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NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

April 8, 2011

SUBJECT: Notice of the Public Input Process for the Micro-siting of the Pioneer Array Moorings and Public Meeting for the Ocean Observatories Initiative (OOI) Pioneer Array

OVERVIEW

Over the past several months, the National Science Foundation (NSF) and the Ocean Observatories Initiative (OOI) Project Office have received input on the placement of the moorings for the Pioneer Array through public meetings, project development and science collaborations. This input, which will lead to the eventual placement of the moorings, has been a critical part of the, "micro-siting" process. The micro-siting process suits the design/test/build/deploy nature of the project as it allows for public input prior to a determination on the final siting of the Pioneer Array. NSF is appreciative of the time and thoughtful input that has been provided to date and looks forward to additional public input. Project Scientists supported by NSF coordinated all input and produced a revised micro-siting plan for the Pioneer Array for public review and comment (*see* Enclosure 1).

NSF, through this letter, gives notice of a 45-day written comment period, **commencing on Tuesday, April 12, 2011**, during which the public is invited to review and provide written comments on the revised micro-siting plan for the Pioneer Array. Following the close of the public comment period on **Friday, May 27, 2011**, NSF will hold a public meeting to report on written comments submitted during the public comment period. (Please note that, in the event of a government shutdown, the dates for the close of the public comment period and public meeting may change; if this happens, NSF will provide an update with revised dates via letter and an update on the project website at www.oceanobservatories.org.) The details for the meeting are:

Date: Tuesday, June 7, 2011
Time: 5:30 – 7:30 pm
Location: University of Rhode Island, Narragansett Bay Campus
Coastal Institute on Narragansett Bay
Hazard A & Hazard B Meeting Rooms
Directions can be found at: http://www.uri.edu/home/visitors/Map/baycampus_map.html

The public meeting agenda will be as follows:

1. Welcome and Introductions
2. Report on written comments
3. Update on Pioneer Array Schedule & Activities
4. Opportunity for questions and answers

BACKGROUND

Oceanographic research has long relied on research vessel cruises (expeditions) as the predominate method of taking direct measurements of the ocean environment. Remote sensing (use of satellites and other wireless technologies) has greatly advanced abilities to measure ocean surface characteristics over extended periods of time. A major advancement in oceanographic research methods is the ability to make sustained, long-term, and adaptive measurements from the surface to the ocean bottom. ''Ocean Observatories'' are now being developed to further this goal. Building upon recent technology advances and lessons learned from prototype ocean observatories, OOI is an interactive, globally distributed and integrated infrastructure that will be the backbone for the next generation of ocean sensors, resulting in complex ocean studies that are presently unachievable.

The Pioneer Array will have 2 lines of stand-alone moorings running north-south across the continental shelf. Moorings would provide locally generated power to seafloor and platform instruments and sensors and use satellite and other wireless technologies to link to shore and the Internet. The western (downstream) line will consist of surface moorings, wire-following profiler moorings with a surface expression, and surface-piercing profiler moorings with intermittent surface expressions. The eastern (upstream) line will consist of wire-following profiler moorings with small surface expressions. Gliders and Autonomous Underwater Vehicles would run missions in the vicinity of the moored array. The information gleaned from the Pioneer Array will include sea temperature, winds, wave height, and currents.

The Pioneer Array will contain: ***10 moorings located at 7 sites; 3 Autonomous Underwater Vehicles (AUVs) and 6 gliders.***

ADDITIONAL INFORMATION

During the public meetings, concerns were expressed regarding whether NSF intends to regulate fishing and how NSF plans to address issues involving gear entanglement. In response, NSF wishes to clarify that it does not have any legal authority to regulate fishing. NSF's mission is to fund cutting edge science and technology; NSF is not a regulatory agency. With regard to addressing issues involving gear entanglement, NSF will follow traditional maritime/admiralty law and ensure that notice to mariners of the locations of the mooring buoys is provided. In addition, in an effort to reduce the potential for gear entanglement, NSF also intends to deploy guard buoys to warn other ocean users of the presence of the Pioneer Array's mooring buoys (*see* Enclosure 1, Figure 3).

PROCESS FOR RECEIPT OF WRITTEN COMMENTS

NSF has provided two methods to transmit written comments. Enclosed is a comment form (*see* Enclosure 2) that can be emailed to Jean McGovern (JMCGOVER@nsf.gov) or mailed to NSF at the address provided on the form. (Please note that in the event of a government shutdown, emails received by NSF cannot be accessed or reviewed by the addressee. All emails will, however, be received and remain in the addressee's inbox; once normal government operations resume, the addressee will be allowed to review the emails.) To assist in the review and preparation of public comments, additional information may be accessed via the project website: www.oceanobservatories.org.

