

Coastal Nature-based solutions

Workshop in Hannover, on Friday, June 20, 2025

The German-American Nature-Based Solutions Exchange (GANBASE) offers stakeholders in the field of nature conservation and environmental protection the opportunity to exchange ideas on nature-based solutions (NbS) across the Atlantic.

GANBASE aims to exchange approaches and experiences; to present excellent research and lighthouse projects from Germany; to demonstrate the integration of NbS into local, regional and national policy in Germany, as well as ideas on how these can be anchored in the USA; and to draw attention to the economic and socio-political aspects of NbS.

This takes place in the form of semi-annual visit programs, one program per year in the USA and one in Germany, with people invited from each country as part of the core group, traveling together and additional researchers and practitioners joining the workshops.

This second GANBASE workshop focuses on nature-based solutions in coastal environments.

The workshop is held at "Gartensaal", Trammplatz 2, 30159 Hannover and starts at 9:00 and finishes at 2:30.

The workshop is free to attend and open to all researchers, practitioners and decision makers. The purpose is to compare research and practice from the United States and Germany and beyond.

Please send let us know if you would like to present at the workshop and contact POCACITO with any questions regarding the workshop and to RSVP: max@pocacito.org

The project is supported by the Transatlantic Program of the Federal Republic of Germany, funded by the European Recovery Program (ERP) of the Federal Ministry for Economic Affairs and Climate Action (BMWK).

More about POCACITO and GANBASE can be found at: <https://www.pocacito.org/> and <https://www.pocacito.org/german-american-nature-based-solutions-exchange-ganbase/>

Please RSVP for the workshop here <https://forms.gle/dw7xkK6NNqnu5asJ6>

8:30	Networking coffee			
9:00	Opening	Max Gruenig	Introduction to GANBASE	POCACITO
9:10	NbS for coastal resilience - coastal protection against erosion, sea-level rise and storm events	Blaise Pezold	The Meraux Foundation's Coastal Restoration efforts	Meraux Foundation
		Sabine Rabe	Nature-based coastal protection	Urbane Landschaften
		Sierra Hildebrandt	Advancing Coastal Restoration Outcomes and Building Capacity for Nature-based Solutions	Old Dominion University
		Elizabeth Stoehr	Plan, Fail, Adapt, Repeat: Adaptive Innovation in Urban Shoreline Restoration	Jamaica Bay-Rockaway Parks Conservancy
10:30	Q&A			
11:00	NbS for biodiversity protection - creating space for species, countering invasive species and adapting to climate change	Shri Verrill	Intersecting Change: Where Economic Democracy Meets Ecological Restoration	Sunrise Ecologic
		Lena Hohls	The Return of the Grey Seal: Conservation and Challenges on the German Baltic Coast	BUND (Bund für Umwelt und Naturschutz Deutschland) Mecklenburg-Vorpommern e.V.
11:40	Q&A			
12:00	Lunch			
13:00	Socio-economic aspects in NbS	Vanessa Haines-Matos	Social Dimension of Research and Implementation of Nature-based solutions: Utilising Synergies for Biodiversity and Climate	Center for Development Research (ZEF), Uni Bonn
		Corey Miller	Participatory resilience actions to improve habitat and mitigate flooding	Pontchartrain Conservancy
		Erika Boerr	Drainage Pump Station (DPS) 01 Watershed Drainage Upgrades & Green Infrastructure Project	City of New Orleans

14:00	Q&A			
14:30	Closing			

Speakers

Erika Boerr, Senior Project Manager, City of New Orleans, Stormwater and Green Infrastructure



Erika Boerr is currently employed as a Senior Project Manager in the Stormwater and Green Infrastructure Department of the City of New Orleans and for the past 6 years has been focused on Stormwater Management projects. She has recently launched the construction of the largest hazard mitigation project, geographically and financially, in New Orleans.

