

CERF's Up!

Volume 51 • Number 2 • June 2025

CERF in Action: Below the Marsh

**CERF in Action: Beneath the Reef:
Revealing Carbon Storage Potential**

Riding the Wave to CERF 2025



**A new wave of
information from
the Coastal and
Estuarine Research
Federation**



CERF's Up!

Volume 51 • Number 2 • June 2025

Table of Contents

President's Message.	1
CERF in Action: Below the Marsh	2
CERF in Action: Beneath the Reef: Revealing Carbon Storage Potential	3
Waived Renewal Fee for Members Who Have Lost Their Jobs	3
Upcoming Events	3
2025–2027 CERF Governing Board Election and Revised Mission Statement Vote.	4
CERF Job Board	16
Riding the Wave to CERF 2025	
Register for CERF 2025	16
Volunteer Judges Needed for Student Presentations	16
Field Trips.	17
Workshops.	18
Social Event	18
Policy and Advocacy Update	19
Seeking Candidates for <i>Estuaries and Coasts</i> Reviews and Perspectives Editor	20
Become an <i>Estuaries and Coasts</i> Author or Reviewer and Select Keywords.	22
<i>Estuaries and Coasts</i> Editors' Choice Award	22
<i>Estuaries and Coasts</i> Outstanding Reviewers	22
The Latest <i>Coastal & Estuarine Science News</i> (CESN)	23
Afterthoughts: The Sea Also Rises	24
The CERF 2023–2025 Governing Board.	25

Front Cover: Sydney Lanier Bridge across a salt marsh in Brunswick, Georgia, USA Photo: Guy Bryan

Back Cover: View of Upper Newport Bay wetland in Newport Beach, California, USA Photo: Felipe Sanchez

Call for Cover Photos for CERF's Up!

Would you like to see your favorite estuary displayed on the cover of *CERF's Up!*? If so, send high-resolution shots showing the place's natural beauty, along with a short caption and photo credit, to bulletin@cerf.science.

President's Message: Convening CERF 2025 During Challenging Times



Linda Blum
CERF President

The President's Message in the Summer 2017 issue of *CERF's Up!*¹ focused on declining research support "for cleaner air, water, and sustainable natural resources" and the impact on "environmental quality, public safety, and economic development." Less than ten years later, the scientific enterprise is facing a flood of challenges in a new world where the work of scientists and natural resource managers is discounted and ignored as being irrelevant. Federal funding cuts to environmental research and management are real, cuts to federal agency science and management staff are deep, and threats to academia are pervasive. Yet the need to carry out discovery science and collect critical environmental data remains essential to promote economic development and support informed management of the air, land, and ocean to provide for the security of constructed infrastructure. What is being lost is the ability to create new knowledge to benefit all citizens, not just here in the US, but worldwide.

These actions are most apparent in the coastal zone, which positions CERF to have an out-sized role in articulating and educating about how investments in the scientific enterprise benefit public safety, job creation, and economic growth. The results of CERF members' work provide insight into ways to deal with threats of coastal flooding to critical commercial and public infrastructure; manage eutrophication to provide for sustainable fisheries; and preserve, conserve, and restore coastal ecosystems that support fisheries, recreation, tourism, and mitigate damage from weather-related disasters.

Annually, unmitigated weather events cost billions in damages to coastal infrastructure and disruption to [live-lihoods](#).² Coastal counties produce \$10 trillion in goods and services, employ 54.6 million people, and pay \$4 trillion in wages [each year](#).³ Each US dollar invested in coastal resilience yields a [\\$6 return](#).⁴

While it is important for those of us working in coastal areas to share our science stories and support one another, we must also go out and communicate the value and benefits derived from our work along coasts and in estuaries within local communities and with local, state, and federal lawmakers. Advocating for and educating about the benefits of basic science and its application to critical societal issues is more important than ever.

The CERF 2025 Conference Committee and the Governing Board are adapting to challenges resulting from current federal and state government actions to ensure that CERF 2025 will be an outstanding meeting. However, there are ways in which the conference may look different. CERF staff and the Executive Committee are communicating with our counterparts at other scientific societies, particularly those that are similar in size and scope, who report that their conference attendance is about two-thirds of normal. As a result, the Governing Board deemed it necessary to reduce the conference budget in a variety of ways, including reducing the food and beverage offered at various events and breaks. We are also expecting fewer sponsors and exhibitors, particularly federal agencies, although there is a robust number of equipment, book publishers, and other types of vendors committed to attending. And, finally, at the 4–5 April 2025 meeting, the Governing Board decided to waive abstract fees for all US federal government employees unable to access government funds and/or payments

due to recent US government actions. Others with a barrier to paying abstract fees were also eligible to receive a waiver. For those members who can help colleagues and friends attend the Conference, we are accepting [donations](#)⁵ for [needs-based grants](#)⁶ for meeting costs. And finally, CERF 2025 will offer opportunities for attendees to learn more about how to make a difference through individual advocacy and educational actions. Currently, several sessions and other types of activities are planned that will focus on how advancements in coastal and estuarine science create knowledge to benefit all citizens. As these plans become more concrete, descriptions will be posted on the [conference website](#)⁷ and announced via the Monthly CERFer, in the [Policy and Advocacy Community of Practice online forum](#)⁸, and on social media.

The conference will look similar to those in the past in the way that a wide range of basic and applied science, restoration, management, and education topics will be presented in oral and poster sessions. The planning committee is very excited about the social event, which will be held at the Hippodrome, just a short walk from the conference venue, located in the historic Jackson Ward of Richmond, often called the "Harlem of the South." Be sure to join the CERF Governing Board and conference planners for music, dancing, small food bites, and a speakeasy cash bar. The Rising TIDES and Coastal Design Competition students and mentors will be important parts of the conference. The Mentorship Program will be back. Due to the success of past conference mentoring programs, the Career Development and Education Committee will partner with the CERF 2025 Attendee Experience Committee to debut a year-round mentoring program. The Ambassadors program has transitioned to the Navigators Program, which asks volunteers to

help ensure that all attendees have an accessible, safe, welcoming, and enriching experience. Please be sure to volunteer for these programs and others when you register.

What won't change about the conference is that it will be a great place to learn about the recent science, management, and education work being carried out in estuaries and coasts, reconnect with colleagues and friends, and establish new collaborations and friendships. I look forward

to seeing y'all in Richmond, Virginia, 9–11 November 2025. I know this conference will be a valuable way to commit again to solving scientific and management issues and meeting the many challenges facing estuaries and coasts.

1. https://cerf.memberclicks.net/assets/bulletin/2010/CERFs_Up_Vol.43.2_05-2017.pdf
2. National Oceanic and Atmospheric Administration. 2025. <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html>

3. Bureau of Economic Analysis. 2020. Marine Economy. <https://www.bea.gov/data/special-topics/ocean-economy>
4. National Institute of Building Sciences. 2019. Natural Hazard Mitigation Saves: 2019 Report. <https://nibs.org/projects/natural-hazard-mitigation-saves-2019-report>
5. <https://www.cerf.science/donate>
6. <https://conference.cerf.science/needs-based-grants>
7. <https://conference.cerf.science/>
8. <https://www.cerf.science/policy-and-advocacy-cop>

CERF IN ACTION

Below the Marsh

Kyle D. Runion

University of Texas at Austin Marine Science Institute, Port Aransas, Texas, USA

kyle.runion@utexas.edu

I am a graduate student at the University of Texas Marine Science Institute, currently researching the ecosystem health of salt marshes by measuring the growth of marsh grasses. This can help us understand marsh resilience to stressors like sea level rise and drought. In the field, I measure leaf attributes of the plants, like stem height and leaf cover, and collect samples of the aboveground leaf material and belowground roots to quantify growth. Back

in the office, I relate all these measurements to all sorts of geospatial data: satellite, climate, tide, and elevation, to name a few. With this, I've created prediction tools that tell us about plant growth patterns across the landscape and through time; essentially, scaling up to "fill in the gaps" around my field data collection. The results can help us identify potential restoration sites to conserve marshes and the services they provide.



Fieldwork in progress at a marsh along the Copano Bay in Bayside, Texas, on 1 May 2024. The PVC quadrat and tape measure over my shoulder help me measure the height of marsh grasses

Photo: Kyle Runion



Root and soil core collected on Sapelo Island, Georgia, on 17 June 2021. After washing away the soil and separating live and dead roots, I am able to quantify root growth in the marsh

Photo: Jessica O'Connell

Beneath the Reef: Revealing Carbon Storage Potential

Kelley Savage

Harte Research Institute, Texas A&M University–Corpus Christi, Texas, USA

ksavage1@islander.tamucc.edu

Oyster reefs feel like concrete underfoot—now imagine trying to core through them from a boat. For my dissertation, we used a vibracore technique to sample 20 reefs, recovering cores packed with centuries to millennia of shell and sediment. We were glad we brought the extra-long core tubes—some cores stretched nearly three meters! It was exciting to slice open the first core and see the structure of a reef thousands of years old. With 13 people from our lab, we processed all 20 cores in just a few days. This effort will help uncover how oyster reefs store carbon over time.



