



Rachel Carson Reserve
 Local Advisory Committee Meeting
 May 17, 2023, 3pm
 101 Pivers Island Road, Beaufort with a WebEx option

Attendance

LAC Partner Organization Members	Present
Ben Fleming, N.C. Div. of Parks and Recreation	Yes
Ben Wunderly, N.C. Maritime Museum	Yes
Greg Piniak, NOAA's National Centers for Coastal Ocean Science	Yes
Todd Clark, Town of Beaufort Administration	Yes
Paul Burdette, Town of Beaufort Police Department	Yes
Brenda Wichmann, N.C Natural Heritage Program	No
Sue Stuska, Cape Lookout National Seashore	Yes
Jimmy Johnson, Albemarle-Pamlico National Estuary Partnership	Yes
NC Wildlife Resources Commission	No
Community Members	
Miriam Sutton	Yes
Susan Schmidt	Yes
Ann Carter	Yes
George Everett	Yes
John Fussell	Yes
Perry Barrow	No
Stan Rule	No
Dan Rittschof	Yes
Janina Millis	Yes
Jeff Benoit	Yes
Others Present	
Paula Gillikin, Reserve Central Sites Manager	
Jillian Daly, Reserve Communications Specialist	
Justin Ridge, Reserve Research Coordinator	
Rachel Gittman, East Carolina University	

Reserve-wide Administrative Update

The Reserve-wide Update, which includes a range of Reserve activities was shared with committee members prior to the meeting and is included as Appendix A. The update was not reviewed in-person due to meeting time constraints.

Rachel Carson Reserve Business

Local Advisory Committee Member Terms – Paula Gillikin

Members Barrow, Carter, Fussell, and Rittschof are serving terms that expire at the end of 2023. These members will be contacted individually in 2023 and reminded that they are able to apply again to serve on the committee during the next application period.

Site update – Paula Gillikin

- **Interns**

Two Carteret Community College and one Appalachian State University student are joining the Reserve team in the Beaufort office as interns. One student will be focused on education activities, one on stewardship, and one on both stewardship and research.

- **Educational Activities**

Educational field trips and presentations were provided for 208 participants including community groups, K-12 students, and university students.

- **Wild Horses**

The committee is aware that a stallion was going to be transferred from Shackleford Banks to the Rachel Carson Reserve to support genetic health of the receiving herd. Unfortunately, the stallion passed away under anesthesia while the transfer was underway. Bloodwork and tissue samples were collected and an upcoming debrief may reveal factors that led to the stallion's death. The Rachel Carson herd still needs new members to sustain the herd, but considering the stallion's death, that work has been paused.

- **Bird Nesting Area**

An approximately 3.5-acre area was posted with signs at the east end of Bird Shoal to protect nesting American oystercatcher and Wilsons plover. This is the first time in several years that a posted area has been installed at Bird Shoal. Postings discontinued during a period when Bird Shoal experienced frequent overwash and signs and nests were being washed away. Currently, the elevation at the east end is high enough to sustain nesting shorebirds.

- **Upcoming Summer Activities**

Summer field activities will include sign posting, bird monitoring, mapping the invasive French tamarisk tree, summer camps, and Terrapin Tally. Contracted studies will continue on sediment dynamics, a restoration feasibility study at the west end of Bird Shoal, and re-assessment of Bird Shoal shoreline position and elevation.

- **Special Activity Authorization**

Six applications were received and authorized during the beginning of the calendar year.

Research Highlight – Dr. Rachel Gittman

- **Evaluating the coastal protection and ecological co-benefits of novel marsh-oyster restoration approaches**

Dr. Gittman is currently conducting research along the north shore of Carrot Island to better understand shoreline protection design and substrates that maximize coastal protection and ecological function. Specifically, in Taylor's Creek, the research is aimed at understanding what shoreline protection design is effective against boat-generated wakes. The current experiment includes the use of OysterCatcher™ material installed in a "table" shape at two vertical reliefs over eight experimental areas along the east Carrot Island shoreline. Generally, sediment accretion and reduced erosion were observed behind the oyster breakwaters even though wave attenuation at the structures wasn't observed as expected. Persistent live oyster cover was observed on both low and high structures with a general increase in size of oysters, particularly on the high relief structures. Reefs were monitored every three months with the current funding source; however, monitoring will decrease to once per year when funding ends. Rachel is happy to keep the committee informed about this research in addition to her research on another type of oyster structure found on the south side of Carrot Island where the wave energy is higher.

Roundtable Discussion

- Miriam emphasized the need for visibility of law enforcement at the site. She recently observed illegal shellfishing and visitors harassing wild horses.
 - Ben Wunderly suggested that the Reserve look into enhancing public education, perhaps through billboards on the interstate and/or information at the boat ramps.
 - John wonders what percentage of people visiting the Reserve understand that it's protected. Paula commented that a visitor use survey was conducted in 2007 and it would be interesting to see if visitors' knowledge of the site has increased since then.
 - Ben Fleming explained the importance of not confronting visitors in a way that could provoke an argument. Sometimes it's best to collect evidence of the violence instead of direct confrontation.
- Committee members offered observations about painted buntings and nesting shorebirds on the site.

