

MPA (2023) FINAL REPORT

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Project: R/MPA-49B

Project Title: Evaluating Performance Of California's Mpa Network Through The Lens Of Sandy Beach And Surf Zone Ecosystems

PUBLICATIONS

Response 1

1	Publication Title Evaluating the influence of marine protected areas on surf zone fish.	Publication Number	Publication Type Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
	Publication Year 2024		
	Publisher Info Wiley Periodicals LLC on behalf of Society for Conservation Biology.		
	Peer Reviewed Yes		
	Notes		
	Related URLs		
	Keywords MPA, Surf Zone, beach seines, BRUVs, community composition, marine protected areas, surf zone fish		
	Open Access Yes	Publication URLs DOI: 10.1111/cobi.14296	
	Citation Marraffini, M, SL Hamilton, J Marin Jarrin, M Ladd, G Koval, J Madden, I Mangino, LM Parker, KA Emery, K Terhaar, DM Hubbard; RJ Miller, JE Dugan. 2024. Evaluating the influence of marine protected areas on surf zone fish. Cons Biol e14296		

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Abstract

Marine protected areas (MPAs) globally serve conservation and fisheries management goals, generating positive effects in somemarine ecosystems. Surf zones and sandy beaches, critical ecotones bridging land and sea, play a pivotal role in the life cycles of numer- ous fish species and serve as prime areas for subsistence and recreational fishing. Despite their significance, these areas remain understudied when evaluating the effects of MPAs. We compared surf zone fish assemblages inside and outside MPAs across 3 bioregions in California (USA). Using seines and baited remote underwater videos (BRUVs), we found differences in surf zone fish inside and outside MPAs in one region. Inside south region MPAs, we observed higher abundance (Tukey's honest significant difference [HSD] = 0.83, p = 0.0001) and richness (HSD = 0.22, p = 0.0001) in BRUVs and greater biomass (HSD = 0.32, p = 0.0002) in seine surveys compared with reference sites. Selected live- bearing, fished taxa were positively affected by MPAs. Elasmobranchs displayed greater abundance in BRUV surveys and higher biomass in seine surveys inside south regionMPAs (HSD = 0.35, p = 0.0003 and HSD = 0.23, p = 0.008, respectively). Although we observed no overall MPA signal for Embiotocidae, abundances of juvenile and large adult barred surfperch (*Amphistichus argenteus*), the most abundant fished species, were higher inside MPAs (K-S test D = 0.19, p

For Featured Publication

SG can post PDF online?

Yes

Full Citation: please include name or journal/proceedings, date, volume, issue, page number, if known

Marraffini, M, SL Hamilton, J Marin Jarrin, M Ladd, G Koval, J Madden, I Mangino, LM Parker, KA Emery, K Terhaar, DM Hubbard; RJ Miller, JE Dugan. 2024. Evaluating the influence of marine protected areas on surf zone fish. *Cons Biol* e14296

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Conservation_Biology_-_2024_-_Marraffini_-_Evaluating_the_influence_of_marine_protected_areas_on_surf_zone_fish.pdf

Response 2

1	Publication Title	Publication Number	Publication Type
	Cross-ecosystem subsidies to sandy beaches support surf zone fish		Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
	Publication Year		
	2024		
	Publisher Info		
	Peer Reviewed		
	Yes		
	Notes		
	Related URLs		

Keywords

Barred surfperch · Allochthonous subsidy · Macroalgal wrack · Kelp · Phytoplankton · Intertidal macroinvertebrates · California Channel Islands

Open Access

Yes

Publication URLs

<https://doi.org/10.1007/s00227-024-04499-y>

Citation

Schooler, NK, KA Emery, JE Dugan, RJ Miller, DM Schroeder, JR Madden, HM Page. 2024 Cross-ecosystem subsidies to sandy beaches support surf zone fish. *Mar Biol.* 171 (9), 184

Abstract

Food webs in ecotones linking adjacent ecosystems may depend on cross-ecosystem subsidies. In surf zones of temperate sandy beaches, higher-level consumers often rely on intertidal prey that utilize allochthonous primary production. We evaluated the importance of phytoplankton and kelp-based prey, as well as physical characteristics of beaches, to diet of a surf zone fish, barred surfperch (*Amphistichus argenteus*), through stomach content and stable isotope analyses. Our results suggested that barred surfperch rely on prey from both phytoplankton and kelp-based subsidies, but their relative contribution to diet varied widely across beaches. Sand crabs (*Emerita analoga*), which depend on phytoplankton, were abundant at every beach, but their contribution to diet in stomach contents varied from 2 to 87% among sites. At the majority of beaches, $\delta^{13}\text{C}$ values of fish muscle tissue, which reflects diet integrated over time, were within 0.5 ‰ of sand crab values, suggesting a reliance on phytoplankton-based prey. However, kelp-dependent prey associated either with beach wrack or subtidal reefs was also present in surfperch stomachs from all beaches (up to 41–72%). The notable enrichment in ^{13}C of juvenile surfperch at two beaches and adults at one beach relative to sand crabs suggested a longer-term contribution of kelp-based prey to fish diet. The detection of kelp-based prey in surfperch diets also indicates the potential for reciprocal subsidies in these ecotones. Our results suggest trophic connectivity between surf zones and kelp forests and sandy beaches is spatially variable and that opportunistic higher-level consumers can shift their diet in response to the availability of phytoplankton and kelp-based food resources.

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Yes

Full Citation: please include name or journal/proceedings, date, volume, issue, page number, if known

Schooler, NK, KA Emery, JE Dugan, RJ Miller, DM Schroeder, JR Madden, HM Page. 2024 Cross-ecosystem subsidies to sandy beaches support surf zone fish. *Mar Biol.* 171 (9), 184

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Schooleretal2024Surfperch.pdf

Response 3

1	Publication Title	Publication Number	Publication Type
	Spatial synchrony cascades across ecosystem boundaries and up food webs via resource subsidies		Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
	Publication Year		
	2024		

Publisher Info

Peer Reviewed

Yes

Notes

Related URLs

Keywords

spatial synchrony | resource subsidies | giant kelp | wrack | shorebirds

Open Access

Yes

Publication URLs

<https://doi.org/10.1073/pnas.2310052120>

Citation

Walter, JA, KA Emery, JE Dugan, DM Hubbard, TW Bell, LW Sheppard, VA Karatayev, KC Cavanaugh, DC Reuman, MCN Castorani 2024. Spatial synchrony cascades across ecosystem boundaries and up food webs via resource subsidies Pro Natl Acad Sci 121(2) e2310052120

Abstract

Cross-ecosystem subsidies are critical to ecosystem structure and function, especially in recipient ecosystems where they are the primary source of organic matter to the food web. Subsidies are indicative of processes connecting ecosystems and can couple ecological dynamics across system boundaries. However, the degree to which such flows can induce cross-ecosystem cascades of spatial synchrony, the tendency for system fluctuations to be correlated across locations, is not well understood. Synchrony has destabilizing effects on ecosystems, adding to the importance of understanding spatiotemporal patterns of synchrony transmission. In order to understand whether and how spatial synchrony cascades across the marine-terrestrial boundary via resource subsidies, we studied the relationship between giant kelp forests on rocky nearshore reefs and sandy beach ecosystems that receive resource subsidies in the form of kelp wrack (detritus). We found that synchrony cascades from rocky reefs to sandy beaches, with spatiotemporal patterns mediated by fluctuations in live kelp biomass, wave action, and beach width. Moreover, wrack deposition synchronized local abundances of shorebirds that move among beaches seeking to forage on wrack-associated invertebrates, demonstrating that synchrony due to subsidies propagates across trophic levels in the recipient ecosystem. Synchronizing resource subsidies likely play an underappreciated role in the spatiotemporal structure, functioning, and stability of ecosystems.

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Walter, JA, KA Emery, JE Dugan, DM Hubbard, TW Bell, LW Sheppard, VA Karatayev, KC Cavanaugh, DC Reuman, MCN Castorani 2024. Spatial synchrony cascades across ecosystem boundaries and up food webs via resource subsidies Pro Natl Acad Sci 121(2) e2310052120

Primary Author

JA Walter

Other Author

KA Emery, JE Dugan, DM Hubbard, TW Bell, LW Sheppard, VA Karatayev, KC Cavanaugh, DC Reuman, MCN Castorani

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walter-et-al-2024-spatial-synchrony-cascades-across-ecosystem-boundaries-and-up-food-webs-via-resource-subsidies.pdf

Response 4

1	Publication Title If you build it, they will come: coastal amenities facilitate human engagement in marine protected areas	Publication Number	Publication Type Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
	Publication Year 2023		
	Publisher Info		
	Peer Reviewed Yes		
	Notes		
	Related URLs		
	Keywords California, citizen science, community engagement, human dimensions, human use, marine protected areas, recreation, tourism		
	Open Access Yes	Publication URLs DOI: 10.1002/pan3.10524	
	Citation Free, C, J Smith, J Brun, Y Francis, J Eurich, J Claudet, J Dugan, D Gill, S Hamilton, K Kaschner, C Lopazanski, D Mouillot, S Ziegler, J Caselle, K Nickols. 2023. If you build it, they will come: coastal amenities facilitate human engagement in marine protected areas <i>Peop Nature</i> 5(5): 1592-1609		

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Abstract

Calls for using marine protected areas (MPAs) to achieve goals for nature and people are increasing globally. While the conservation and fisheries impacts of MPAs have been comparatively well- studied, impacts on other dimensions of human use have received less attention. Understanding how humans engage with MPAs and identifying traits of MPAs that promote engagement is critical to designing MPA networks that achieve multiple goals effectively, equitably and with minimal environmental impact. 2. In this paper, we characterize human engagement in California's MPA network, the world's largest MPA network scientifically designed to function as a coherent network (124 MPAs spanning 16% of state waters and 1300 km of coastline) and identify traits associated with higher human engagement. We assemble and compare diverse indicators of human engagement that capture recreational, educational and scientific activities across California's MPAs. 3. We find that human engagement is correlated with nearby population density and that site "charisma" can expand human engagement beyond what would be predicted based on population density alone. Charismatic MPAs tend to be located near tourist destinations, have long sandy beaches and be adjacent to state parks and associated amenities. In contrast, underutilized MPAs were often more remote and lacked both sandy beaches and parking lot access 4. Synthesis and applications: These results suggest that achieving MPA goals associated with human engagement can be promoted by developing land- based amenities that increase access to coastal MPAs or by locating new MPAs near existing amenities during the design phase. Alternatively, human engagement can be limited by locating MPAs in areas far from population centres, coastal amenities or sandy beaches. Furthermore, managers may want to prioritize monitoring, enforcement, education and outreach programmes in MPAs with traits that predict high human engagement. Understanding the extent to which human engagement impacts the conservation performance of MPAs is a critical next step to designing MPAs that minimize tradeoffs among potentially competing objectives.

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Yes

Full Citation: please include name or journal/proceedings, date, volume, issue, page number, if known

Free, C, J Smith, J Brun, Y Francis, J Eurich, J Claudet, J Dugan, D Gill, S Hamilton, K Kaschner, C Lopazanski, D Mouillot, S Ziegler, J Caselle, K Nickols. 2023. If you build it, they will come: coastal amenities facilitate human engagement in marine protected areas *Peop Nature* 5(5): 1592-1609

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Response 5

1	Publication Title A marine protected area network does not confer community structure resilience to a marine heatwave across coastal ecosystems	Publication Number	Publication Type Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
Publication Year 2023			
Publisher Info			

Peer Reviewed

Yes

Notes

Related URLs

Keywords

California, climate change, community composition, community structure, marine heatwaves, marine protected area networks, resilience

Open Access

Yes

Publication URLs

DOI: 10.1111/gcb.16862

Citation

Smith, JG, CM Free, C Lopazanski, J Brun, CR Anderson, MH Carr, J Claudet, JE Dugan, JG Eurich, T Francis, SL Hamilton, D Mouillot, PT Raimondi, RM Starr, SL Ziegler, KJ Nickols, JE Caselle. 2023. A marine protected area network does not confer community structure resilience to a marine heatwave across coastal ecosystems *Global Change Biol* 00:1–18

Abstract

Marine protected areas (MPAs) have gained attention as a conservation tool for enhancing ecosystem resilience to climate change. However, empirical evidence explicitly linking MPAs to enhanced ecological resilience is limited and mixed. To better understand whether MPAs can buffer climate impacts, we tested the resistance and recovery of marine communities to the 2014–2016 Northeast Pacific heatwave in the largest scientifically designed MPA network in the world off the coast of California, United States. The network consists of 124 MPAs (48 no-take state marine reserves, and 76 partial-take or special regulation conservation areas) implemented at different times, with full implementation completed in 2012. We compared fish, benthic invertebrate, and macroalgal community structure inside and outside of 13 no-take MPAs across rocky intertidal, kelp forest, shallow reef, and deep reef nearshore habitats in California's Central Coast region from 2007 to 2020. We also explored whether MPA features, including age, size, depth, proportion rock, historic fishing pressure, habitat diversity and richness, connectivity, and fish biomass response ratios (proxy for ecological performance), conferred climate resilience for kelp forest and rocky intertidal habitats spanning 28 MPAs across the full network. Ecological communities dramatically shifted due to the marine heatwave across all four nearshore habitats, and MPAs did not facilitate habitat-wide resistance or recovery. Only in protected rocky intertidal habitats did community structure significantly resist marine heatwave impacts. Community shifts were associated with a pronounced decline in the relative proportion of cold water species and an increase in warm water species. MPA features did not explain resistance or recovery to the marine heatwave. Collectively, our findings suggest that MPAs have limited ability to mitigate the impacts of marine heatwaves on community structure. Given that mechanisms of resilience to climate perturbations are complex, there is a clear need to expand assessments of ecosystem-wide consequences resulting from acute climate-driven perturbations, and the potential role of regulatory protection in mitigating community structure changes.

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Smith, JG, CM Free, C Lopazanski, J Brun, CR Anderson, MH Carr, J Claudet, JE Dugan, JG Eurich, T Francis, SL Hamilton, D Mouillot, PT Raimondi, RM Starr, SL Ziegler, KJ Nickols, JE Caselle. 2023. A marine protected area network does not confer community structure resilience to a marine heatwave across coastal ecosystems *Global Change Biol* 00:1–18

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CM Free, C Lopazanski, J Brun, CR Anderson, MH Carr, J Claudet, JE Dugan, JG Eurich, T Francis, SL Hamilton, D Mouillot, PT Raimondi, RM Starr, SL Ziegler, KJ Nickols, JE Caselle

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Global_Change_Biology_-_2023_-_Smith_-_A_marine_protected_area_network_does_not_confer_community_structure_resilience_to_a-1.pdf

Response 6

1	Publication Title	Publication Number	Publication Type
	Estuarine and Coastal Structures: Environmental Effects: a focus on shore and nearshore structures. In: Human-induced Problems (Uses and Abuses) in Estuaries and Coasts		Book Chapter (peer-reviewed)
	Publication Year		
	2024		
	Publisher Info		
	Elsevier		
	Peer Reviewed		
	Yes		
	Notes		
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	No		
	Citation		
	Dugan, JE, L Airoidi, MG Chapman, KE Emery, DM Hubbard, E Jaramillo, TA Schlacher. 2024. Estuarine and Coastal Structures: Environmental Effects: a focus on shore and nearshore structures. In: Human-induced Problems (Uses and Abuses) in Estuaries and Coasts (eds. M. Kennish, M. Elliott), Treatise on Estuarine and Coastal Science 2nd ed. Vol 6, pp. 57–91 Elsevier.		
	Abstract		
	For Featured Publication	SG can post PDF online?	

Full Citation: please include name or journal/proceedings, date, volume, issue, page number, if known

Dugan, JE, L Airoidi, MG Chapman, KE Emery, DM Hubbard, E Jaramillo, TA Schlacher. 2024. Estuarine and Coastal Structures: Environmental Effects: a focus on shore and nearshore structures. In: Human-induced Problems (Uses and Abuses) in Estuaries and Coasts (eds. M. Kennish, M. Elliott), Treatise on Estuarine and Coastal Science 2nd ed. Vol 6, pp. 57–91 Elsevier.