Erika started her interest in Disaster Recovery work at Dillard University, where she worked as FEMA/Capital Funding Analyst managing their Hurricane Katrina Recovery Programs. Her focus, in addition to administering the many private and federal funding sources, was the restoration of three historic residence halls, successfully finished in 2013.

Then, she turned her focus to a Hazard Mitigation project to improve drainage campus wide. She worked within a team of professionals such as Trapolin-Peer Architects, Sizeler Architects, Vanir Construction Management, Aims Group, and Chester Engineers to name a few.

This latest project opened the doors to the City of New Orleans, where she is now dedicated to resilience projects and able to make the large-scale difference she has been so eagerly looking to do for her dear City of New Orleans, she now calls home.

Erika is originally from Buenos Aires, Argentina, and has become a part of the New Orleans community since 2002, when she arrived to instruct Spanish at Dillard University. She has since graduated with honors from both her bachelor's in business management from Dillard University and her MBA with a concentration in Information Systems from the University of New Orleans and obtained her PMP certification in January 2013. She has over fifteen years of experience in program and project management and has been a PMI and PMI GNO Chapter member since July 2012.

Erika's passion is to advocate Project Management in all business disciplines. She strives to continue to work on Green Infrastructure, Nature-based Solutions, Resilient projects for Climate Action worldwide.

Abstract: This project uses natural and human-made features that provide environmental and social benefits related to water management. In New Orleans, these features slow the speed of water, temporarily store it, quicken its absorption into soil, and filter it before or at the same time as water enters a drainage system. During an intense storm, green infrastructure complements grey infrastructure by providing entry points for excess water to

be distributed and absorbed across the natural landscape instead of overwhelming the drainage system.

The project area involves work in nine city neighborhoods, but the benefits are realized throughout Pump Station 1's watershed. The scope includes stormwater parks and lots, green intersections with corner street basins, and drain pipe improvements and connections, to store almost 13M gallons of stormwater and delay about 2.5 times the storage capacity.

Vanessa Haines-Matos, Center for Development Research (ZEF), Uni Bonn



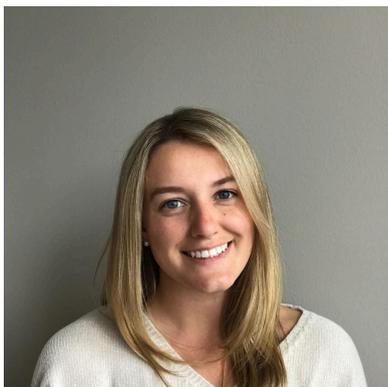
Doctoral research student at ZEF (Center for Development Research), Uni Bonn, conducting transdisciplinary and mixed methodological research on Nature-based Solutions. ZEF implementer for the BioClimSocial Project, commissioned by the German Federal Agency for Nature Conservation (Bundesamt für Naturschutz (BfN)) with the focus on Nature-based Solutions, addressing the nexus of biodiversity, climate and the social dimensions.

Activist and qualified Occupational Therapist with expertise in Neuro-rehabilitation.

topic:

The BioClimSocial Project - a BfN (German Federal Agency for Nature Conservation) commissioned project on the 'Social Dimension of Research and Implementation of Nature-based solutions: Utilising Synergies for Biodiversity and Climate.'

Sierra Hildebrandt, Old Dominion University



Sierra Hildebrandt is a Ph.D. candidate in the Ecological Sciences Program at Old Dominion University. As a member of Dr. Taylor Sloey's Wetland Plant and Restoration Lab, her research focuses on evaluating the efficacy of living shorelines as a shoreline management technique and restoration strategy. Her research combines field- and remote-sensing data to understanding how living shoreline designs can reduce erosion and sustain intertidal habitat. Before starting her Ph.D., Sierra received her M.S. in Biology with a concentration in Marine and Environmental Sciences from Hampton University in 2021. Her M.S.

research focused on evaluating the efficacy of an alternative oyster production method for restoration and aquaculture. Sierra received her B.S. in Biology with a concentration in Marine Science from Old Dominion University in 2018. Sierra is a recipient of the prestigious Virginia Sea Grant Graduate Research Fellowship (2022-2024) and a former Marine Scientist with NOAA's National Centers for Coastal Ocean Sciences (2024-2025).

