

APPENDIX R: STEWARDSHIP POLICIES

Stewardship of the NCNERR is governed by use requirements in the North Carolina Administrative Code (Appendix G) and county and municipal regulations (Appendix I). Yet, a number of site-specific policies are needed to address the diversity of site conditions and local uses. These policies were developed with the assistance of component local advisory committees and ERD. These policies will be reviewed as part of Objective 4.1, Activity 1 of this management plan and changes will be discussed at component local advisory committee meetings as appropriate.

Recreation

Responsible use of the Reserve by recreational visitors protects the Reserve habitats and organisms and enhances the user experience for subsequent visitors.

Policy 1: Traditional recreational uses of each component shall be allowed to continue as long as they do not disrupt the natural integrity of the component or any research or educational activities.

The four components have long been used by area residents and visitors for swimming, fishing, hunting, nature study, and hiking. These traditional uses have created a strong local pride in and attachment to the natural and aesthetic values of each component. Recreation can be compatible with research and education when properly managed. Allowing recreation to continue promotes full use of the Reserve's resources and meets the legislative requirements for the program. Protection of the components and research and education programs take precedence over recreational activities if such activities are deemed to be impacting the natural integrity of the Reserve or if conflicts arise between these uses.

Policy 2: Users of the Reserve shall not disturb or remove any live animals (except for fish, shellfish, game animals, furbearers, or waterfowl per fishing and hunting policies) or vegetation at any component unless it is part of an approved research or educational project and all necessary permits have been obtained.

Removal and destruction of vegetation can lead to serious long-term damage to the ecosystems found in the Reserve by causing erosion/sedimentation and by decreasing species richness. Disturbing nesting birds and other animals can interfere with their natural habits, potentially causing nesting failure or departure of the animals from the Reserve. Any interpretive trails established within the Reserve will be compatible with this policy of respecting the natural integrity of the components.

Policy 3: Pets must be under control at all times.

Pets on Reserve sites can damage and destroy habitat and disturb wildlife if not properly controlled. In addition, pet wastes can carry potentially damaging bacteria. Pet owners who choose to recreate on the NCNERR must keep their animals under control at all times and collect and properly dispose of pet wastes. Owners are subject to the relevant county and municipal rules regarding leashing and appropriate disposal of wastes.

Policy 4: Camping or fires in designated areas are only allowed by written or posted permission from DCM.

Restriction of camping and fires protects the Reserve's habitats from disturbance and destruction. Camping at Zeke's Island, Rachel Carson and Currituck Banks will be permitted only for research that requires overnight stays for observations or data gathering; written permission must be obtained from the Reserve. Primitive camping on Masonboro Island will be allowed in designated areas according to rules posted on-site.

Policy 5: All visitors must pack out their own trash.

Debris and litter left behind by visitors can negatively impact the NCNERR habitats and organisms. The primary purposes of the Reserve are research and education and as such, recreational facilities such as trashcans and restrooms are not available at the components. Thus, it is the responsibility of visitors to pack out all trash and refuse.

Off-Road Vehicles/Access

Policy 1: No power-driven vehicles shall be used on the uplands and marsh sediments within the Rachel Carson or Masonboro Island components except during emergency, enforcement, management, research, or dredging operations. Motorized boat use within these components, consistent with N.C. Wildlife Resources Commission regulations, is not affected by this policy.

Unauthorized power vehicles (*e.g.*, motorcycles and ORVs) have created problems on the components by destroying dunes, trampling vegetation, and disturbing animals. The Town of Beaufort has an ordinance that prohibits motor vehicles on the Rachel Carson islands.

Policy 2: Reserve operation at the Currituck Banks component shall not reduce current levels and rights of public access to properties located between the component and the Virginia line.

Currently, paved road access north of Corolla terminates at an ocean beach access ramp located within the Reserve component. Landowners, local residents and visitors depend upon this ramp to route them to the beach for access to lands located between the Reserve and the state line. County ORV regulations limit this access to the ocean beach seaward of the foredunes. Federal regulations restrict access through the Back Bay National Wildlife Refuge (VA) to certain permanent residents of Currituck Banks. Thus, the ramp and beach within the Reserve property are vital for public access to the northern banks.

When the beach is impassible due to high water levels, access across the component for property owners to the north will be extended to include back dune areas. The road in the adjacent Ocean Hills development to the south will also be part of this "high water" route. Dominion Power maintains a MOU with DCM for cooperative maintenance of a permanent easement granted to Dominion Power for an electric distribution right-of-way to service the northern banks (Appendix J). The easement is located in the back dune areas of the Currituck Banks component and its location must be considered when delineating "the high water" route.

