

National Center for Ecological Analysis and Synthesis

Director: Ben Halpern Annual Report Fiscal Year 2023-2024 University of California, Santa Barbara nceas@nceas.ucsb.edu

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MISSION STATEMENT

NCEAS's mission is to accelerate scientific discoveries that will enhance our understanding of the world and benefit people and nature, as well as to transform the scientific culture to be more open, efficient, and collaborative.

OVERVIEW

The National Center for Ecological Analysis and Synthesis (NCEAS) is an independent research center of UC Santa Barbara with a global network and impact. We conduct transformational science focused on informing solutions that will allow people and nature to thrive. Established in 1995, NCEAS has pioneered the movement toward scientific collaboration, openness, and synthesis in ecology and environmental science, and has helped build a community of scientists around it.

We achieve **our mission**, stated above, through the following:

- Enabling collaborations between the brightest minds in the environmental sciences
- **Conducting breakthrough science** that is grounded in big-picture thinking
- Improving analyses through computing innovations that increase the usability of data
- **Partnering** with agencies and organizations that can help put the science to action
- **Training and inspiring** generations of scientists to practice synthesis and open science

Our approach to science is solutions-oriented and enables discoveries at larger scales and faster speeds, making them well positioned to inform environmental policy and management. The approach focuses on synthesis, leverages collaboration, and embraces and practices open science.

Environmental challenges are complex and their solutions require diverse perspectives and sets of expertise. In recognition of this, we convene multidisciplinary teams of academic and non-academic researchers from all over the world into working groups who, over the course of one to two years, tackle "wicked" questions collaboratively, an approach NCEAS first innovated and institutions around the world now emulate. These teams do not collect new data, but synthesize and analyze existing data from many sources to uncover new and often big-picture insights that can inform policy and management. Given our focus on accessible and reproducible data, we catalyze discovery and scientific culture to be more open.

Our approach also centers on building **partnerships** with other research institutions, nonprofits, and government agencies, helping expand capacity for synthesis within these organizations and translate the science into solutions. For example, we operate the Gulf

Ecosystem Initiative, a partnership with the NOAA RESTORE program and engage in long-term partnerships with nonprofits such as The Nature Conservancy (TNC), along with private corporations like Microsoft and Universities around the world.

Our approach informs the four pillars of **our work**: research, data science, training, and community engagement.

We lead synthesis and analytical research initiatives and projects that tackle big questions that would be difficult to answer with other scientific approaches. A few current examples of these pillars include:

- With a \$5 million grant from Google.org, we have partnered with Woodwell Climate Research Center to support the development of a new, open-access resource that will use satellite data and artificial intelligence (AI) technology to make it possible to track Arctic permafrost thaw in near real-time for the first time.
- We lead the Ocean Health Index, a program that systematically assesses the health of the world's oceans annually for 220 coastal nations and territories, as well as at smaller regional scales. This program also prioritizes open and transparent methods for reproducible research, sharing code and providing training and support for independent groups interested in leading their own OHI assessments.
- We are working towards the first release of the Western Wildfire Resilience Index (WWRI) that will calculate resilience scores for human-ecological communities in the western regions of the US and Canada to inform decision-makers when crafting wildfire preparedness, response, and recovery policies.

We also create innovative solutions for managing and analyzing environmental data, such as the following:

- Through our KNB Data Repository, we make thousands of environmental datasets generated at NCEAS and elsewhere publicly and freely available, allowing researchers to store their own data and access data from thousands of others, ultimately making science more transparent and reproducible.
- In partnership with DataONE and NOAA's National Center for Environmental Information, we run the Arctic Data Center to make available all data, software, and other research products associated with NSF-funded science in the Arctic for the sake of reproducibility.

Finally, we train early-career and established researchers from around the world in best practices for open science and data management, especially with an application to synthesis research. Examples of this work include the following:

- Our <u>Learning Hub</u> is our knowledge-sharing community where, through trainings and resources, environmental researchers can learn the latest data science skills and technologies, enabling their science to inform solutions more quickly and effectively.
- We serve as a host institution for postdoctoral researchers, which typically support working groups, giving them experience coordinating research teams and designing their own synthesis research projects.
- In partnership with UCSB's Bren School of Environmental Science and Management we host the Master of Environmental Data Science (MEDS) Program, a degree program preparing students for a career advancing solutions to environmental problems through data science.

NCEAS operates in downtown Santa Barbara in a facility that provides visiting researchers the physical and mental space for creativity and collaboration – important ingredients that foster the level of scientific output for which NCEAS is known. At the same time, NCEAS maintains strong ties to campus. Many working groups include UCSB faculty or researchers, and we employ and train a large cadre of UCSB graduate students in data management, scientific programming, and science communications.

In addition, the Center supports a community of resident researchers that concentrate on synthesis science or the development of computational approaches and tools to support synthesis science. NCEAS staff provides logistical and technical support, training, and outreach services to increase the productivity and impact of our researchers and working groups.

EXECUTIVE SUMMARY

As NCEAS rounds out its 29th year of operation and looks forward to celebrating our 30th year of supporting synthesis science around the world, we celebrate our successes across all four pillars of our work: research, data science, training, and community engagement.

Over the course of the last year NCEAS secured over \$7.5 million dollars in new awards and administered 44 different funded programs. We also welcomed nearly 800 external participants through our trainings, meetings, working groups, and other activities and projects. Across these projects we produced over 80 publications and received national and international media attention for our groundbreaking synthesis science and data science trainings. Below we offer highlights on NCEAS' growth and sustainability organized around our four pillars of work.

Research

In 2023/2024 NCEAS supported 12 interdisciplinary synthesis science working groups across our three main working group initiatives: LTER, Morpho, and the <u>Gulf Ecosystem Initiative</u>. This equates to over 300 days of in-person, scientific discovery and collaboration at our facility. The <u>Morpho Initiative</u> aims to support scientific results that can inform solutions to urgent issues facing our changing planet - from wildfires to biodiversity loss and climate change - while advancing workforce development skills. The <u>Gulf Ecosystem Initiative</u> is a partnership with the NOAA RESTORE to bring working groups of scientists and decision makers together to collaborate to solve pressing questions across the Gulf of Mexico.

In 2024 we awarded two new **Gulf Ecosystem Initiative** grants to groups focusing on fisheries, climate change, and ecosystem management in the Gulf region. <u>Read more</u> about the 'Shifts in distributions and movement patterns of Coastal Migratory Pelagic Fish species' and "The impact of large-scale estuarine habitat restoration on fisheries of the Gulf of Mexico' working groups to learn about the projects and postdocs. Our **Morpho Initiative** has now welcomed a total of seven working groups. Our two latest transdisciplinary working groups are focused on marine and aquatic systems with the first focused on whether and how global trade impacts sharks and rays and the second examining what causes a lack of thiamine (vitamin B1) in aquatic systems. <u>Read more</u> about the 'Baited Switch: Is global trade driving unsustainable fisheries?' and the 'Identifying root causes of thiamine deficiency complex in global aquatic ecosystems' working groups on our website. And our LTER Network Office funded two new LTER synthesis groups this year, the <u>Assessing the resilience of productivity to climate variability across management and climate gradients group</u> and the <u>Consumer</u> <u>Absence Generates Ecological Dissimilarity (CAGED)</u> group, as well as supporting three groups funded in 2023 for their second and final year of funding

We also supported ten postdoctoral scholars across our research programs, providing a sizable cohort of researchers that can offer peer support and advice. Learn more about each postdocs' research project and interest in our first annual <u>"Monarch: A digital yearbook to commemorate our vibrant community of postdoctoral scholars"</u>.

Especially exciting for NCEAS research community was the announcement that funding for the <u>LTER Network Office was successfully renewed</u> for the next five years by the National Science Foundation. Focal areas for these five years include fostering new synthesis science, broadening participation in ecology, and training a new generation of ecologists. The LNO will remain housed at NCEAS, continuing to draw on their experience in synthesis science, open data, and collaboration.

Our diverse set of partnerships continue to make significant progress towards our shared NCEAS mission and substantial contributions to the scientific and informatics communities. Other research program highlights include:

- SeaSketch hit several major milestones this year. First, the Blue Azores program that we are involved in announced that the Azores Regional Government signed into law a network of Marine Protected Areas covering 287,000 square kilometers, or 30% of their offshore area (6-200 nautical miles). Half of the network is fully protected while the other half is highly protected. SeaSketch was used by stakeholders to design the network to meet strict science and policy guidelines. The legislation also mandates nearshore planning (0-6 nautical miles) in which SeaSketch will also be used so we begin that work now. The team also conducted Ocean Use Survey and Marine Spatial Planning workshops in Kiribati, Fiji and Yap in which teams of people used SeaSketch in Barbados, Brazil, Argentina, Uruguay, Spain and Portugal. So, SeaSketch continues to be one of the most popular tools for MSP and is leading to some real-world changes in ocean management!
- The <u>Western Wildfire Resilience Index (WWRI)</u> continued its work this year, with \$2.1 million of support from the Moore Foundation. This project is calculating index scores for human-ecological communities in the western regions of the US and Canada to inform decision-makers when crafting wildfire preparedness, response, and recovery policies. WWRI index scores will be displayed with a transparent, user-friendly interface so that decision-makers, resource managers, and property owners will be able to see which factors are driving the index score of any given area. Initial WWRI scores will be launched in 2025.
- This year marks the 13th annual global <u>Ocean Health Index</u> assessment. Since 2018, the Ocean Health Index has been calculated by OHI fellows. The Ocean Health Index Global Fellowship was created to familiarize a small group of early-career data scientists with the inner workings of the OHI. With the objective of calculating OHI scores, the fellows dive into the theory, tools, and workflows employed by the larger team to ensure openness, transparency, and reproducibility. While fellows gain

valuable experience and build useful skills, they also contribute fresh eyes and new perspectives that help the OHI to continually grow and innovate. This program is an integral part of what the Ocean Health Index has accomplished thus far and what it is today. This year we received additional funding to support four fellows. As a result of their efforts, eight out of ten goal scores were updated with new goal, pressure, and resilience data. Additionally, we made significant improvements to the tourism and recreation goal, sea ice habitat assessments, coastal population estimates, and the website. The Fellows also contributed to the OHI's outreach and knowledge-sharing efforts by authoring three blog posts that were published on the oceanhealthindex.org website.

• Our <u>Social Cost of Plastic Pollution</u> working group is working ro design a flexible framework that can be employed to estimate the social costs of a specific plastic pollutant (e.g., microfibers, single-use consumer macroplastics, fishing pots). The team is working towards a U.S.- focused framework to be applied in two ways: 1) improve cost-benefit analyses in upcoming U.S plastic pollution policy (at any scale of governance), which often consider abatement without damages, and 2) to ensure the social cost of plastic pollution is considered in future regulatory impact analyses for non-plastic related policies.

Data Science (Cyberinformatics)

NCEAS continues to be a change leader in Environmental Cyberinformatics/Data Science. As a home to NSF's <u>Arctic Data Center</u>, the <u>Permafrost Discovery Gateway</u>, <u>DataONE</u>, and the <u>Knowledge Network for Biocomplexity (KNB)</u>, NCEAS is not only a gathering place for environmental data science, but also a leader in moving this community towards new and exciting innovations.

- With \$5 million in funding from Google.org and in-kind support from 15 Google.org Fellows, the **Permafrost Discovery Gateway** partnership continues to develop an innovative, open-access resource that will use satellite data and artificial intelligence (AI) technology to make it possible to track Arctic permafrost thaw in near real-time for the first time. To date, real-time analysis of permafrost thaw has been out of reach due to the limitations of remote sensing and satellite imagery analysis. This new resource—an expansion of the Permafrost Discovery Gateway—will use AI technology to streamline the data analysis process and make it easier to rapidly identify patterns and trends in permafrost thaw datasets that will be essential to informing climate mitigation and adaptation strategies.
- The NSF Funded <u>Arctic Data Center (ADC)</u> has now collected and processes over 58TB of data sourced from NSF funded projects across the Arctic. In addition to our support of the Arctic community through data management, training, and archiving, a special focus over the last year has been conducting community surveys from the Arctic research community to provide feedback on how the ADC can be improved and/or

celebrate what we have done well. Read more about this work in our Reflections from our <u>2024 Arctic Research Community Survey blog</u>.

• **DataONE** is now host to 77TB of data across our 56 federate data repositories and is in the process of adding even more new partners to the data network!

Training

The NCEAS Learning Hub continues to empower researchers around the world with essential data science skills through hands-on trainings. We aim to create a culture in which all researchers are empowered to solve the pressing environmental issues of our time using inclusive, collaborative, open, and reproducible data science tools.

Over the course of the last year the Learning Hub hosted ~45 days of trainings to over 200 diverse people across our various programs and working group initiatives. We continued our training partnerships with USGS, the Smithsonian Institute, The Delta Stewardship Council, UCSB's Office of Research, and the UCSB Library.

Our flagship <u>coreR</u> course continues to be a major opportunity for researchers of all backgrounds to gain experience with essential data science tools and best practices to increase their capacity as collaborators, reproducible coders, and open scientists. Over the years we have seen how this course can be transformational to scientists' careers, as they are given the tools and confidence to embrace fundamental data science techniques that make their science more **c**ollaborative, **o**pen, **r**eproducible, and **e**fficient (core). For example a 2024 coreR participant said "No matter what type of work you do in your daily life, taking this course will open doors to data analysis and the ability to understand the world around you."

This year our LTER Network Office's (LNO) also launched the <u>Synthesis Skills for Early Career</u> <u>Researchers course</u>. This course draws on the LNO's decades of synthesis experience to teach graduate students the skills needed to succeed in collaborative, cross-disciplinary, and multi-ecosystem projects. The course includes 27 students and representation from 14 sites. The course is designed around two key components: students learn key synthesis science skills in the classroom, then apply those skills to a small group synthesis project, using real data to address fundamental questions in ecology.

The LNO also hosted the first cohort of our <u>Authentic Research Experience for Teachers</u> project in which participants spent time stationed in the field at LTER sites, and also came through NCEAS for a week of learning and collaboration. Teachers are collaborating on lesson plans and <u>classroom materials</u> for building data literacy at the high school and middle school levels. Our <u>Arctic Data Center</u> also continues to host incredibly successful trainings geared towards the Arctic Research Community. This year we hosted three, week-long fundamental data science workshops which were adapted to different skill levels of programming in R and Python for Arctic researchers. And, in collaboration with <u>Cyber2A</u>, we held a new, innovative data science training in AI and machine learning. This training supported 20 Arctic researchers at NCEAS to learn more about incorporating artificial intelligence (AI) and machine learning (ML) techniques into their research. Topics covered in this workshop included AI fundamentals and tools, AI-ready data, data annotation, neural networks and deep learning, AI ethics, reproducibility, and more. Participant's research and experiences varied widely. You can learn more about this training in our <u>Arctic researchers dive into AI and ML for</u> transformative science in the first Cyber2A blog.

Community Engagement

NCEAS continues to dedicate ourselves to expanding and diversifying the greater environmental science community. In particular, in February 2024 we hosted the second annual Environmental Data Science Summit, focused on "Communicating and Translating Environmental Data." The two-day "unconference" serves as a gathering space for the environmental data science community to discuss technical developments and ethical questions. It's also an opportunity to spark collaboration among practitioners of different backgrounds and experience. This year's theme prompted participants to consider how improved data communication can help the public understand and use environmental data. You can read more about this year's summit in our 'EDS Summit 2024 nourishes and inspires the environmental data science community blog'.

This year NCEAS also hosted our fourth annual DEIJ Seminar Series by welcoming Dr. Lourdes Vera, Keara Lightning, and Dr. Eric Nost to speak on diversity, equity, inclusion, and justice in environmental data science. NCEAS plays a central role in environmental data science, synthesis science, and collaborative research. The DEIJ Seminar Series arose from conversations within NCEAS about how we can foster diversity and inclusion within our scientific community, while also designing research questions and approaches to promote environmental justice and equity across our broader community. Cristina Mancilla, NCEAS community engagement officer and DEIJ committee co-chair, sees NCEAS position as a unique opportunity: "As an institution with this much visibility, we have a responsibility to use the resources and the network that we have to amplify both these really pressing issues and also the voices that we typically don't hear within the environmental science, management, and data science fields," she said. You can read more about this year's speakers and themes in our 'Expressing care and working towards justice in environmental data science' feature story.

Additionally, Molly Phillips joined our LTER LNO team this year as our Inclusion and Access Coordinator to support fostering welcoming and inclusive communities at each LTER site. She launched our first network wide Climate and Culture Survey in 2024. The results from the survey help us begin thinking about implications for LTER site and LNO activities to enhance a culture of inclusion in LTER research and education.

Likewise, our LNO <u>Advancing Public Engagement Across LTER's project</u> is in its **third** year. Three sites have developed new strategic engagement plans and the project published their <u>SCRREE framework</u> (Strategic, Cumulative, Reciprocal, Reflexive, Equitable, and Evidence-based) for conducting public engagement activities, drawing on examples from the LTER Network.

We also continued our <u>Artist in Residence (AiR)</u> program this year by welcoming 2024 Artist in Residence Martina Fröschl. Fröschl spent a month in residence at NCEAS interviewing researchers to help inform her creative work. She asked each resident to define *systems ecology*. "This was one of the most important questions, besides about their research. I got some pretty neat answers." You can hear excerpts from these interviews in the main projection video <u>A Piece of Systems Ecology</u> and read more about our inspiring <u>2024 artist and First Thursday Exhibit here</u>.

Envisioning the Future

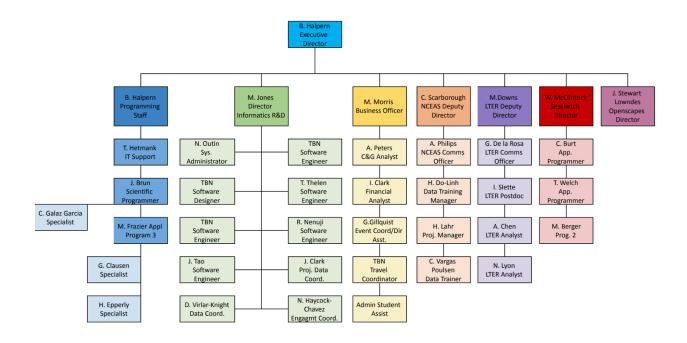
As NCEAS looks ahead to our 30th Anniversary in 2025 we are grateful for the decades of insights, engagement, and innovation our community has fostered over the years. Heading into my ninth year as NCEAS' Director, I am exceedingly appreciative of the Center Staff and thousands of researchers that have made NCEAS the center of gravity for so much of the Environmental Science community. I would also like to thank the Office of Research for its deep commitment to NCEAS, and all of our partners and funders in these endeavors, including the Zegar Family Foundation, the Gordon and Betty Moore Foundation, the David and Lucile Packard Foundation, the National Philanthropic Trust, the National Science Foundation, Google.org, the Waitt Foundation, Conservation International, Microsoft, National Geographic, NASA, BOEM, our partners at The Nature Conservancy, the Point Conception Institute, NOAA RESTORE, the Delta Stewardship Council, USGS, the Carnegie Institute, NASA JPL, and our many other Universities and contributors for their support. I also want to acknowledge and thank the State of California and the leadership of UC Santa Barbara for their continued support of and commitment to NCEAS.

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Ben Halpern, Executive Director National Center for Ecological Analysis and Synthesis (NCEAS)

PEOPLE OF NCEAS

ORGANIZATION CHART



Advisory Committee

- Cherie Briggs, Committee Chair, EEMB
- Kelly Caylor, Geography, Bren
- Krzysztof Janowicz, Geography
- Kyle Lewis, Technology Management Program
- Marko Peljhan, Media Arts and Technology
- Leah Stokes, Political Science
- Rich Wolski, Computer Science

Ex-Officio Members:

• Ben Halpern, Director, NCEAS

Administrative Staff

- Michelle Morris, Business Officer
- Courtney Scarborough, Deputy Director
- Ana Peters, Contracts & Grants Analyst
- Isabel Clark, Financial Analyst
- Ginger Gillquist, Event Coordinator/Director's Assistant
- Jessica Espinosa, Assistant

TECHNICAL STAFF

- Menzies, Peter
- Clark, Susan J
- Hoang, Austin
- Menzies, Peter
- Meyer, Abigail
- Nenuji, Rushiraj
- Nesbitt, lan
- Tao, Jing
- Brooke, Matthew
- Frazier, Melanie R
- Burt, Chad
- Schildhauer, Mark P
- Kadi, Justin
- Klope, Maggie
- Virlar-Knight, Daphne
- Jones, Matthew B

- Outin, Nicholas P
- Hetmank, Thomas

STATISTICAL SUMMARY

UC SANTA BARBARA

Research Division

Statistical Summary

Statistical Summary	
Department:	NCEAS
Fiscal Year:	2024
Personnel engaged in research (head count):	
Faculty	2
Professional Researchers (including Visiting)	3
Project Scientists	2
Specialists	10
Postdoctoral Scholars	8
Postgraduate Researchers	0
Graduate Students	8
Undergraduate Students	8
Technical & Research Staff	16
Tota	al 57
Participation from outside UCSB (head count): (optional	D
Academics (without Salary Academic Visitors)	5
Other (specify)	0
Tota	al 5
Unit Operational Staff (# of FTE):	
Administrative	6
Computing	2
Technical & Service (e.g. recharge personnel, lab manager)	0
Programmatic Staff	0
Tota	al 8
Sponsored Research:	
Number of Principal Investigators*	5
Proposals submitted (#)	20
Proposals submitted (\$ value)	16,244,690

Awards issued (#)	23
Awards issued (\$ value)	7,499,359
Extramural awards administered during year (#)**	44
Extramural awards administered during year (\$ value)**	28,134,743.00
Costshare funds managed during year (\$ value)**	0
Awarding agencies dealt with (#)****	19
Other Projects & Programs:	
Seminars, symposia, workshops sponsored (#)	46
Other projects administered (#)****	4
Other projects administered (\$ value)*****	444859
Intramural support administered (\$ value)**	502624
Budget & Space:	
Total base budget for the year	580,347
Total assigned square footage in ORU	7526

PRINCIPAL INVESTIGATORS

Jennifer Caselle	Associate Research Biologist	Marine Science Institute
Frank Davis	LTER Network Office Executive Director	National Center for Ecological Analysis and Synthesis
Benjamin Halpern	Professor	Bren School
Matthew Jones	Director of Informatics, Research, and Development	National Center for Ecological Analysis and Synthesis
Carrie Kappel	Researcher	National Center for Ecological Analysis and Synthesis
Christopher Lortie	Researcher	National Center for Ecological Analysis and Synthesis

Julia Stewart Lowndes	Project Scientist	National Center for Ecological Analysis and Synthesis
William McClintock	Project Scientist	Marine Science Institute
Todd Oakley	Researcher	Ecology, Evolution, and Marine Biology
Mark Schildhauer	CNT V	National Center for Ecological Analysis and Synthesis

Postdoctoral Fellows, Graduate and Undergraduate Students

Postdoctoral Fellows

- Chapman, Melissa
- Czaja, Raymond
- Fung, Mai
- Li, Liying
- Morse, Marisa
- O'Hara, Casey C
- Slette, Ingrid
- Sura, Shayna
- Wang, Zhe

Students

- Cori Lopazanski
- Archipov, Kira
- Broderick, Carlo
- Egg, Erika
- Robinson, Adelaide
- Lecuona, Sophia
- Payne, Sarah
- Ramji, Anna
- Chia, Russell
- Dysart, James

- Kracha, Chris
- Lee, Tasha
- Ly, Kacey
- Melkote, Nikhil
- Raghuraman, Nandita
- Su, Quincy
- Wen, Hsinpin
- Yang, Ruoqi

EXTERNAL PARTICIPATION

Activity	Activity Type	First Name	Last Name	Institution
	Working Group	Xinping	Hu	Texas A and M University Corpus Christi
	Working Group	Jennifer	Pollack	Texas A and M University Corpus Christi
	Working Group	Mark	Fisher	Texas Parks and Wildlife Department
	Working Group	Seungwon	Chung	University of Texas
	Working Group	Zong-Liang	Yang	University of Texas at Austin
	Working Group	Jiabi	Du	Texas A and M University at Galveston
	Working Group	Hui	Liu	Texas A and M University
	Working Group	Paul	Montagna	Harte Research Institute
GEI: Fisheries And	Working Group	Antonietta	Quigg	Texas A and M University at Galveston
Ecosystem	Working Group	Edward	Buskey	University of Texas at Austin
	Working Group	Christopher	Biggs	University of Texas at Austin
	Working Group	Zhanfei	Liu	University of Texas at Austin
	Working Group	Katherine	Loesser	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	Hannah	Brown	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	Adrien	Hilmy	Coastal Bend and Bays Estuary Program
	Working Group	Zach	Olsen	Texas Parks and Wildlife Department

	Working Group	Joan	Garland	University of Texas at Austin
	Working Group	Christine	Jensen	Texas Parks and Wildlife Department
	Working Group	Caitlin	Broderick	Kansas State University
	Working Group	Jeffrey	Blanchard	University of Massachusetts, Amherst
	Working Group	Julia	Brandao Gontijo	Universidade de Sao Paulo
	Working Group	Luciana	Chavez Rodriguez	University of California, Irvine
	Working Group	Katherine	Shek	University of New Hampshire
	Working Group	Dawson	Fairbanks	University of Arizona
	Working Group	William	Rodriguez-Reill o	Harvard Medical School
	Working Group	Jennifer	Jones	Michigan State University
	Working Group	Alicia	Clum	University of California, Berkeley
	Working Group	Margaret	O'Brien	University of California, Santa Barbara
	Working Group	Hugh	Cross	National Ecological Observatory Network, Inc. (NEON)
LTER: EMERGENT	Working Group	Anthony	Winston	Pacific Northwest National Laboratory
LI LR. LMLRGLINI	Working Group	Jason	McDermott	Pacific Northwest National Laboratory
	Working Group	Caitlin	Broderick	Kansas State University
	Working Group	Jeffrey	Blanchard	University of Massachusetts, Amherst
	Working Group	Cristina	Takacs-Vesbac h	University of New Mexico
	Working Group	Sydne	Record	Bryn Mawr College
	Working Group	Luciana	Chavez Rodriguez	University of California, Irvine
	Working Group	Julia	Brandao Gontijo	University of California, Berkeley
	Working Group	Dawson	Fairbanks	University of Arizona
	Working Group	Emiley	Eloe-Fadrosh	Lawrence Berkeley National Laboratory
	Working Group	Alicia	Clum	University of California, Berkeley
	Working Group	Margaret	O'Brien	University of California, Santa Barbara

