

Section 7: Mitigation Strategies

7.1 Introduction

This section of the Albemarle Regional Hazard Mitigation Plan outlines all of the goals and strategies that will be implemented at the regional, county, and municipal level. It should be noted that all goals and implementing strategies relating to the individual counties were based on elements of each respective jurisdictions' previous plan. All strategies relating to regional initiatives were developed through this planning process. All actions have been updated and are intended to reflect the current needs and desires of the Regional Mitigation Advisory Committee and their respective jurisdictions. The mitigation strategies developed through the planning process will be implemented at the regional, county, and in some cases, municipal level. Gates County will take the lead in undertaking all strategies outlined within this plan relating to the region overall, with support and assistance from Camden, Chowan, Currituck, Dare, Hertford, Pasquotank and Perquimans counties, as well as all participating jurisdictions.

As the Regional Mitigation Advisory Committee worked through the development of this action plan, the group focused on six primary mitigation focus areas for the region, as well as each participating jurisdiction. These focus areas define the various aspects of mitigation, and provide guidance toward the development of a truly comprehensive solution to mitigation planning.

1. **Prevention** include regulatory methods such as planning and zoning, building regulations, open space planning, land development regulations, and stormwater management.
2. **Property Protection** actions diminish the risk of structural damage through acquisition of land, relocation of buildings, modifying high-risk structures, and floodproofing high-risk structures.
3. **Natural Resource Protection** can soften hazard impacts through mechanisms such as erosion and sediment control or wetlands protection.
4. **Emergency Services** measures include warning, response capabilities, Town critical infrastructures protection, and health and safety maintenance.
5. **Structural Mitigation** controls natural hazards through projects such as reservoirs, levees, diversions, channel modifications and storm sewers.
6. **Public Education** includes providing hazard maps and information, outreach programs, real estate disclosure, technical assistance and education.

7.2 Mitigation Progress Reports

A. Public Participation

All participating jurisdictions work very closely with citizens to provide programs and support that will improve each County's resiliency to natural disasters. Over the last five years, all five Counties have taken significant steps to improve upon existing emergency service functions and

programs. The public was an integral part in carrying out all of these efforts. All issues relating to emergency management policy and programs have been thoroughly discussed with the respective County Board of Commissioners and Town/City Councils. In more specific terms, the public has been involved in discussions relating to regulatory tools, mitigation, and emergency services through County Planning Board and Board of Commissioners meetings. All meetings involving these two bodies are locally advertised and open to the public.

B. Monitoring and Evaluation

Camden, Chowan, Currituck Dare, Gates, Hertford, Perquimans and Pasquotank counties, as well as participating municipal jurisdictions, have and will continue to utilize the information within this document for day-to-day planning efforts. Through monitoring the status of each jurisdiction's existing Mitigation Plan, each County has improved upon the data utilized throughout this document. Each County's administration maintains a dialogue with their respective County Board of Commissioners and municipal representatives regarding mitigation/emergency management issues, and provides the public with information when deemed necessary.

C. Incorporation of Mitigation Plan into Other Planning Mechanisms

Over the last five years, Camden Chowan, Currituck Dare, Gates, Hertford, Perquimans and Pasquotank counties as well as all participating jurisdictions, have made several land development policy amendments. The information and strategies outlined within each County's existing HMP were factored into discussions during the development of these documents. This coordination ensures that information outlined in the hazard mitigation plan is carrying over into land use policy. Additionally, each County and pertinent municipal jurisdictions reviewed their Flood Damage Prevention Ordinances to ensure compliance with current standards, including review and adoption of updated Flood Insurance Rate Maps. All entities also considered the HMP during decisions relating to capital expenditures such as infrastructure improvements.

D. Mitigation Strategy Progress

Over the last five years, each jurisdiction participating in this update process have implemented strategies at both the County and municipal levels. Through these implementation efforts, each jurisdiction has strengthened their respective mitigation programs, as well as improved the resiliency of their respective community. A comprehensive status report of each participating jurisdictions existing mitigation actions is provided in Appendix F of the plan.

7.3 Mitigation Strategies

The overall hazard mitigation planning effort is focused on providing the region and each participating jurisdiction with an action plan that will strive toward the achievement of the goals outlined below. In order to establish this plan, the Regional Mitigation Advisory Committee decided that the best approach would be to define goals to guide the development of strategies developed through this plan. In taking this approach, the goals as defined in each community's previous plan have been redefined. The overall intent is consistent; however, the language and content of the

statements has been slightly modified as outlined in the mitigation action status report (see Appendix F).