If at some point in the future driving along the ocean beach conflicts with Reserve goals and objectives (*e.g.*, environmental issues, recreational beach uses, or research/education uses), it

will be the responsibility of the state to make available replacement upland access and to do so prior to any restriction of current beach driving. Any such action will be taken only after full consultation and coordination with the local advisory committee, Currituck County, NOAA, adjacent landowners, and current landowners between the component and the state line.

Access across the component shall be for the purpose of providing a vehicular route to and from properties located between Corolla and the Virginia state line. At no time shall the component be used to provide through access to Virginia (except for enforcement, emergencies, and the currently permitted beach driving access to the north allowed to permanent residents). Should improved access to properties located between the Reserve site and Virginia ever be provided from the north, access across the component may be terminated. Improvement of internal access within those subdivisions north of the component shall not alter provision of access across the Reserve site.

Policy 3: Off-road-vehicles at the Zeke's Island and Currituck Banks shall normally operate only on the flat, sandy beach area: driving over dunes and disturbing vegetation is prohibited. Vehicles using the Currituck Banks during flooded beach conditions shall follow interdune flats and avoid vegetated areas. Drivers shall avoid posted areas of nesting birds and observe a 15 miles per hour speed limit.

The destruction of plants and sand dunes accelerates erosion of barrier beaches and diminishes the Reserve's natural productivity and habitat diversity. The beach and dune areas are important nesting areas for various bird species that cannot find these natural habitats elsewhere along the rapidly developing coast. The Reserve staff will assist the state park ranger in the delimitation of waterbird feeding and nesting sites near New Inlet within the Zeke's Island component.

Policy 4: At the Zeke's Island component, power-driven, off-road vehicles (other than boats, emergency vehicles, and law enforcement vehicles) are only allowed in designated areas on the barrier spit. ORV use at the Zeke's Island component is managed by the N.C. Division of Parks and Recreation (DPR) and is restricted to the schedule listed in Table 1 below. A permit must be obtained and the required fee paid to the DPR prior to using ORVs at the component.

The barrier spit is the only portion of the Zeke's Island component that is easily accessible to users of off-road vehicles (ORVs). This portion of the component overlaps with DPR's Fort Fisher State Recreation Area and DPR manages the ORV use per a long-standing MOU with DCM (Appendix J). Confining ORVs to this area does not diminish other uses within the component. The islands and marshes remain protected, while traditional users, such as fishermen, retain access to the inlet and sound waters. Special areas for bird breeding and wintering will be posted to avoid impacts from vehicles and foot traffic.

September 1 – September 14	6:00 am – 8:00 pm
September 15 – March 15	24 hours
March 16 – March 31	8:00 am – 7:00 pm
April 1– May 31	8:00 am – 8:00 pm
June 1 – August 31	6:00 am – 9:00 pm

Table 1. Schedule for permitted ORV use at the Zeke’s Island component.

ORVs permitted on Masonboro Island (for research, enforcement, or emergency purposes only) will travel in the intertidal beach zone during this time period.

The beaches of Fort Fisher (Zeke’s Island) and Masonboro Island are nesting grounds for sea turtles, primarily Atlantic Loggerheads that come ashore to lay eggs at high tides during nesting season. White lights from vehicles or buildings keep the turtles from coming ashore and nesting. Lights also can interfere with turtle hatchlings’ journey to the ocean. Tire tracks on the beach can also impede or misdirect the hatchlings.

Fishing and Hunting

Policy 1: Fishing, shellfishing and hunting may occur on the Reserve within the limits of local and state laws. Hydraulic dredging or "clam kicking" is prohibited within the Reserve.

Sport and commercial fishing and hunting will be allowed subject to existing regulations on bag limits, seasons and gear. Collection of all migratory birds requires a U.S. Fish and Wildlife permit and a WRC license. At the Currituck Banks component, traditional hunting and fishing in the sound waters and commercial fishing along the ocean will be allowed per county, WRC, and DMF regulations.

In order to maintain ecosystem diversity and protect the natural integrity of the sites, hunting and trapping of certain species on upland portions of a given component may be necessary. If these rights do not exist currently, they may be extended on a case-by-case basis after consultation with Reserve staff, the local advisory committee, and the WRC.

Hydraulic dredging to harvest shellfish destroys underwater habitats by the severe disturbance of estuarine bottoms and vegetation and by extensive sedimentation of the water column. Such activity is expressly prohibited in the Reserve according to DMF regulations (NCAC T15 3B .0900 and .1000).

Policy 2: Certain areas of the Reserve may be closed to commercial and recreational fishing and shellfishing to provide undisturbed sites for research and fisheries reproduction.

