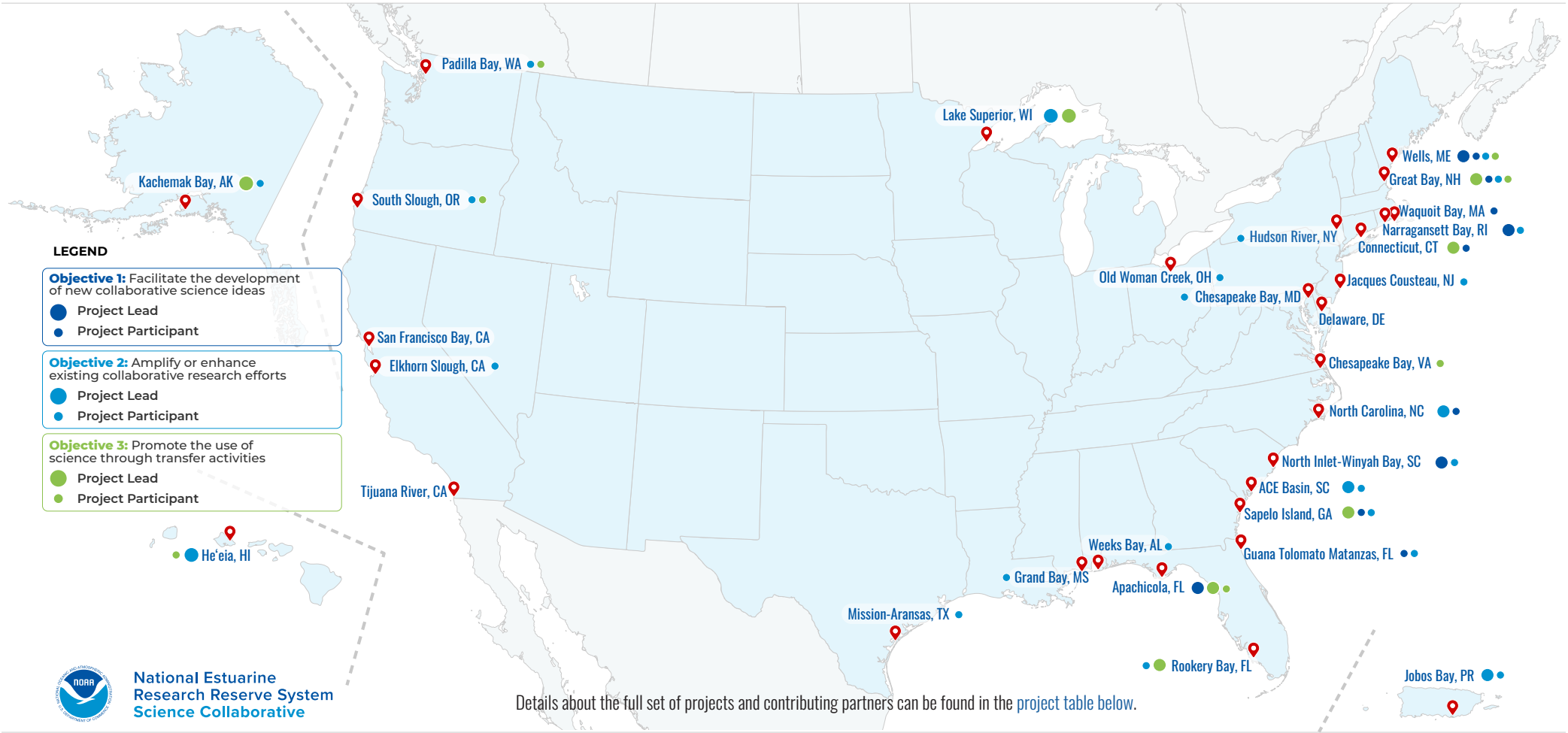
2023 NERRS SCIENCE COLLABORATIVE GRANT AWARDS



Details about the full set of projects and contributing partners can be found in the project table below.

