

MPA (2023) FINAL REPORT

Status: Submitted (10/28/2024 01:55:33 PM)

Project: R/MPA-49A

Project Title: Monitoring And Evaluation Of Kelp Forest Ecosystems In The Mlpa Marine Protected Area Network

PUBLICATIONS

Response 1

1	Publication Title Consequences of kelp forest ecosystem shifts and predictors of persistence through multiple stressors.	Publication Number	Publication Type Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
	Publication Year 2024		
	Publisher Info		
	Peer Reviewed Yes		
	Notes		
	Related URLs		
	Keywords		
	Open Access No	Publication URLs http://doi.org/10.1098/rspb.2023.2749	
	Citation Smith, Joshua G., Malone, Daniel and Carr, Mark H. 2024. Consequences of kelp forest ecosystem shifts and predictors of persistence through multiple stressors. Proc. R. Soc. B.29120232749 http://doi.org/10.1098/rspb.2023.2749		

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Abstract

Ecological communities can be stable over multiple generations, or rapidly shift into structurally and functionally different configurations. In kelp forest ecosystems, overgrazing by sea urchins can abruptly shift forests into alternative states that are void of macroalgae and primarily dominated by actively grazing sea urchins. Beginning in 2014, a sea urchin outbreak along the central coast of California resulted in a patchy mosaic of remnant forests interspersed with sea urchin barrens. In this study, we used a 14-year subtidal monitoring dataset of invertebrates, algae, and fishes to explore changes in community structure associated with the loss of forests. We found that the spatial mosaic of barrens and forests resulted in a region-wide shift in community structure. However, the magnitude of kelp forest loss and taxonomic-level consequences were spatially heterogeneous. Taxonomic diversity declined across the region, but there were no declines in richness for any group, suggesting compositional redistribution. Baseline ecological and environmental conditions, and sea urchin behaviour, explained the persistence of forests through multiple stressors. These results indicate that spatial heterogeneity in preexisting ecological and environmental conditions can explain patterns of community change.

For Featured Publication

SG can post PDF online?

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

Primary Author

Other Author

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smith-et-al-2024-consequences-of-kelp-forest-ecosystem-shifts-and-predictors-of-persistence-through-multiple-stressors.pdf

Response 2

1	Publication Title Measurements, mechanisms, and management recommendations for how marine protected areas can provide climate resilience.	Publication Number	Publication Type Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
	Publication Year 2025		
	Publisher Info		
	Peer Reviewed Yes		
	Notes		
	Related URLs		
	Keywords		

Open Access

No

Publication URLs

<https://www.sciencedirect.com/science/article/pii/S0308597X24004196?via%3Dihub>

Citation

White JW, Hopf JK, Arafah-Dalmau N, Ban NC, Bates AE, Claudet J, Lopazanski C, Sunday JM, Caselle JE (2025). Measurements, mechanisms, and management recommendations for how marine protected areas can provide climate resilience. *Marine Policy* 171: 106419.

Abstract

The number of marine protected areas (MPAs) implemented globally is rising, with calls to protect 30 % of the ocean by 2030. One potential benefit of MPAs is increased resilience to anthropogenic climate change impacts. However, realistic ecological expectations are needed to identify the conditions that may yield resilience benefits and determine effective evaluation methods. To date, global meta-analyses have consistently shown positive ecological effects of protection, yet assessing resilience effects has been more complex. 'Resilience' is challenging to define and measure and may manifest at various spatiotemporal scales. Additionally, identifying an appropriate reference point to quantify resilience is challenging. Robust assessments require long time series to estimate variability or opportunistic observation of disturbance and recovery. Such data are not always available. We suggest an alternative, complementary approach. First, it is crucial to define the ecological and socioeconomic mechanisms by which an MPA could provide any resilience benefit to the human-natural system; these mechanisms are both limited and context-dependent. Then, we can measure indicators of resilience to assess the contribution of such mechanisms inside MPAs. This provides a pathway to assess how conservation influences adaptive capacity, overcoming the challenge of directly measuring resilience itself. Finally, it is critical to recognize that MPAs are only one tool in a portfolio of management actions that could improve resilience. They should not be misconstrued as standalone solutions, but rather as integral parts of a comprehensive approach to ecosystem-based sustainability management.

