PMC-ND
(1.08.09.13)

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION

RECIPIENT: University of Washington **STATE:** WA

PROJECT TITLE: 3rd Generation Integrated Instrumentation: Enhancements to the Adaptable Monitoring Package

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001418	DE-EE0007827	GFO-0007827-002	GO7827

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:

A9 Information gathering, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
B3.6 Small-scale research and development, laboratory operations, and pilot projects	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the University of Washington (UW) to develop and field test an integrated instrumentation package purpose built for environmental monitoring and marine hydrokinetic sites.

The proposed project would be divided into three Budget Periods, with a Go/No Go decision point between each Budget Period. DOE previously completed a NEPA review for Budget Period 1 (BP1) (GFO-0007827-001 CX A9 and B3.16, 12/08/2016). In BP1 UW conducted field tests of the existing iAMP system to establish a baseline of performance. This review is for BP2 activities only (Tasks 2-4). In BP2 UW would make upgrades to the iAMP system, and field test those upgrades.

Task 2 would involve developing software upgrades for the iAMP system. Task 3 would involve hardware upgrades to the iAMP system, including upgraded power packs, rotating instrument heads to allow instruments to scan greater area, and integration of a 38kHz sonar. Activities associated with Task 2 and 3 would be completed at the University of Washington at office, laboratory and dock facilities.

Task 4 would include three subtasks. Under subtask 4.1 UW would prepare a Biological Evaluation to evaluate the impact of field testing the upgraded device at the Pacific Northwest National Lab (PNNL) Marine Science Laboratory (MSL), specifically in in Sequim Bay, WA.. In subtask 4.2 UW would field test the device at Sequim bay. Under subtask 4.3 UW would analyze data obtained during the proposed field testing.

The iAMP device is approximately 3 by 6 feet and integrates active acoustic, passive acoustic, and optical sensors. The active components would include an optical stereo camera, a multi beam sonar and an acoustic camera. It is a cabled system that is connected to shore via a dual power and fiber optic cable. It is both deployed and retrieved by use of a remote operational vehicle.

In October 2015 DOE, through PNNL, completed a Biological Assessment (BA) and Essential Fish Habitat Assessment, and consulted with SHPO, NMFS, and USFWS regarding a five year scientific research plan for the MSL (which includes the area in and around Sequim Bay). The five year plan covers the period from January 2016 through September 2020.

PNNL completed a Section 106 cultural resource review of the proposed project areas and found that there would be no impact to such resources. In January of 2016, the State Department of Archaeology and Historic Preservation concurred with that conclusion.

The BA identified and analyzed eight different types of research that could occur at the site. These include: installation of equipment or cables on the seabed; installation of floating platforms or moored buoys; installation of equipment on the existing dock/pier; deployment and operation of autonomous underwater vehicles; habitat and species survey and sediment sampling; vessel use; operation of acoustic detection or emitting devices including light and sound emission; and electromagnetic field emissions. The BA examined the impacts of these potential activities in five distinct research areas in and around Sequim Bay. These areas are: Sequim Bay 1 (SB1), the area near the inlet just south of Travis Spit and comprising of 6.88 acres; Sequim Bay 2 (SB2), an area located in the middle of the bay comprising of 2.47 acres; Sequim Bay general area (SBa), which is an area from the mouth of the bay from shore to shore down the bay being approximately 46% of the bay and comprising of 2258 acres; Marine Science Laboratory dock and channel (MSL dock), an area at the entrance to the bay that includes the MSL dock and pier and comprising of 3 acres; and, Gibson Spit (GSa), a general ocean area outside of Sequim Bay and comprising of 1900 acres. Together, these five research areas are known as MSL. Finally, the BA examined impacts the proposed research activities would have to the thirteen threatened or endangered (T&E) species, to protected marine mammals, and to essential fish habitat (EFH) found in the MSL area.

The BA found that the proposed research activities would not likely adversely affect (NLAA) all T&E and protected species, except two species for which there would be no effect, and that there would be no or minimal adverse impacts to EFH. On January 27, 2016, NMFS concurred with PNNL that the proposed research activities that would occur during the five year period would not likely adversely affect EFH, marine mammals, and T&E species under their jurisdiction. On February 18, 2016 the USFWS concurred that the proposed research activities that would occur during the five year period would not likely adversely affect T&E species under their jurisdiction. Both NMFS and USFWS concluded that no further consultation would be needed for any additional research conducted within the five year period if PNNL determines it fits within the bounds of the BA. If PNNL were to determine that research would not fit within the bounds of the BA, then further consultation with NMFS and USFWS would be required.

In March of 2016, DOE/EERE contacted both NMFS and USFWS regarding the completed consultations. DOE/EERE concurred with the analysis and finding in the previously submitted BA. On March 21, 2016 both NMFS and USFWS notified EERE that the analysis and concurrence previously provided to PNNL regarding projects under the scope of the BA would apply to EERE in the same manner as it applies to PNNL.

Task 4.2 for this proposed project, would include field testing the upgraded iAMP device at MSL. A vast majority of the components on the iAMP device, including the active acoustic and active optical devices, would be within the parameters of the consultations previously conducted. However, the 38kHz sonar would not be within the parameters of the previous consultation. As such, DOE will need to reinitiate consultation regarding the upgraded iAMP device. Thus, there is not enough information at this time to fully evaluate the impact of Task 4.2. UW must submit a BE (as planned under subtask 4.1) and consultation must be completed prior to a NEPA review of subtasks 4.2 and 4.3.

Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

Based on the review of the proposal, DOE has determined that Task 2, Task 3, and subtask 4.1, fit within the class of actions and the integral elements of Appendix B to Subpart D of 10 CFR 1021 outlined in the DOE categorical exclusions selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) related to the proposal that may affect the significance of the environmental effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. Task 2, Task 3, and subtask 4.1 are categorically excluded from further NEPA review.

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:
Task 4.3 Improvement Analysis
Task 4.2 - Improvement Measurements
All Budget Period 3 tasks
This restriction does not preclude you from:
Task 2 - Operational Awareness
Task 3 - Increased Adaptability
Task 4.1 - Improvement Permitting

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:
Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

Note to Specialist :

This NEPA determination does require a tailored NEPA provision.
Water Power Program
Review completed by Roak Parker 9.13.17

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/14/2017
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager