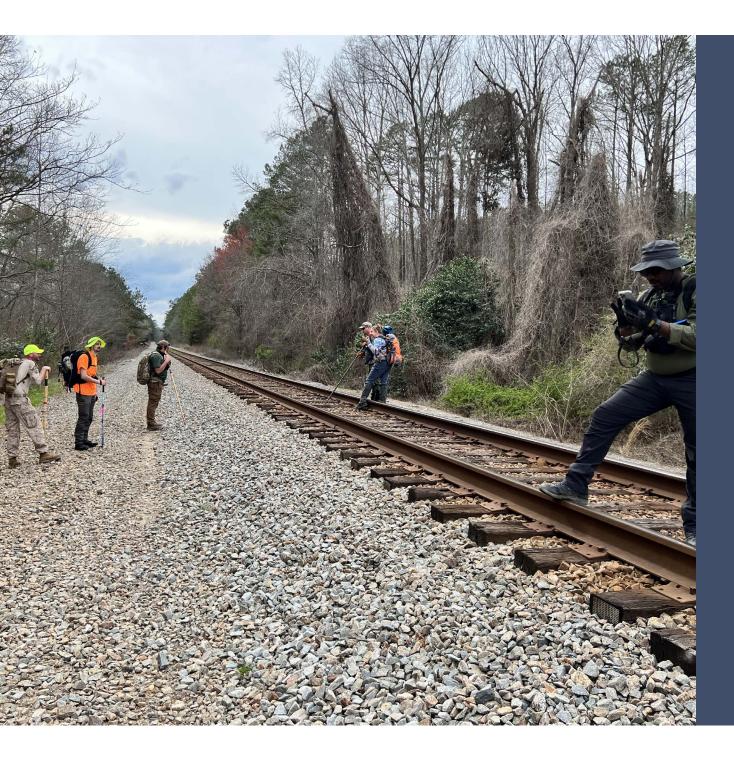
2021 ANNUAL REPORT











This past year proved to be another year of unexpected challenges, many related to the ongoing COVID-19 pandemic and surges involving new variants of the virus. We are fortunate that more than 70% of North Carolina's eligible population is now vaccinated, but there is still work to do to get more people vaccinated and boosted, while maintaining capacity for testing, as well as supporting our emergency medical systems, hospitals and health care providers.

During 2021, we organized and operated a major federally supported COVID-19 vaccination center in Greensboro alongside our local partners and Health and Human Services and National Guard partners – providing more than 140,000 vaccinations.

We also supported those communities impacted by the effects of civil unrest, cyber incidents, catastrophic flooding in western North Carolina, threats to critical infrastructure and many other events. This is in addition to the daily work of preparedness in executing statewide grant and response programs and as we expand recovery and mitigation efforts from a long list of disasters and work to become more resilient in the face of future disasters.

I am truly honored to have been selected to lead North Carolina Emergency Management and grateful for the support of our team and all of our local, state, federal and private sector partners. I am reminded daily that we have the best State Emergency Response Team in the nation and it is humbling to partner with each of you to advance public safety in North Carolina.

I'm looking forward to a productive future working with all of you as we seek to sustain critical all-hazards preparedness and response programs, expand support of the statewide homeland security apparatus and critical infrastructure partners, and continue to streamline mitigation and recovery programs to address the needs of all North Carolinians.

Will: C. 18

William C. Ray Director & Deputy Homeland Security Advisor North Carolina Emergency Management

ABOUT NCEM

OUR MISSION

North Carolina Emergency Management works to enhance the state's resiliency by actively collaborating, communicating and coordinating to prevent, mitigate, respond and recover from disasters.