	Working Group	Hugh	Cross	National Ecological Observatory Network, Inc. (NEON)
	Working Group	Anthony	Winston	Pacific Northwest National Laboratory
	Working Group	Pamela	Sullivan	Oregon State University
	Working Group	Arial	Shogren	Michigan State University
	Working Group	Adam	Wymore	University of New Hampshire
	Working Group	Benjamin	Abbott	University of Brighton
	Working Group	Joanna	Carey	Babson College
	Working Group	Ruth	Heindel	Kenyon
	Working Group	Wilfred	Wollheim	University of New Hampshire
	Working Group	Jeremy	Jones	University of Alaska, Fairbanks
	Working Group	Lienne	Sethna	Indiana University
	Working Group	Linda	Deegan	Marine Biological Laboratory
	Working Group	Kathijo	Jankowski	US Geological Survey (USGS)
	Working Group	Keira	Johnson	Oregon State University
	Working Group	William	McDowell	University of New Hampshire
LTER: River Si Exports	Working Group	Amanda	Poste	Norwegian Institute for Water Research
	Working Group	Diane	McKnight	University of Colorado, Boulder
	Working Group	Pirkko	Kortelainen	Finnish Environment Institute
	Working Group	Sidney	Bush	Oregon State University
	Working Group	Antti	Raike	
	Working Group	Hjalmar	Laudon	
	Working Group	Paul	Julian	Sanibel-Captiva Conservation Foundation
	Working Group	Pamela	Sullivan	Oregon State University
	Working Group	Lienne	Sethna	Indiana University
	Working Group	Kathijo	Jankowski	US Geological Survey (USGS)
	Working Group	Keira	Johnson	Oregon State University
	Working Group	Sidney	Bush	Oregon State University
	Working Group	Laura Melissa	Guzman	University of Southern California
Marpha Nation	Working Group	Neal	Williams	University of California, Davis
Morpho: Native Plant Prioritizer	Working Group	Grace	Horne	University of California, Davis
Plant Prioritizer	Working Group	Alejandra	Echeverri Ochoa	University of California, Berkeley

				University of California,
	Working Group	Christopher	Cosma	Riverside
	Working Group	Andrea	Williams	California Native Plant Society
		Eric	Wood	California State University,
	Working Group	EIIC	Lequerica	Los Angeles
	Working Group	Manuel	T√°mara	AMBS Ecology and Heritage
				Vermont Center for
	Working Group	Desiree	Narango	Ecostudies
	_			California Native Plant
	Working Group	Jessica	Woodard	Society
	Working Group	April	Owens	Pollinate Collective
	Working Group	James	Strittholt	Conservation Biology Institute
	Working Group	Jesse	Fleri	Fors Marsh
	Meeting	Evelyn	Gaiser	Florida International University
	Meeting	Heidi	Sosik	Woods Hole Oceanographic Institution
	Meeting	Rubao	Ji	Woods Hole Oceanographic Institution
	Meeting	Deron	Burkepile	University of California, Santa Barbara
	Meeting	Michelle	Mack	Northern Arizona University
	Meeting	Emily	Stanley	University of Wisconsin
	Meeting	Hilary	Dugan	University of Wisconsin, Madison
	Meeting	Gwenn	Hennon	University of Alaska, Fairbanks
2024 LTER Science Council Meeting	Meeting	Russell	Hopcroft	University of Alaska, Fairbanks
	Meeting	John	Kominoski	Florida International University
	Meeting	Pamela	Templer	Boston University
	Meeting	Jennifer	Rudgers	University of New Mexico
	Meeting	Kevin	Griffin	Columbia University
	Meeting	Laura	Dee	University of Colorado, Boulder
	Meeting	Sarah	Hobbie	University of Minnesota, Twin Cities
	Meeting	Eric	Seabloom	University of Minnesota
	Meeting	Elizabeth	Borer	University of Minnesota
	Meeting	Matthew	Reidenbach	University of Virginia

	0		State University of New
Meeting	Oscar	Schofield	Jersey, Rutgers
Meeting	Kenneth	Dunton	University of Texas, Austin
Meeting	Amanda	Spivak	University of Georgia
Meeting	Merryl	Alber	University of Georgia
Meeting	Allison	Louthan	Kansas State University
Meeting	Jesse	Nippert	Kansas State University
Meeting	Mike	Stukel	Florida State University
Meeting	Jennifer	Rehage	Florida International University
Meeting	Nancy	Emery	University of Colorado, Boulder
Meeting	Marko	Spasojevic	University of California, Riverside
Meeting	Kai	Kopecky	University of California, Santa Barbara
Meeting	Peter	Groffman	City University of New York (CUNY)
Meeting	Matthew	Betts	Oregon State University
Meeting	Katherine	Hayes	Cary Institute of Ecosystem Studies
Meeting	Jonathan	Thompson	Harvard University
Meeting	Wilfred	Wollheim	University of New Hampshire
Meeting	Jess	Zimmerman	University of Puerto Rico, Rio Piedras Campus
Meeting	Michael	Gooseff	University of Colorado, Boulder
Meeting	Gregory	Maurer	New Mexico State University
Meeting	Nicholas	Haddad	Michigan State University
Meeting	Natalie	Boelman	Columbia University
Meeting	James	McClelland	University of Chicago
Meeting	Anne	Giblin	The Ecosystems Center
Meeting	Robert	Miller	University of California, Santa Barbara
Meeting	Annette	Brickley	Woods Hole Oceanographic Institution
Meeting	Niall	Hanan	New Mexico State University
Meeting	Sarah	Elmendorf	National Ecological Observatory Network, Inc. (NEON)
Meeting	Melisa	Diaz	The Ohio State University
Meeting	Rebecca	Ball	Arizona State University

	Meeting	Daniel	Childers	Arizona State University
	Meeting	Katherine	Barbeau	University of San Diego
	Meeting	Sasha	Reed	US Geological Survey (USGS)
	Meeting	Alex	Webster	University of New Mexico
	Meeting	Joey	Lodge	University of Colorado Boulder
	Meeting	Benjamin	Maglio	University of Alaska
	Meeting	Christopher	Peterson	University of Alaska, Fairbanks
	Meeting	Catherine	Polik	University of Minnesota, Twin Cities
	Meeting	Georgia	Seyfried	Oregon State University
	Meeting	Jacob	Bukoski	Oregon State University
	Meeting	Betsy	Von Holle	National Science Foundation
	Meeting	Daniel	Thornhill	National Science Foundation
	Meeting	Francisco	Moore	National Science Foundation
	Meeting	William	Casola	National Science Foundation
	Meeting	Kyle	Emery	University of California, Santa Barbara
	Meeting	Christopher	Nytch	University of Puerto Rico
	Meeting	Audrey	Barker-Plotkin	Harvard Forest
	Working Group	Kyle	Manley	University of California, Irvine
	Working Group	Laura	Dee	University of Colorado, Boulder
	Working Group	Anna	Lopresti	University of Colorado
	Working Group	Cody	Evers	Portland State University
	Working Group	Morgan	Varner	Tall Timbers
	Working Group	Holly	Nowell	Tall Timbers
	Working Group	Rebecca	Chaplin-Krame r	World Wildlife Fund (WWF)
Morpho: Fire	Working Group	Kate	Brauman	University of Alabama
Ecosystem Services	Working Group	Lilli	Kaarakka	California Polytechnic State University
	Working Group	Morris	Johnson	US Department of Agriculture (USDA)
	Working Group	Jamie	Peeler	University of Montana
	Working Group	Miguel	Villareal	US Geological Survey (USGS)
	Working Group	Alison	Lerch	Colorado Department of Natural Resources
	Working Group	Isabella	Oleksy	University of Wyoming
	Working Group	Katherine	Siegel	NOAA Climate and Global Change

	Working Group	Kyle	Manley	University of California, Irvine
	Working Group	Anna	Lopresti	University of Colorado
				University of Colorado,
	Working Group	Laura	Dee	Boulder
	Working Group	Cody	Evers	Portland State University
	Working Group	Erin	Hanan	University of Nevada, Reno
	Working Group	Morgan	Varner	Tall Timbers
	Working Group	Holly	Nowell	Tall Timbers
	Working Group	Lilli	Kaarakka	California Polytechnic State University
	Working Group	Morris	Johnson	US Department of Agriculture (USDA)
	Working Group	Jamie	Peeler	University of Montana
	Working Group	Jason	Kreitler	US Geological Survey (USGS)
	Working Group	Miguel	Villareal	US Geological Survey (USGS)
	Working Group	Alison	Lerch	Colorado Department of Natural Resources
				NOAA Climate and Global
	Working Group	Katherine	Siegel	Change
	Working Group	Isabella	Oleksy	University of Wyoming
			Anoush	
	Working Group	Tristin	McHugh	The Nature Conservancy
	Working Group	Melissa	Abderrahim	International Union for Conservation of Nature (IUCN)
	Working Group	Alexandra	Boutros	University of California Santa Cruz
	Working Group	Jarrett	Byrnes	University of Massachusetts-Boston
	Working Group	Alejandra	Gonzalez	Universidad de Chile
Morpho: Kelp Restoration	Working Group	Janaka	deSilva	International Union for Conservation of Nature (IUCN)
	Working Group	Nur	Arafeh Dalmau	Stanford University
	Working Group	Loyiso	Dunga	Parley for the Oceans
	Working Group	Anita	Giraldo-Ospina	University of California, Santa Barbara
	Working Group	Jennifer	Caselle	University of California, Santa Barbara
	Working Group	Steve	Lonhart	NOAA, National Marine Sanctuary Monterey Bay
	Working Group	Mohammed	Sedarat	University of California, San Diego

	Working Group	Angelo	Villagomez	Center for American Progress
	Working Group	Lynn	Lee	Parks Canada
	Working Group	Betsy	Peabody	Puget Sound Restoration Fund
	Working Group	Kataya	Barrett	Country Needs People
	Working Group	Aaron	Eger	University of New South Wales
	Training Workshop	Kristine	Chua	University of California, Santa Barbara
	Training Workshop	Ebenezer	Larnyo	University of California, Santa Barbara
	Training Workshop	Mong Sin	Wu	University of California, Santa Barbara
	Training Workshop	Alison	Rickard	University of California, Santa Barbara
OpenS Training	Training Workshop	Mingshuang	Lian	University of California, Santa Barbara
OpenS Training	Training Workshop	Daisuke	Seto	University of California, Santa Barbara
	Training Workshop	William	Cunningham	University of California, Santa Barbara
	Training Workshop	Basamat	Shaheen	University of California, Santa Barbara
	Training Workshop	Kathleen	Moore	University of California, Santa Barbara
	Training Workshop	Joan	Dudney	University of California
	Working Group	Miranda	Mockrin	US Department of Agriculture (USDA)
	Working Group	Connor	Nolan	Stanford University
	Working Group	Shefali	Lakhina	Wonder Labs
Wildfire Resilience Index	Working Group	Leanna	Weissberg	University of California, Berkeley
	Working Group	Мах	Moritz	University of California, Berkeley
	Working Group	Malcolm	North	University of California, Davis
	Working Group	Winslow	Hansen	Cary Institute of Ecosystem Studies
	Working Group	Marek	Smith	The Nature Conservancy
	Working Group	Claire	Tortorelli	University of California, Davis
	Working Group	Ilkay	Altintas	University of California, San Diego
	Working Group	Oliver	Brandes	University of Victoria

	Working Group	Joan	Dudney	University of California
	Training Workshop	Soraida	Garcia	University of Illinois, Chicago
	Training Workshop	Kathryn	Tomasi	University of California, Santa Barbara
	Training Workshop	Zephyr	Girard	Massachusetts Institute of Technology
	Training Workshop	Beatriz	Mejia-Mercado	
	Training Workshop	Mackenzie	White	Florida International University
CoreR Course	Training Workshop	Hailie	Kittner	University of California, Santa Barbara
	Training Workshop	Jacob	Schmidt	University of California, Santa Barbara
	Training Workshop	Leeza-Marie	Rodriguez	University of California, Santa Barbara
	Training Workshop	Vicente	Vasquez	Smithsonian Tropical Research Institute
	Training Workshop	Braden	DeMattei	Carnegie Institution for Science
	Working Group	Charlie	Braman	University of California, Santa Barbara
	Working Group	Hillary	Young	University of California, Santa Barbara
	Working Group	Kathleen	Elder	California Polytechnic State University
	Working Group	Rae	Wynn-Grant	University of California, Santa Barbara
Coastal subsidies to terrestrial animals	Working Group	Ruth	Oliver	University of California, Santa Barbara
	Working Group	Peter	Raimondi	University of California, Santa Cruz
	Working Group	Francis	Gerraty	University of California, Santa Cruz
	Working Group	Grace	Lewin	University of California, Santa Barbara
	Working Group	Zoe	Zilz	University of California, Santa Barbara
	Working Group	Jenifer	Dugan	University of California, Santa Barbara
	Working Group	Kristen	Ikeda-Yoza	The Nature Conservancy
	Working Group	Alex	Wegmann	The Nature Conservancy
	Working Group	Erica	Nielsen	The Nature Conservancy

	Working Group	Elizabeth	Hiroyasu	The Nature Conservancy
	Working Group	Walter	Heady	The Nature Conservancy
	Working Group	Karin	Lin	The Nature Conservancy
	Working Group	Raimy	Williams	
	Working Group	Mark	Reynolds	The Nature Conservancy
	Meeting	Jessica	Black	University of Alaska, Fairbanks
	Meeting	Courtney	Carothers	University of Alaska, Fairbanks
Indigenizing	Meeting	Janessa	Esquible	Orutsararimut Native Council
Salmon Science & Management	Meeting	Carrie	Stevens	University of Alaska, Fairbanks
	Meeting	Wilson	Justin	University of Alaska, Anchorage
	Meeting	Jonathan	Samuelson	Kuskokwim River Inter-Tribal Fish Commission
	Meeting	Naupaka	Zimmerman	University of San Francisco
	Meeting	Rebecca	Howard	Oregon State University
	Meeting	Aji	John	University of Washington
	Meeting	Lea	Shanley	International Computer Science Institute
	Meeting	Dorris	Scott	Data Curation Network
	Meeting	Kiros	Welegerima	Mekelle University
	Meeting	Geoffrey	Fricker	University of California, Los Angeles
	Meeting	Elmera	Azadpour	US Geological Survey (USGS)
	Meeting	Vaasuki Marupaka	Marupaka	University of Florida
Environmental Data Science	Meeting	Sophia	Leiker	University of California, Santa Barbara
Summit	Meeting	Elizabeth	Wolkovich	University of British Columbia
	Meeting	Dawn	Wright	Environmental Systems Research Institute (ESRI)
	Meeting	Wenxin	Yang	University of Arizona
	Meeting	Caitlin	Mothes	Colorado State University
	Meeting	Samendra	Sherchan	Tulane University
	Meeting	Beatriz	Milz	University of S√£o Paulo
	Meeting	Ibrahim	Lajada	Washington University in St. Louis
	Meeting	Cassie	Buhler	Drexel University
	Meeting	Amanda	Whitmire	Stanford University

