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# MARCH 2022 RESILIENCE STRATEGY REPORT



NC DEPARTMENT OF NATURAL AND CULTURAL RESOURCES (DNCR)

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## Climate Vulnerabilities and Risks

The resilience strategies developed by the NC Department of Natural and Cultural Resources reflect the unique vulnerabilities and risks associated with the resources managed by its divisions. As an agency, DNCR is given primary responsibility for protecting and stewarding the state’s cultural resources, and a shared responsibility with other agencies in protecting and stewarding the state’s natural resources. While these sectors have common vulnerabilities and risks associated with climate change, they also have certain unique concerns addressed by DNCR’s strategies.

North Carolina’s ***cultural resources*** such as state and local historic sites and museums are irreplaceable, making them inherently sensitive to sea level rise and the increasing frequency and severity of heavy precipitation and flooding. Climate stressors and hazards of greatest concern for cultural resources include multi-faceted “water-where-it doesn’t-belong” threats, particularly those posed by tropical cyclones, more frequent and intense heavy precipitation and flooding events, and sea level rise. In specific instances, such as the state archives’ oversight of the destruction of public records, the agency plays a hybrid stewardship management and regulatory role by encouraging public records not under the direct management of the agency to be properly preserved, while maintaining authority over the destruction of those records if they are damaged in a weather-related event. The department acts as a constituent service and regulatory agency to fulfill its duty for “establishment and enforcement of standards for the furtherance of resources, services and programs” to aid the public and private sectors through direct outreach, technical consultation, and constituent-oriented programs to foster private and public stewardship of irreplaceable cultural resources.

North Carolina’s ***natural resources and ecosystems*** are distributed across three physiographic regions, which differ from each other in terms of their most critical climate stressors and their adaptive capacity:

- Western North Carolina hosts a diversity of elevations, precipitation patterns, and geologic formations, and therefore supports a diversity of ecosystems and many endemic species known from nowhere else in the world. Drought, heat, and extreme precipitation could easily shift conditions to regimes that will not support the diversity of life that currently characterizes this region.

- North Carolina’s biggest cities and highways are in the Piedmont. The rivers and streams of the Piedmont region are especially important ecologically, harboring a diversity of aquatic species including some endemic organisms such as the Neuse River Waterdog (*Necturus lewisi*). The presence of rare and endemic fish, mussels, and amphibians in Piedmont rivers indicate places where water quality remains clean enough to support animals that are sensitive to pollution and sedimentation. Water temperature change, sedimentation, and pollution runoff associated with extreme precipitation compound stresses already threatening the aquatic species associated with Piedmont streams and small rivers.
- In the Coastal Plain, the people and natural communities in closest proximity to major rivers, sounds, and the ocean are most vulnerable to flooding from extreme precipitation and sea level rise. Coastal streams, floodplains, and freshwater tidal wetlands are all vulnerable to flooding, saltwater inundation, and invasion of nonnative species. Coastal fringe areas are losing habitat due to erosion, and marine species are responding to changes in coastal water temperatures.

In developing its 2020 resilience strategies, DNCR considered not only how it manages specific assets under its stewardship (such as public lands and facilities, state historic sites and public records), but also the ability of its educational and regulatory programs to encourage broader adoption of best practices regarding climate-based resilience and adaptation among its partners and the public. These programs range from inventories of natural and cultural resources, grant funding to protect important resources, to educational programs aimed at specific constituents (local planners, public records administrators, etc.) and the public at large (through activities at DNCR’s many facilities distributed across the state).

The following chart summarizes DNCR’s progress to date on these strategies.

#	Activity	Status	Target Completion Date
<b><i>Critical Facilities</i></b>			
1	NC State Parks and Recreation – Agency Fleet ZEV/Electric Infrastructure (EO80, Section 7)	Underway	Progress in 2021; ongoing/long-term
2	State Historic Sites – Agency Fleet ZEV/Electric Infrastructure (EO80, Section 7)	Underway	Ongoing/long-term
3	State Historic Sites - Agency Building Utility Consumption Reduction (EO80 Section 8)	Underway	Progress in 2021; ongoing /long-term
4	State Historic Sites – Water Fountain Installation	Complete	2021
5	Battleship NC - Agency Building Utility Consumption Reduction (EO80 Section 8)	Underway	Progress in 2021; ongoing /long-term
6	NC Aquariums - Agency Building Utility Consumption Reduction (EO80 Section 8)	Underway	Progress in 2021; ongoing /long-term

7	NC Aquariums – Teddy Roosevelt Natural Area Biodiversity Surveys	Complete	Completed 2021
8	NC Aquariums – Historic Oregon Inlet Lifesaving Station	Planned	Long-term
9	NC Zoo – Agency Fleet ZEV/Electric Infrastructure (EO80, Section 7)	Underway	Progress in 2021; ongoing /long-term
10	NC Zoo – Zoo-built heat exchanger to reduce propane consumption	Underway	Progress in 2021; ongoing/medium Term
11	NC Zoo – 30% reduction in energy consumption	Underway	Progress in 2021; ongoing annually/long-term
12	NC Zoo – Environmental Steward/EMS certification	Complete	Completed 2021
13	NC Zoo – Waste Reduction	Underway	Progress made in 2021; ongoing/long-term
14	State Library – Waste Reduction	Underway	Progress made in 2021; ongoing/medium term
15	State Library - Agency Building Utility Consumption Reduction (EO80 Section 8)	Underway	Progress in 2021; ongoing /long-term
16	NC Museum of Natural Sciences - CompostNow	Underway	Medium-term
17	NC Capital Projects – Guaranteed Energy Savings Contract – Agency Building Utility Consumption Reduction (EO80 Section 8)	Underway	Long term (more than 2 years)
18	DNCR wide – Agency Fleet ZEV/Electric Infrastructure (EO80, Section 7)	Underway	Ongoing/long-term
19	DNCR-wide – Building Energy Efficiency	Underway	2023
<b><i>Communication Networks &amp; Technical Assistance</i></b>			
1	NC State Parks and Recreation – Grant writing support	Underway	Ongoing; long-term
2	State Parks / Land and Water Stewardship - Public Lands/Open Space Investment in Underserved Communities	Planned	Long-term
3	Division of Land and Water Stewardship/Natural Heritage Program - Natural Heritage Inventory	Underway	Long-term
4	Division of Land and Water Stewardship and State Historic Preservation Office - State Disaster Recovery Task Force	Underway	Medium-term
5	NC Aquariums – Wildlife Monitoring	Underway	Ongoing; long-term
6	State Historic Preservation Office (HPO) and Office of State Archaeology (OSA) - United States Army Corps of	Underway	Medium-term

