



The California State University

COUNCIL ON OCEAN AFFAIRS, SCIENCE & TECHNOLOGY (COAST)

State Science Information Needs Program

We are on a quick break!

Part 2 on RFP #3 will start at 11:00 am

Part 2: RFP #3 “Informing ocean and coastal compensatory mitigation and associated restoration”

Intended audience:

- CSU faculty members & research associates interested in applying to this RFP

Part 2 Outline

- Legislative intent of the funding
- RFP parameters
- Background on how RFP research objectives were chosen
- Proposals outside the 6 specific research objectives
- Question & answer from our state agency representatives

Legislative Intent of the Funding

- One-time \$3M appropriation to the CSU for COAST
- “Increase meaningful support for research confronting California’s most critical ocean concerns and solutions”
- COAST staff IDed science needs through interviews with state agencies
 - RFPs are deliberately designed to solicit proposals to address specific state needs
 - RFPs also allow for proposals outside those specific questions but must demonstrate that a state agency values this information.

RFP Parameters

- CSU faculty members and research associates (broadly defined) are eligible
 - Lead PI must be from CSU
 - Must have PI status on home campus
 - Non-CSU co-PIs are permitted through subawards
 - No more than 20% of total funding may be awarded to a non-CSU co-PI
- Award start date: anytime between July 1-September 30, 2022
- Project duration: 30 months

RFP Parameters (cont'd)

- Awards will range from \$200,000-\$360,000
- Up to \$720,000 will be awarded
- Anticipate making 2 awards
 - Inclusion of any one particular research objective in the RFP does not constitute a commitment to fund a project.

Methods to identify and choose RFP objectives

- Review of case studies
- Interviews with state agencies
 - State Water Resources Control Board (and Regional Boards)
 - Dept of Fish and Wildlife
 - CA Coastal Commission
 - Ocean Protection Council
 - State Lands Commission
 - State Coastal Conservancy

Proposals Answering Questions Outside the Specific Research Objectives

- Objective 6.1
- See Grant Guidelines Section 3.3.6
 - Application materials **MUST** contain a letter from a state agency who will benefit from the research, explaining **HOW** they will benefit

Q & A with State Agency Representatives



Dr. Lauren Garske
Senior Ecologist
California Coastal Commission



Michael Esgro
Marine Ecosystems Program Manager
& Tribal Liaison
Ocean Protection Council



Jennifer Mattox
Science Policy Advisor & Tribal
Liaison
State Lands Commission



Brian Owens
Senior Marine Environmental
Scientist
Dept of Fish and Wildlife



Terri Reeder
Senior Engineering Geologist
Santa Ana Regional Water Quality
Control Board



Marilyn Latta
Project Manager
State Coastal Conservancy

Research Objectives (slide 1 of 4)

1. Improving the science of out-of-kind mitigation

1.1. Assess how different sampling programs for fish populations (density, site fidelity, mean size) influence estimates of habitat valuation when different types of sampling gear are used and sampling is conducted at various times (seasonally, diurnally) and frequencies. How can the value of different habitat types be compared when sampling varies with habitat type?

1.2. What are recommended methods/approaches and metrics for comparing habitat value among different habitat types (e.g., hard/soft substrate, kelp, eelgrass, estuarine)?

Research Objectives (slide 2 of 4)

2. Improving understanding of restoration practices to improve compensatory mitigation outcomes

2.1. Artificial reefs

2.1.1. Assess differences between artificial and natural reefs in California with respect to community composition and ecological function. Comparisons must include:

- Biological attributes of each reef: species assemblages, species richness, density, and size structure; individual mean size; substrate cover; invertebrate density; and giant kelp density.
- Physical attributes of each reef: georeferenced data points demarcating reef location (including depth), three-dimensional profiles of the reef, description of the habitats surrounding the perimeter for the purpose of characterizing the ecotone, determination of whether any part of the reef has subsided or been covered via sediment transport, and for artificial reefs determination of the substrate type upon which the reef was placed, and description of the materials used to build the reef
- See Appendix A for a list of artificial reefs that CDFW has prioritized for study under this research objective.

Research Objectives (slide 3 of 4)

2.2 Kelp restoration

2.2.1. Identify the most effective methods of kelp restoration in California. Identify the risks of different kelp restoration methods and measures that can be taken to address those risks. Describe the ecological and environmental circumstances under which each method should be pursued.

Research Objectives (slide 4 of 4)

2.3 Eelgrass restoration

2.3.1. Assess methods to allow existing patches of eelgrass to expand by 1) beneficially reusing suitable material to construct habitat at an appropriate depth for eelgrass in proximity to current populations, 2) removing shell hash from areas of past aquaculture operations that seem to be excluding eelgrass from what would otherwise be available substrate, or 3) other means to create habitat conducive to eelgrass expansion and/or colonization.

2.3.2. Assess the feasibility and efficacy of using seeding for eelgrass restoration in California. Identify gaps in knowledge regarding seed viability as a first step.

3.1 Other compensatory mitigation and associated restoration research questions (i.e. “catch-all” category)

Partial screenshot of Appendix A

Appendix A: List of known artificial reefs for potential study under Research Objective 2.1.1 (source: California Department of Fish and Wildlife).

Please note that in some instances the coordinates are skewed due to a conversion from Loran to GPS positioning. Additionally, many reefs are modular acting as a single reef and in some instances have multiple sets of modules to form a reef complex (e.g., Huntington Beach). Reefs that were constructed as mitigation (e.g., Wheeler North reef, Palos Verdes reef) are not included in this list because there is either an extensive history of monitoring or a monitoring plan is in place.

NAME	Depth (ft.)	Size (ac.)	Material	Centroid LAT	Centroid LONG
Atascadero	55	0.4	3,500 tons quarry rock	35.393333	-120.8755555
Bolsa Chica	85-100	220	10,400 tons concrete rubble & 8 barges	33.65	-118.1
Carlsbad	37-60	6	10,000 tons quarry rock	33.086153	-117.320747
Channel Islands Habor	60	unknown	60,000 tires	34.1552777	-119.2672222
Hermosa Beach	60	0.5	330 tons quarry rock	33.853611	-118.413333

Thank you!

Additional questions please contact:

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