Cutting open a reef core using a custom cradle to reveal the internal structure of an oyster reef. Cores were collected with the help of T. Baker Smith LLC

Photo: Daphne White



Members of the Coastal Conservation and Restoration Ecology Lab at Harte Research Institute after processing 20 oyster reef cores Photo: Harte Research Institute

Waived Renewal Fee for Members Who Have Lost Their Jobs

Now more than ever, the CERF community is a valuable resource that we want you to continue to be part of. Therefore, the Governing Board has approved free renewal for our affected members. To alleviate hardship for those who have lost or will lose their job in 2025 due to government actions, for renewing and recently lapsed members, CERF will waive the 1-year renewal fee for your membership.

You must complete the renewal form at <https://www.cerf.science/renew>, including checking the box to confirm your employment has been impacted by government actions, to access the discount code to be used at the end of the renewal application to activate the free membership renewal.

CERF Job Board

Navigating the current landscape of coastal and estuarine science and management careers can be challenging. As a CERF member, you'll gain access to a wide range of opportunities. Take the next step with the support of our community by visiting our job board: <https://www.cerf.science/job-board-info>.

Anyone can submit a job, fellowship, internship, grant, or other opportunity to our job board—you do not have to be a member, and it does not have to be an opportunity that you or your organization is offering. So, if you see something that might help our members, please fill submit it to our job board via this form: <https://cerf.memberclicks.net/job-board-submission#!/>.



River Exe estuary, Devon, England, United Kingdom

Photo: Jenny Thompson

2025–2027 CERF Governing Board Election and Revised Mission Statement Vote

We invite you to make your voice heard in the future of the Federation. Voting is now open for the 2025–2027 CERF Governing Board to elect our next President-Elect, Secretary, Members at Large, and Student Member at Large. Only one individual will be elected to each position, except Member at Large, for which we are electing two individuals. In addition to electing the incoming board members, we are also asking members to vote on a revised mission statement.

All eligible voting members should have received an email with a link to the ballot. You can also find the link at: <https://www.cerf.science/2025-2027-cerf-governing-board-slate>. The deadline to submit your votes is 22 June 2025.

Mission Statement Vote

During the Governing Board election, members will also vote on a proposed new mission statement as well as minor changes to the Constitution so that the language better aligns with our new values, vision, and mission, and allows the Affiliate Societies some flexibility on the title of the person who will represent them on the CERF Governing Board. The Board is proposing these changes based on extensive input and feedback from CERF members and the broader coastal and estuarine community. Proposed changes and notes on the Mission Statement

can be found below, and information on the changes to the Constitution can be found in the voting form.

An initial vote on the revised Mission Statement did not pass during Summer 2024 due to a lack of quorum. After reviewing feedback from that voting period, the Board felt small wording changes were warranted. We need 50% of CERF's voting members to vote to change the CERF Mission Statement and Constitution. Last time, fewer than 40% of members voted. We can't make this important change without your help! In appreciation, everyone voting will be entered in a drawing for a 1-year membership extension!

The proposed changes are as follows:

Current Mission Statement

CERF's mission is to:

- Promote research in estuary and coastal ecosystems.
- Support education of scientists, decision-makers, and the public.
- Facilitate communication among these groups.

Failed 2024 Mission Statement Update

CERF's mission is to advance science, knowledge, and stewardship of coasts and estuaries by fostering a diverse and inclusive community.

Revised 2025 Mission Statement Update

CERF's mission is to advance

research, knowledge, and stewardship of coasts and estuaries and sustain the education and professional development of a diverse and inclusive community.

2025–2027 CERF Governing Board Candidates

These dedicated CERF members have carefully considered how they can best contribute to the future of the Federation. We urge you to carefully review their statements and take time to vote on CERF's future leadership. On behalf of the current and future Governing Board members, thank you for your participation in this important election!

Upcoming Events

12th INTECOL Wetlands Conference

29 June–4 July 2025

Tartu, Estonia

<https://intecolwetlands2025.ee/>

2025 Society of Wetland Sciences Annual Meeting

15–18 July 2025

Providence, Rhode Island

<https://na.eventscloud.com/web-site/82801/>

CERF 2025 Conference

9–13 November 2025

Richmond, Virginia

<https://conference.cerf.science/>



Ben Walther

Texas A&M University—Corpus Christi

Biography

I am a Professor of Marine Biology in the Department of Life Sciences at Texas A&M University—Corpus Christi. I have been a member of CERF since 2009, and I currently serve as a Member at Large on the CERF Governing Board. In that role, I have been actively engaged with several CERF priorities, including serving as a member of the Publications & Communications Committee, the Search Committee for *Estuaries & Coasts* coeditors in chief, and the Equity in Awards Task Force. I served as a Member at Large for the Gulf Estuarine Research Society (GERS) from 2021–2023. I have also been actively engaged with organizing the biennial meetings of CERF. I served as a co-chair of the Workshops Committee for the 2019 Biennial Conference in Mobile, Alabama, and I was a co-chair of the Scientific Program Committee for the 2021 Biennial Conference that was conducted virtually. In my academic life, my research focuses on quantifying the movements and ecological interactions of mobile fishes and other organisms in coastal habitats, with an emphasis on using geochemical techniques to reconstruct individual and population responses to environmental stressors such

as hypoxia. I am a proud mentor of graduate and undergraduate students and am thrilled to help train and promote their development as independent scientists. I received a BA in Liberal Arts and a BS in Biology from the University of Texas at Austin, followed by a PhD in Biological Oceanography from the MIT/Woods Hole Oceanographic Institution Joint Program. I then completed two postdoctoral fellowships in Australia at the University of Adelaide and Australian National University before returning to the United States to begin my faculty positions in 2009.

Vision

There has never been a more crucial time for the federation to passionately advocate for our community. We conduct vital research that expands our fundamental understanding of the function and value of healthy ecosystems. Our work is essential for effective policy and management that seeks to conserve or restore resources that support coastal communities. Our federation is made up of a diverse and vibrant array of students, professionals, scientists, academics, managers, policymakers, community members, and beyond who collectively give voice to the incredible work we all do to understand and protect coastal and estuarine systems. CERF supports this work through its numerous activities that give tremendous value to our scientific

community and public audiences.

I am fully committed to CERF's Vision V Strategic Plan and the framework for change outlined by the Harris et al. paper "A Socio-ecological Imperative for Broadening Participation in Coastal and Estuarine Research and Management" (2022, *Estuaries and Coasts* 45:38–48¹). Programs such as Rising TIDES have helped diversify our membership through inclusionary practices. Financially supporting these programs will be challenging in the coming years, and we must find creatively impactful ways to continue broadening our membership and impact. Our flagship journal, *Estuaries and Coasts*, is essential for the financial health of the society. I will prioritize finding ways for the journal to continue publishing scientifically rigorous and cutting-edge research while modernizing its efficiency and sustainability in the rapidly changing landscape of scientific publishing. Finally, a strength of CERF has always been its welcoming and supportive atmosphere for students and early career members. I have seen how important CERF is for my own students as they embark on their own careers. I will work hard to continue making CERF a home for future generations of our strong and vibrant community.

1. <https://link.springer.com/article/10.1007/s12237-021-00944-z>



Christine Whitcraft

California State University Long Beach

Biography

Christine Whitcraft's research focuses on how human activities impact estuarine and coastal ecosystems and how to design solutions to large-scale challenges facing these ecosystems. Specifically, she investigates restoration strategies, impacts of invasive plants, habitat use by fish and birds, monitoring program design, and climate resilience. Her publication record includes collaborative manuscripts on inclusive funding programs, hydrology, restoration, oysters, sediment augmentation, and vegetation.

Christine attended Williams College (Massachusetts) to earn a BA in Biology, worked several years on the US East Coast, and then headed west for graduate school. After finishing her PhD at the University of California San Diego, Scripps Institution of Oceanography in 2007, she completed a CALFED Science post-doctoral position. In 2008, she became an assistant professor at California State University Long Beach (CSULB) and is currently a full professor (2019). At CSULB, Christine has served as the Director of Environmental Science and Policy for six years and as the Chair of the Presidential Commission on Sustainability.

Christine has participated actively in CERF since attending her first (C)ERF Conference in Providence, Rhode Island, in 2007. In addition to attend-

ing CERF Conferences and co-chairing scientific sessions, she served as Membership Coordinator (2011–2013) and President (2015–2017) of the California Estuarine Research Society (CAERS). She co-organized the CAERS annual meeting at CSULB (2012) and with Restore America's Estuaries (2018). She served on the CERF Governing Board as CAERS President (2015–2017) and as a member at large (2017–2021). She was co-chair of the Scientific Program Committee of the Biennial Conference in 2023.

Outside of CERF, she is the proud mother of one son and enjoys volleyball, skiing, traveling, and generally being outside. She is excited to be a greater part of the leadership team of CERF and give back to the CERF community that has welcomed her professionally and personally for many years.

Vision

We are at a critical juncture where the integrity of scientific research is increasingly under threat. More than ever, it is essential that we stand united in advocating for science-based policies and decisions. From a CERF perspective, I think this science-based approach is even more important for effective coastal and estuarine management for these already threatened ecosystems.

- **Strengthen Advocacy Efforts:** I am excited to pair with the CERF leadership, CERF experts and members, and fellow professional societies to amplify our voices in policy realms, ensuring that estu-

arine science is represented and respected in legislative processes. This type of effort is best done with existing collaborations, but also by building new partnerships from all sectors.