Primary Author
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Other Author
L Airoidi, MG Chapman, KE Emery, DM Hubbard, E Jaramillo, TA Schlacher.

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PROJECT UPDATES, HIGHLIGHTS AND ACCOMPLISHMENTS (2024 REPORTING)

Project Updates: milestones or major results, changes, or challenges faced over the reporting period (required for each project)

1

Provide a high level description of your project's goals and objectives. Describe the progress that has been made toward reaching these goals and objectives. If applicable, this information may be taken and/or modified from your project proposal form.

Study Goals and Objectives

1) Conduct new field surveys of beaches and surf zones of paired MPA and reference site in 2023 to collect information on birds, kelp wrack and surf zone fish on sandy beaches and their surf zones including species richness, abundance, biomass and size structure inside and outside MPA. These new data will be used to increase our ability to evaluate the responses of these ecosystem features to MPA protection by adding a fifth year of monitoring activities for beaches and surf zones in MPAs in California since the baseline studies.

2) Analyze and summarize information collected during 2023 statewide surveys of beaches and surf zones to provide a foundation for a long term MPA monitoring program that includes these ecosystem features.

Summary of progress

1. Field and data activities

Team Training activities

A number of team training activities to train new staff and promote compatibility of statewide field data collection were accomplished in 2023 and 2024.

- In late May 2023 and 2024, staff and students from the south, central and north coast fish survey teams (UCSB, MLML and Cal Poly Humboldt) met in Carmel and Monterey to train and refresh protocols and gear use for statewide surf zone fish, beach and wrack surveys.
- In spring 2024 California Department of Fish and Wildlife staff coordinated and trained Cal Poly Humboldt students and staff on gear and protocols for hook and line surveys. This work including field testing of two gear types at different north coast sites (Humboldt County). The teams then field tested the Carolina rig and the high/low rig to investigate the comparability of data collected by these two hook and line gear types.
- With the support of Cal Poly Humboldt anglers, graduate student Noah Gabay trained four Blue Lake Rancheria staff from the Environmental department on the hook-and-line methods for surfperch sampling in 2024.
- In August 2024, beach bird teams from the south, central and north central regions (UCSB Point Blue, Gulf of the Farallones Association) met at Ross Cove (Montara SMR) in Half Moon Bay to train and refresh protocols for use in the statewide beach bird, beach and wrack surveys
- In September 2024, beach bird teams from the south, and north regions met at Leo Carrillo State Beach (ref) to train new staff and refresh protocols for use in the statewide beach bird, beach and wrack surveys
- In September 2024, beach bird teams from the south and central regions (Point Blue) met Percos Beach (Point Conception SMR) to train new staff and refresh protocols for use in the statewide beach bird, beach and wrack surveys

Surf Zone Fish Surveys

During summer of 2023 the UCSB team led by PI Jenny Dugan deployed 6 BRUVS and completed all 6 seine hauls at every of our eight sites three times during summer of 2023 with the exception of one site (Strands Beach, Dana Point SMCA, Orange County) where a new previously unknown permitting issue with Orange County Parks prevented the third survey of the season. For Summer 2024 round two surveys have been completed at all sites and there are five surveys remaining for round three to complete the 2024 season. Data entry for 2023 is complete and data entry for 2024 is in progress. Notable observations in 2023

and 2024 included a large Pacific angel shark (new species in seine and on BRUV) a Cortez bonefish (BRUV new species), diamond stingrays (BRUV), a number of large white seabass (BRUVs), a large California halibut also juvenile diamond turbot and starry flounder in the seines and several sites including an Orange County site caught very high numbers of juvenile queenfish in some of the seines. Progress is good on the south coast BRUVs, many of which have large numbers of fish to id and quantify with ~80% of the 2023 BRUVs (3 BRUVs per date and site) analyzed to date. Staff from the UCSB team provided and coordinated field trainings, provided data entry templates and instructions and coordinated the QA/QC process for the 2023 statewide surf zone fish and beach and wrack data sets. In consultation with the other teams the UCSB team modified species code names as needed for consistency in analyses.

During the summers of 2023 and 2024, the MLML team led by Co-PI Scott Hamilton able to deploy all 6 BRUVS and completed 6 seine hauls at every of our eight sites three times with little incident. One BRUV was left in the ocean at one site, it was retrieved by the Co-PI using SCUBA diving the next day, and the footage was recovered (although after about 15 minutes it was fully buried in sand). The MLML surveys were accomplished with an enthusiastic team of largely undergraduate students from CSUMB helping this year along with some UCSC undergraduates, MLML graduate students, and unaffiliated recently-graduated people. Several NSF-supported REU students (Research Experience for Undergraduates) also joined our surveys as volunteers to obtain more field experience. Data entry for 2023 season is complete and data entry for the 2024 season is currently in progress with an anticipated completion date of the end of November. Notable catches in 2024 included 12 leopard sharks in a single seine haul, a striped bass at Point Lobos State Park, and many more juvenile rockfish than 2023 including bocaccio, copper, gopher, olive/yellowtail, kelp, and several other species that were too small to identify. Progress on analyzing the central coast surf BRUVS is excellent thanks to a great team effort in spring 2024 that enabled the analysis of all 6 BRUVS from every site from all previous years before sampling for summer 2024 commenced. For the 2024 BRUVS, 60 out of 144 videos have been analyzed to date.

In spring and summer 2023 and 2024, the Cal Poly Humboldt team, led by co-PI Jose R. Marin Jarrin and masters student Noah Gabay, sampled surf zone fish at four paired (i.e., control and impact) sites using a beach seine, hook-and-line (sites differ among years) and Baited Remote Underwater Video methods. These sites are located in Humboldt, Mendocino, Sonoma and Marin counties, and were sampled three times each in each year. They measured beach wrack and characteristics along with other environmental variables, including salinity, and total dissolved solids (as a proxy for turbidity). During 2023, the north coast team collected 496 individuals from 12 spp. of fish and thousands of invertebrates using the beach seine at the 8 sites. In 2024 to increase the information available on adult surfperch populations at MPA and reference sites where beach seining is challenging, the north coast team expanded the hook-and-line sampling from two to three pairs of sites (two in Humboldt and one in Mendocino County) with financial and technical support from OPC, CDFW and UCSB. Training along with protocol and gear refinements for hook and line surveys were made in collaboration of California Fish and Wildlife staff in 2024. Overall, the 2024 hook and line surveys caught 464 red and 256 silver surfperch, at the 6 study sites, all of which were measured and released unharmed. Funds for this amendment are still in the process of being transferred to UCSB and Cal Poly Humboldt The plan is to continue this expanded hook & line sampling effort through the summer of 2025. Data entry for the 2023 season is complete and data entry for 2024 is in progress. To date 120 hours of video collected with Baited Remote Underwater Video during 2023 have been analyzed and analyses of the 2024 north coast BRUVS are in progress. We observed 100 individuals from 4 different species of fish per survey on BRUVs. During the past year, graduate student Noah Angell aged the otoliths of all the surfperch euthanized for his master's degree research since 2020 and is planning on defending his thesis in December of 2024.

Bird surveys

Surveys of beach birds, characteristics and wrack at 36 sites (18 MPA, 18 reference) were successfully conducted in September, October and November 2023 by teams from UCSB (11 south coast sites), Point Blue (12 central coast sites, 1 south coast site), Gulf of the Farallones Association (4 north coast sites- Marin and Sonoma County), and Cal Poly Humboldt (8 north coast sites -Humboldt and Mendocino County). Statewide beach bird surveys for September 2024 are complete, the October surveys are in progress and the November surveys are planned for suitable daytime low tides. Staff from the UCSB team entered and QA/QC'd all the statewide beach bird, beach and wrack datasets for 2023 and prepared them for analysis.