Meeting	Michael	Cecil	Clark University
Meeting	Rachel	Layko	Arizona State University
Meeting	Samuel	Glickman	University of Hawaii at Manoa
Meeting	Мае	Lacey	Conservation Science Partners Inc.
Meeting	Layla	Kilolu	University of Hawaii at Manoa
Meeting	Keolohilani Jr.	Lopes	UH Manoa
Meeting	Kacie	Kajihara	University of Hawaii at Manoa
Meeting	Josh	LeMonte	Brigham Young University
Meeting	Ileana	Fenwick	Openscapes and Global Environmental Strategies
Meeting	Hannah	Kurita	LanzaTech
Meeting	Emelia	Williams	Open Environmental Data Project
Meeting	Deepali	Bidwai	Alpha Square
Meeting	Daniel	Peters	Environmental Defense Fund
	Christopher	Christopher	
Meeting	Beltz	Beltz	Finch Insights
Meeting	Scott	St. George	Willis Towers Watson (WTW)
Meeting	Clinton	Johson	NorthStar of GIS
Meeting	Jamal	Watkins	NAACP
Meeting	Somayeh	Dodge	University of California - Santa Barbara
Meeting	Meghan	Shea	Stanford University
Meeting	Anjali	Boyd	NULL
Meeting	Andrew	Huang	Anaconda
Meeting	Rasheed	Pongnon	Virginia Tech
Meeting	Will	Harrigan	University of Hawaii
Meeting	Verena	Manolis	Forest Trends
Meeting	Tatjana	Washington	The University of Chicago
Meeting	Sharif	Islam	Massachusetts Institute of Technology
Meeting	Sarah	Cuprewich	Dartmouth College
Meeting	Leah	Wasser	pyOpenSci
Meeting	Melanie	Leung	University of California, Los Angeles
Meeting	Iris	Foxfoot	United States Army Corps of Engineers
Meeting	Ciara	Horne	University of Virginia
Meeting	Margaux	Sleckman	US Geological Survey (USGS)
Meeting	Arlene	Hopkins	Vector Studio

	Meeting	Raymond	Almodóvar	West Chester University of Pennsylvania
	Meeting	Dominique	Kelly	Woods Hole Oceanographic Institution
	Meeting	Alex	Powell	Colorado Department of Public Health and Environment
	Meeting	Cee	Nell	U.S. Geological Survey
	Meeting	Felipe	Montealegre	UC Berkeley
	Meeting	Greg	Janée	UC Santa Barbara
	Meeting	Orhun	Aydin	Saint Louis University
	Meeting	Nastassia	Barber	Mast Reforestation
	Meeting	Japheth	Kimeu	Food and Agriculture Organization of the United Nations (FAO)
	Meeting	lqra	Basit	Provincial Disaster Management Authority
	Meeting	Sarah	Buckingham	ENGIE
	Meeting	Warren	Hanson	Oregon Department of Agriculture
	Meeting	William	Oestreich	Monterey Bay Aquarium Research Institute
	Meeting	Elsa	Culler	University of Colorado Boulder
	Meeting	Fran	Harvey	Global Geospatial Institute
	Meeting	Noam	Ross	EcoHealth Alliance
	Meeting	Franklin	Heng	Running Tide
	Meeting	Hannah	Murray	University of Southern California
	Meeting	Mardell	Overson	Brigham Young University
	Meeting	Austen	Lambert	Brigham Young University
	Meeting	Xuerui	Yang	Forest Trends Association
	Meeting	Yazid Salahudeen	Mikail	Global Partnership for Sustainable Development Data
	Meeting	Mohammed Bayero	Yayandi	YandyTech Community
	Meeting	Unis	Lebbie	INTEGEMS Limited
	Meeting	Alii	Napoleon	Chaminade Universtiy of Honolulu
PCI Advisory Board Meeting	Advisory Board	Trisalyn	Nelson	University of California, Sant Barbara

	Advisory Board	Kelly	Caylor	University of California, Santa Barbara
	Advisory Board	Amy	Frazier	University of California Santa Barbara
	Advisory Board	Michael	Sweeney	The Nature Conservancy
	Advisory Board	Damian	Spangrud	Environmental Systems Research Institute (ESRI)
	Advisory Board	Mark	Reynolds	The Nature Conservancy
	Advisory Board	Michael	Bell	The Nature Conservancy
	Advisory Board	Laura	Dangermond	Environmental Systems Research Institute (ESRI)
	Advisory Board	Jack	Dangermond	Environmental Systems Research Institute (ESRI)
	Advisory Board	Karin	Lin	The Nature Conservancy
	Advisory Board	Charles	Zegar	Zegar Family Foundation
	Training Workshop	Kristine	Chua	University of California, Santa Barbara
	Training Workshop	Ebenezer	Larnyo	University of California, Santa Barbara
Open S	Training Workshop	Mong Sin	Wu	University of California, Santa Barbara
	Training Workshop	Alison	Rickard	University of California, Santa Barbara
	Training Workshop	Daisuke	Seto	University of California, Santa Barbara
	Working Group	Megan	Cimino	University of California, Santa Cruz
	Working Group	Stephanie	Hampton	Carnegie Institution for Science
	Working Group	Nichole	Barger	The Nature Conservancy
Biodiversity Data	Working Group	Ruth	Oliver	University of California, Santa Barbara
	Working Group	Fabian	Schneider	Jet Propulsion Laboratory of the National Aeronautics and Space Administration (NASA)
Science	Working Group	Frank	Muller-Karger	University of South Florida
	Working Group	Xiao	Yang	Southern Methodist University
	Working Group	Bala	Chaudhary	Dartmouth College
	Working Group	Rebecca	Chaplin-Krame r	World Wildlife Fund (WWF)
	Working Group	Amina	Pollard	US Environmental Protection Agency (EPA)

	Working Croup	Alexa		University of California, Santa Cruz
	Working Group Working Group	Rachel	ann Gallery	University of Arizona
	Working Group	Michael	Meyer	US Geological Survey (USGS)
	Working Group	David	Schimel	Jet Propulsion Laboratory of the National Aeronautics and Space Administration (NASA)
	Working Group	Braden	DeMattei	Carnegie Institution for Science
	Working Group	Carmen	Cillero	3edata
	Working Group	Charlie	Braman	University of California, Santa Barbara
	Working Group	Kathleen	Elder	California Polytechnic State University
	Working Group	Rae	Wynn-Grant	University of California, Santa Barbara
	Working Group	Ruth	Oliver	University of California, Santa Barbara
	Working Group	Francis	Gerraty	University of California, Santa Cruz
Coastal Consumers	Working Group	Grace	Lewin	University of California, Santa Barbara
Consumers	Working Group	Zoe	Zilz	University of California, Santa Barbara
	Working Group	Alex	Wegmann	The Nature Conservancy
	Working Group	Kyle	Emery	University of California, Santa Barbara
	Working Group	Walter	Heady	The Nature Conservancy
	Working Group	Raimy	Williams	University of California, Santa Barbara
	Working Group	Erica	Nielsen	The Nature Conservancy
	Working Group	Elizabeth	Hiroyasu	The Nature Conservancy
	Working Group	James	Tolan	Texas Parks and Wildlife Department
	Working Group	Nathan	Brugnone	Michigan State University
	Working Group	William	Patterson	University of Florida
GEI: Fisheries and Offshore Wind	Working Group	Holden	Harris	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	Skyler	Sagarese	National Oceanic and Atmospheric Administration (NOAA)

	Working Group	John	Walter	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	Willem	Klajbor	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	Sarah	Gibbs	University of South Alabama
	Working Group	David	Chagaris	University of Florida
	Working Group	Ryan	Rindone	Gulf of Mexico Fishery Management Council
	Working Group	Caitlin	Young	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	Michelle	Johnston	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	William	Heyman	LGL Ecological Research Associates, Inc.
	Working Group	Mariana	Steen	Bureau of Ocean Energy Management (BOEM)
	Working Group	James	Morris	NOAA, National Ocean Service (NOS)
	Working Group	Jason	Adriance	Louisiana Department of Wildlife and Fisheries
	Working Group	Leann	Bosarge	Southern Shrimp Alliance
	Working Group	Deborah	Steinberg	Virginia Institute of Marine Science
	Working Group	Heidi	Sosik	Woods Hole Oceanographic Institution
	Working Group	Alexandra	Cabanelas	Woods Hole Oceanographic Institution
	Working Group	Gwenn	Hennon	University of Alaska, Fairbanks
LTER: Pelagic	Working Group	Russell	Hopcroft	University of Alaska, Fairbanks
Community Structure	Working Group	Thomas	Kelly	University of Alaska, Fairbanks
	Working Group	Oscar	Schofield	State University of New Jersey, Rutgers
	Working Group	Mike	Stukel	Florida State University
	Working Group	Beatriz	dos Santos Dias	University of Alaska, Fairbanks
	Working Group	Shailja	Gangrade	University of California, San Diego

				University of California, San
	Working Group	Moira	Décima	Diego
	Marking Craws	Laba	Comment	University of California, Santa
	Working Group	John	Conroy	Cruz
	Working Group	Deborah	Steinberg	Virginia Institute of Marine Science
		Deboran	Stemberg	Woods Hole Oceanographic
	Working Group	Heidi	Sosik	Institution
	Working Group		JUSIK	Woods Hole Oceanographic
	Working Group	Alexandra	Cabanelas	Institution
				University of Alaska,
	Working Group	Thomas	Kelly	Fairbanks
				University of Alaska,
	Working Group	Russell	Hopcroft	Fairbanks
				State University of New
	Working Group	Oscar	Schofield	Jersey, Rutgers
	Working Group	Daniel	Cushing	University of Alaska
	Working Group	Mike	Stukel	Florida State University
			dos Santos	University of Alaska,
	Working Group	Beatriz	Dias	Fairbanks
				University of California, San
	Working Group	Mark	Ohman	Diego
				University of California, San
	Working Group	Lin	Hou	Diego
	Working Group	Shailja	Gangrade	University of California, San Diego
	Working Group	Moira	Décima	University of California, San Diego
	Working Group	John	Conroy	University of California, Santa Cruz
	Working Group	Jill	Johnstone	University of Saskatchewan
	Working Group	Michelle	Mack	Northern Arizona University
Morpho: Sustainable Fuel Breaks	Working Group	Nicholas	Link	Northern Arizona University
	Working Croup	Lisa	Saparatain	U.S. Fish and Wildlife Service, Alaska
	Working Group		Saperstein	
	Working Group	Nathan	Lojewski	Chugachmiut
	Working Group	Dorothy	Cooley	
	Working Group	Katie	Spellman	University of Alaska, Fairbanks
	Working Group	Andrew	Spring	Wilfrid Laurier University
	Working Group	Ann	Erickson	Bureau of Land Management
	Working Group	Carla	Johnston	Wilfrid Laurier University
	5 1	-		

	Working Group	Felecia	Amundsen	Northern Arizona University
				Union of Concerned
	Working Group	Carly	Phillips	Scientists
	Working Group	Daniel	Rees	
	Working Group	Joseph	Little	Northern Arizona University
	Working Group	Hazel	Berrios	Fairbanks Soil and Water Conservation District
	Working Group	Jill	Johnstone	University of Saskatchewan
	Working Group	Michelle	Mack	Northern Arizona University
	Working Group	Nicholas	Link	Northern Arizona University
	Working Group	Lisa	Saperstein	U.S. Fish and Wildlife Service, Alaska
	Working Group	Nathan	Lojewski	Chugachmiut
	Working Group	Dorothy	Cooley	Teslin Tlingit Council
	Working Group	Katie	Spellman	University of Alaska, Fairbanks
	Working Group	Joseph	Little	Northern Arizona University
	Working Group	Carla	Johnston	Wilfrid Laurier University
	Working Group	Luc	Bibeau	Yukon Government
	Working Group	Ann	Erickson	Bureau of Land Management
	Working Group	Daniel	Rees	
	Working Group	Hazel	Berrios	Fairbanks Soil and Water Conservation District
	Working Group	Andrew	Spring	Wilfrid Laurier University
	Training Workshop	Cecilia	Porter	University of Calgary
	Training Workshop	Helena	Kleiner	Northern Arizona University
	Training Workshop	Diana	Khaziakhmeto va	George Washington University
	Training Workshop	Yunjoeng	Мо	Iowa State University
ADC: Fundamentals in	Training Workshop	Emma Jayne	Harrison	Dalhousie University
Data Management	Training Workshop	Paul	Mann	Northumbria University
	Training Workshop	Roberta	Glenn	University of Alaska, Fairbanks
	Training Workshop	Janessa	Esquible	Orutsararimut Native Council
	Training Workshop	Emmanuel	Chukwuemeka	University of North Dakota