- **Elevate Efforts of Members and Affiliates:** By leveraging and enhancing existing initiatives and structures, such as webinars, communities of practice, and the biennial conferences, CERF can serve as a powerful platform to elevate the work of our members. I hope to foster a community that is not only dedicated to advancing science but also to educating and engaging the public in meaningful ways.
- **Support and Enhance Inclusive Culture:** I have been very excited and proud to have been a part of the community at CERF that is striving to implement programs that promote inclusive participation and increase organizational diversity. From the Inclusive Culture Council through the Rising TIDES program, CERF has committed to fostering an inclusive community. I intend to prioritize and enhance these efforts to ensure that young coastal and estuarine scientists worldwide can succeed and contribute positively to coastal and estuarine research and policy.

All these efforts will be undertaken with the goal of helping everyone find the type of expertise, friendship, and connection to other coastal and estuarine scientists and practitioners that I was lucky enough to find in CERF.



Alex Bijak

Virginia Institute of Marine Science

Biography

I am a coastal ecologist, and my work has focused on ecological monitoring and the impacts of biodiversity on ecosystem functions and services. I am motivated to conduct science that is rooted in ecological theory but also geared toward developing solutions to coastal problems, which is why I've found a home within the CERF community. I have done much of my work on seagrass on the Gulf coast, where I've studied the effects of genetic and species diversity on meadow carbon cycling. I have also worked on coastal water quality monitoring with the US Environmental Protection Agency, where I contributed to assessments of the distribution, concentration, and potential ecological toxicity of legacy contaminants in sediments.

The integration of research, monitoring, and policy is a strong theme in the work of CERF members and shapes how I do my science. I've used state and federal datasets to answer fundamental research questions about ecosystem health and stability, and I have designed research projects with the intent to inform policy. For example, my dissertation research closed some knowledge gaps on seagrass carbon

cycling that inhibit the full implementation of blue carbon credit markets. I am also inspired by CERF scientists and practitioners leading the way in working with local communities to advance both ecological and human outcomes, which is something I continue to learn from and hope to eventually incorporate within my own work. I joined CERF in 2013 and have attended every conference since to find inspiration from impactful coastal science, initiate new collaborations, and connect with colleagues.

Vision

I value the space CERF provides where members spanning research, management, and policy sectors can exchange ideas and best practices. At different stages in my career, whether in academia or government, I have always felt buoyed by CERF and its professional community. I am running as CERF Secretary to welcome others into this community by working to increase the sense of belonging for existing and prospective members. I am proud of CERF's unwavering commitment to enrich our community by supporting folks who are underrepresented in coastal science and striving to make conferences safer and more inclusive for all. As CERF Secretary, I will continue to support members through conference events. I have organized past

student events as the CERF representative on the Student Activities Committee for the Joint Aquatic Sciences Meeting in 2022 and am currently serving on the Inclusive Culture Committee for this year's CERF conference.

In the position of secretary, I will work with CERF staff and board members to identify ways to make our impact on coastal communities more visible to policymakers. Communicating the value of the work we do as coastal scientists and practitioners is especially important in this moment of uncertainty in federal funding and science. I think there are opportunities to expand science communication training for members and to provide more opportunities to engage with policymakers. For example, CERF in partnership with the Consortium of Aquatic Science Societies is hosting a program that aims to develop a cohort of skilled science communicators through intensive training in communication and policy. CERF has also recently co-hosted a virtual rally connecting coastal practitioners with US Senators and leaders of federal agencies. I am eager to leverage existing partnerships with other organizations to continue to demonstrate our value to the public and politicians through these types of efforts.



Shelley Katsuki

Virginia Institute of Marine Science

Biography

I am the Research Coordinator for the Aquaculture Genetics and Breeding Technology Center (ABC) at the Virginia Institute of Marine Science (VIMS). My work focuses on selective breeding and genetic research to improve commercially important traits of the eastern oyster (*Crassostrea virginica*). Since stepping into this role in 2014, I have taken great pride in enhancing our hatchery's output, strengthening collaborative projects with other agencies, and improving operational efficiency. Our work at ABC has been instrumental in refining breeding techniques, particularly in tetraploid oyster production, which supports the broader aquaculture industry.

Beyond maintaining and improving hatchery operations, I am passionate about finding new ways to enhance efficiency and productivity. I actively collaborate with other researchers and members of the commercial shellfish industry to address emerging challenges, such as disease resistance, climate resilience, and

sustainable aquaculture practices. My goal is to ensure that our research not only advances scientific understanding but also provides tangible benefits to the industry and coastal communities that depend on it.

Prior to working with oysters, I spent several years studying diseases affecting other commercially important shellfish and finfish at VIMS. These experiences have given me a broad perspective on aquaculture health and sustainability, which continues to inform my work today.

Vision

I am honored to be considered for the position of Secretary for the Coastal and Estuarine Research Federation (CERF). I have been actively engaged in CERF and its affiliate societies for many years, most notably through my leadership in the Atlantic Estuarine Research Society (AERS), where I served as President (2022–2024) and represented AERS on the CERF Governing Board.

My long-standing involvement with AERS and CERF has deepened my appreciation for collaboration and communication within our scientific

community. I began my service to AERS as Student Representative in 2007, later became Membership Chair, and served as Secretary (2017–2019). These experiences reinforced my commitment to fostering engagement, maintaining strong organizational records, and ensuring effective communication—critical responsibilities of the CERF Secretary. I also helped with CERF's biennial conferences as Co-Chair of the Ambassadors program in 2021 and 2023.

I am passionate about supporting CERF's mission and strengthening connections across our diverse community. As Secretary, I would ensure smooth and transparent operations, facilitate communication between the board and membership, and maintain accurate records to support CERF's long-term goals. Additionally, I am eager to increase engagement, foster networking, and ensure that students and early-career researchers feel welcomed and supported.

CERF has been instrumental in my own professional growth, and I would be honored to contribute my experience, dedication, and enthusi-



Beth Darrow

Bald Head Island Conservancy

Biography

CERF has always been a welcoming and inspiring organization to me, ever since my first ERF 2003 conference in Seattle as a graduate student at the Virginia Institute of Marine Science (VIMS). A few of us first-year VIMS students were sent by our dean, Iris Anderson, to present a class project, “The Fate of the Spring Bloom in the York River.” We got to travel across country, meet many of our science heroes, learn to network, and take in a huge array of coastal and estuarine science. I was hooked on (C)ERF! I completed my MS at VIMS and worked as a technician there and in Bermuda for a few years. Bermuda doesn’t have many estuaries - and I missed them. When I began my PhD at Dauphin Island Sea Lab in 2010, I became involved with the Gulf Estuarine Research Society (GERS) and CERF again. Since 2014 I have worked in North Carolina, first as a researcher and lecturer at the University of North Carolina Wilmington and now as lead scientist at Bald Head Island Conservancy, a small conservation nonprofit. I have continued to be involved in CERF, working on the Outreach & Education Committee, help-

ing lead an education conference session, attending a conference “abstract sorting party,” serving as a reviewer for *Estuaries and Coasts*, and leading a few silent auctions at conferences. My research portfolio is much more applied and broader now, moving from a focus on estuarine nitrogen sources and shellfish ecology to barrier island sustainability and wildlife conservation. I have supervised dozens of interns and techs and very much enjoy mentoring early-career scientists. CERF meetings always feel like a family reunion...and I would like to spend more time with this family!

Vision

I would like to give back to the organization that has been my intellectual home throughout my career. In these challenging political times, nonprofits and private organizations such as CERF will be uniquely positioned to provide opportunities for diversity, equity, inclusion, and environmental justice (DEIJ) when these programs are being slashed through funding agencies and universities. We can help where others cannot. CERF has been a leader in DEIJ initiatives for years, and I would be honored to continue supporting this legacy. As a scientist at a nonprofit conservation organization and

a founding board member of a STEM education nonprofit, I bring the perspective of a science practitioner, community liaison, and ready mentor for students pursuing non-academic career paths. I would like to help identify opportunities for non-student early career scientists to attend meetings and become members and leaders of CERF or its affiliate societies to encourage continued career growth. More and more young coastal science professionals have seasonal or temporary jobs and are not current students but have not yet had the opportunity to attend a scientific conference. Maybe the timing was not right for them to present at CERF while they were students. Can we find travel funds and/or awards to encourage participation by these individuals? A few colleagues and I are hosting a “Coastal and Estuarine Wildlife” session at CERF 2025 and hope to encourage more overlap between the “megafauna” and “habitat” folks. I appreciate that the breadth and depth of CERF membership has supported my scientific interests throughout my career. Overall, I would love to give my time and perspective and am ready to listen and learn from experienced board leaders and the general CERF membership.



