Sea Grant Host Description

1. Host Location and contact information:  
   North Region Environmental Planning  
   Environmental Engineering and Coastal Stewardship  
   District 1, 1656 Union Street  
   Eureka, CA 95501

2. Fellowship Supervisor:  
   Kevin Church, North Region Chief Environmental Engineer  
   (707) 445-5201  
   kevin.church@dot.ca.gov

3. Point of Contact:  
   Lorna McFarlane, Water Quality Planner  
   (707) 441-5609  
   lorna.mcfarlane@dot.ca.gov

Agency Background

The California Department of Transportation (Caltrans) is a part of the cabinet level California State Transportation Agency tasked with managing the state’s highway system. Caltrans’ mission is to “[p]rove a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability.”

In response to the National Environmental Policy Act (NEPA), in 1969, and the California Environmental Quality Act (CEQA), in 1973, Caltrans formally initiated an environmental function. Subsequently, in response to the passage of a host of environmentally-related laws and regulations and heightened public support for the environment, environmental compliance has grown to become a substantive and inseparable part of Caltrans’ planning, development, construction, operation and maintenance efforts.

Caltrans headquarters’ Division of Environmental Analysis (DEA), administers Caltrans’ responsibilities under federal and state environmental law. The DEA develops and maintains Caltrans environmental standards, policies, procedures, and practices that are implemented by the Department’s 12 District Environmental Branches. The selected Fellow would work with Caltrans North Region Environmental, based in Eureka CA. Staff at headquarters DEA and in the districts work to identify and assess the effects of Caltrans’ projects on the state’s natural and cultural environments, and identify ways to avoid or mitigate those effects. Efforts include:

- Complying with state and federal environmental laws;
- Encouraging the public to participate in the environmental evaluation process;
- Determining the environmental consequences of our activities;
- Proposing prudent, feasible and cost-effective strategies and alternatives to avoid or minimize adverse impacts of the Department's activities, and;
- Ensuring the mitigation selected is appropriate.
- Provide funding to State and Federal Agencies conservation efforts, implemented as mitigation.

https://dot.ca.gov/programs/environmental-analysis  
https://dot.ca.gov/caltrans-near-me/district-1

Position Description

The Sea Grant Fellow will function as a full team member in the Environmental Engineering Unit. The Fellow may also split time with the Coastal Stewardship Unit and other Units in the Division of Environmental. Within the Environmental Engineering Unit, and depending on the Fellow’s skill and interests, the Fellow may work on the following projects:
• Implementing eelgrass mitigation in Humboldt Bay in coordination with the California Department of Fish and Wildlife (CDFW) and Sea Grant Extension Specialist Joe Tyburczy (Humboldt State University)
• Assessing the hydroacoustic impacts to aquatic life from construction activities (pile driving, jack hammering etc.)
• Assessing the relationship between land-based construction activities and the collapse of Tidewater Goby burrows
• Assessing the water quality impacts of placing asphalt grindings in roadway construction
• Completing CEQA level Water Quality Assessments for planned projects within Caltrans District 1
• Water Quality permitting (401, 404, 1600, Lake and Streambed Alteration Agreement (LSAA) etc.)
• Identifying and developing mitigation options for Caltrans projects that result in significant impacts
• Identifying and developing innovative new ways to earn alternative compliance units under the Caltrans NPDES (National Pollutant Elimination Discharge System) Permit
• Water Quality monitoring (fresh and marine) for threatened or endangered fish species
• Research and development of proposal on the value and appropriateness of using eDNA in biological surveys
• Overseeing removal of Spartina densiflora at Tuluwat Island; restoring ~70 acres of wetlands in Arcata, CA

Skills Learned

We understand the aim of the fellowship is to provide recent graduates with real world environmental policy and implementation experience. We are committed to ensuring you leave the fellowship with developed and employable skills that will make you a competitive job applicant in the field. We will work closely with the fellow to provide career mentorship and the development of other skills such as:

• Development of Memorandums of Understanding (MOUs) and Interagency agreements
• CEQA, NEPA, and water quality permitting
• Understanding the roles and functions of resource, regulatory and project delivery State agencies
• Exposure to (through direct work with) agencies including CDFW, Coastal Commission, Waterboards, NOAA Fisheries, US Fish and Wildlife
• Understanding of project management

Desirable Qualifications

Experience with the subject matter for any (or all) of the potential projects listed above but most importantly we seek a motivated, self-starter who is willing to learn. Additionally, we are looking for a fellow with a positive attitude, strong organizational skills, and strong networking/communication abilities.

**Also, must be willing to live in one of the most beautiful parts of California!!