Masonboro Island Reserve
Local Advisory Committee Meeting Minutes
Wednesday, December 2, 2020, 3 pm
Meeting held by WebEx

Attendance

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<tr>
<th>LAC Partner Organization Members</th>
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<tr>
<td>NC Audubon, Walker Golder</td>
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<tr>
<td>New Hanover County Sheriff’s Office, Sergeant Steve Schmidlin</td>
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<td>New Hanover County Planning Department, Dylan McDonnell</td>
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<tr>
<td>NC Coastal Land Trust, Mellissa Dionesotes</td>
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<tr>
<td>Division of Marine Fisheries</td>
<td>No</td>
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<tr>
<td>Division of Parks and Recreation – Carolina Beach State Park, Chris Helms</td>
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<td>Natural Heritage Program, Judith Ratcliffe</td>
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<td>UNCW Center for Marine Science, Martin Posey</td>
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<td>Town of Wrightsville Beach Administration</td>
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<th>Community Members and Community Organizations Members</th>
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<tr>
<td>Neal Andrew</td>
<td>Yes</td>
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<tr>
<td>Thomas Carter</td>
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<td>Dr. Lynn Leonard</td>
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<td>Dr. Zachary Long</td>
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<td>Masonboro.org, Richard Johnson</td>
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<td>Haywood Newkirk</td>
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<td>William Raney</td>
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<td>Pat Rittenmeyer</td>
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<td>Sam Romano</td>
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<td>Surfrider, Cape Fear</td>
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<td>Ted Wilgis</td>
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<td>Martin Willard</td>
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<th>Others Present</th>
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<tr>
<td>Hope Sutton, DCM/NCCR &amp; NCNERR Stewardship Coordinator &amp; Southern Sites Manager</td>
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<tr>
<td>Elizabeth Colhoun, DCM/NCCR &amp; NCNERR Stewardship Specialist</td>
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<td>Christy Simmons, DCM Public Information Officer</td>
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Welcome – Hope Sutton

The site manager welcomed the committee to the Fall 2020 meeting, reviewed the agenda, and called roll. A brief introduction to the web meeting platform was provided by Christy Simmons, DCM Public Information Officer.

Reserve-wide Administrative Update – Hope Sutton

The Reserve-wide Update, which now includes a range of reserve activities 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.

Site Update and Old Business – Hope Sutton

• General site conditions
  o The site manager reported that conditions and activities at the site during the summer and fall of 2020 were not unusual and that, anecdotally, visitation on weekdays appears to have increased during the pandemic perhaps with more people working at home and having more flexibility, as well as a desire to get out and do activities that allow for social distancing. The exception to this increased visitor use was the period during which the upland portions of the site were closed from April 3 through May 9 to support state and local efforts to reduce the spread of Covid-19. During this period and throughout the stay-at-home period of the Governor’s emergency declarations, visitation was lower. An infant dwarf sperm whale stranded on September 13 and the Marine Mammal Stranding team conducted a necropsy on September 14. This is the third deep ocean whale to strand on the island in the past few years. The others were a juvenile Sei whale (January 2019) in and an adult male Gervais’ beaked whale (October 2018).
  o Research activities have continued largely uninterrupted with the exception of the water quality station in Research Creek. The deployment structure failed and needs to be reinstalled. Staff have been working to find a marine contractor to do the installation but due to the construction climate in the area following several years of storm damage to waterfront infrastructure, response to inquiries has been limited.

• Seasonal activities
  o Sea turtles – Forty-three sea turtle nests were identified and protected on Masonboro Island during the 2020 nesting season (38 loggerhead and five green sea turtle); this is higher than average but lower than the number of nests in 2019. Seven nests were lost to Hurricane Isais and one was lost to a high tide during September. Overall hatch success was approximately 64%, somewhat higher than the state average. Unfortunately, we were not able to have students or community volunteers work with us this season due to Covid-19 restrictions.
  o Shorebirds – Predator management was conducted in March and October to benefit nesting shorebirds, primarily the American oystercatcher (AMOY). Throughout the nesting season, 39 pairs of AMOY were monitored. These pairs produced 49 nested which resulted in a total of 7 fledglings, for a fecundity of 0.18 fledglings per pair. This is well below the fecundity goal to support population increase is 0.5 fledglings per pair. The cause of nest failure was not clear for the majority of the nests, although predation was indicated for more than half of the nests lost and an early season tropical storm resulted in 5 nest failures. The Reserve
continues to work with Audubon staff to band adult and fledgling AMOY and to support regional survey efforts such as the International Shorebird Survey and the Tri-annual American Oystercatcher Census. Mr. Andrew and Mr. Johnson asked for more details about predation management operations conducted to support nesting shorebirds. Coyotes have been the main predator of concern during the past two seasons. The Reserve continues to contract with a predation abatement specialist who uses approved trapping methods to address these concerns.

