

**Climate Change Internship Opportunity with the  
West Coast Governors' Agreement on Ocean Health  
Climate Change Action Coordination Team**

**INTERN POSITION ANNOUNCEMENT:**

**Duration:** Up to 8 months depending on availability for part- or full-time; start date is flexible

**Stipend:** \$17,000

**Location:** Oakland, California

**Qualifications:** Senior level undergraduate or graduate student in Natural Resources with Coastal or Marine Science background preferred.

**Application Due Date:** **December 7, 2010**

The **West Coast Governors' Agreement on Ocean Health Climate Change Action Coordination Team** is seeking an intern to accomplish specific tasks outlined in our Work Plan. This is an excellent opportunity to work with experts in the field of regional climate change adaptation across California, Oregon, and Washington. The individual selected for this position will also make a valuable contribution to the scientific community across all three states. The intern will begin in late winter/early spring and continue the job for up to 8 months (flexible with part- or full-time). The intern will be an undergraduate at the senior level or a graduate student with a background in Natural Resources, with a focus on Coastal or Marine Sciences preferred. The internship will be located at the California State Coastal Conservancy office in Oakland, California that is co-located with the National Oceanic and Atmospheric Administration's Coastal Service Center office. The background for our group and the specific tasks to be accomplished are described below.

**Background:** On September 18, 2006, the Governors of California, Oregon and Washington announced the [West Coast Governors' Agreement on Ocean Health](#) (WCGA). The Agreement launched a new, proactive regional collaboration to protect and manage the ocean and coastal resources along the entire West Coast, as called for in the recommendations of the U.S. Commission on Ocean Policy and the Pew Oceans Commission. The Agreement seeks to advance the goals of:

- Clean coastal waters and beaches,
- Healthy ocean and coastal habitats,
- Effective ecosystem-based management,
- Reduced impacts of offshore development,
- Increased ocean awareness and literacy among the region's citizens,
- Expanded ocean and coastal scientific information, research, and monitoring, and
- Sustainable economic development of coastal communities.

The [Executive Committee](#) established multiple workgroups, known as Action Coordination Teams (ACTs), to coordinate coast-wide implementation of the Action Plan. These teams were created to address or perform activities in the Action Plan for which multiple representatives from each of the three states with specific expertise or connections are required. The Climate Change ACT is focusing initial efforts, in collaboration with the federal government, on a west coast-wide assessment of shoreline changes and anticipated impacts to coastal areas and communities due to climate change over the next several decades, and is working together to develop actions to mitigate and adapt to the impacts of climate change and related coastal hazards. To find out more about the Climate Change ACT Work Plan, go to:

[http://westcoastoceans.gov/Docs/Climate\\_Final\\_Work\\_Plan.pdf](http://westcoastoceans.gov/Docs/Climate_Final_Work_Plan.pdf)

**Intern Duties:** The purpose of the proposed project is to anticipate climate change impacts and hazards to coastal areas by characterizing ecological changes of nearshore habitat from sea level rise (SLR), changes in storm intensity and other climate-related physical processes. **The intern will complete the following tasks that are part of the Climate Change ACT Work Plan:**

1. Survey subject matter experts to identify key coastal ecosystems/habitats impacted by climate change and sea level rise. Subject matter experts will be identified through recommendations from WCGA Climate Change ACT members, from individuals that will be identified in the proposed regional Integrated Ecosystem Assessment (IEA) pilot projects listed in the IEA ACT work plan, and from participants at a January 2009 workshop (described below in #5). The inclusion of diverse stakeholders and resource managers along the west coast, especially participants from the January 2009 workshop, will guarantee input from a variety of sources. Key ecosystems and habitats will be chosen to ensure a coast-wide perspective and their identification will be enhanced by the current LiDAR mapping project in the Seafloor Mapping ACT work plan.
2. Produce a geospatial product and map identifying the key ecosystems and habitats with links to the compiled information to post to the internet as a tangible product for the public to access.
3. Identify models of SLR and impacts on marshes and other natural shorelines (e.g., Sea Level Affecting Marshes Model – SLAMM) to aid land management agencies. Work will focus on identifying models that have regional relevance, enhance regional collaboration across all three states, and integrate with the National Academies Study on Sea Level Rise that is currently underway.
4. Conduct a literature review of shoreline change impacts to natural resources and compile a reference list for resource managers. A starting point will be the existing West Coast Climate Change Shoreline Impact Inventory compiled by National Oceanic and Atmospheric Administration’s Coastal Service Center and subject matter experts identified in the IEA ACT work plan proposed pilot projects.
5. Survey west coast resource managers to catalogue observed habitat changes and areas/issues of highest concern. An initial survey was conducted at a January 2009 Climate Change Workshop focused on the coastal ecosystems of California, Oregon, and Washington. Participants of the workshop identified ecological impacts of climate change and provided examples of west coast ecosystems that are known to have buffered the physical impacts of climate change.

**Estimated timeline for products/outcomes:**

1. Meet with the Climate Change ACT to discuss tasks, products and timeline (late winter/early spring)
2. Perform tasks while providing monthly progress reports (ongoing)
3. Products and draft report completed (by August 2011)
4. Final report approved by Climate Change ACT (by September 16, 2011)

**For Questions and Application Submittal:** All applicants should email a cover letter that describes how their experience and skills relate to this project and a resume or curriculum vitae, including 3 references, to:

Samantha N. Marcum  
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Pacific Southwest Region  
U.S. Fish and Wildlife Service  
Santa Cruz, California  
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