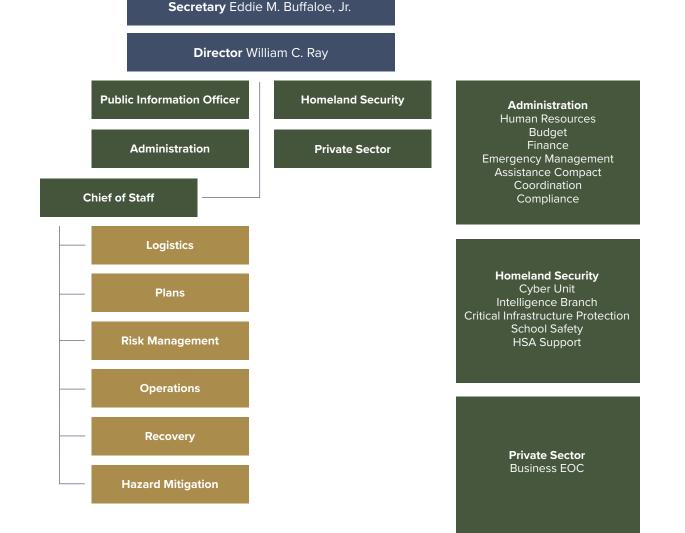
AUTHORITY

NCEM is granted the responsibility and authority to respond to emergencies and disasters by the governor via general statute § 166-A (North Carolina Emergency Management Act). The agency is nationally accredited under the Emergency Management Accreditation Program, affirming NCEM's ability to provide continuous and consistent response to disasters by bringing together necessary staff and resources from local, state, private and volunteer organizations.

RESPONSIBILITY

NCEM administers state and federal grants, manages multi-agency disaster responses, oversees all hazards and threat risk management, coordinates regional hazard mitigation plans, facilitates trainings and exercises, and manages assets such as the regional hazardous materials response teams and search and rescue teams. In addition, the agency develops and maintains flood maps for each county and maintains the official survey database for the state. NCEM also manages the state's Homeland Security program, partnering closely with the Center for Safer Schools and the state's cybersecurity agencies.

The director, who is appointed by the governor, reports to the secretary of the Department of Public Safety and serves as the state's deputy homeland security advisor.



Plans



 Logistics
 Natural Hazards

 Logistics Support
 Training

 Logistics Services
 Exercise

 Community Emergency
 Response Team (CERT)

Regional Branches

Communications/24-Hour Watch Emergency Services Human Services

Civil Air Patrol

Recovery Individual Assist Public Assista

Risk Management Floodplain Mapping National Flood Insurance Program (NFIP) Geodetic Survey Information Technology Application & GIS

Hazard Mitigation Plans Development Implementation Closeout Finance & Administration

NCEM NON-DISASTER FUNDING

NCEM's SFY2021 non-disaster assistance expenditures included over \$45,415,230.

These expenditures include personnel costs, pass-through grants to county and state partners, program delivery costs (ex: CTP/Floodplain Mapping, Cybersecurity technical assistance, Pre-Disaster Mitigation, and others), disaster response, and operating expenses such as facility and vehicle leases, utilities, and others.

The \$7,549,732 received from state appropriations is used as match for the Emergency Management Performance Grant, supporting personnel and operating expenses. Receipts received from the radiological protection, flood plain mapping programs, and hazardous materials fees amounted to \$12,783,135 and are used to support program delivery, personnel, grants to local governments, and operating costs. Approximately half of the \$25,082,364 in federal grant funds are pass-through grants, with the remainder supporting program delivery, personnel, and operating costs.

Each year, NCEM's non-disaster assistance expenditures support:

- The purchase of equipment for local, county and state agencies
- Procurement or delivery of training for first responders, emergency management staff and law enforcement
- Regular annual exercises to ensure state and local agencies are ready for all types of emergencies (including incidents at fixed nuclear facilities)
- Operations of the statewide Floodplain Mapping program, the Geodetic Survey program, and the National Flood Insurance program
- Operations of the statewide Regional Response Teams for Hazardous Materials program and Local Emergency Planning Committees
- Maintains a 24/7 capability assist local governments in disasters and other emergencies across North Carolina

| NON-DISASTER ASSISTANCE FUNDING SOURCE | AMOUNT |
|--|--------------|
| Federal Grants | \$25,082,364 |
| State Appropriations | \$7,549,732 |
| Receipts | \$12,783,135 |

| FUNDING USES | AMOUNT |
|--|--------------|
| Personnel | \$14,706,917 |
| Pass through to counties, state agencies and contractual | \$12,481,357 |
| Program Delivery | \$9,597,440 |
| Disaster Response | \$4,726,657 |
| Operating (Internal Operating Costs) | \$4,623,099 |

NCEM DISASTER ASSISTANCE FUNDING

During SFY2021 NCEM's Recovery and Hazard Mitigation Sections provided \$485,225,560 in federal disaster assistance and \$26,717,335 in state disaster assistance funding to eligible subrecipients, including local governments, state agencies, non-profits, houses of worship, and individual disaster survivors. These programs were supported with \$6,414,015 in management costs.

