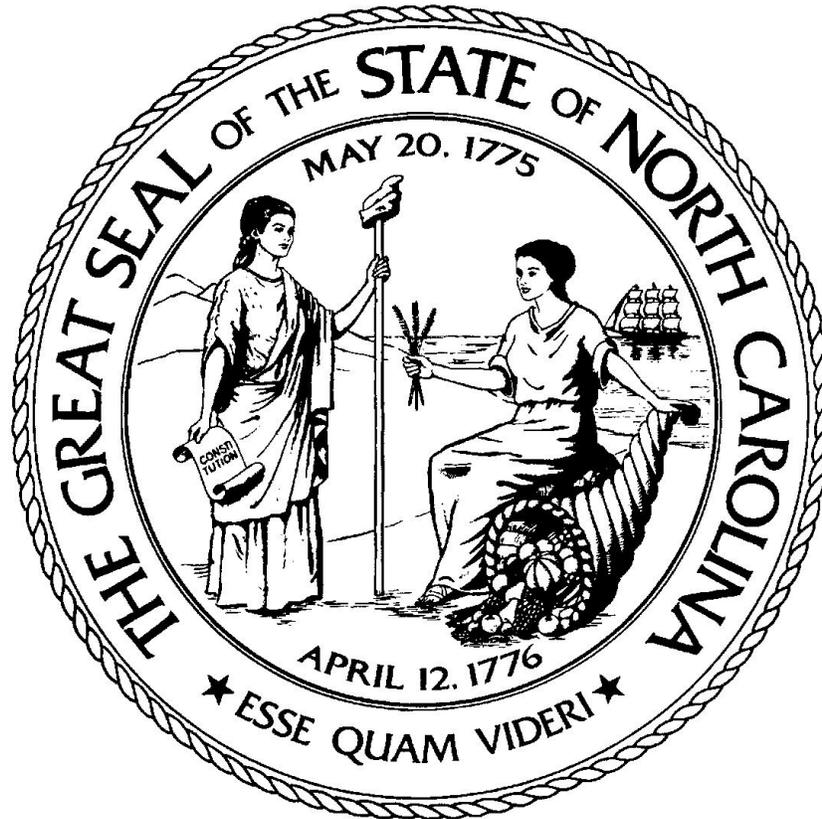


# Department of Environmental Quality

Strategic Plan

2019 – 2021



This page left blank intentionally

# Contents

---

- 1. Strategic Plan Executive Summary ..... 4
- 2. Mission, Vision, and Values ..... 6
- 3. Goals, Objectives, and Performance Measures..... 7
- 4. Highlights and Opportunities..... 17

# 1. Strategic Plan Executive Summary

---

NCDEQ is responsible for a broad range of regulatory, technical assistance and outreach programs. DEQ also offers technical assistance to businesses, farmers, local governments, and the public and encourages responsible behavior with respect to the environment through education programs provided at DEQ facilities and through the state's school system.

NCDEQ is challenged daily with a myriad of issues that directly impact the lives of every person living in North Carolina. In our administration of our regulatory programs designed to protect and improve our air quality, water quality, land quality and the public's health we are also responsible for advancing a climate and energy strategy that integrates our internal requirements and works with a variety of stakeholders to include, state, federal and local governments, the business and environmental communities, and all North Carolinians. Over the next biennium DEQ will focus on the following:

Environmental stewardship, including the protection and restoration of water quality, protection of air quality and land quality through the implementation of regulatory and voluntary programs is a central focus for NCDEQ. In all these functional areas we will place a priority of effort to addressing emerging compounds across the state, finalizing of requirements set for in the Coal Ash Management Act for the coal ash impoundments in North Carolina, and development of a new General Permit related to swine operations.

Create a 21<sup>st</sup> Century NCDEQ that provides a better customer service experience for North Carolina's regulated community and more user-friendly data sources for interested parties. We will accomplish this through the development of a robust online system for applying, tracking and paying throughout the permitting process. The Division of Environmental Assistance and Customer Service (DEACS) will lead the initiative, involving each regulatory division as key stakeholders in the permitting transformation process. This effort will improve our communication and transparency with the regulated community during the submittal and review process; develop an online permitting presence for submittals, corrections and payments; streamline the permitting process information requirements with tracking and search capabilities; and eliminating the 42% backlog and 2-year waiting period for some of our permits.

NCDEQ will support North Carolina's commitment to address climate change and transition to a clean energy economy as outlined in Executive Order 80 (EO 80). NCDEQ will collaborate with NC citizens, power providers, businesses, local governments, state agencies, education partners and the stakeholder community to reduce carbon pollution while propelling the state into a new energy economy. NCDEQ will work with state agencies and the stakeholder community to expand our understanding of climate vulnerabilities and help local communities become more resilient to extreme weather events.