	Training			
	Workshop	Douglas	Clark	University of Saskatchewan
	Training Workshop	Sarah	Treadwell	University of North Dakota
	Training			
	Workshop	Sappho	Gilbert	Harvard University
	Training			University of Alaska,
	Workshop	Abigail	Jackson	Fairbanks
	Training	E J J .	Marthan	Yukon River Inter-Tribal
	Workshop	Edda	Mutter	Watershed Council
	Training Workshop	Yu	Сао	The Arctic Institute
	Training Workshop	William	Rosenbluth	University of Alaska, Fairbanks
	Training Workshop	Lavanya	Ashokkumar	The University of Alabama in Huntsville
	Training Workshop	Christina	Draeger	University of British Columbia
	Training			
	Workshop	Lynn	Kaluzienski	University of Alaska
	Training Workshop	Santosh	Muralidaran	University of Alaska
	Training Workshop	Joe	Phillips	Lancaster University
	Training Workshop	Romilly	Close	Lancaster University
ADC: Scalable and	Training Workshop	Emma	Liu	Stanford University
Computationally Reproducible	Training Workshop	Bareera	Mirza	Oregon State University
Approaches	Training Workshop	Caleb	Pan	US Army Corps of Engineers
	Training Workshop	Alexander	Orona	Ocean Motion Technologies, Inc
	Training			
	Workshop	Ali	Hossaini	University of Minnesota
	Training		Dam	Ocean Motion Technologies,
	Workshop Training	Jack	Pan	Inc
	Workshop	Tim	Bartholomaus	University of Idaho
	Training			
	Workshop	Yining	Feng	Penn State University
	Training Workshop	Carlyn	Schmidgall	University of Washington

Training			
Workshop	Margaret	Murakami	University of Texas, Austin
			University of Alaska,
Working Group	Rachel	Lekanoff	Fairbanks
Working Croup	Potor	Westley	University of Alaska, Fairbanks
working Group	Pelei	westiey	University of Alaska,
Working Group	Emily	Lescak	Fairbanks
Working Group	Jacqueline	Vogel	San Diego State University
	· ·		Alaska Department of Fish
Working Group	Bert	Lewis	and Game
			Alaska Department of Fish
Working Group	Tyler	Dann	and Game
			University of Alaska,
Working Group	Најо	Eicken	Fairbanks
Working Group	Harmony	Wayner	University of Alaska, Fairbanks
	Паппопу	waynei	NOAA, Alaska Fisheries
Working Group	Ed	Farley	Science Center
			Jim Simon Consulting Group,
Working Group	James	Simon	LLC
			Kuskokwim River Inter-Tribal
Working Group	Justin	Leon	Fish Commission
Working Group	Graeme	Diack	Atlantic Salmon Trust
			University of Colorado
Working Group	Will	Manley	Boulder
Working Croup	Doto	Dand	Prince William Sound Science Center
working Group	Pele	Ranu	Coastal Cultures Research
Working Group	Rachel	Donkersloot	and Consulting
The final general p			United States Geological
Working Group	Vanessa	Von Biela	Survey
			US Fish and Wildlife Service
Working Group	Daniel	Rinella	(FWS)
Working Group	Jill	Johnstone	University of Saskatchewan
Working Group	Natalie	Cleavitt	Cornell University
Working Group	Walt	Koenig	Cornell University
Working Group	Jalene	LaMontagne	DePaul University
Working Group	Penelope	Holland	University of York
	· · ·	Macias	University of New Mexico
Working Group	Dialia	Macias	
Working Group Working Group	Katherine	Nigro	Colorado State University
	Workshop Working Group Working Group	WorkshopMargaretWorking GroupRachelWorking GroupPeterWorking GroupEmilyWorking GroupJacquelineWorking GroupBertWorking GroupHajoWorking GroupHajoWorking GroupHaipoWorking GroupJamesWorking GroupJamesWorking GroupJustinWorking GroupJustinWorking GroupWillWorking GroupPeteWorking GroupPeteWorking GroupNatalieWorking GroupJillWorking GroupJanessaWorking GroupWaltWorking GroupPeteWorking GroupJanessaWorking GroupJanessaWorking GroupJanessaWorking GroupJaleneWorking GroupJeleneWorking GroupPeteWorking GroupPeteWorking GroupPeteWorking GroupPeteWorking GroupPeteWorking GroupPeteWorking GroupPete	WorkshopMargaretMurakamiWorking GroupRachelLekanoffWorking GroupPeterWestleyWorking GroupEmilyLescakWorking GroupJacquelineVogelWorking GroupBertLewisWorking GroupTylerDannWorking GroupHajoEickenWorking GroupHarmonyWaynerWorking GroupEdFarleyWorking GroupJamesSimonWorking GroupJustinLeonWorking GroupGraemeDiackWorking GroupPeteRandWorking GroupPeteRandWorking GroupJanessaVon BielaWorking GroupJustinLeonWorking GroupJustinLeonWorking GroupJustinLeonWorking GroupPeteRandWorking GroupPeteRandWorking GroupJanessaVon BielaWorking GroupJanelRinellaWorking GroupJaleneLaMontagneWorking GroupJaleneLaMontagneWorking GroupJaleneLaMontagne

	Working Group	lan	Pearse	Fort Collins Science Center, USGS
	Working Group	Thomas	Miller	Rice University
	Working Group	Rebecca	Snell	Ohio University
	Working Group	Miranda	Redmond	University of California, Berkeley
	Working Group	Bala	Chaudhary	Dartmouth College
	Working Group	Elizabeth	Crone	University of California, Davis
	Working Group	Mark	Schulze	Oregon State University
	Working Group	Jess	Zimmerman	University of Puerto Rico, Rio Piedras Campus
	Working Group	Jessica	Barton	DePaul University
	Working Group	Ankur	Desai	University of Wisconsin-Madison
	Working Group	Roisin	Commane	Columbia University
	Working Group	Sam	Jurado	Cornell University
	Working Group	Alexis	Helgeson	Boston University
	Working Group	Patricia	Oikawa	California State University, East Bay
	Working Group	Sparkle	Malone	Yale University
	Working Group	Sara	Knox	University of British Columbia
	Working Group	Jaclyn	Matthes	Harvard University
	Working Group	Camilo	Rey-Sanchez	North Carolina State University
LTER: Flux Gradient Project	Working Group	Susanne	Wiesner	University of Wisconsin River Falls
	Working Group	Christopher	Florian	National Ecological Observatory Network, Inc. (NEON)
	Working Group	Stefan	Metzger	National Ecological Observatory Network, Inc. (NEON)
	Working Group	Evan	Kane	Michigan Technological University
	Working Group	Cove	Sturtevant	National Ecological Observatory Network, Inc. (NEON)
	Working Group	Kyle	Delwiche	University of California, Berkeley
	Working Group	David	Reed	Yale University
LTER: Flux Gradient	Working Group	Ankur	Desai	University of Wisconsin-Madison

	Working Group	Roisin	Commane	Columbia University
	Working Group	Sam	Jurado	Cornell University
	Working Group	Alexis	Helgeson	Boston University
	Working Group	Patricia	Oikawa	California State University, East Bay
	Working Group	Sparkle	Malone	Yale University
	Working Group	Sara	Knox	University of British Columbia
	Working Group	Jaclyn	Matthes	Harvard University
	Working Group	Camilo	Rey-Sanchez	North Carolina State University
	Working Group	Susanne	Wiesner	University of Wisconsin River Falls
	Working Group	Christopher	Florian	National Ecological Observatory Network, Inc. (NEON)
	Working Group	Kyle	Delwiche	University of California, Berkeley
	Working Group	David	Reed	Yale University
	Working Group	Cove	Sturtevant	National Ecological Observatory Network, Inc. (NEON)
	Working Group	Bradley	Strickland	Virginia Institute of Marine Science
	Working Group	Kimberly	Komatsu	University of North Carolina
	Working Group	Maowei	Liang	university of minnesota twin cities
	Working Group	Мах	Castorani	University of Virginia
	Working Group	Grace	Wilkinson	University of Wisconsin, Madison
	Working Group	Mike	Stukel	Florida State University
LTER: Producers	Working Group	Charlotte	Malmborg	Harvard University
Consumers and Disturbance	Working Group	Warren	Sconiers	University of Colorado Boulder
	Working Group	Noe	Castaneda	University of California, Santa Barbara
	Working Group	Tatiana	Rynearson	University of Rhode Island
	Working Group	Pierre	Marrec	University of Rhode Island
	Working Group	Suzanne	Strom	Western Washington University
	Working Group	Susanne	Menden-Deuer	University of Rhode Island
	Working Group	James	Hogan	University of Florida
Plastic Pollution	Working Group	Erin	Murphy	Arizona State University

	Working Group	Jenna	Jambeck	University of Georgia
				Virginia Institute of Marine
	Working Group	Andrew	Scheld	Science
	Working Group	Amy	Uhrin	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	Kara	Lavender Law	Sea Education Association
	Working Group	Levi	Helm	Arizona State University
	Working Group	Erica	Nunez	The Ocean Foundation
	Working Group	Benjamin	Maurer	National Renewable Energy Labatory
	Working Group	Adam	Domanski	Enduring Econometrics Work
	Working Group	Kristy	Wallmo	National Oceanic and Atmospheric Administration (NOAA)
	Working Group	Marisa	Morse	University of California, Santa Barbara
	Working Group	Mary Ellen	Ternes	E and W Law
	Working Group	Maria Cristina	Portales Reyes	Saint Louis University
	Working Group	David	Hoover	US Department of Agriculture (USDA)
	Working Group	Carmen	Watkins	University of Oregon
	Working Group	Jennifer	Rudgers	University of New Mexico
	Working Group	Tadashi	Fukami	Stanford University
	Working Group	Forest	Isbell	University of Minnesota
	Working Group	Megan	Wilcots	University of Minnesota
LTER: Transitions	Working Group	Laureano	Gherardi	University of California, Berkeley
	Working Group	Anny	Chung	University of Georgia
	Working Group	Beatriz	Aguirre	Cornell University
	Working Group	Hanan	Farah	University of Minnesota
	Working Group	Katharine	Suding	University of Colorado, Boulder
	Working Group	Lukas	Bell-Dereske	Czech Academy of Sciences
	Working Group	Joan	Dudney	University of California
	Working Group	Lauren	Hallett	University of Oregon
	Training			
	Workshop	Ryan	Toohey	US Geological Survey (USGS)
CASCs Postdoc	Training Workshop	Megan	Behnke	University of Alaska Southeast
Training	Training Workshop	Jason	Fellman	University of Alaska Southeast

Training			North Carolina State
Workshop	Charlotte	Lee	University
Training			
Workshop	Michelle	Baker	Utah State University
Training			, , , , , , , , , , , , , , , , , , ,
Workshop	Yog	Aryal	University of Iowa
Training			University of Massachusetts,
Workshop	Richard	Palmer	Amherst
Training			
Workshop	Kendra	Kaiser	Boise State University
Training			, , , , , , , , , , , , , , , , , , ,
Workshop	Amanda	Cravens	US Geological Survey (USGS)
Training			
Workshop	Jay	Wimhurst	University of Oklahoma
Training			University of Colorado,
Workshop	Holly	Barnard	Boulder
Training			
Workshop	Jennifer	Koch	University of Oklahoma
Training			,
Workshop	Jackson	Valler	US Geological Survey (USGS)
Training			
Workshop	Shawn	Carter	US Geological Survey (USGS)
Training			
Workshop	William	Farmer	US Geological Survey (USGS)
Training			University of Massachusetts,
Workshop	Konstantinos	Andreadis	Amherst
Training			
Workshop	Adam	Price	University of Washington
Training			
Workshop	Jordan	Bush	US Geological Survey (USGS)
Training			
Workshop	Peter	Pearsall	US Geological Survey (USGS)
Training			University of California Santa
Workshop	Jenny	Pensky	Cruz
Training		1 chory	
Workshop	Farah	Nusrat	University of Rhode Island
Workshop	i di di i	Rusiue	National Institute of Water
Training			and Atmospheric Research
Workshop	Arman	Haddadchi	(NIWA)
Training		nadadacin	
Workshop	Madeleine	Rubenstein	US Geological Survey (USGS)
Training	maacterite	Rubenstein	
Workshop	Ryan	Toohey	US Geological Survey (USGS)
Training	Туан	Tooney	University of Alaska
Workshop	Megan	Behnke	Southeast
workshop	Megan	Delitike	JUUIIEdSL

	Training			North Carolina State
	Workshop	Charlotte	Lee	University
	Training			
	Workshop	Yog	Aryal	University of Iowa
	Training			
	Workshop	Amanda	Cravens	US Geological Survey (USGS)
	Training Workshop	Jay	Wimhurst	University of Oklahoma
	Training Workshop	Shawn	Carter	US Geological Survey (USGS)
	Training Workshop	Jenny	Pensky	University of California Santa Cruz
	Training Workshop	Cassie	VanWynen	US Geological Survey (USGS)
	Training Workshop	Madeleine	Rubenstein	US Geological Survey (USGS)
	Training Workshop	Farah	Nusrat	University of Rhode Island
	Meeting	Hamid	fåustovifá	University of Sarajevo
	Meeting	Odirilwe	Selomane	Stellenbosch University
	Meeting	Mark	Rounsevell	Karlsruhe Institute of Technology (KIT)
	Meeting	Isabel	Sousa Pinto	University of Porto
	Meeting	Purnamita	Dasgupta	Institute of Economic Growth, (IEG)
	Meeting	Osamu	Saito	Institute for Global Environmental Strategies (IGES)
	Meeting	Pamela	McElwee	Rutgers University
IPBES: Nexus	Meeting	Yuka	Otsuki (Estrada)	
Assessment Meeting	Meeting	Debora	Ley	United Nations Economic Commission for Latin America and the Caribbean
	Meeting	Virginia	Alonso Rold√°n	Universidad Tecnológica Nacional
	Meeting	Rosemary	McFarlane	University of Canberra
	Meeting	Mario	Herrero	Cornell University
	Meeting	Tiff	van Huysen	United Nations
	Meeting	Zuzana	Harmackova	CzechGlobe
	Meetilg	Luzalla	Harrison	UK Centre for Ecology
	Meeting	Paula	(Hepworth)	& Hydrology

