

**California Department of Fish and Wildlife - California Sea Grant Statewide Kelp
Management Extension Fellowship**

Request for Applications

1. Partner Point of Contact:

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2. Various Management Plan Goals, Objectives, and Strategies (if available) that this Project Relates to:

- [CDFW 2001 draft final Environmental Document Giant and Bull Kelp Commercial and Sportfishing Regulations](#)
- [Sonoma-Mendocino Bull Kelp Recovery Plan](#)
- [Sanctuary Advisory Council's Kelp Recovery Recommendations](#)
- [2018 Master Plan for Fisheries: A Guide for Implementation of the Marine Life Management Act](#)

3. Brief Project Description:

California Sea Grant is expanding their fellowship opportunities for recent Masters and PhD students through a new Extension Fellowship program. As part of the program, the California Department of Fish and Wildlife (CDFW) Marine Region will host an Extension Fellow in Eureka, California for two years, to support the creation of an Enhanced Status Report (ESR) and/or statewide management plan for bull kelp and giant kelp. The CDFW will serve as one of the co-mentors for the Extension Fellow, with additional mentorship from California Sea Grant. The Extension Fellow will not only help advance the CDFW and Sea Grant missions, but also will assist in making tangible and quantifiable progress towards creating and implementing an ESR and/or statewide kelp management plan.

The fellowship will include engagement with the dynamic team of California Sea Grant Extension Specialists who work with state and federal agencies, municipalities, nonprofit organizations, local businesses, and members of the California coastal community, to identify emerging marine resource problems and opportunities, conduct applied scientific research, and share findings with stakeholder groups. Together, the statewide Extension Team will support, and connect the Extension Fellow to appropriate stakeholders (i.e. academic researchers, fishing community, non-profit organizations, non-government organizations, and K-12 educators). The Extension Fellow will gain on-the-job experience in planning, implementation, and management, providing a unique educational opportunity for recent graduate students interested in outreach, marine resources and the policy decisions that affect them.

4. Project Objectives and Tasks:

Creation of a Statewide Kelp Management Plan

The Extension Fellow will work with CDFW Marine Region staff and California Sea Grant Extension to coordinate and develop an ESR and/or comprehensive statewide kelp management plan, focused on giant and bull kelp on a regional basis. Such an ESR and/or management plan could include, but is not limited to the following:

1. Purpose and need for management;
2. Goals of the plan;



3. Biological information (e.g., life cycle, predators, ecosystem role);
4. Past and current status of kelp resources;
5. Regulatory framework including commercial and recreational harvest;
6. Overview of past and current management efforts in California and elsewhere (e.g., enhancement, predator removals, commercial and recreational harvest regulations);
7. Tribal use and impacts to tribes;
8. Development of a long-term cohesive monitoring program;
9. Recovery options and geographic considerations; and
10. Research gaps and information needs.

Potential activities relating to the creation of the ESR and/or kelp management plan include: compiling and synthesizing information, writing draft sections, coordinating with appropriate stakeholders, assisting with meetings, and review of materials.

Kelp Stakeholder Coordination

The Extension Fellow will work with CDFW Marine Region staff and California Sea Grant Extension to participate in statewide kelp management and restoration efforts. The Fellow will participate in advisory bodies and working groups including the Kelp Ecosystem and Landscape Partnership for Research on Resilience ([KELPRR](#)) workgroup, where members from state agencies and NGOs, effectively link communication efforts amongst the kelp community to identify research gaps and needs.

Scientific Advisory Committee

The Extension Fellow will work with CDFW Marine Region staff and California Sea Grant Extension to develop a scientific advisory body, to help shape the priorities for the ESR and management plan.

Addressing CDFW, California Sea Grant, Ocean Protection Council, and National Marine Sanctuary Goals

The Extension Fellow will engage in other efforts that advance the goals of the [CDFW](#), [California Sea Grant](#), the [Ocean Protection Council](#) and the [National Marine Sanctuaries](#) of California (e.g. Channel Islands National Marine Sanctuary; Monterey Bay National Marine Sanctuary; Greater Farallones National Marine Sanctuary; and Cordell Banks National Marine Sanctuary).