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OBJECTIVE 1 | Facilitate the development of new collaborative science ideas

PROJECT LEAD AND AFFILIATION	PROJECT TITLE	PARTICIPATING RESERVE(S)
Robinson Fulweiler, Boston University	**Testing low-cost, ultra-portable CO2 and CH4 sensors for better monitoring of salt marsh ecosystem services, resilience, and restoration (Abstract)**	**Narragansett Bay (RI)**; Connecticut (CT); Waquoit Bay (MA); Great Bay (NH); Wells (ME)
Nicole Grinnan, Florida Public Archaeology Network, University of West Florida	**People of the Apalachicola Region: Exploring cultural heritage as a vector for ecosystem planning, management, and adaptation (Abstract)**	**Apalachicola (FL)**
Matthew Kimball, University of South Carolina	**Evaluating oyster reefs as habitat: Comparing the utility of ecological metrics to assess ecosystem function (Abstract)**	**North Inlet-Winyah Bay (SC)**; North Carolina (NC); Sapelo Island (GA); Guana Tolomato Matanzas (FL)
Christine Feurt, Wells National Estuarine Research Reserve	**Collaborative science to support marsh conservation and management decisions in Maine (Abstract)**	**Wells (ME)**

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OBJECTIVE 2 | Amplify or enhance existing collaborative research efforts

PROJECT LEAD AND AFFILIATION	PROJECT TITLE	PARTICIPATING RESERVE(S)
Monica Iglecia, Pacific Birds Habitat Joint Venture	**Integrating Indigenous knowledge and NERR science and monitoring to improve estuarine restoration and management, with shared benefits for birds and local communities (Abstract)**	**He'eia (HI)**; Kachemak Bay (AK); Padilla Bay (WA); South Slough (OR)
Kaitlin Reinl, Lake Superior National Estuarine Research Reserve	**Synthesizing long-term SWMP datasets to quantify estuarine ecosystem dynamics and identify trends along an ecological gradient (Abstract)**	**Lake Superior (WI)**; Rookery Bay (FL); South Slough (OR); North Inlet-Winyah Bay (SC); Guana Tolomato Matanzas (FL); Chesapeake Bay (MD); Padilla Bay (WA); Great Bay (NH)
Marae West, Cape Fear Bird Observatory	**Synthesizing Motus data across the NERRS for research, education and conservation (Abstract)**	**North Carolina (NC)**; ACE Basin (SC); Chesapeake Bay (MD); Elkhorn Slough (CA); Grand Bay (MS); Hudson River (NY); Jacques Cousteau (NJ); Jobos Bay (PR); Kachemak Bay (AK); Mission-Aransas (TX); Narragansett Bay (RI); North Inlet-Winyah Bay (SC); Old Woman Creek (OH); Padilla Bay (WA); Rookery Bay (FL); Sapelo Island (GA); Weeks Bay (AL); Wells (ME)
Denise Sanger, ACE Basin National Estuarine Research Reserve	**Adapting salt marsh vulnerability assessment methodologies to southeastern salt marshes (Abstract)**	**ACE Basin (SC)**; North Inlet-Winyah Bay (SC)
Danielle Ogurcak, Florida International University	**Uncertain recovery in mangrove ecosystems following repeated hurricane impacts (Abstract)**	**Jobos Bay (PR)**; Rookery Bay (FL)

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OBJECTIVE 3 | Promote the use of science through transfer activities

PROJECT LEAD AND AFFILIATION	PROJECT TITLE	PARTICIPATING RESERVE(S)
Ingrid Harrald, Kachemak Bay National Estuarine Research Reserve	Invasive species monitoring in Alaska (**Abstract**)	**Kachemak Bay (AK)**; Padilla Bay
Jay Black, Rookery Bay National Estuarine Research Reserve	Drone the NERRS: Assessing the efficacy of a drone-based coastal wetland monitoring protocol across five biogeographic regions (**Abstract**)	**Rookery Bay (FL)**; Chesapeake Bay (VA); Great Bay (NH); Wells (ME); South Slough (OR); Apalachicola (FL)
Lauren Sutton, Kachemak Bay National Estuarine Research Reserve	Explorations, demonstrations and novel applications for environmental DNA in Kachemak Bay (**Abstract**)	**Kachemak Bay (AK)**; He'eia (HI)
Lindsey Williams, New Hampshire Sea Grant, University of New Hampshire	Bridging human dimensions research and practice to address water quality concerns in the Great Bay watershed (**Abstract**)	**Great Bay (NH)**
Torrance Hanley, Sacred Heart University	Communication and assessment of seagrass seed-based restoration techniques (**Abstract**)	**Connecticut (CT)**; Padilla Bay (WA); South Slough (OR)
Howard Veregin, University of Wisconsin-Madison	Transferring Lake Superior NERR habitat mapping tools and methods to the Wisconsin-Minnesota St. Louis River Estuary (**Abstract**)	**Lake Superior (WI)**
Rachel Guy, Sapelo Island National Estuarine Research Reserve	What's my bait? Identifying and communicating the importance of non-game fish species in Georgia's estuaries (**Abstract**)	**Sapelo Island (GA)**
Joel Trexler, Coastal and Marine Laboratory, Florida State University	Apalachicola Bay community advisory board support successor group (**Abstract**)	**Apalachicola (FL)**