This funding was provided by the following key programs:

- FEMA Public Assistance
- State Public Assistance Program and Match Funds
- FEMA Hazard Mitigation Grant Program)
- State Hazard Mitigation Grant Program and Match Funds
- FEMA Individual Assistance
- State Individual Assistance

| DISASTER ASSISTANCE FUNDING SOURCE | AMOUNT |
|------------------------------------|---------------|
| Federal Disaster Assistance | \$485,225,560 |
| State Disaster Assistance | \$26,717,335 |
| Management Costs | \$6,414,015 |

| DISASTER ASSISTANCE PROGRAM | AMOUNT |
|---|---------------|
| FEMA Public Assistance | \$473,473,198 |
| State Public Assistance & Match Funds | \$22,583,903 |
| FEMA Public Assistance Management Costs | \$4,791,571 |
| FEMA Hazard Mitigation Grant Program | \$9,788,725 |
| State HMGP & Match Funds | \$3,275,608 |
| FEMA HMGP Management Costs | \$1,622,444 |
| FEMA Individual Assistance | \$1,963,637 |
| State Individual Assistance | \$ 857,823 |



EMERGENCY DECLARATIONS

Gov. Roy Cooper declared states of emergency for these events in 2021.



COVID-19 PANDEMIC

Executive Order 116 – March 10, 2020 This state of emergency for the COVID-19 pandemic continued throughout the year.

WINTER STORM

Executive Order 194 – Feb. 17, 2021 Provided transportation waivers in anticipation of a winter storm.

COLONIAL PIPELINE CYBER INCIDENT

Executive Order 213 – May 11, 2021 A malware cyber incident on the Colonial Pipeline Company resulted in a 7-day shut down of the pipeline, resulting in a run on the pumps and fuel shortages during May. Transportation waivers allowed for expedited movement of fuel supplies by truck.

TROPICAL STORM FRED

Executive Order 227 – Aug. 18, 2021 Tropical Storm Fred brought catastrophic flooding to parts of western North Carolina, particularly along the Pigeon River in Haywood County.

OUTER BANKS STORM

Executive Order 237 – Nov. 15, 2021 This state of emergency helped to secured federal highway dollars for cleanup and repairs to state Highway 12 and dunes after over wash and flooding.

DISASTER DECLARATIONS

State and federal disaster declarations can provide additional recovery funding and resources when the local government's capacity to recover is exceeded.

FEDERAL MAJOR DISASTER DECLARATIONS

COVID-19 PANDEMIC

DR-4487-NC Declared March 25, 2021 Provides the crisis counseling program and public assistance reimbursement for emergency protective measures statewide.

TROPICAL STORM FRED

DR-4617-NC Declared Sept. 8, 2021 Provides public assistance in 11 western North Carolina counties and individual assistance in three counties.

STATE DISASTER DECLARATIONS

MARION AND LILLINGTON FLOODING

Executive Order 214 – May 14, 2021 The town of Lillington in Harnett County experienced damages from severe weather, heavy rainfall and flash flooding on Oct. 29, 2020, and the city of Marion in McDowell County experienced severe weather from the remnants of Tropical Storm Zeta in late Oct.

This type 1 state disaster declaration provided Public Assistance for debris clearance, emergency protective measures and roads and bridges.



RESPONDING TO THE CALL

2021 major incidents involving response or support from NCEM staff:



PRESIDENTIAL INAUGURATION

SUPPORT January Deployment of North Carolina National Guard troops to protect facilities in Raleigh and Washington D.C. during the presidential inauguration, following the Jan. 6 attack on the U.S. Capitol.

BRUNSWICK COUNTY TORNADO Feb. 15

Nighttime EF3 tornado touched down in Brunswick County, killing three and injuring 10.

ELECTIONS SUPPORT

Oct. 5 and Nov. 2 Activated the State Emergency Operations Center to support the state's Board of Elections staff for municipal and general elections.

COLONIAL PIPELINE CYBERATTACK May 7-12

A cyberattack on the Colonial pipeline halted the flow of gasoline to market for several days.

TROPICAL STORM ELSA July 7-8

Brought several inches of rain with minor impacts as it moved quickly across the Carolinas.

TROPICAL STORM FRED

Aug. 16-17 Catastrophic flooding occurred along the Pigeon River in Haywood County.

HURRICANE IDA Sept. 1

The costliest U.S. storm of 2021 had minor effects in North Carolina, dropping heavy rains, causing some power outages and prompting evacuations in areas recently damaged by Tropical Storm Fred's flooding.

FALL WILDFIRES

November Extremely dry conditions resulted in significant fires in the northern Piedmont, at Sauratown Mountain and Pilot Mountain State Park.

OUTER BANKS STORM

Nov. 7 A coastal storm, combined with extreme high tides, caused flooding, over wash and dune damages along the Outer Banks. An emergency declaration allowed NCDOT to pursue federal highway funds for repairs and restoration.