Kim de Mutsert

University of Southern Mississippi

Biography

I am an Associate Professor in the Division of Coastal Sciences of the School of Ocean Science and Engineering at the University of Southern Mississippi. Born and raised in the Netherlands, I moved to the US to pursue a PhD in Oceanography and Coastal Sciences at Louisiana State University (LSU) after graduating with an MS in Biology from the University of Amsterdam in 2003. I attended my first CERF meeting as a PhD student in Norfolk, Virginia, in 2005, and have been an avid CERF-er since. After I finished my PhD and a post-doc at LSU, I started as an Assistant Professor at George Mason University in Virginia in 2011. I became active in the affiliate society Atlantic Estuarine Research Society (AERS) as a Member at Large from 2018–2021, and I hosted an AERS meeting in 2019 as the Associate Director of the Potomac Environmental Research and Education Center. I am active in CERF as well, serving as the Workshops Chair on the Scientific Program Committee of the 2021 and 2023 CERF meetings, as the Chair of the Diversity, Equity, Inclusion, and Justice Award Sub-Committee in 2023, the Chair of the Equity in Awards Task Force in 2024, and the Chair of the

CERF Achievement Awards right now. My research focus is fisheries ecology and ecosystem modeling in coastal and estuarine systems. I have always been fascinated with how organisms can thrive in these dynamic environments and how changing environmental factors affect fish and shellfish in areas where salt and freshwater mix. To have a welcoming professional society focused on these ecosystems is such a gift. I regularly moderate sessions at CERF meetings, which I will be doing again for the CERF 2025 Biennial Conference. I am looking forward to seeing everyone there!

Vision

I am an advocate for equal opportunity and a believer that work is to be done to make that a reality. At my own institution I am the Chair of the Coastal Sciences Graduate Fellowship in Support of Diversity and the Chair of the School of Ocean Science and Engineering Diversity, Equity, and Inclusion Committee. I've realized that sometimes small changes can have big impacts, and that paying attention to what is needed to provide equitable solutions is important. This could mean providing between-campus transportation, increased access to healthcare, creating a stronger support system, or providing a sense of belonging by organizing social

events. I try to apply this mindset in my work and my service, and I am constantly learning. As the Chair of the CERF Equity in Awards Task Force, I presented new Standard Operating Procedures to the CERF Governing Board, meant to ensure greater fairness, transparency, and accessibility to recognition with CERF Achievement Awards for all CERF members. The suggested changes are a work in progress, and I believe I can be of great help implementing them in the position of Member at Large on the CERF Governing Board. I envision these changes to be implemented incrementally from 2025 to 2029. I furthermore would like to work on increasing awareness of our federation and a sense of belonging with students and professionals from more institutions and disciplines. As an ecological modeler, I often find myself looking for collaborators that can model other parts of the system, such as hydrology, climate, sediment transport, biogeochemistry, or land use changes. Conferences are a great place to meet interdisciplinary collaborators. My goal is to increase the CERF membership in disciplines such as physical oceanography, geology, and coastal engineering so that we can grow into a large federation where interdisciplinary collaborations can thrive.



Ashley Martin (Peiffer)
FishWise

Biography

Growing up in landlocked Wyoming, I visited the aquarium, dreaming of the ocean. This inspired me to study marine science at the University of Tampa, studying sea slugs and discovering the wonder of scuba diving. It wasn't until joining the Peace Corps that I fully understood the power of people in shaping science.

In Tanzania, I taught secondary biology and physics all while learning Swahili and three dialects. I built deep relationships with the students, teachers, and community. These relationships revealed that many girls missed school because they lacked access to menstrual products. Working with teachers, we developed grant proposals, secured reusable menstrual products, and led health workshops. These projects weren't successful because of funding, but because they were grounded in trust and ownership of the outcomes. This transformed my understanding of projects that serve community needs, and how successful they can be when communities lead the way.

With this lesson in hand, I earned a master's in Marine Resource Management from Oregon State University, investigating COVID-19 impacts on non-profits' community engagement in East Africa. Afterward, as an Integrated Ocean Observing System

(IOOS) fellow, I built community relationships and co-developed projects across their 11 regional associations. Through IOOS, I convened a session at the CERF 2023 Conference where I immediately connected with CERF's commitment to center communities in coastal and estuarine science. Today, I manage projects at FishWise, a nonprofit and consultancy focused on human and labor rights in sustainable seafood supply chains. My experiences guide my work elevating the most impacted voices, building lasting relationships, and co-creating solutions that reflect lived experience.

CERF's mission to connect science and people deeply resonates with me, and I'm excited to bring a strong foundation in equitable community engagement, interdisciplinary collaboration, and experience connecting science and social impact to the CERF community.

Vision

CERF is a leader in bridging science, policy, and communities, ensuring that estuarine and coastal research is not only impactful but also inclusive and community driven. I am excited for the opportunity to serve on the board, bringing my experience in trust-based community engagement, interdisciplinary collaboration, and strategic partnerships to help further this mission.

Throughout my career, I have seen how equitable, community-led

initiatives lead to more meaningful and lasting change. Whether working with ocean observing networks, seafood sustainability, or grassroots education projects, I have focused on centering the voices of those most impacted and ensuring that science serves community needs.

CERF is well-positioned to expand equity and inclusion in coastal and estuarine research, ensuring that all communities, particularly those historically excluded, have access to and ownership over the knowledge that shapes their environments.

A key part of this vision is fostering accessible and meaningful networking opportunities for students and early career professionals. I am passionate about creating safe, inclusive mentorship and career pathways, ensuring that emerging scientists feel supported and connected to the field. As a board member, I would contribute my experience in coordinating national networks and aligning regional collaboration to help CERF's Affiliate Societies learn from each other about successful models of engagement.

CERF has played an important role in connecting science and people, and I am eager to help shape a future that prioritizes equity, collaboration, and community-driven impact as a board member.



Pedro Morais

California Department of Water Resources

Biography

My passion for the ocean and its creatures began when I was seven while spending vacations with my parents and sister on a beach in southern Portugal. Ten years later, not far from that beach, I went to the University of Algarve to study Marine Biology and Fisheries. I completed my degree in 2000 with a study on phytoplankton dynamics in a coastal saline lake, then completed my PhD in Population Ecology with a study of the ecology of the European anchovy in the Guadiana estuary. I moved to the US in 2017 and now work for the California Department of Water Resources.

I have almost 30 years of experience studying diverse organisms in nearly all types of temperate aquatic ecosystems – from the ocean to oxbow lakes and creeks. However, most of my work has focused on estuaries and coastal lagoons and all kinds of taxa, including bacterioplankton, protistoplankton, zooplankton, jellyfish, bivalves, crustaceans, fish, birds, and even cetaceans. My broad research experience has given me a solid and holistic perspective on the functioning of estuarine ecosystems.

CERF 2011 was my first CERF conference and a turning point in my career. CERF has become my sci-

entific home, where I can share my passion for estuarine ecosystems and their creatures while learning from many outstanding colleagues. Since then, I have tried to give back to others what I have been receiving from CERF. I am an *Estuaries and Coasts* associate editor and Webinar Committee member; have chaired 11 conference sessions; integrated the Poster Committee for CERF 2019, 2021, and 2023; and now serve as co-chair of the CERF 2025 Scientific Program Committee.

I hope my involvement with CERF in past years, my perspective as a European scientist, and my connections with colleagues around the world can help solidify the role of CERF in North America and expand its influence to other regions of the world.

Vision

I am applying for CERF's Governing Board to help promote its mission – “*advance understanding and wise stewardship of estuarine and coastal ecosystems worldwide*” – by building a resilient scientific society, which has been pivotal in shaping the careers of many students who have become prominent scientists and CERF leaders. If elected, I plan to lay the foundations for three resiliency plans.

The first strategic action is expanding CERF's membership outside North America to increase resilience through membership numbers, conference attendance, and diverse

contributions. I propose launching the CERF Ambassador Program with local representatives in each continent and sponsoring CERF* (CERF STAR) Meetings. These meetings will be scientific events led by CERF members in their home institutions outside North America that will count on the support from CERF and CERF's community.

The second strategic action aims to retain new and existing members by adding value to membership and minimizing the decrease in membership numbers between conferences. I propose launching CERF Academy, a professional development platform where colleagues at all career stages can find the resources they need (on demand, remote, in person) to accelerate and solidify their careers.

The third strategic action aims to support *Estuaries and Coasts* because the journal is vital for CERF's sustainability and resilience. The journal has been seeking to increase submissions from outside North America, and although the first two strategic actions will support this goal, more can be done. I propose working with the journal's chief editors to expand the pool of editors and reviewers from other parts of the world (66% of the associate editors are based in North America) and work towards decreasing the time to first decision by bringing diligent reviewers and improving the reviewers' recognition award.



Kelley Savage

Texas A&M University—Corpus Christi

Biography

I'm a coastal conservation and restoration ecologist pursuing my PhD in Coastal and Marine System Science at the Harte Research Institute (HRI) at Texas A&M University—Corpus Christi. My interdisciplinary research focuses on the carbon storage potential of oyster reefs, working at the intersection of biogeochemistry, marine ecology, and environmental management. I'm particularly interested in how science can inform climate solutions and restoration strategies that benefit ecosystems and communities.

As a NOAA Margaret A. Davidson Fellow, I collaborate with the Mission-Aransas National Estuarine Research Reserve to co-develop a tool for prioritizing oyster reef restoration based on ecological function and carbon sequestration potential. I also engage directly with the public through HRI's "Sink Your Shucks" oyster shell recycling program, helping to connect local stewardship with long-term sustainability and restoration goals. These experiences have strengthened my skills in partnership-building, science communication, and public engagement—core values of CERF's vision.

This year, I'm excited to continue expanding my global perspective

through the French-American Doctoral Exchange Program in Ocean Sciences, where I will visit marine labs across France and present my research at the 2025 One Ocean Science Congress. This opportunity will enhance my interdisciplinary training and provide valuable international insights that I hope to bring back to inform coastal ecosystem management in the US.