Testing low-cost, ultra-portable, CO2 and CH4 sensors for better monitoring of salt marsh ecosystem services, resilience, and restoration

Project Lead: Robinson Fulweiler
Reserve(s): Narragansett Bay (RI); Connecticut (CT); Waquoit Bay (MA); Great Bay (NH); Wells (ME)
Budget Request: $189,594

Project Summary: Salt marshes provide a host of ecosystem services, yet they are experiencing numerous stressors that compromise their function. Quantifying fluxes of powerful greenhouse gases (e.g., carbon dioxide and methane) is essential to understanding the role salt marshes play in mitigating climate change, how these systems respond to climate change, and if restoration efforts are effective. Current technologies for measuring salt marsh carbon dioxide and methane fluxes are slow, logistically challenging, often destructive to the marsh, and cost prohibitive. Therefore, as a community, efforts to quantify carbon sequestration and greenhouse gas inventories from salt marsh systems are hindered.

This project addresses these technological and scientific knowledge gaps by providing end users with an easy to use, non-invasive, cost-effective, novel sensor package that will enable high resolution carbon dioxide and methane flux data collection. Current sensor model packages will be tested at all five New England reserves, and end user-suggested changes will be made to these packages to increase flux measurement ease and efficiency. The project will develop a universal protocol for deploying these sensors in combination with ongoing system-wide monitoring throughout the Reserve System, addressing at least two management needs of all five New England reserves.

People of the Apalachicola Region: Exploring cultural heritage as a vector for ecosystem planning, management, and adaptation

Project Lead: Nicole Grinnan
Reserve(s): Apalachicola (FL)
Budget Request: $99,968

Project Summary: The Apalachicola Reserve encompasses an area of the Apalachicola River, Apalachicola Bay, and surrounding lands that is immensely diverse in natural and cultural resources. Through the integration of digital modeling, heritage sites recording, and community engagement in and around the Apalachicola Reserve, this project seeks to identify ecosystem services that people, past and present, use and value in the Apalachicola system. This research aims to provide a more representative interpretation of local heritage, inform management decision-making for both heritage and environmental resources impacted by climate and human pressures, and guide future research into impacts and issues these resources may be facing. This project will collect new data specific to the Apalachicola region by transferring methodology produced through a **2021 Collaborative Research project** at the Guana Tolomato Matanzas Reserve.

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Evaluating oyster reefs as habitat: Comparing the utility of ecological metrics to assess ecosystem function

Project Lead: Matthew Kimball
Reserve(s): North Inlet-Winyah Bay (SC); North Carolina (NC); Sapelo Island (GA); Guana Tolomato Matanzas (FL)
Budget Request: $199,943

Project Summary: Oyster reefs provide habitat for a diverse and productive community of organisms within estuaries across the Reserve System. Traditional techniques to quantify the value of reefs as habitat are labor intensive and difficult to replicate at multiple sites, which limits the ecological information they can provide.

This project will examine estuarine fauna use of oyster reefs in four reserves spanning from North Carolina to Florida. The project approach uses emerging methods–including high-resolution acoustic imaging, stable isotope analysis, eDNA metabarcoding, and oyster disease assays–to provide unique ecological information such as faunal abundance, food web structure, species composition, and disease prevalence. The project team will apply these methods alongside traditional sampling, comparing their utility in evaluating oyster reef habitat function and assessing their capacity to address reserve management needs associated with oysters. During two planned workshops, the project team will generate targeted research questions and develop a proposal for future funding opportunities. Finally, the team will engage reserve users and resource managers to evaluate the potential for data produced by these ecological evaluation methods to feed directly into the management of coastal habitats and fishery resources

Collaborative science to support marsh conservation and management decisions in Maine

Project Lead: Christine Feurt
Reserve(s): Wells (ME)
Budget Request: $80,613

Project Summary: The U.S. Geological Survey (USGS) project, "Science to support marsh conservation and management decisions in the northeastern United States" provides a scientific framework for supporting decision-makers who actively research and manage the climate-induced changes in coastal resilience and vulnerability. This project provides two USGS geospatial products that link landscape integrity with coastal hazards. The first product–the unvegetated-vegetated ratio (UVVR) and associated sediment-based marsh lifespan–has proven useful for evaluating marsh condition and restoration feasibility in salt marsh systems across the U.S. Second, the Coastal Change Likelihood product merges all coastal land classes with storm and sea-level rise hazards to estimate the likelihood of geomorphic change over near-term timescales.

