit's proposal.

All questions regarding this project, including eligibility, should be directed only to the Program Announcement and Cooperative Agreement Questions point-of-contact listed in Section VII.

IV. Application and Submission Information

1. Proposal Submission: Proposal must be submitted by May 1, 2020.

2. Location of Application Package

All 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 15.423 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 “Applicants” on top menu bar, go to “Apply for Grants”, Register as an Organization.

3. Content and Form of Applications

The application process begins by downloading Adobe Reader (version 9.0.0 and later) at <http://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html>. 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 (including Proposal Cover Sheet described below)
- Budget Narrative Form
- Budget Form and Budget Justification
- GG Certification Regarding Lobbying Form
- (Complete the Optional SF-LLL Lobbying form only if lobbying has occurred)

4. 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 Organization:

Contact information for Technical and Administrative Negotiations

Project Status: New/Continuation

Project Duration: (years or months)

Proposed Start Date:

Proposed Draft Final Report Submission Date:

Proposed Completion Date:

Amount Requested From BOEM:

Amount and Sources of Non-Federal Match:

Total Project Cost:

Video Abstract: A link to a brief, less than two minute, video abstract should be included. This should summarize the importance of the proposed research and clearly explain why this research is important for BOEM resource management.

Signature, Name and Contact Information of Organization's Principal Investigator and Co-Investigator:

Proposal Endorsement, including Signature, Name and Contact Information of Sponsoring Organization or Institute Director:

5. Proposal Text

The proposal must be in 12 point Times New Roman, Arial, or similar font with 1" page margins. Non-conforming proposals will not be considered. The text should be no longer than 25 pages. Please include the following in the Proposal:

a. Abstract

b. Video Abstract: A video abstract as an introduction to your proposal should be submitted as part of a complete application package. The video abstract is intended to introduce the technical program evaluation committee to your proposal in your own words, explaining, to a non-technical audience, how this proposal accomplishes BOEM's objectives and advancing the highest quality science decision makers need environmental assessment.

Video abstracts should:

- Format: .mov, .mpg, or .mp4
- Maximum file size: 200 MB
- Aspect ratio: 16:9, square pixels, deinterlaced (landscape format is best)
- Frame rate: 24, 25 or 30 fps
- Frame type: 1080p (min)

c. 240 Character Non-Technical Proposal Summary

d. Background/Relevance to BOEM Issues, Information Needs, and Research Topics:

Give a brief introduction to the research problem. State how the proposal addresses BOEM goals. Explain why the work is important. Specify the contribution to science related to renewable energy issues, oil and gas development, or marine minerals production and the benefits that society will receive from the study. Proposals should describe why the research is important to offshore energy development issues. Provide a brief summary of findings or outcomes of any prior work you have completed in this area.

e. Objectives/Hypotheses: Clearly define the goals of the project.

f. Methods/Analyses: Provide a clear description of planned methodologies and analyses

g. Data Management, Data Security and Data Archiving Plan: Provide copies of data files with metadata to BOEM in a format that meets Federal data standards (e.g., current Federal Geographic Data Committee standards). Copies shall also be archived with the National Environmental Satellite, Data, and Information Service (NESDIS), or other appropriate Federal Data Repository.

h. For studies involving field work, or as otherwise appropriate, applicants shall provide plans for Logistics, Safety Management, and necessary Permits/Interagency coordination/Local Coordination

i. Project Management/Staffing Plan: All key personnel (including graduate student workers) shall be identified. List the non-profit's Principal Investigator first, followed by the names of other individuals. Indicate the role (oceanographer, anthropologist,

geochemist, field assistant, etc.) and anticipated level of effort for each participant in the project. If names of some participants are unknown at the time the proposal is first submitted, a proposal addendum with the names and vitae must be submitted prior to award.

j. Performance Measures: Applicants shall suggest specific measures that can be used to monitor project progress, including that of sub-awardees e.g., quality and timely deliverables, timely completion of fieldwork or other project components, draft peer reviewed articles. These performance measures will be incorporated into the cooperative agreement award and reviewed as part of any continuation request.