- **Diamondback Terrapins** – The annual Terrapin Tally was not held due to Covid-19 concerns. We are, however, planning for the project to be held in 2021, with expansion to up to ten additional sites. Working with the NC Wildlife Resources Commission, we are meeting with various partners to develop a model that uses local coordinators for each of the new sites to assist with route development and recruitment and management of local volunteers. If successful, this project, begun at the Masonboro Island Reserve, will collect population data at sites from the SC border through Cape Lookout. The other news related to diamondback terrapins is that the Division of Marine Fisheries adopted two diamondback terrapin management areas where blue crab pots will be required to be outfitted with excluder devices to reduce diamondback terrapin bycatch. The Masonboro Island Reserve is entirely included within the Masonboro Island Diamondback Terrapin Management Area. These management measures take effect early in 2021. Research conducted at the site, including data from the Terrapin Tally and several research projects conducted by Amanda Williard, were included as part of the justification for implementing this new management approach. Mr. Romano shared information about a modified crab pot design he is working with Amanda Williard to test.

- **Fourth of July debrief**

  - With the State still under an Emergency Declaration in the weeks leading up to the Fourth of July, it was challenging to determine how best to prepare for the holiday. The decision was made to prepare for the possibility of a large gathering, similar to recent years, and to put additional effort into communications to promote safety of visitors by encouraging community responsibility for adherence to social distancing and alternate locations for holiday celebrations. On the Fourth, less than 200 visitors were present in the area that typically holds crowds of 1500 or more. The New Hanover County Sheriff’s Office again acted as the lead enforcement agency on the site and surrounding waters and the reserve contracted supplemental officers for a total cost of $6480. Law enforcement and emergency response activities minimal and included no medical assists, citations, or arrests. Mr. Johnson reported that Masonboro.org was present but hauled away a very small amount of debris, noting that a refrigerated was recovered and offering to support derelict vessel removal. The site manager explained that the NC Wildlife Resources Commission had recently received legal authorization to remove abandoned and derelict vessels from State waters and that the Reserve staff would be working closely with this agency to address vessels at the Masonboro Island Reserve in the coming year (see new business item below).

- **Sand placement activities**

  - The Army Corps of Engineers (Corps) will again be using the ocean beach on Masonboro Island between the Upper Johns Creek area and the south end of the island for a dredge spoil disposal project this winter in a continuation of the maintenance project started last winter. Approximately 135,000 cubic yards of beach quality sand was set to be placed along a 3000’ linear reach of the beach, but only approximately one-third of the material was able
to be placed before the end of the placement window. Quantities for this year’s placement have yet to be determined. The State Property Office, in coordination with the reserve, gave permission for one-time access for this operation. The reserve has continued to work with a group of researchers from UNCW to conduct pre- and post-placement monitoring activities to provide for better understanding of the potential benefits and concerns associated with this activity. Monitoring will include high resolution imagery, sediment cores, elevation transects, invertebrate sampling in the surf zone, and shorebird monitoring. The project is anticipated to begin soon after the Christmas holiday. The project must be completed by March 15 per agreement between the Corps, the U.S. Fish and Wildlife Service, the N.C. Wildlife Resources Commission, and the reserve.