The NCDEQ Environmental Justice Program requires all North Carolinians have fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. The challenge ahead of the department is integrating this perspective into the core mission and day-to-day operations of the department and into the legal and scientific principles that guide our current work and policy development.

In order to carry out the responsibilities of the agency, it is critical to have the most talented work force. NCDEQ will continue to focus on our human resources, financial and IT services, and provide comprehensive services to our employees to aid in the hiring and retention of the most talented people in their field and to provide them with the required tools and equipment to allow them to accomplish their respective duties and responsibilities.

A major initiative for NCDEQ is to embark on an extended outreach and partnership effort with local community leadership to help them understand the various grant programs and technical assistance available to them from the agency.

Finally, following the devastation of Hurricanes Matthew and Florence, NCDEQ will use lessons learned to re-assess critical infrastructure, then work to develop greater resiliency in areas of NCDEQ influence.

## 2. Mission, Vision, and Values

---

### Mission Statement

Providing science-based environmental stewardship for the health and prosperity of all North Carolinians.

### Vision Statement - where do we want to be

Environmental protection and economic expansion are not mutually exclusive. NCDEQ will operate (and regulate) in an open and transparent manner to provide all North Carolinians, business and industry with regulatory certainty focused on protecting the environment without impeding economic expansion. We will continue to develop and expand upon our key partnerships and stakeholder groups (public and private) to further develop best practices and to better leverage our limited resources. Our work on core issues (emerging compounds, coal ash, general permits, fisheries reform, coastal management, pipelines, environmental justice, etc.,) will continue and we must persist in requiring science-based results to improve our ability to protect the environment and hold those who do not account for their actions. The devastation left by Hurricanes Florence and Michael will demand our attention as we work to reestablish, improve and/or coordinate the development of new more resilient infrastructure and environmental solutions to better position North Carolina for future storms. Moreover, as we work to accomplish these actions we will do so with a focus on modernizing our methods and operating procedures while simultaneously examining and implementing new programs and policies oriented to addressing the impacts of climate change on our environment and the complementary aspects of energy for the health and prosperity of all North Carolinians.

### Organizational Values

- Environmental protection
- Public health protection
- Follow the law
- Follow the science
- Dedicated service
- Community outreach
- Proactive engagement
- Continuing public education
- Integrity
- Commitment to inclusion and diversity to enhance engagement
- Transparency
- Accountability
- Innovation
- Efficiency
- Value the knowledge and contributions of the DEQ family
- Environmental stewardship and economic expansion can be partners

### 3. Goals, Objectives, and Performance Measures

---

**GOAL 1. Environmental Stewardship.** NCDEQ is responsible across a wide spectrum of media (air, land, water) for regulatory oversight and certainty in the proper use and management of our environmental resources while simultaneously holding those who violate our rules and regulations accountable for their actions. It is incumbent upon NCDEQ to promote and ensure environmental stewardship, provide technical, compliance, permit and financial assistance to permittees to meet or exceed regulatory requirements while simultaneously promoting and recognizing organizations and businesses who go beyond compliance.

#### **Objective - 1.1 Protecting and Restoring Water Quality**

**Strategy/Brief Description** - NCDEQ will ensure the water quality of the people of North Carolina will be maintained and where possible enhanced at the standards and regulations set forth in state and federal statute.

**1.1.1 – Emerging Compounds Water Quality and Sampling** -- DEQ collect and analyze data that can be used to make informed decisions about managing perfluorinated compounds (PFAS). Conduct surface water, pore water and water supply well sampling and analysis across the state, as well as identify potential sources of contamination in groundwater, surface water, wastewater, soil and sediment.

**1.1.2 - Safe Drinking Water** - Improve public water system Maximum Contaminate Level (MCL) compliance. Provide training and technical assistance to public water system personnel to maintain and improve compliance with state requirements and develop public water supply oversight sampling monitoring program in which samples are routinely analyzed for compliance with state and federal requirements.

**1.1.3 - Maintain and Enhance the Quality of the State’s Surface Waters** – Work with permitted facilities to effectively treat the wastewater before returning it back to the environment.

**1.1.4 - Maintain and Enhance the Quality of the State’s Groundwater** – Through groundwater monitoring identify any contamination, then work to ensure proper remediation.

**1.1.5 - Local Water Supply Planning** - Provide water supply planning assistance. Provide technical water supply planning assistance through the continued collection of detailed annual data from water suppliers to better enable communities to resolve immediate and long-term water shortage issues.

**1.1.6 - Basinwide Plans** - Update integrated basinwide management plans at least every ten years.

**1.1.7 - Establish contaminant management strategies for waters not meeting water quality standards** - Increase management strategies for pathogens, toxics, and nutrients in order to have a more extensive focus on water quality standards than traditional total maximum daily

load (TMDL) plans, which primarily manage industrial point sources and municipal stormwater. These strategies will also incorporate agricultural runoff and atmospheric deposition.