The project's goals align with Maine's climate action plan, the Coastwise tidal crossing project, and the stakeholder-driven Climate Ready Coast project, and address unmet needs for science to support marsh resilience. In response to these needs, which have been identified by marsh conservation leaders in Maine, this project will transfer and apply the USGS data products produced for Maine to current efforts to prioritize locations for marsh conservation, identify sites for migration pathways, and evaluate restoration strategies. The project team will also synthesize a collaborative learning-based model for geospatial science transfer and share it with the Reserve System.

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Integrating Indigenous knowledge and NERR science and monitoring to improve estuarine restoration and management, with shared benefits for birds and local communities

Project Lead: Monica Iglecia

Reserve(s): He'eia (HI); Kachemak Bay (AK); Padilla Bay (WA); South Slough (OR)

Budget Request: $199,976

Project Summary: Coastal wetlands provide a variety of essential habitats for migratory and threatened/endangered birds throughout the Pacific region, and are used by millions of migrating birds to breed, rest, refuel and overwinter. These areas are also highly valued by human communities for hunting, fishing, birding, and other recreational and cultural activities. Despite their value, estuarine habitats are being lost at accelerating rates due to erosion, sea level rise, invasive species, and human development.

This project–which geographically connects four distinct reserves in the Pacific region through shared, culturally-important, migratory bird species–builds upon existing frameworks for integrating conventional science and Indigenous knowledge, research, and cultural values. The team's approach explores applications of Indigenous knowledge and management practices to enhance stewardship of estuarine habitats and coastal watersheds for the benefit of birds and people. The project team includes reserve staff and their local management and cultural partners, who will collaborate with the Pacific Birds Habitat Joint Venture to address each reserve's management and science transfer needs related to climate change, habitat resilience, and ecosystem services.

Synthesizing long-term SWMP datasets to quantify estuarine ecosystem dynamics and identify trends along an ecological gradient

Project Lead: Kaitlin Reinl

Reserve: Lake Superior (WI); Rookery Bay (FL); South Slough (OR); North Inlet-Winyah Bay (SC); Guana Tolomato Matanzas (FL); Chesapeake Bay (MD); Padilla Bay (WA); Great Bay (NH)

Budget Request: $155,867

Project Summary: Estuaries are dynamic ecosystems that integrate complex abiotic and biotic processes that interact across spatial and temporal scales. The NERRS System-Wide Monitoring Program (SWMP) provides an opportunity to compare spatiotemporal dynamics across a wide range of estuaries in varied regions, understand ecosystem dynamics, and identify patterns and trends. Synthesis of SWMP data is a high priority for many reserves; however, limited personnel capacity has prevented these datasets from being utilized to their full potential.

To address current SWMP synthesis needs, this project will leverage existing SWMP data from seven reserves to identify whether system dynamics are linear, linear-stochastic, or nonlinear; apply trend and breakpoint analyses to quantify the direction and magnitude of trends; and develop 'lessons learned' for applying these tools to the Reserve System. To build capacity to analyze SMWP data, the project will develop a graduate-level course at UW-Madison that engages students in the analysis of SWMP data and demonstrates how to conduct the analyses outlined above. This work will catalyze future analyses to improve understanding of the changes in, and the relative importance of, ecosystem drivers at varied spatial and temporal scales.

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Synthesizing Motus data across the NERRS for research, education and conservation

Project Lead: Marae West

Reserve(s): North Carolina (NC); ACE Basin (SC); Chesapeake Bay (MD); Elkhorn Slough (CA); Grand Bay (MS); Hudson River (NY); Jacques Cousteau (NJ); Jobos Bay (PR), Kachemak Bay (AK); Mission-Aransas (TX); Narragansett Bay (RI); North Inlet-Winyah Bay (SC); Old Woman Creek (OH); Padilla Bay (WA); Rookery Bay (FL); Sapelo Island (GA); Weeks Bay (AL); Wells (ME)

Budget Request: $200,000

Project Summary: Over half of the reserves have Motus wildlife tracking stations, which provide new information on the presence and movements of animals. Given the increasing number of Motus stations within the Reserve System, growth of the resulting databases, and interest in these data from within and outside of the Reserve System, there is an opportunity to develop a collaborative community and supporting infrastructure among reserves.