I've also pursued professional training in communication, facilitation, and leadership through programs like Crucial Conversations, Collaborative Science, and Facilitation for Coastal Managers. These experiences have prepared me to collaborate across disciplines, contribute thoughtfully to strategic discussions, and bring a human-centered, science-informed perspective to a governance role. I am eager to support CERF's work with energy, creativity, and a deep commitment to community and coastal resilience.

Vision

Attending the 2023 Biennial CERF Conference as a PhD student was a turning point—I found a community that welcomed me and reflected the kind of science I strive to do: interdisciplinary, inclusive, and impactful. That experience deepened my commitment to CERF's mission, and I would be honored to give back by serving as Student Member at Large on the Governing Board.

If elected, I will work to ensure students feel empowered, connected, and supported throughout their CERF journey—whether they're new to the field or preparing for the next step in their careers. I'm committed to creating opportunities for interdisciplinary collaboration, peer mentoring, and skill-building that reflect the diversity of coastal and estuarine science paths. Drawing from my own experiences—from working with coastal managers to participating in international research—I hope to represent the full range of opportunities CERF can offer students and help shape programs that support both scientific and professional growth.

In this role, I will advocate for:

- More inclusive pathways into leadership and mentorship
- Accessible training in science communication and collaboration
- Continued support for student-led policy engagement and advocacy

CERF's recent leadership in defending science integrity and promoting a safe, inclusive workforce reflects the bold, collaborative vision I hope to support. I look forward to working with the Governing Board and membership to ensure CERF remains a trusted, inclusive home for coastal and estuarine scientists—and a launching point for the next generation of leaders.



Brooke Torjman

Texas A&M University at Galveston

Biography

I am currently working towards my PhD in the Ecology and Evolutionary Biology program at Texas A&M University at Galveston in the Marine Biology Department. My research focuses on facilitative interactions between infauna and plants within salt marshes in Galveston Bay, Texas. I aim to understand how these two groups' shared facilitations benefit one another and influence salt marsh function and productivity. I am very interested in questions that ask how different groups of organisms interact and how biotic and abiotic alterations impact those interactions.

I am currently on the CERF Navigators subcommittee for CERF 2025, helping curate an inclusive space for this year's conference while also advocating for those new to the federation who may need guidance, support, or a friendly face to turn to at such a large event. I have always been passionate about advocating for graduate student needs and using my leadership qualities to aid fellow students when navigating

graduate school. As a graduate ambassador for the research and graduate studies office at my university, I have learned how to advocate for student needs and am ready to continue to do so as a Student Member at Large on the 2025–2027 CERF Governing Board.

Vision

My first CERF conference was in 2023. Never before had I attended a conference where almost all the research being shared piqued my interest. Alongside the science, CERF presented such a welcoming atmosphere for students and minority groups alike, where students do not feel like an afterthought. Attending the LGBTQIA+ affinity lunch introduced me to other young scientists, along with senior researchers that provided mentorship and proof those of us in the community could thrive within this field. Finding that link encouraged me to use my experiences within the CERF community to provide a voice for other students looking for connection.

Speaking from personal experience, current students want to feel secure in this field, and that they are worthy of a place within it. These

feelings are transgenerational, but currently they are heightened with the uncertainty we all feel regarding future employment and funding. As Student Member at Large, my goal would be to create a space within CERF to allow students to express their concerns, provide compassion, and offer resources to best prepare current students to transition to early career scientists. Providing seminars year-round that promote professional development as our profession actively changes is vital for student success as they transition from student to early career scientist. As the Student Member at Large, I would also be a representative of the student population within CERF. Actively listening to student concerns and advocating for them to the CERF board would allow student needs to be heard and met. This is something I currently do as a graduate ambassador at my university and can transfer this skillset to the federation. Providing students with resources and advocating for them are skills I pride myself on and would be honored to do so as the CERF 2025–2027 Student Member at Large.



CERF 2025

9–13 November 2025 / Richmond, Virginia

Estuaries: Tradition and Transition

IMPORTANT DATES for the 28th Biennial Conference

- Student/Early Career Participation Awards Deadline: 8 July 2025
- Needs-Based Grants Deadline: 8 July 2025
- Caregiver Support Grants Deadline: 8 July 2025
- Online Registration Deadline: 3 November 2025

All dates are subject to change.



Learn more at: conference.cerf.science

Register for CERF 2025

Online [registration](#)¹ for CERF 2025 is now open! You do not have to be a member to attend our conference; however, CERF members receive a discounted registration rate. If you'd like to become a member before registering, please [join now](#).² The Biennial CERF Conference, taking place 9–13 November in Richmond, Virginia, offers coastal and estuarine scientists, managers, and educators from all over the world the opportunity to come together to network, learn, attend intriguing sessions, and connect with new colleagues and friends. When you register, you can also sign up for a multitude of optional opportunities, including field trips and workshops; the social event; the Navigators Program; the Mentorship Program; volunteer judging for student presentation awards; grant opportunities for students, early career professionals, caregivers, and others with financial needs; and more. Visit the [CERF 2025 website](#)³ for more information.



Registration Type	Regular Rate	Onsite Rate (after 3 November)	One Day Rate
Member	\$665.00	\$835.00	\$415.00
Non-Member	\$885.00	\$1,125.00	\$525.00
Student Member	\$325.00	\$415.00	\$195.00
Student Non-Member	\$385.00	\$425.00	\$225.00
Early Career Member	\$545.00	\$635.00	\$325.00
Early Career Non-Member	\$625.00	\$715.00	\$395.00
Emeritus Member	\$545.00	\$635.00	\$325.00
Developing Nation Rate	\$255.00	\$255.00	\$255.00

1. <https://conference.cerf.science/registration-information>

2. <https://cerf.memberclicks.net/benefits-options>

3. <https://conference.cerf.science/>

Volunteer Judges Needed for Student Presentations

Remember when you were an undergraduate or graduate student and were excited about sharing your research? And remember when you were eligible to win an award for best presentation? The CERF 2025 Biennial Conference needs your help with judging student presentations to provide the best experience for our student attendees. All judges will be entered into a raffle to win a free CERF membership. If you would like to volunteer to judge student presentations, you can volunteer in two ways: (1) when you register for the conference, check the box "Volunteer Judging for Student Competition," or (2) fill out the online form at <https://bit.ly/CERF2025Judge>. Please consider being a judge and making a difference with our young scientists.

Field Trips

Sign up for a CERF 2025 field trip when registering for CERF 2025. All field trips will take place on Sunday, 9 November. **Please make sure you do not sign up for workshops or field trips with overlapping times.**



Whitewater rafting on the James River Pipeline

Photo: Courtesy of Richmond Region Tourism

White Water Rafting

\$91 per person (includes lunch) | 11:00 AM–3:00 PM ET

Richmond is the only city in the United States where you can take on Class IV rapids right through downtown! The city sits right on a 'fall line' where the elevation drops 105 feet over the course of seven miles. Join us as we cross the fall line in a guided white water rafting trip from RVA Paddle Sports. This trip will be approximately four hours, including lunch and passing through popular rapids such as the Class I and II Choo Choo, which pass under Richmond's famous art deco train bridge, and Class III and IV rapids like Hollywood and Pipeline, where you can see the city skyline. Safety equipment, paddles, wetsuits, and guides will be provided.



A view from Belle Isle to kayakers on the James River, the pedestrian bridge to the island, and downtown Richmond

Photo: Courtesy of Richmond Region Tourism



The Maggie L. Walker National Historic Site in Jackson Ward; the building was the home of Maggie L. Walker, a pioneering African American businesswoman and civil rights activist, and the first woman to serve as president of a bank in the United States

Photo: Courtesy of Richmond Region Tourism

Walking Tour of Jackson Ward

\$20 per person | 1:00 PM–3:00 PM ET

Gary L. Flowers provides a 20-stop, 1.5-mile walking tour of Historic Jackson Ward in the downtown section of his hometown of Richmond, Virginia. Tours include historic educational, economic, religious, and social institutions that inspired the name, "Black Wall Street," and "The Harlem of the South," and served as an early model of Black Capitalism in the United States of America. Gary Flowers is an eighth-generation Virginian and a fourth-generation Jackson Ward resident, dating back to his great-grandparents, who moved to The Ward in the 1890s, and he remains highly active in the Jackson Ward community.

Plein Air Art

\$45 per person | 1:00 PM–4:00 PM ET

Join local artist Tori Qualls on a 1.5-mile hike along the James River and explore plein air, the act of creating artwork outdoors. Participants will hike to Belle Isle, an island on the river, and stop at two locations along the trail where Tori will guide the group through creating artworks of the local views. Art supplies are included in participant costs

Workshops

CERF 2025 workshops provide an opportunity to receive valuable training on topics ranging from effective communication to technical web-based software. We encourage all attendees to take advantage of low-cost, high-quality training opportunities. All workshops will take place on Sunday, 9 November. To sign up for these workshops, please select them when you register for the conference. **Please make sure you do not sign up for workshops or field trips with overlapping times.** A schedule of workshops and prices is listed below; visit <https://conference.cerf.science/conference-workshops> for more details.