	Engineers (USACE) South Atlantic Coastal Study At-Risk Cultural Resources Analysis		
7	State Historic Preservation Office (HPO) - Historic architectural Surveys (post-Hurricanes Florence and Michael)	Underway	2023
8	Division of Historical Resources / State Historic Preservation Office (HPO) - Historic Resilience Planning Project for Local Governments	Underway	Long-term
9	Division of Historical Resources / State Historic Preservation Office (HPO) - Hurricanes Florence and Michael Constituent Subgrant Program for Historic Preservation Recovery	Underway	2021-2023
10	Division of Historical Resources / State Historic Preservation Office (HPO) - Constituent consultations and training videos	Underway	Ongoing; long-term
11	Division of Archives and Records, , Office of Archives and History (OAH), Cultural Resources Emergency Support Team (CREST) – Post-storm constituent consultations  Division of Archives & Records, Office of Archives and History (OAH) – CREST Assistances for Tropical Storm Fred in Town of Canton	Underway	Short-term
12	Office of State Archaeology (OSA) - North Carolina Coastal Cemetery Survey (post-Hurricanes Florence and Michael)	Underway	Medium-term
13	Office of State Archaeology (OSA) - North Carolina Shorescape Archaeological Survey	Planned	FY 2022-23
14	Division of Archives & Records – Records Analyst Position	Underway	Position to be filled in 2022
15	State Library – Libraries in Disaster Preparedness	Planned	Long-term
16	DNCR-wide planning	Underway	2023
<b><i>Educational Campaigns</i></b>			
1	NC Zoo – Revamped Investigation Station	Complete	Completed but ongoing
2	NC Zoo – AmeriCorps positions to meet environmental education needs	Complete	Completed but ongoing
3	NC Aquariums Public Programs	Complete	Completed but ongoing

4	NC Museum of Art Minicourses	Complete	Completed but ongoing
5	NC Museum of Natural Sciences (NCMNS) climate education at public events	Complete	Completed but ongoing
6	NCMNS – Lunchtime Discovery Series/Sustainability Lunches/Sustainability Lunch Bunches	Complete	Completed but ongoing
7	NCMNS – Environmental Education Center at Prairie Ridge	Planned	Long-term
8	NCMNS – Teen Science Ambassadors	Underway	Ongoing
9	NCMNS – Love Nature: The Biophilia Podcast	Complete	Complete but ongoing
10	NCMNS – Research and Collections staff published several papers on climate change	Complete	Completed but ongoing
11	Division of Archives & Records – Training on identification and protection of essential government records	Underway	Ongoing
12	Division of Archives & Records – Cultural Resources Emergency Support Team (CREST)	Complete	Completed 9/15/21
13	DNCR-wide – PBS-NC “A State of Change” Series on Climate Change	Underway	2021-22
14	DNCR-wide – Climate Change Educational Signage at DNCR sites	Underway	2023
15	State Historic Preservation Office – Resilience and Disaster Planning Training for Local Historic Preservation Commissions (in collaboration with the National Park Service and National Alliance of Historic Preservation Commissions)	Planned	June 2022
<b>Mission Critical Projects</b>			
1	NC State Parks and Recreation – prescribed fire as method to increase ecosystem resilience	Underway	Ongoing and long-term
2	NC State Parks and Recreation – land restoration and management	Underway	Ongoing and long-term
3	Division of Land and Water Stewardship/North Carolina Land and Water Fund – 2021 Grant Cycle Projects	Complete	Completed for 2021 grant cycle; ongoing
4	Division of Land and Water Stewardship/Natural Heritage Program - Climate Risk Assessment and Resilience Plan - Ecosystems Chapter	Complete	June 2020; but ongoing annual work by NHP field biologists
5	Division of Land and Water Stewardship/Natural Heritage Program and Land and Water Fund - Natural and Working Lands Action Plan	Completed	June 2020, ongoing work with stakeholders

6	Division of Land and Water Stewardship/NC Land and Water Fund – Flood Risk Reduction Committee & Grants	Underway	2022
7	Battleship USS North Carolina – Living with Water	Underway	Medium-term
8	State Historic Preservation Office (HPO) - Statewide Historic Preservation Plan Update	Underway	2023
9	Division of State Historic Sites & Division of Historical Resources / State Historic Preservation Office (HPO) and Office of State Archaeology - Brunswick Town / Fort Anderson (BTFA) Wave Attenuator Project	Underway	Completion 2022-23
10	Office of Archives and History (Division of State Historic Sites , Battleship North Carolina Memorial, Tryon Palace, Division of Historical Resources / State Historic Preservation Office (HPO) and Office of State Archaeology) – Federally-funded resiliency projects for Office of Archives and History properties	Proposed	TBD
11	DNCR-wide – Climate change evaluation	Underway	2023
12	DNCR-wide Objective 5.2	Underway	2023
13	DNCR-wide Objective 5.3	Underway	2023

## **Activity Progress**

### ***Critical Facilities***

#### **1. NC STATE PARKS & RECREATION – AGENCY FLEET ZEV/ELECTRIC INFRASTRUCTURE UNDERWAY**

Installed electric vehicle chargers at Crowders Mountain, Lake James, Lake Norman, Raven Rock, and Pilot Mountain State Parks. Plans for additional vehicle chargers at two parks, as well as conversations with a potential corporate donor for the placement of electric vehicle chargers system-wide.

#### **2. STATE HISTORIC SITES – AGENCY FLEET ZEV/ELECTRIC INFRASTRUCTURE UNDERWAY**

Continue to modernize the Craft Services vehicle fleet and equipment with more fuel efficient and less polluting utility vans and vehicles.

#### **3. STATE HISTORIC SITES - AGENCY BUILDING UTILITY CONSUMPTION REDUCTION UNDERWAY**

Upgraded all lighting to LED systems. Installing more efficient HVAC systems. Utilizing geothermal HVAC systems when applicable during major renovations. Encouraging individual sites to adjust thermostat controls to cooler heating season temperatures and warmer cooling season temperatures where such changes will not affect artifact preservation. Encouraging sites to utilize sustainably sourced materials for structural renovations and exhibit builds.

