



**Zeke’s Island Reserve  
Local Advisory Committee Meeting Minutes  
Monday, December 4, 2023, 11:00 am**

**Attendance**

<b><u>LAC Partner Organization Members</u></b>	<b><u>Present</u></b>
Division of Parks and Recreation – Fort Fisher Recreation Area, Jeff Owen	Yes
Division of Archives and History, Stephen Atkinson	No
NC Aquarium at Fort Fisher, Renee Weeks	No
Natural Heritage Program, Judith Ratcliffe	No
<b><u>Community Members</u></b>	
Devon Eulie	No
Stephen Rice	No
Angela Marshall	No
Jack Housenger	No
<b><u>Others Present</u></b>	
Elizabeth Pinnix, DCM/NCNERR Southern Sites Manager Morgan Penrose, DCM/NCNERR Stewardship Specialist Abby Williams, DCM/NCNERR Resilience Specialist Rebecca Williams, DCM/NCNERR, UNCW EVS Intern	

**Welcome**

The southern sites manager welcomed the committee to the Fall 2023 meeting, reviewed the agenda, and led introductions.

**Reserve-wide Administrative Update**

The Reserve-wide Update was shared with committee members prior to the meeting. Members had no comments or questions about the updates. The update in its entirety is included as Appendix A.

The site manager provided the following reminders from the Reserve-wide update:

- This is the last meeting for those LAC members that have terms expiring at the end of the calendar year. New appointments will be present at the Spring 2024 meeting.
- Staffing update: Natural Resource Resilience Specialist, Abby Williams, is joining us from the Beaufort office. The goal of this position is to plan and implement resilience plans for Masonboro, Zeke’s, and Currituck reserves.

## **Site Specific Update**

### *General site conditions*

Staff conducted a site visit over the fall to replace rule signs and scope out a location for new signage and [Chronolog](#). The large sign at the end of the Basin Trail still needs to be leveled and cleaned. Additionally, nearly 30 derelict crab pots were removed from the main island by the Division of Marine Fisheries' Marine Patrol.

### *Spanish-language outreach project*

This summer, the Wilmington office hosted an intern through the [National Oceanographic Atmospheric Administration's Hollings Scholarship](#) to continue our effort in translating and creating educational opportunities for the Spanish-speaking communities at reserve sites. Her efforts were specifically focused on Zeke's Island Reserve, but materials are under review that can be used for all 10 sites.

We are working with NC Wildlife Resources Commission to develop translated signs at the Federal Point public boat ramp that focus on safety, fishing rules, and education.

### *Upcoming activities*

[Chronolog](#) units have been installed at many of the reserve sites to engage the community and collect timelapse photos to see habitat change over time. A new unit will be installed at the boat ramp in the next few months that will be installed to overlook the marsh monitoring transects associated with the System Wide Monitoring Program (SWMP) that is conducted within our research section.

Proposal requests have recently closed for the [Margaret A. Davidson Fellowship](#), a two-year fellowship that gives the opportunity to a graduate student to conduct collaborative research with a National Estuarine Research Reserve. Reserve research needs were identified by staff and include Zeke's Island Reserve. We are hopeful that a promising proposal comes in to bring further research to Zeke's Island.

In early 2024, infrastructure updates will be underway to replace the current water quality stations associated with SWMP. The goal is to create more storm resilient structures and platforms for the future. The funding for this project was provided by the NERRS Procurement, Acquisition, and Construction (PAC) grants. The Army Corps of Engineers (USACOE) is in the Environmental Impact Assessment phase of their Wilmington Harbor Project, where they propose to deepen and widen the port's channel. The reserve and other organizations/agencies have been in the loop about the project and have expressed concerns for the potential environmental impact to Zeke's Island and surrounding areas. Updates for this project will be provided at the next meeting or can be found on the [USACOE website](#).

The site manager reminded the committee that this was the last meeting for those with terms that expire in 2023. The spring 2024 meeting will have newly appointed members in attendance.

**NEXT MEETING: Thursday, April 11 @ 11:00 am**

## **Roundtable**

The site manager asked Mr. Owen to report on the status of a prescribed burning plan at the Bald Head Island State Natural Area. Mr. Owen asked an additional Fort Fisher State Park Ranger to join the conversation to discuss this topic, Kip Futch. Mr. Futch explained the NC State Parks, in collaboration with their park biologists, have been working on a prescribed burn plan to aid in the improvement Eastern Black Rail habitat within the

Bald Head Island State Natural Area (managed by NC State Parks). They have conducted site visits to find potential target areas to patch burn and at least one of these areas is within the boundary of Zeke's Island. The site manager asked who will be conducting the burns, what other species benefit from prescribed marsh burning, have there been lack rail detections in this area, and what is the goal. Is it primarily for improving Eastern Black Rail habitat? Mr. Futch responded that burns are conducted by a fire crew within the NC State Parks, there has been some discussion that burning of the marsh can help to elevate the marsh, in turn benefiting many species, and there have not been any detections of Eastern Black Rails in the area. He added the goal is to provide suitable habitat for Eastern Black Rails and burn off the excess wrack that has been swept in from storms and high tide events.