Workshop Title	Time	Regular Price	Student Price
Using the Ocean Identity Model to Evaluate Program Impact	8:00 AM–10:00 AM	\$65	\$45
Application Tips and Tricks for Early Career Professionals	8:00 AM–11:00 AM	\$75	\$52
Responding to Mangrove Migration: Prioritizing Science for Research and Management	9:00 AM–11:00 AM	\$65	\$45
Tools to Support SAV Monitoring and Restoration Planning	9:00 AM–12:00 PM	\$75	\$52
The Japanese Art of Gyotaku (Fish Printing)	9:00 AM–12:00 PM or 1:00 PM–4:00 PM	\$110	\$90
Introduction to R Workshop	9:00 AM–5:00 PM	\$100	\$70
Developing Your Broader Impact Identity	10:30 AM–12:30 PM	\$65	\$45
Unlock the Secrets to Scientific Writing Excellence	11:30 AM–4:30 PM	\$80	\$56
Making Research Matter: Engaging the Public with Your Service	1:00 PM–5:00 PM	\$75	\$52
Communicating Science Effectively	1:00 PM–5:00 PM	\$75	\$52
The Coastal Carbon Atlas: Understanding, Using, and Contributing	1:00 PM–5:00 PM	\$75	\$52

Social Event

The CERF 2025 social event will be held at the historic Hippodrome Theater, located in the Jackson Ward neighborhood, known as the “Harlem of the South,” a breezy 10-minute walk from the convention center in downtown Richmond. Admission will include small bites of local fare and a beverage from the speakeasy bar. Join in on an authentic Virginia reel dance and swing to a local jazz band, echoing Hippodrome performers of the past like Billie Holiday, Louis Armstrong, and Duke Ellington. Get to know fellow attendees in a fun and relaxing setting! You can purchase your tickets for the social event when you register for the conference. Tickets are \$80 or \$45 for students.



The Hippodrome Theater

Photo: Courtesy of Richmond Region Tourism

Policy and Advocacy Update

In light of recent US government actions, the CERF Executive Committee, Governing Board, and committees have been active in various policy activities. CERF President Linda Blum has shared some of these updates in recent emails to members (on 3 February 2025 and 12 March 2025). Some of our activities, described in those emails as well as more recent actions, include:

1. Letters to US Congress: CERF has signed on to several letters to US Congress urging them to defend science and oppose policies that are harming the US scientific enterprise, including pauses or cuts to research funding, removing data from government websites, dismantling environmental regulations, and workforce reductions at federal science and environmental agencies. These include letters led by the [Union of Concerned Scientists](#),¹ the [American Institute of Biological Sciences \(AIBS\)](#),² and the [Society of Environmental Toxicology and Chemistry of North America](#).³ Watch the CERF [policy and advocacy website](#)⁴ for new public statements and letters.

2. Visits to Capitol Hill: CERF Executive Director Susan Park has participated in several events on US Capitol Hill, including sharing information about CERF and the work of our members with Congressional staffers during Coasts Week 2025, 24–28 March 2025; meeting with staffers on behalf of the American Society of Association Executives to ask them not to tax non-profit organizations like CERF and to support the Freedom to Invest in Tomorrow's Workforce Act; and participating in the AIBS Congressional Visits Day on 29–30 April 2025 to meet with additional staffers to advocate for federal investments in coastal and estuarine research and management programs supported by the National Science Foundation, National Oceanic and Atmospheric Administration, US Environmental Protection Agency, and other federal agencies. Additional visits to relevant

congressional offices are expected in the near future.

3. Supporting grassroots actions by members: Recognizing that one CERF staffer alone cannot reach all congressional offices, CERF is focusing efforts to support our members to take action. We encouraged members to participate in the [American Geophysical Union \(AGU\) April Days of Action](#),⁵ 14–25 April 2025, when Congress was in recess and legislators were in their home districts. We shared the suite of helpful tools AGU has developed for those new to reaching out to legislators or looking for guidance on communicating the need for scientific research. In addition to the one-pagers developed by AGU, we developed our own one-pagers on the value of estuaries and coasts, requesting support for CERF's federally funded workforce development programs, and funding requests for coastal programs for FY2026 appropriations discussions. All can be found at <https://bit.ly/DaysOfaction>. CERF is also developing webinars and other educational materials to help our members reach out to their legislators and other policymakers.

4. Understanding impacts on members: We understand that recent US executive orders, memos, proposed legislation, and similar actions have had ramifications to our members' work and lives. CERF is committed to supporting our members, and we want to hear from you. We recently closed an anonymous survey to collect information about the impacts of the orders and policies on our membership and the broader coastal and estuarine community and are now analyzing the responses. Based on the data and new developments, we will soon be releasing an updated survey. We welcome all information, including impacts to your research or ability to manage coastal resources, threats to your job security, or impacts on your personal lives. By collecting and integrating evidence of these

impacts, CERF can use them in our policy and advocacy work in support of the wise stewardship of estuarine and coastal ecosystems (e.g., sharing evidence collected in the survey during upcoming visits to congressional delegations and staffers). *Your responses will remain anonymous unless you choose to share your information.*

5. Forum for information exchange: We recognize that a lot of information is being shared, and it can be hard to keep track of all that is happening. Therefore, we created a members-only Policy and Advocacy Community of Practice (CoP), an online forum for sharing information about policy and advocacy on coastal and estuarine science and management. You can apply to join the CoP using [this link](#).⁶ The application page will prompt you to sign in or sign up for a new account. More information on the CoP at <https://www.cerf.science/policy-and-advocacy-cop>.

We thank the members of the Executive Committee, Governing Board, Policy and Advocacy Rapid Response Task Force, and Policy and Advocacy Committee for their dedication to supporting CERF members and the broader coastal and estuarine research and management community at this time of need. If you have questions about these activities, please contact Susan Park at spark@cerf.science.

1. <https://www.ucs.org/about/news/scientists-ask-congress-protect-future-science>

2. <https://www.aibs.org/news/2025/250304-aibs-letter-exec-actions#subheader>

3. <https://www.setac.org/resource/coalition-of-environmental-advocates-across-the-u-s-joins-setac-in-calling-for-strong-support-of-environmental-science-and-management.html>

4. <https://cerf.memberclicks.net/policy-advocacy>

5. <https://bit.ly/DaysOfaction>

6. <https://cerf-community.mobilize.io/registrations/groups/135771>

Seeking Candidates for *Estuaries and Coasts* Reviews and Perspectives Editor

Paul A. Montagna, Just Cebrian, Melisa Wong

Coeditors in Chief, *Estuaries and Coasts*

Ken Heck

Reviews and Perspectives Editor, *Estuaries and Coasts*

CERF is seeking a new Reviews and Perspectives Editor for the journal *Estuaries and Coasts*. The primary responsibilities are to assist the coeditors in chief in continuously improving the intellectual quality of the journal by soliciting, promoting, and managing high-quality review and perspective articles that advance knowledge of estuarine-coastal systems. The editor will also assess and take steps to continuously improve the intellectual quality of the journal and adhere to CERF's core value to steward greater diversity, equity, and inclusion in publication practices.

CERF desires the following attributes for candidates:

1. Recognized accomplishment as an estuarine or coastal scientist with broad research and/or management experience
2. Track record of publishing and evaluating peer-reviewed papers on estuarine and coastal science and management
3. Strong connections to the global coastal and estuarine science and management community
4. Ability to effectively network and recruit strong reviews and perspectives from authors
5. Objectivity and integrity
6. Creative, strategic thinker committed to the continual improvement of the journal and subject matter of the reviews and perspectives
7. Demonstrated commitment to increasing diversity and equity in research and/or scientific publishing
8. Ability to make a minimum three-year commitment from 1 January 2026 through 31 December 2028

The duties of the Reviews and Perspectives Editor include:

1. Work and communicate regularly

with the coeditors in chief on the progress of reviews.

2. Actively solicit the writing and submittal of review and perspective article submissions on topics of interest to the readers of the journal, to tentatively recruit at least four Reviews and two Perspectives annually.
3. Follow-up on potential review submissions and other leads suggested by the coeditors in chief based on their editorial oversight of original reports submitted to the journal.
4. Attend the biennial CERF conference and other related conferences that may serve as venues for scouting and recruiting review and perspective articles; actively recruit manuscripts from conference speakers through outreach to appropriate session chairs and presenters
5. Collaborate with coeditors in chief to encourage review articles as keystone contributions of special or theme issues prepared for the journal.
6. Work with the coeditors in chief to solicit and guide an annual Odum Synthesis Essay.
7. Communicate with prospective authors to provide feedback and encouragement on review and perspectives manuscripts that are proposed or in development.
8. Serve in the role of editor for all review and perspectives submissions by overseeing the peer review process and making editorial decisions on acceptance; maintain and improve the highest quality of science in the journal through stringent and fair peer review.
9. Participate in the CERF Publications Committee, annual journal strategy meeting, Governing Board

meetings, and similar meetings as requested to provide updates and participate in strategic planning for continually improving the journal's quality, visibility, and impact.

10. Serve for a three-year term, with renewal for additional three-year terms as mutually agreed to by the CERF Governing Board and coeditors in chief. If a Reviews Editor must leave their position early, CERF expects them to take an active role in helping the CERF Executive Committee identify a replacement.