For Featured Publication

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

Primary Author

Other Author

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white_et_al_2025.pdf

Response 3

1	Publication Title	Publication Number	Publication Type
	Drivers of spatio-temporal variability in a marine foundation species.		Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
	Publication Year		
	2024		
	Publisher Info		

Peer Reviewed

No

Notes

Related URLs

Keywords

Open Access

No

Publication URLs

<https://doi.org/10.1101/2024.06.25.600483>

Citation

Giraldo-Ospina, A., T. Bell, M.H. Carr, J.E. Caselle. 2024. Drivers of spatio-temporal variability in a marine foundation species. bioRxiv 2024.06.25.600483; doi: <https://doi.org/10.1101/2024.06.25.600483>

Abstract

Marine foundation species are critical for the structure and functioning of ecosystems and constitute the pillar of trophic chains while also providing a variety of ecosystem services. In recent decades many foundation species have declined in abundance, sometimes threatening their current geographical distribution. Kelps (Laminariales) are the primary foundation species in temperate coastal systems worldwide. Kelp ecosystems are notoriously variable and identifying the key factors that control the dynamics of kelp abundance is key to predicting the fate of kelp ecosystems under climatic change and informing management and conservation decisions such as forest restoration. Here, we used in situ data from long-term monitoring programs across 1,350 km of coast spanning multiple biogeographic regions in the state of California (USA) to identify the major regional drivers of density of two dominant canopy-forming kelp species and to elucidate the spatial and temporal scales over which they operate. We used generalized additive models to identify the key drivers of density of two dominant kelp species (*Nereocystis luetkeana* and *Macrocystis pyrifera*) across four ecological regions of the state of California (north, central, south-west and south-east) and for the past two decades (2004-2021). Our study identified that the dominant drivers of kelp density varied between regions and species but always included some combination of nitrate availability, wave energy and exposure, density of purple sea urchins, and temperature as the most important predictors explaining 63% of the variability of bull kelp in the north and central regions, and 45% and 51.4% of the variability in giant kelp for the central/south-west and south-east regions, respectively. These large-scale analyses infer that a combination of lower nutrient availability, changes in wave energy and exposure, and increases in temperature and purple sea urchin counts have contributed to the decline of kelp observed in the last decade. Understanding the drivers of kelp dynamics can be used to identify regions and periods of significant change and historical stability, ultimately informing resource management and conservation decisions such as site selection for kelp protection and restoration.

For Featured Publication

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

Primary Author

Other Author

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Giraldo-Ospina_et_al_2024.pdf

Response 4

1	Publication Title Marine protection and environmental forcing influence fish-derived nutrient cycling in kelp forests.	Publication Number	Publication Type Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
Publication Year 2025			
Publisher Info			
Peer Reviewed Yes			
Notes			
Related URLs			
Keywords			
Open Access No	Publication URLs		
Citation Shrestha, J., J.R. Peters, J.E. Caselle, and S.L. Hamilton. Marine protection and environmental forcing influence fish-derived nutrient cycling in kelp forests. In revision/resubmitted Functional Ecology			
Abstract			
For Featured Publication	SG can post PDF online? No		
Full Citation: please include name or journal/proceedings, date, volume, issue, page number, if known			
Primary Author			
Other Author			
Uploaded File			

Response 5

1	Publication Title Measuring biological effectiveness across a very large, coherent network of coastal marine protected areas.	Publication Number	Publication Type Peer-reviewed: Journals (incl. articles), Books, Proceedings, and Other Documents
Publication Year 2025			
Publisher Info			
Peer Reviewed Yes			
Notes			
Related URLs			
Keywords			
Open Access No	Publication URLs		
Citation Spiecker B., Carr M.H., Malone D., Parsons-Field A., Koehn K., Pondella D., and J.E. Caselle. Measuring biological effectiveness across a very large, coherent network of coastal marine protected areas. In Revision Ecological Applications			
Abstract			
For Featured Publication	SG can post PDF online?		
Full Citation: please include name or journal/proceedings, date, volume, issue, page number, if known			
Primary Author			
Other Author			
Uploaded File			

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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.