2. Summary of results

Surf Zone Fish

We observed similar mean values of richness of surf zone fish in seines across the four years of surveys and at MPA and reference sites (Figure 1). This suggests that our site pairs are relatively well matched for species richness of surf zone fish. In previous analyses, we also observed similar community composition inside and outside MPAs (Dugan et al. 2022, Marraffini et al 2024)). However a strong biogeographical pattern in surf zone fish richness is evident across the state of California with richness varying across the three regions in the MPA network (Figure 1). The pattern of varying richness across regions was

consistent across years, with the lowest mean richness in the North coast and the Central and South having similar richness (Figure 1).

The mean abundance of surf zone fish (CPUE) in seines was similar at MPA and reference sites in each of the five survey years (Figure 2). In four of the five years of surveys we observed higher mean abundance of fish in the Central region, particularly in 2020, 2021, and 2022 at reference sites (Figure 2). The high abundance we found in the Central region continued to be largely driven by results from one site, Stillwater Cove (Ref), which also had the highest species richness. The lowest average abundance of surf zone fish caught in seines across years was consistently observed in the North region with an average of one or less fish per seine (Figure 2). In all years, we observed higher abundance of fish in reference sites compared to MPAs in the Central region. In contrast for the South region we observed higher abundance inside MPAs compared with reference sites in most years particularly in 2022 and 2023.

The 2023 results for fish biomass in seines (Figure 3) are consistent with previous four years with higher biomass in MPAs for the south coast region in most comparisons. Our results continue to suggest that MPA protection from fishing in the South coast region has a measurable effect on surf zone fish biomass (Dugan et al. 2022, Marraffini et al 2024). The MPA effect observed in the South coast over 5 years is also consistent with results for MPAs in other ecosystems like kelp forests and reefs (Carr et al. 2022, Hamilton et al. 2022). Those MPA results have been linked to high population centers and a higher level of fishing pressure in the South region (Ziegler et al. 2023a). Annual variability in fish biomass is evident but not surprising, for example, in 2019 biomass inside MPAs in the South coast averaged 2.5 kg/seine, whereas in 2021 biomass in MPAs averaged 1kg/seine, biomass also varied with year in reference sites. This level of annual variability may be inherent to the surf zone ecosystem and continued long-term monitoring will provide insights on potential drivers of this variability.

Birds

Shorebirds

The abundance of shorebirds varied greatly among the three regions and 36 sites but those differences were not consistent across the four years of survey to date (Figure 4). Given the variability observed for shorebirds, additional years of observations are needed to identify and evaluate any MPA signals or trends in shorebird abundance. Beaches where the average abundance of wintering shorebirds is 50 or more individuals km⁻¹ can be considered high performing beaches for this group (Hubbard and Dugan 2003). In our study, the highest average numbers of shorebirds were most often observed on beaches associated with coastal dunes (6 of the 7 site pairs with 50 or more shorebirds km⁻¹) (Figure 4). Beaches backed by coastal dunes can support large numbers of wintering and migrating shorebirds, including sandpipers, however statewide relatively few MPAs have extensive dunes. Beaches that are overshadowed by tall bluffs, trees or buildings may be used less by the smaller shorebird species as these adjacent habitats can provide perches for avian predators, such as falcons. Sites that consistently supported high numbers of shorebirds (>50 ind/km) over time on the Central coast included the MPA sites of Gazos (Ano Nuevo SMR), Asilomar (Asilomar SMR), Wall (Vandenberg SMR) and the reference sites of Tunitas and Minuteman. For the south coast, the MPA sites of Sands (Campus Point SMCA) and Isla Vista (Campus Point SMCA) and the reference site of East Campus consistently supported high numbers of shorebirds. Of these sites, Tunitas, Minuteman and Percos have restricted human use. Shorebird abundance was consistently high (>50 ind/km) at only one North coast reference site (MacKerricher Beach Ward Ave) over the four years of surveys. However, shorebird abundance varied most among years at the North coast sites (Figure 4) where observations of very large flocks of small sandpipers (thousands of individuals) were observed on a single survey day in two of the four years at one site pair, Samoa (Samoa SMCA) and its reference site Mad River. These results illustrate how variation in the abundance of shorebirds among years can be very high at individual sites, particularly for small species of sandpipers that can arrive in very large flocks during migration periods. This finding highlights the dynamics of the use of open coast beaches as staging areas for migratory/wintering shorebirds, particularly for small flocking sandpipers.

2

What is the geographic area(s) of where the work is being done/communities affected by the work? Provide a zip code where possible.

Statewide on sandy beaches from San Diego to Humboldt County including 24 study sites for surf zone fish (12 MPA and 12 Reference) and 36 study sites for beach birds (18 MPA and 18 Reference)..

3

Have there been any change(s) in your approach? If so, describe the change(s) and provide reason(s) for the change(s).

This year we have been exploring the incorporation of hook & line surveys for surfperch at selected sites in Mendocino and Humboldt counties where beach seining has been challenging

- 4 Any actual or anticipated problems or delays? If so, briefly state the problem or delay and describe any actions or plans to resolve them.
One south coast site required a new permit that was not obtained in time to conduct the third surf zone fish survey in 2023. The permit was obtained in 2024 and no further issues are anticipated.
-
- 5 Any changes that had a significant impact on expenditures?
No
-
- 6 Have there been significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents?
No
-
- 7 Change of primary performance site location from that originally proposed? If yes, please describe including the organization name, DUNS (Data Universal Numbering System)/Unique Entity Identifier (UEI)/Employer Identification Number (EIN), and Congressional District Address.
No
-
- 8 Has there been a change in the active other support of the PD/PI or senior/key personnel since the last reporting period?
No
-

Highlights (optional)

- 9 Provide a recap of the highlight in a few sentences. Keep the language clear, in layman's terms, without abbreviations or acronyms, and written in the third person.
We published a peer reviewed journal article on the results of the first two years of our surf zone fish surveys in MPAs and reference sites in Conservation Biology
Marraffini, M, SL Hamilton, J Marin Jarrin, M Ladd, G Koval, J Madden, I Mangino, LM Parker, KA Emery, K Terhaar, DM Hubbard; RJ Miller, JE Dugan. 2024. Evaluating the influence of marine protected areas on surf zone fish. Cons Biol e14296
-
- 10 In-depth description of the highlight
-
- 11 What is the full name (no acronyms), type, and scale of the partner(s) associated with this specific highlight. See "Help Text" for definitions/guidance.
-

Accomplishments (optional)

- 12 Provide a recap of the accomplishment in a few sentences. Keep the language clear, in layman's terms, without abbreviations or acronyms, and written in the third person.
-
- 13 In-depth description of the accomplishment.
-
- 14 What is the full name (no acronyms), type, and scale of the partner(s) associated with this specific accomplishment. See "Help Text" for definitions/guidance.
-

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PARTNERS THIS PERIOD (2024 REPORTING)

Moss Landing Marine Laboratories, SJSU

1	Partner Name	Scale	Type
	Moss Landing Marine Laboratories, SJSU	STATE	Academic Institution
Notes			
This is a continuing partnership under a new subaward			
2	Is this partnership new to your project?		
	No - this is a continuing partnership from previous reporting periods.		
3	How long has this partner been associated with this project? Consider time from initial outreach to current situation.		
	24+ months		
4	Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.		
	40		
5	Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?		

Humboldt state university

1	Partner Name	Scale	Type
	Cal Poly Humboldt	STATE	Academic Institution
Notes			
This is a continuing partner on a new subaward			
2	Is this partnership new to your project?		
	No - this is a continuing partnership from previous reporting periods.		
3	How long has this partner been associated with this project? Consider time from initial outreach to current situation.		
	24+ months		
4	Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.		
	40		
5	Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?		

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Point Blue

1	Partner Name	Scale	Type
	Point Blue	STATE	NGO
Notes			
This is a continuing partnership on a new subaward			
2	Is this partnership new to your project?		
	No - this is a continuing partnership from previous reporting periods.		
3	How long has this partner been associated with this project? Consider time from initial outreach to current situation.		
	24+ months		
4	Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.		
	40		
5	Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?		