The following provides definitions of how goals and implementing strategies relate to one another:

- **Goals** – A broad based statement of intent that establishes the direction for the Regional Hazard Mitigation Plan. Goals state desired outcomes for the overall implementation process.
- **Implementing Strategies** – A project specific strategy aimed at mitigation and involving a specific entity, interest, and funding mechanism.

As noted, goals are statements of desirable future conditions that are to be achieved. They are broad in scope and assist in setting community priorities. The following goals will provide the basis for the implementation strategies that will be included in this section, some of which are already being administered and implemented locally. These goals take into account the strategic goals outlined within each participating jurisdictions' existing plan.

1. Reduce the risk of loss of life and personal injury from natural hazards.
2. Reduce the risk and impact of future natural disasters by regulating development in known high hazard areas.
3. Maintain critical facilities in functional order.
4. Protect infrastructure from damage.
5. Ensure that hazard mitigation is considered when redevelopment occurs after a natural disaster.
6. Provide education to citizens that empowers them to protect themselves and their families from natural hazards.
7. Fulfill Federal and State requirements for receipt of future disaster recovery and hazard mitigation assistance.
8. Improve inter-jurisdictional cooperation and coordination, especially regarding the reduction of natural hazard impacts.

The tables in this section outline all the implementation strategies developed through the Albemarle Regional planning process. The tables also provide guidance relating to funding sources, priority, and a variety of other information required to effectively implement the plan.

The actions in the following tables have been ranked based on a cost-benefit review conducted by the Regional Mitigation Advisory Committee through the planning process. Each implementing action has been provided a priority of low, medium, or high based on this review. The following provides a breakdown of the factors utilized to conduct this cost benefit review:

1. High Priority – Highly cost-effective, administratively feasible and politically feasible strategies that should be implemented in fiscal years 2015/2016 and 2016/2017 and be continued.
2. Medium Priority – Strategies that have at least two of the following characteristics (but not all three) and should be implemented in fiscal years 2016/2017 to 2017/2018:
 - Highly cost-effective; or
 - Administratively feasible, given current levels of staffing and resources; or
 - Are politically popular and supportable given the current environment.
3. Low Priority – Strategies that have at least one of the following characteristics (but not two or three) and should be implemented in the next five (5) years (by the end of 2018/2020):
 - Highly cost-effective; or
 - Administratively feasible, given current levels of staffing and resources; or
 - Are politically popular and supportable given the current environment.

Strategies will be implemented earlier if resources are available. It should also be noted that projects or initiatives given low priority may be ultimately contingent upon grant funding.

The following tables provide a detailed breakdown of specific mitigation strategies that will aid the region and all participating jurisdictions in furthering the goals discussed within this section of the plan. These implementing strategies are intended to address the next five years. Subsequent to this period, the Regional Mitigation Advisory Committee will revisit these actions as outlined within Section 8, Plan Maintenance.

It should be noted that in devising the strategies outlined in this section, the Regional Mitigation Advisory Committee took the following factors into consideration:

- The strategy will solve the problem it is intended to solve, or begin to develop a solution.
- The strategy meets at least one community mitigation goal.
- The strategy complies with all laws and regulations.
- The strategy is cost-beneficial.
- The community implementing the strategy has (or will have) the capability to do so.
- The strategy is environmentally sound.
- The strategy is technically feasible.
- The strategy will further the County's standing in the NFIP.

The overriding consideration in deciding whether a strategy should be established and/or maintained was whether the project or initiative was cost-beneficial. The MAC reviewed each potential statement based on the overall benefit in relation to the financial and staff resources required for implementation.

Table 7.1 Regional Mitigation Strategies

Number	Mitigation Strategy	Responsible Agency
REG1	Evaluate and revise local plans, policies, procedures, regulations and ordinances to further enhance the regions ability to mitigate natural and man-made hazards	Participating County Administration, Participating County Emergency Management Agencies
REG2	Maintain and/or improve existing transportation infrastructure throughout the Region to enhance response times and aid in evacuations.	Participating County Administration, Participating County Emergency Management Agencies
REG3	Implement a public outreach campaign to increase awareness about the natural and man-made hazards that can impact the region.	Participating County Administration, Participating County Emergency Management Agencies
REG4	Pursue mitigation of repetitive loss properties throughout the Region.	Participating County Administration, Participating County Emergency Management Agencies
REG5	Identify and implement mitigation projects that are cost effective and will help reduce the effects of natural and man-made hazards.	Participating County Administration, Participating County Emergency Management Agencies