QVC DISTRIBUTION CENTER FIRE Dec. 18-19

A massive fire at the Rocky Mount warehouse of the QVC home-shopping network killed one employee and destroyed the building, eventually resulting in the permanent closure of the facility and loss of about 2,000 local jobs. NCEM coordinated state agency and mutual aid response, including North Carolina Forest Service aircraft for fire suppression and NCDOT fuel delivery to support multi-day firefighting efforts.

TROPICAL STORM FRED

| DECLARED COUNTIES |
|-----------------------|
| Individual Assistance |
| Buncombe |
| Haywood |
| Transylvania |
| |
| Public Assistance |
| Avery |
| Buncombe |
| Haywood |
| Henderson |
| Madison |
| McDowell |
| Mitchell |
| Rutherford |
| Transylvania |
| Watauga |
| Yancey |
| |
| |

The remnants of Tropical Storm Fred brought extensive rainfall to western North Carolina in mid-August and caused catastrophic flooding along the Pigeon River in Haywood County.

The White House and the Federal Emergency Management Agency approved a federal disaster declaration providing public assistance for 11 counties and individual assistance for three counties – Haywood, Buncombe and Transylvania. By year's end, more than \$1.2 million in federal public assistance funds had been obligated, \$13.2 million paid in National Flood Insurance claims and \$4.3 million paid in individual assistance.

The state budget passed in November provided \$44 million in state funding for Tropical Storm Fred relief, including much needed funds for repair of private roads and bridges not covered by FEMA programs. The Office of State Budget and Management – Disaster Recovery is managing the state-funded recovery program.



STORM RECOVERY

The recovery team continues to work through recovery programs for 11 federally declared disasters since Hurricane Matthew and six state declared disasters. Long term recovery efforts for many of these events are ongoing in cooperation with partners at the North Carolina Office of Recovery and Resiliency, Office of State Budget and Management – Disaster Recovery and a variety of Voluntary Organizations Active in Disaster.

FEDERAL DECLARATIONS

For federally declared disasters, public assistance to local governments and state agencies totals more than \$2.1 billion obligated and \$1.3 million reimbursed since Hurricane Matthew in 2016.

PUBLIC ASSISTANCE

| DISASTER (Declaration Date) | ACTIVE PROJECTS | OBLIGATED | PERCENT OBLIGATED | TOTAL PAYOUT | |
|---------------------------------------|--------------------|-----------------|----------------------|-----------------|-----|
| Matthew (10/10/2016) | 1,900 | \$384,223,917 | 100% | \$291,302,531 | •• |
| Florence (9/14/2018) | 2,798 | \$997,166,171 | 95% | \$633,998,274 | •• |
| Michael (2/1/2019) | 213 | \$30,120,072 | 99% | \$18,023,531 | ••• |
| Dorian (10/4/2019) | 506 | \$99,491,742 | 97% | \$39,479,165 | ••• |
| COVID-19 3/25/2020 | 686 | \$619,956,915 | 60% | \$405,632,685 | ••• |
| February Severe Storms | | | | | ••• |
| (5/8/2020) | 100 | \$15,824,463 | 97% | \$3,280,977 | |
| Isaias (8/14/2020) | 258 | \$36,667,334 | 98% | \$20,032,331 | |
| Eta (11/12-15, 2020) | 135 | \$36,400,332 | 76% | \$2,912,157 | |
| Fred (9/8/2021) | 230 | \$3,341,156 | 21% | \$1,207,932 | |
| Totals | 6,826 | \$2,223,192,101 | 83% | \$1,415,869,583 | |



Individual assistance was authorized during the COVID-19 pandemic, with activation of the Crisis Counseling Program and a new FEMA program to reimburse funeral expenses for those who died from COVID-19. Both of these programs made payments throughout 2021.