NSF looks forward to your participation in the public input process and to the transformative research and discovery that the Pioneer Array will enable.

Sincerely,

Jean McGovern
OOI Program Director
National Science Foundation

Enclosures:

(1) Revised Configuration of Pioneer Array Components:

Figure 1. Revised Pioneer Array areas for moorings, gliders and AUVs within the Mid-Atlantic region of influence as assessed in the Final SSEA.

Figure 2. Revised Pioneer Array micro-siting area for moorings.

Figure 3. Diagram of the proposed installation of guard buoys on the Pioneer Array.

(2) Comment form

ENCLOSURE (1)

Revised Configuration of Pioneer Array Components

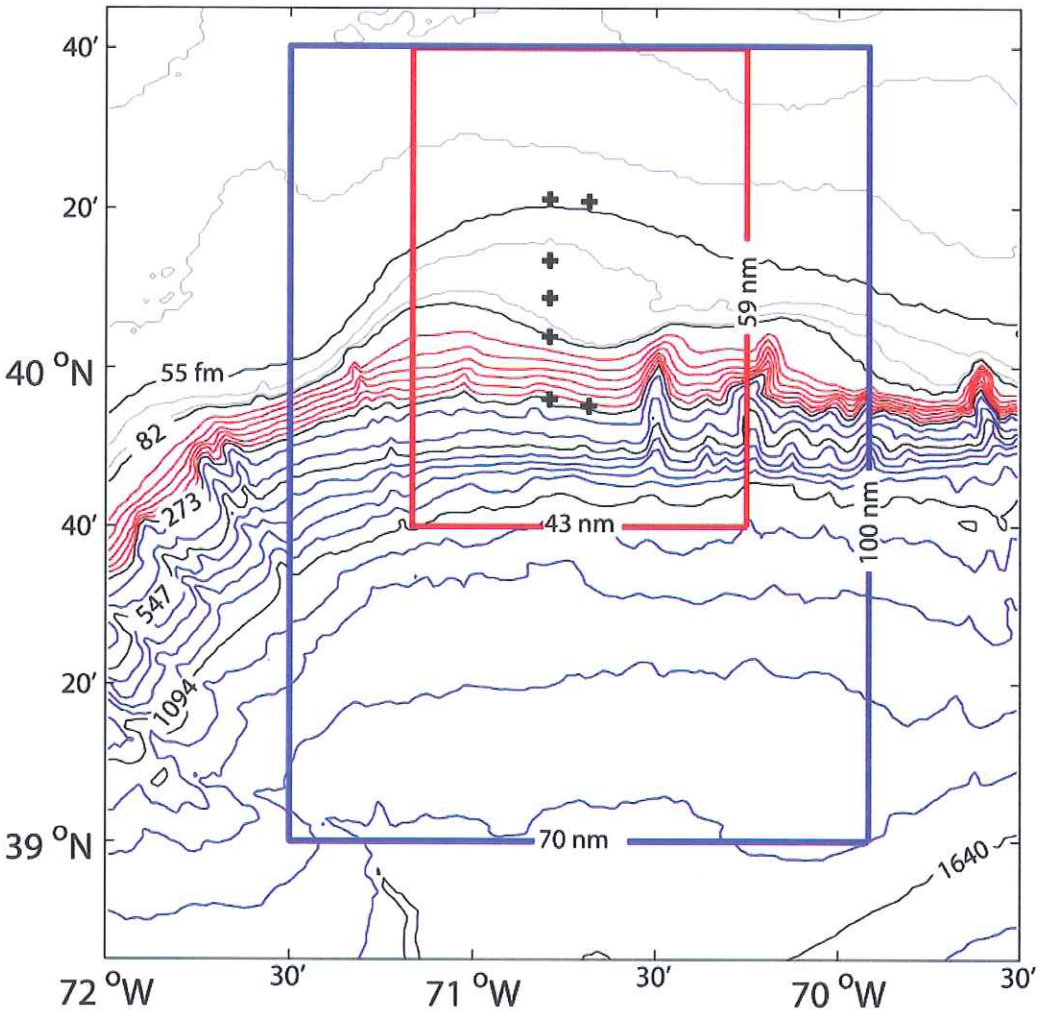

Figure 1. ***Revised*** Pioneer Array areas for moorings, gliders and AUVs within the Mid-Atlantic region of influence as assessed in the Final SSEA. Proposed mooring sites are shown as black "+". The glider operating area, delineated by a blue box, is extended to the northern boundary of the AUV operating area. The AUV operating area is delineated by a red box.