Table 7.2.1 Camden County Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM1	Utilize best available data to identify the location and potential impacts of natural hazards on people, property and natural environment.	Hurricanes, Nor'easters Flooding	High	Planning, GIS, Emergency Management	General Fund, Grants	New Action
CAM2	Establish periodic monitoring and review of Multi-Hazard plan and ordinances to determine effectiveness at preventing and mitigating hazards.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	High	Planning, Inspections, Emergency Management, LEPC, Emergency Response Agencies	General Fund	New Action
CAM3	Continue to ensure through proper planning, zoning and building codes that all safety measure are in place for new construction and placement.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	High	Planning, Inspections, County Commissioners	General Fund	New Action
CAM4	Continue efforts for post-storm planning in an effort to reduce the time required to return the affected community to pre-storm status.	Hurricanes, Nor'easters, Flooding, Tornadoes	High	Planning, Emergency Management	General Fund	County has just completed the RFP process for a new Debris Removal Contract and Debris Monitoring Contract. A Disaster Recovery Plan has been completed.
CAM5	Maintain "Storm Ready Community" Status	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	High	Emergency Management	General Fund	New Action
CAM6	Ensure that building codes are enforced to prevent damages from high winds.	Hurricanes, Severe Tornadoes, Severe Thunderstorms	High	Inspections, County Commissioners	General Fund	New Action
CAM7	Continue to enforce regulatory measures that ensure new development will not increase flood threats to existing properties.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms	High	Planning, County Commissioners	General Fund, Grants	New Action
CAM8	Minimize economic and property losses due to flooding through continued compliance in the National Flood Insurance Program (NFIS).	Hurricanes, Nor'easters, Flooding	High	Planning, Emergency Management, County Commissioners	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM9	Join the Community Rating System (CRS).	Hurricanes, Nor'easters, Flooding,	High	Planning, Emergency Management, County Commissioners	General Fund	New Action
CAM10	Develop and maintain comprehensive water management policies for Camden County considering the connections between land-use, urban growth, and surface water, and ground water issues.	Hurricanes, Nor'easters, Flooding	High	Planning, CAMA, County Commissioners, Emergency Management	General Fund	New Action
CAM11	Seek/Encourage the development and implementation of long-term cost effective and environmentally sound mitigation projects.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms	Medium	Emergency Management, County Commissioners	Mitigation Funds	New Action
CAM12	As Funding allows, reduce flood-related damage to repetitive flood loss properties and structures through the buyout program.	Hurricanes, Nor'easters, Flooding	Medium	Emergency Management, County Commissioners, Finance Department	Mitigation Funds	New Action
CAM13	Encourage critical facilities to apply structural hazard mitigation and sustainability concepts when building or remodeling their facilities; to include back-up power sources.	All Hazards	Medium	Emergency Management	General Funds, Mitigation Fund, Grants	New Action
CAM14	Reduce the impact of wind on trees near county/city structures.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	Low	Maintenance	General Fund	New Action
CAM15	Acquire generators or other forms of redundant power supply to ensure that critical facilities and infrastructure remain operational where normal power supply is not available.	All Hazards	Medium	Emergency Management	General Fund	New Action
CAM16	Maintain Debris Removal and Monitoring Services Contracts	Hurricanes, Nor'easters, Severe Thunderstorms Tornadoes	Medium	Emergency Management, Planning, County Commissioners	General Fund	New Action
CAM17	Encourage development of Continuity of Operations Plans in both government and private agencies.	Hurricanes, Nor'easters, Severe Thunderstorms, Flooding Tornadoes	Medium	Emergency Management	General Fund	Completed by Camden Sheriff's Office and additional planning efforts are underway by other departments.
CAM18	Educate and inform residents, businesses and visitors via public education, social media and print materials on ways to mitigate disasters including steps that they can protect themselves.	All Hazards	High	Emergency Management	Mitigation Funds	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook.
CAM19	Encourage the use of weather radios/severe weather warning apps especially in schools, rest homes, convalescent homes, retirement centers and other locations where people congregate to inform them of the approach of severe weather.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	High	Emergency Management	Mitigation Funds	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM20	Increase awareness of hazards affecting Camden County and provide information to assist in good decision-making.	All Hazards	High	Emergency Management	General Funds, Mitigation Fund, Grants	New Action
CAM21	Educate home and property owners about flood-proofing and wind-proofing measures.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	Medium	Planning/Inspections, Emergency Management	General Fund	New Action