INDIVIDUAL ASSISTANCE

| Disaster (Declaration Date) | Disaster Case Management | Crisis Counseling Program | Housing Assistance | Other Needs Assistance | State Cost Share (ONA Only-25% Cost Share) | Small Business Administration | Funeral Assistance Disbursed In NC (FEMA) |
|--------------------------------------|--------------------------------|---------------------------------|-----------------------|------------------------------|---|-------------------------------------|--|
| Hurricane Matthew (10-10-16) | \$3,221,072 | \$1,560,937 | \$29,632,500 | \$69,316,689 | \$17,329,172 | \$102,564,900 | \$0 |
| Severe Winds and Flooding (5-8-2018) | \$0 | \$0 | \$399,314 | \$324,173 | \$81,043 | \$1,268,500 | \$0 |
| Hurricane Florence (9-14-2018) | \$8,934,789 | \$11,597,482 | \$23,742,792 | \$110,069,172 | \$27,517,293 | \$409,274,400 | \$0 |
| COVID-19 (3-25-2020) | \$0 | \$2,671,883 | \$0 | \$0 | \$0 | \$7,368,853,382 | \$58,001,014 |

STATE DECLARATIONS

In cases where a disaster does not qualify for a federal declaration, or there are unmet needs remaining after federal programs, state-funded disaster assistance helps fill the gaps.

PUBLIC ASSISTANCE

| | ESTIMATED PA EVENT COST | PA STATE SHARE - 75% | STATE PAID TO DATE |
|---------------------------------------|----------------------------|-------------------------|-----------------------|
| Alberto - May 2018 | \$1,384,009.35 | \$1,038,077.01 | \$495,998.11 |
| Marshall - December 2018 | \$163,749.41 | \$122,812.06 | \$15,038.82 |
| Marshall - April 2019 | \$508,260.64 | \$381,195.48 | \$237,304.07 |
| Marion, Old Fort and Tyron - May 2020 | \$302,170.00 | \$266,552.50 | \$253,434.64 |
| Lillington - August 2020 | \$1,341,025.84 | \$1,005,769.38 | \$111,586.97 |
| Marion - October 2020 | \$288,298.21 | \$216,223.66 | \$24,505.66 |

INDIVIDUAL ASSISTANCE

| | Heavy Precipitation (10-23-2017) | Severe Weather (6-14-2017) | Flooding and Heavy Winds (1-6-2019) | Hurricane Dorian (10-4-2019) | Hurricane Isaias (8-14-2020) | Alleghany Earthquake (8-27-2020) | Hurricane Eta (11-12-2020) |
|----------------------------------|--|----------------------------------|---|------------------------------------|------------------------------------|--|----------------------------------|
| Small Business Administration | \$491,900 | \$49,100 | \$3,968,800 | \$6,082,000 | \$897,800 | \$1,174,800 | \$231,800 |
| Grants Amounts Awarded | \$268,869 | \$35,442 | \$251,503 | \$720,649 | \$480,535 | \$112,055 | \$166,132 |

HAZARD MITIGATION

The Hazard Mitigation section works to lessen damages from future disaster events, using funding from the Federal Emergency Management Agency's annual hazard mitigation programs and grants provided after each federally declared disaster. In the first year of FEMA's new Building Resilient Infrastructure for Communities Program in 2020, the team successfully moved five projects ahead to final consideration and submitted another 49 projects for consideration in 2021.

Meanwhile, the team continues working acquisitions, elevations, reconstructions and infrastructure projects funded after 11 federally-declared disasters in North Carolina - with 421 homes and 15 infrastructure projects completed since Hurricane Matthew in 2016.

With the passage of the 2021 state budget, NCEM gained the authority to begin managing hazard mitigation projects centrally with state staff. Counties that lack the resources to manage hazard mitigation projects, or that no longer wish to manage projects at the local level are now able to opt-in to the state-centric hazard mitigation program.

COMPETITIVE ANNUAL GRANTS

| GRANT NAME | AMOUNT AWARDED OR REQUESTED SINCE 2011 | TOTAL FEDERAL SHARE |
|--|---|---------------------|
| Flood Mitigation Assistance 2020 | \$2,473,919.00 | \$1,855,439.25 |
| Building Resilient Infrastructure 2020 | \$30,000,000.00 | \$22,500,000.00 |
| Flood Mitigation Assistance 2021 | \$3,523,544.00 | \$2,642,658.00 |
| Building Resilient Infrastructure 2021 | \$168,214,189.75 | \$126,160,642.31 |

