



**Rachel Carson Reserve**  
**Local Advisory Committee Meeting Minutes**  
**Oct 25, 2018 3:00 p.m.**  
**Administration Building, NOAA Beaufort Lab**

**Attendance**

<b><u>LAC Partner Organization Members</u></b>	<b><u>Present</u></b>
Town of Beaufort Administration, John Day	No
Town of Beaufort Police, Paul Burdette	No
N.C. State Parks, Fort Macon, Ben Fleming	Yes
N.C. Maritime Museum – Beaufort, Ben Wunderly	Yes
National Park Service, Cape Lookout – Sue Stuska	Yes
Albemarle-Pamlico National Estuary Partnership – Trish Murphey	Yes
N.C. Natural Heritage Program – Laura Robinson	Yes
NOAA’s National Centers for Coastal Ocean Science – Greg Piniak	
N.C. WRC Enforcement – Brandon Joyner	
<b><u>Community Members</u></b>	
Ann Carter	Yes
Perry Barrow	Yes
John Fussell	Yes
Stan Rule	Yes
Margaret Garner	Yes
Dan Rittschof	No
Robin Newton	No
Miriam Sutton	Yes
George Everett	Yes
<b><u>Others Present</u></b>	
Rebecca Ellin, DCM/NCCR & NCNERR Program Manager	
Michelle Brodeur, DCM/NCCR & NCNERR Communications Specialist	
Brandon Puckett, DCM/NCCR & NCNERR Research Coordinator	
Rudi Rudolph – Carteret Shoreline Protection Office	

Alex Seymour, Duke University Marine Lab
Robert Harper, Citizen
Jeanne Kraus, Citizen
Becca Drohan, Crystal Coast Waterkeeper

**Reserve-wide Administrative Update**

Staff will share these written updates with the local advisory committees prior to the committee meetings so that members have the opportunity to review them in advance; this change is in response to committee member suggestions at the fall 2017 meetings.

**Hurricane Florence and Tropical Storm Michael**

All Reserve sites and the Kitty Hawk, Beaufort, and Wilmington offices closed September 11 in preparation for Hurricane Florence. The Columbia office closed September 13. The eye of Hurricane Florence passed directly over the Masonboro Island and Zeke’s Island Reserves on September 14.

The Kitty Hawk and Columbia offices received little to no damage as a result of the storm and reopened September 17. The Beaufort office at the NOAA Beaufort Lab sustained a variety of damage and fully reopened September 28. The Wilmington office at University of North Carolina Wilmington’s (UNCW) Center for Marine Science also sustained a variety of damage and reopened to staff on October 1. Damage assessment and repair is handled by the respective partners that own the office facilities and not by Reserve staff; thank you to NOAA Beaufort Lab and UNCW staff for getting the facilities up and running again so that more regular business operations could resume.

Storm impacts to the Reserve sites varied geographically based on the track of the storm. The Currituck Banks, Kitty Hawk Woods, Buxton Woods, and Buckridge Reserves received little to no damage. The remaining sites located in the central and southern portions of the state experienced the following general impacts: erosion and deposition on oceanfront and estuarine shorelines, grounded vessels at the Rachel Carson and Masonboro Island Reserves, significant accumulation of marine debris such as lumber, staircases, floating docks and pilings, downed trees, missing signs, and damage to the boardwalk at the Rachel Carson Reserve. Eight of the ten Reserve sites reopened on September 24 following site assessments; Permuda Island and Bald Head Woods Reserves remain closed at this time.

Potentially hazardous conditions associated with storm damage remain at the Reserve sites and visitors should exercise caution. Grounded vessels are being addressed under Emergency Support Function #10 staffed by the U.S. Coast Guard, NOAA, N.C. Wildlife Resources Commission, and N.C. Department of Environmental Quality, including Reserve staff. Pollutants and a subset of vessels that remain grounded will be removed from the Reserve sites under this operation. Visitors should refrain from disturbing the vessels to protect personal safety and respect vessel owners’ personal property while removal efforts are underway. Clean-up of

smaller marine debris items has begun with the help of volunteers at select sites while storm recovery funding sources are being explored for removing the larger marine debris items described above and addressing the downed trees.

Reserve programming was and continues to be impacted by the storm. K-12 student field trips, teacher workshops, public education programming, and Coastal Training Program workshops have been cancelled, postponed, and rescheduled. Research staff are measuring storm impacts on several current research projects including performance of marsh sills and living shorelines constructed of alternative substrates. Water quality monitoring equipment remained deployed at the Masonboro Island and Zeke's Island Reserves during the storm and staff will be evaluating those data in the near future. Stewardship staff are addressing the site-related items described above.

No additional impacts were observed from Tropical Storm Michael.