- **California Department of Fish and Wildlife:**
 - Ensure the conservation, sustainable use, and restoration of the state's kelp resources through ecosystem-based management and informed public involvement in decision-making and science.
- **California Sea Grant -**
 - **Healthy Coastal Ecosystems** - *Assess changes in kelp beds to understand restoration potential, and causes and consequences of loss.*



- **HCE 1-1:** Evaluate interactions between kelp resources and their physical and chemical environment. Determine how these relationships vary over time, especially as driven by climate change, changes in fisheries management, establishment and/or management of aquaculture, water quality, and establishment of marine protected areas.
- **HCE 3-1:** Identify kelp ecosystems, communities and resources that are at particular risk from climate change impacts, including sea level rise, ocean acidification, hypoxia, rising temperatures, and changing frequencies and intensities of storm events.
- **HCE 3-2:** Support research to understand, and develop models and tools to evaluate and forecast the ecological and socioeconomic impacts of climate change on kelp species, environments, and related communities.
 - **Sustainable Fisheries and Aquaculture** - *Provide science-based information to support and grow a sustainable California aquaculture industry to help meet the growing demand for seafood, and minimize negative environmental impacts of aquaculture.*
 - **Strategy 2-4:** Apply culturing technologies to further conservation goals, including the recovery of rare species and restocking.
- **Ocean Protection Council**
 - **Objective 1.3:** Improve Understanding of Climate Impacts on California's Coast and Ocean - Map current inventory of and projected future habitat space for seagrass meadows and kelp forests along the California coast; identify data gaps and set targets for restoration as needed
 - **Objective 3.2:** Restore and Protect Kelp Ecosystems - Develop and begin implementation of statewide kelp forest research and restoration plan
 - **Objective 3.3:** Support Sustainable Marine Fisheries and Thriving Fish Populations - Develop rapid response capabilities to unanticipated biodiversity/fisheries emergencies (such as sea star wasting disease, harmful algal blooms, kelp forest collapse)
- **National Marine Sanctuaries (of California)**
 - **Goal One** - Ensure thriving sanctuaries and other ocean parks
 - **Goal Two** - Safeguard more underwater treasures as national marine sanctuaries
 - **Goal Three** - Increase support for sanctuaries
 - **Goal Four** - Deepen our understanding on sanctuaries

The Extension Fellow could also advance California Sea Grant and CDFW interests by taking a lead role in the development of a California Sea Grant kelp research solicitation call based off of research needs and gaps identified during the creation of the ESR and/or management plan. The Extension Fellow would work closely with relevant

researchers and California Sea Grant's Science Integration and Communication Teams to develop materials, and promote the funding opportunity.

Other Outreach, Training, and Kelp Initiatives

The Extension Fellow may pursue and participate in regional outreach opportunities, and as an integrated member of the CDFW, could provide support to kelp focused projects in other regions as needed. Finally, similar to extension specialists, the Extension Fellow could engage students to expand capacity to meet research and outreach needs identified during the project.

5. Desirable Qualifications

- Ability to work both independently and with diverse interdisciplinary teams;
- Strong and clear verbal and written communication skills;
- Ability to develop and apply expertise in natural resources and coastal management issues;
- Ability to translate science into a manner that can be easily understood by a variety of audiences;
- Project management skills;
- Experience in or knowledge of environmental policy, law, management, and other natural resource related fields;
- Experience in, or knowledge of, current kelp management and restoration issues;
- Ability to conduct scientific literature reviews

6. Skills Learned

- Including but not limited to: understanding the roles and functions of resource, regulatory, and boundary agencies in California.

