

# Socioeconomic Impacts of Marine Protected Areas and Offshore Energy Analyst Summer 2025

## **Project Background**

Marine spatial closures, e.g., marine protected areas and offshore energy areas, typically exclude fishing activity. Such closures could negatively impact fisheries outcomes including harvest and profit by reducing access to fish resources and increasing travel costs. However, closures could positively impact fisheries outcomes if, for example, benefits from spillover effects outweigh the potential costs. The net socioeconomic implications of such closures is unclear and likely depending on a number of factors including fishery status, biological attributes, and fleet dynamics.

emLab is seeking one graduate student for a paid, full time, hourly summer position, with the potential for this position to extend through Fall Quarter. The student will work with our staff to analyze the socioeconomic implications of marine area closures using the <a href="marlin">marlin</a> framework (publication). These analyses will support ongoing research projects that use the marlin framework to estimate the implications of planned West coast wind energy areas on the Dover sole, thornyhead, and sablefish (DTS) complex, and no-take marine protected areas on pelagic fisheries in the Pacific Ocean. The selected candidate may also conduct literature reviews on country-specific marine resources and assist with economic valuations of offshore areas with and without marine area closures.

### Responsibilities

During this opportunity, the student will work on applied research projects and activities may include:

- Conducting literature review on marine resources and fisheries stock assessments
- Developing and executing reproducible code that implements the marlin framework in several different fisheries contexts
- Parameterizing the marlin model using stock assessments and other fisheries-specific information
- Producing and interpreting model outputs for each context
- Supporting the coding and parameterizing of stock assessments
- Applying economic valuation methods to different context
- Contributing to presentations, reports, and manuscripts

#### **Desired Skills and Experience**

- Coursework and/or experience with fisheries science, marine science, and data science
- Advanced knowledge of R, GitHub, and data science best practices
- Prior independent research experience

## **How to Apply**

To apply, please send your resume and cover letter to Jennifer Bone at jebone@ucsb.edu. In your application package, please include the following:

- 1. Your resume
- 2. A short cover letter (no longer than one page) that includes information on (a) your schedule/availability for the summer, and (b) any relevant work or volunteer experience that relates to the desired skills and experience outlined above.

The student research assistant will be paid commensurate with experience, starting at \$22/hour, and will work for 12 weeks from their start date, which is ideally in June.

**Application Deadline: May 1st, 2025**