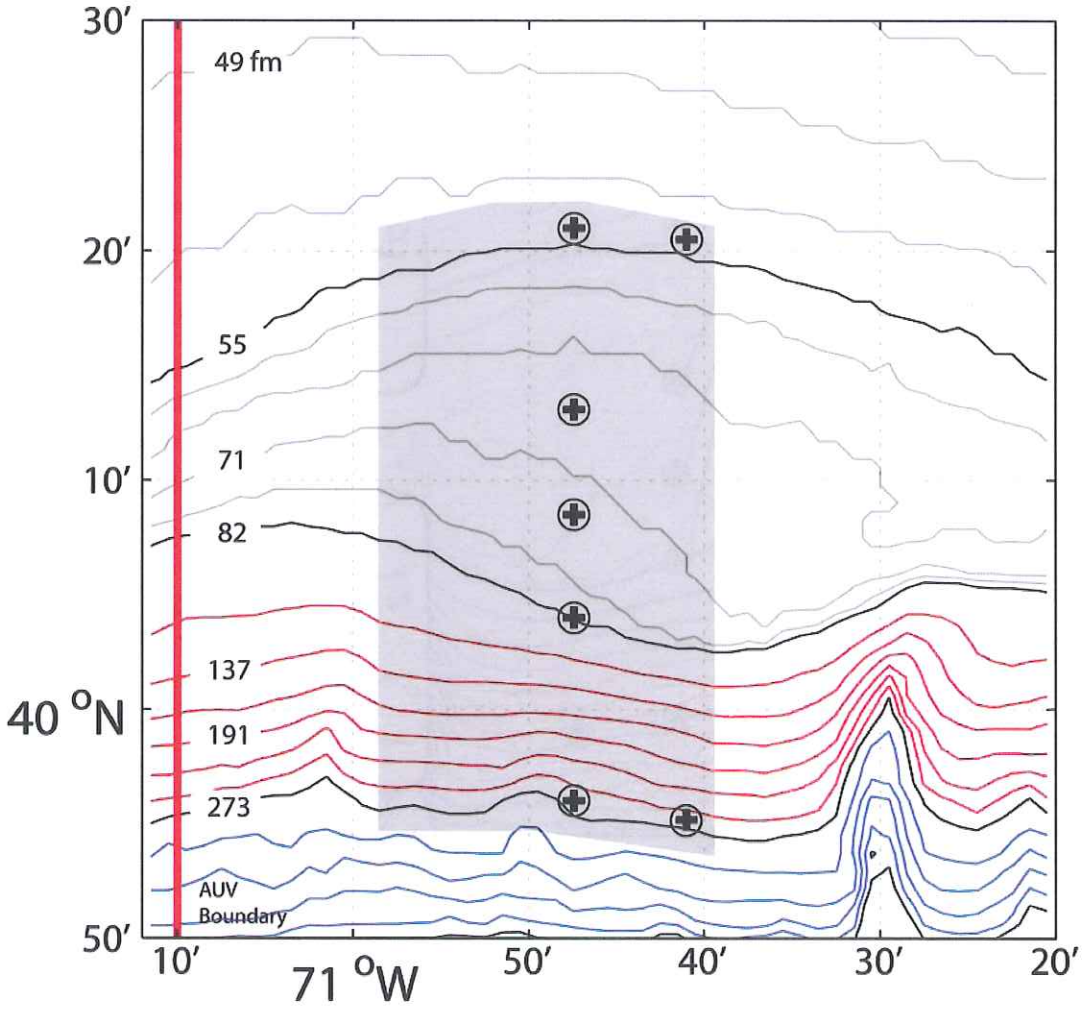

Figure 2. ***Revised*** Pioneer Array micro-siting area for moorings. Proposed mooring sites are shown as black "+" surrounded by a 0.5 nm radius buffer zone. The vertical line at 71° 10' W is the western boundary of the AUV operating area.