#### **4. STATE HISTORIC SITES – WATER FOUNTAIN INSTALLATION UNDERWAY**

NC Historic Sites installed water fountains with the capacity to refill personal water bottles to help eliminate single use plastic bottles.

#### **5. BATTLESHIP NC - AGENCY BUILDING UTILITY CONSUMPTION REDUCTION UNDERWAY**

Completed a transition to the highest Seasonal Energy Efficiency Ratio rated HVAC and the maximum LED lights that we can afford. All HVAC has been replaced and upgraded and about 80% of ship lighting replaced with LED

#### **6. NC AQUARIUMS - AGENCY BUILDING UTILITY CONSUMPTION REDUCTION UNDERWAY**

FY2020-2021 goal to reduce energy consumption by 3% and reduce water use by 2%.

Jennette's Pier will save energy through repairing solar panel installation and improving energy efficiency of a life support system. The Pier also installed energy efficient hand dryers, performed an



EO80 energy efficiency audit, plans to replace thirty CFL light fixtures with LED fixtures, and replaced metal halide entrance sign light fixtures with solar rechargeable LED fixtures.

#### **7. NC AQUARIUMS – TEDDY ROOSEVELT NATURAL AREA BIODIVERSITY SURVEY**

##### **COMPLETE**

NC Aquariums has conducted two biodiversity surveys in the Teddy Roosevelt Natural Area, 40 years apart. This good data for long-term monitoring that could be tied to climate change.

#### **8. NC AQUARIUMS – HISTORIC OREGON INLET LIFESAVING STATION**

##### **PLANNED**

In addition to the three aquariums and Jeanette’s Pier, the NC Aquariums manage one of North Carolina’s last remaining historic lifesaving stations – the Oregon Inlet Lifesaving Station, nestled among the dunes of the Pea Island National Wildlife Refuge. While the setting creates an authentic and picturesque setting for the station, its location makes it extremely vulnerable to rising sea level and more frequent and severe storms caused by climate change. NC Aquariums is working with its sister DNCR agency, the State Historic Preservation Office, to develop plans for moving the lifesaving station to a less vulnerable location. Those plans also call for using the station as an educational resource to tell the story of the role that North Carolina’s historic lifesaving stations once played in the state’s maritime history, and how historic preservation is adapting to the increased threats of climate change to the state’s coastal heritage.

#### **9. NC ZOO – AGENCY FLEET ZEV/ELECTRIC INFRASTRUCTURE**

##### **UNDERWAY**

Acquired two Chevy Bolts, full electric vehicles through DOA’s Motorfleet Division. Used for daily patrols by Park Rangers and for off-park programming by the Zoo’s Conservation, Education and Science Section.

The Zoo has ordered 20 fully electric vehicles to considerably expand our existing electric fleet. These vehicles are all small utility vehicles and golf carts that will in some cases replace full-sized gas-powered vehicles.

Conservation Education and Science Section purchased two electric-assist tricycles. These vehicles are smaller than golf carts and ZEV capable for use inside the park. In addition to their service moving educators around inside the facility, we hope to be able to demonstrate how lithium-powered electric vehicles may be employed to fulfill any number of service roles inside the Zoo.

Installed electric vehicle chargers at North American Parking, Solar Pointe Parking, and DTC (Staff Only)

## **10. NC ZOO – HEAT EXCHANGER**

### **UNDERWAY**

Pilot testing the use of a Zoo-built heat exchanger to provide supplemental heat for one of our greenhouses. Heat generated by composting organic material will be used to generate heat which the unit will capture and circulate into the greenhouse. If this test is effective, the Zoo will expand it to other greenhouses on site to reduce its propane consumption.

## **11. NC ZOO – 30% REDUCTION IN ENERGY CONSUMPTION**

### **UNDERWAY**

The Zoo's 2020-2021 energy consumption for heating and cooling of state-owned buildings was 149,332 BTUs per square foot, a 30% reduction from 2002-2003 levels. The Zoo is pursuing additional savings through the installation of new HVAC systems, improvements to life support systems, use of alternative heating methods, and replacement of fluorescent tubes with LED bulbs.

## **12. NC ZOO – ENVIRONMENTAL STEWARD/EMS CERTIFICATION**

### **COMPLETE**

Addition of 2 charging stations for electric vehicles a continued DEQ "Environmental Steward", and maintenance of Environmental Management System certification.

## **13. NC ZOO – WASTE REDUCTION**

### **UNDERWAY**

The Zoo eliminated all plastic bottles in park vending machines, and is in the process of installing water bottle refill stations in place of standard water fountains. They also started a sustainability team to bring together different sections from the Zoo to focus on non-organic waste, organic waste, the Zoo's carbon footprint, and surface & environmental water.

The Zoo has embarked on a new program to recycle disposable latex and nitrile gloves. Working with its Partner Terracycle, drop off points for gloves have been established around the Zoo. In the first few months of the program they have diverted over 160 lbs of gloves from landfill waste.

The Zoo has purchased a high-volume compost screener which will allow it to further improve the Zoo's extensive compost program. The screener will allow the production of hundreds of tons of high-quality compost annually from its two-acre compost facility.

## **14. STATE LIBRARY – WASTE REDUCTION**

### **UNDERWAY**

Working to reduce the amount of plastic used for events by 50% and implementing a plan to reduce the amount of paper used for administrative functions by 25%. Purchasing smaller amounts of supplies to eliminate future waste as supply needs change.

## **15. STATE LIBRARY - AGENCY BUILDING UTILITY CONSUMPTION REDUCTION**

### **UNDERWAY**

Working to replace fluorescent lights in the Government & Heritage Library stacks with motion-detection LED fixtures and add UV protection to all windows in the Government & Heritage Library reading room. Recommend all staff turn off computers in the evening to reduce energy use.

## **16. NC MUSEUM OF NATURAL SCIENCES – COMPOSTNOW**

### **UNDERWAY**

Renewed contract with CompostNow to compost at public-facing cafes and internal break rooms. Aiming to make future public events zero-waste. Writing an institution-wide environmental policy to reflect MNS values and goals related to conservation and climate change. Seeking certification from DEQ's Green Travel Initiative.

## **17. NC CAPITAL PROJECTS**

### **UNDERWAY**

"Guaranteed energy savings contract" means a contract for the evaluation, recommendation, or implementation of energy conservation measures, including the design and installation of equipment or the repair or replacement of existing equipment or meters, in which all payments, except obligations on termination of the contract before its expiration, are to be made over time, and in which energy savings are guaranteed to exceed costs. A contract will be in place in early 2022 for this work at multiple facilities across the Department.