This project aims to create a website that displays Motus data from across the Reserve System, including tower locations, number of species detected, example species detected, and connections among sites. The team will promote communication and collaboration among reserve staff to ensure that the project meets shared values and goals. Other objectives of the project include: 1) creating freely available educational resources related to Motus data; 2) developing in-person educational experiences at the North Carolina Reserve; and 3) constructing new Motus systems at four priority locations.

Adapting salt marsh vulnerability assessment methodologies to southeastern salt marshes

Project Lead: Denise Sanger

Reserve: ACE Basin (SC); North Inlet-Winyah Bay (SC)

Budget Request: $119,322

Project Summary: The ACE Basin and North Inlet–Winyah Bay (NI-WB) reserves recently completed a capacity building project focused on salt marshes in South Carolina. As part of this effort, the team identified management and research questions that centered around regionally and locally appropriate metrics and thresholds to assess vulnerability to impacts from climate change, particularly from increasing rates of sea-level rise. While a variety of marsh vulnerability metrics have been developed nationally, their direct applicability to southeastern marshes remains a knowledge gap. The recent "Drone the SWMP" catalyst project expanded monitoring capabilities in the region by establishing Unmanned Aerial Systems (UAS)-based data collection, which can be used to build upon current reserve monitoring to better inform marsh vulnerability metrics at the local scale for South Carolina.

This project will assess existing marsh vulnerability metrics at multiple spatial scales for both South Carolina reserves. The project will develop an outline of local marsh vulnerability methodologies available, their current applicability and limitations with respect to marsh management and restoration needs, and potential improvements. The information and methodologies produced will be used by South Carolina state and local marsh managers to address specific vulnerabilities of the state's coastal marshes.

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Uncertain recovery in mangrove ecosystems following repeated hurricane impacts

Project Lead: Danielle Ogurcak
Reserve(s): Jobos Bay (PR); Rookery Bay (FL)
Budget Request: $150,274

Project Summary: Mangrove ecosystems of the greater Caribbean are subject to major coastal hazards, including increasingly frequent strong tropical cyclones. Resilience of mangrove ecosystems is being tested by the combined effects of cyclones, sea level rise, hydrologic alterations, and coastal development. In 2017, mangrove ecosystems in Jobos Bay and Rookery Bay NERRs were impacted by Hurricanes Maria and Irma, respectively. Since 2020, an effort to understand storm damage, recovery trends, and implications for ecosystem services has been ongoing (NERRS Science Collaborative project - the Mangrove Coast Collaborative - MCC). Areas of minimal regeneration have been identified in both reserves, attributable to multiple factors including hydrologic stress. Both reserves again sustained impacts in 2022 by Hurricanes Fiona and Ian, the additional disturbances potentially altering the recovery trajectories. Using methods established during the MCC, we propose to extend mangrove change mapping through 2023 to capture impacts from those hurricanes and to assess causes of limited post-hurricane recovery at select locations via temporal monitoring of the hydrological regime. Data will be used within a decision-making framework co-designed with managers during the MCC to make decisions related to restoration and to understand the range of variability of post-hurricane recovery and implications for resilient human-natural coastal ecosystems.

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Invasive species monitoring in Alaska

Project Lead: Ingrid Harrald
Reserve(s): Kachemak Bay (AK); Padilla Bay
Budget Request: $83,907

Project Summary: The European green crab (Carcinus maenas, EGC) is a globally damaging invasive species that poses a threat to native shellfish, crabs, eelgrass beds, and estuary habitat critical for juvenile salmon and other culturally and commercially important species. The introduction of EGC to Alaska will have economic and social impacts affecting a wide range of stakeholders. The 2022 discovery of invasive EGC in southeast Alaska elevated concerns about the inevitable spread along the Alaska coast and has highlighted the need to proactively enhance coordination and increase detection efforts throughout the state.

