Figure 2-7 (3 pages) Candidate sites for the OOI Endurance Array OR-Inshore observatory node off Newport, as discussed at a public "micro-siting" meeting in Newport, OR, 11/22/2010.

The figures are projected on NOAA Navigational Chart 18561(2008) with depths marked in fathoms. The original siting "requirements" that drove the site selection of this observatory off Newport focused on proximity to the Newport Hydrographic (NH) Line (along 44.65° 'N). This is the world-renown location of repeat hydrographic sampling for over 50 years producing much of what we know about Eastern Boundary Current Upwelling Systems. The goal for this Inshore Site includes water depths between 14-16 fathoms, with a soft bottom, and minimum safe operational distances from navigational channels, markings, and shipping lanes. We also specified a safe operational distance away from the exact Newport Hydroline so as not to interfere with existing research and monitoring programs routinely collect samples there. The charts note a yellow circle on the NH Line, and a yellow "siting box" within which we will establish the observatory node. The "micro-siting" process is designed to find the best candidate that meets the minimum requirements for science and minimize conflict with other users. A candidate site was suggested during public comment hearings (green box off Yaquina Head) that would avoid conflict with more heavily used areas on the south end of the siting options. Action items to check included further discussion with the charter operators. Note that the "green box" marked ~ 10 miles offshore at 42 fathoms is the "Shelf" site in the array.

Figure 2-7.1 Navigation chart with candidate site details.

Figure 2-7.2 Navigation chart with high-resolution bathymetry overlaying the candidate OR-Inshore node siting box. Color bar depth key is in meters.

Figure 2-7.3 Bottom backscatter intensity collected during the bathymetric survey. Lighter shades are more reflective to the multibeam acoustics, usually representing hard bottoms – gravel, basalt, or carbonate reefs.
Figure 2-7.1
Endurance Array (Newport Line) Candidate Inshore & Shelf Mooring Sites

LEGEND
Candidate Mooring Site Locations
- OR Inshore
- OR Inshore (Micrositing Meeting)
- OR Shelf
- 25-30m Depth Zone
- Study Area for Siting
- NH Line
- Inshore Nav Markers Buffer
- Towlanes

Note: Depths in Fathoms
Source: NOAA Navigational Chart 18561: Approaches to Yaquina Bay (May 2008)
Figure 2-7.2
Endurance Array (Newport Line) Candidate Inshore & Shelf Mooring Sites

LEGEND
Candidate Mooring Site Locations
- OR Inshore
- OR Inshore (Micrositing Meeting)
- OR Shelf
- 25 -30m Depth Zone
- Study Area for Siting
- NH Line
- Inshore Nav Markers Buffer
- Towlanes

Note: Depths in Fathoms

Source: NOAA Navigational Chart 18561: Approaches to Yaquina Bay (May 2008)
Figure 2-7.3
Endurance Array (Newport Line) Candidate Inshore & Shelf Mooring Sites