

TOWN OF MORRISVILLE HAZARD MITIGATION PLAN: ANNUAL PROGRESS REPORT



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Town of Morrisville Hazard Mitigation Plan: Annual Progress Report

REPORTING PERIOD: JANUARY 2018 TO DECEMBER 2018

BACKGROUND

The federal Disaster Mitigation Act (DMA) of 2000 (Public law 106-390) requires state and local governments to develop hazard mitigation plans as a condition for federal grant assistance. This includes a mandatory five-year update that provides an opportunity to reevaluate recommendations, monitor the impacts of actions that have been accomplished, and determine if there is a need to revise the focus of mitigation strategies.

In 2012, Federal grant funds were awarded to Wake County for a multi-jurisdictional hazard mitigation plan. After funds were received, Atkins Consulting was selected by a work team made up of representatives from each of Wake County's twelve jurisdictions. The Wake County team and the consultant worked together to develop the multi-jurisdictional plan, which was released to the public for review and comment. The public was involved in both the drafting of the plan and review of the final draft document. On January 29th, 2015, the final draft received approval by the Federal Emergency Management Agency (FEMA), which cleared the way for adoption among Wake County's twelve jurisdictions. On May 26th, 2015, the Morrisville Town Council officially adopted the Wake County Multi-Jurisdictional Hazard Mitigation Plan. Since its adoption, Town staff annually updates the Planning & Zoning Board and Town Council on efforts to address the specified action items outlined in the plan.

2018 NATURAL DISASTERS

Hurricane Florence made landfall in North Carolina on September 14th, 2018, with the storm's outer bands impacting Morrisville. The National Weather Service reported almost 3 inches of rain and 30+ mph winds at nearby RDU International Airport during the one-day period. Flooding occurred along Crabtree Creek, but no significant damage was reported in Morrisville.

Hurricane Michael passed over North Carolina on October 11th, 2018, with the storm's outer bands impacting Morrisville. Similar to Hurricane Florence, The National Weather Service reported almost 3 inches of rain and 30+ mph winds at nearby RDU International Airport during the one-day period. Flooding occurred along Crabtree Creek, but no significant damage was reported in Morrisville.

A winter storm moved across the Triangle area on December 9th, 2018. The National Weather Service reported almost 7 inches of snow at nearby RDU International Airport during the one-day period

No other natural disasters directly impacted Morrisville.

PLAN EVALUATION

The approval period for the current plan is five years (expires January, 2020). During this approval period, the Planning Department provides the Town Council and the citizens of Morrisville an annual report on the implementation of the policies identified in the plan. To appropriately gauge progress, a set of specific criteria, located in Section G on page 57 of the adopted Plan¹, were utilized by staff to draft this report. Each policy, including a brief evaluation, is provided below:

Prevention Policy 1: Improve road visibility and safety by evaluating existing road conditions and paving and/or placing new reflector tape or paint along road edges and in the divided line on all major Town roads.

The Town hires a private engineering consulting firm to perform a Pavement Condition Survey on all Town roads approximately every two years. On a street-by-street basis, pavement deficiencies are recorded, the pavement is given a pavement condition index number, recommended repairs and associated costs are noted and a repair prioritization schedule is developed. Most recently, Kercher Engineering, Inc. performed a Pavement Condition Survey in January 2019.

Each year, the Public Works Department determines roads in town to be repaired based on a number of criteria such as pavement condition index, severity of defects, age of roadway, road classification, traffic volume and available funding. The 2016 Pavement Condition Survey report findings are an overall Pavement Condition Index (PCI) of 76.6 which is similar to the 2014 PCI of 76.8. 87 percent of Town roads are rated fair to very good condition, while 13 percent of Town roads are rated poor to very poor condition.

Road Paving Projects in 2018 included the following: Perimeter Park Drive, 4 lanes wide, from Watkins Road to Airport Blvd, McCrimmon Pkwy., 4 lanes wide, from Airport Blvd. to McCrimmon Extension Project Phase I and Carrington Mill Blvd., 4 lanes wide from Paramount Pkwy. to 100 ft. past the last Oracle driveway.