New Business – Hope Sutton

- **Marine debris project**
  - The reserve has been working collaboratively with the NC Coastal Federation (NCCF) to complete a marine debris removal project along the coast that has included several of the reserve sites, including the Masonboro Island Reserve. Funding for this large-scale collection of marine debris has come from the NOAA Marine Debris Program, National Fish and Wildlife Foundation– Hurricane Response Marine Debris Removal Fund, USDA NRCS Emergency Watershed Protection Program, and from state appropriations. The crew working in this area began work on August 17 and completed its effort on November 13. This incredible team removed 52.13 tons of debris during 66 days of work. Items removed included dock sections, pilings, and a variety of other medium to large marine debris items generated over the past few storm seasons. Several abandoned vessels (ADVs) left from the past three storms still need to be addressed in the coming months — efforts are underway to utilize funds from both the NC General Assembly through the Wildlife Resources Commission and the marine debris grants to do this work. The WRC recently was granted the authority to address ADVs and is working out their decision making and implementation processes. The reserve will coordinate closely with the WRC and the NCCF complete these efforts.

- **Pandemic friendly public outreach**
  - Since the start of the Covid-19 pandemic, the reserve has not held any in person outreach activities. We have continued with electronic outreach communications such as newsletters and social media and conducted several campaigns through the summer season, including one that featured a different researcher working at the site each day for a week and ongoing threads such as “Turtle Tuesdays.” As the situation has continued to restrict activities, we have been looking for ways to connect with our visitor and volunteer communities remotely. We have four story maps that will be launched during the winter and spring to share aspects of the site with visitors from a distance. These include: a virtual tour that displays and discussed a variety of site features and activities, a recreation focused story that highlights the variety of recreational activities occurring at the site and connects potential visitors with information and resources such as tide charts, camping guidance, and paddling maps, a general bird information and identification tool, and a story map focused on our efforts to protect and study American oystercatchers at the site. Two seasonal staff whose intended field activities were reduced by Covid protocols created these items during their office hours. We are also using and encouraging visitors to use the iNaturalist app to document natural history of the sites. This smart phone application allows users to collect
images and geospatial data for any plants and animals seen on the site. These records then are verified by experts and added to the database related to the “Masonboro Island Reserve project.” Finally, as mentioned previously, the Terrapin Tally will be completely remotely conducted this season. The topic of outreach led to additional conversation related to special events, with Mr. Newkirk asking about the possibility of surfing events to occur on the site. After brief discussion about the details that might be part of an event of this type, the site manager reminded the committee members that one of the new proposed rules is to allow for a special authorization process. This rule does not include a mechanism for activities on site to pay a fee as the Reserve general statutes do not include this language.

- **Permit hunt program**
  - The Reserve is pursuing working with the Wildlife Resources Commission to include the Masonboro Island Reserve in the permit hunting program. This change would allow the Reserve to work with the WRC to customize the regulations around hunting to best suit site conditions and serve both management and adjacent community concerns such as visitor conflicts. It would result in the WRC including the site in the 2021-22 Hunting Regulations Digest where information about the sites and would include the requirement to obtain a permit before hunting and to report take. For the Masonboro Island Reserve, inclusion in the permit hunt program would help Reserve staff better manage potential visitor conflicts and better understand what types and levels of hunting are occurring at the site. The Reserve is interested in gathering any input from committee members regarding this approach.
    - Committee members expressed a variety of opinions about the idea of a permit hunt approach at the Masonboro Island Reserve. Some members suggested that this would be a good way to continue to allow for this traditional use while reducing potential conflicts with other users. Some discussion about the types of firearms occurred with members stating that shot guns, used most frequently for duck hunting, are not a danger to homeowners across the Intracoastal Waterway. These members are concerned about additional limitations on this traditional use. The site manager explained that the concerns expressed by adjacent property owners came from an increase in deer hunting in recent years in which dogs and rifles are being used to hunt deer on the dredge spoil islands directly across the ICWW from homes.

- **Member selection process**
  - Some of the Reserve’s Local Advisory Committees have members whose terms have expired, so we will be preparing to hold a member application and selection process during the late spring or early summer of 2021. We wanted to provide this advance notice to committee members since the application period will be announced to the public in conjunction with the press release for the spring meetings. As per the Operating Procedures, individual and organizational community members are allowed to serve consecutive terms but must reapply to be considered. Current members who will need to reapply in order to be considered for continued service will be contacted directly by the respective site managers closer to the announcement of the application period. (Neal, Pat, Haywood, Martin, Sam, Masonboro.org, and Surfrider)