Public Comment

None

Final comments, Action Items, and Wrap-up

- Paula Gillikin will update Ann Carter's email address.

Adjourn

The meeting was adjourned at 4:40pm

N.C. Coastal Reserve and National Estuarine Research Reserve Spring 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 number of community member appointments will expire at the end of 2023 and the reserve is seeking community member applications in June 1-30, 2023 for each of the reserve's ten committees. As a reminder, community members may apply to serve consecutive or non-consecutive terms per the [Local Advisory Committee Operating Procedures](#). More information about the upcoming application period will be available in mid-May.

Program Highlights

- Spring **student field trips** to the Rachel Carson Reserve and Masonboro Island Reserve via the Island Explorer Program are starting, and **summer camps** at the Rachel Carson Reserve will start in June in partnership with the NC Maritime Museum.
- The Coastal Reserve's **Training Program** hosted three workshops for real estate professionals this April on living shorelines and low impact development for water quality protection. The workshops were held in partnership with the Brunswick County Association of Realtors and Cape Fear Realtors. At these workshops, real estate professionals received 4 elective continuing education credits. Since 2020, the training program has hosted 11 real estate professional workshops reaching over 700 people.
- The Coastal Reserve and NC Wildlife Resources Commission are gearing up for the 9th annual **2023 Terrapin Tally** to help better understand the overall population status and condition of the diamondback terrapin within the state. This citizen science project takes a snapshot of the diamondback terrapin population numbers in a given area by conducting kayak surveys at specified times and prescribed routes. Terrapin Tally paddling routes are available at 11 locations including: Cape Lookout National Seashore, Rachel Carson Reserve, Calico Creek, Hammocks Beach State Park, Lea Hutaff Island, Masonboro Island Reserve, Carolina Beach State Park, Fort Fisher State Recreation Area, Zeke's Island Reserve, Bald Head Island, and Bird Island Reserve. Data collection will occur during established windows during May and June.
- North Carolina is celebrating the [Year of the Trail](#) in 2023, as designated by the N.C. General Assembly. The reserve will highlight available trails at sites on social media throughout the year.
- Repairs to the **Currituck Banks Reserve boardwalk** are complete and the boardwalk has reopened to visitors. The original footprint of the boardwalk was maintained, and the aging decking boards, benches, and railings were replaced. These replacements are identified as a facility need in the N.C. National Estuarine Research Reserve's 2020-2025 Management Plan. This project was made possible with funding from the Division's N.C. Public Beach and Coastal Waterfront Access Grant Program, DEQ, and NOAA. A big thank you to staff and the DEQ facilities team for their hard work on this project. An event will be held in early June to celebrate the enhanced public access at the site.

Staffing News

- Dr. Justin Ridge joined the reserve as the new Research Coordinator in February. Justin comes to us from the Duke University Marine Lab where he led the Marine Robotics and Remote Sensing (MaRRS) Lab's coastal mapping research program. Justin has a Master's degree in biological oceanography from Florida Institute of Technology and a PhD in marine science from UNC Chapel Hill where his research focused on North Carolina's sounds (and primarily within the Rachel Carson Reserve), examining growth of oyster reefs and their influence on saltmarsh sedimentation and erosion. Justin's recent research includes the application of novel methods

(e.g., drones, deep learning, etc.) for coastal resource management to address human and climatic driven changes, working with the southeast national estuarine research reserves and beyond, along the east and gulf coasts and in Belize.

- Jillian Daly joined the reserve as the new Communications Specialist in February. Jillian is a recent graduate of UNC Chapel Hill with a BS in Environmental Science and a minor in Marine Science, with a strong interest and experience in science communication. In her free time, she enjoys spending time at the Rachel Carson Reserve.
- Several interns and seasonal staff are working with the reserve in Beaufort and Wilmington this summer. Thank you to Friends of the Reserve, the N.C. Internship Program, and NOAA’s Education Partnership Program with Minority Serving Institutions for their support of the internships. Students will work on stewardship and education projects, including Spanish translation of materials to better serve this visitor population.
- NOAA provided capacity building funds to the Division of Coastal Management from its allocation of the Bipartisan Infrastructure Law (or Infrastructure Investment and Jobs Act) to hire time-limited staff to work on conservation and restoration projects. The reserve’s time-limited position will conduct habitat resilience planning and project implementation at the N.C. National Estuarine Research Reserve sites to increase coastal habitat resilience to ensure the sites continue to provide ecological services and protective services to the communities where they are located. The position will be posted soon.

Federal Budget

- The budget table below is a summary of the current status of the federal budget* for fiscal years 2020-2024 as it relates to the N.C. Reserve. The Senate and House are currently working on their versions of the FY2024 federal budget. 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	Final Omnibus Appropriations FY2022	FY2023 Enacted	FY2024 President’s Request
NERRS Operations	\$27.5M	\$28.5M	\$29.7M	\$32.5M	\$32.5M
NERRS Procurement, Acquisition, & Construction (PAC)	\$4.5M	\$4.5M	\$6.5M	\$8.5M	\$4.5M
CZM Grants	\$77 M	\$78.5 M	\$79M	\$81.5M	\$78.5M

* 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.