

## Oceanographer

Olympic Coast National Marine Sanctuary (OCNMS) is seeking to fill a contract position for an operations oceanographer to manage and participate on its mooring project, hypoxia surveys and other water quality research and resource protection efforts including climate change impacts.

The Olympic Coast National Marine Sanctuary encompasses approximately 3,300 square miles off the Washington Coast, extending from Cape Flattery to the mouth of the Copalis River. Significant natural and cultural resources include 29 species of whales, dolphins and other marine mammals, large populations of nesting seabirds, Native American communities and archaeological sites and some of the last remaining wilderness coastline in the lower 48 states. OCNMS provides resource protection through research, education and conservation programs that foster public understanding and stewardship of this nationally significant marine ecosystem.

Currently we deploy up to 14 moorings on a seasonal basis (late April through early October), each equipped with a variety of sensors. The moorings range in depth from 15m to 65m. Sensors include Onset thermistors, Seabird CTs and DO sensors, Wetlab fluorometers, Falmouth surface current meters, and an RDI ADCP. Recording frequencies are based on OCNMS, PISCO and our west coast sanctuary system wide program needs. The moorings are serviced approximately every five weeks and the data downloaded for processing using MatLab software

We hope to eventually expand some of the moorings to be year round, add additional sensors, move from current meters to ADCPs, expand to deeper water depths, further evaluate hypoxia occurrences, explore other data uploading options, employ acoustic releases, etc. In addition we conduct water and oceanographic sampling for carbonate saturation state determination, harmful algal bloom investigations, and conduct mid water bioacoustic surveys for evaluation of trophic relationships with marine mammal and seabird population data, as well as a variety of other related projects. The majority of our work in partnership with other agencies, other branches of NOAA, and the coastal Native American Indian tribes.

**Specific tasks** for the operations oceanographer contract include but are not limited to the following:

1. Manage the sanctuary mooring data including quality control tasks, developing or modifying databases, synthesizing information graphs and potentially writing reports and web pages, recommending and documenting procedures, modifying Standard Operating Procedures, documenting the database, creating metadata, developing and tracking budgets, etc. The primary software is MatLab, and as such writing and/or modifying script is necessary.
2. Attend meetings representing OCNMS. Meetings with partners such as Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), Northwest

Association of Networked Ocean Observing Systems (NANOOS), Olympic Region Harmful Algal Bloom (ORHAB) group, Northwest Indian Fisheries Commission, etc.

3. Participate on NOAA programs for national and/or regional data storage, back up and data distribution. Involves working with an oceanographic and database team from NOAA's NCDDC, University of California, and Oregon State University.
4. Participate on both small boat field efforts of up to a week at a time and research cruises aboard ships for up to 3 weeks. Small boat ops include as the lead for mooring servicing events – working with the instrumentation, downloading and redeploying..
5. Work with staff and volunteers on data management, data entry and data quality control tasks.
6. Participate and potentially lead mooring design discussions for year around moorings in the sanctuary and contribute to policy discussions regarding related issues.
7. Assist the permit staff in reviewing mooring permit requests.
8. Evaluate additional sensor needs and models.
9. Analyze the existing data and mooring design and overall program to recommend changes.
10. Work with partners such as Oregon State University, University of Washington, University of Victoria, The coastal Native American Indian tribes, Northwest Indian Fisheries Commission, NOAA's Pacific Marine Environmental Laboratory, Washington State Department of Natural Resources and others regarding data uses and joint projects.
11. Contribute to OCNMS discussions on research and resource protection needs and priorities and efforts related to the Management Plan Review process, including potential participation in technical Working Groups.
12. Design or contribute to program design for new programs.

**Compensation:** The contract is for 40 hour/week for at least a year. During field efforts hours may exceed 40 hours per week but during off seasons the hours may be less, balancing out. Rate to start is \$25/hour plus a travel allowance for meetings and field work. No benefits except those, if any, provided by the outsourcing company.

Due to the nature of the work involved, OCNMS will provide a workspace for the contractor, which will include a computer, telephone, access to fax machine and copier.

**Start Date:** Flexible but ideally prior to 30 September 2009.

Required skills/education for this contract include the following:

1. Proficient with MatLab software or equivalent for managing the oceanographic data
2. Programming, script writing or or unix experience.
3. Proficient with Access database software or equivalent relational database software.
4. Experience on small boats.
5. Research experience based on observational physical oceanography
6. Graduate degree in oceanography or related field *OR* at least 5 years experience working in the field of oceanography.
7. Valid driver's license.
8. Strong work ethic with willingness to put in extra hours to scramble to get equipment repaired and redeployed as needed.

Must be willing to

- work long days on occasion,
- work off small boats (~18 to 40 foot) on the Washington coast, handling equipment, winches, A-frames, CTD-Niskin bottle rosettes, etc.
- participate on occasional large ship cruises of up to 20 days in duration,
- work occasional weekends,
- work out of the Port Angeles, Washington office
- work at physically demanding tasks such as moving around moorings components (anchors weigh ~120 pounds)
- keep office hours that are within general operating hours - between ~6AM and 7PM except during field efforts
- work independently and on teams – which for some efforts will include developing study designs or data synthesis recommendations and on others implementing those requested by others
- obtain "Extended Non-Owned Auto Coverage", to cover damages to a 3rd party while driving a government owned vehicle.

Preferred but not required additional skills/knowledge/experience – OCNMS would like to know if you have any of the following in addition to the required items above:

1. Proficiency with any of the following: GIS, statistical software, data display software (e.g., SigmaPlot), building relational databases.
2. Knowledge of Pacific Northwest marine invertebrates, fish, algae, birds, bioacoustics or marine geology.
3. Policy application or policy development experience.
4. Leading tasks involving 1-4 others.
5. Budget development and tracking.
6. Mooring design experience.

7. Experience implementing quality control measures into field and data management programs.
8. Experience writing Standard Operating Procedures, creating field checklists, developing metadata and database documentation.

Interested parties should submit a cover letter and CV/resume to the following address.

Mary Sue Brancato  
OCNMS  
115 E Railroad Ave, Suite 301  
Port Angeles, WA 98382

[Mary.sue.brancato@noaa.gov](mailto:Mary.sue.brancato@noaa.gov)  
Fax: 360 456-8496

The cover letter should specifically address how they meet the required skills/education, the items under “must be willing” and any of the “preferred but not required” elements that apply. In addition, please provide a description of your experience or familiarity with our current oceanographic instrumentation or similar instrumentation. Contacts for three references should be provided. Questions regarding this announcement can be directed to Mary Sue Brancato at [mary.sue.brancato@noaa.gov](mailto:mary.sue.brancato@noaa.gov)