				Helmholtz Centre for Environmental Research
	Meeting	Ralf	Seppelt	(UFZ)
				Institute of Rural
	Meeting	Pramod	Singh	Management Anand
				Food and Agriculture Organization of the United
	Meeting	Edmundo	Barrios	Nations (FAO)
	Meeting	Pete	Smith	
	Meeting	Fabrice	DeClerck	Consultative Group on International Agriculture Research (CGIAR)
			Paukert	University of Missouri
	Meeting	Craig		
	Meeting	Paula Lucas	Prist Garibaldi	EcoHealth Alliance Universidad Nacional de Rio Negro
	Meeting	Rainer	Krug	University of Zurich
	meeting		Calderón	Universidad Autonoma
	Meeting	Rafael	Contreras	Metropolitana
	Meeting	Karen Linda	O'Brien	University of Oslo
	Meeting	Anne	Larigauderie	International Council for Science (ICSU)
	Meeting	Douglas	Beard	US Geological Survey (USGS)
	Meeting	Arun	Agrawal	University of Michigan
	Meeting	Lynne	Shannon	University of Cape Town
				Instituto Nacional de
	Meeting	Maria Elena	Zaccagnini	Tecnología Agropecuaria
				University of Santiago de
IPBES: Transformative	Meeting	Sebastian	Villasante	Compostela
Change Meeting	Meeting	Sergio Agustín	Lambertucci	Universidad Nacional de Cordoba, CONICET
	Meeting	Madhav	Karki	Centre for Green Economy Development, Nepal
	Meeting	Peter	Bridgewater	Environment Australia
	Meeting	Janita	Gurung	International Centre for Integrated Mountain Development
	Meeting	Fern	Wickson	The Arctic University of Norway
	Meeting	Hannah	Gosnell	Oregon State University
	Meeting	Julia	Leventon	CzechGlobe
	Meeting	Camille	Guibal	University of Montpellier
	Meeting	Edward	Carr	Clark University

	Meeting	Floyd	Homer	
	Meeting	Chuan	Liao	Cornell University
	Meeting	Stéphanie	Hernandez	
	Meeting	Yves	Zinngrebe	UFZ - Helmholtz-Centre for Environmental Research
	Working Group	Imtiaz	Rangwala	University of Colorado, Denver
	Working Group	Miyoko	Chu	Cornell University
	Working Group	Jim	Giocomo	American Bird Conservancy
				Natural Resource
	Working Group	Dirac	Twidwell	Conservation Service
	Working Group	Ben	Rashford	University of Wyoming
	Working Group	Beth	Ross	US Fish and Wildlife Service (FWS)
	Working Group	Emily	Boyd-Valandra	Rose Bud Souix Tribe
	Working Group	Irene	Ruvalcaba	Universidad Autonoma de Nueva Leon
	Working Group	Drew	Bennett	University of Wyoming
	Working Group	Sarah	Olimb	World Wildlife Fund
	Working Group	Amanda	Rodewald	Cornell University
	Working Group	John	Carlson	US Fish and Wildlife Service (FWS)
Morpho: Grassland	Working Group	Brandt	Ryder	Bird Conservancy of the Rockies
Birds	Working Group	Barry	Robinson	Environment Climate Change Canada
	Working Group	Chris	Latimer	Bird Conservancy of the Rockies
	Working Group	Imtiaz	Rangwala	University of Colorado, Denver
	Working Group	Miyoko	Chu	Cornell University
	Working Group	Jim	Giocomo	American Bird Conservancy
	Working Group	Dirac	Twidwell	Natural Resource Conservation Service
	Working Group	Ben	Rashford	University of Wyoming
	Working Group	Beth	Ross	US Fish and Wildlife Service (FWS)
	Working Group	Irene	Ruvalcaba	Universidad Autonoma de Nueva Leon
	Working Group	Drew	Bennett	University of Wyoming
	Working Group	Katherine	Holland	Road2Recovery
	Working Group	Sarah	Olimb	World Wildlife Fund

	Working Group	Amanda	Rodewald	Cornell University
				US Fish and Wildlife Service
	Working Group	John	Carlson	(FWS)
				BUFFALO NATIONS
	Working Group	Shaun	Grassel	GRASSLANDS ALLIANCE
	Working Crown	Maggio	Hanna	Bird Conservancy of the Rockies
	Working Group	Maggie	Hanna	
	Working Group	Tom	Bonnot	U.S. Fish and Wildlife Service
	Working Group	Brandt	Ryder	Bird Conservancy of the Rockies
	Working Group	Barry	Robinson	Environment Climate Change Canada
	Working Group	Chris	Latimer	Bird Conservancy of the Rockies
	Working Group	Jennifer	Lau	Indiana University
	Working Group	Tom	Mozdzer	Bryn Mawr College
	Working Group	Ken	Whitney	University of New Mexico
	Working Group	Loralee	Larios	University of California, Riverside
	Working Group	Joseph	Waterton	Indiana University
	Working Group	Elsa	Cleland	University of California, San Diego
LTER: Selection Across Scales	Working Group	Nancy	Emery	University of Colorado, Boulder
	Working Group	Tadeo	Ramirez Parada	University of California Santa Barbara
	Working Group	Neha	Mohanbabu	University of Minnesota
	Working Group	Alejandra	Martinez Blancas	Michigan State University
	Working Group	Jonathan	Henn	University of Colorado, Boulder
	Working Group	Cynthia	Chang	University of Washington, Bothell
	Working Group	Bradley	Strickland	Virginia Institute of Marine Science
	Working Group	Joel	Llopiz	Woods Hole Oceanographic Institution
	Working Group	Jacob	Allgeier	University of Michigan
LTER: Marine Consumer	Working Group	Deron	Burkepile	University of California, Santa Barbara
Nutrient Dynamics	Working Group	Russell	Hopcroft	University of Alaska, Fairbanks
	Working Group	James	Nelson	University of Louisiana at Lafayette

			Florida International
Working Group	Mackenzie	White	University
Working Group	Max	Castorani	University of Virginia
Working Group	Amanda	Spivak	University of Georgia
	1	Dahara	Florida International
Working Group	Jennifer	Rehage	University University of California, Santa
Working Group	Joseph	Peters	Barbara
Working Group	Shalanda	Grier	University of California, Santa Barbara
Working Group	Jennifer	Caselle	University of California, Santa Barbara
Working Group	Li	Kui	University of California, Santa Barbara
Working Group	Lauren	Enright	University of California, Santa Barbara
Working Group	Kyle	Emery	University of California, Los Angeles
Working Group	Grace	Cawley	University of San Diego
Working Group	Anya	Stajner	University of California, San Diego
Working Group	Dante	Capone	University of California, San Diego
Working Group	Jacob	Allgeier	University of Michigan
Working Group	Joel	Llopiz	Woods Hole Oceanographic Institution
	5061		University of California, Santa
Working Group	Deron	Burkepile	Barbara
Working Group	Russell	Hopcroft	University of Alaska, Fairbanks
Working Group	James	Nelson	University of Georgia
Working Group	Mackenzie	White	Florida International University
Working Group	Max	Castorani	University of Virginia
Working Group	Amanda	Spivak	University of Georgia
Working Group	Amanua	Spivak	Florida International
Working Group	Jennifer	Rehage	University
			University of California, Santa
Working Group	Jennifer	Caselle	Barbara
Working Group	Shalanda	Grier	University of California, Santa Barbara
Working Group	Li	Kui	University of California, Santa Barbara

We while a Creasure		Fusielet	University of California, Santa
Working Group	Lauren	Enright	Barbara University of California, San
Working Group	Anya	Stajner	Diego
			University of California, San
Working Group	Dante	Capone	Diego
Working Group	Bradley	Strickland	National Park Service
Working Group	Joseph	Peters	Great Ecology
Working Group	Kyle	Emery	University of California, Los Angeles
Working Group	Grace	Cawley	University of San Diego
Working Group	Jacob	Allgeier	University of Michigan
Working Group	Deron	Burkepile	University of California, Santa Barbara
			University of Alaska,
Working Group	Russell	Hopcroft	Fairbanks
Working Group	Mackenzie	White	Florida International University
Working Group	Max	Castorani	University of Virginia
Working Group	James	Nelson	University of Georgia
Working Group	Amanda	Spivak	University of Georgia
			Florida International
Working Group	Jennifer	Rehage	University
Working Group	William Ryan	James	Florida International University
			University of California, Santa
Working Group	Jennifer	Caselle	Barbara
			University of California, Santa
Working Group	Shalanda	Grier	Barbara
Working Group	Li	Kui	University of California, Santa Barbara
Working Group	Lauren	Enright	University of California, Santa Barbara
Working Group	Kyle	Emery	University of California, Santa Barbara
Working Group	Anya	Stajner	University of California, San Diego
Working Group	Dante	Capone	University of California, San Diego
Working Group	Bradley	Strickland	National Park Service
Working Group	Nathan	Lemoine	Marquette University
Working Group	Grace	Cawley	University of San Diego
Working Group	Joseph	Peters	Great Ecology

	Working Group	Melinda	Smith	Colorado State University
	Working Group	Alan	Knapp	Colorado State University
LTER: Drought	Working Group	Scott	Collins	University of New Mexico
LIER. DIOUGIIL	Working Group	Jeffrey	Dukes	Purdue University
	Working Group	Meghan	Avolio	Johns Hopkins University
	Working Group	Timothy	Ohlert	Colorado State University
	Working Group	Lauren	Kinsman-Coste llo	Kent State University
	Working Group	Craig	See	University of Minnesota
	Working Group	Dylan	Stover	University of Texas, El Paso
	Working Group	Jennie	McLaren	University of Texas, El Paso
	Working Group	Whendee	Silver	University of California, Berkeley
LTER: Soil P Control of C and N	Working Group	Matthew	Vadeboncoeur	University of New Hampshire
	Working Group	Ellery	Vaughan	Northern Arizona University
	Working Group	Anne	Cross	Tulsa Community College
	Working Group	Daniel	Liptzin	Soil Health Institute
				State University of New York (SUNY), College of Environmental Science and
	Working Group	Ruth	Yanai	Forestry

Journal Articles

- Almaraz, Maya, Benjamin Z. Houlton, Michael Clark, Iris Holzer, Yanqiu Zhou, Laura Rasmussen, Emily Moberg, et al. "Model-Based Scenarios for Achieving Net Negative Emissions in the Food System." PLOS Climate 2, no. 9 (September 6, 2023): e0000181. https://doi.org/10.1371/journal.pclm.0000181.
- Anthony, Winston E., Steven D. Allison, Caitlin M. Broderick, Luciana Chavez Rodriguez, Alicia Clum, Hugh Cross, Emiley Eloe-Fadrosh, et al. "From Soil to Sequence: Filling the Critical Gap in Genome-Resolved Metagenomics Is Essential to the Future of Soil Microbial Ecology." Environmental Microbiome 19, no. 1 (August 2, 2024): 56. https://doi.org/10.1186/s40793-024-00599-w.
- — . "From Soil to Sequence: Filling the Critical Gap in Genome-Resolved Metagenomics Is Essential to the Future of Soil Microbial Ecology." Environmental Microbiome 19, no. 1 (August 2, 2024): 56. https://doi.org/10.1186/s40793-024-00599-w.
- Atwood, Lesley, Maria Gannett, and Stephen A. Wood. "AgEvidence: A Dataset to Explore Agro-Ecological Effects of Conservation Agriculture." Scientific Data 11, no. 1 (June 4, 2024): 581. https://doi.org/10.1038/s41597-024-03415-9.