Portions of the components may be closed to fishing and shellfishing once research better documents the Reserve's submerged habitats and species that they support. Such closings would benefit commercial fishing by protecting nursery and spawning areas. Similarly, areas may be

closed for research projects if undisturbed waters are required. Authority to close certain areas of the Reserve rests with DMF. When Reserve staff and the local advisory committee(s) find such a closing warranted, the DCM will petition the DMF for such action in accordance with the existing regulations (*e.g.*, NCAC T15 3B .011). Also, primary nursery areas within the Rachel Carson, Masonboro Island, and Zeke's Island component are protected from bottom-disturbing fishing gear by DMF regulations.

Policy 3: Hunting is permitted in the Reserve according to local, state or federal wildlife regulations. More stringent rules may be pursued if hunting conflicts with research and education uses or threatens the Reserve's wildlife populations. Target shooting is not allowed.

Existing WRC and U.S. Fish and Wildlife Service regulations set season, bag limits, and limits on methods of taking for game species found at Reserve components (*e.g.*, migratory waterfowl, marsh hens, doves, deer, and other game). These regulations, properly enforced, are adequate to maintain wildlife populations in the Reserve. If the Reserve staff and local advisory committees deem more stringent regulations to be necessary, the DCM will petition the WRC and the Secretary of DENR to adopt appropriate restrictions in accordance with departmental procedures. The Currituck Banks component, and other components if deemed appropriate, is registered with the State's Registered Lands program through the Wildlife Resources Commission to allow more effective enforcement of hunting regulations and protection of the Reserve.

Target shooting is prohibited within the Reserve components because it is not formally regulated. Bullets may carry for great distances and cause severe injury or death posing a hazard to staff and research, educational, and recreational users as well as creating a liability hazard for the state. Past problems with target shooting at the components have resulted in damage to vegetation and signs and improper disposal of target materials.

Disposal of Dredge Material – Resource Manipulation Plan

Policy 1: Dredge material disposal as part of U.S. Army Corps of Engineers projects shall be allowed to continue at the Rachel Carson and Masonboro Island components, but only within existing disposal areas of designated easements. All operations must comply with the North Carolina Coastal Area Management Act (G.S. 113A-100 et seq.), Dredge and Fill Act (G.S. 113-229), Section 404 of the Federal Water Pollution Control Act (33 USC 1251 et seq.), and the Use Requirements of the N.C. Coastal Reserve (NCAC T15A: 070). Deposition of dredge material within the Corps easement by private contractors will be allowed only if approved by the Corps, the DCM, and the State Property Office and the contractors have received appropriate permits from the Division of Coastal Management. Disposal sites must be located, designated, and managed to prevent sedimentation of marshes, intertidal flats and submerged lands, and to minimize impacts to ground nesting birds and sea turtle nesting areas. All dredge material shall be placed in a manner consistent the best technology available for prevention of mosquito and other disease vector breeding. All dredging proposals shall be reviewed by the Reserve staff, local advisory committees, and any other interested parties.

The U.S. Army Corps of Engineers (COE) retains perpetual easements along Taylor's Creek at Rachel Carson and along the Atlantic Intracoastal Waterway (AIWW) at Masonboro Island. Periodic deposition of dredge material has maintained the uplands of the Carrot Island, Town Marsh, and certain portions of Masonboro Island in early stages of plant succession that provide a valuable nesting habitat for many species of birds. Dredge material deposition on the ocean beach at the Masonboro Island component will not affect the estuary (though there may be impacts on surf zone fauna) as the dredge material will be washed back into the natural longshore transport of sediments. This addition of sediment will, to some degree, mitigate the erosion caused by sediment loss to the jetty on the north end of the island. Deposition at Rachel Carson and along the waterway portion of Masonboro Island shall be in diked areas within the existing easements.

Policy 2: Dredge material deposition shall not occur during the critical nesting times of sea turtle and ground- nesting shorebirds (May - November). Populations of seabeach amaranth shall also be protected from direct deposition and from vehicular impacts of disposal operations. If dredging is unavoidable during that time period, it shall be contingent upon prior and concurrent monitoring for nesting activity and presence of seabeach amaranth.

The courting and nesting of shorebirds at the Rachel Carson and Masonboro Island components extends from the end of April through September. This roughly coincides with the sea turtle nesting season, which extends from May 1 - November 15. Thus, deposition of dredge material during the spring and summer months plus the associated activities of bulldozers and other vehicles on the beaches can negatively impact these species. Seabeach amaranth, a federal and state threatened species, occurs on the upper beaches and foredunes of Masonboro Island and deposition of material and associated vehicular activity may disrupt species presence and habitat. Seasonal monitoring of sea turtles and seabeach amaranth shall be a priority activity for the Reserve.