CERF is committed to promoting diversity throughout all levels of the organization, including its leadership. Candidates who reflect individual differences in social identity, such as race, ethnicity, national origin, gender, gender identity and expression, religion, sexual orientation, physical ability, and socioeconomic background, as well as differences in discipline, career path, and life experience, are particularly encouraged to apply.

The Reviews and Perspectives Editor receives a modest stipend of \$3,000 annually for their work.

Interested candidates should complete a brief form at <https://bit.ly/ESCOREviewsEditor>. In addition to basic information, the form requests that you upload a CV/resume and answer the following questions:

1. Why do you wish to serve as Reviews and Perspectives Editor?
2. Why do you believe you would be successful in the role of Reviews and Perspectives Editor?

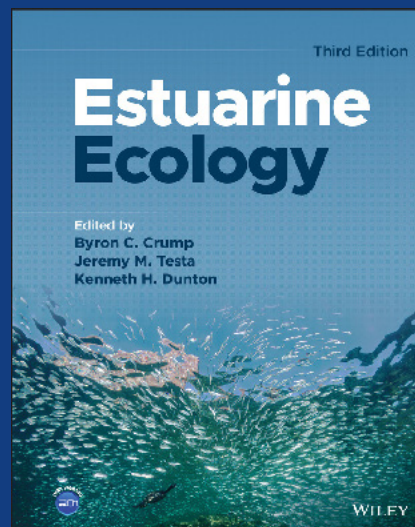
Applications must be received by **16 July 2025**. If you have any questions, please contact CERF Executive Director Susan Park at spark@cerf.science.

20% OFF WITH PROMO CODE LFS2 AT WILEY.COM

Estuarine Ecology, *3rd Edition*

Edited by Byron C. Crump, Jeremy M. Testa,
and Kenneth H. Dunton

ISBN 978-1-119-86699-2 | Hardcover
November 2022 | 480 pages



A detailed and accessible exploration of the fundamentals and the latest advances in estuarine ecology.

In the newly revised third edition of *Estuarine Ecology*, a team of distinguished ecologists presents the current knowledge in estuarine ecology with particular emphasis on recent trends and advances. The book is accessible to undergraduate students while also providing a welcome summary of up-to-date content for a more advanced readership.

This latest edition is optimized for classroom use, with a more intuitive mode of presentation that takes into account feedback from the previous edition's readers. Review questions and exercises have been added to assist in the learning and retention of complex concepts.

Estuarine Ecology remains the gold standard for the discipline by taking stock of the manifold scientific breakthroughs made in the field since the last edition was written. It also offers:

- Thorough introductions to estuarine geomorphology, circulation, and chemistry
- In-depth treatments of estuarine primary and secondary production, including coastal marshes and mangrove wetlands
- A holistic view of estuarine ecosystems, their modeling and analysis, as well as the impact of human activities and climate change
- A companion website with detailed answers to exercise questions

Perfect for students of estuarine ecology, environmental science, fisheries science, oceanography, and natural resource management, *Estuarine Ecology* will also earn a place in the libraries of professionals, government employees, and consultants working on estuary and wetlands management and conservation.

ABOUT THE EDITORS

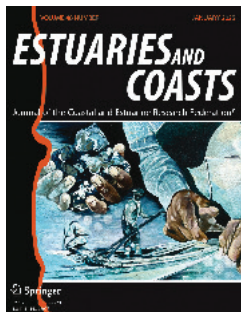
Byron C. Crump, PhD, Oregon State University, USA

Jeremy M. Testa, PhD, University of Maryland Center for Environmental Science, USA

Kenneth H. Dunton, PhD, University of Texas at Austin, USA

Become an *Estuaries and Coasts* Author or Reviewer and Select Keywords

Paul A. Montagna, Just Cebrian, Melisa Wong
Coeditors in Chief, *Estuaries and Coasts*



Estuaries and Coasts (ESCO) has implemented a new keyword feature for authors and reviewers. The editorial team hopes this will

improve reviewer invitations and speed up the review process. The keywords were selected by the editorial team and the CERF Publications Committee. Please take a minute to log into the ESCO Editorial Manager site to select keywords for your account. Here are the instructions:

- Log in to <https://www.editorialmanager.com/esco/> and choose either the Author or Reviewer role.
- Under your name in the top right corner, select the drop-down box and click "Update My Information."
- The top boxes have personal and institutional information; please edit them as needed.
- The box labelled "Areas of Interest or Expertise" is for keywords. Click "Select Personal Classifications" and select at least three (or as many as you want) from the standardized list; make sure to click "Submit" after selecting. Next, click "Edit Personal Keywords" and add at least two (or as many as you want) keywords or

phrases of your choice to customize your interests and expertise and click "Close" after you have finished.

- When you have finished selecting keywords, click the "Submit" button at the bottom of the page.

If you find you have more than one account with your name, it is because you have multiple listings in our database. You can edit the most accurate one and ask Taylor Bowen, estuariesandcoasts@gmail.com, the ESCO Managing Editor, to delete or merge the unwanted profiles. Editing your profile saves the information for author, reviewer, and editor roles, so you only need to do this once.

Estuaries and Coasts Editors' Choice Award

Paul A. Montagna, Just Cebrian, Melisa Wong
Coeditors in Chief, *Estuaries and Coasts*

January 2025

Xie, J. et al. 2025. Effects of phosphate-solubilizing bacteria on phosphorus release from coastal sediments and the growth of 'green tide' *Chaetomorpha linum*. *Estuaries and Coasts* 48(1): Article 14. <https://doi.org/10.1007/s12237-024-01456-2>
<https://rdcu.be/eoJoA>

March 2025

Macías-Tapia, A. et al. 2025. Tidal flooding contributes to eutrophication: constraining non-point source inputs to an urban estuary using a data-driven statistical model. *Estuaries and Coasts* 48(2): Article 36.
<https://doi.org/10.1007/s12237-024-01473-1>
<https://rdcu.be/eoJqS>

May 2025

Zikmanis, K. et al. 2025. Legacies of ecosystem modification: factors affecting long-term variation in the abundance of juvenile bull sharks in a subtropical estuary. *Estuaries and Coasts* 48(3): Article 81.
<https://doi.org/10.1007/s12237-025-01508-1>
<https://rdcu.be/eoJqY>

Estuaries and Coasts Outstanding Reviewers

Paul A. Montagna, Just Cebrian, Melisa Wong
Coeditors in Chief, *Estuaries and Coasts*



Estuaries and Coasts (ESCO) would not be successful without the hard work of hundreds of volunteer peer reviewers whose dedication and expertise play a crucial role in upholding the quality and integrity of the articles published in the journal. CERF recognizes the critical contributions of all our reviewers and thanks you for the generosity of your time. Reviewers are the lifeblood of the journal, and we feel it is important to recognize those who go above and beyond in their service. The ESCO editorial board is proud to recognize the dedicated efforts of outstanding reviewers in each issue of *CERF's Up!* This recognition honors reviewers based on the quality, the number of reviews, and their promptness.

Between October 2024 and March 2025, we are happy to highlight Outstanding Reviewers for their significant contributions to the quality and success of ESCO. We thank and highlight one reviewer who completed four reviews: Ahmed Saqr; and three reviewers who completed three reviews each: Joel Anderson, Matthew Kimball, and Guoming Qin. We are especially grateful to reviewers who complete reviews rapidly as this allows us to offer feedback to anxious authors and publish papers quickly. We thank the 24 people who completed at least two reviews, and we recognize the six of those reviewers who completed their two reviews in less than a week on average: Hubert Chanson, Alan Whitfield, Reginald Uncles, Jonas Blomme, Elorri Arevalo, and Chao Chen.

Thank you for your invaluable contributions to CERF and ESCO!

The Latest Coastal & Estuarine Sciences News (CESN)

Merryl Alber, CESN Editor, University of Georgia

Janet Fang, CESN Science Writer/Managing Editor

The mission of CESN is to highlight the latest research in the journal *Estuaries and Coasts* that is relevant to environmental managers. CESN is a free electronic newsletter that is posted online and delivered to subscribers on a bimonthly basis (six issues per year). CESN is available in both English and Spanish. Please visit www.cerf.science/cesn to read the full summaries and sign up to have future issues delivered to your email inbox. And please encourage the environmental managers you work with to sign up as well.

La misión de CESN es destacar las últimas investigaciones en la revista *Estuaries and Coasts* que sean relevantes para los gestores ambientales. Es un boletín electrónico gratuito que se entrega a los suscriptores cada dos meses. Regístrate en www.cerf.science/cesn-spanish.

2025 CESN Issue 1

Can Living Shorelines Be Used to Retrofit Armored Structures?

Enhancing shore protection and providing habitat in Florida

Source: Barry, S.C. et al. 2025. Performance assessment of three living shorelines in Cedar Key, Florida, USA. *Estuaries and Coasts* 48(1): Article 7.

<https://doi.org/10.1007/s12237-024-01440-w>

<https://rdcu.be/d0UTV>

<https://cerf.memberclicks.net/cesn-2025-issue-1#Article1>

How Mechanically Harvesting Oysters Affects Seagrass Recovery

Timing is everything

Source: Boardman, F. C. & J. L. Ruesink. 2025. Eelgrass (*Zostera marina*) recovery affected by disturbance timing on mechanically harvested oyster culture beds. *Estuaries and Coasts* 48(2): Article 32.