k. Timeline (including deliverables): Provide for submission of the draft final report six months before project end date to ensure adequate time for review, revision, and publication.

l. Critical starting dates (e.g., for season-limited field work): Identify any critical starting dates and the reason why project success is dependent upon that start date.

m. Project Deliverables and Planned Products: List product(s) (reports, analyses, maps, digital data, etc.) that will be delivered during the performance period. Quarterly, draft and final annual reports, and draft and final technical summaries are required. Images and data are also standard deliverables.

n. Publication and Presentation: BOEM strongly encourages the Recipients to publish project reports in scientific and technical journals, and present results to the scientific community, appropriate professional organizations, and local, State, and Federal agencies. In conjunction with the BOEM co-principal investigator as part of the project. These publications and meetings should be included in the proposal and budget.

o. Bibliography: List all references cited in the text, as well as references that are relevant to the current proposal from your past work in the field.

p. Curricula Vitae (maximum 2 pages) for each identified participant. Emphasize previous experience in the field of study that the proposal addresses.

q. Letters of Commitment: Provide signed letters of commitment by matching funds grantors, contractors, and sub-grantees.

r. Budget Spreadsheet: In addition to SF-424a Budget Information form in section IV.3 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 BOEM funds and for the anticipated match funds.

- s. Budget Justification Narrative: (see item 6 below)

6. Budget Justification Narrative

This information will provide more details than the SF-424a form (section IV.3) 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. Where applicable please include the following:

- a. Salaries and Wages. List positions, rate of compensation and estimated number of hours. If contract employees are hired, also list job titles, number of estimated hours, rate of compensation, and total time.
- 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. Provide a copy of the negotiated rate agreement with the cognizant federal audit agency for the Recipient, and all sub-grantees, if available.
- c. Tuition. Requests for funds for tuition must identify the student by name. The total compensation (including tuition funds, stipend, etc.) requested for the individual must be commensurate with the services to be performed by that individual.
- d. Lab Analyses. Briefly itemize cost of all analytical work.
- e. 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 that represents a significant portion of the proposed amount. Provide a statement that supplies will be purchased in accordance with 2 CFR 200.318-326.
- f. 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 also 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. Provide a statement that equipment will be purchased in accordance with 2 CFR 200.313.

- g. 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. Sub-applicant proposals should provide cost breakdowns at the same level of detail as the Applicant's proposal. If contract employees are hired, include their total time, rate of

compensation, job titles, and roles. Provide a statement that salaries will be charged at the actual rate and that the rate is comparable to others doing similar work within the organization. Note that tasks conducted by Federal partners must have a separate proposal and budget. Federal partners must be funded directly from BOEM via an intra-agency agreement, and cannot be reimbursed directly by the recipient.

h. 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 one to two major meetings (see Section IV.5.1).

i. Publication costs. Show the estimated cost of publishing the results of the research in open source, peer-reviewed literature. Include costs of drafting or graphics, reproduction, page or illustration charges, and a minimum number of reprints.

j. Digital Images. All projects should plan to provide BOEM with no less than 10 digital images and videos related to the research activity.

k. Other direct costs. Itemize the different types of costs not included elsewhere.

l. Total Direct Charges. Totals for items a - k.

m. 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. Provide a copy of the negotiated rate agreement with the Applicant's federal cognizant audit agency.

n. Amount proposed. Total items l and m.

o. Multi-year projects. The Applicant shall provide summary information as well as a detailed budget for each year. Funds requested for the final year of performance shall comprise a minimum of 15% of the project's total anticipated budget.

vi. Budget justification narrative (standard)

V. Application Review Information

Proposals will be reviewed by BOEM scientists, program managers and may also include external peer review. Reviewers have expertise in Federal offshore programs and/or the specific scientific discipline of the proposal.

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

Scientific Quality and Impact (35%)

Are all elements – the tasks – outlined within the scope of work effectively understood and a description provided of how each element will be addressed?