- Atwood, Trisha B., Enric Sala, Juan Mayorga, Darcy Bradley, Reniel B. Cabral, Arnaud Auber, William Cheung, et al. "Reply to: Quantifying the Carbon Benefits of Ending Bottom Trawling." Nature 617, no. 7960 (May 2023): E3–5. https://doi.org/10.1038/s41586-023-06015-6.
- Bald, Lisa, Jannis Gottwald, and Dirk Zeuss. "spatialMaxent: Adapting Species Distribution Modeling to Spatial Data." Ecology and Evolution 13, no. 10 (2023): e10635. https://doi.org/10.1002/ece3.10635.
- Barber, Paul H., Jeannie K. Barber-Choi, Austin Betancourt, Benjamin Cuker, Alexandra C.D.
 Davis, Caitlin R. Fong, Peggy Fong, Jon Fong, Deidre M. Gibson, and Tyler B. Smith.
 "Advancing Diversity and Inclusivity in Ocean Sciences by Re-Envisioning Overlooked Barriers in Scientific Diving Training." Oceanography 36, no. 4 (2023): 51–55.
- Besley, John C., and Marth R. Downs. "Environmental Scientists' Support for Public Engagement Strategy Development Is Predicted by a Range of Factors, but Mostly Perceived Benefits." International Journal of Science Education, Part B, May 2024, 1–16. https://doi.org/10.1080/21548455.2024.2342039.
- Betley, Erin C., Amanda Sigouin, Pua'ala Pascua, Samantha H. Cheng, Kenneth Iain MacDonald, Felicity Arengo, Yildiz Aumeeruddy-Thomas, et al. "Assessing Human Well-Being Constructs with Environmental and Equity Aspects: A Review of the Landscape." People and Nature 5, no. 6 (2023): 1756–73. https://doi.org/10.1002/pan3.10293.
- Borer, Elizabeth T., Andrew S. MacDougall, Carly J. Stevens, Lauren L. Sullivan, Peter A.
 Wilfahrt, and Eric W. Seabloom. "Writing a Massively Multi-Authored Paper: Overcoming Barriers to Meaningful Authorship for All." Methods in Ecology and Evolution 14, no. 6 (2023): 1432–42. https://doi.org/10.1111/2041-210X.14096.
- Burton, A. Cole, Christopher Beirne, Kaitlyn M. Gaynor, Catherine Sun, Alys Granados, Maximilian L. Allen, Jesse M. Alston, et al. "Mammal Responses to Global Changes in Human Activity Vary by Trophic Group and Landscape." Nature Ecology & Evolution 8, no. 5 (May 2024): 924–35. https://doi.org/10.1038/s41559-024-02363-2.
- Chapman, Melissa, Benjamin R. Goldstein, Christopher J. Schell, Justin S. Brashares, Neil H. Carter, Diego Ellis-Soto, Hilary Oliva Faxon, et al. "Biodiversity Monitoring for a Just Planetary Future." Science 383, no. 6678 (January 5, 2024): 34–36. https://doi.org/10.1126/science.adh8874.
- Chong, Steven S., Mark Schildhauer, Margaret O'Brien, Bryce Mecum, and Matthew B. Jones. "Enhancing the FAIRness of Arctic Research Data Through Semantic Annotation." Data Science Journal 23, no. 1 (January 17, 2024). https://doi.org/10.5334/dsj-2024-002.
- ———. "Enhancing the FAIRness of Arctic Research Data Through Semantic Annotation." Data Science Journal 23, no. 1 (January 17, 2024). https://doi.org/10.5334/dsj-2024-002.
- ———. "Enhancing the FAIRness of Arctic Research Data Through Semantic Annotation." Data Science Journal 23 (January 17, 2024): 2. https://doi.org/10.5334/dsj-2024-002.
- Couture, Jessica L., Darcy Bradley, Benjamin S. Halpern, and Steven D. Gaines. "Could Fish Aggregation at Ocean Aquaculture Augment Wild Populations and Local Fisheries?" PLOS ONE 19, no. 4 (April 17, 2024): e0298464. https://doi.org/10.1371/journal.pone.0298464.

- Crona, Beatrice I., Emmy Wassénius, Malin Jonell, J. Zachary Koehn, Rebecca Short, Michelle Tigchelaar, Tim M. Daw, et al. "Four Ways Blue Foods Can Help Achieve Food System Ambitions across Nations." Nature 616, no. 7955 (April 2023): 104–12. https://doi.org/10.1038/s41586-023-05737-x.
- ———. "Four Ways Blue Foods Can Help Achieve Food System Ambitions across Nations." Nature 616, no. 7955 (April 2023): 104–12. https://doi.org/10.1038/s41586-023-05737-x.
- Dai, Chunli, Ian M. Howat, Jurjen van der Sluijs, Anna K. Liljedahl, Bretwood Higman, Jeffrey T. Freymueller, Melissa K. Ward Jones, et al. "Applications of ArcticDEM for Measuring Volcanic Dynamics, Landslides, Retrogressive Thaw Slumps, Snowdrifts, and Vegetation Heights." Science of Remote Sensing 9 (June 1, 2024): 100130. https://doi.org/10.1016/j.srs.2024.100130.
- DeCesaro, Joseph M., Edward H. Allison, Gage Clawson, Melanie Frazier, Jessica A. Gephart, Christina C. Hicks, Kirsty L. Nash, David R. Williams, and Benjamin S. Halpern. "The Distribution of Environmental Pressures from Global Dietary Shift." Environmental Research Letters 19, no. 12 (October 2024): 124006. https://doi.org/10.1088/1748-9326/ad8509.
- Dee, Laura E., Paul J. Ferraro, Christopher N. Severen, Kaitlin A. Kimmel, Elizabeth T. Borer, Jarrett E. K. Byrnes, Adam Thomas Clark, et al. "Clarifying the Effect of Biodiversity on Productivity in Natural Ecosystems with Longitudinal Data and Methods for Causal Inference." Nature Communications 14, no. 1 (May 5, 2023): 2607. https://doi.org/10.1038/s41467-023-37194-5.
- D'Evelyn, S. M., M. Blancas, M. Pollowitz, R. D. Haugo, Y. J. Masuda, S. J. Prichard, K. Ray, E. G. Walker, and J. T. Spector. "Mobilizing through Dialogue: Building Interdisciplinary Partnerships among Forest Health, Wildland Fire, and Public Health Sectors to Find Solutions to Address the Impact of Wildland Fire Smoke on Communities." Environmental Research Communications 5, no. 3 (March 2023): 031004. https://doi.org/10.1088/2515-7620/acc014.
- Dudney, Joan, Andrew M. Latimer, Phillip van Mantgem, Harold Zald, Claire E. Willing, Jonathan C. B. Nesmith, Jennifer Cribbs, and Elizabeth Milano. "The Energy–Water Limitation Threshold Explains Divergent Drought Responses in Tree Growth, Needle Length, and Stable Isotope Ratios." Global Change Biology 29, no. 15 (2023): 4368–82. https://doi.org/10.1111/gcb.16740.
- Eggen, Michael, Robert Heilmayr, Patrick Anderson, Rebecca Armson, Kemen Austin, Reza Azmi, Peter Bayliss, et al. "Smallholder Participation in Zero-Deforestation Supply Chain Initiatives in the Indonesian Palm Oil Sector: Challenges, Opportunities, and Limitations." Elementa: Science of the Anthropocene 12, no. 1 (May 16, 2024): 00099. https://doi.org/10.1525/elementa.2023.00099.
- Ellis-Soto, Diego, Melissa Chapman, and Amanda M. Koltz. "Addressing Data Disparities Is Critical for Biodiversity Assessments." Trends in Ecology & Evolution 39, no. 12 (December 1, 2024): 1066–69. https://doi.org/10.1016/j.tree.2024.10.005.
- Engen, Sigrid, Vera Helene Hausner, Eirik Mikkelsen, Hege Gundersen, Hartvig Christie, Jannike Falk-Andersson, Benjamin S. Halpern, and Per Fauchald. "Co-Creating Coastal

Sustainability Goals and Indicators." Sustainability Science 19, no. 4 (July 1, 2024): 1327–43. https://doi.org/10.1007/s11625-024-01521-6.

- Eurich, Jacob G., Whitney R. Friedman, Kristin M. Kleisner, Lily Z. Zhao, Christopher M. Free, Meghan Fletcher, Julia G. Mason, et al. "Diverse Pathways for Climate Resilience in Marine Fishery Systems." Fish and Fisheries 25, no. 1 (2024): 38–59. https://doi.org/10.1111/faf.12790.
- Fleury, Aharon G., Casey C. O'Hara, Nathalie Butt, Jaime Restrepo, Benjamin S. Halpern, Carissa J. Klein, Caitlin D. Kuempel, et al. "Spatial and Life History Variation in a Trait-Based Species Vulnerability and Impact Model." PLOS ONE 19, no. 6 (June 21, 2024): e0305950. https://doi.org/10.1371/journal.pone.0305950.
- Fong, C. R., J. DeCesaro, G. Clawson, M. Frazier, B. S. Halpern, and H. E. Froehlich. "Winners and Losers in U.S. Marine Aquaculture under Climate Change." Environmental Research Letters 19, no. 11 (October 2024): 114024. https://doi.org/10.1088/1748-9326/ad76c0.
- Fong, Caitlin R., Carmen Galaz García, Emman Abbasi, Nick Gubbins, and Zeynab Jouzi. "Broadening Participation in Environmental Data Science: Insights from Practitioners." Environmental Data Science 3 (January 2024): e15. https://doi.org/10.1017/eds.2024.9.
- ———. "Broadening Participation in Environmental Data Science: Insights from Practitioners." Environmental Data Science 3 (January 2024): e15. https://doi.org/10.1017/eds.2024.9.
- Fong, Caitlin R., Claire M. Gonzales, Mae Rennick, Luke D. Gardner, Benjamin S. Halpern, and Halley E. Froehlich. "Global Yield from Aquaculture Systems." Reviews in Aquaculture 16, no. 3 (2024): 1021–29. https://doi.org/10.1111/raq.12881.
- Fong, Caitlin R., Nefertiti Smith, Elijah Catalan, Blanca Alvarez Caraveo, Paul H. Barber, and Peggy Fong. "Herbivorous Sea Urchins (Echinometra Mathaei) Support Resilience on Overfished and Sedimented Tropical Reefs." Scientific Reports 14, no. 1 (February 15, 2024): 3829. https://doi.org/10.1038/s41598-024-52222-0.
- Free, Christopher M., Joshua G. Smith, Cori J. Lopazanski, Julien Brun, Tessa B. Francis, Jacob G. Eurich, Joachim Claudet, et al. "If You Build It, They Will Come: Coastal Amenities Facilitate Human Engagement in Marine Protected Areas." People and Nature 5, no. 5 (2023): 1592–1609. https://doi.org/10.1002/pan3.10524.
- Galaz García, Carmen, Julien Brun, and Benjamin S. Halpern. "Mapping Invasive Iceplant Extent in Southern Coastal California Using High-Resolution Aerial Imagery." Ecological Informatics 81 (July 1, 2024): 102559. https://doi.org/10.1016/j.ecoinf.2024.102559.
- Ghazian, Nargol, Rachel King, Mario Zuliani, and Christopher J. Lortie. "The Microclimatic Effects of the Native Shrub Ephedra Californica (Mormon Tea) in California Drylands." Frontiers in Plant Science 15 (October 9, 2024). https://doi.org/10.3389/fpls.2024.1396004.
- Guo, Wen-Yong, Josep M. Serra-Diaz, Wolf L. Eiserhardt, Brian S. Maitner, Cory Merow, Cyrille Violle, Matthew J. Pound, et al. "Climate Change and Land Use Threaten Global Hotspots of Phylogenetic Endemism for Trees." Nature Communications 14, no. 1 (October 31, 2023): 6950. https://doi.org/10.1038/s41467-023-42671-y.
- Halpern, Benjamin S., Carl Boettiger, Michael C. Dietze, Jessica A. Gephart, Patrick Gonzalez, Nancy B. Grimm, Peter M. Groffman, et al. "Priorities for Synthesis Research in Ecology and

Environmental Science." Ecosphere 14, no. 1 (2023): e4342. https://doi.org/10.1002/ecs2.4342.

- Halpern, Benjamin S., Melanie Frazier, Paul-Eric Rayner, Gage Clawson, Julia L. Blanchard, Richard S. Cottrell, Halley E. Froehlich, et al. "Reply to: The Environmental Footprint of Fisheries." Nature Sustainability 6, no. 11 (November 2023): 1314–15. https://doi.org/10.1038/s41893-023-01223-4.
- Heidler, Konrad, Ingmar Nitze, Guido Grosse, and Xiao Xiang Zhu. "PixelDINO: Semi-Supervised Semantic Segmentation for Detecting Permafrost Disturbances in the Arctic." IEEE Transactions on Geoscience and Remote Sensing 62 (2024): 1–12. https://doi.org/10.1109/TGRS.2024.3448294.
- Jankowski, Kathi Jo, Keira Johnson, Lienne Sethna, Paul Julian, Adam S. Wymore, Arial J. Shogren, Patrick K. Thomas, et al. "Long-Term Changes in Concentration and Yield of Riverine Dissolved Silicon From the Poles to the Tropics." Global Biogeochemical Cycles 37, no. 9 (2023): e2022GB007678. https://doi.org/10.1029/2022GB007678.
- Johnson, Keira, Kathi Jo Jankowski, Joanna C. Carey, Lienne R. Sethna, Sidney A. Bush, Diane McKnight, William H. McDowell, et al. "Climate, Hydrology, and Nutrients Control the Seasonality of Si Concentrations in Rivers." Journal of Geophysical Research: Biogeosciences 129, no. 9 (2024): e2024JG008141. https://doi.org/10.1029/2024JG008141.
- Johnson, Keira, Kathi Jo Jankowski, Joanna Carey, Nicholas J. Lyon, William H. Mcdowell, Arial Shogren, Adam Wymore, et al. "Establishing Fluvial Silicon Regimes and Their Stability across the Northern Hemisphere." LIMNOLOGY AND OCEANOGRAPHY LETTERS 9, no. 3 (June 2024): 237–46. https://doi.org/10.1002/lol2.10372.
- Jones, Benjamin M., Susan Schaeffer Tessier, Tim Tessier, Michael Brubaker, Mike Brook, Jackie Schaeffer, Melissa K. Ward Jones, et al. "Integrating Local Environmental Observations and Remote Sensing to Better Understand the Life Cycle of a Thermokarst Lake in Arctic Alaska." Arctic, Antarctic, and Alpine Research 55, no. 1 (December 31, 2023): 2195518. https://doi.org/10.1080/15230430.2023.2195518.
- Kuempel, Caitlin D., Melanie Frazier, Juliette Verstaen, Paul-Eric Rayner, Julia L. Blanchard, Richard S. Cottrell, Halley E. Froehlich, et al. "Environmental Footprints of Farmed Chicken and Salmon Bridge the Land and Sea." Current Biology 33, no. 5 (March 13, 2023): 990-997.e4. https://doi.org/10.1016/j.cub.2023.01.037.
- Lafia, Sara, Andrea Thomer, Elizabeth Moss, David Bleckley, and Libby Hemphill. "How and Why Do Researchers Reference Data? A Study of Rhetorical Features and Functions of Data References in Academic Articles." Data Science Journal 22, no. 1 (April 28, 2023). https://doi.org/10.5334/dsj-2023-010.
- Levy, Charlotte R., Maya Almaraz, David J. Beerling, Peter Raymond, Christopher T. Reinhard, Tim Jesper Suhrhoff, and Lyla Taylor. "Enhanced Rock Weathering for Carbon Removal–Monitoring and Mitigating Potential Environmental Impacts on Agricultural Land." Environmental Science & Technology 58, no. 39 (October 1, 2024): 17215–26. https://doi.org/10.1021/acs.est.4c02368.