Habitat Restoration

Policy 1: Projects to restore estuarine and upland habitats within the Reserve will be reviewed by state and federal Reserve staff, other governmental agencies, local advisory committees, and any other interested parties. Priority shall be given to areas impacted by visitor use, dredge material deposition, and invasive species.

Given the diversity of habitats and uses within the various components, occasional restoration projects may be necessary. For example, dredge material islands along the waterway side of Masonboro Island represent former salt marshes that have been filled. Portions of these islands located outside of the Corps easement are available for mitigation projects where marsh could be restored and, thus, increase the Reserve estuarine area. Likewise, areas within components that have experienced damage from traditional use or that have been altered by the presence of invasive species may require remedial action. Restoration projects present opportunities for long-term monitoring of structure and function within the restored habitat.

Feral Horses

Policy 1: The state of North Carolina is the lawful owner of the feral horses on the Rachel Carson component. However, the state does not own the horses that roam the Currituck Banks component.

The state Attorney General's Office has determined that the horses found on the islands composing the Rachel Carson component are owned solely by the state. The horses on Currituck Banks roam many properties and, thus, are not claimed by the state.

Policy 2: Scientific studies of population structure, feeding habits, and impacts on Reserve habitats plus information from analogous management programs of feral horses shall be used to manage the horses at the Rachel Carson component. Such information will also be used to consult with key parties concerning feral horse management on the Currituck Banks.

Information gathered from studies of feral horses on the components plus additional data from other populations (*e.g.*, at Cape Lookout National Seashore and Assateague National Seashore) will be used to determine proper management of the horse herds. The primary goal of the North Carolina NERR is to manage the components for research and education. Though the horses are very popular with local residents, the animals represent a management conflict because they are an introduced species that consumes and tramples marsh vegetation vital to estuarine productivity, and their presence, activities, and wastes alter other natural processes. Decisions regarding horse management will be reviewed by DENR, ERD, and members of the local advisory committee as appropriate. Decisions regarding horse management at Currituck Banks will be developed in collaboration with the Currituck Outer Banks Wild Horse Advisory Board, which includes the Corolla Wild Horse Fund, Currituck County, representatives from each of the protected lands utilized by the herd (Reserve and U.S Fish and Wildlife Service), and community members.

Surveillance, Enforcement and Maintenance

Policy 1: The Reserve staff and enforcement personnel from other federal, state and local agencies shall periodically visit each component to identify and investigate possible violations of Reserve regulations. The Reserve also relies on researchers, educators, members of the local advisory committees and other users of the sites to report any problems.

Time and budget limitations keep the DCM and other enforcement agencies from maintaining a continuous presence at each component in the Reserve. Therefore, all users of the Reserve must exercise responsibility for obeying the management policies stated in this plan, for reporting any violations of the policies, and for cooperating with Reserve staff and pertinent enforcement agencies.

Policy 2: The Division of Coastal Management, Division of Marine Fisheries, Division of Parks and Recreation, Wildlife Resources Commission, and local law enforcement agencies shall cooperate in the enforcement of Reserve use standards listed in the North Carolina Administrative Code (see Appendix B) as well as applicable state and local laws and ordinances.

Each component in the North Carolina NERR falls into a number of different, sometimes overlapping jurisdictions involving state and local law enforcement agencies. Such overlap demands strong lines of communication and a strong sense of cooperation on the part of the enforcement agencies. Site managers will maintain regular communication with each of these groups and investigate any rule violations through the appropriate channels.

At Zeke's Island, the DENR has assigned management responsibility for patrol and enforcement of the barrier spit to the DPR (Appendix x). In addition, the New Hanover County Sheriff has jurisdiction throughout the Zeke's Island and Masonboro Island components. The Town of Beaufort Police and Carteret County Sheriff respond to problems at the Rachel Carson component. Currituck Banks is within the jurisdiction of the Currituck County Sheriff, who has a deputy stationed in Corolla. Rangers of the Currituck and Mackay Island National Wildlife Refuge also patrol this component. The WRC has authority to patrol the lands and waters of the entire Reserve for enforcement of their regulations (i.e., hunting and boating) (Appendix x). Likewise, the DMF patrols the components to enforce marine fisheries regulations (Appendix x).

Policy 3: When deemed necessary, the Division of Coastal Management shall enter into cooperative agreements with pertinent law enforcement agencies to clarify enforcement jurisdictions and responsibilities.

Each Reserve component has in the past experienced some difficulty with response to law enforcement calls. This difficulty has arisen largely from a lack of understanding on the part of the enforcement authorities regarding which agency should respond to a given problem. Cooperative agreements will help to clarify each agency's role relative to Reserve management and, thus, coordinate and expedite enforcement of Reserve use standards.