When performing road paving projects, the Town removes the existing striping and pavement markings and replaces them in thermo-plastic, high reflective paint. Also, as pavement markings wear off they are repainted with thermo-plastic paint as part of routine maintenance.

Streets and the public right-of-way are inspected on a weekly basis by Public Works staff for road hazards, trash in the ROW, downed or damaged signage, debris, trees and branches encroaching in the ROW, and to ensure storm water control features (curb inlets, catch basins, etc.) are cleared and cleaned.

Prevention Policy 2: Evaluate and update the Town of Morrisville Multi-Hazard Emergency Response Plan on an annual basis.

The Standard of Cover plan was updated in 2015. The Town will continue to annually update and review this plan in the future.

Prevention Policy 3: Monitor trees and branches in public areas at risk of breaking or falling in wind, ice, and snow storms. Prune or thin trees or branches when they would pose an immediate threat to property or other significant structures or critical facilities in the Town.

The Town's Public Works Department performs a weekly inspection of all NCDOT roads and Town roads to look for hazards in the ROW such as potholes, debris and fallen tree limbs as well as routine maintenance

¹ A copy of the adopted Plan is available at Town website.

items related to roads, sidewalks, drainage and traffic signs. In addition, Public Works regularly inspects Town parks, grounds and right of ways for hazardous trees and/or limbs. If trees or limbs have the potential of causing harm or property damage, they are removed in accordance with Morrisville's Hazardous Tree Policy. Public Works contracts out the removal of large trees to Bartlett Tree Service. Finally, Public Works performs hazardous tree inspections after heavy storms.

Prevention Policy 4: Maintain all tax parcel information, floodplain locations and frequent flooding areas in Geographic Information Systems (GIS).

Tax parcel information and floodplain maps continue to be maintained. New preliminary floodplain maps were introduced in 2015, but aren't expected to go into effect until 2019.

Prevention Policy 5: Evaluate and update the current floodplain ordinances and policies.

The Floodplain Management program is currently under the Engineering Department and managed by a certified floodplain manager (CFM). All ordinances are up to date, included in the Morrisville Unified Development Ordinance as of 06/23/2017, and currently approved by the state.

The stormwater division also created a web page on the Town's website that provides details about the preliminary FEMA Flood Insurance Rate Maps (*floodplain maps*), which are expected to be in effect by 2019.

Prevention Policy 6: Develop a Debris Management Plan, in conjunction with the Wake County Debris Management Plan, to address debris associated with natural hazards.

A Debris Management Plan was adopted in 2010 and is currently in use. For FY 2019, the Town has entered into contracts with Philips & Jordan Inc. for debris removal service and HDR Inc. for debris management service.

Prevention Policy 7: Explore amending the Zoning and/or Subdivisions Ordinances to require all utilities to be placed underground for all new projects and major amendments to existing projects.

This requirement was incorporated into the UDO (effective 7/1/2015). See Section 5.11.1.B.2, Underground Installation Required.

Property Protection Policy 1: Evaluate the need and cost of purchasing records protection services for information technology-related services.

A full backup of all data from all servers is captured weekly and incremental backups are performed nightly. The Town has transitioned from the use of tape backups to offsite cloud storage backups. In addition, redundant server, storage, and networking has been installed at the EOC to support continuous replication of virtual servers which can be made available in the event of a loss at Town Hall.

Property Protection Policy 2: Seek Federal, State, and County funding opportunities to purchase property located completely or partially in FEMA designated floodplains in order to mitigate potential property damage and protect natural resources.

The Town has not sought Federal, State, or Wake County funding to purchase property or land that is completely or partially located in FEMA designated floodplain. However, in 2017, the Town purchased ten acres of land, partially located within a FEMA designated floodplain, in order to expand the regional greenway system.