- Li, Wenwen, Anna Liljedahl, Matthew B. Jones, Chia-Yu Hsu, Alyona Kosobokova, Jim Regetz, Chandi Witharana, et al. "Cyber2A: AI for Arctic Research," October 21, 2024. https://cyber2a.github.io/cyber2a-course/.
- Liljedahl, Anna K., Chandi Witharana, and Elias Manos. "The Capillaries of the Arctic Tundra." Nature Water 2, no. 7 (July 2024): 611–14. https://doi.org/10.1038/s44221-024-00276-9.
- Liljedahl, S. Jeanette Clark, Matthew B. Jones, Samantha Csik, Carmen Galaz García, Bryce Mecum, Natasha Haycock-Chavez, Daphne Virlar-Knight, Juliet Cohen, Anna. "Scalable and Computationally Reproducible Approaches to Arctic Research," March 25, 2024. https://learning.nceas.ucsb.edu/2024-03-arctic/.
- Lowman, Heili, Joanna Blaszczak, Ashley Cale, Xiaoli Dong, Stevan Earl, Julia Grabow, Nancy B. Grimm, et al. "Persistent and Lagged Effects of Fire on Stream Solutes Linked to Intermittent Precipitation in Arid Lands." Biogeochemistry 167, no. 6 (June 1, 2024): 777–91. https://doi.org/10.1007/s10533-024-01154-y.
- Lowndes, Julia Stewart, Anna M. Holder, Emily H. Markowitz, Corey Clatterbuck, Amanda L. Bradford, Kathryn Doering, Molly H. Stevens, et al. "Shifting Institutional Culture to Develop Climate Solutions with Open Science." Ecology and Evolution 14, no. 6 (2024): e11341. https://doi.org/10.1002/ece3.11341.
- Manos, Elias, Chandi Witharana, and Anna Liljedahl. "Deep Learning-Based Building and Road Detection Reveals Higher Permafrost Thaw-Related Damage Costs than Previously Estimated for Alaska." Research Square, September 27, 2024. https://doi.org/10.21203/rs.3.rs-4783812/v1.
- Manos, Elias, Chandi Witharana, Amal S. Perera, and Anna K. Liljedahl. "A Multi-Objective Comparison of CNN Architectures in Arctic Human-Built Infrastructure Mapping from Sub-Meter Resolution Satellite Imagery." International Journal of Remote Sensing 44, no. 24 (December 17, 2023): 7670–7705. https://doi.org/10.1080/01431161.2023.2287563.
- Mills, Katherine E, Derek Armitage, Jacob G Eurich, Kristin M Kleisner, Gretta T Pecl, and Kanae Tokunaga. "Co-Production of Knowledge and Strategies to Support Climate Resilient Fisheries." ICES Journal of Marine Science 80, no. 2 (March 1, 2023): 358–61. https://doi.org/10.1093/icesjms/fsac110.
- Navarro Garcia, Javier, Raymundo Marcos-Martinez, Aline Mosnier, Guido Schmidt-Traub, Valeria Javalera Rincon, Michael Obersteiner, Katya Perez Guzman, et al. "Multi-Target Scenario Discovery to Plan for Sustainable Food and Land Systems in Australia." Sustainability Science 18, no. 1 (January 2023): 371–88. https://doi.org/10.1007/s11625-022-01202-2.
- ———. "Multi-Target Scenario Discovery to Plan for Sustainable Food and Land Systems in Australia." Sustainability Science 18, no. 1 (January 2023): 371–88. https://doi.org/10.1007/s11625-022-01202-2.
- ———. "Multi-Target Scenario Discovery to Plan for Sustainable Food and Land Systems in Australia." Sustainability Science 18, no. 1 (January 2023): 371–88. https://doi.org/10.1007/s11625-022-01202-2.
- Nesterova, Nina, Marina Leibman, Alexander Kizyakov, Hugues Lantuit, Ilya Tarasevich, Ingmar Nitze, Alexandra Veremeeva, and Guido Grosse. "Review Article: Retrogressive

Thaw Slump Theory and Terminology." Frozen ground/Geomorphology, January 22, 2024. https://doi.org/10.5194/egusphere-2023-2914.

- Oestreich, William K., Ruth Y. Oliver, Melissa S. Chapman, Madeline C. Go, and Megan F. McKenna. "Listening to Animal Behavior to Understand Changing Ecosystems." Trends in Ecology & Evolution 39, no. 10 (October 1, 2024): 961–73. https://doi.org/10.1016/j.tree.2024.06.007.
- O'Hara, Casey C., Melanie Frazier, Mireia Valle, Nathalie Butt, Kristin Kaschner, Carissa Klein, and Benjamin S. Halpern. "Cumulative Human Impacts on Global Marine Fauna Highlight Risk to Biological and Functional Diversity." PLOS ONE 19, no. 9 (September 18, 2024): e0309788. https://doi.org/10.1371/journal.pone.0309788.
- ———. "Cumulative Human Impacts on Global Marine Fauna Highlight Risk to Biological and Functional Diversity." PLOS ONE 19, no. 9 (September 18, 2024): e0309788. https://doi.org/10.1371/journal.pone.0309788.
- Oliver, Ruth Y., Melissa Chapman, Diego Ellis-Soto, Vanessa Brum-Bastos, Francesca Cagnacci, Jed Long, Matthias-Claudio Loretto, Robert Patchett, and Christian Rutz. "Access to Human-Mobility Data Is Essential for Building a Sustainable Future." Cell Reports Sustainability 1, no. 4 (April 26, 2024): 100077.

https://doi.org/10.1016/j.crsus.2024.100077.

- Palmer, Meredith S., Kaitlyn M. Gaynor, Joel O. Abraham, and Robert M. Pringle. "The Role of Humans in Dynamic Landscapes of Fear." Trends in Ecology & Evolution 38, no. 3 (March 1, 2023): 217–18. https://doi.org/10.1016/j.tree.2022.12.007.
- Peng, Ge, Gary Berg-Cross, Mingfang Wu, Robert R. Downs, Sudhir R. Shrestha, Lesley Wyborn, Nancy Ritchey, et al. "Harmonizing Quality Measures of FAIRness Assessment towards Machine-Actionable Quality Information." International Journal of Digital Earth 17, no. 1 (December 31, 2024): 2390431. https://doi.org/10.1080/17538947.2024.2390431.
- Perera, Amal S., Chandi Witharana, Elias Manos, and Anna K. Liljedahl. "Hyperparameter Optimization for Large-Scale Remote Sensing Image Analysis Tasks: A Case Study Based on Permafrost Landform Detection Using Deep Learning." IEEE Access 12 (2024): 43062–77. https://doi.org/10.1109/ACCESS.2024.3379142.
- Peters, Joseph Richard. "Consumer-Mediated Nutrient Dynamics of Kelp Forests in the Wake of Global Change." UC Santa Barbara, 2023. https://escholarship.org/uc/item/0555b9tq.
- Pinto-Ledezma, Jesús N, Sandra Díaz, Benjamin S Halpern, Colin Khoury, and Jeannine Cavender-Bares. "No Branch Left behind: Tracking Terrestrial Biodiversity from a Phylogenetic Completeness Perspective." Frontiers in Ecology and the Environment 22, no. 2 (2024): e2696. https://doi.org/10.1002/fee.2696.
- Rand, Peter S, and Gregory T Ruggerone. "Biennial Patterns in Alaskan Sockeye Salmon Ocean Growth Are Associated with Pink Salmon Abundance in the Gulf of Alaska and the Bering Sea." ICES Journal of Marine Science 81, no. 4 (May 1, 2024): 701–9. https://doi.org/10.1093/icesjms/fsae022.
- Reyes-García, Victoria, Rodrigo Cámara-Leret, Benjamin S. Halpern, Casey O'Hara, Delphine Renard, Noelia Zafra-Calvo, and Sandra Díaz. "Biocultural Vulnerability Exposes Threats of

Culturally Important Species." Proceedings of the National Academy of Sciences 120, no. 2 (January 10, 2023): e2217303120. https://doi.org/10.1073/pnas.2217303120.

- Rogers, Tanya L., Samuel M. Bashevkin, Christina E. Burdi, Denise D. Colombano, Peter N. Dudley, Brian Mahardja, Lara Mitchell, Sarah Perry, and Parsa Saffarinia. "Evaluating Top-down, Bottom-up, and Environmental Drivers of Pelagic Food Web Dynamics along an Estuarine Gradient." Ecology 105, no. 4 (2024): e4274. https://doi.org/10.1002/ecy.4274.
- ———. "Evaluating Top-down, Bottom-up, and Environmental Drivers of Pelagic Food Web Dynamics along an Estuarine Gradient." Ecology 105, no. 4 (2024): e4274. https://doi.org/10.1002/ecy.4274.
- Ryan, Sadie J., and Joshua Ladau. "Exploring Species Assemblages in Kruger National Park, South Africa." African Journal of Wildlife Research 53, no. 1 (August 2023). https://doi.org/10.3957/056.053.0147.
- See, Craig R., Anna-Maria Virkkala, Susan M. Natali, Brendan M. Rogers, Marguerite Mauritz, Christina Biasi, Stef Bokhorst, et al. "Decadal Increases in Carbon Uptake Offset by Respiratory Losses across Northern Permafrost Ecosystems." Nature Climate Change 14, no. 8 (August 2024): 853–62. https://doi.org/10.1038/s41558-024-02057-4.
- Smith, Joshua G., Christopher M. Free, Cori Lopazanski, Julien Brun, Clarissa R. Anderson, Mark H. Carr, Joachim Claudet, et al. "A Marine Protected Area Network Does Not Confer Community Structure Resilience to a Marine Heatwave across Coastal Ecosystems." Global Change Biology 29, no. 19 (2023): 5634–51. https://doi.org/10.1111/gcb.16862.
- Smith, Melinda D., Kate D. Wilkins, Martin C. Holdrege, Peter Wilfahrt, Scott L. Collins, Alan K. Knapp, Osvaldo E. Sala, et al. "Extreme Drought Impacts Have Been Underestimated in Grasslands and Shrublands Globally." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA 121, no. 4 (January 23, 2024): e2309881120. https://doi.org/10.1073/pnas.2309881120.
- Tiegs, S. D., K. A. Capps, D. M. Costello, J. P. Schmidt, C. J. Patrick, J. J. Follstad Shah, C. J. LeRoy, and the CELLDEX Consortium. "Human Activities Shape Global Patterns of Decomposition Rates in Rivers." Science 384, no. 6701 (June 14, 2024): 1191–95. https://doi.org/10.1126/science.adn1262.
- Venable, Jonathan, Shayna Sura, and Jeffrey Krause. "Epiphytic Diatom Production on the Seagrass Thalassia Testudinum in Northern Gulf of Mexico." Gulf and Caribbean Research 34 (2023): SC19–23. https://doi.org/10.18785/gcr.3401.19.
- Wang, Zhe, Chao Fan, Xiang Que, Felix Haifeng Liao, Xiaogang Ma, and Hui Wang. "Multi-Scale Analysis of Urban Forests and Socioeconomic Patterns in a Desert City, Phoenix, Arizona." Scientific Reports 14, no. 1 (October 11, 2024): 23864. https://doi.org/10.1038/s41598-024-74208-8.
- Wedding, L. M., S. J. Pittman, C. A. Lepczyk, C. Parrain, N. Puniwai, J. S. Boyle, E. G. Goldberg, et al. "Integrating the Multiple Perspectives of People and Nature in Place-Based Marine Spatial Planning." Npj Ocean Sustainability 3, no. 1 (September 10, 2024): 1–15. https://doi.org/10.1038/s44183-024-00071-9.
- Wilcox, Kevin R., Anping Chen, Meghan L. Avolio, Ethan E. Butler, Scott Collins, Rosie Fisher, Trevor Keenan, et al. "Accounting for Herbaceous Communities in Process-Based Models

Will Advance Our Understanding of 'Grassy' Ecosystems." Global Change Biology 29, no. 23 (2023): 6453–77. https://doi.org/10.1111/gcb.16950.

- Wisnoski, Nathan I., Riley Andrade, Max C. N. Castorani, Christopher P. Catano, Aldo Compagnoni, Thomas Lamy, Nina K. Lany, et al. "Diversity–Stability Relationships across Organism Groups and Ecosystem Types Become Decoupled across Spatial Scales." Ecology 104, no. 9 (2023): e4136. https://doi.org/10.1002/ecy.4136.
- Zhao, Qing, Quresh S. Latif, Bryan L. Nuse, David C. Pavlacky Jr., Christopher L. Kilner, T.
 Brandt Ryder, and Christopher E. Latimer. "Integrating Counts from Rigorous Surveys and
 Participatory Science to Better Understand Spatiotemporal Variation in Population
 Processes." Methods in Ecology and Evolution 15, no. 8 (2024): 1380–93.
 https://doi.org/10.1111/2041-210X.14368.

SPACE

NCEAS is located at 1021 Anacapa Street, Santa Barbara, CA 93101-5504, approximately 8.5 miles from the main UC Santa Barbara campus.



1021 Anacapa Layout:

First floor layout. NCEAS occupies the entire main suite of the first floor to the left of the parking garage, including 9 offices, a large classroom, two lounges, and two restrooms.



Third floor plan. NCEAS occupies the entire third floor of the building, including 19 offices, three conference rooms, four restrooms, and a large outdoor terrace