<https://doi.org/10.1007/s12237-024-01454-4>

<https://rdcu.be/d6iyz>

<https://cerf.memberclicks.net/cesn-2025-issue-1#Article2>

A Constructed Oyster Reef Seven Years In

There is no one-size-fits-all solution

Source: Shinn, J.P. et al. 2025. Seven years of monitoring the development of an oyster reef living shoreline. *Estuaries and Coasts* 48(1): Article 11.

<https://doi.org/10.1007/s12237-024-01437-5>

<https://rdcu.be/d0UUM>

<https://cerf.memberclicks.net/cesn-2025-issue-1#Article3>

Invasion of the Blue Crabs

The Atlantic blue crab in a Spanish Lagoon

Source: Vivas, M. et al. 2025. Effect of the invasive blue crab (*Callinectes sapidus* Rathbun, 1896) in a protected coastal lagoon. *Estuaries and Coasts* 48(1): Article 9.

<https://doi.org/10.1007/s12237-024-01436-6>

<https://rdcu.be/d0UVh>

<https://cerf.memberclicks.net/cesn-2025-issue-1#Article4>

2025 CESN Issue 2

Adding Life to Hardened Urban Shorelines

Living seawalls can offer some of the benefits of living shorelines

Source: Grothues, T.M. et al. 2025. Life as a design element of hardened urban shorelines. *Estuaries and Coasts* 48(2): Article 48.

<https://doi.org/10.1007/s12237-024-01475-z>

<https://rdcu.be/d69JW>

<https://cerf.memberclicks.net/cesn-2025-issue-2#Article1>

Testing Cold Hardiness in Tropical Fish

All hail the snook in the north

Source: Hall-Scharf, B.J. et al. 2025. Increased cold tolerance of a tropical fish species at the northern edge of its expanded range. *Estuaries and Coasts* 48(2): Article 43.

<https://doi.org/10.1007/s12237-024-01480-2>

<https://rdcu.be/ecvH0>

<https://cerf.memberclicks.net/cesn-2025-issue-2#Article2>

Tidal Flooding Contributes Significantly to Eutrophication

Quantifying tidal surge flooding in the Chesapeake Bay

Source: Macías-Tapia, A. et al. 2025. Tidal flooding contributes to eutrophication: constraining nonpoint source inputs to an urban estuary using a data-driven statistical model. *Estuaries and Coasts* 48(2): Article 36.

<https://doi.org/10.1007/s12237-024-01473-1>

<https://rdcu.be/d69HY>

<https://cerf.memberclicks.net/cesn-2025-issue-2#Article3>

How Do Human Communities Benefit from Restoration?

Shifting strategies for assessing long-term benefits of restoration projects

Source: Osland, A.C. et al. 2025. Did It work? Shifting strategies for how we assess benefits to communities from long-term coastal restoration projects. *Estuaries and Coasts* 48(2): Article 49.

<https://doi.org/10.1007/s12237-025-01486-4>

<https://rdcu.be/d69Jy>

<https://cerf.memberclicks.net/cesn-2025-issue-2#Article4>

The Sea Also Rises

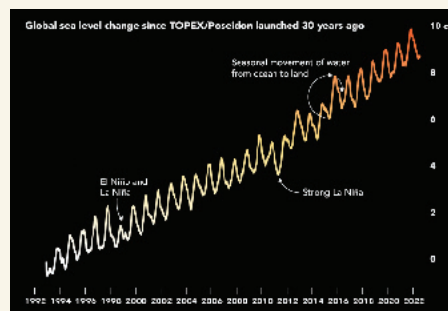
Stephen S. Hale

<https://orcid.org/0000-0001-7858-3750>

stephenshale@gmail.com

Sea level has long mattered to humans. Topographic and bathymetric maps use it as a baseline. We need to keep our coastal structures from flooding and our ships from grounding. Now, sea level has become a symbol of global warming consequences. However, measuring something as dynamic as the ocean surface is not simple.

According to NASA Earth Observatory, satellites that use radar altimetry to measure global sea level have found a rise of over 10 cm in the 30-year record (1991–2022), driven by melting glaciers and ice sheets, and thermal expansion of a warming ocean. The 140-year record from tide gauges and satellites shows a global sea level rise of 21–24 cm. And the rate is accelerating, enough to offset Mt. Everest's growth of 4 mm/yr from the continuing collision of two continental plates.



Satellite measurements of global sea level change since 1992 Photo: NASA

Wilko Graf von Hardenberg's 2024 book *Sea Level: A History* discusses how sea level has fluctuated over time and across different geographic areas, as well as how people have attempted to measure it. Historical efforts to define and measure it have been driven by various coastal people's interactions with the ocean,

commercial interests, national ambitions, and scientific curiosity.

An early scientist who tackled this was Anders Celsius in Sweden in the 1740s (he also worked on temperature). Some 90 years later, the British geologist Charles Lyell found, way up on dry land, a rock that Celsius had used as a marker of sea level. Lyell hypothesized that the cause was not falling sea level, but land undergoing a post-glacial rebound (later shown to be correct).

After that, Europeans tried to standardize global mean sea level as a universal benchmark, but abandoned the effort when it became clear it couldn't be done with the methods of the time. Different countries adopted different benchmarks based on local sea level. France began with the mean sea level at the mouth of the Loire River. England used 100 ft below a mark on St. John's church in Liverpool.



Tidal gauge at the Presidio in San Francisco, installed in 1854, the second oldest continually operating tidal gauge in the world (the oldest is at Brest, France)

Photo: NOAA Tides & Currents

Now, global mean sea level is measured by a combination of satellite altimetry and fixed tidal stations adjusted for land movement. The

ocean surface is affected by ocean circulation, astronomical tide, water volume, density, temperature, wind, atmospheric pressure, tides, tsunamis, and the gravity of glaciers and landmasses. It varies widely around the planet. A gravity anomaly in the Indian Ocean causes a large area to be over 100 m lower than the global average. The spinning Earth causes the sea level to bulge at low latitudes. NOAA notes that if mountain heights were based on distance from the center of Earth, Mt. Chimborazo near the equator in Ecuador would be approximately 2 km higher than Mt. Everest.

Local mean sea level is calculated over time, smoothing out the variances of tidal cycles, moon phase, 19-year Metonic cycle, season, storms, wind, El Niño-La Niña cycles, and others. For much of the planet's coastal areas, sea level relative to the shoreline is rising. This is greater than the global means when there is land subsidence, which can be aggravated by draining swamps, altering river courses, or pumping water, oil, and gas from below ground. In other places, such as Sweden and Alaska, local sea level is falling as landmass rebounds following the melting of massive ice sheets.

In sum, when measuring and reporting mean sea level, it is important to use data gathered from consistent methods over long periods, and to specify whether it is a global, regional, or local level.

CERF 2023–2025 GOVERNING BOARD

President

Linda Blum
University of Virginia

Past President

Leila Hamdan
University of Southern Mississippi

President-Elect

Sharon Herzka
The University of Texas at Austin
Marine Science Institute & Centro de
Investigación Científica y de Educación
Superior de Ensenada (CICESE)

Secretary

Lilian Aoki
University of Oregon

Treasurer

Erik Smith
University of South Carolina

Members at Large

Member at Large (2021–2025)

Treda Grayson
US Environmental Protection Agency

International Member at Large (2021–2025)

Catherine Lovelock
University of Queensland

Member at Large (2023–2027)

Allison Fitzgerald
New Jersey City University

Member at Large (2023–2027)

Benjamin Walther
Texas A&M University–Corpus Christi

Student Member at Large (2023–2025)

Sommer Starr
Trent University

Affiliate Society Representatives

ACCESS

Jeff Clements
Fisheries and Oceans Canada

AERS

Jessie Jarvis
University of North Carolina Wilm-
ington

CAERS

Julio Lorda
Universidad Autónoma de Baja
California

GERS

Charlie Martin
University of South Alabama and
Dauphin Island Sea Lab

NEERS

Danielle Perry
National Oceanic and Atmospheric
Administration

PERS

Jason Stutes
Tetra Tech

SEERS

Amanda Kahn
South Florida Water Management
District

Journal Officials

Coeditors in Chief

Just Cebrian
King Abdullah University of Science
and Technology (KAUST)

Paul Montagna
Texas A&M University–Corpus Christi

Melisa Wong
Fisheries and Oceans Canada

Managing Editor

Taylor Bowen

Reviews Editor

Ken Heck
Dauphin Island Sea Lab

CESN Managing Editor

Merryl Alber
University of Georgia

CESN Science Writer/Managing Editor

Janet Fang

Contact Information

Coastal & Estuarine Research Federation

2150 North 107th Street, Suite 330
Seattle, WA 98133-9009
(206) 209-5262
info@cerf.science

Executive Director

Susan Park
(804) 381-6658
spark@cerf.science

Chief Operating Officer

Louise S. Miller
info@cerf.science

CERF's Up! Bulletin

Coeditors:

Kyle Capistrant-Fossa and Julie Walker

Managing Editor: Tayton Hewitt

Copy Editor: Andra Kendall

Layout Editor: Rhonda Cole

Comments or questions on any piece in this issue?

Email bulletin@cerf.science

COASTAL & ESTUARINE RESEARCH FEDERATION

2150 N 107th St, Ste 330

Seattle, WA 98133

Phone: (206) 209-5262

Website: www.cerf.science

Email: info@cerf.science