These would include objectives of and past experience creating genetic/genomic profiles for individual animals and developing a population level synthesis while matching to individual photo-id records.

Is there a complete and precise, technically and scientifically sufficient description of the design and methodology for the required services?

Is there a clear statement of how each project deliverable will be accomplished, including major tasks that will lead to achieving the goal, the strategies to be employed, required staffing, and other required resources, tools or techniques?

If applicable, are logistics, safety, and permits/interagency coordination adequately addressed?

Does the applicant have experience coordinating diverse genetic data sets as well as photo-id databases?

Does the applicant have experience developing cloud-based open-source distributed data management for mark-recapture data?

Does the applicant have expertise in genetic analysis and distribution mapping, in particular of cryptic, deep diving, cetacean species?

Does the contractor have the ability to compare samples across geographic regions for haplotype frequencies and export into commonly used software packages for genetic analysis like GenePop.

Does the applicant have the ability to compare samples across geographic regions for haplotype frequencies and export into commonly used software packages for genetic analysis, for example, ArcGIS and GenePop

Does the applicant demonstrate ability to reconcile multiple sources of individual identities, such as photo-id, telemetry and genetic markers?

Organizational and Research Personnel Competency (20%)

Does the proposed project staff possess the skills, knowledge, and expertise necessary to complete the tasks, including all of the elements listed within the project scope of work? Does the applicant agency or institution have the organizational capacity to complete all deliverables? Is diverse student participation involved? If consultants and/or partnerships are proposed, is there a reasonable justification for their inclusion in the project and a clear structure to ensure effective coordination? Does the applicant demonstrate the ability to produce the results offered and according to the timeline proposed? Are the proposed project management and staffing plans realistic and sufficient to complete the project within the award period?

Has the applicant successfully demonstrated the ability to synthesize marine mammal genetic and photo-id profiles?

Budget Justification and Clarity (10%):

Is staff sufficient to accomplish the proposed goals? Are field expenses, supplies, lab work, and other expenses appropriate? Are expenses adequately itemized. Is the proposed budget realistic, does it provide sufficient cost detail/narrative, and does it represent good value relative to the anticipated results? Is the applicant able to work within the time constraints outlined?

Planned Products and Dissemination of Results (10%):

Are the products clearly defined? Will they be useful for environmental stewardship and management activities? Will sample collections and datasets be properly archived and accessible to the public? Will the results be published in a peer-reviewed, evergreen open access, form?

Past Performance (5%)

Were previous studies completed in a competent and timely manner? Were the reporting requirements from previous awards satisfied? Were the results from previous studies published in peer-reviewed scientific or technical journals? Does the applicant have experience in obtaining kinematic, satellite and acoustic data from marine mammal species? Can the applicant provide adequate tools, techniques, analysis and equipment necessary to produce the required deliverables?

Innovation (20%)

Are there any innovative approaches, techniques, or design aspects proposed that will enhance the project?

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.

Awards based on the application submitted to, and as approved by the BOEM, are subject to the terms and conditions incorporated either directly or by reference in the following:

Acceptance of a Federal Financial Assistance award from the Department of the Interior (DOI) Bureau of Ocean Energy Management 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 BOEM, 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 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

2 CFR Part 25 Universal Identifier and System for Award Management

2 CFR Part 170 Reporting Subaward and Executive Compensation Information

2 CFR Part 175 Award Term for Trafficking in Persons

2 CFR Part 182 Governmentwide Requirements for Drug-Free Workplace

2 CFR Part 1400 NonProcurement Debarment and Suspension

2 CFR Part 1401 Requirements for Drug-Free Workplace

2 CFR Part 1402 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

43 CFR Part 18 New Restrictions on Lobbying

The following provisions are included in full text:

Conflicts of Interest

(a) Applicability.

- 1) This section intends to ensure that non-Federal entities and their employees take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements.
- 2) In the procurement of supplies, equipment, construction, and services by recipients and by sub-recipients, the conflict of interest provisions in 2 CFR 200.318 apply.

(b) Requirements.

