

Endurance Array Micro-siting Public Meeting
Guin Library of the Hatfield Marine Science Center, Newport, OR
November 22, 2010, 7-9 PM

OOI Participants:

Bob Collier (OSU)
Jack Barth (OSU)
Chris Romsos (OSU)
Craig Risien (OSU)
Laura Miller (Tetra Tech)

Public Attendees:

Patrick Whittier
Chris Castelli, Oregon Department of State Lands
Chuck Pavlik, Coastal Conservation Association (CCA)
Karolyn Pavlik, CCA
Wil Black, Advanced Research Group
Caroline Bauman, Executive Director, Economic Development Alliance for Lincoln County

Summary:

Bob Collier provided opening remarks which included: a brief summary of the community meetings to date; an overview of the micro-siting process for the Newport nearshore (14 fathom) mooring; and an overview of the science requirements/objectives for the Endurance Array. The section below provides a summary of questions (*in italics*) that were asked during the opening presentations and answers provided by OOI team members. Note that numbering is used for reference purposes only and does not imply any prioritization.

Questions asked during the presentation with answers provided by Bob Collier

1. *What is the surface height of the buoys (i.e. how tall will they be above water)?* They will be 3 meters (10 ft) high for the offshore and shelf buoys; 2.5 meters (8 ¼ ft) for the inshore buoy.
2. *Will there be an active radar reflector on the buoys?* There is no reason why the radar reflectors can't be active.
3. *Do you have intentions of having a light on the buoys?* Each buoy will have solar-powered lights which will meet the USGS standards for design and strobe length and each mooring will be permitted as a USCG Private Aid to Navigation (PATON).
4. *Will they have buoy standard lighting?* The newer Coast Guard Approved lights are Canadian-made and an improvement over previous lights. (Carmanah 701-5) But we are open to suggestions if you have better ideas.
5. *Are you going to lay both cables in Oregon?* That's the plan provided that the permits are acquired. The current schedule is for the contractor to lay the cable offshore this summer. In the following summer, they'll install the primary nodes that will provide power to scientific instrumentation. Testing and installation of instruments will start in 2012 and 2013.
6. *Regarding the mooring watch circles: - what type of response times will there be if the mooring leaves the permitted watch circle (fails and floats free) and what kind of platforms will provide the response?*

These aren't specified yet. We will have to work this out in order for to get the USCG PATON and US Army Corps of Engineers permits. We will build a portfolio of options.

7. *Will there be instruments on the bottom? How big? How will you keep the anchor for getting buried?* We have ideas for minimizing sand burial. During tests, we have had optical instruments that foul due to sand and debris. In big storms we could see the anchor moving. If you know of areas where sand moves more or less than in other areas, please let us know. We want to get input on your experiences.
8. *How close will the 14 fm buoy be to the wave energy buoy?* Our mooring will be straight off of Yaquina Head. The current plans for the Wave Energy Test Bed will be directly offshore of our candidate mooring site. Being close to the other buoy is not necessarily bad since boaters are already prepared for a mooring in this location. Chris Romsos (OSU) showed the chart with the bathymetry overlay and the micro-siting box. The site furthest south was deemed to be the initial recommended site, although Bob mentioned some anecdotal evidence that the southern site might experience eddies that trap debris during storms.
9. *Have you tied in with the Oregon Department of Fish and Wildlife (ODFW) buoys? Is your information going to be passed back and forth?* We are following the observation programs of the Oregon Department of Fish and Wildlife. Yes, we will share OOI data with them..
10. *How do the gliders work?* They move up and down within the water column by changing their buoyancy. The gliders move forward along a predetermined sampling line due to the hydrodynamic "wings". They can get carried off course by currents but continually take GPS positions when they come to the surface. The gliders move slowly at approximately 0.5 knots. We never have had a glider hang up on any fishing or mooring gear although they have been "recovered" from the seasurface by passing boats.
11. *Have you talked to the Department of Land Conservation and Development (DLCD) for consistency? It was also noted that a Special Use Lease would be required.* OSU has applied for these permits .

Micro-siting discussion

- Sixty feet to 100 feet in depth is very popular for recreational crabbing. People may have 5 to 6 crab pots 50 yards apart in that area during summer. Most of the time it's crowded. At the mouth of Yaquina, you'll be dodging crab pot buoys from both commercial crabbers and sports crabbers. North of Yaquina Head is not a problem – it's too far up shore. May need to contact the charter boat operators to find out where they operate within the siting box.
- Sports fishers don't tag their pots. Crab pots are left overnight when the small crabber can't get to them to pull them in. Recreational crabbers pots are 30-35 pounds and get entangled with others with storms move them. Commercial crab pots are 100 pounds or greater and tend to stay-put. Concern for the lighter pots getting entangled with the OSU buoys was expressed. Most of the summer storms are out of the northwest and are not as severe. Most of the storm-driven pot movement would be commercial gear deployed in the winter.
- There was further discussion about the south end of the siting box and it was generally felt that avoiding the waters south of Yaquina Head would minimize conflict with the recreational fisheries.

Actions

- Contact charter operators to get input on candidate mooring location.
- Investigate option to include active radar reflectors.