Natural Resource Protection Policy 1: Explore the possibility of promoting or requiring xeriscaping as a water conservation measure.

The Unified Development Ordinance (UDO), which was adopted December 10, 2013 with an effective date of July 1, 2014, encourages the use of drought-tolerant vegetation native to the Morrisville. This policy has been met.

Natural Resource Protection Policy 2: Evaluate expanding the riparian buffer from 50 to 100 feet.

Recent State legislation has limited the Town's capability of requiring any riparian buffer over 50 feet.

Emergency Services Policy 1: Monitor the status of backup generators, communications and vehicles for all Morrisville owned critical public facilities. Test generators, communications equipment and vehicles on a regular basis, not only for maintenance, but to confirm that the equipment continues to match the needs of critical facility expansion or updated operations. Purchase and repair equipment as necessary.

To ensure critical public facilities are able to respond during a disaster, the Town tests generators weekly, performs maintenance quarterly and load test annually. Currently (FY 2019) KB Power System is on contract to perform maintenance services on the Town's generators. Town emergency communication equipment and vehicles are used and maintained year-round. Public Works has a Senior Mechanic that performs preventative maintenance on the Town vehicles and equipment. Major and specialty repairs are contracted out. Preventative maintenance is performed on each vehicle in accordance with the manufacturer's recommendations and at a minimum each vehicle is brought in at least twice a year. In 2017, Public Works installed Telematics on all general fleet vehicles which provides real-time OBD-II diagnostic trouble code readings directly to Public Works to provide timely detection and repair of vehicle maintenance needs.

Public Education and Awareness Policy 1: Disperse via the Morrisville Connection newsletter a posting which provides information regarding natural hazard emergency response and preparedness actions the public can take.

The Morrisville Connection newsletter is mailed to all residents quarterly and includes information about emergency preparedness as appropriate.

ReadyWake! Emergency Notification System – The Town of Morrisville continues to use ReadyWake as our emergency notification system. Residents are encouraged to sign up to receive emergency notifications via the Morrisville Connection.

Winter Weather Notification - We listed several methods for our residents to receive winter weather information and cancellations including ReadyWake, the Town's Weather Hotline and Text and Email options. The Town also posts inclement weather and emergency notification information to Town social media accounts.

All listed home telephone numbers are automatically enrolled in the ReadyWake system. Cellular phones and unlisted numbers require manual registration with ReadyWake on their website www.readywake.com.

Public Education and Awareness Policy 2: Notify citizens of the public hearing on the Hazard Mitigation Plan annual progress report.

Prior to adoption of the Wake County Multi-Jurisdictional Hazard Mitigation Plan, staff placed an ad in the News & Observer to notify residents of the public hearing. Since the annual plan update report is voluntary and not required by the State or Federal government, an official public hearing notice is not required. In lieu

of a newspaper ad, staff utilized the Town website, Twitter, Facebook, the Morrisville Connection, and/or other media resources that reach a larger audience and save money.

Policy Education and Awareness Policy 3: Continue providing website link to Federal and State Declared Emergencies affecting the Town.

Through 2018, when Federal or State Declared Emergencies are made, the website is updated.

Policy Education and Awareness Policy 4: Continue advertising the Town of Cary's Water Conservation and Restriction Plans on the Town website.

The Morrisville Connection, which is available on the Town website, provides information from the Town of Cary.

Policy Education and Awareness Policy 5: Continued participation in CodeRED, an automated citizen alert system that notifies the public of pending emergencies and actions necessary to take in response to a particular emergency.

The Town transitioned from CodeRED to ReadyWake! In December 2012. ReadyWake! is offered by Wake County and provides the same function as CodeRED.

Policy Education and Awareness Policy 6: Utilize volunteer citizen committees, such as CERT or Public Safety Committee, to educate residents in preparing for natural hazards.

The Community Emergency Response Team (CERT) conducted monthly training in 2018, which included general emergency/disaster preparedness and response, along with fire safety. The Town will look to enhance the participation of citizens on CERT in the years to come.