**1.1.8 - Reduce sedimentation and improve the health of our environment and citizens -**

Improve compliance with the Sedimentation Pollution Control Act of 1973 and the NPDES Construction Stormwater Permit Coverage, State stormwater requirements and the Industrial Stormwater Program.

**1.1.9 - Infrastructure Funding Programs to Assist Compliance -** Administer several statewide funding programs that fund infrastructure improvements that assists communities in meeting their infrastructure needs. The focus of the funding program priorities (determined in conjunction with the State Water Infrastructure Authority) are to: fix existing infrastructure first (before new); meet new regulatory initiatives (basin strategies, new MCLs, etc.); promote good system management; and meet the needs of small, economic distressed systems.

**1.1.10 - General Permit – Swine –** Ensure General Permit when revised is protective of environment and communities and that NCDEQ is appropriately resourced and staffed to actively manage and regulate this important program. North Carolina has the strongest permit program for concentrated animal feeding operations in the country and is one of the only states that requires annual inspections of every facility. The General Permit for swine operations is currently under review for renewal and will contain the required performance standards, operation and maintenance requirements, monitoring and reporting requirements, policy for inspections and entry to the farms, general conditions and the penalty policy.

**1.1.11 - Coal Ash – Continue** implementation of the Coal Ash Management Act so that the natural resources and environment are protected and restored where needed.

**Objective - 1.2 Effectively Manage North Carolina’s Fisheries**

**Strategy/Brief Description -** NC fisheries have not had a major review or adjustment to statute since the 1997 Fisheries Reform Act (FRA). The FRA focused on five areas of reform: licensing, the Marine Fisheries Commission, Fishery Management Plans, Coastal Habitat Protection Plans and law enforcement. The 1997 FRA is still a solid foundational document and DMF is already in the process of reviewing the FRA for changes they believe are required due to changes in technology, science, biology, law, and climate.

**1.2.1 – Legislative language -** Development of new legislative language to support an update to the 1997 FRA. Fisheries management practices have changed over the past 21 years since the FRA was first introduced and much of the current legislation requires modifications and adjustments to better reflect current best fisheries management practices. Work with General Assembly to pass a fisheries reform bill.

**1.2.2 - Addition of a Secretary’s Fisheries Advisory Board (FAB) –** Board to be comprised of top fisheries scientists to augment DMF staff. The intent of the Secretaries FAB is to provide DMF with an independent body to address fisheries management outside of routine work DMF staff is engaged in. This body will be smaller than the SAB and the EJ Advisory Board’s but will provide additional scientific oversight of the Division’s management of the resource.

### **Objective - 1.3 Protect Coastal Resources and Public Trust Waters**

**Strategy/Brief Description** - The Division of Coastal Management (DCM) continues to work to protect, conserve and manage North Carolina's coastal resources through an integrated program of planning, permitting, education and research. Following Hurricanes Matthew and Florence, DCM continues to advocate the importance of beachfront development setbacks, natural and nature-based infrastructure, outreach and education, and community resilience planning (include the potential impacts and related planning for coastal flooding and sea-level rise).

- 1.3.1** – Improve the annual average processing time of issuing CAMA major permits to be 75 days or less.
- 1.3.2** – The annual average compliance rate of inspected permitted projects will be 95%.
- 1.3.3** – A total of 10 “living shoreline” projects will be permitted by DCM annually.
- 1.3.4** – DCM will partner with other agencies and stakeholders to provide training and technical assistance to at least 200 coastal professionals and three local governments annually.

### **Objective – 1.4 Protect and Preserve Air Quality**

**Strategy/Brief Description** – The Division of Air Quality works with the state’s citizens to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all.

- 1.4.1 – Monitoring Air Quality** - Operate a statewide air quality monitoring network to measure the level of pollutants in the outdoor air. Determine which pollutants (and emerging compounds) need to be monitored where, and how; compile and quality assure the data and provide reports to internal staff and the public; increase ability to provide data in real-time to the public, etc.
- 1.4.2 – Planning** - Develop and implement plans to meet future air quality initiatives.
- 1.4.3 - Assuring Compliance with Air Quality Rules** – Ensure increased compliance with air quality rules through inspections, assistance, education and outreach; consistently develop clear and enforceable permits; address citizen inquiries and complaints in a timely and professional manner; and other actions.
- 1.4.4 - Provide Education and Outreach to the Residents of North Carolina** – Provide multiple opportunities to engage with residents and educate on air quality issues.