DISASTER GRANTS

| GRANT NAME | TOTAL STATE \$ AMOUNT AWARDED OR REQUESTED SINCE 2011 | TOTAL FEDERAL SHARE | TOTAL STATE SHARE | AMOUNT REIMBURSED TO DATE |
|---------------------------|--|------------------------|----------------------|---------------------------------|
| Hurricane Matthew | \$98,964,273.67 | \$74,223,205.25 | \$24,741,068.42 | \$29,669,254.81 |
| Rockingham Tornadoes 2017 | \$97,801.00 | \$73,350.75 | \$24,450.25 | \$0.00 |
| Hurricane Florence | \$174,604,853.67 | \$130,953,640.25 | \$43,651,213.42 | \$8,401,542.78 |
| Tropical Storm Michael | \$5,179,888.00 | \$3,884,916.00 | \$1,294,972.00 | \$0.00 |
| Hurricane Dorian | \$19,427,456.00 | \$14,570,592.00 | \$4,856,864.00 | \$0.00 |
| Covid-19 | \$70,843,318.67 | \$53,132,489.00 | \$17,710,829.67 | \$0.00 |
| Storms/Tornadoes/Flooding | \$2,383,682.00 | \$1,787,761.50 | \$595,920.50 | \$0.00 |
| Hurricane Isaias | \$4,224,157.34 | \$3,168,118.01 | \$1,056,039.34 | \$0.00 |
| Hurricane Eta | \$6,679,153.00 | \$5,009,364.75 | \$1,669,788.25 | \$0.00 |
| TS Fred | \$5,473,943.00 | \$4,105,457.25 | \$1,368,485.75 | \$0.00 |
| Western NC Wildfires | \$1,143,373.00 | \$857,529.75 | \$285,843.25 | \$39,719.43 |
| Total HM Program | \$598,937,380.10 | \$448,845,504.83 | \$97,136,298.09 | \$38,110,517.02 |

KEEPING WATCH: 24-HOURS



2021 CALLS TO STATE EOC 24-HOUR WATCH

| 6 |
|-------|
| 215 |
| 71 |
| 1,187 |
| 201 |
| 7 |
| 126 |
| 179 |
| 220 |
| 2,298 |
| |

The NCEM 24-Hour Watch Center serves as the state's alert and warning point. Emergency management officers receive information and resource requests from counties for all hazards including severe weather, missing persons, hazmat incidents, fish kills, search and rescue missions, forest fires, sewage leaks and a variety of other threats.

24-Hour Watch staff can also initiate emergency alert messages via the national emergency alert system and wireless emergency alerts to mobile phones. All incidents reported by local, state and federal authorities to the NCEM 24-Hour Watch Center are documented in official records.

STATE EMERGENCY RESPONSE COMMISSION



The State Emergency Response Commission is responsible for protecting the state's residents and environment through effective emergency planning and informing the community of chemical hazards.

The SERC also acts in an advisory capacity to the secretary of the Department of Public Safety, who serves as the state administrative agent to coordinate activities of the State Homeland Security Program and the domestic preparedness regions.

In addition, the SERC fulfills the following responsibilities:

- Reviews Department of Homeland Security Grant Program applications and allocations for state and regional homeland security-related projects.
- Reviews plans for preventing, preparing, responding and recovering from acts of terrorism and all hazards, man-made or natural.
- Ensures State Homeland Security Program collaboration with all homeland security stakeholders, both government and private-sector, and encourages resident awareness of and participation in all-hazards preparedness.

The secretary of the Department of Public Safety serves as the SERC chair and the NCEM director serves as vice chair.

The commission met four times in 2021. Three of those meetings were held virtually due to COVID-19 precautions.



COVID-19 RESPONSE



North Carolina's response to the COVID-19 virus continued into its second year in 2021, as vaccines became widely available. Providing initial vaccinations and then booster shots was a priority throughout the year.

NCEM staff partnered with the North Carolina Department of Health and Human Services, the North Carolina National Guard, local partners and military staff provided by the U.S. Department of Defense to plan and run a community vaccination center in Greensboro that operated for eight weeks, providing more than 143,000 vaccines.

A mobile vaccination team provided by the Federal Emergency Management Agency operated mostly in rural areas of western North Carolina for several weeks, providing more than 9,000 additional vaccines.

NCEM staff worked to secure federal resources to support the state's medical system during the pandemic, including emergency medical crews and ambulances to support overburdened local EMS systems and staff to support monoclonal antibody clinics.

Department of Public Safety and NCEM communications staff provided support for daily Joint Information Center operations, press conferences, social media and graphics.

With 940 troops activated during peak operations, National Carolina National Guard provided planning and logistical support; distributed food, personal protective equipment and other supplies; managed warehouse operations; conducted COVID-19 testing; supported monoclonal antibody clinics and surveyed alternate care sites.





DIRECTOR SPRAYBERRY RETIRES

After an eight-year tenure as the state's longest serving emergency management director, Michael A. Sprayberry retired in July 2021. He leaves a legacy that includes respected leadership, military service and integrity.