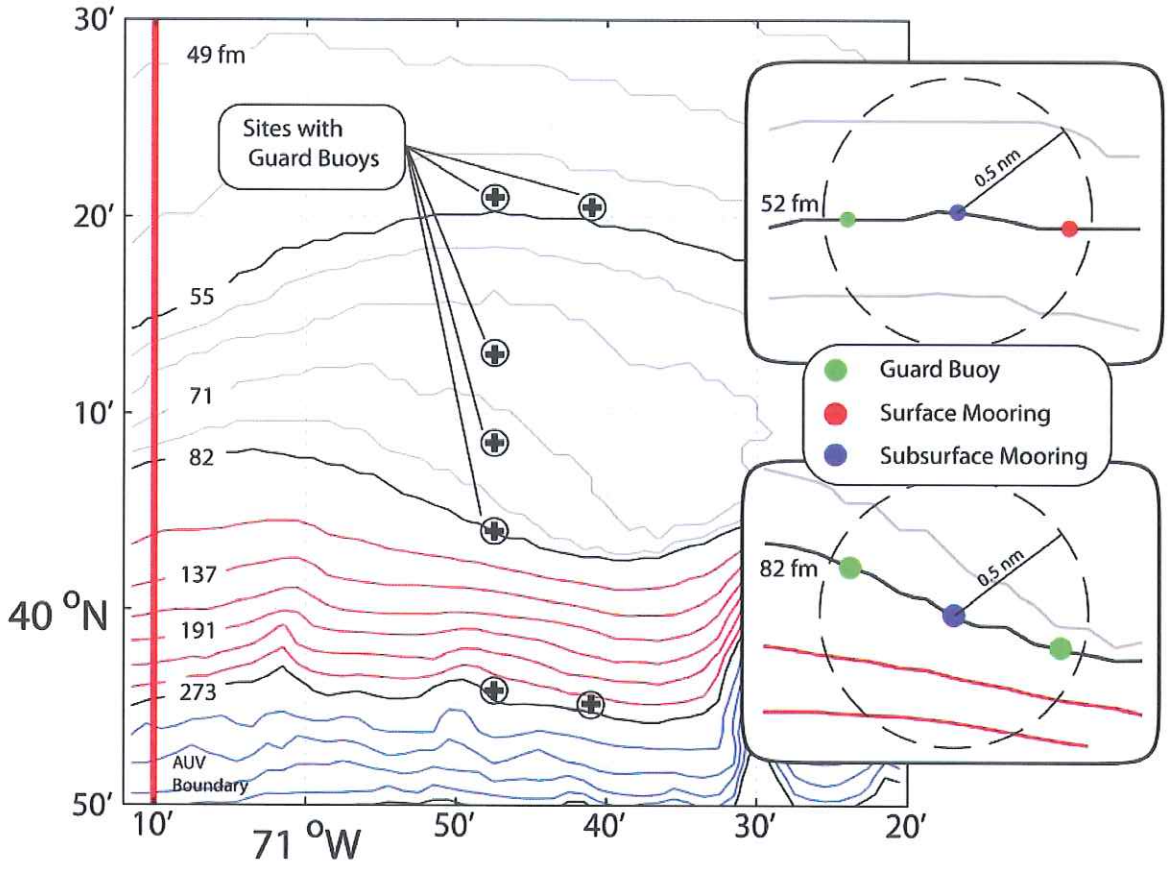

Figure 3. Diagram of the proposed installation of guard buoys on the Pioneer Array. Guard buoys are proposed to be installed to increase the visibility of subsurface moorings. The addition of guard buoys, along with the Pioneer surface mooring buoys, will mark the 0.5-nm radius safety zone (i.e., area to avoid) around subsurface mooring sites in waters shallower than 250 fm. They will be installed along isobaths such that each subsurface mooring will be in between two visible surface buoys (i.e., between a surface mooring buoy and guard buoy, or between two guard buoys). Guard buoys and surface mooring buoys will be lighted and marked per USCG requirements and will be equipped with radar reflectors.

The upper inset shows the proposed configuration for a site at the 52 fm isobath with paired subsurface and surface moorings – as shown, a guard buoy would be placed on one side of the subsurface mooring, with the surface mooring buoy on the other side to denote the 0.5-nm radius safety zone (i.e., area to avoid) around the subsurface mooring site. The lower inset shows the proposed configuration for the site at the 82 fm isobath with stand-alone subsurface mooring – as shown, two guard buoys would be placed so as to mark the location of the subsurface mooring and denote the 0.5-nm radius safety zone around the subsurface mooring site.

ENCLOSURE (2)

NATIONAL SCIENCE FOUNDATION (NSF)
OCEAN OBSERVATORIES INITIATIVE (OOI)
MICRO-SITING OF PIONEER ARRAY MOORINGS

Comment Sheet

Date: _____

****Please print – additional space is provided on back****

1. Name: _____
2. Address: _____
   _____
3. Please check here ☐ if you would like to be on the mailing list for future meetings and information on the micro-siting process for the Pioneer Array.

Please email this form to: JMCGOVER@nsf.gov
or mail to: Jean McGovern, OOI Program Director, Division of Ocean Sciences
National Science Foundation
4201 Wilson Blvd., Ste 725, Arlington, VA 22230

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