Gulf of the Farallones Association

1	Partner Name	Scale	Type
	Gulf of the Farallones Association	Other	NGO
Notes			
This is a continuing partnership on a new subaward			
2	Is this partnership new to your project?		
	No - this is a continuing partnership from previous reporting periods.		
3	How long has this partner been associated with this project? Consider time from initial outreach to current situation.		
4	Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.		
	25		
5	Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?		

California Department of Fish and Wildlife

1	Partner Name	Scale	Type
	California Department of Fish and Wildlife	STATE	Government

Notes

This is a continuing partnership on a new award

- 2 Is this partnership new to your project?
 No - this is a continuing partnership from previous reporting periods.

- 3 How long has this partner been associated with this project? Consider time from initial outreach to current situation.
 24+ months

- 4 Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.
 25

- 5 Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?

California State Parks

1	Partner Name	Scale	Type
	California State Parks	STATE	Government

Notes

This is a continuing partnership to support access to study sites

- 2 Is this partnership new to your project?
 No - this is a continuing partnership from previous reporting periods.

- 3 How long has this partner been associated with this project? Consider time from initial outreach to current situation.
 24+ months

- 4 Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.
 15

- 5 Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?

University of California Natural Reserve System

1	Partner Name	Scale	Type
	University of California Natural Reserve System	STATE	Academic Institution

Notes

This is a continuing partnership to support access to study sites

- 2 Is this partnership new to your project?
 No - this is a continuing partnership from previous reporting periods.

- 3 How long has this partner been associated with this project? Consider time from initial outreach to current situation.
 24+ months

- 4 Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.
 15

- 5 Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?

The Nature Conservancy

1	Partner Name	Scale	Type
	The Nature Conservancy	Other	NGO

Notes

This is an ongoing partnership to support research on the Jack and Laura Dangermond Preserve

- 2 Is this partnership new to your project?
 No - this is a continuing partnership from previous reporting periods.

- 3 How long has this partner been associated with this project? Consider time from initial outreach to current situation.
 24+ months

- 4 Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.
 20

- 5 Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?

City of Laguna Beach

1	Partner Name	Scale	Type
	City of Laguna Beach	LOCAL	Government

Notes

Laguna Beach provided access and logistical support for project surveys of city beaches.

- 2 Is this partnership new to your project?
 No - this is a continuing partnership from previous reporting periods.

- 3 How long has this partner been associated with this project? Consider time from initial outreach to current situation.
 24+ months

- 4 Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.
 10

5 Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?

Orange County Parks

1	Partner Name	Scale	Type
	Orange County Parks	LOCAL	Government

Notes

This partnership is new this year to provide access to a study site

2 Is this partnership new to your project?
 Yes - this is the first reporting period that we've partnered with them.

3 How long has this partner been associated with this project? Consider time from initial outreach to current situation.
 7-12 months

4 Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.
 15

5 Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?

Blue Lake Rancheria Environmental department

1	Partner Name	Scale	Type
	Blue Lake Rancheria Environmental department	Tribal	Other

Notes

New partnership to train Rancheria staff on our hook-and-line methods for surfperch sampling

2 Is this partnership new to your project?
 Yes - this is the first reporting period that we've partnered with them.

3 How long has this partner been associated with this project? Consider time from initial outreach to current situation.
 Under 6 months

4 Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work.
 25

5 Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?

Pebble Beach

1	Partner Name	Scale	Type
	Pebble Beach	LOCAL	Other
Notes			
Continuing partnership to provide access to MPA study site			
2	Is this partnership new to your project? No - this is a continuing partnership from previous reporting periods.		
3	How long has this partner been associated with this project? Consider time from initial outreach to current situation. 24+ months		
4	Approximately how many hours did you work together on this project during this reporting period? Include time spent building relationships, project development, implementation, outreach, administrative work. 15		
5	Was knowledge co-production or participatory science involved in the planning or implementation of your project? Answer yes or no. If yes, explain how it was involved. If no, do you plan to incorporate either into future partnerships?		

STAFFING LEVEL OF EFFORT (2024 REPORTING)

Jenifer Dugan

1	Full name of Faculty/Staff/Technician (written as First Name Last Name). Jenifer Dugan
2	How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period? 2
3	How many calendar months effort on this project was funded by match/cost share dollars during this reporting period? .5
4	Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else. Lead principal investigator for project and leads south coast fish and bird surveys and oversees north coast bird surveys

Scott Hamilton

1	Full name of Faculty/Staff/Technician (written as First Name Last Name). Scott Hamilton
2	How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period? 1
3	How many calendar months effort on this project was funded by match/cost share dollars during this reporting period? .5

- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Co-PI leads central coast fish surveys
-

Michelle Marraffini

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Michelle Marraffini
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
2
-
- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
1
-
- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Postdoc who leads data analyses for project
-

Jose Marin-Jarrin

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Jose Marin-Jarrin
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
1
-
- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
.5
-
- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Co-PI leads fish surveys on north coast
-

Kriss Neuman

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Kristina Neuman
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
.24
-
- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0
-
- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Co-PI leads bird surveys on central coast
-

Kirsten Lindquist

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Kirsten Lindquist
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
1
-

3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0.5

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Co-PI leads north central coast bird surveys

Dan Robinette

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Dan Robinette

2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
.1

3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Co-PI oversees bird surveys at sites on VAFB and Dangermond

Lauren Parker

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Lauren Parker

2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
12

3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Provides coordination of fish teams and data organization, assist with fish and bird surveys on south coast and protocol trainings

Jacob Bechtel

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Jacob Bechtel

2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
7

3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assists with statewide data management and south coast fish and bird surveys

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Kevin Hinterman

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Kevin Hinterman

- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
5

- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assists with fish surveys and datasets on central coast beaches

Kate Terhaar

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Kate Terhaar

- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
4

- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assists with North coast fish surveys & data

Stephanie Coates

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Stephanie Coates

- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
0.57

- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assist with central coast bird surveys

George Cummins

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
George Cummins

- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
0.57

- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assist with central coast bird surveys
-

Emily Rice

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Emily Rice
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
0.16
-
- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0
-
- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assist with central coast bird surveys
-

Kyle Emery

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Kyle Emery
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
1
-
- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
1
-
- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Co-PI, assist with South coast surveys and project coordination
-

David Hubbard

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
David Hubbard
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
2
-
- 3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
-
- 4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assist with south coast bird and fish surveys, data entry and QA/QC for statewide data
-

Mark Cowell

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Mark Cowell
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
.5
-

3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Oversee north coast bird surveys

Julie Howar

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Julie Howar

2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
0.3

3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assisted with central coast bird surveys

Esther Haile

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Esther Haile

2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
.3

3 How many calendar months effort on this project was funded by match/cost share dollars during this reporting period?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.
Assisted with central coast beach bird surveys

LEVERAGED FUNDING (2024 REPORTING)

1 Source of leveraged funds (name of organization/institution/donor, etc.).
California Ocean Protection Council

2 Leveraged funding start date
06-12-2023

3 Leveraged funding end date
09-30-2025

4 Are leveraged funds managed or influenced? See "Help Text" for definitions and guidance.
 Influenced

5 Amount of leveraged funding acquired (numbers only).
528476

-
- 6 Comments and/or explanation of leveraged funds (e.g., how were funds calculated).
Project title: Projecting habitat and indicator species distributions for beach and surf zone ecosystems in current and future conditions within California's MPA network. This project relies on datasets collected as part of this Sea Grant award
-
- 7 Are there any other projects associated with these leveraged funds? If so, please list the projects. If not, write "N/A".
Yes
-
- 8 Primary Sea Grant Focus Area the leveraged funds apply to
 Healthy Coastal Ecosystems
-

FOCUS AREAS, GOALS, AND CLASSIFICATION (2024 REPORTING)