During his tenure as NCEM director, he served a term as president of the National Emergency Management Association, as vice-chair of the State Emergency Response Commission, as North Carolina's deputy homeland security advisor and oversaw the establishment of the North Carolina Office of Recovery and Resiliency.



For more than a year during the COVID-19 pandemic, his joint news briefings with Health and Human Services Secretary Mandy Cohen and Gov. Roy Cooper became a familiar ritual. As Mike would always remind us, "Don't forget to look out for your family, friends and neighbors – and call your loved ones daily!"

TRAINING AND EXERCISES

Quality training opportunities provide emergency managers, first responders and volunteers with the skills and knowledge needed during disaster response and recovery. Exercises provide a chance to test those skills and learn in simulated environments. North Carolina Emergency Management's Training Section coordinated 446 classes this year, in-person and online, that included more than 8,000 students.

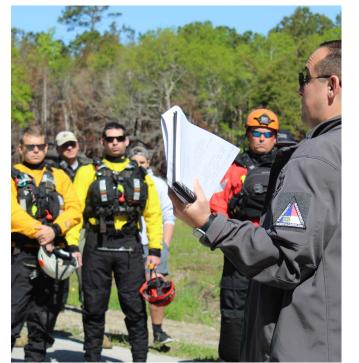
| | CLASSES | STUDENTS |
|---|---------|----------|
| Incident Management and Command | 169 | 3,128 |
| Floodplain | 11 | 595 |
| Search & Rescue | 80 | 1,428 |
| Hazardous Materials | 2 | 53 |
| Public Information/Communication | 75 | 923 |
| Active Assailant | 6 | 174 |
| Radiological Emergency Preparedness | 5 | 124 |
| Community Emergency Response Tear | n 26 | 225 |
| Other Federal Training | 33 | 412+ |
| Other State Training | 39 | 1,034 |
| TOTAL | 446 | 8,096+ |
| ••••••••••••••••••••••••••••••••••••••• | | |



FORMER SECRETARY HOOKS SWORN IN AS FEMA DEPUTY ADMINISTRATOR

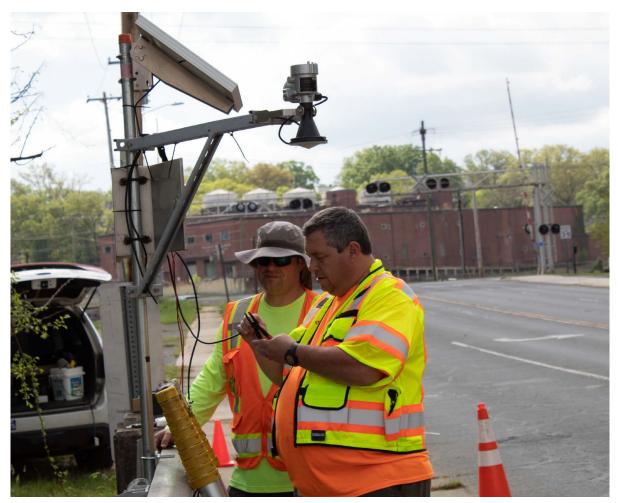


After five years at the helm of the Department of Public Safety, Secretary Erik A. Hooks retired in August and was selected by the Biden administration as its nominee for the position of deputy administrator at the Federal Emergency Management Agency. In December, Hooks was confirmed by the U.S. Senate and sworn in as deputy to FEMA Administrator Deanne Criswell.





FLOOD MITIGATION



FLOOD PLAIN MAPPING ACCOMPLISHMENTS

- Performed updated coastal analyses in Onslow and Carteret counties
- Performed levee engineering analyses for updated flood maps in Edgecombe and Robeson counties
- Developed and performed hydrologic analyses for five counties in the French Broad River Basin
- Continued floodplain engineering analyses for 11 riverine counties
- Prepared draft flood maps for 16 counties
- Issued preliminary flood maps for three counties including final coastal county (Washington County)
- Issued final Letter of Final Determination for four counties including Wake County

NEW GAUGES BRING ADDED FLOOD MONITORING AND PREDICTION CAPABILITY

In partnership with the Department of Homeland Security, North Carolina Emergency Management installed eight new low-cost gauges this year and incorporated the data into FIMAN. Installation of 71 additional new gauges began in January 2022 and will be completed by summer of 2022. Eleven new water level gauges were installed at sites near high and immediate hazard dams in 2021 and more gauges near dams will be installed in early 2022.