### **Objective - 1.5 Land Quality**

**Strategy/Brief Description** - NCDEQ will ensure the land quality of the people of North Carolina will be maintained and where possible enhanced at the standards and regulations set forth in current state and federal statute.

- 1.5.1 - Improve Compliance with the North Carolina Dam Safety Law** - Inspect dams at the required frequency and take necessary actions to ensure protection of public safety.

**1.5.2 – Ensure Adequate Program Resources** - Develop new legislative language to support an emergency dam safety fund and positions to manage that and the EAP program.

**1.5.3 - Improve Efficiency and Compliance with the North Carolina Mining Program** – Use electronic tools to better track inspections, enforcement actions and reports required by facilities.

**1.5.4 – Brownfields** - Expand the use of the Brownfields Program to stimulate redevelopment of contaminated sites and achieve higher levels of sustainability.

**1.5.5- Solid waste, Hazardous waste and Superfund Programs-** Continue to effectively assess and remediate environmental contamination at these sites where needed while also increasing the use of risk-based remediation across the programs to provide protective land use controls on properties moving forward.

**1.5.6- Underground Storage Tank Program-** Complete current review of 1666 low risk incidents to verify current risk classifications are ensuring water quality protection is maintained while closing incidents as appropriate. Pursue legislative funding and staff resources to address noncommercial releases and associated impacts to surface waters of the state.

## **Objective - 1.6 Environmental Assistance and Customer Service**

**Strategy/Brief Description** - The Division of Environmental Assistance and Customer Service (DEACS) leads NCDEQ's responsiveness to customers. Through its non-regulatory technical services, DEACS helps its customers navigate regulatory and permitting challenges, improve environmental performance through sustainable practices and recognition programs, promote recycling material management programs and expand recycling infrastructure thereby creating economic growth.

**1.6.1 Environmental Assistance -Permitting Assistance and Environmental Stewardship Initiative (ESI)** – Increase the ability and resources to provide valuable technical assistance through our Environmental Assistance Coordinators (EACS) and the ESI program to support the regulatory aspects of economic recruitment and expansion efforts as requested by state/local economic development partners or directly by clients and grow and expand our pool of ESI members of this key industry outreach and partnership program.

**1.6.2 - Recycling and Materials Management** – Support the growth of private sector recycling collection, processing, and manufacturing capacity and the growth and development of efficient and effective local government recycling programs. Increase number of tons recycled, grants awarded, number of jobs created, public and private investment in recycling infrastructure, increase in private sector recycling capacity (additional tons diverted from landfill), and residents served with curbside or drop-off recycling.

**1.6.3 - Waste Reduction Partners** - Provides expert technical assistance to businesses, institutions, and industries on reducing environmental impacts through pollution prevention and waste reduction using a uniquely qualified team of retired and volunteer engineers, scientists and business professionals in support of serving the objective of the Pollution Prevention Pays Programs § 113-8.01. Increase number of clients assisted, hours technical

assistance provided, water conserved (gallons), energy saved (MMBtu), solid waste reductions (tons) GHG reductions, and client cost savings.

**GOAL 2 - DEQ 21<sup>st</sup> Century** - Develop a more competitive NCDEQ that is modernized and resourced to help eliminate the backlogs and inefficiencies in the permitting process, better manage and share information to assist the regulatory and business communities, improve transparency and most importantly, keep pace with a growing economy

**Objective 2.1** - Permit Transformation

**Strategy/Brief Description** - Create a better customer service experience for North Carolina's regulated community and more user-friendly data sources for interested parties. Develop a robust online system for applying, tracking and paying throughout the permitting process. The Division of Environmental Assistance and Customer Service (DEACS) will lead the initiative, involving each regulatory division as key stakeholders in the permitting transformation process. Improve our communication and transparency with the regulated community during the submittal and review process; Develop an online permitting presence for submittals, corrections and payments; Streamline the permitting process information requirements with tracking and search capabilities; and Eliminating the 42% backlog and 2-year waiting period for some of our permits.

**2.1.1 - Improve communication outreach and transparency** - Create feedback mechanism on DEQ homepage for permitting questions in the form of an online questionnaire that goes to a DEACS Environmental Assistance Coordinator to address and general overall rehabilitation of NCDEQ Webpage to provide greater transparency, current updates, and access to regulatory rules and regulations.

**2.1.2 - Streamline Permitting process and reduce approval timing** - Reinforce and resource NCDEQ DEQ Permit Transformation Workgroup to map the permitting workflow to assist in creating Online Permitting Interface while "leaning" the permitting process for efficiency.

**2.1.3 - Web-based permitting, pay apply, search and track** - Create a centralized Online Permitting "Interface" (OPI) for all DEQ permitting needs.

