

## Statewide Monitoring Fellow

Pursuant to the Marine Life Protection Act (MLPA [California Fish and Game Code, §2850-2863]), significant steps were taken to ensure California's MPAs were designed as an ecologically connected network through four incremental science-based and stakeholder driven regional MPA planning processes, ultimately resulting in a completed statewide network by 2012. Now that planning is complete, the California Department of Fish and Wildlife (CDFW) and partners are focused on monitoring of MPAs, specifically "monitoring, research, and evaluation at selected sites to facilitate the mandated adaptive management of MPAs and ensure that the [MPA] system meets the goals stated in this chapter."<sup>1</sup>

To date, the statewide MPA monitoring framework has been used primarily to guide baseline monitoring efforts and has guided the development of regional monitoring plans that provide a broad list of metrics and questions that are linked to the goals of the MLPA. UCD researchers have developed some understanding of the transient responses of populations to MPAs. There is a need to develop a template for building a monitoring program that will evaluate the performance of the network and inform adaptive management. In addition little is known about the efficacy of MPA networks that cover a geographic scale as large as California due to the lack of empirical data from large-scale MPA networks throughout the world.

The University of California, Davis and California Department of Fish and Wildlife seek an experienced Post-Doctoral Researcher to create innovative approaches and analyses in support of MPA network management in California. Specifically the Post Doc will be asked to co-lead the development of approaches to selecting metrics at varying scales that will inform statewide network performance evaluation; evaluating the efficacy of selecting reference MPAs to represent regional conditions over time; and work closely with the Ocean Science Trust and researchers throughout the state that were involved in the design process for MPAs to integrate this work into the statewide monitoring framework and to test the efficacy of the original design assumptions for the network.

We seek a creative individual with a PhD in Ecology and Evolutionary Biology, Fisheries Science, Marine Science, or a related field and research expertise in at least one of MPAs, ecosystem-based management, monitoring and adaptive management, population dynamics, and spatial ecology. The individual will need to be interested and have the ability to effectively work in interdisciplinary teams on cross-cutting issues. The work of the Postdoctoral Researcher will require proficiency in programming language such as R and Python, programming, data management/protocol, coding, metadata, and relational databases. Given the focus and goals of the project and of the groups involved, we seek a person with experience and/or interest in both advancing scientific frontiers and addressing real-world challenges in sustainable ocean resource management.

The Postdoc will be part of a specific faculty sponsor(s)' lab at UC Davis and hosted at the California Department of Fish and Wildlife office in Belmont, CA located near San Francisco. The Postdoc will be working collaboratively with both UC Davis faculty and the CDFW Program

Manager that is responsible for the leading the management of California's MPA network. This multi-faceted mentoring approach will provide opportunities for the Postdoc to develop innovative scientific applied approaches that will directly affect marine resource management decisions in California. In addition to frequent communication with faculty via remote meetings, the position includes a travel stipend that will support significant time at the UC Davis campus to ensure close integration with the UC Davis faculty and community.

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<sup>1</sup> California Marine Life Protection Act, Fish and Game Code section 2853(c)(3). See also sections 2852(a), and 2856(a)(2)(H).