CORS BENEFITS WORTH MORE THAN \$120 MILLION

The North Carolina Geodetic Survey, a section within NCEM Risk Management, operates the state's network of continuously operating reference stations supporting high accuracy three-dimensional positioning activities throughout the state. In 2021, CORS data was used over 1.7 million times and generated efficiency gains worth more than \$120 million. The CORS network generated an estimated \$230 million in total benefits to North Carolina's economy - over 350 times the annual cost of the program. Moreover, the economic activity supported by CORS is estimated to generate more than \$2.3 million in annual state sales and income tax revenue, as well as \$590,000 in local sales tax revenue. This is more than enough to fund the network's annual operating cost of \$645,000.

The CORS network is composed of **Global Navigation Satellite System** base station receivers spaced 20-40 miles apart across the state. Each receiver continuously records the GNSS data received through its permanently mounted antenna, which has a surveyed reference point to calculate the second-by-second positioning error caused by signal delays, satellite clock errors and inaccurate orbit information. CORS data allows spatial data users to increase the accuracy of field data from 10 meters to 2 centimeters.

BUILDING CYBERSECURITY STATEWIDE



As threats and attacks in cyberspace have become as common and concerning as natural hazards, North Carolina has continued to improve its cybersecurity posture.

The Joint Cybersecurity Task Force includes the North Carolina National Guard Cybersecurity Response Force, the North Carolina Emergency Management Cybersecurity Unit, the North Carolina Local Governments Information Security Association, North Carolina Department of Information Technology and federal partners. The team plans and executes vulnerability assessments, network evaluation and monitoring, and defensive cyber operations for state networks.

ENSURING SECURE ELECTIONS

The Department of Public Safety coordinated a multi-agency work group, including the North Carolina National Guard, State Board of Elections, NCEM and North Carolina Department of Information Technology, focused on election support. This included the facilitation of multiple exercises, planning work groups, and activations of the State Emergency Operations Center on primary and general election days.

EXPANDED INTELLIGENCE AND CYBERSECURITY AND CRITICAL INFRASTRUCTURE PROTECTION CAPABILITIES

The Department of Public Safety increased staff assigned to the State Fusion Center to better support state and local public safety operations and enhance information sharing. The Joint Cybersecurity Task Force added staff to support technical assessments, forensic investigation, cyber defensive operations and mitigation operations. The Homeland Security Advisor Work Group expanded to include more state and federal public safety, intelligence and law enforcement partners to ensure relevant infrastructure sectors are protected.

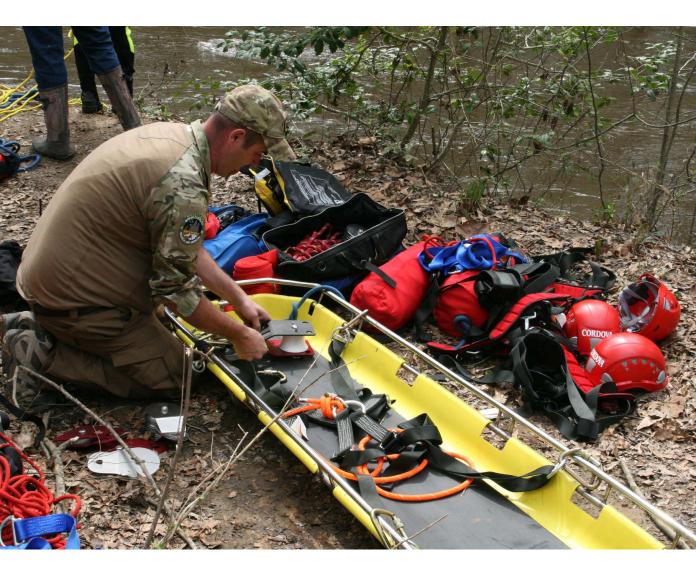
PROVIDED CYBERSECURITY SUPPORT TO LOCAL AND STATE AGENCIES

Joint Cybersecurity Task Force members conducted security assessments, responded to incidents of ransomware/malware, continuously monitored 168 entities (including state, county and municipal agencies and community colleges) and conducted cybersecurity exercises for participants from city, county and state agencies, schools, community colleges and election boards.

CIVIL DISTURBANCE

State law enforcement agencies, to include the Alcohol Law Enforcement, Community Corrections, NCNG, State Bureau of Investigation, State Capitol Police, State Highway Patrol, along with the North Carolina Department of Transportation/Division of Motor Vehicles, in coordination with the efforts of NCEM, initiated a civil disturbance working group. This group initiated proactive outreach to local public safety partners to strategically support incidents involving criminal activity.







Plan. Prepare. Stay Informed. 919-825-2500 www.readync.gov



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