- 1 Please indicate which National Focus Area your project primarily falls under. Note that a project may fall within a single Focus Area or transgress several focus areas; please report the primary.
Healthy Coastal Ecosystems
-
- 2 Select one or more goal(s) below that fall under the PRIMARY FOCUS AREA selected above relevant to your project. See instructions at the top of the page for the list of goals per Focus Area.
 Goal 1 Goal 2
-
- 3 Approximately, what percentage of your project falls within the Focus Area, Healthy Coastal Ecosystems?
90
-
- 4 Approximately, what percentage of your project falls within the Focus Area, Resilient Coastal Communities and Economies?
0
-
- 5 Approximately, what percentage of your project falls within the Focus Area, Sustainable Fisheries and Aquaculture?
0
-
- 6 Approximately, what percentage of your project falls within the Focus Area, Environmental Literacy and Workforce Development?
10
-
- 7 Which of California Sea Grant's DEIJA Strategic Goal does your project address?
 Goal 2
-
- 8 Explain how your project addressed one or more of California Sea Grant's DEIJA Strategic Goals (see above more info). If your project did not address any of the DEIJA Strategic Goals, write "N/A".
Students and participants involved in our research come from all backgrounds and communities
-
- 9 Classification - Tier 1: Major topical areas of investment for your project. Read "Help Text" for information about Sea Grant Classifications.
Ecosystem Structure, Function, and Services
-
- 10 Classification - Tier 2: Specific sub-topical areas of your project. Multiple-select (up to three). Read "Help Text" for information about Sea Grant Classifications.
 Climate Mitigation and Adaptation Recreational Fisheries Restoration and Conservation
-

- 11 Classification – Tier 3: Cross-cutting “disciplines” that are not intended to be exhaustive. Unlimited number of codes can be selected per Project. Please do not re-select Environmental Science and Literacy or Integrated Workforce Development if it was coded as such in Tier 1. Read "Help Text" for information about Classifications.

Environmental Science Environmental Science and Literacy

HEALTHY COASTAL ECOSYSTEM METRICS (2024 REPORTING)

No user response.

RESILIENT COMMUNITIES AND ECONOMIES METRICS (2024 REPORTING)

No user response.

SUSTAINABLE FISHERIES & AQUACULTURE METRICS (2024 REPORTING)

No user response.

ECONOMIC & SOCIETAL IMPACTS AND BENEFITS (2024 REPORTING)

No user response.

ENVIRONMENTAL ACTIONS & VISITOR ATTENDANCE (2024 REPORTING)

No user response.

EVENTS AND PUBLIC/PROFESSIONAL PRESENTATIONS (2024 REPORTING)

Evaluating the responses of surf zone fish to Marine Protected Areas

Sea Grant Sponsored/Organized Events

- 1 Title or name of the event.

- 2 The first day of the event. If the event ran for multiple days, just enter the start date.

- 3 Geographic location of the event (name of town, city, etc.). If a virtual event, write "Virtual".

- 4 Number of event attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.

- 5 Was this a Sea Grant sponsored/organized event? See "Help Text" for definitions/guidance.

- 6 Was it an inward-facing event or an event internal to Sea Grant staff (Extension Specialists and/or funded researchers)? See "Help Text" for definitions/guidance.

7 What Focus Area was the event primarily focused on?

Public or Professional Presentations

8 Name(s) of the presentation author(s) and/or presenter(s).
Dugan, J.; Marraffini, M.; Hubbard, D.M; Hamilton, S; Marin-Jarrin, J.; Ladd, M.; Madden, J ; Koval, G. ; Parker, L. ; Terhaar, K. ; Emery, KA ; Mangino, I. , Miller, RJ

9 Title of presentation.
Evaluating the responses of surf zone fish to Marine Protected Areas

10 What was the name of the conference, symposium, meeting, or class that you presented at and it's location (geographic location or institution name)? If virtual, write "Virtual" along with the name of the institution host (if applicable).
International Sandy Beach Symposium, University of Salento, Lecce Italy

11 Date of presentation.
06-26-2024

12 Number of presentation attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.
60

13 Was it an inward-facing event or an event internal to Sea Grant staff or PIs? See "Help Text" for definitions/guidance.
 No

14 What Focus Area was the presentation primarily focused on?
Healthy Coastal Ecosystems

Long term patterns of bird use on a southern California beach.

Sea Grant Sponsored/Organized Events

1 Title or name of the event.

2 The first day of the event. If the event ran for multiple days, just enter the start date.

3 Geographic location of the event (name of town, city, etc.). If a virtual event, write "Virtual".

4 Number of event attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.

5 Was this a Sea Grant sponsored/organized event? See "Help Text" for definitions/guidance.

6 Was it an inward-facing event or an event internal to Sea Grant staff (Extension Specialists and/or funded researchers)? See "Help Text" for definitions/guidance.

7 What Focus Area was the event primarily focused on?

Public or Professional Presentations

8 Name(s) of the presentation author(s) and/or presenter(s).
Hubbard, David M, Emery, Kyle, Dugan Jenifer E.

9 Title of presentation.
Long term patterns of bird use on a southern California beach.

10 What was the name of the conference, symposium, meeting, or class that you presented at and it's location (geographic location or institution name)? If virtual, write "Virtual" along with the name of the institution host (if applicable).
International Sandy Beach Symposium, University of Salento, Lecce Italy

11 Date of presentation.
06-25-2024

12 Number of presentation attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.
60

13 Was it an inward-facing event or an event internal to Sea Grant staff or PIs? See "Help Text" for definitions/guidance.
 No

14 What Focus Area was the presentation primarily focused on?
Healthy Coastal Ecosystems

Sandy Beaches as Ecosystems on the Edge

Sea Grant Sponsored/Organized Events

1 Title or name of the event.

2 The first day of the event. If the event ran for multiple days, just enter the start date.

3 Geographic location of the event (name of town, city, etc.). If a virtual event, write "Virtual".

4 Number of event attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.

5 Was this a Sea Grant sponsored/organized event? See "Help Text" for definitions/guidance.

- 6 Was it an inward-facing event or an event internal to Sea Grant staff (Extension Specialists and/or funded researchers)? See "Help Text" for definitions/guidance.
-
- 7 What Focus Area was the event primarily focused on?
-

Public or Professional Presentations

- 8 Name(s) of the presentation author(s) and/or presenter(s).
Jenifer Dugan
-
- 9 Title of presentation.
Sandy Beaches as Ecosystems on the Edge
-
- 10 What was the name of the conference, symposium, meeting, or class that you presented at and it's location (geographic location or institution name)? If virtual, write "Virtual" along with the name of the institution host (if applicable).
ESM 260 Applied Marine Ecology, UCSB Bren School Masters in. Environmental Science program
-
- 11 Date of presentation.
03-06-2024
-
- 12 Number of presentation attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.
20
-
- 13 Was it an inward-facing event or an event internal to Sea Grant staff or PIs? See "Help Text" for definitions/guidance.
 No
-
- 14 What Focus Area was the presentation primarily focused on?
Healthy Coastal Ecosystems
-

Projecting habitat and indicator species distributions for beach ecosystems in current and future climate
Sea Grant Sponsored/Organized Events

- 1 Title or name of the event.
-
- 2 The first day of the event. If the event ran for multiple days, just enter the start date.
-
- 3 Geographic location of the event (name of town, city, etc.). If a virtual event, write "Virtual".
-
- 4 Number of event attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.
-
- 5 Was this a Sea Grant sponsored/organized event? See "Help Text" for definitions/guidance.
-

6 Was it an inward-facing event or an event internal to Sea Grant staff (Extension Specialists and/or funded researchers)? See "Help Text" for definitions/guidance.

7 What Focus Area was the event primarily focused on?

Public or Professional Presentations

8 Name(s) of the presentation author(s) and/or presenter(s).
Jenifer Dugan, Michelle Marraffini, Matt Reiter, Kriss Neuman

9 Title of presentation.
Projecting habitat and indicator species distributions for beach ecosystems in current and future climate

10 What was the name of the conference, symposium, meeting, or class that you presented at and it's location (geographic location or institution name)? If virtual, write "Virtual" along with the name of the institution host (if applicable).
Beach Ecology Coalition Meeting, Newport, California

11 Date of presentation.
01-30-2024

12 Number of presentation attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.
100

13 Was it an inward-facing event or an event internal to Sea Grant staff or PIs? See "Help Text" for definitions/guidance.
 No

14 What Focus Area was the presentation primarily focused on?
Healthy Coastal Ecosystems

FORMAL AND NONFORMAL EDUCATION (2024 REPORTING)

No user response.