## **18. DNCR WIDE – AGENCY FLEET ZEV/ELECTRIC INFRASTRUCTURE**

### **UNDERWAY**

Strategic Plan Objective: Incorporate best practices for state government building energy efficiency to reduce energy consumption (Objective 5.1, DNCR Strategic Plan 2021-2023)

Milestones: Improve tracking energy use to reduce energy consumption (Implementing Capturis through DNCR Budget Office – Capturis provides utility bill payment administration, utility consumption reporting, cost tracking as well as other utility information solutions).

Partner with Capital Projects to integrate energy efficiency measures and reduce energy consumption for facility construction and upgrades.

## **19. DNCR-WIDE – BUILDING ENERGY EFFICIENCY**

### **UNDERWAY**

Incorporate best practices for state government building energy efficiency to reduce energy consumption (Objective 5.1, DNCR Strategic Plan 2021-2023)

**Milestone 5.1.1** Improve tracking energy use to reduce energy consumption (Implementing Capturis through our Budget Office – Capturis provides utility bill payment administration, utility consumption reporting, cost tracking as well as other utility information solutions.)

**Milestone 5.1.2** DNCR will lead by example to increase state employees’ familiarity with Zero Emissions Vehicles (ZEV), prioritizing ZEVs and hybrids in the purchase or lease of new vehicles and shall use ZEVs for agency business travel when feasible.

**Milestone 5.1.3** Partner with Capital Projects to integrate energy efficiency measures and reduce energy consumption for facility construction and upgrades.

### ***Communication Networks & Technical Assistance***

#### **1. PARKS AND RECREATION TRUST FUND– GRANT WRITING SUPPORT**

##### **UNDERWAY**

Technical assistance is provided to local governments applying for PARTF grants through a contract with Recreation Resources Service (RRS) at NC State University.

#### **2. STATE PARKS / LAND AND WATER STEWARDSHIP - PUBLIC LANDS/OPEN SPACE INVESTMENT IN UNDERSERVED COMMUNITIES**

##### **PLANNED**

Plan to work with DEQ & the Andrea Harris Social, Economic, Environmental, and Health Equity Task Force to incorporate park and trail investment in underserved communities into the State’s environmental justice work.

#### **3. DIVISION OF LAND AND WATER STEWARDSHIP/NATURAL HERITAGE PROGRAM - NATURAL HERITAGE INVENTORY**

##### **UNDERWAY**

Working to update the NHP Lists of Rare Plant and Animal Species of North Carolina. These reports, which are updated every two years, provide a list of all the species that are listed as Endangered, Threatened, or of Special Concern as well as all species that are not formally protected but are imperiled enough to warrant tracking and monitoring to prevent extirpation. In 2022, the Natural Heritage Program will coordinate with partners in the NC Wildlife Resources Commission and NC Plant Conservation Program to review the plant and animal species listed as Significantly Rare and determine if any species are considered stable enough to be down-listed to Watch List; they will also review the Watch Lists to determine if any species have declined enough to be up-listed to Significantly Rare.

In 2021, with funding from US Fish and Wildlife Service, the Natural Heritage Program conducted rangewide status surveys of 4 species under consideration for federal listing (Wireleaf Dropseed, Georgia Indigo-Bush, Thinwalled Quillwort, and Venus Flytrap Cutworm Moth). As part of these inventories, threats from climate change and overall ecological resilience were considered.

In 2022, the Natural Heritage Program will launch a rangewide status survey of Carolina Hemlock, considering threats from all sources including climate change.

#### **4. DIVISION OF LAND AND WATER STEWARDSHIP AND STATE HISTORIC PRESERVATION OFFICE - RECOVERY SUPPORT FUNCTIONS OF THE STATE DISASTER RECOVERY TASK FORCE**

##### **UNDERWAY**

NC Natural Heritage Program and NC Land and Water Fund staff participate in the Environmental Recovery Support Function of the State Disaster Recovery Task Force, as does the State Historic Preservation Office in the Cultural Resources Recovery Support Function, contributing map data and recommendations for the upcoming Disaster Recovery Framework update.

#### **5. NC AQUARIUMS – WILDLIFE MONITORING**

##### **UNDERWAY**

Identifying potential impacts of climate change on plants and animals. Over time, scientists will be able to correlate data with changes in weather patterns and sea levels.

NC Aquariums are monitoring the following species and animal groups:

- Sand tiger sharks
- Sea turtles (all species)
- Crystal skipper butterfly
- Gopher frogs – two populations at Pine Knoll Shores
- Least tern colony at Pine Knoll Shores
- Stranded marine mammals (all species) along the northern NC coastline
- Lionfish on offshore shipwrecks

#### **6. STATE HISTORIC PRESERVATION OFFICE (HPO) AND OFFICE OF STATE ARCHAEOLOGY (OSA) - UNITED STATES ARMY CORPS OF ENGINEERS (USACE) SOUTH ATLANTIC COASTAL STUDY AT-RISK CULTURAL RESOURCES ANALYSIS**

##### **UNDERWAY**

HPO and OSA are consulting with USACE to identify cultural resources (historic and archaeological sites, historic districts, and other historic resources) vulnerable to coastal storm damage and sea level rise. This analysis is part of a multi-state effort throughout the southeastern United States and Caribbean. GIS and archaeological and architectural survey data along with staff expertise are all

proving crucial to informing this effort. Many of the places identified are federal and state historic assets open to the public.

**7. STATE HISTORIC PRESERVATION OFFICE (HPO) - HISTORIC ARCHITECTURAL SURVEYS (POST-HURRICANES FLORENCE AND MICHAEL)**

**UNDERWAY**

Identified multiple counties that received FEMA disaster declarations from hurricanes Florence and Michael but are currently lacking historic architectural survey information. Undertaking these needed surveys in Cumberland, Hoke, McDowell, Montgomery, Person, Polk, and Vance counties, and Mount Pleasant in Cabarrus County in FY 2021-FY2023.

**8. DIVISION OF HISTORICAL RESOURCES / STATE HISTORIC PRESERVATION OFFICE (HPO) - HISTORIC RESILIENCE PLANNING PROJECT FOR LOCAL GOVERNMENTS**

**UNDERWAY**

In collaboration with the NC Impact Initiative at the UNC School of Government, working to better link local disaster planning to historic resource resiliency planning, and create and provide training for state agency personnel, local governments, and non-profit historic sites in best practices for disaster preparedness and response.

