

PMC-EF2a

(20402)

**U.S. DEPARTMENT OF ENERGY  
EERE PROJECT MANAGEMENT CENTER  
NEPA DETERMINATION**

**RECIPIENT:** Florida Atlantic University**STATE:** FL

**PROJECT TITLE :** Center of Excellence in Ocean Research and Development

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
Congressionally Directed Project 2009	DE-EE0000319	GFO-10-063	GO0

**Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:**

**CX, EA, EIS APPENDIX AND NUMBER:****Description:**

- B3.1** Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:
- A9** Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B3.3** Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish or wildlife resources and that involve only negligible habitat destruction or population reduction

**Rational for determination:**

Florida Atlantic University (FAU) proposes to use Congressionally Directed Funding through the DOE to study the energy potential of the Gulf Stream and currents off the coast of Florida. Their goals are to further the assessment of hydrokinetic and thermal ocean-energy resources off the east coast of Florida and to advance the development of those resources for commercial-scale electrical power production.

**Project tasks include:**

- \*Task 1.0 Technology Testing and Resource Monitoring
  - Subtask 1.1.1 Instrument/deployment of platform (final design, fabrication and deployment)
  - Subtask 1.1.2 Sensors
  - Subtask 1.2.0 Data communications and management

- \*Task 2.0 Impact Studies
  - Subtask 2.1 Sea Turtles
  - Subtask 2.2 Marine Mammals

- \*Task 3.0 Education and Outreach
  - Subtask 3.1 Professional Workshop/Conference
  - Subtask 3.2 Public Outreach/Education

**Task 4.0 Project Management and Reporting**

Task 1.1.1 will involve the final design, fabrication, deployment and use of a mobile ocean-going laboratory into the outer continental shelf of the Atlantic Ocean. The mobile ocean laboratory is a floating, instrumented platform capable of deploying the devices to be tested and of supporting environmental monitoring instrumentation. The platform will consist of a scalable hull, a large flat working deck, an environmentally controlled operations enclosure, safety and navigation equipment, the seaward end of the long-range communications and high-bandwidth point-to-point shore data link, and working equipment including engineering sensors, an A-frame, hydraulic and electronic power systems, power management and dissipation systems, and berthing.

Impacts to the human and marine environment related to the deployment and use of this project task are unknown at this time. Several federal regulatory and permitting agencies have been engaged by FAU regarding this task. An MMS permit application was submitted in June 2010 and consultations with the US Fish and Wildlife Service, National Marine Fisheries Service, US Army Corps of Engineers and several Florida state level agencies are ongoing.



Tasks 1.1.2 and 1.2 will involve the acquisition of ocean measurement sensors and data acquisition hardware for the purposes of physical oceanography measurement that will assist with preliminary studies necessary for task 1.1.1. These include high-resolution acoustic current profilers, narrow-band acoustic monitoring system, and acoustic positioning system. The equipment will be used to help characterize physical oceanography conditions from vessel-based deployments. This equipment is considered passive and will be used on-ship and off-shore (data communication devices) to measure current depth, velocity and seafloor conditions.

Task 2 objective are to conduct environmental and marine species studies in order to fill gaps in existing data that will provide an early-stage baseline assessment of the potential interactions of device operation with marine mammal activity in the Florida Straits.

Task 2.1 involves literature studies and transect-line aerial surveys in order to obtain baseline data regarding sea turtle species utilizing the waters within the northern Straits of Florida. No in-water monitoring will occur for this task, it has been removed from the monitoring plan.

Task 2.2 is comprised of two parts: (1) observations of marine mammal population distribution via aerial survey and (2) software modeling of underwater hydrokinetic energy extraction device noise generation.

Task 3 will involve education and outreach efforts with intent to create awareness about the Florida current resource. The activities proposed in this task involve stakeholder meetings, workshops, and conferences.

#### Determination:

Task 1.1.1 lacks sufficient information in order to make a NEPA determination at this time. FAU and DOE will coordinate with these agencies prior to making a NEPA determination on this task. Funding for this subtask will be held and conditional pending the outcome of this coordination and further environmental analysis.

Tasks 1.1.2 and 1.2 involve conducting routine and established environmental monitoring and site characterization for ocean environments; therefore a CX B3.1 will apply.

Task 2 involves literature research, computer modeling and aerial surveys directly related to the inventory and information collection activities that are directly related to the conservation of sea turtles in the coastal Florida waters; therefore a CX A9 and B3.3 will apply.

Tasks 3 and 4 involve informational gathering, curriculum development, and project management tasks; therefore a CX A9 will apply.

#### NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Subtask 1.1.1 – Technology Testing: Instrument/deployment the mobile ocean-going laboratory vessel/platform

Unallowable tasks include: final design, fabrication, testing and deployment.

This restriction does not preclude you from:

Subtasks 1.1.2, 1.2, and all subtasks under tasks 2.0, 3.0 and 4.0

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:

Assist in the coordination efforts between federal agencies during planning and preliminary development stages for the mobile ocean-going laboratory (subtask 1.1.1)

Note to Specialist :

Review completed by L.Margason 7/14/2010

This project involves a NEPA condition and hold on subtask 1.1.1. NEPA recommends that this project be placed on ASAP approval.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:   
NEPA Compliance Officer

Date: 7/14/10

**FIELD OFFICE MANAGER DETERMINATION**

☐ Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- ☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- ☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_  
Field Office Manager

Date: \_\_\_\_\_