The overarching goal of our project is to inform the evaluation and adaptive management of California's network of MPAs. Our specific goals and objectives are largely defined by the evaluation questions identified in Appendix B of the MPAMAP and refined by the Decadal Evaluation Working Group (DEWG), that pertain to shallow rocky reef and kelp forest ecosystems. Guided by these evaluation questions, our proposed approach includes the following elements: (i) continue long-term kelp forest monitoring at sites identified in the project proposal, (ii) QA/QC collected data and append to the long-term kelp forest dataset (ccc), (iii) use these historic and future datasets to reassess and update statistical analyses on MPA performance conducted for the 2022 Decadal Management Review (originally guided by the Action Plan), (iv) reproduce selected updated graphic and textual summaries of analyses, and (v) document datasets and analysis code and submit to appropriate repositories.

To maximize the value of the proposed data collection, analyses, and written products for CDFW, OPC and OST, we will collaborate with their institutional representatives (e.g., Stephen Wertz, Becky Ota, Michael Esgro) on each element of our approach.

The major outcome from this report period was the completion of another year of monitoring surveys at long-term monitoring sites along the northern, central, and southern California coast and across the Channel Islands by each of the institutions funded by this project - Vantuna Research Group, Cal Poly Humboldt, UC Santa Barbara and UC Santa Cruz.

Work has begun on the QA/QC process for this year's data collection across the four institutions in this project, and the formatted datasets along with metadata descriptions will be uploaded to the CA OPC Data Access Portal on DataOne.org in coming months.

- 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.

California coast

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

At UCSB, working with the Raimondi Lab at UC Santa Cruz and David Kushner (retired NPS), we are conducting a novel project aimed at locating and quantifying shallow subtidal populations of the endangered black abalone. This species has been studied extensively in the intertidal, however underwater populations have never been assessed. Our highly skilled dive team which also conducts rocky intertidal surveys as part of the MARINe Network, are ideally equipped to initiate this ground-breaking work. Surveys are being conducted in the shallow subtidal regions of Anacapa and Santa Cruz Islands, generally in 0' to 15' depths (-1' to -16' MLLW tide levels). Our work includes adapting established intertidal and subtidal monitoring methods to the unique challenges of this turbulent zone.

- 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.

None

- 5 Any changes that had a significant impact on expenditures?

None

- 6 Have there been significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents?

None

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?

None

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.

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.

PARTNERS THIS PERIOD (2024 REPORTING)

1	Partner Name	Scale	Type
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Notes

No new partners this period

2 Is this partnership new to your project?

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.
-
- 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)

Mark Carr

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

Daniel Malone

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Daniel Malone
-
- 2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
8
-
- 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.
-

Dan Pondella

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

Jonathan Williams

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

Jonathan Williams

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?

0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.

Jeremy Claisse

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

Jeremy Claisse

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?

0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.

Chelsea Williams

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

Chelsea Williams

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?

0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.

Brian Cohn

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

Brian Cohn

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.

Julia Mackin-McLaughlin (Occidental)

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Julia Mackin-McLaughlin (Occidental)

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.

Jessica Peria

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

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?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.

Brynn O'Hara

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Brynn O'Hara

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?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.

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Juliano Vitagliano

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

- 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.

Chestina Craig (Occidental)

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Chestina Craig (Occidental)

- 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.

Molly Brzezinski (Occidental)

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Molly Brzezinski (Occidental)

- 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.

Franklin Moitoza

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

- 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.

Johnathan Centoni

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

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?
0

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Shane Ribovich

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

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

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0

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Jake Burnett

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

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

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0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.

Hannah Joss

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

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.