7. Other project partners:

- National Marine Sanctuaries of California
- Greater Farallones Association
- Scripps Institution of Oceanography
- The Nature Conservancy
- Ocean Protection Council
- Reef Check
- Academic Institutions
- Waterman's Alliance
- Commercial urchin industry
- Tribes
- Noyo Center for Marine Science
- Farallon Institute



8. Eligibility

Applications may be submitted by a graduate student close to completing their degree (Masters, Ph.D., or J.D) in a field related to marine biology, marine ecology, and/or marine resource management. Graduate students who recently completed their degree with graduation date [i.e. the date the degree was awarded by the university] after May 1, 2018 are also eligible to apply. **The Fellow must complete all degree requirements before starting the fellowship.**

Sea Grant is committed to increasing the diversity of the Sea Grant workforce and of the communities we serve. Sea Grant embraces individuals of all ages, races, ethnicities, national origins, gender identities, sexual orientations, disabilities, cultures, religions, citizenship types, marital statuses, job classifications, veteran status types, and income, and socioeconomic status types. Sea Grant is committed to building inclusive research, extension, communication and education programs that serve people with unique backgrounds, circumstances, needs, perspectives and ways of thinking.

9. Length and Location of Assignment

The length of the assignment is 24 months (non-renewable). The fellowship, located in Eureka, California, will begin on April 1, 2020.

10. Stipend and Expenses

The fellow will receive \$100,800 in stipend for the twenty four-month assignment (\$4,200/month). Additional funds will be available for health insurance reimbursement (\$260/month) and to cover fellowship related travel (\$10,000/year).

11. Application

A complete application will include:

- Resume/curriculum vitae (not to exceed two pages using 12-point font)
- A personal education and career goal statement that emphasizes the applicant's abilities and interest in a field related to marine biology, marine ecology, and/or marine resource management, and the applicant's expectations of the career development experience (1,000 words or less)
- Two letters of professional recommendation, including one from the student's major professor. If no major professor exists, the faculty member who is most familiar with the applicant academically may be substituted
- Copies of all undergraduate and graduate student transcripts. Unofficial copies will be accepted



How to Submit an Application

The electronic files comprising your application must be submitted as PDFs using eSeaGrant, California Sea Grant's online submission portal.

You will need to register for an account (click on the banner labeled "Register") in eSeaGrant if you have not done so in the past year. You can change the randomly generated password once you log in successfully into the website. To apply for this fellowship, follow [eSeaGrant instructions](#) specific for this opportunity.

Please make sure to include your last name in the file names for each section of the proposal (e.g., Smith_statement.pdf or Smith_cv.pdf). When naming the document please do not use apostrophes. Once submitted through the website, PDFs may not be edited. To change a PDF, it must be deleted and resubmitted.

IMPORTANT: To maintain confidentiality, letters of recommendation may be submitted directly from the referee to California Sea Grant through eSeaGrant and must be submitted by the application deadline to be considered. Letters may also be emailed to sgproposal@ucsd.edu. Please address letters to Dr. Shauna Oh, Director, California Sea Grant. Late submissions may lead to the rejection of incomplete applications. Candidates are encouraged to work with referees to meet the deadline.

For electronic files larger than 6 MB, contact sgproposal@ucsd.edu to make other arrangements.

Only Acrobat documents (pdf) are accepted.

For technical issues with submitting your application through eSeaGrant please contact Catherine Courtier at sgproposal@ucsd.edu or (858) 822-2167.

Application Deadline: 5:00 PM PST Friday, February 7th 2020

NOTE: the eSeaGrant proposal portal will automatically close at the date and time stated above, and late applications (even 1 minute late) cannot be accepted. It is your responsibility to get materials submitted before the deadline.

12. Selection

Selection of the finalists is made by staff of the California Sea Grant College Program and the California Department of Fish and Wildlife based upon review of written application materials and interviews (in person, Zoom, or phone) of a subset of applicants. Selection criteria used by California Sea Grant include: academic ability, writing and



communication skills, diversity and appropriateness of academic background and experience, career goals, additional qualifying experience, and support of referees.

Please note that California Sea Grant will not cover expenses incurred during interviews since traveling is not required to interview.

13. Timeline

- **December 18th:** Fellowship application posted
- **February 7th:** Fellowship applications due
- **Mid-February:** California Sea Grant and CDFW screening of fellowship applications
- **Late-February:** Interviews
- **Early-March:** Candidate notified
- **April 1, 2020:** Fellowship begins

14. Contact

For additional information about the CDFW-California Sea Grant Statewide Kelp Management Extension Fellowship, please contact:

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