**9. DIVISION OF HISTORICAL RESOURCES / STATE HISTORIC PRESERVATION OFFICE (HPO) - HURRICANES FLORENCE AND MICHAEL CONSTITUENT SUBGRANT PROGRAM FOR HISTORIC PRESERVATION RECOVERY**

**COMPLETE**

In December 2019, the National Park Service (NPS) awarded the North Carolina State Historic Preservation Office (HPO) approximately \$17 million in federal grant funding to provide recovery assistance to historic resources damaged by Hurricanes Florence and/or Michael that are listed in or eligible for listing in the National Register of Historic Places.

The award allowed the HPO to make available up to \$9.25 million in grants for historic resources located in the 61 eligible counties in North Carolina designated by FEMA for disaster assistance.

In September 2020 following a successful subgrant solicitation period, the HPO submitted 22 constituent subgrant proposals to the National Park Service for funding approval totaling \$9.25 million in cumulative assistance. These proposed projects include three planning projects, and nineteen brick and mortar projects. NPS will make final decisions soon.

**10. DIVISION OF HISTORICAL RESOURCES / STATE HISTORIC PRESERVATION OFFICE (HPO) -  
CONSTITUENT CONSULTATIONS AND TRAINING VIDEOS**

**UNDERWAY**

The Restoration Branch of the State Historic Preservation Office (HPO) provides technical advice for restorations, rehabilitations, and building maintenance to owners of historic buildings at no cost or obligation.

**Professional Development and Training.** The Branch has sought professional development opportunities regarding building adaptations for greater resiliency, including attendance at the national biennial *Keeping History Above Water* conferences and National Park Service training for historically sensitive building elevations where flooding is an issue. Several staff members have successfully completed floodplain management training with North Carolina Emergency Management.

**Constituent training videos.** The Branch has produced constituent videos available on YouTube, including review of federal disaster recovery assistance available for property owners in historic districts; how to use GIS mapping and data to prepare for and respond to natural disasters; case studies of building elevations for better resiliency; and how to dry out a flooded historic building.

**Constituent consultations.** The Branch provides expedited and on-site assistance to historic property owners following natural disasters and fires and conducts consultations regarding damaged historic buildings and best practices for repair and recovery.

**11. DIVISION OF Archives and Records,), OFFICE OF ARCHIVES AND HISTORY (OAH), CULTURAL  
RESOURCES EMERGENCY SUPPORT TEAM (CREST) – POST-STORM CONSTITUENT CONSULTATIONS**

**UNDERWAY**

DNCR staff have worked on multiple fronts to address storm recovery and climate resilience in two historically marginalized communities with frequent flooding—Princeville and Pembroke.

Princeville: Consulted with town leaders to preserve buildings and artifacts associated with the historic Princeville School and the Matthewson House. Although, after careful consideration, the c.1870 Matthewson House was demolished in 2020, HPO and OAH staff continue to consult with town leaders to plan storage for the salvaged architectural elements and to assist with plans for a future Princeville Museum.

Pembroke: Consultations have led to recommendations for federal resiliency funding to address structural needs at The Indian Education Program Museum in the historic Pembroke High School. In addition, CREST has been able to direct federal funds earmarked for Hurricane Florence recovery to upgrade storage supplies for the museum’s cultural heritage collection.

Tropical Storm Fred flooded the Town of Canton on August 18. Floodwaters filled the basement level of the town-operated museum. Its director requested CREST assistance and team members provided consultations remotely and onsite assessments and artifact relocation assistance in late August and early September.

**12. OFFICE OF STATE ARCHAEOLOGY (OSA) - NORTH CAROLINA COASTAL CEMETERY SURVEY (POST-HURRICANES FLORENCE AND MICHAEL)**

**UNDERWAY**

Undertaking a North Carolina Coastal Cemetery Survey to identify, document, and assess the condition of historical cemeteries on state lands in the nine coastal counties (Dare, Hyde, Beaufort, Pamlico, Carteret, Onslow, Pender, New Hanover, and Brunswick) likely to have been impacted by storm damage. Particular attention to recording cemeteries traditionally associated with African American communities, which are underrepresented in state records.

**13. OFFICE OF STATE ARCHAEOLOGY (OSA) - NORTH CAROLINA SHORESCAPE ARCHAEOLOGICAL SURVEY**

**PLANNED**

In FY2022-2023, OSA will undertake a North Carolina Shorescape Survey to identify and document archeological resources associated with coastal communities that are most at risk of being damaged by storm events. Focus is on identifying and documenting sites within 200 ft (60 meters) of the shoreline.

**14. STATE LIBRARY – LIBRARIES IN DISASTER PREPAREDNESS**

**PLANNED**

Collaborate with DNCR and the NC Public Library Directors Association to more formally recognize and support the role that libraries play in disaster preparedness and recovery efforts.

**15. DIVISION OF ARCHIVES & RECORDS – RECORDS ANALYST POSITION**

**UNDERWAY**

The department's goal of adding a records analyst based in the eastern portion of the state to focus on supporting counties and municipalities that have faced recent flooding during severe weather events was funded in the 2021-2022 budget. The position description has been written and the planning has started for the position. It will be based in New Bern and primarily responsible for local



government records consultations, training on essential records protection, and the coordination of back-up imaging of archival records in the eastern portion of the state.

## **16. DNCR-WIDE PLANNING**

### **UNDERWAY**

Foster resiliency through local and statewide planning efforts, education, and grant opportunities to constituents (Objective 5.4, DNCR Strategic Plan 2021-2023)

**Milestone 5.4.1** Complete the statewide historic resilience project through cooperative agreement between the Historic Preservation Office and the UNC School of Government by September 2023

**Milestone 5.4.2** Broaden constituent outreach and education for resiliency measures, such as restoration workshops on how to floodproof or dry out buildings, CREST-led disaster planning training, and Register of Deeds training, to aid in better statewide preparation for flooding events.

**Milestone 5.4.3** Bring resiliency-oriented grant projects (constituent and internal) to completion through the State Historic Preservation Office hurricane grant program for Hurricanes Florence and Michael recovery.

**Milestone 5.4.4** Provide greater services such as resiliency-oriented technical assistance to locally-owned cultural resources.