- **FOR internship award**
  - The reserve’s friends group, Friends of the Reserve, has decided to work with the reserve to create and fund an undergraduate internship award. The focus of this program will be to
promote diversity, equity, and inclusion by awarding students from historically underrepresented groups, who show academic promise and have financial need, with a travel/housing stipend and a paid internship. The first award will be given for the summer of 2021 and the student will work in association with activities at the Masonboro Island Reserve. The board members will be doing a press campaign to encourage donations to the award program in the near future. Although 2021 is planned to include a single internship, it is hoped that this program will grow and expand over time. Ms. Leonard asked whether the applicants would be required to show proof of financial need. The site manager responded by explaining that the applicants would be asked to include their latest financial aid assessment document, the document used to determine eligibility for federal programs such as pell grants and work study.

**Roundtable**
- Mr. Raney asked about the status of the acquisition process for the inholding that is being donated by the owners. The site manager responded that it is with the State Property Office and going through the required legal review and acquisition steps.
- Mr. Newkirk asked about the potential for vegetation restoration in the Johns Creek area where there has been significant overwash with recent storms. The site manager responded that habitat restoration and enhancement projects intended to increase resilience are allowed and even supported by the National Estuarine Research Reserve.
- Dr. Posey reported on some of the findings of the NERR Science Collaborative funded project to examine the effects of shellfish aquaculture. The project resulted in a 3-page report summarizing key findings, including some unexpected findings resulting from the passage of Hurricane Florence during the study period. The report can be accessed at: [https://nerrsciencecollaborative.org/media/resources/Darrow16_Final_FactSheet.pdf](https://nerrsciencecollaborative.org/media/resources/Darrow16_Final_FactSheet.pdf)
- Mr. Wilgis reported on progress related to the derelict and abandoned vessel removal project the NC Coastal Federation is managing with funds obtained by the Division of Coastal Management. Communication with vessel owners to obtain the necessary permissions is underway and the removals are expected to begin in March 2021.
- Dr. Long reported that he is working with USFWS to pick up efforts to monitor and treat beach vitex.

**Public comments**
- None

**Action Items**
- Reserve staff will contact committee members during the winter to establish a date for the spring meeting.
COVID-19 Update
Below is a summary of how the Reserve is working during the COVID-19 pandemic.

- Staff continue to telework and all offices remain closed to visitors.
- All Reserve sites are open to visitors. The Reserve will continue to closely monitor state and local COVID-19 guidelines and directives and encourage Reserve visitors to comply with these measures to protect themselves and their communities; current guidelines and directives are located here.
- All in-person trainings and public programming remain canceled; education and training staff are conducting virtual programming as well as assisting partners with virtual meeting support.
- Research and stewardship work is continuing at the sites, although activities are more limited as they must meet social distancing requirements.

Hurricane Isaias Reserve Impacts

- All Reserve sites remained open during and following Hurricane Isaias.
- Four vessels were displaced during Isaias on the Masonboro Island Reserve; three of the displaced vessels were removed by the owners/contractors.
- A water quality monitoring sonde and its piling infrastructure at the Zeke’s Island Reserve disappeared in the storm. Staff are investigating replacement options.
- All of the trails at the Bald Head Woods Reserve were littered with downed trees and limbs. Thank you to The Nature Conservancy staff for assisting Reserve staff with the trail clean-up.

Periodic Rules Review
The Rules Review Commission approved the requested readoption timeline of November 30, 2021 for Coastal Reserve rules (15A NCAC 07O). At its September 2020 meeting, the N.C. Coastal Resources Commission provided unanimous support of the Division’s proposed amendments for re-adoption of 15A NCAC 07O to inform its recommendation to the Department. The proposed amendments reflected the input previously provided by the local advisory committees. Staff are preparing the required fiscal analysis as part of the rule-making process. 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 final revised management plan for the N.C. National Estuarine Research Reserve for 2020-2025 is located here on the Reserve website. NOAA will publish notification of the plan’s availability in the federal register shortly.

N.C. NERR Federal Program Evaluation
NOAA conducts periodic evaluations of coastal management programs and National Estuarine Research Reserves as required by the federal Coastal Zone Management Act. The virtual site visit for NOAA’s evaluation of the N.C. coastal management program and N.C. National Estuarine Research Reserve took place the week of October 5 with a public meeting for both programs held on October 7. Findings from the evaluations are anticipated in early 2021.