**2.1.4 - Online searchable database with permitting and enforcement information** - Develop and maintain a searchable database for external customers to view compliance and enforcement information online as part of the OPI. Performance measures include the creation of the 'permitting warehouse'; creation of the enforcement and compliance information; development of a unique identifier to tie all DEQ's permits together in the warehouse, etc.

**2.1.5 - Consistency and predictability with rules enforcement and among DEQ's seven regions** - Develop standardized templates for each permitting body to use among divisions in each region where possible and needed. Ensure consistent application of statutory requirements of enforcement factors.

**2.1.6 - Eliminate and prevent permitting backlog** - Address the current permit backlog (42% and two-year waitlist for some of our permits) and develop procedures to possibly prevent

future backlogs. Process improvement and timeliness of reducing current permit backlog will be permit unique and will vary on the complexity of the permit and availability of resources.

**2.1.7 – Complete 5 projects that support the 21st Century Program to modernize DEQ’s IT environment** - NCDEQ established 5 projects to modernize its IT environment. These projects are focused on utilizing the Dynamics CRM product to rapidly configure applications and create a common platform that can be supported and maintained for multiple years. The goal is to collapse existing applications into Dynamics CRM reducing IT costs and increasing efficiencies between applications through data integration and a common platform. This will also create a powerful launching point for near real-time dashboards and reports.

**2.1.7.1 – Complete the Foundational IT Transformation Project** - The Foundational IT project provides the foundation to implement Dynamics CRM and upgrade remote location’s bandwidth to take advantage of the cloud solution and improve overall productivity for the remote locations. Faster connections from regional offices and reduced reliance on on-site servers will be measured by the reduction of servers and corresponding costs. The project includes a project manager and CRM architect and establishes the Dynamics CRM infrastructure within DEQ including the instances, portals, and initial licenses to being development in CRM.

**2.1.7.2 - Complete the Digital Transformation Project** - The Digital Transformation project provides a vehicle to move paper products to digital that facilitates automated processes

**2.1.7.3 - Complete the Legacy Application Transformation Project** - The Legacy Application Transformation project provides a way to upgrade legacy applications into Dynamics CRM. As these processes are migrated, process times and effectiveness will be captured as well as lessons learned to make future migrations more efficient.

**2.1.7.4 – Complete the Permit Transformation Project** - The Permit Transformation Project is the IT project in conjunction with DEQ’s Permitting Transformation project that seeks to update the permit processes and provide a single point of entry to track, pay, search, and apply for permits. This can be transformational in how the regulated community interacts with DEQ, creating a positive view of how DEQ operates its mission.

**2.1.7.5 – Support the completion of the Fisheries Information Network (FIN) project** - This project supplements the current FIN project by adding contractors to support application development work. Completing FIN web and its core capabilities by June 2020 will be the measure.

**Objective 2.2 - Facilitate the design and content acquisition of a regional database based on partners date and information needs.**

**Strategy/Brief Description** A regional database will help ensure that environmental information will be integrated to support regional assessments and environmental decision-making.

**2.2.1** – Regional database that is current, comprehensive and easily accessible

### **Objective 2.3 Modernize Lab Certification Program**

**Strategy/Brief Description** Improve the accuracy of lab data used for regulatory decision-making.

**2.3.1** - Maintain a professional certification program to provide laboratories with the necessary skills to maintain compliance with state and federal regulations while concurrently provide training and technical assistance to laboratory personnel to maintain and improve compliance with state and federal requirements.

**GOAL 3. Climate and Energy** – DEQ will support North Carolina’s commitment to address climate change and transition to a clean energy economy as outlined in Executive Order 80 (EO 80). DEQ will collaborate with NC citizens, power providers, businesses, local governments, state agencies, education partners and the stakeholder community to reduce carbon pollution while propelling the state into a new energy economy. DEQ will work with state agencies and the stakeholder community to expand our understanding of climate vulnerabilities and help local communities become more resilient to extreme weather events.

### **Objective 3.1 - Climate Mitigation and Growing Clean Energy**

**Strategy/Brief Description** - By 2025, work with partners to reduce net Greenhouse Gas emissions by 40% below 2005 levels while continuing to grow NC’s economy; reduce energy intensity in state-owned buildings by at least 40% from 2002-2003 levels; and support the adoption of zero emission vehicles (ZEV) and expansion of ZEV infrastructure as outlined in Section 1 of EO 80. DEQ divisions will evaluate the impacts of climate change on their programs and operations and integrate climate change mitigation into their duties as outlined in Section 2 of EO 80.

**3.1.1 - Lead the activities of the NC Climate Change Interagency Council to meet the goals of EO 80** - DEQ will lead the Council by providing strategic direction, scheduling and planning Council meetings, prioritizing activities, facilitating stakeholder engagement, and assigning of pathways to support statewide climate mitigation and adaptation practices with focus on the October 1, 2019 deadline established in the EO.