CAM22	Continue to enforce the North Carolina Building Code. The requirement that new structures or structures undergoing significant renovation be resistant to wind loads of 110 mph. is of particular importance.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	High	Planning/Inspections	General Fund	The Planning and Code Enforcement Department continues to enforce the state building code, including wind load requirements. All building plans must demonstrate compliance prior to issuance of a building permit. The Building Inspector continues to conduct inspections during construction and no Certificate of Occupancy is issued unless all requirements are satisfied.
CAM23	Educate contractors about safe housing development through written materials or during county sponsored events.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	Low	Planning/Inspections	General Fund	Removed from plan. Will be removed on subsequent plan.
CAM24	Provide hazard mitigation information for the county residents including information on preparedness for all hazards significant to Camden County during various public events, in public buildings, and through media outlets.	All Hazards	High	Emergency Management	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook.
CAM25	Provide homeowners information on wind resistant measures.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	Medium	Planning/Inspections, Emergency Management	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook.
CAM26	Post information about Camden County's emergency evacuation routes.	All Hazards	High	Emergency Management	General Fund	Information provided during various public events/educational events. Also posted to EM website and via social media.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM27	Review the Pasquotank-Camden-Elizabeth City Multi-Hazard Operations Plan annually and update the plan as necessary. Ensure all departments establish guidelines for response to emergencies and to maintain departmental operations. Work with County departments to ensure each department possesses a clear understanding of department responsibilities as outlined in the Pasquotank-Camden-Elizabeth City Multi-Hazard Operations Plan.	All Hazards	High	Emergency Management	General Fund	Public Safety Agencies meet regularly, on a monthly basis. Other agencies meet along with these agencies for special meetings/trainings. Exercises are conducted annually to review departmental operations and to ensure each agency understands their role and responsibility as outlined in the Multi-Jurisdictional Hazard Mitigation Plan.
CAM28	Monitor trees and branches at risk of breaking or falling in windstorms. Prune or thin trees or branches on county property when they would pose an immediate threat to property, utility lines or other significant structures or critical facilities in the community.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	High	Utility Providers, Emergency Management, Public Works	General Fund	Camden County relies on the utility providers to conduct these efforts, the County will continue to support their efforts through maintenance support services provided by the County.
CAM29	Continue efforts to develop continuity of operations plans (COOP) for county departments. Continuity of operations planning has been completed by several departments and additional planning efforts are currently underway.	All Hazards	High	Emergency Management, County Commissioners,	General Fund	Completed by Camden Sheriff's Office and additional planning efforts are underway by other departments.
CAM30	Record all tax parcel information and floodplain locations in a GIS system including repetitive loss areas, areas of greatest risk, and vulnerable populations.	Hurricanes, Floods, Nor'easters	High	Camden County GIS	General Fund	Completed and updated as information is made available.
CAM31	In conjunction with NCEM/GTM, produce an up-to-date flood map of Camden County that can be utilized to reduce development in the floodplain.	Hurricanes, Floods, Nor'easters	High	Camden County GIS	General Fund	Completed and updated as information is made available.
CAM32	Minimize economic and property losses due to flooding. Continued compliance with NFIP— participate in the Community Rating System (CRS).	Hurricanes, Floods, Nor'easters	High	Planning and Inspections	General Fund	The flood damage prevention ordinance is reviewed annually to ensure that it is current, FIRMS are up to date and proper enforcement is being accomplished.
CAM33	Provide information to citizens on flooding preparedness. As with other hazards of concern to Camden County, hazard mitigation information should be distributed to residents, including information on preparedness for all hazards significant to its jurisdiction. The information should educate on methods of elevation and flood proofing property.	Hurricanes, Floods, Nor'easters	High	Planning and Inspections	General Fund	Available at the office of planning and inspections, information is provided via various forums and in the flood damage prevention ordinance.
CAM34	Distribute information identifying flood prone areas within the county. Sixty-seven percent of Camden County is within the flood zone. Evacuation and family preparedness information should be distributed to all residents living within flood prone areas and especially to the special needs population located within these areas.	Hurricanes, Floods, Nor'easters	High	Emergency Management	General Fund	Emergency Management maintains a Special Needs Registry – evacuation and family preparedness information made available to this population as well as the non-English speaking population in Camden County.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM35	Work with the National Weather Service to provide early warning to the community and critical facilities.	Hurricanes, Floods, Nor'easters	High	Emergency Management	General Fund	Pasquotank-Camden Emergency Management Agency has been officially recognized by the National Weather Service as a NC Storm ready Community. There is access to, and considerable cooperation from, local broadcast media to warn the public to the potential for flooding. Weather alert radios are also located in each school and many government agencies to provide early warning. In addition, a notification plan is in place to alert critical facilities of watches/warnings. Coordination with the NWS should continue and additional methods of disseminating early warnings to the community/critical facilities should be continually evaluated and explored.