Federal Budget
The budget table below is a summary of the current status of the federal budget* for fiscal years 17, 18, 19, and 20 as it relates to the Coastal Reserve.

November 13, 2020
### Program Highlights

- **Living on a Barrier Island Workshop:** The Coastal Training Program hosted a virtual workshop in September for real estate professionals to learn the ecology and geology of barrier islands and the rules and policies that govern development. The workshop covered updates to the National Flood Insurance Program, hurricane-resistant construction and wind insurance incentives, and using native plantings for the coastal landscape.

- **Drones in the Coastal Zone Virtual Workshop Series:** Reserve staff assisted in organizing and facilitating the Drones in the Coastal Zone virtual workshop series hosted by SECOORA in October. The series covered the use of unoccupied aircraft systems in ecosystem and fisheries management in the Southeast and U.S. Caribbean, including governmental policy and procedures, mission planning, data management, demonstrations on emerging drone technologies, and more. Session recordings are available to view on this [webpage](#) and a workshop report will be available soon.

- The Reserve was selected to receive funding from the DCM Public Beach and Coastal Waterfront Access Program for the replacement of decking, structural joists, and pilings for the **Currituck Banks Reserve boardwalk** which ends at a viewpoint of the Currituck Sound. Work will take place in 2021.

### Staffing News

- Congratulations to Reserve staff award winners!
  - Whitney Jenkins (Coastal Training Program Coordinator) and Paula Gillikin (Central Sites Manager) each received 2020 Pelican Awards from the NC Coastal Federation in a virtual awards program on August 6. Both were recognized in the “Coastwide Winners” category – Paula received an award for “Exceptional Leadership and Facilitation of Coastal Stewardship” and Whitney for “Exemplary Commitment to Coastal Resource Training and Collaboration.”
  - Brandon Puckett, Research Coordinator, received the Division of Coastal Management’s 2020 Distinguished Service Award at a virtual Department of Environmental Quality awards program on November 10. Brandon was recognized for his scope of high quality and impactful work, including his work on living shorelines and

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### Federal Budget Lines

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- Federal Fiscal Year 21: The President’s budget request does not include funding for the NERRS Operations and PAC, or the CZM Grants budget lines. The House funding level for NERRS Operations for FY21 is $28.25M and the Senate funding level is $29M.

- 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.
leadership in the multi-component Beaufort Inlet Dredging Monitoring Project to inform the state’s response to the US Army Corps of Engineers’ proposals for summertime dredging of federal shipping channels at NC State Ports.

- **Duncan Anderson** joined the Reserve as a temporary GIS Specialist. Duncan is a recent graduate of NC State University where he received his B.S. in Environmental Technology and Management. He is working to organize and further the program’s mapping and cataloging spatial information from all 10 Reserve sites.

- **Marae Lindquist** is our first National Estuarine Research Reserve System Margaret A. Davidson Fellow. Marae is a PhD student from UNC-W Department of Biology and Marine Biology. She will be researching 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). This research will address management priorities for the Reserve and will provide important information to inform management of habitats that benefit sensitive species. The two-year fellowship began in September; click [here](#) to learn more about Marae’s work and the fellowship.

- **Grace Roskar** will join the Reserve November 30 as the temporary Natural Resources Resilience Specialist. Grace has a B.S. in marine science and biology from the University of Miami and a M.S. in biology from Florida Atlantic University’s Harbor Branch Oceanographic Institute. Grace recently completed a Sea Grant Knauss Marine Policy Fellowship, during which she worked for NOAA Fisheries Office of Science and Technology as a habitat science specialist. Grace will be working with staff on the Rachel Carson Reserve resilience plan, funded by the National Fish and Wildlife Foundation’s Emergency Coastal Resilience Fund.

- **Jason Brown**, Reserve Northern Sites Manager, accepted another job within DEQ in Raleigh and his last day with the Reserve was September 4. **Steve Jarvis** re-joined the Reserve as a part-time employee to help manage the Currituck Banks, Kitty Hawk Woods, and Buxton Woods Reserve. Interviews were conducted to fill the vacant position November 5-6.

*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 cooperative agreement that DCM receives provides funding for Reserve staffing, state site operations, and administrative support.*