**Milestone 5.4.5** Increase funding for the Parks and Recreation Trust Fund and Land and Water Fund.

**Milestone 5.4.6** Incorporate climate change and resilience information into DNCR educational materials, campaigns, and social media feeds.

### ***Educational Campaigns***

#### **1. NC ZOO – REVAMPED INVESTIGATION STATION**

##### **COMPLETE**

Revamped Investigation Station at the Rocky Coast exhibit (featuring arctic species such as polar bears, arctic foxes and harbor seals) is now focusing more on climate change, using explanatory metaphors and community level solutions.

#### **2. NC ZOO – AMERICORPS POSITIONS**

##### **COMPLETE**

Created two AmeriCorps positions focused on improving representativeness and meeting the needs of under-resourced communities. The goal is to provide more effective environmental education for these communities while also better meeting their needs.

### **3. NC AQUARIUMS PUBLIC PROGRAMS**

#### **COMPLETE**

Public programs include several topics related to climate change (e.g. ocean acidification, temperature change and reptile impacts, wind and solar energy, geothermal program, climate clues and renewable energy challenge) and its impacts on ecosystems and ocean life.

Staff training has taken place on NNOCCI (National Network for Ocean and Climate Change Interpretation) to more effectively cover this topic.

Incorporated conservation messaging in signage including specific actions people can take to mitigate their use of fossil fuels and plastics.

### **4. NC MUSEUM OF ART - MINICOURSES**

#### **COMPLETE**

Created Arts and Science minicourses for teachers as professional development including emphasis on how the design of the Museum's Art Park is geared toward sustainability.

### **5. NC MUSEUM OF NATURAL SCIENCES (NCMNS) CLIMATE EDUCATION AT PUBLIC EVENTS**

#### **COMPLETE**

Implemented climate education into public events (e.g. BugFest, Science Cafes, etc.)

Increased conservation communication to Museum members by incorporating a new "Conservation Corner" section into membership e-newsletters.

Initiated an Earth Day 2020 50th anniversary project to coordinate and cross-promote Earth Day activities throughout NC.

Improved signage to increase composting and recycling in public and staff-only areas utilizing graphics provided by DNCR.

Created new, interactive conservation-focused signage at the NCMNS Whiteville branch with support from an Institute of Museum and Library Services (IMLS) grant.

### **6. NCMNS – LUNCHTIME DISCOVERY SERIES/SUSTAINABILITY LUNCHESES/SUSTAINABILITY LUNCH BUNCHES**

#### **COMPLETE**

Launched a series of Sustainability Lunches in the Triangle region modeled after the successful Charlotte area Sustainability Lunch Bunches. These quarterly programs attract corporate, NGO, and government organizations.

Lunchtime Discovery Series Webinar with presentation and public question and answer session: The Other Side of Environmental Injustice: Parks and Greenspace Inequity in Marginalized Communities, NC Museum of Natural Sciences Via YouTube ([https://youtu.be/hnqh\\_2R8eX4](https://youtu.be/hnqh_2R8eX4)).

**7. NCMNS – ENVIRONMENTAL EDUCATION CENTER**

**PLANNED**

Working on a new environmental education center at the Prairie Ridge facility in Wake County – a potential of embedding the initiative in a future facing story of science engagement, which will influence many aspects of that site and the Museum’s story overall.

**8. NCMNS – TEEN SCIENCE AMBASSADORS**

**UNDERWAY**

Managed an external program, Teen Science Ambassadors, to increase science literacy among middle school and high school students.

**9. NCMNS – LOVE NATURE: THE BIOPHILIA PODCAST**

**COMPLETE**

Launched Love Nature: The Biophilia Podcast, hosted by Dr. Eric Dorfman (NCMNS Director and CEO) and Dr. Dan Dombrowski (NCMNS Chief Veterinarian) to “understand and navigate a changing world, and to allow us to live better, and more responsibly, on the planet.”

**10. NCMNS – RESEARCH AND COLLECTIONS STAFF PUBLISHED SEVERAL PAPERS ON CLIMATE CHANGE**

**COMPLETE**

Research and Collections staff published several papers with research focused on climate-change related topics.

**11. DIVISION OF ARCHIVES AND RECORDS – TRAINING ON IDENTIFICATION AND PROTECTION OF ESSENTIAL GOVERNMENT RECORDS**

**ONGOING**

Regular presentation training on the identification and protection of essential government records, a key mitigation strategy for government offices to ensure continuity of operations during an emergency. This training was based on FEMA-approved curriculum (Intergovernmental Protection for Essential Records), originally developed by the Council of State Archivists in 2011.

Government Records Section of the Division held 9 essential records and disaster preparedness workshops for 385 participants. Below is a chart with dates and if they were for a local government, state government, or combined audience.

<u>Date</u>	<u>Attendance</u>	<u>State/Local/Mixed</u>
2/12/21	22	Mixed
3/25/21-3/26/21	54	Local
3/25/21-3/26/21	50	Local
3/29/21-3/31/21	43	State
3/30/21-4/1/21	32	State
6/8/21-6/9/21	65	Local
6/8/21-6/9/21	48	Local
6/10/21-6/11/21	38	State
6/10/21-6/11/21	33	State

**12. DIVISION OF ARCHIVES AND RECORDS – CULTURAL RESOURCES EMERGENCY SUPPORT TEAM (CREST)**

**COMPLETE**

Cultural Resources Emergency Support Team (CREST): the team held their annual summit on August 24, 2021. 25 members attended. On September 15 the CREST team manager presented a webinar, “Establishing and Maintaining Emergency Supply Caches,” for the Foundation for Advancement in Conservation (national audience). FAIC maintains the recording on their website.

**13. DNCR-WIDE - PBS-NC “A STATE OF CHANGE” SERIES ON CLIMATE CHANGE**

**UNDERWAY**

DNCR is collaborating with PBS-NC in sponsoring “A State of Change,” a series on climate change in NC, currently airing on TV and internet in 2022.

**14. DNCR-WIDE – CLIMATE-CHANGE EDUCATIONAL SIGNAGE AT DNCR SITES**

**UNDERWAY**

With some of the state’s most visited public attractions focused on natural and cultural resource protection and environmental education, DNCR is developing plans for placing signage at sites across the state that will help educate the public about both the impacts of climate change and ways that the public can adapt for a more resilient future.