This project will facilitate the transfer of evidence-based techniques, protocols, and standardized early detection practices from the Padilla Bay Reserve and Washington Sea Grant Crab Team to a cohort in Alaska representing organizations actively engaged in invasive species monitoring. The team plans to develop and implement a train-the-trainer workshop that will support the creation of a collaborative early detection network across Alaska's coastal communities. This coordinated effort ensures standard data collection and sharing, maintains and builds new partnerships, updates methods and techniques, and builds skills in training techniques to engage monitors across the state.

Drone the NERRS: Assessing the efficacy of a drone-based coastal wetland monitoring protocol across five biogeographic regions

Project Lead: Jay Black
Reserve: Rookery Bay (FL); Chesapeake Bay (VA); Great Bay (NH); Wells (ME); South Slough (OR); Apalachicola (FL)
Budget Request: $137,077

Project Summary: Uncrewed Aerial Systems (UAS), commonly referred to as drones, offer a lower-cost, less invasive alternative to traditional ground-based monitoring for emergent vegetation, while providing higher resolution images than satellite-based imagery. A recent Science Collaborative Catalyst project used UAS to monitor wetlands in six reserves, and developed an accessible tool comprising three interrelated standardized protocols for equipment operation, image processing, and image analysis.

The purpose of this project is to evaluate the efficacy of this tool in a wider range of biogeographic regions. The team will accomplish this through an iterative process of having each participating reserve utilize the tool at their long-term wetland monitoring sites, meeting to compare tool efficacy and identify potential challenges or technical difficulties, troubleshooting those technical difficulties, and improving or adjusting the tool as needed. The project team aims to optimize this tool as a low-cost method of coastal wetland monitoring.

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Explorations, demonstrations, and novel applications for environmental DNA in Kachemak Bay

Project Lead: Lauren Sutton
Reserve(s): Kachemak Bay (AK); He'eia (HI)
Budget Request: $71,541

Project Summary: An emerging genomic tool for biodiversity monitoring known as environmental DNA (eDNA) can fill in common gaps in our ecological understanding of systems, especially for remote places where study sites can be difficult to access. The Kachemak Bay Reserve, in collaboration with the He'eia Reserve and various Alaska-based researchers, proposes to transfer knowledge and skills regarding past, current, and future methodology of eDNA and provide a platform for ongoing collaboration between experienced and new users interested in applications of eDNA in the Kachemak Bay region. Working with and building on the He'eia Reserve's previous success with a collaborative eDNA workshop, the Kachemak Bay Reserve will incorporate reserve standard protocols for eDNA as described in estuaryDNA.org via a three-step approach: (1) Train the team; (2) Inspire the researchers; and (3) Engage the community.

This project promotes the use of science through transfer activities via hands-on demonstrations of eDNA technology for community members and a workshop for researchers on the current methodology of eDNA. The project addresses the Kachemak Bay Reserve's management goal of providing opportunities for all learners to improve coastal science literacy through the transfer of existing information, approaches, and/or techniques to external regional partners.

Bridging human dimensions research and practice to address water quality concerns in the Great Bay watershed

Project Lead: Lindsey Williams
Reserve: Great Bay (NH)
Budget: $99,361

Project Summary: Although there have been a number of local social science studies that could inform new and existing community education programs in New Hampshire's Great Bay watershed, outreach practitioners—including training and education staff at Great Bay Reserve and their partners—have asked for help finding, interpreting, and applying this research. To address this management need, the project team will gather, categorize, and summarize available relevant human dimensions research and, after a project kick-off workshop, will host a series of interactive peer learning sessions with end users from the outreach community and invited researchers to discuss the practical implications of the research. At a final workshop, the project team and participants will discuss key research findings, takeaways on the application of findings for practitioners, and collaboratively identified next steps. The team will then share these findings and next steps through a set of targeted research summaries. The collaborative process and products will increase access to local human dimensions research, facilitate communication between social science researchers and outreach practitioners, generate new actionable insights about existing research, and lay the foundation for co-developed social science studies in the watershed.

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Communication and assessment of seagrass seed-based restoration techniques

Project Lead: Torrance Hanley
Reserve(s): Connecticut (CT); Padilla Bay (WA); South Slough (OR)
Budget Request: $77,845

Project Summary: Seagrass restoration is a high priority for reserves across the country, and the focus of collaborative partnerships among academic scientists, state and federal agencies, and non-governmental organizations. The emphasis has typically been on restoration methods that transplant adult shoots, but interest in seed-based restoration has recently increased. A wide array of seed-based restoration techniques have been used for small-to large-scale restorations with varying success, yet communication of lessons learned from these efforts is relatively limited among groups and across geographic regions.

