

Southern California Coastal Water Research Project (SCCWRP) Sea Grant Fellow Opportunity

Host Location

Southern California Coastal Water Research Project (SCCWRP; www.sccwrp.org) 3535 Harbor Blvd., Suite 110 Costa Mesa, CA 92691

Supervisors and Point of Contact for Prospective Fellows and Finalists

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Position Description

The Southern California Coastal Water Research Project Authority (www.sccwrp.org), an intergovernmental coastal research agency, is seeking a Seagrant Fellow to conduct research and help develop policy on the effects of anthropogenic nutrients on stream algal ecology to support the development of nutrient criteria.

SCCWRP is a leading U.S. environmental research institute that works to develop a scientific foundation for informed water-quality management in Southern California and beyond. Since its founding as a public agency in 1969, SCCWRP has been a champion of sound interdisciplinary approaches to solving complex challenges in water management. SCCWRP's staff of more than 40 researchers investigates not only how to more effectively monitor and protect Southern California's ocean and coastal watersheds, but also how to bridge the gap between water-quality research and the management community that relies on this science. Through a 14-member governing board – known as the SCCWRP Commission and made up of wastewater dischargers, stormwater agencies and water-quality regulators from across Southern California – SCCWRP builds consensus and develops real-world management solutions, paving the way for collaborators and stakeholders to coalesce around shared, long-range research goals.

SCCWRP is the scientific lead on a California State Water Resources Control Board program (hereto referred to as "Water Board"; www.swrcb.ca.gov) to develop nutrient criteria for the state's surface waters, focused on wadeable stream and estuaries

(www.waterboards.ca.gov/water_issues/programs/nutrient_objectives/development/). SWRCB staff favor a "bioconfirmation" approach, in which endpoints for ecological response indicators (e.g., algal abundance and community metrics, dissolved oxygen) are used in tandem with nutrient targets to establish goals for waterbodies. Water Board staff also favors the idea of allowing for watershed-based nutrient management where urban or agricultural land uses may make it difficult to meet proscribed targets. There are many important policy issues in the implementation of a watershed nutrient management approach that Water Board staff is considering how to address.

To kick start discussions on the policy issues associated with such an approach, SCCWRP is assisting the San Diego Regional Water Quality Control Board and stakeholders of the Santa Margarita River to develop a watershed approach to establishing nutrient targets, where the river tributaries and the downstream estuary have been designated as impaired for nutrient overenrichment. The goal of this project is to establish nutrient targets for Santa Margarita River and Estuary, utilizing field data

collection, statistical analyses, and computer modeling tools to develop a watershed-based nutrient management strategy. The project provides an opportunity to work through policy issues associated with the implementation of "watershed approach" to nutrient management.

SCCWRP is seeking a Sea Grant Fellow to support research activities and the translation of science to policy applications for both the Santa Margarita River Watershed project and the Statewide Nutrient Objective Program. We anticipate that the position will consist of field research and associated data analyses to support Santa Margarita River Watershed science approximately 50% of the time. The remainder of the time will be focused on supporting the State Water Board, the San Diego Regional Water Board, and stakeholder discussions of the policy implications of this science and can be tailored to the Seagrant Fellow's interest. Examples of this can include developing white papers on technical options underlying implementation issues, interviewing Regional Board staff to understand barriers to ideas or existing precedents, and conducting literature reviews of innovative watershed nutrient management approaches. In addition, the Sea Grant fellow would be trained and mentored in SCCWRP's approach to facilitation at stakeholder meetings, both for Santa Margarita River Watershed and for the Statewide Wadeable Stream Nutrient Objectives Program.

The preferred candidate will have, at minimum, a Masters degree in stream or coastal ecology or biogeochemistry with excellent oral and written communication skills and the ability to work independently. Experience with quantitative data analyses, interest and demonstrated experience in field work and laboratory analyses is a plus.