#### Local Advisory Committees

In August 2018, the Secretary of the N.C. Department of Environmental Quality appointed new community members and re-appointed community members interested in continuing to serve to the local advisory committees following an application process earlier in the year to fill vacancies. Additional government agencies were also appointed to fill gaps on the committees. The local advisory committee Operating Procedures document is to be updated every five years according to the Operating Procedures. An update was originally planned for fall 2018 but has been rescheduled to spring 2019 as staff focus on Hurricane Florence recovery.

#### Periodic Rules Review

Per the Division's request, the N.C. Department of Environmental Quality is seeking the Rules Review Commission's approval of a readoption timeline of November 30, 2021 for Coastal Reserve rules (15A NCAC 070). This item is scheduled for the Rules Review Commission's November 2018 meeting. Staff will begin preliminary discussions regarding 15A NCAC 070.0202 at the fall 2018 meetings. This work is part of the Legislative Periodic Review and Expiration of Existing Rules process (G.S. 150B-21.3A).

#### N.C. NERR Management Plan

The Reserve received feedback from NOAA on the draft management plan for the N.C. National Estuarine Research Reserve that will cover 2018-2023 in late August 2018. Staff are currently working to address the feedback. Review by the N.C. Department of Environmental Quality will follow. A 30-day public comment period for the draft management plan will be scheduled after all reviews are complete and 3 public meetings, in the northern, central and southern regions of the coast, will be scheduled during the comment period.

#### Federal Budget

The budget table below is a summary of the current status of the federal budget\* for fiscal years 17, 18, and 19 as it relates to the Coastal Reserve.

Federal Budget Lines	Final Omnibus Appropriations FY2017	Final Omnibus Appropriations FY2018	President's Budget Request FY2019	Senate Approps Committee Mark FY2019	House Approps Committee Mark FY2019
NERRS Operations	\$23.5 M	\$25 M	\$0 M	\$27.5 M	\$27 M
CZM Grants	\$70 M	\$75 M	\$0 M	\$90 M	\$75 M

- Federal Fiscal Year 19: The President's budget request does not include funding for the NERRS Operations or the CZM Grants budget lines. Next steps for the federal fiscal year 19 budget include the House and Senate conferencing between the chambers, chamber votes to agree on a final budget, and a final budget going to the President for signature into law.
- 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.

#### State Budget

The N.C. General Assembly appropriated \$2.5M to the Division in the State Fiscal Year 18 budget for acquisition of the Sunset Beach West tract to be included in the Bird Island Coastal Reserve. The early stages of the acquisition are underway. The appropriation supports implementation of a Memorandum of Understanding between the Town of Sunset Beach and Sunset Beach and Twin Lakes, INC to resolve a legal battle regarding the tract. The tract is adjacent to the Bird Island Coastal Reserve and includes similar pristine beach and salt marsh habitats.

#### Visitor Access Study

Reserve Site Managers are working with a team of researchers from UNCW (Environmental Science Department, School of Health, Applied Human Science Recreation, Tourism Management Program) to implement a visitor access assessment project at select Reserve sites titled "Understanding Access and Visitor Use on North Carolina's Coastal Reserve System." The project focuses on six of the ten Reserve sites – Bird Island, Zeke's Island, Masonboro Island, Rachel Carson, Kitty Hawk Woods, and Currituck Banks. The goal of the project is to understand visitor access patterns and inform planning and projects to accommodate visitor access of the sites. Interviews and stakeholder sessions with community members and government and business leaders, and on-site surveys of visitors are complete. Data collected will be analyzed by the research team and a study report will be complete in 2019. Results will be used by Reserve staff to inform visitor access management and planning.

#### Upcoming Program Activities

Find upcoming event information on the event calendar at [www.nccoastalreserve.net](http://www.nccoastalreserve.net).

- **NOAA Tools Training Workshop** (11.6, Wilmington) - Participants will learn about NOAA's resources available to improve local decision-making. Participants will get hands-on experience with various tools, including the Sea Level Rise Viewer and the Coastal Flood Exposure Mapper, as well as learn about resources available through NOAA's Digital Coast. American Institute of Certified Planners (AICP) will receive 4 Certification Maintenance credits. Registration is required.
- **Low Impact Development Basics for Water Quality Protection** - Workshop for Real Estate Professionals (12.4 and 12.5, Wilmington) - Participants will learn the following: how land use decisions impact water quality; Low Impact Development techniques that help protect water quality; the costs and benefits of implementing LID; managing stormwater control measures to meet state and local regulations and to maintain functionality and aesthetics; and tour stormwater control measures on the Wrightsville Beach Loop. Real estate professionals will receive 4 elective continuing education credits from the N.C. Real Estate Commission. Registration is required.