**3.1.2 – Develop the NC Clean Energy Plan by October 1, 2019 as outlined in Section 4 of EO 80** - The Clean Energy Plan will be designed to foster the growth of clean energy technology solutions (solar, energy storage, bioenergy, smart meters, wind, beneficial electrification, microgrids, etc.) to create a modern, smart and resilient power grid. The development of the Plan will be multifaceted, with initiatives targeting innovation, demonstration, workforce development, equity, access, economic opportunity, environmental benefits and affordability. Partnerships with public and private entities will be pursued to leverage resources, expertise and opportunities to make NC a leader in clean energy development.

**3.1.3 - Foster the growth of wind energy development in North Carolina**

**3.1.3.1 - Onshore Wind** – Pursuant to Article 21C of Chapter 143 of the NC General Statutes, DEQ is directed to permit the construction of onshore wind energy facilities (WEFs). Wind development is presently under moratorium and cannot issue permits for WEFs until December 31, 2018; however, NCDEQ anticipates receiving our very first application(s) for WEFs in early 2019.

**3.1.3.2 Offshore Wind** – For wind energy facilities contemplated in the federal outer continental shelf (OCS) waters, the Bureau of Ocean Energy Management in US DOI is the authorizing agency, and DEQ will play a strategic role as any projects proceed in accordance with the federal process.

**3.1.4 – Develop NC ZEV Plan with DOT by October 1, 2019, as outlined in Section 5 of EO 80** - Plan development efforts are designed to enable acceleration and adoption of ZEVs in NC. A strong push will be given to partner with local governments DOA, DOT and technology developers to increase EV sales and build EV infrastructure through establishment of interstate and intrastate ZEV corridors in NC.

**3.1.5 - Foster efficient use of energy in the residential, commercial and industrial sectors** - The weatherization program will continue to reach out to low income residents, expand the program to other areas where feasible, and pursue additional funding opportunities to leverage federal resources. The Energy Division will support existing industrial efficiency programs to bring energy efficiency concepts to businesses and manufacturing facilities and work with university partners and other stakeholders to evaluate pathways that elevate NC's ranking in energy efficiency. The Utility Savings Initiative (USI) staff will work with state agencies, universities and other interested groups to reduce electricity and fuel usage, provide technical assistance on financing options, and track the reductions in utility consumption.

**3.1.6 – Administer the SustainableNC Program** - The SustainableNC Program will encourage climate action from major sectors of the North Carolina economy (businesses and industries, cities and towns, university, community college, K-12 schools and community groups). The program will harness the expertise and resources of business leaders and other partners to support, encourage and accelerate voluntary strategies and actions for environmental sustainability.

**3.1.7 – Publish a Greenhouse Gas Emissions Inventory** - The inventory will serve as a tool to understand past, current, and expected future GHG emissions in North Carolina and will comply with requirements of Section 10 in EO 80.

## **Objective 3.2 - Climate Adaptation and Resiliency**

**Strategy/Brief Description** - Under the new paradigm of more severe storms and more frequent flooding, which will be more exacerbated by impacts climate change and sea level rise, DEQ will provide leadership to protect life, property, environment, natural resources and the economy while building resilient communities. DEQ divisions will evaluate the impacts of climate change on their programs and operations and integrate climate change adaption and resiliency planning into their policies, programs and operations as outlined in Section 9 of EO 80.

**3.2.1 – Assess Impacts of Climate Change on North Carolina** - NCDEQ will solicit assistance from state and national experts to down scale national climate assessments to better understand the anticipated impacts of climate change in North Carolina, including expanding our scientific understanding of sea level rise, increased precipitation from severe storms, and vulnerabilities to natural and built infrastructure.

**3.2.2 - Assist vulnerable communities develop resiliency plans as outlined in Section 9b of EO 80** - NCDEQ will use expertise and assistance from other states and federal agencies to educate and provide training to local government staff create adaptation and resiliency plans for their specific community.

**3.2.3 – Develop the NC Climate Risk Assessment and Resiliency Plan by March 1, 2020 as outlined in Section 9a of EO 80** - DEQ will build partnerships with universities, non-profits, state agencies and other experts to prepare the Plan. The resulting products will assist DEQ assess climate change impacts, conduct vulnerability assessments, and develop action plans; specifically addressing the areas inhabited by marginalized and disadvantaged communities.

**GOAL 4. Environmental Justice & Equity** - Every North Carolinian - no matter where they live, what they look like or how much money they make - should have the same access to a healthy and prosperous life.

**Objective 4.1 - Environmental Justice**

**Strategy/Brief Description** - The NCDEQ Environmental Justice Program requires all North Carolinians have fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. The challenge ahead of the department is integrating this perspective into the core mission of the department and into the legal and scientific principles that guide our current work and policy development.