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topic: Advancing Coastal Restoration Outcomes and Building Capacity for Nature-based Solutions.

Nature-based solutions are promoted for their capacity to build coastal resilience and provide a wide range of ecological benefits typically associated with natural habitats. However, the extent to which nature-based solutions can mimic natural resiliency and produce co-benefits will depend on their environmental setting, design, and maintenance. This presentation will discuss ongoing applied research on nature-based solutions and how "science" is translated to advance restoration outcomes and build capacity for resilient projects.

Lena Hohls, BUND (Bund für Umwelt und Naturschutz Deutschland) Mecklenburg-Vorpommern e.V.



Once nearly extinct in the Baltic Sea, the grey seal (*Halichoerus grypus*) has made a remarkable comeback along the coast of Mecklenburg-Western Pomerania. This presentation explores the fascinating story of the species' return, the conservation efforts and challenges for a seal's life at our coast.

We will examine the challenges facing grey seal populations in

a rapidly changing climate, including habitat shifts, food scarcity, and increasing human activity. Particular attention will be given to measures that Friends of the Earth is doing to protect Germany's largest predator (photo ID, legal protection of haul out sites, reporting disturbances, network of volunteer seals' caretakers, seal talks, educational work, etc ...).

Join us to learn how scientists, policymakers, and communities are navigating conflicts and challenges concerning grey seals—and what the future might hold on for one of the most iconic marine mammals.

Corey Miller, Community Engagement Director, Pontchartrain Conservancy



Corey Miller is the Community Engagement Director for Pontchartrain Conservancy (PC). A third generation New Orleanian, he received his MA in Sociology at the University of New Orleans through an assistantship with their Center for Hazards Assessment, Response and Technology. He joins PC with more than a dozen years of experience working to improve coastal community resilience in the face

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of land loss, climate change, hurricanes, flooding, and a constantly changing environment. Throughout, he has focused on increased awareness through community outreach and improving ways that local knowledge and public input can be garnered and incorporated into plans for coastal restoration, flood protection, and community adaptation.

topic: 1. Volunteer restoration of cypress swamp habitat and a growing expansion into ridge restoration and subaquatic vegetation habitat. 2. Community-based resilience planning with residents of St. James Parish.

Blaise Pezold, Coastal Program Director, The Meraux Foundation



Blaise Pezold is the Coastal and Environmental Program Director for the Arlene and Joseph Meraux Charitable Foundation. To advance the Foundation's mission to improve the quality of life in St. Bernard Parish, Blaise helps plan and execute the nonprofit's work to preserve, protect, and restore the area's natural environment, especially its vulnerable coast. His work includes field projects, strategic partnerships, community engagement, and public awareness. He liaises on coastal matters between nonprofit, government, and strategic partners. Blaise is a St. Bernard Coastal Zone Board member and the Crescent Soil Water

Conservation District Vice Chairman. Notably, he designed the \$29 million Bayou La Loutre Ridge and Marsh restoration, assisted in the design of the \$46 million Reggio Marsh Creation and Hydrological restoration, and designed the \$35 million Woodlake Marsh Creation and Terraces CWPPRA projects. Blaise was also instrumental in founding and partnering the Central Wetlands Reforestation collective, which will plant 30,00 trees and 33,000 plugs of marsh grass to restore wetland ecosystems in his community. He was the recipient of the Louisiana Association of Conservation District's Guy Caire award in 2022 and the Coalition to Restore Coastal Louisiana's Coastal Stewardship Award in 2024. Learn more at www.merauxfoundation.org.