\* The federal fiscal year is October 1-September 30. The National Estuarine Research Reserve System (NERRS) budget line provides funding to the 29 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 grant funds DCM receives provides funding for Reserve staffing, state site operations, and administrative support.

### **Site Update/New Business**

- *Shoreline Change Study*  
**Alex Seymour, Duke University Marine Robotics Laboratory.** Alex provided an overview of shoreline changes, both horizontal and vertical, in the reserve generated from both LIDAR and drone monitoring. The study captured before and after conditions at the site for hurricanes Matthew and Florence. The west end of Bird Shoal (inactive dredge spoil cell) experiences significant erosional change both after storms (ex. 4m after Matthew) and high water events. The western Bird Shoal embayment area, beach, and dunes (just east of the escarpment/dredge cell) are accreting overall. The middle of Bird Shoal has lost its dune features primarily due to increased wave energy through Beaufort Inlet. There is also accretion at the east end of Bird Shoal due to longshore transport. Deep Creek is filling in with sediment. Many of these changes are likely due to the widening of Beaufort inlet.

**Brandon Puckett, N.C. NERR Research Coordinator.** Brandon described shoreline changes at Bird Shoal resulting from an on-the-ground transect study where elevation information was gathered. The results were very similar to the Duke study: accretion both at the west and east ends and erosion in the middle section.

- *Hurricane Florence*

Primary storm impacts to the Rachel Carson Reserve include: 11 stranded vessels; storm debris; one emergency rescue of a sailboat crew from Town Marsh; and shoreline change. Bird Shoal experienced overwash, dune loss, and a partial breach in the middle.

- *NOAA Marine Debris Program Grant*

In September, the Town of Beaufort in partnership with the Reserve, received a grant in the amount of \$67,889 to remove abandoned and derelict vessels and other debris from Beaufort Harbor and adjacent shorelines. Over 46,000 pounds of debris are expected to be removed. Educational videos about marine debris and the project will be produced by the Boat U.S. Foundation.

- *Wild Horse Herd*

The wild horse herd is currently at 30-head, including 17 females and 13 males. All of the horses survived Hurricane Florence. The oldest member of the herd is a 28-year-old mare and the youngest is 5 months old. Since the spring local advisory committee meeting, one bachelor stallion died due to a compound fracture of the leg. Body condition evaluations are typically conducted in September of each year; however, this was not completed due to Hurricane Florence.

- *Public Access Survey*

Researchers from the University of North Carolina at Wilmington were contracted by the Division of Coastal Management to better understand how the general public, local businesses, and community leaders think about public access at Reserve sites. Researchers used online surveys, on-site surveys, and focus groups to engage research participants. In addition to public access, the study gathered information that help the Reserve gauge the effectiveness of its communications efforts over the past ten years.

- *Education*

Free public field trips led by trained volunteers were held on Tuesdays and Thursdays from June through August. Summer science camp programs for children were offered through the summer in partnership with the N.C. Maritime Museum in Beaufort. Friends of the Reserve. The non-profit organization that raises funds to support Reserve has rescheduled an oyster roast fundraiser that was postponed due to Hurricane Florence. The new date is December 15 at 3 p.m. Stayed tuned to the Facebook page of @FORNorthCarolina for information and updates.

- *Friends of the Reserve*  
The non-profit organization that raises funds to support Reserve has rescheduled an oyster roast fundraiser that was postponed due to Hurricane Florence. The new date is December 15 at 3 p.m. Stayed tuned to the Facebook page of @FORNorthCarolina for information and updates.
- *Potential priority topics for rules update*  
Rebecca presented the priority topics as identified by Reserve staff for the upcoming rules update. Members were generally supportive of the priority topics . However, members pointed out that the following topics were not included that are also important: dogs off leash, public nudity, and removal of research gear after a project is complete.

### **Roundtable Discussion**

- Committee members discussed the changes of Bird Shoal, site resilience and the site as protecting the nearby community of Beaufort.
- Members discussed species and habitats that could be impacted by changing environmental conditions and trade-offs must be considered (ex. Loss of dunes could benefit species such as Wilson’s plover).
- The committee discussed value of identifying priority areas for protection as conditions change.
- Reserve staff offered that the shoreline monitoring studies in concert with a recent site vulnerability study, could help guide future management actions and/or studies.
- Alex Seymour suggested looking into SURGE modeling to help better understand vulnerabilities.

### **Public comment**

- Rudi Rudolph discussed the need to deepen the east end of Taylor’s Creek and secure a place where the spoils could benefit habitats of the Reserve and/or adjacent areas.

### **Action items**

- Paula Gillikin will email the committee the site update, as she could not attend the meeting due to spur-of-the-moment post-hurricane response activities.