



## Charles Stock

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### ***Earth system predictions for resilient living marine resources***

Climate change has shifted from a looming global threat to a pervasive contemporary challenge to the resilience of marine ecosystems and the communities they support. Environmentally-informed decisions across time horizons—from days to decades—are critical for meeting this challenge. Current global models yield skillful predictions of basic ecosystem-relevant physical ocean properties in many regions. Numerous case studies, including for California’s Pacific sardine fishery, suggest that consideration of such predictions in management may promote both economic and conservation goals. Furthermore, global biogeochemical predictions experiments have found that critical ecosystem stressors (e.g., plankton, oxygen, acidity) are often more predictable than their physical counterparts, enabling more robust marine resources predictions in a changing climate. Despite these successes, observational advances and high-resolution regional ocean models are critical for fully realizing the value of earth system predictions for marine resource resilience. In this seminar, Charles will highlight upcoming efforts to advance these areas.

**Registration for this webinar is required and space is limited. [Please RSVP here.](#)**