topic: The Meraux Foundation's Coastal Restoration efforts

Elizabeth Stoehr, Deputy Director, Jamaica Bay-Rockaway Parks Conservancy

Elizabeth Stoehr is the Deputy Director of the Jamaica Bay-Rockaway Parks Conservancy in New York City, where she leads initiatives at the intersection of ecological restoration, climate resilience, and community engagement. Her work focuses on advancing nature-based solutions through hands-on implementation, long-term stewardship, and adaptive management of coastal systems. Elizabeth also supports the development and deployment of emerging nature technologies, working with researchers, startups, and innovation partners to pilot scalable, tech-enabled approaches to urban resilience.

topic: Plan, Fail, Adapt, Repeat: Adaptive Innovation in Urban Shoreline Restoration
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This presentation explores the West Pond Living Shoreline in Jamaica Bay (New York City) as a model for adaptive innovation in nature-based coastal restoration. In post-implementation phases, unforeseen conditions—storm impacts, sediment shifts, and planting failures—require not only responsive maintenance but creative, field-based problem solving. Through rapid on-site adjustments, the project illustrates how innovation often emerges through stewardship rather than static design. The case challenges conventional “build-and-exit” models and highlights adaptive management as a core component of long-term coastal resilience.

Shri Verrill, Owner, Principal, Sunrise Ecologic

Participants

Ryan Bare, Sr. Research Scientist, Program Director, Houston Advanced Research Center (HARC)



Dr. Ryan Bare is the Program Director of Water and Nature-Based Solutions at HARC. Dr. Bare applies his expertise in hydrology, ecology, and natural and water resource management to conduct applied research on social and environmental challenges across coastal and inland watersheds. Dr. Bare leads multi-disciplinary projects, bringing effective research, actionable outreach, and equitable approaches for the design, planning, and implementation of nature-based practices to the forefront. Dr. Bare earned a Doctorate in Water Management and Hydrological Science from Texas A&M University's. He obtained a Master of Science in Marine Resource Management from Texas A&M University at Galveston, and a Bachelor of Science in Environmental Science with a concentration in Marine and Coastal Resources from Texas A&M University – Corpus Christi.

Wendy Chávez-Páez, University of Bonn



Wendy Chávez-Páez is an economist (Polytechnic School of Guayaquil, Ecuador) and holds a master's degree in public administration (New York, USA) and a master's degree in human settlements (KU Leuven, Belgium). She is a junior researcher and PhD student in Cultural and Political Change at the Center for Development Research of the University of Bonn. She has worked in the Ecuadorian academia, government sector, and civil society organizations. She is a founder member of the Observatory of Public Policy of

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Guayaquil. She also performs voluntarily as the Academic Coordinator of the local organization Fundación Cerro Verde, which works actively with ancestral communities of the Gulf of Guayaquil to conserve the mangrove ecosystem.

Andrew Ferris, Native Plants Program Coordinator, Coalition to Restore Coastal Louisiana



Andrew Ferris lives in New Orleans, Louisiana where he works as the Native Plants Program Coordinator at the Coalition to Restore Coastal Louisiana.

Sophie Henningsen, Christian Albrecht University of Kiel



I am a master's student in Sustainability, Society, and the Environment at Kiel University, with a background in environmental engineering. My experience includes bioengineering research on water pollution from the Ayurvedic industry in India, co-founding Zecura in Africa to advance zero-emission urban planning, and conducting research in Brazil on ESG, circular economy, and sustainability integration. In Portugal, I contributed to a coastal resilience project addressing erosion and invasive species. Through this interdisciplinary work and a peer-reviewed article on aligning ESG and CE with the SDGs, I bring a systems-based perspective to Gangbase's mission on nature-based solutions.

Dwane Jones, Administrator University of the District of Columbia



Dwane is a professor and administrator in the University of the District of Columbia's College of Agriculture, Urban Sustainability, and Environmental Sciences. He has degrees in City Planning, Environmental Planning, and Urban Design.