- 1) Non-Federal entities must avoid prohibited conflicts of interest, including any significant financial interests that could cause a reasonable person to question the recipient's ability to provide impartial, technically sound, and objective performance under or with respect to a Federal financial assistance agreement.
- 2) In addition to any other prohibitions that may apply with respect to conflicts of interest, no key official of an actual or proposed recipient or sub-recipient, who is substantially involved in the proposal or project, may have been a former Federal employee who, within the last one (1) year, participated personally and substantially in the evaluation, award, or administration of an award with respect to that recipient or sub-recipient or in development of the requirement leading to the funding announcement.
- 3) No actual or prospective recipient or sub-recipient may solicit, obtain, or use non-public information regarding the evaluation, award, or administration of an award to that recipient or sub-recipient or the development of a Federal financial assistance opportunity that may be of competitive interest to that recipient or sub-recipient.

(c) Notification.

- 1) Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the DOI awarding agency or pass-through entity in accordance with 2 CFR 200.112, Conflicts of Interest.
- 2) Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The recipient is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by sub-recipients.

(d) Restrictions on Lobbying. Non-Federal entities are strictly prohibited from using funds under this grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43CFR Part 18 and 31 USC 1352.

(e) Review Procedures. The Financial Assistance Officer will examine each conflict of interest disclosure on the basis of its particular facts and the nature of the proposed grant or cooperative agreement, and will determine whether a significant potential conflict exists and, if it does, develop an appropriate means for resolving it.

(f) Enforcement. Failure to resolve conflicts of interest in a manner that satisfies the Government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR 200.338, Remedies for Noncompliance, including suspension or debarment (see also 2CFR Part 180).

Data Availability

(a) Applicability. The DOI is committed to basing its decisions on the best available science and providing the American people with enough information to thoughtfully and substantively evaluate the data, methodology, and analysis used by the Department to inform its decisions.

(b) Use of Data. The regulations at 2 CFR 200.315 apply to data produced under a Federal award, including the provision that the Federal Government has the right to obtain, reproduce, publish, or otherwise use the data produced under a Federal award as well as authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

(c) Availability of Data. The recipient shall make the data produced under this award and any sub-award(s) available to the Government for public release, consistent with applicable law, to allow meaningful third party evaluation and reproduction of the following:

- (i) The scientific data relied upon;
- (ii) The analysis relied upon; and
- (iii) The methodology, including models, used to gather and analyze data.

Reporting

The BOEM will conduct oversight and monitoring of the work progress and financial status of each cooperative agreement by requiring the following information from the Recipient institution, 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 BOEM 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 2 CFR Part 200. These regulations specify basic cooperative agreement reporting requirements including performance and financial reports. BOEM will work closely with the recipient to incorporate appropriate performance and financial reporting requirements into each cooperative agreement award, consistent with 2 CFR Part 200. 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 reporting process and yearly submission of financial status reports.

3. Single Audit Requirements

Nonfederal entities that expend financial assistance funds of \$750,000 or more in Federal awards must have a single or a program-specific audit conducted for that year. Nonfederal entities that expend less than \$750,000 in Federal awards are exempt from Federal audit requirements for that year, except as noted in 2 CFR 200.501.

4. Technical Reporting Requirements (to be submitted by project PI)

Quarterly Reports, Annual Progress Reports, Draft and Final Reports, and Draft and Final Technical Summaries are required. Details and format requirements are available at: [http://www.boem.gov/ Environmental-Studies-Program-Report-Specifications/](http://www.boem.gov/Environmental-Studies-Program-Report-Specifications/)

Acknowledgement of Sponsorship

The Recipients shall acknowledge Federal sponsorship in the draft and final reports by placing the following statement on the disclaimer/acknowledgement page of both reports: “Study collaboration and funding were provided by the U.S. Department of the Interior, Bureau of Ocean Energy Management, Environmental Studies Program under Agreement Number _____.”

The following disclaimer statement shall be placed on the disclaimer/acknowledgement page of both reports: “This report has been technically reviewed by BOEM, and it has been approved for publication. The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.”