The site manager asked for studies and research to be provided to support this management strategy, in addition to the fire plan with maps included.

Mr. Owens added the NC Aquariums has received funding to help eradicate and treat invasive vegetation and was inquiring about burning large stands of *Phragmites* that are surrounding their property.

The site manager asked about the benefit of burning *Phragmites*, does it not accelerate growth?

Mr. Futch responded that it is not the growth that they are focused on, but it makes the vegetation height more manageable to treat with pesticide.

Mr. Owen mentioned Fort Fisher State Park and Recreation Area may be one of the last coastal parks to accept prescribed burning in their collection of management strategies – it is already being done at Hammocks Beach and Fort Macon State Park. He reiterated they will provide the research, their fire management plan, and will stay in communication before beginning this project.

Mr. Owen also reported that Fort Fisher State Park had an average sea turtle nesting year with 85 nests and once again extremely busy visitation during summer and fall. He also mentioned current winter activity and visitation at the park and recreation area is comparable to visitation numbers and conditions during the month of May.

#### **Public comments**

None

#### **Action Items**

Mr. Owen will provide documents regarding prescribed burning for marshes within the Bald Head Island Natural Area and Zeke's Island Reserve.

## N.C. Coastal Reserve and National Estuarine Research Reserve Fall 2023 Local Advisory Committee Meetings Reserve-wide Update

### Local Advisory Committee Membership

Thank you for your continued service to the reserve's Local Advisory Committees! A special thank you to members whose terms are expiring at the end of this year and did not reapply to serve – the reserve, as well as the division and department, are very appreciative of your service and input. Recommendations regarding community member/organization applications submitted earlier this year are in review for terms beginning in 2024.

### Program Highlights

- This year the Coastal Training Program offered **workshops and partner engagement meetings** for decision-makers throughout coastal North Carolina. Multiple events served 533 professionals including real estate agents, local government staff, federal and state agency staff, and land use planners delivering science-based information to protect and manage NC's coastal resources.
- Students and educators gained **in-the-field experiences** at the Rachel Carson and Masonboro Island Reserves this year. Over 50 students participated in summer camps in partnership with the N.C. Maritime Museum and over 40 educators received free continuing education credits through the Teachers on the Estuary and Coastal Explorations programs. Students from Carteret, Onslow, and Craven Counties traversed the Rachel Carson Reserve and the Masonboro Island Explorers program hosted fifth grade students from New Hanover County in partnership with Masonboro.org and Carolina Ocean Studies.
- The reserve continues celebrating the **Year of the Trail** in 2023, as designated by the N.C. General Assembly. Guided hikes at the Kitty Hawk Woods and Bald Head Woods Reserves and events at the Currituck Banks and Bird Island Reserves provide opportunities for community members and partners to come together to experience these protected places while staff highlight the habitats and programs that occur at the sites. Thank you to the partners who helped make these a success! Additionally, interpretive signs were installed along trails at the Masonboro Island and Bird Island Reserves and along the Currituck Banks Reserve boardwalk highlighting the unique features of the sites, flora and fauna, ecological processes, and research conducted at the sites.
- The reserve's **Site Stewards Volunteer Program** significantly enhanced the program's capacity in managing the Currituck Banks, Kitty Hawk Woods, Buxton Woods, Rachel Carson, Masonboro Island, and Bird Island Reserves this year. Since January 2023, over 100 volunteers have logged more than 650 hours of stewardship work at reserve sites. Site Stewards observe and record data such as site condition, marine debris, infrastructure damage, and species observed in the field and report findings back to reserve staff. Thank you, volunteers!
- The **Scuppernong Water Study Engagement** Team, comprised of the Coastal Reserve, Albemarle-Pamlico National Estuary Partnership, The Nature Conservancy, and NC Sea Grant, hosted a public meeting in October to gather local knowledge on flooding to inform the development of the Scuppernong Regional Water Management Study and model funded by the Division of Water Resources; the engagement for the study is supported by NOAA Digital Coast Connects funding. Also included in the public meeting was an asset mapping exercise for Washington County and the Town of Creswell in conjunction with the division's Resilient Coastal Communities Program – these communities are just starting in Phase 1 & 2 of the program. This was done in partnership with SWCA Environmental Consultants, who has been paired with these communities by RCCP. Over 100 community members attended the meeting.
- The reserve introduced its "**Discover the NC Coastal Reserve**" tour last month which is a multi-year campaign spanning 2023-2026 to connect target audiences with the program and places with

events to be hosted at reserve sites along the coast. The tour kicked off in June with a soft launch at our Currituck Banks Reserve with a successful grand reopening and dedication of the refurbished boardwalk (watch a [short video](#) of the event). Local Advisory Committee members will be invited to the site-based events so stay tuned for upcoming event information.

- The reserve is planning a **Research Symposium** for March 20-21, 2024 to highlight work conducted across reserve sites with posters and presentations from researchers including students, faculty, partner agencies, and staff. This will also be an opportunity for the research community to network and provide input on future research priorities.