**15. STATE HISTORIC PRESERVATION OFFICE – RESILIENCE AND DISASTER PLANNING TRAINING FOR LOCAL PRESERVATION COMMISSIONS**

**PLANNED (June 2022)**

In collaboration with the National Park Service and National Alliance of Preservation Commissions, the Office will hold a Commission Assistance Mentoring Program (CAMP) over two days in June 2022, for local historic preservation commissions statewide, but particularly in FEMA-declared Hurricanes Florence and Michael counties, focused on resilience and disaster planning for historic places in local jurisdictions.

***Mission Critical***

**1. NC STATE PARKS AND RECREATION – PRESCRIBED FIRE AS METHOD TO INCREASE ECOSYSTEM RESILIENCE**

**UNDERWAY**

Active prescribed fire program to maintain natural communities in an ecologically healthy condition. A healthy habitat is one better suited to adapting to whatever climatic condition it faces. The Division has performed 70 separate fires on 15 of its properties in the past year totaling 5,708 acres.

**2. NC STATE PARKS AND RECREATION – LAND RESTORATION AND MANAGEMENT**

**UNDERWAY**

Actively restoring lands and waters that have been damaged from past land activities. Actions on lands include conversion of pine plantations and abandoned agricultural fields to a more natural condition. Streams and wetlands are being restored by re-creating natural channels and removing artificial structures such as dams and culverts.

**3. DIVISION OF LAND AND WATER STEWARDSHIP/NC LAND AND WATER FUND – 2021 GRANT CYCLE PROJECTS**

**COMPLETE**

Lands conserved and restored with funding from the NC Land and Water Fund (formerly Clean Water Management Trust Fund) preserve resilient landscapes, provide flood abatement for nearby communities by helping store and slow the flow of water during storm events, protect natural streambank vegetation to stabilize shorelines, and provide habitat for rare species. In total, over 51,000 acres will be protected, including over 33 miles of waterways, as a result of the 2021 grant awards. This includes Game Lands, State Parks, Historic Sites, and local parks, and 71 Endangered, Threatened, and Special Concern species.

**4. DIVISION OF LAND AND WATER STEWARDSHIP/NATURAL HERITAGE PROGRAM - CLIMATE RISK ASSESSMENT AND RESILIENCE PLAN - ECOSYSTEMS CHAPTER**

**COMPLETE**

Since completion of the “Ecosystems” chapter, field biologists continue to monitor rare species as they conduct biological inventories of lands under consideration for protection as state nature preserves. Special attention is increasingly paid to species and habitats that are most vulnerable to a changing climate and natural disasters such as hurricanes, floods, and landslides.

**5. DIVISION OF LAND AND WATER STEWARDSHIP/NATURAL HERITAGE PROGRAM AND LAND AND WATER FUND - NATURAL AND WORKING LANDS ACTION PLAN**

**COMPLETE**

Collaborated with researchers at Duke University Nicholas Institute for Environmental Policy Solutions to analyze and summarize the resilience and carbon benefits of lands purchased and restored with funding from the NC Land and Water Fund since the Fund’s inception as the Clean Water Management Trust Fund in 1996. The NHP and Duke also recently completed a similar study of NC Department of Public Safety lands.

**6. DIVISION OF LAND AND WATER STEWARDSHIP/NC LAND AND WATER FUND – FLOOD RISK REDUCTION COMMITTEE AND GRANTS**

**UNDERWAY**

The NC Land and Water Fund (NCLWF) was appropriated an additional \$15 million in 2021 to provide grants to counties, municipalities, nonprofit corporations, and other State agencies “to protect and restore floodplains and wetlands for the purpose of storing water, reducing flooding, improving water quality, providing wildlife and aquatic habitat, and providing recreational opportunities.” NCLWF has also been charged with developing “criteria to score projects based on the ability of a project to reduce flood risks.” The NCLWF board chair has established an ad hoc “Flood Risk Reduction Committee” to address these requirements and make recommendations to the full board. Once those criteria are established, a request for proposals will be issued and funds awarded by the full NCLWF board. DNCR hopes the projects funded through this program will demonstrate the value of flood risk reduction strategies as a central component of North Carolina’s approach to resiliency and adaptation to climate change.

**7. BATTLESHIP USS NORTH CAROLINA – LIVING WITH WATER**

**UNDERWAY**

In its coastal setting, Battleship North Carolina is a sentinel site for climate change. It has witnessed a 770% increase in tidal flooding over the last decade. Rising sea levels interrupt visitation, create safety and operational hazards and degrade the State’s water quality and fragile coastal habitats. The Battleship’s Living with Water flood mitigation and resiliency project will: 1) install an intertidal living shoreline at an actively eroding section of the berth, 2) create an estuarine wetland and tidal creek in a portion of the parking lot most subject to chronic flooding, 3) elevate the remaining parking area above the measured tide flood level, and 4) deliver public education messages on building climate change resiliency in response to coastal conditions. Living with Water, a \$4M engineered solution to rising sea levels, is supported by \$2.3M in state and federal grants and a \$700K contribution in Battleship revenues.

**8. STATE HISTORIC PRESERVATION OFFICE (HPO) - STATEWIDE HISTORIC PRESERVATION PLAN UPDATE**

**UNDERWAY**

Preliminary planning for the 2023 10-year update cycle of the state plan is underway. The update will include specific measures to be taken toward strengthening disaster mitigation and resiliency for historic resources throughout the state.

**9. DIVISION OF STATE HISTORIC SITES & DIVISION OF HISTORICAL RESOURCES / STATE HISTORIC PRESERVATION OFFICE (HPO) AND OFFICE OF STATE ARCHAEOLOGY - BRUNSWICK TOWN / FORT ANDERSON (BTFA) WAVE ATTENUATOR PROJECT**

**UNDERWAY**

Continued installation of wave attenuators in the Cape Fear River to protect more of the sensitive, in situ Colonial-era archaeological resources and Civil War earthworks present along the shoreline from wave action and hurricane storm surge.

- a. Of the approximately 5,000 feet of shoreline in need of protection, two phases of wave attenuators have been installed for a total of 460 feet, with an additional two phases (1,775 more feet of protection) currently underway.
- b. The excellent performance of previously installed sections during Hurricane Florence in protecting those segments of shoreline was in stark contrast to the loss of and damage to the largely non-protected stretches at Brunswick Town, and has been the subject of study through monitoring by the Coastal and Estuarine Studies Lab of the University of North Carolina-Wilmington.
- c. The agency believes this system is a demonstration project nationally for protection of vulnerable shorelines, particularly in the context of threatened cultural resources.