**4.1.1 - Integration of EJ Program** - All Divisions within DEQ will incorporate all aspects of environmental justice and equity into their everyday functions and processes to include but not limited to the permitting process and overall measurements of cumulative impact.

**4.1.2 - Fulfill DEQ commitment under the Title VI Settlement** – Meet all requirements agreed to including the air quality monitoring, water quality monitoring, stakeholder process for the General Permit for Swine Operations renewal, and the equity tool development.

**GOAL 5. Chamber/Mayors/100 County** - Outreach and partnership with local community leadership.

**Objective 5.1 - Increase Outreach**

**Strategy/Brief Description** - Develop a closer partnership and better understanding of challenges facing local governments in areas NCDEQ can influence and assist.

**5.1.1 Local Government Outreach** - All NCDEQ Division’s will incorporate outreach into their day-to-day operations (Council of Government, Chambers of Commerce, elected officials) and be prepared to provide increase understanding of our policy, programs and associated processes in addition to providing technical assistance and review as required/requested.

**5.1.2 - Conduct Training on Resources Available from DEQ** - Training events would cover the various grant programs available for local governments (such as water and wastewater infrastructure, CBDG, water resources development grants, weatherization, etc.), and the technical resources available from DEQ for various challenges the local governments may face such as recycling program needs, water quality monitoring, infrastructure, etc.

**GOAL 6. Infrastructure and Resiliency** - Following the devastation of Hurricane's Matthew and Florence use lessons learned to re-assess critical infrastructure and develop greater resiliency in areas of NCDEQ influence.

**6.1 -Objective** - Improved Infrastructure planning and siting for a more resilient North Carolina.

**Strategy/Brief Description** - Work closely with key stakeholders, state, federal and local partners to re-assess critical infrastructure in conjunction with current scientific data, flood plain information and climate impacts/projections. **NCDEQ views the new NC Office of Recovery and Resiliency (NCORR) as a critical partner in our efforts to assist in the recovery and future resilience of North Carolina and is prepared to provide subject matter experts and appropriate level of liaison support to ensure NCORR's success.**

**6.1.1 Planning** – All Divisions to review lessons learned from previous storms and determine how to best use resources to rebuild in a way that is stronger and better positions North Carolina for the next storm and be prepared to support efforts set forth by NCORR and the Governor's office

**6.1.2 Grants** – All Divisions to determine if resiliency criteria can be factored in to the grant programs to ensure the public dollars are being invested in the best manner possible.

**Objective 6.2 - Resilient Infrastructure.**

**Strategy/Brief Description – Establish Viable Utilities Grants.** The Division of Water Infrastructure has been working with the Department of State Treasurer (DST) and Environmental Finance Center at the School of Government to identify utilities that are not viable and to propose solutions to establish viable utilities. For many small systems located in rural parts of the state, water revenues have decline with the loss of manufacturing (e.g., no large water users), declining population (e.g., loss of jobs), and the decline of household water usage (e.g., more water efficient fixtures).

**6.2.1 – Project Selection Criteria** – Ensure evaluation criteria leads to decisions where funding is focused to primarily support new viable utilities who will be self-supporting, maintain increased and better compliance, and be more resilient to a myriad of events (economic, natural disasters, etc.).

**GOAL 7. Program Effectiveness** - The care for our people and providing them with the necessary tools and resources to accomplish their respective missions and task are a priority for the Department.

**Objective 7.1 - Human Resource**

**Strategy/Brief Description** – To recruit and retain a high performing workforce that fosters a learning culture to support the mission of DEQ that is ready today and prepared for the future.

**7.1.1 – Comprehensive HR Services** – Ensure that necessary training is provided to new and existing employees, support hiring managers by efficiently processing personnel actions, encourage personal and professional growth, provide support to managers as they conduct workforce planning and succession planning.

#### **Objective 7.2 - Financial Services**

**Strategy/Brief Description** – Improve efficiency of operations through increased use of electronic commerce.

**7.2.1 – Improved Efficiencies** – by increasing the payments received via e-Payment, the percentage of e-Payments made by DEQ, and improved alignment of budget resources to decrease the number of budget revisions processed annually.

#### **Objective 7.3 – Information Technology**

**Strategy/Brief Description** – IT strives to provide reliable and consistent IT experiences to DEQ, continually explore and implement solutions to increase productivity and/or reduce IT costs and focus on security by incorporating security tasks in all IT goals and projects DEQ Goal.

**7.3.1 – Comprehensive IT Services** - Improve DEQ’s customer service experience, improve and expand DEQ’s e-payment capability, incorporate security into all processes, provide robust IT training, improve IBEAM support and capabilities, and develop a plan to migrate legacy applications. See Goal 2 - 21<sup>st</sup> Century NCDEQ.

