CALIFORNIA COASTAL COMMISSION

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CALIFORNIA COASTAL COMMISSION

2017 SEA GRANT FELLOWSHIP OPPORTUNITY COASTAL ENGINEER OR NEARSHORE OCEANOGRAPHER

1. Host location and contact information

California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 94105

2. Fellowship Supervisor and Point of Contact for California Sea Grant, Prospective Fellows, and Finalists

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3. Overview

The California Coastal Commission implements the California Coastal Act of 1976 and has regulatory authority over development along the coast in balance with the protection of coastal resources, environmentally sensitive habitats, and public access. This work is carried out through land use planning and permitting. The Commission is an independent, quasi-judicial state agency whose authority is defined as the coastal zone, a 1.5 million-acre area stretching 1,270 miles along the state's mainland coastline from Oregon to Mexico, and around nine offshore islands (333 miles of island shoreline). The Commission also has the responsibility to work with local governments to establish Local Coastal Programs (LCPs) which, when certified by the Commission, becomes the land use plan basis for coastal permitting at the local level. Furthermore, the Commission has the purview and planning responsibility to assess and address issues of state-wide importance such as sea level rise and coastal erosion and the implications of these on Coastal Act resources. Both sea level rise and coastal erosion are likely to be exacerbated by climate change.

Position Description

The Sea Grant Fellow will be involved in a broad range of the Coastal Commission's regulatory and LCP planning work throughout the coastal zone. He/she will have an opportunity to assist executive, management, and policy staff in the Commission offices with the technical and engineering aspects of a variety of coastal and ocean issues. Working closely with Coastal Commission's Chief Deputy Director, Senior Coastal Engineer, technical staff and other senior staff, the Sea Grant Fellow will have the opportunity to work at the leading edge of natural resources and coastal and ocean management and climate change adaptation. The Fellow will have the opportunity to interact directly with senior technical staff and leaders in resource management policy throughout California. Fellow work products, potentially including presentations and collaborative work on reports with the Coastal Commission and with other state agencies, will be highly visible.

A Sea Grant Fellow with special expertise in coastal engineering and/or coastal processes with the Coastal Commission will support the executive and senior policy and technical staff in specific areas such as participating in multi-agency meetings, reviewing, commenting on and drafting comments on

the technical components of regulatory, enforcement and planning documents, and assisting the Commission in developing or enhancing projects including those that are done in cooperation with partners. The role of the Fellow may include support on one or more of the above mentioned large-scale projects and he/she will also likely have several smaller projects that will be theirs to develop and manage.

Key focus areas could include addressing concerns related to: increased flooding, wave attack and erosion that could result from rising sea level and climate change; shoreline protection and effective options for soft protection; beach nourishment; living shorelines and adaptive protection options; tsunami risk and options for protection and response; sediment management; and, other coastal hazards.

Potential tasks associated with the analysis and development of projects include: review of site plans, grading plans, erosion and wave up-rush studies, slope stability and other engineering, geology, and technical reports; communicating with local planners, project applicants, technical consultants and others; review, analysis and summary technical reports; coordinating with stakeholders, partners, or technical consultants; organizing and/or participating in meetings and workshops; participating in site visits; problem solving; and maintaining broad project or program support.

Specific project and program duties will be developed collaboratively with the Fellow and with Coastal Commission staff members currently working on these issues. Potential project opportunities at this time address a mix of policy and technical needs. The Fellow would also have the opportunity to participate in numerous intra-agency and inter-agency working groups including the following:

- Coastal Sediment Management Work Group
- Tsunami Policy Work Group
- Sea Level Rise Mapping Partners and FEMA Resilience Alignment Meetings
- Beach Erosion and Coastal Hazards Working Group
- San Dieguito Lagoon Coastal Processes Technical Panel
- Coast and Ocean Climate Adaptation Work Group

A successful Sea Grant Fellow at the Coastal Commission must be willing to take on and deliver a broad range of projects. The Sea Grant Fellow must be able to identify and analyze an array of technical issues associated with Commission regulatory and planning efforts and communicate information clearly in both writing memos and reports, as well as through oral and visual presentations. The Sea Grant Fellow must be able to work well under minimal supervision or guidance. Assignments will be customized to match the unique skills of the selected Fellow. However, since there are few academic programs that provide all the necessary skills for this Coastal Engineering/ Coastal Processes position, the Fellow must also know when they are working outside their sphere of understanding and be willing to ask for help or direction early in the work effort. An undergraduate degree in civil or environmental engineering or engineering geology, and a masters or Ph.D. in coastal, environmental or ocean engineering; environmental or engineering geology; physical oceanography; or related disciplines is desirable.

The Coastal Commission's senior management has broad experience and success in hosting Fellows and giving them a wide breadth of experience in coastal management issues. *The Commission has two fellowship proposals; however, it is likely that only one 2017 proposal will be funded.*