CAM36	Provide new home and property buyers with information on wind proofing. This information may be most efficiently dispersed by the tax assessor's office because all home transactions are recorded there.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	Low	Planning and Inspections, Tax Office	General Fund	Removed from plan.
CAM37	Educate mobile home contractors and owners about wind proofing measures, including wood and light steel construction connectors and anchoring systems.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	High	Planning and Inspections	General Fund	Mobile homes are only allowed in R-2 and R-1 residential zones. Single-wides are permitted to be replaced on site, and moved around the county to R-1 zones or trailer parks – but are not allowed to be brought into county otherwise. All homes must meet 110 mph wind codes. Mobile homes older than 1993 when the wind regulations changed are not permitted.
CAM38	Zoning and Subdivision Ordinances should require storm shelters in all mobile home areas and subdivisions.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	Low	Planning and Inspections	General Fund	Removed from plan.
CAM39	Reduce the impact of trees/ice to power lines. Prune trees away from power lines and develop/enforce policies regarding tree limb clearance.	Winter storms	Medium	Camden Maintenance, Building Inspector, County Manager	General Fund	County maintenance division in cooperation with the County's extension service identifies regularly and removes trees/branches that are considered at risk. Camden County relies on the utility providers to conduct these efforts, the County will continue to support their efforts through maintenance support services provided by the County.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM40	Continue coordinated mitigation and management strategies for de-icing roads, public notification and clearing roads of fallen trees with NCDOT and other public and private partners.	Winter storms	High	Camden Manager, Emergency Management	General Fund	Follow guidance provided by NCDOT division for de-icing roads. Work with County maintenance and utility providers for removal of trees post storm. Coordination with the NWS should continue and additional methods of disseminating early warnings for community/critical facilities, that includes public infrastructure such as roads and bridges. Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook.
CAM41	Minimize the impacts of lightning strikes. Zoning ordinances should require that lightning detection devices be installed in public outdoor gathering areas such as school stadiums and ball parks.	Severe Thunderstorms	Medium	Planning, County Commissioners	General Fund	For consideration in the County's rewrite of the Unified Development Ordinance (UDO). RFP responses for a UDO rewrite is being considered in FY 15-16 budget.
CAM42	Minimize the impacts of lightning strikes. Continue to educate the public on severe thunderstorm safety and the safety measures to be taken from lightening injuries.	Severe Thunderstorms	High	Planning, Emergency Management	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook.
CAM43	Improve the wind resistance of structures in the county. Continue to enforce the NC Building Code. The requirement that new structures or structures undergoing significant renovation be resistant to wind loads of 110 m.p.h. is of particular importance.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Planning, County Commissioners	General Fund	The Planning and Code Enforcement Department continues to enforce the state building code, including wind load requirements. All building plans must demonstrate compliance prior to issuance of a building permit. The Building Inspector continues to conduct inspections during construction and no Certificate of Occupancy is issued unless all requirements are satisfied.
CAM44	Educate home and property owners about wind proofing measures. Provide hazard mitigation information for the county residents including information on preparedness for all hazards significant to Camden County during various public events, in public buildings, and through media outlets.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Planning and Inspections, Tax Office	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook.
CAM45	Reduce the impact of wind on trees near county structures. Monitor trees and branches at risk of breaking or falling in windstorms. Prune or thin trees or branches on county/city property when they would pose an immediate threat to property, utility lines or other significant structures or critical facilities in the county.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Public Works	General Fund	Trees and branches are continually monitored by all departments and pruned prior to major weather events.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM46	Increase driving safety during thunderstorms by installing visibility, reflector tape or paint along road edges and in the dividing line should be placed on all major roads throughout the county.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Planning, County Manager, Public Works	General Fund	As funds are available this is maintained by NCDOT. Road paint reapplied, reflectors replaced, resurfacing completed as needed.