Jennifer Caselle

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

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?
0

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.

Avrey Parsons-Field (UCSB)

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Avrey Parsons-Field (UCSB)

2 How many calendar months effort on this project was funded by Sea Grant dollars during this reporting period?
6

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

4 Provide any necessary notes, explanations, or justifications for inclusion of this individual, their effort, or anything else.

Chris Honeyman (UCSB)

1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Chris Honeyman (UCSB)

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.

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Conner Jainese (UCSB)

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Conner Jainese (UCSB)

- 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.

Gavin Hansen (UCSB)

- 1 Full name of Faculty/Staff/Technician (written as First Name Last Name).
Gavin Hansen (UCSB)

- 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.

Adelyne Wadell

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

- 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.

Luke Murrell

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

- 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.

Emalia Partlow

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

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.

Erik Hollstien

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

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.

LEVERAGED FUNDING (2024 REPORTING)

Response 1

1 Source of leveraged funds (name of organization/institution/donor, etc.).
MBARI

2 Leveraged funding start date
07-19-2023

3 Leveraged funding end date
09-30-2024

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

5 Amount of leveraged funding acquired (numbers only).
150000

6 Comments and/or explanation of leveraged funds (e.g., how were funds calculated).

Vessel time on R/V Paragon

7 Are there any other projects associated with these leveraged funds? If so, please list the projects. If not, write "N/A".

8 Primary Sea Grant Focus Area the leveraged funds apply to

Healthy Coastal Ecosystems

Response 2

1 Source of leveraged funds (name of organization/institution/donor, etc.).

UCSB Coastal Fund

2 Leveraged funding start date

04-01-2024

3 Leveraged funding end date

09-30-2024

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

Managed

5 Amount of leveraged funding acquired (numbers only).

19200

6 Comments and/or explanation of leveraged funds (e.g., how were funds calculated).

Support for student divers

7 Are there any other projects associated with these leveraged funds? If so, please list the projects. If not, write "N/A".

N/A

8 Primary Sea Grant Focus Area the leveraged funds apply to

Healthy Coastal Ecosystems

Response 3

1 Source of leveraged funds (name of organization/institution/donor, etc.).

Packard Foundation

2 Leveraged funding start date

03-07-2023

3 Leveraged funding end date

11-30-2024

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

Managed

- 5 Amount of leveraged funding acquired (numbers only).
58155
-
- 6 Comments and/or explanation of leveraged funds (e.g., how were funds calculated).
Support for Caselle on MPA analyses and outreach
-
- 7 Are there any other projects associated with these leveraged funds? If so, please list the projects. If not, write "N/A".
N/A
-
- 8 Primary Sea Grant Focus Area the leveraged funds apply to
 Healthy Coastal Ecosystems
-

Response 4

- 1 Source of leveraged funds (name of organization/institution/donor, etc.).
NOAA
-
- 2 Leveraged funding start date
06-30-2024
-
- 3 Leveraged funding end date
06-30-2025
-
- 4 Are leveraged funds managed or influenced? See "Help Text" for definitions and guidance.
 Managed
-
- 5 Amount of leveraged funding acquired (numbers only).
84963.06
-
- 6 Comments and/or explanation of leveraged funds (e.g., how were funds calculated).
Conduct SCUBA surveys of endangered black abalone populations at Santa Cruz and Anacapa Islands
-
- 7 Are there any other projects associated with these leveraged funds? If so, please list the projects. If not, write "N/A".
N/A
-
- 8 Primary Sea Grant Focus Area the leveraged funds apply to
 Healthy Coastal Ecosystems
-

Response 5

- 1 Source of leveraged funds (name of organization/institution/donor, etc.).
Maxwell Hanrahan Foundation
-
- 2 Leveraged funding start date
01-01-2023
-
- 3 Leveraged funding end date
06-30-2024
-