### Research Fellowship Updates

- **2023 NC Coastal Research Fellow Announced**

Juan Zuluaga, a PhD student at University of North Carolina Wilmington is the 2023 North Carolina Coastal Research Fellow. Juan's research will look at how birds regulate their temperature through behaviors to cope with heat in the summer at the Bird Island Reserve. [North Carolina Sea Grant](#) and the [N.C. Coastal Reserve and National Estuarine Research Reserve](#) jointly fund this opportunity, which is open to graduate students across North Carolina. With funding for one year, recipients conduct research within one or more of the Coastal Reserve's 10 sites. Learn more about this year's fellow and project [here](#).

- **NOAA Margaret A. Davidson Fellows**

The [Margaret A. Davidson Graduate Fellowship](#) provides funding to graduate students to conduct research within one of the 30 reserves in NOAA's National Estuarine Research Reserve System. Fellows address a key coastal management question to help reserves, scientists, and communities understand coastal challenges that may influence future policy and management strategies.

- Marae West, NC's first Davidson fellow, completed her fellowship this fall. Click [here](#) to learn more about Marae and her work on the impacts of sea level rise on wintering populations of saltmarsh and seaside sparrows at four reserve sites (Rachel Carson, Masonboro Island, Zeke's Island, and Bird Island Reserves). Congratulations to Marae!
- Daniel Bowling, a PhD student at North Carolina State University, is in the second year of his two-year fellowship and is continuing his work to assess the effectiveness of using remote sensing to monitor intertidal oyster habitat and develop a model to support future coast-wide population assessments and for Reserve sites to be able to quickly detect and respond to changes in habitat health. Daniel's fellowship will wrap up in 2024.
- NOAA is recruiting for the **2024-2026 Davidson fellow cohort**. More information on the fellowship, application process, and NC management needs is available [here](#). Applications are due **December 4, 2023**.

### Staffing News

- Abby Williams joined the Division in September as the Reserve's Resilience Specialist. Abby will develop resilience plans, secure funding for, and implement projects on the ground at the national reserve sites to increase habitat resilience to ensure the sites continue to provide ecological services and protective services to the communities where they are located. Abby comes to us from the Division of Marine Fisheries where she served as the Cultch Planting Biologist and is working at our Beaufort office. This is a new time-limited position that is funded by capacity building funding provided by NOAA to the reserve through the Bipartisan Infrastructure Law.

### Upcoming Student Opportunities

Application periods for Summer 2024 student opportunities in the Northern Sites and Beaufort offices are currently open.

- Three **State of NC Internship** opportunities are available at the Beaufort office for summer 2024. Applications are due **January 8, 2024**, and more details will be available on the reserve’s website. The opportunities are focused on summer educational programming, training and stewardship, and research.
- The Friends of the Reserve (FOR) is requesting applications for the **2024 NC Coastal Reserve Undergraduate Internship**. This internship encourages promising and talented students from traditionally underserved and underrepresented populations to pursue study and careers in coastal and estuarine science by gaining professional experience working with the Coastal Reserve for the summer. The 2024 intern will work with staff on stewardship activities at the northern sites (Currituck Banks, Kitty Hawk Woods, and Buxton Woods Reserves) and will be based out of the Northern Sites Office at the National Park Service headquarters in Manteo. More details are available on FOR’s website [here](#) and the deadline for submitting applications is **January 19, 2024**. FOR is a 501(c)(3) nonprofit organization that supports the N.C. Coastal Reserve and National Estuarine Research Reserve, including its sites and programs.

Federal Budget

- The budget table below is a summary of the status of the federal budget\* for fiscal years 2020-2024 as it relates to the N.C. Reserve. Congress has not passed the FY2024 federal budget, and the federal government is operating under a continuing resolution based on FY2023 allocations until January 2024 when the continuing resolution expires. Thank you to the National Estuarine Research Reserve Association and Friends of the Reserve for their work to educate Congress on the value of the national system and the NCNERR.

Federal Budget Lines	FY2020 Enacted	FY2021 Enacted	FY2022 Enacted	FY2023 Enacted	FY2024 President’s Request	FY2024 House Mark	FY2024 Senate Chair Mark
NERRS Operations	\$27.5M	\$28.5M	\$29.7M	\$32.5M	\$32.5M	\$29.7M	\$33.3M
NERRS Procurement, Acquisition, & Construction (PAC)	\$4.5M	\$4.5M	\$6.5M	\$8.5M	\$4.5M	\$4.5M	\$8.5M
CZM Grants	\$77M	\$78.5 M	\$79M	\$81.5M	\$78.5M	TBD	TBD

\* The federal fiscal year is October 1-September 30. The National Estuarine Research Reserve System (NERRS) budget line provides funding to the 30 reserves within the System through cooperative agreements that are matched by the states, and supports national coordination of programs and implementation of system-wide and competitive projects. The Coastal Zone Management (CZM) grants budget line provides funding to coastal states with approved coastal management programs through cooperative agreements that are matched by the states. The Division of Coastal Management (DCM) receives funding from both budget lines to operate the N.C. National Estuarine Research Reserve (NCNERR) and N.C. Coastal Management Program. The CZM cooperative agreement that DCM receives provides funding for Reserve staffing, state site operations, and administrative support.