GOVERNMENT RELATIONS (2024 REPORTING)

1 California State Assembly: Please select the CA congressional district number(s) your project benefits. You can find your district(s) here: <http://findyourrep.legislature.ca.gov>. If your project benefited all COASTAL districts, you may mark the "All Coastal Districts" box. If your project benefited all California districts, you may mark the "All California Districts".
 All COASTAL California Districts. All CALIFORNIA districts.

2 California State Senate: Please select the CA congressional district number(s) your project benefits. You can find your State Senators and districts here: <http://findyourrep.legislature.ca.gov>. If your project benefited all COASTAL districts, you may mark the "All Coastal Districts" box. If your project benefited all California districts, you may mark the "All California Districts".
 All COASTAL California districts. All CALIFORNIA districts.

- 3 U.S. House of Representative: Please select the U.S. congressional district number(s) your project serves. You can find your districts here: <https://www.house.gov/representatives>. If your project benefited all COASTAL districts, you may mark the "All Coastal Districts" box. If your project benefited all California districts, you may mark the "All California Districts".
- All COASTAL California Districts. All CALIFORNIA Districts.

- 4 Optional: provide justification and/or links for your district selections. If your work takes place in or affects communities/geographic locations outside of the above questions, explain below.
- The health of our coasts and oceans is relevant to all districts in the state but perhaps more immediately relevant to coastal districts

PRESS AND MEDIA COVERAGE (2024 REPORTING)

Response 1

- 1 Title or headline of the media coverage.
UC Santa Barbara researchers launch CoastSnap, citizen science initiative to monitor coastal changes
- 2 Source of coverage/name of entity providing the coverage.
UCSB Current
- 3 How was the covered delivered?
 Online news article
- 4 Date of coverage.
04-10-2024
- 5 Full citation of the coverage.
See link below- This new CoastSnap station was set up at an MPA beach study site in Santa Barbara. Another new CoastSnap station was installed at our MPA beach study site at Asilomar State Beach in Pacific Grove this year and more installations are in progress
- 6 Relevant URL/link to the coverage (if applicable).
<https://news.ucsb.edu/2024/021425/uc-santa-barbara-researchers-launch-coastsnap-citizen-science-initiative-monitor>

Response 2

- 1 Title or headline of the media coverage.
UCSB study shows the importance of kelp forests on local beaches
- 2 Source of coverage/name of entity providing the coverage.
KCBX Central Coast Public Radio Article By Beth Thornton
- 3 How was the covered delivered?
 Online news article Podcast Radio
- 4 Date of coverage.
02-02-2024

5 Full citation of the coverage.
see link below

6 Relevant URL/link to the coverage (if applicable).
<https://www.kcbx.org/health-science-and-technology/2024-02-02/ucsb-study-shows-the-importance-of-kelp-forests-on-local-beaches>

Response 3

1 Title or headline of the media coverage.
Study uncovers the synchrony connecting kelp forests to the beach

2 Source of coverage/name of entity providing the coverage.
PhysOrg

3 How was the coverage delivered?
 Online news article

4 Date of coverage.
01-02-2024

5 Full citation of the coverage.
Please see link

6 Relevant URL/link to the coverage (if applicable).
https://phys.org/news/2024-01-uncovers-synchrony-kelp-forests-beach.html#google_vignette

Response 4

1 Title or headline of the media coverage.
The choreography of cross-ecosystem subsidies that connects the kelp forest to the beach

2 Source of coverage/name of entity providing the coverage.
UCSB Current

3 How was the coverage delivered?
 Online news article

4 Date of coverage.
01-09-2024

5 Full citation of the coverage.
Please see link below

6 Relevant URL/link to the coverage (if applicable).
<https://news.ucsb.edu/2024/021317/choreography-cross-ecosystem-subsidies-connects-kelp-forest-beach>

Response 5

- 1 Title or headline of the media coverage.
Securing the future of California's coasts

- 2 Source of coverage/name of entity providing the coverage.
UCSB News

- 3 How was the coverage delivered?
 Online news article

- 4 Date of coverage.
04-09-2024

- 5 Full citation of the coverage.
Please see link below.

- 6 Relevant URL/link to the coverage (if applicable).
<https://news.ucsb.edu/2024/02/14/20/securing-future-californias-coasts>

PRODUCTS, TOOLS, TECHNOLOGIES, AND INFORMATION SERVICES (2024 REPORTING)

No user response.

STUDENTS INVOLVED (2024 REPORTING)

Noah Angell

- 1 Full name of post-secondary student.
Noah Angell

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography) Paid/funded by match or cost-share funds Paid/funded by leveraged funds

- 4 Number of months (or weeks if less than one month) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
9 SG
3 other funds

- 5 Level of degree sought by student involved in project.
MA/MS/MMA

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
Continuing
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
Yes
-

Noah Gabay

- 1 Full name of post-secondary student.
Noah Gabay
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography) Paid/funded by match or cost-share funds
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
6
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
no
-

Raili Makela

- 1 Full name of post-secondary student.
Raili Makela
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Inigo Baxter

- 1 Full name of post-secondary student.
Inigo Baxter
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

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Nathan Wiggins

- 1 Full name of post-secondary student.
Nathan Wiggins

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5

- 5 Level of degree sought by student involved in project.
BA/BS

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.

- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no

- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Frances Fowler

- 1 Full name of post-secondary student.
Frances Fowler

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Matt Craig,

- 1 Full name of post-secondary student.
Matt Craig,
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Tyler Brewster

- 1 Full name of post-secondary student.
Tyler Brewster
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Ben Abrams

- 1 Full name of post-secondary student.
Ben Abrams
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Poly Humboldt
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Jordan Ng

- 1 Full name of post-secondary student.
Jordan Ng
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSB
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
2
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Yes
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
Yes
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
Continuing
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
No
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
Yes 5
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

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Fern Cappittifenton

- 1 Full name of post-secondary student.
Fern Cappittifenton

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSB

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography) Paid/funded by leveraged funds

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
2.5

- 5 Level of degree sought by student involved in project.
BA/BS

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Yes

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
Yes- field technician for UCSB wetland research project

- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
Continuing

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no

- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Brooke Andris

- 1 Full name of post-secondary student.
Brooke Andris

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSB

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Yes
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
Yes- working for estuarine conservation program
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
Continuing
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
No
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
No
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Sophia Vargas

- 1 Full name of post-secondary student.
Sophia Vargas
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
-
- 3 How was the student funded?
 Other
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
0.75
-
- 5 Level of degree sought by student involved in project.
BA/BS
-

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Yes
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Eva Bradman

- 1 Full name of post-secondary student.
Eva Bradman
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSB
-
- 3 How was the student funded?
 Volunteer/unpaid
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1 week
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Inez Mangino

- 1 Full name of post-secondary student.
Inez Mangino
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSB
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography) Other
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
2 weeks
-
- 5 Level of degree sought by student involved in project.
PhD
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
Continuing
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
yes 12 hours
-

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Yes

Kristin Michaud

- 1 Full name of post-secondary student.

Kristin Michaud

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".

UCSB

- 3 How was the student funded?

Other

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.

1 week

- 5 Level of degree sought by student involved in project.

PhD

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?

No

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.

no

- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?

Continuing

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.

No

- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?

No

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

No

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Sofia Barajas

- 1 Full name of post-secondary student.
Sofia Barajas

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5

- 5 Level of degree sought by student involved in project.
BA/BS

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.

- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.

- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Lorenzo Bazo

- 1 Full name of post-secondary student.
Lorenzo Bazo

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

James Brady

- 1 Full name of post-secondary student.
James Brady
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
no
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Matthias Milton

- 1 Full name of post-secondary student.
Matthias Milton
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
4
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Sebastian Caamano

- 1 Full name of post-secondary student.
Sebastian Caamano
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
no
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
no
-

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Duncan Campbell

- 1 Full name of post-secondary student.
Duncan Campbell
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

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Jonah Gier

- 1 Full name of post-secondary student.
Jonah Gier

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5

- 5 Level of degree sought by student involved in project.
MA/MS/MMA

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.

- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.

- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Bruno Mattioli

- 1 Full name of post-secondary student.
Bruno Mattioli

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
3
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
Continuing
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Sam Perrello

- 1 Full name of post-secondary student.
Sam Perrello
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
3
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
Continuing
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Jordan Pilcher

- 1 Full name of post-secondary student.
Jordan Pilcher
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Madison Sandquist

- 1 Full name of post-secondary student.
Madison Sandquist
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Kierstin Thigpen

- 1 Full name of post-secondary student.
Kierstin Thigpen
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
3
-
- 5 Level of degree sought by student involved in project.
MA/MS/MMA
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

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Rilee Wadsworth

- 1 Full name of post-secondary student.
Rilee Wadsworth

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
3

- 5 Level of degree sought by student involved in project.
MA/MS/MMA

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.

- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.

- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Skye Cardoza

- 1 Full name of post-secondary student.
Skye Cardoza

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
3
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Branden Clarin

- 1 Full name of post-secondary student.
Branden Clarin
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Neil Elias

- 1 Full name of post-secondary student.
Neil Elias
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Blanca Herrera

- 1 Full name of post-secondary student.
Blanca Herrera
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Miles Holmes

- 1 Full name of post-secondary student.
Miles Holmes
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Monterey Bay
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
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Ronnie Lazaro

- 1 Full name of post-secondary student.
Ronnie Lazaro

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey. Bay

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5

- 5 Level of degree sought by student involved in project.
BA/BS

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.

- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.

- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Nicolle Martinez

- 1 Full name of post-secondary student.
Nicolle Martinez

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Wyatt Milam

- 1 Full name of post-secondary student.
Wyatt Milam
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal State Univ Monterey Bay
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Ashley Del Colletti

- 1 Full name of post-secondary student.
Ashley Del Colletti
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Oregon State Univ
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Vanessa Garcia

- 1 Full name of post-secondary student.
Vanessa Garcia
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UC Santa Cruz
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Chloe King

- 1 Full name of post-secondary student.
Chloe King
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UC Santa Cruz
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
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Jayde O'Blair

- 1 Full name of post-secondary student.
Jayde O'Blair

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Cal Pol Humboldt

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1.5

- 5 Level of degree sought by student involved in project.
MA/MS/MMA

- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
No

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
No

- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
Continuing

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
No

- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
No

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.

Rachel Mageean

- 1 Full name of post-secondary student.
Rachel Mageean

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UC Santa Cruz

- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)

- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Bella McCracken

- 1 Full name of post-secondary student.
Bella McCracken
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UC Santa Cruz
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-

- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
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- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Zahra Vogel

- 1 Full name of post-secondary student.
Zahra Vogel
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UC Santa Cruz
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-

- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
-
- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Emiliano Martinez-Poeter

- 1 Full name of post-secondary student.
Emiliano Martinez-Poeter
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
MLML SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
3
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
-
- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
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- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-

- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

Katherine Sze

- 1 Full name of post-secondary student.
Katherine Sze
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
SJSU
-
- 3 How was the student funded?
 Paid/funded by Sea Grant funds (through California Sea Grant/UC San Diego/Scripps Institution of Oceanography)
-
- 4 Number of months (or weeks if less than one money) that the student was funded. Differentiate between months funded by federal Sea Grant dollars and months funded by other funding sources. See "Help Text" for definitions/guidance.
1
-
- 5 Level of degree sought by student involved in project.
BA/BS
-
- 6 Did the student graduate from undergraduate or graduate school during the reporting period?
Unsure
-
- 7 Has the student become employed in a job related to their degree within two years of graduation? If yes, was the job related to their degree? Describe below.
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- 8 Was this student new to the project or is continuing work on the project from a previous reporting period?
New
-
- 9 Was this student a current or past California Sea Grant State Fellow? If yes, list the Fellowship year (e.g., 2024 State Fellow, 2025 State Fellow) and with which agency they held their Fellowship.
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- 10 Did you mentor this student outside of a university setting (i.e., mentoring took place outside of regular thesis advising or lab hours)? If yes, how many hours were spent mentoring the student outside of the university setting?
-
- 11 Did the student help to fulfill any of your organization's or Sea Grant's DEIJA objectives, including but not limited to increasing representation of people from groups historically underrepresented in ocean science and/or conducting a project that helped to strengthen DEIJA? If so, please explain. See "Help Text" for definitions/guidance.
-

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VOLUNTEER SUPPORT (2024 REPORTING)

Surf zone fish surveys for MPA monitoring

- 1 Name of the California Sea Grant-sponsored volunteer activity.
Surf zone fish surveys for MPA monitoring

- 2 If you are reporting an individual volunteer, provide their name. If multiple volunteers from one entity (such as a company, NGO, etc.) volunteered, provide the name of the entity here.
Rosie Arathoon

- 3 Number of volunteers. If you are reporting on multiple volunteers for one activity, enter the total number of individuals. If you are reporting one individual's activities, write "1".
1

- 4 Number of hours volunteered. If reporting on multiple individuals, enter the total number of hours for all individuals. See "Help Text" for definitions/guidance.
20

- 5 Provide a brief description of their type of engagement (e.g., collected water samples or removed trash or debris, etc.). What is economic or societal benefits resulted from the volunteer activities? See "Help Text" for definitions/guidance.
assisted with field surveys

- 6 How much did the volunteer program cost to administer? Provide dollar value where possible. Indicate what was funded with Sea Grant dollars and what was funded with non-Sea Grant dollars. See "Help Text" for definitions/guidance.
0

- 7 What was the Primary Focus Area of the volunteer work?
 Healthy Coastal Ecosystems

Surf Zone fish surveys

- 1 Name of the California Sea Grant-sponsored volunteer activity.
Surf Zone fish surveys

- 2 If you are reporting an individual volunteer, provide their name. If multiple volunteers from one entity (such as a company, NGO, etc.) volunteered, provide the name of the entity here.
Annakate Clemons

- 3 Number of volunteers. If you are reporting on multiple volunteers for one activity, enter the total number of individuals. If you are reporting one individual's activities, write "1".
1

- 4 Number of hours volunteered. If reporting on multiple individuals, enter the total number of hours for all individuals. See "Help Text" for definitions/guidance.
30

- 5 Provide a brief description of their type of engagement (e.g., collected water samples or removed trash or debris, etc.). What is economic or societal benefits resulted from the volunteer activities? See "Help Text" for definitions/guidance.
assisted with surf zone fish surveys in Monterey Bay

6 How much did the volunteer program cost to administer? Provide dollar value where possible. Indicate what was funded with Sea Grant dollars and what was funded with non-Sea Grant dollars. See "Help Text" for definitions/guidance.
0

7 What was the Primary Focus Area of the volunteer work?
 Healthy Coastal Ecosystems

Surf zone fish surveys

1 Name of the California Sea Grant-sponsored volunteer activity.
Surf zone fish surveys

2 If you are reporting an individual volunteer, provide their name. If multiple volunteers from one entity (such as a company, NGO, etc.) volunteered, provide the name of the entity here.
Lauren Hearn

3 Number of volunteers. If you are reporting on multiple volunteers for one activity, enter the total number of individuals. If you are reporting one individual's activities, write "1".
1

4 Number of hours volunteered. If reporting on multiple individuals, enter the total number of hours for all individuals. See "Help Text" for definitions/guidance.
25

5 Provide a brief description of their type of engagement (e.g., collected water samples or removed trash or debris, etc.). What is economic or societal benefits resulted from the volunteer activities? See "Help Text" for definitions/guidance.
assist with surf zone fish surveys

6 How much did the volunteer program cost to administer? Provide dollar value where possible. Indicate what was funded with Sea Grant dollars and what was funded with non-Sea Grant dollars. See "Help Text" for definitions/guidance.
0

7 What was the Primary Focus Area of the volunteer work?
 Healthy Coastal Ecosystems