- 4 Are leveraged funds managed or influenced? See "Help Text" for definitions and guidance.
 Managed
-
- 5 Amount of leveraged funding acquired (numbers only).
15000
-
- 6 Comments and/or explanation of leveraged funds (e.g., how were funds calculated).
DIVERsity in Diving
Support for Diversity in Diving student divers
-
- 7 Are there any other projects associated with these leveraged funds? If so, please list the projects. If not, write "N/A".
-
- 8 Primary Sea Grant Focus Area the leveraged funds apply to
 Healthy Coastal Ecosystems

Response 6

- 1 Source of leveraged funds (name of organization/institution/donor, etc.).
CA Seagrant
-
- 2 Leveraged funding start date
02-01-2023
-
- 3 Leveraged funding end date
01-31-2023
-
- 4 Are leveraged funds managed or influenced? See "Help Text" for definitions and guidance.
 Managed
-
- 5 Amount of leveraged funding acquired (numbers only).
77680
-
- 6 Comments and/or explanation of leveraged funds (e.g., how were funds calculated).
DIVERsity in DIVING - expanding underwater marine research opportunities
Support for Diversity in Diving student divers
-
- 7 Are there any other projects associated with these leveraged funds? If so, please list the projects. If not, write "N/A".
-
- 8 Primary Sea Grant Focus Area the leveraged funds apply to
 Healthy Coastal Ecosystems

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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?
100
-

- 4 Approximately, what percentage of your project falls within the Focus Area, Resilient Coastal Communities and Economies?
-

- 5 Approximately, what percentage of your project falls within the Focus Area, Sustainable Fisheries and Aquaculture?
-

- 6 Approximately, what percentage of your project falls within the Focus Area, Environmental Literacy and Workforce Development?
-

- 7 Which of California Sea Grant's DEIJA Strategic Goal does your project address?

Goal 1 Goal 2 Goal 3

- 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".

At UCSC we have a diversity in diving program for providing access to SCUBA gear for undergraduates learning how to conduct underwater research: GoDive (<https://scientificdiving.ucsc.edu/godive-program>) Our monitoring also program provides dive gear where necessary to our divers. We did have four women divers and one underrepresented minority diver working for our program during this report period.

At Occidental College, PI Pondella mentored one research student through Occidental's Undergraduate Research Center Summer Research Program. This student participated in an intensive 10-week summer research program where they conducted independent research projects. During the program they participated in boat-based field work scientific diving and data entry for the MPA

monitoring project. Data collected for the MPA project was used in their independent research project.

At UCSB, we developed the DIversity in Diving program and chose the third cohort of DDP students through an open application process. Three DDP students conducted subtidal field work on this project in 2024.

- 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.

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

HEALTHY COASTAL ECOSYSTEM METRICS (2024 REPORTING)

Resource Managers Using Ecosystem-Based Approaches in the Management of Land, Water, and Living Resources

- 1 Number of resource managers using/applying this ecosystem-based approach as a result of information from your California Sea Grant efforts.

- 2 Brief description of the ecosystem-based approach, and how it's being used:

- 3 List the name(s) of the agencies/institutions/entities the resource managers are employed by.

- 4 Geographic location (city, county, and zip code, if possible) in which the resource manager(s) is using the ecosystem-based approaches.

Areas of Coastal Habitat Protected, Enhanced, or Restored

- 5 Number of acres coastal habitat conserved as a result of California Sea Grant efforts (whole numbers only—no fractions). See "Help Text" for information about what acreage to report.

N/A

- 6 Type of coastal habitat conserved.

- 7 Geographic location of habitat (city, region, or coordinates).

- 8 How did you calculate these acres? See "Help Text" for information about acre vs. linear mile.

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 MPA Networks: Lessons from California, USA

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).
Mark Carr

- 9 Title of presentation.
Evaluating MPA Networks: Lessons from California, USA

- 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).
NRDC Workshop - MPA Monitoring and Evaluation

- 11 Date of presentation.
10-31-2024

- 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

Random (Kelp) Forest: A Temporal Study of Changing Communities on California's North Coast

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).

Franklin Moitoza

9 Title of presentation.

Random (Kelp) Forest: A Temporal Study of Changing Communities on California's North Coast

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).