This project seeks to inform eelgrass restoration by systematically assessing and summarizing seed-based eelgrass restoration efforts across locations and reserves and creating a common database and platform for the communication of shared knowledge. The project team will gather the collective knowledge of a global community of eelgrass restoration practitioners via survey and interview, and share that information on a StoryMap. The project includes iterative engagement with intended users in the development of multiple publicly-available and easily-accessible resources, the establishment of a cross-continental network of seagrass restoration practitioners via a hybrid workshop, and the development of tools to support the continued exchange of ideas and information.

Transferring Lake Superior NERR habitat mapping tools and methods to the Wisconsin-Minnesota St. Louis River Estuary

Project Lead: Howard Veregin
Reserve: Lake Superior (WI)
Budget Request: $139,196

Project Summary: This project transfers tools and methods for habitat mapping for the Lake Superior Reserve to the entire St. Louis River estuary, which is one of the largest coastal wetlands ecosystems along Lake Superior and spans the border between Wisconsin and Minnesota in the Duluth-Superior metro area. Habitat mapping within the reserve boundaries has been underway since 2020 with technical assistance from NOAA's Office for Coastal Management. Applying already-developed mapping techniques to the whole estuary and the surrounding uplands within a mile radius supports estuary-wide habitat restoration planning and vulnerability assessment.

This project responds directly to the stated needs of the St. Louis River Habitat Workgroup (HWG), who are in the process of updating the 2002 St. Louis River Habitat Plan. The revised plan will be used to identify and prioritize areas for future restoration and conservation. Products of the proposed project include a classified habitat map of the St. Louis River estuary, a well documented and publicly available workflow used to create the map, and a change analysis report comparing habitat maps from 2002 with 2024 to analyze important habitat shifts over the last 20 years.

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What's my bait? Identifying and communicating the importance of non-game fish species in Georgia's estuaries

Project Lead: Rachel Guy
Reserve(s): Sapelo Island (GA)
Budget Request: $69,358

Project Summary: Since 2020, Sapelo Island Reserve and regional partners have engaged in collaborative monitoring of estuarine fishes. This effort not only fills important spatial gaps in other monitoring projects but has also proven a valuable tool for training future coastal scientists and generating public interest in estuarine fishes. While there is an abundance of public media and guides on game and large charismatic fish species, there is less content available that addresses small-bodied non-game species that constitute most of the fish biomass in Georgia's estuaries. In addition, there are few guides available to the public that address the challenges of identifying fishes in their juvenile stages, which may look very different from their adult morphology.

This project proposes to bring greater awareness of these lesser known species and juvenile stages through three primary tools: 1) an electronically illustrated media product that highlights the diversity of estuarine fish communities, the importance of the estuarine habitat, and the impact of these fish on coastal communities; 2) a guide with identifying features and brief life histories of estuarine fishes that includes juvenile stages of and non-game species; and 3) training modules aimed at educating undergraduate and non-academic audiences about estuarine species. The audience for these transfer materials are the public, marine extension and outreach programs, eco-tourism guides, K-12 educators, and undergraduate students in introductory estuarine ecology field courses.

Apalachicola Bay community advisory board support successor group

Project Lead: Joel Trexler
Reserve: Apalachicola (FL)
Budget Request: $102,067

Project Summary: Historically, Apalachicola Bay provided 90% of Florida's oyster products and as much as 10% of U.S. oyster production. Unfortunately, the fishery collapsed in the early 2010s and was declared a federal fisheries disaster in 2013. In 2020, State managers closed the Bay to all harvest for five years. The Apalachicola Bay System Initiative (ABSI) seeks to gain insight into the root causes of decline of the Bay's ecosystem and the deterioration of oyster reefs, and support the development of plans for the restoration and sustainable management of the Bay. From its outset, the ABSI has collaborated closely with the Apalachicola Reserve and included stakeholder and community engagement through a Community Advisory Board (CAB). The CAB is set to end its work in November 2023 and be replaced by a "Successor Group" that will provide oversight and implementation of recommended restoration and management strategies, including review and inclusion of ABSI and ANERR scientific results. This project will support the facilitation staff and supply costs needed to launch the Successor Group and serve as a one-year administrative bridge from the current funding to long-term sustainable funding sources.

To learn more about these grant programs and follow the progress of these projects, visit **http://nerrssciencecollaborative.org**

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