**10. OFFICE OF ARCHIVES AND HISTORY (DIVISION OF STATE HISTORIC SITES , BATTLESHIP NORTH CAROLINA MEMORIAL, TRYON PALACE, DIVISION OF HISTORICAL RESOURCES / STATE HISTORIC PRESERVATION OFFICE (HPO) AND OFFICE OF STATE ARCHAEOLOGY) – FEDERALLY-FUNDED RESILIENCY PROJECTS FOR OFFICE OF ARCHIVES AND HISTORY PROPERTIES**

**PROPOSED**

Several state-owned historic properties are proposed to receive federal funding to address Hurricane Florence / Michael damage and provide greater resiliency:

Battleship USS North Carolina. Address resiliency for the mast superstructure using newly developed marine coatings that are more resistant to wind-driven rain and resultant scouring and corrosion of the steel.

Galen Stone Hall @ Charlotte Hawkins Brown Memorial. Design and construction of building and foundation drainage systems to prevent basement flooding that the building experienced during Florence.

Douglas Complex @ Tryon Palace. Address damaged flooring and brick sheathing, mold eradication, and water runoff control.

Harper House @ Bentonville Battlefield. Installation of an emergency generator to maintain power to the HVAC system during severe wind-driven rainstorm events will avoid future problems like the week-long period post-Florence where the building could not be adequately dried out and developed mold and plaster issues.

## **11. DNCR-WIDE – CLIMATE CHANGE EVALUATION**

### **UNDERWAY**

Evaluate the impact of climate change and integrate climate change mitigation, adaptation, education, and resiliency practices into DNCR programs and operations – See Goal 5 of DNCR Strategic Plan 2021-2023.

## **12. DNCR-WIDE OBJECTIVE 5.2**

### **UNDERWAY**

Mitigate against future catastrophic events and assist with disaster recovery at DNCR sites (Objective 5.2, DNCR Strategic Plan 2021-2023).

**Milestone 5.2.1** Renovate and expand the North Carolina Aquarium at Fort Fisher

**Milestone 5.2.2** Floodplain and wetland acquisition and restoration

**Milestone 5.2.4** Complete repairs at State Parks related to storm damage

**Milestone 5.2.5** Complete repairs at Museum of Natural Sciences Whiteville

**Milestone 5.2.6** Develop on-demand training for public records custodians, cultural heritage practitioners, and the public around disaster preparedness and recovery for public records and documentary heritage of the state.

**Milestone 5.2.7** Protect historic structures and artifacts

**Milestone 5.2.8** Complete the relocation of Underwater Archaeology artifacts

**Milestone 5.2.9-10** Conduct environmental reviews and provide assistance to constituents for disaster recovery, response, and mitigation for future events

**Milestone 5.2.11** NC Museum of Art: Complete bridge, culvert, path repairs and replacement and stream restoration



**Milestone 5.2.12** Evaluate off site storage solutions for collections at risk from the triple threats of flooding, heavy precipitation, and sea level rise climate risks

**Milestone 5.2.13** Introduce and promote land management practices to restore long-term resilience and mitigate climate change, such as prescribed fire, hydrologic restoration, reforestation, and natural riparian vegetation.

**Milestone 5.2.14** Consider climate-related hazards when developing master plans for natural areas, parks, and nature preserves.

### **13. DNCR-WIDE OBJECTIVE 5.3**

#### **UNDERWAY**

Evaluate the impacts of climate change on DNCR programs and operations to ensure meaningful engagement with communities (Objective 5.3, DNCR Strategic Plan 2021-2023)

**Milestone 5.3.1** Increase outreach efforts in impacted communities. Implement a coordinated, strategic approach to increase communication and interaction, with an emphasis on vulnerable and historically marginalized communities.

**Milestone 5.3.2** Publish clear percentages of newly established jobs or contracts that should go to vulnerable communities and for which historically marginalized businesses receive priority bidding.

**Milestone 5.3.3** Increase outreach efforts for hiring in communities where work will be completed. Continue to partner with the DOA Office of Historically Underutilized Businesses, NC Institute of Minority Economic Development, and other entities to increase outreach efforts of bidding and contracting opportunities for underserved communities.

**Milestone 5.3.4** Leverage disaster recovery funds and other sources of capital to promote equitable job creation and inclusive business development in communities most vulnerable to climate change.

**Milestone 5.3.5** Develop a statewide science trail of venues to offer unique science experiences with the natural world for visitors and citizens.

**Milestone 5.3.6** Environmental Justice and Inclusion – Promote Environmental Justice and Inclusion through collaboration with DNCR environmental, conservation, and preservation programs to ensure appropriate and fair uses of natural resources.

**Milestone 5.3.7** Promote equal access for communities of all backgrounds to parks, trails, greenways and other open spaces, and make recommendations through DNCR divisions to improve outcomes.

## *Looking Ahead*

For the NC Department of Natural and Cultural Resources, 2021 was a reminder not only of the challenges North Carolina faces regarding climate change, but also of the potential benefits of strategic and coordinated efforts to adapt to those challenges.

The past year saw continued coastal flooding at DNCR sites such as the Battleship USS North Carolina in Wilmington, the closure of state parks and historic sites in western North Carolina due to flooding caused by the remnants of Tropical Storm Fred, and one of the more active forest fire seasons in recent memory within the state parks system. These impacts on DNCR sites demonstrated that climate change is not isolated to any one part of the state. And yet, one of the more visible and publicized of these events – the November forest fire at Pilot Mountain State Park – also demonstrated the value of proactive planning for climate resiliency. While the visual images of the fire at Pilot Mountain were dramatic, the actual damage to the forest there was not as severe as park officials had originally feared, thanks to a years-long program of prescribed burning that had greatly reduced the amount of fuel on the forest floor, which limited the intensity of the fire.

This was a testament to the value of DNCR's resiliency strategies, and combined with a banner budget year for the department that resulted in significantly enhanced funding for some of its signature programs such as the NC Land and Water Fund (NC LWF) and the Parks and Recreation Trust Fund (PARTF) – including \$15 million for "Flood Risk Reduction Grants" as part of NC LWF – we are optimistic about DNCR's potential to be a leader in demonstrating the unique and positive role that state agencies can play in building a more resilient North Carolina.