## **4. Highlights and Opportunities**

---

1. As mentioned in the strategies, the Division of Water Infrastructure is working with multiple entities on water infrastructure issues. Primarily, the division has worked with the State Water Infrastructure Authority to develop North Carolina’s Statewide Water and Wastewater Infrastructure Master Plan: The Road to Viability. The vision of the master plan is establishing viable utilities as the best way for the state to meet its water infrastructure needs. The division has been working on outreach, supporting technical assistance, reviewing water infrastructure issues, reviewing local government unit audit data, and authoring papers/articles as well as the day-to-day administration of the funding programs. Through collaboration with the Department of State Treasurer and Environmental Finance Center and others, it has been recognized that many (likely over 100) smaller system water utilities in the state are not viable (i.e., do not generate enough revenue to properly operate the utility) and face uncertainty in providing essential water services to their residents. Grant programs that fund needed rehabilitation projects provide some support, but a new approach must be used to establish viable utilities that are resilient to economic changes and natural disasters (hurricanes, droughts, etc.). However, for many utilities the costs of taking a new approach can be cost prohibitive as simply do not have the customer base (revenue) to afford a solution. For example, there may be larger, viable utility that could provide water services, but the cost to connect to that system or the costs to bring a system up standards for a merger exceeds grant availability or the ability of the smaller unit to pay the debt

service. A grant program with sufficient funding (e.g., \$50 million) for this purpose will be the first step in resolving this significant issue for rural water utilities across North Carolina.

2. The Division of Mitigation Services (DMS) stepped forward as a national leader encouraging and coordinating In-Lieu Fee (ILF) programs to communicate and mentor other states and nonprofits managing ILFs. ILF programs such as DMS have historically worked within their states or service areas with little interaction with other programs. DMS established a SharePoint Discussion Board allowing many of the 59 ILFs online interaction, sharing of ideas, issues, and common solutions. In conjunction with the online interaction, DMS coordinates national ILF conference calls providing national policy implications, innovative strategies, and other discussions.

3. DMS has also advanced technologically within the past year. The Division has completed its new data system merging project, financial, and asset management into one cloud-based database. DMS is also testing the use of 360 camera technology to provide virtual mitigation tours for regulatory agency project review. Both innovations will provide the Division with significant financial savings in time and efficiencies.

## Potential Initiatives

1. See Division of Water Infrastructure comment above.

2. Long term coastal resiliency planning. The Division of Coastal Management is working with communities to build their capacity to be more resilient to storms, flooding and other coastal hazards.

3. North Carolina has one of the most active shellfish restoration efforts in the country. One of the largest programs in this effort is the Oyster Sanctuary Program. An oyster sanctuary is an area where the harvest of oysters is prohibited. These areas are protected to encourage the growth of large, healthy oyster populations that can act as a brood stock for the rest of North Carolina's coastal waters. Each oyster produces millions of eggs annually that are carried by currents and tides to surrounding areas. By developing and protecting a brood stock, the availability of robust native oysters in adjacent waters increases. In these areas, the Division of Marine Fisheries deploys material to build reefs and encourage baby oysters to settle and grow. In addition to attracting native oyster larvae, these reefs also act as habitat for clams, small and juvenile finfish, crabs and shrimp, which in turn attract larger fish. While the sanctuaries are closed to oyster fishing they are open to hook-and-line anglers, making oyster sanctuaries popular and productive sport fishing spots. Through continued association with various academic institutions, state and federal agencies and collaboration with commercial fishermen, the program continues to develop more refined techniques for siting, building and monitoring oyster sanctuaries.

4. Planning for Needed Facility Upgrades. DEQ is in great need to upgrade our Reedy Creek Laboratory. The lab performs analysis for water quality, water resources, and air quality. It was constructed in 1991 and has not undergone a substantial renovation.

5. Currently, Marine Patrol has 78 patrol vessels and 37 of those vessels in service were purchased in 1999 or prior. Eleven of the 37 vessels were purchased in 1996. Due to budget reductions, Marine Patrol has not been able to maintain any schedule for the replacement of aging equipment. Due to the condition and age of these motors and trailers they need to be replaced. Our officers must patrol in

poor weather conditions and the vessels with older engines could present a serious safety concern if one of these engines failed during a storm. The trailers needing replacement have been inspected to ensure they are not a safety hazard, however, it is no longer cost effective to keep replacing parts on this aging equipment. There is also a need for additional Marine Patrol coverage in each district. Adding 2 law enforcement officers to each district would help remedy this shortage and to allow them to safely and effectively provide enforcement of fishery statutes and rules.

### Collaborative Opportunities

To be provided later.