### **Sea Grant Host Description 2019**

# 1 Fellowship available at the California Department of Fish and Wildlife

1. Host location and contact information California Department of Fish and Wildlife

350 Harbor Blvd. Belmont, CA 94002

2. Fellowship Supervisor(s) Becky Ota

Habitat Conservation Program Manager

Marine Region

Department of Fish and Wildlife

(650) 631-6789

Becky.Ota@wildlife.ca.gov

3. Point of contact for finalists

Becky Ota

Habitat Conservation Program Manager

Department of Fish and Wildlife, Marine Region

(650) 631-6789

Becky.Ota@wildlife.ca.gov

Brian Owens, Artificial Reefs, Lead person Senior Environmental Scientist, Specialist Department of Fish and Wildlife, Marine Region

Brian.Owens@wildlife.ca.gov

### 4. Position description

The California Department of Fish and Wildlife (Department) is a trustee for the State's fish and wildlife resources and therefore has jurisdiction over the conservation, protection and management of fish, wildlife, and habitats necessary for biologically sustainable populations of those species. The Department's Marine Region specifically manages the marine and estuarine resources and habitats of the state and is responsible for marine biodiversity protection under the Marine Life Protection Act (MLPA) and for a comprehensive, ecosystem-based approach to the management of the state's fisheries under the Marine Life Management Act (MLMA). The Department has a myriad of other key state and federal mandates to uphold including provisions of the California Fish and Game Code and collaborates with numerous state and federal agencies, Tribes and Tribal Communities, the academic community, non-government organizations and stakeholders. The Marine Region's Habitat Conservation Program includes the Statewide Marine Protected Areas Management Project and the Environmental Review and Water Quality Project. Several Senior Environmental Scientists are responsible for addressing emerging issues related offshore renewable energy and **artificial reefs**.

The Department has been involved in the construction of artificial reefs since 1958, with most of the reefs constructed in southern California because of the concentration of population and the sandy stretches of coastline. The California Artificial Reef Program (CARP) was created by legislative statute in 1985 (Fish and Game Code section 6420 et seq.). CARP was created to address declines in various southern California marine species. The legislature found that efforts to enhance these species through the placement of artificial reefs needed to be investigated and a program of artificial reef research and development was in the public interest. CARP, as administered by the Department, was mandated to include: a) the placement of artificial reefs in state waters; b) a study to determine the design criteria needed for artificial reefs capable of increasing fish and invertebrate production; and c) a determination of the requirements for reef siting and placement. Unfortunately, in the late 1990's, there were funding cuts and no future appropriation of sustainable funding was identified, and CARP has remained an unfunded mandate. As a result, the research, design criteria, and plan creation

is unfinished and efforts to understand how artificial reefs enhance or affect fisheries populations and create fishing opportunity is needed. The Department has seen an increase in requests for artificial reefs that are not consistent with existing Fish and Game Code for reef placement. Despite the lack of an Artificial Reef Program, the Marine Region has been working, with the little capacity we have, to identify what we can do to start collecting important data on the existing reefs, whether scientific, fishing effort, or socioeconomic. Key scientific questions need to be answered and a scientifically sound statewide management plan for the placement of artificial reefs in state waters is needed before the Department can support further creation of artificial reefs.

A related issue concerns the Marine Resources Legacy Act (Fish and G. Code section 6600 et.seq.) or Rigs-to-reefs. Rigs-to-reefs refers to the concept of converting decommissioned offshore oil platforms into artificial reefs by leaving a portion of the platform structure in the water, instead of complete removal. Offshore in California, there are 33 structures: ten in State waters, and 23 in Federal waters. Offshore platforms support abundant populations of fish and invertebrates. However, the actual habitat value and contribution to increased production of marine life is inconclusive. Currently, the Marine Resources Legacy Act charges three state agencies, including the Department, with reviewing the decommissioning application(s). The Department is also responsible for preparing a draft reef management plan, the ongoing management of the reef structures, and other mandated responsibilities. As part of this effort, it is necessary that the Department reestablish its artificial reef program, in order to provide this on-going management for the reef structures. Recently several oil platforms have been identified as candidates for decommissioning and the owners have started the process.

The Department is looking for a Sea Grant Fellow to perform the following tasks associated with artificial reefs:

## <u>Artificial reefs</u> –

- Assist with researching and gathering published scientific data, along with expert scientific opinion and knowledge, regarding the effect of artificial reefs on fish populations.
- Evaluate how the effects on fish populations would change fisheries management decisions.

#### Rigs-to-reefs -

• Assist in the development of a draft management plan for decommissioned oil platforms based on the requirements outlined in the existing Marine Resources Legacy Act.

#### Skills or attributes we seek include:

- Excellent verbal and written communication skills.
- Knowledge of fisheries management practices.
- Knowledge of ecological principles
- Ability to work independently.
- Ability to work as a team member.
- Ability to communicate science.
- Up for a challenge