The Recipient shall require of all investigators that all manuscripts intended to be published in journals resulting from this study shall be submitted to BOEM for review and comment prior to submittal to the journal, with final revisions remaining subject to

the discretion of the author(s). BOEM encourages recipients to work collaboratively with the BOEM Investigator to collaborate on publications and presentations. BOEM manuscript reviews shall be conducted expeditiously, within a period of 10 business days, and in conformance with the U.S. Department of the Interior Scientific and Scholarly Integrity Policy, as outlined in the DOI Departmental Manual (Part 305: Chapter 3).

All publications and oral presentations shall contain an acknowledgement of support from BOEM under this Cooperative Agreement that reads: “Study collaboration and funding were provided by the U.S. Department of the Interior, Bureau of Ocean Energy Management, Environmental Studies Program under Agreement Number _____.” As well as include the designated BOEM technical contact.

Scientific integrity is vital to Department of the Interior (DOI) activities under which scientific research, data, summaries, syntheses, interpretations, presentations, and/or publications are developed and used. Failure to uphold the highest degree of scientific integrity will result not only in potentially flawed scientific results, interpretations, and applications but will damage DOI’s reputation and ability to uphold the public’s trust. All work performed must comply with the DOI Scientific Integrity Policy posted to <http://www.doi.gov/ScientificIntegrity>, or its equivalent as provided by their organization or State law.

Environmental Studies Program Information System (ESPIS)

ESPIS data will be submitted to the Project Officer as a final deliverable of the study to include the:

1. Final Report and Technical Summary: the copies of the narratives of study results in both Microsoft Word and Adobe Acrobat (PDF/A) formats, without any password protections for open access by BOEM staff and the public, following the [Environmental Studies Program Report Specifications](#).
2. Study Footprint: the geographic information that enables the referencing of the study using a geographic information system, following the study footprint specifications.
3. Study Footprint Metadata: the scientific attribution information required to enhance discoverability of the study in the ESPIS system and third party sites (such as <http://www.data.gov/>), following the study footprint metadata specifications.
4. Study Map: the study area map embedded in the (i) Final Report, and (ii) Technical Summary that depicts the study footprint and that is cited in the study footprint metadata.
5. Federal Geographic Data Committee compliant metadata for each scientific dataset: the scientific, technical, and administrative information for each coherent unit of scientific data, including the physical medium, file information, volume, and access uniform resource locator (URL), when applicable.

6. Copy of related publications: the manuscripts of scholarly publications and conference presentations for research funded by this agreement for free and unlimited use by BOEM staff, which may take the form of a full text, final, pre-publication copy of the related publication in cases that the publisher enforces pay for access or copyright restrictions.
7. Bibliographic information for related publications: the information on each related publication needed for formatting Council of Science Editors bibliographies using the name-date system, including the URL and Digital Object Identifier to access the publication on the publisher's website, when applicable.

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:

Acquisition Policy and Financial Assistance Branch

Bureau of Safety and Environmental Enforcement

45600 Woodland Road, VAE-AMD

Sterling, Virginia 20166

Attn: Christy Tardiff

Phone (703) 787-1367

Email: christy.tardiff@bsee.gov

VIII. OTHER INFORMATION

Dissemination of Research Results: BOEM considers dissemination of research data and results to be an integral and crucial aspect of projects funded by this program. This includes the proper archiving of samples and datasets to maximize public access in the future. 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. BOEM encourages the Recipient to publish project reports in scientific and technical journals. When appropriate as determined by the project officer, applicants should include in the proposal a plan to present findings at two major meetings, one of which will be the local regional BOEM Information Transfer Meeting.

All projects should plan to provide BOEM with no less than 20-30 digital images related to the research activity. BOEM encourages the recipient to develop education and/or outreach materials, e.g. teacher's packet, poster, video, etc.

Extensions to the project period. Extensions are discouraged. The timely conduct of funded projects is of great importance to the achievement of the goals of the BOEM. Applicants should consider their time commitments at the time of applying for funding support.

--End of Program Announcement M20AS00004--