Contributed talk, 2023 Western Society of Naturalists

11 Date of presentation.

11-12-2023

- 12 Number of presentation attendees. Do not include Sea Grant staff (funded researchers and Extension Specialists) in the attendee count.
75
-
- 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)

No user response.

PRESS AND MEDIA COVERAGE (2024 REPORTING)

No user response.

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

No user response.

STUDENTS INVOLVED (2024 REPORTING)

Ilyaas Arsala

- 1 Full name of post-secondary student.
Ilyaas Arsala
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSC
-
- 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?
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?
yes, 120 hrs
-
- 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
-

Starlynn Hartnek

- 1 Full name of post-secondary student.
Starlynn Hartnek
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSC
-
- 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?
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?
yes 120 hrs
-
- 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
-

Liam Bartlett

- 1 Full name of post-secondary student.
Liam Bartlett
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSC
-
- 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?
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?
yes 120 hrs
-

- 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

Raymond Sayles

- 1 Full name of post-secondary student.

Raymond Sayles

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

UCSC

- 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?

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?

yes 120 hrs

- 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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Joseph McIntyre

- 1 Full name of post-secondary student.
Joseph McIntyre
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
UCSC
-
- 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?
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?
yes 120 hrs
-
- 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

Kaitlin Placencia

- 1 Full name of post-secondary student.
Kaitlin Placencia
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Occidental College
-
- 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?
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

Madison Valiente

- 1 Full name of post-secondary student.
Madison Valiente
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Occidental College
-
- 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?
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

Alyssa Player

- 1 Full name of post-secondary student.
Alyssa Player
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Occidental College
-
- 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?
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, Research Tech at CalTech
-
- 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
-

Osiel Madrid

- 1 Full name of post-secondary student.
Osiel Madrid
-
- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
Occidental
-
- 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?
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

Margaret Schaffzin

- 1 Full name of post-secondary student.

Margaret Schaffzin

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

Occidental College

- 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?

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.

no

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Joseph Kolda

- 1 Full name of post-secondary student.
Joseph Kolda
-
- 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.
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?
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?
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

Bowen Brock

- 1 Full name of post-secondary student.
Bowen Brock
-
- 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.
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?
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?
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

Benny Behar

- 1 Full name of post-secondary student.
Benny Behar
-
- 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.
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?
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?
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

Geraldine Urgel

- 1 Full name of post-secondary student.
Geraldine Urgel
-
- 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 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.
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?
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?
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

Milena Mootoka

1 Full name of post-secondary student.

Milena Mootoka

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 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.

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?

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.

yes

Kylie Newcomer

- 1 Full name of post-secondary student.

Kylie Newcomer

- 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 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.

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?

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.

yes

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Nika Dassatti

- 1 Full name of post-secondary student.
Nika Dassatti

- 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 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.
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?
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.
yes

Caeley Hickson Long

- 1 Full name of post-secondary student.
Caeley Hickson Long

- 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 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.
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?
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.
yes
-

Marine Wloczyniak

- 1 Full name of post-secondary student.
Marine Wloczyniak
-
- 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 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.
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?
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.
yes

Brynn Campos

- 1 Full name of post-secondary student.
Brynn Campos
-
- 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 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.
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?
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.
yes
-

Jaden Orli

- 1 Full name of post-secondary student.
Jaden Orli
-
- 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 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.
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?
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.

yes

Madeliene Frost

- 1 Full name of post-secondary student.

Madeliene Frost

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

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 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, 100hrs

- 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

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Alina O'Konski

- 1 Full name of post-secondary student.
Alina O'Konski

- 2 Name of student's higher education institution. If the name of the institution is not known, write "Unknown".
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 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?
yes, 100 hrs

- 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

VOLUNTEER SUPPORT (2024 REPORTING)

N/A

- 1 Name of the California Sea Grant-sponsored volunteer activity.
N/A

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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.

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".

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.

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.

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.

7 What was the Primary Focus Area of the volunteer work?