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Jonathan Heimer, German Marine Research Consortium

Hui Liu, Associate Professor, Texas A&M University



Dr. Hui Liu is an Associate Professor in the Department of Marine Biology, College of Marine Sciences and Maritime Studies of Texas A&M University. He also serves as an Associate Editor for Canadian Journal of Fisheries and Aquatic Sciences and a U.S. representative on working groups of North Pacific Marine Science Organization (PICES). Dr. Liu holds a Ph.D. in Oceanography and a MS in Statistics granted by the University of Alaska Fairbanks. His research is focused on quantitative marine ecosystem studies aiming to gain a predictive understanding of mechanisms and processes underlying interactions and dynamics of marine

organisms through integrating modeling and observation to answer fundamental questions for better management and conservation of marine ecosystems in estuaries and coastal waters. Dr. Liu has published 50+ peer-reviewed articles in high-profile journals regarding zooplankton, jellyfish, oysters, and fishes over seven large marine ecosystems in the Northern Hemisphere including the Gulf of Mexico, Georges Bank, California Current, the Gulf of Alaska, the Yellow Sea, the South China Sea, and the Arabian Gulf.

Rina Lopez, Senior Environmental Policy Analyst, San Francisco Environment Department



I'm a Senior Environmental Policy Analyst at the San Francisco Environment Department, where I lead climate and energy initiatives focused on achieving carbon neutrality, advancing environmental justice, and building long-term community resilience. My work bridges technical policy analysis with public engagement to shape innovative strategies that reduce greenhouse gas emissions while centering equity.

With over a decade of experience in environmental policy, I specialize in developing programs that accelerate building electrification, phase out high-impact refrigerants, and expand access to clean energy solutions. I've worked closely with city agencies, community-based organizations, utilities, and state partners to design

policies that are not only effective, but also inclusive and responsive to the needs of frontline communities.

I'm passionate about systems-level change, and I approach my work with a commitment to collaboration, data-driven decision-making, and climate justice. Whether developing incentive structures, evaluating emissions impacts, or crafting new legislative pathways, I believe thoughtful policy can be a powerful tool for environmental transformation.

Gerrit Meiners, INES-Solutions/Senckenberg



Gerrit is a deep-sea biologist with the INDEX project, using image-based methods to study hydrothermal-vent ecosystems along the Central Indian Ridge. His work assesses the diversity, distribution, and ecology of benthic megafauna to inform management of polymetallic sulfide resources. He develops photogrammetry workflows that convert video transects into georeferenced habitat maps and explores machine-learning tools to accelerate image classification. Passionate about improving cost-effective monitoring across marine systems, he aims to enhance global marine conservation through accessible imaging and AI tools.

Jasmin Spöckl, Leuphana University Lüneburg



I am a student at Leuphana University Lüneburg, where I am doing my bachelor's in sustainability science. Previously I worked at the Wadden Sea for a voluntary year, as an ecosystem educator and caretaker on Föhr.

John Supino, PhD Candidate, Boston College



I am a chemical oceanographer and wetland scientist interested in fundamental ecosystem processes and land-ocean-atmosphere dynamics at the coastal interface. My doctoral research uses marine carbon and oxygen biogeochemical cycling in tidal wetlands as a way to assess ecosystem metabolisms. I use autonomous biogeochemical sensors to measure a variety of parameters to assess how anthropogenic disturbance and climate change have altered tidal marshes, how they might change in the future, and how effective current climate mitigation and restoration techniques are in keeping blue carbon in place.

Alicia Wach, Kiel University



Having a background in environmental sciences my focus shifted from natural sciences towards questions of responsibility and justice in my two masters programs on Environmental Ethics and Sustainability Science. Having studied in Lima, Lisbon and Kiel, I am passionate about coastal regions and inter- as well as transdisciplinary knowledge transfer.

During my time at Potsdam Institute for Climate Impact Research, I was able to broaden my view connecting climate issues with migration, agriculture and biodiversity with partner countries from three continents.