CAM47	Conduct an annual review of the Pasquotank-Camden-Elizabeth City Multi-Hazard Operations Plan. Maintain current emergency contact information.	Wildfires	High	Planning, Emergency Management, County Manager	General Fund	Annual update of Multi-Jurisdictional Hazard Mitigation Plan. The Emergency Management Coordinator attends annual NC Forest Service Cooperative Meeting. EM Coordinator maintains current contact information.
CAM48	Continue inter-agency and multi-jurisdictional efforts to identify, contain and properly extinguish wildfires	Wildfires	High	Planning, Emergency Management, County Manager	General Fund	NC Forestry representatives regularly attendee monthly Public Safety Meetings.
CAM49	Record tax parcel information/floodplain locations in GIS system including repetitive losses due to flooding.	Flooding	High	Tax Office	General Fund	Staff will continue to utilize FEMA Floodplain data provided by NCFMP along with tax parcel data to locate vulnerable areas. Storm Surge data from NOAA will also be used.
CAM50	Review the Pasquotank-Camden Elizabeth City Multi-Hazard Operation Plan	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Planning, Emergency Management, County Manager	General Fund	Annual update of Multi-Jurisdictional Hazard Mitigation Plan. The Emergency Management Coordinator attends annual NC Forest Service Cooperative Meeting. EM Coordinator maintains current contact information.
CAM51	Enforce NC Building Code	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Planning/Inspections	General Fund	The Planning and Code Enforcement Department continues to enforce the state building code, including wind load requirements. All building plans must demonstrate compliance prior to issuance of a building permit. The Building Inspector continues to conduct inspections during construction and no Certificate of Occupancy is issued unless all requirements are satisfied.
CAM52	Maintain Evacuation Routes and disseminate information to the public	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Planning, Emergency Management, County Manager	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM53	Provide information to citizens on flooding preparedness.	Hurricanes, Severe Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Emergency Management, Planning	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.
CAM54	Coordination with NWS should continue and additional methods of disseminating early warnings to the community/critical facilities should be continually evaluated and explored.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Planning, Emergency Management, County Manager	General Fund	Coordination efforts with NWS are taking place. Continue to monitor best methods of disseminating early warnings to Community whether it be on the website, periodic mailers, regional committees, etc.
CAM55	Educate the public on severe thunderstorm safety.	Thunderstorms	High	Planning, Emergency Management	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.
CAM56	Monitor trees and branches at risk of breaking or falling in windstorms. Prune or thin trees on county property when they pose an immediate threat to property or critical facilities.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Public Works	General Fund	Camden County relies on the utility providers to conduct these efforts, the County will continue to support their efforts through maintenance support services provided by the County.
CAM57	Stormwater Advisory Committee should continue its work in identifying major drainage issues in the four stormwater districts and work to identify what level of maintenance is needed in these areas.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Public Works, Planning	General Fund, Grant Funds	Established a Stormwater program and fee to conduct clearing and snagging maintenance activities on the county's major streams and ditches, and some dredging where permitted by the Army Corp of Engineers.
CAM58	Update/Maintain a current action plan for wildfire response.	Wildfires	High	Planning/County Manager	General Fund	Plan is to be updated and maintained.
CAM59	Continue inter-agency and multijurisdictional efforts to identify, contain and extinguish wildfires.	Wildfires	Medium	Planning, Emergency Management, County Manager	General Fund	NC Forestry representatives regularly attendee monthly Public Safety Meetings.
CAM60	Participate in National Flood Insurance Community Rating System (in addition to continued NFIP compliance)	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Planning, Emergency Management, County Manager	General Fund	Adopted appropriate land use or other regulatory polices/ordinances that assist repetitive loss properties.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CAM61	Encourage installation of generator switches in new construction critical facilities	Hurricanes, Severe Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	Medium	Public Works	General Fund	New Action
CAM62	Provide new home and property buyers with information on wind proofing measures.	Hurricanes, Severe Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	Medium	Inspections	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook. All structures rehabilitated greater than 50% damage, or reconstructed greater than 50% have to meet present wind load requirements in NC Building Code.
CAM63	Educate contractors about wind proofing measures.	Hurricanes, Severe Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Inspections	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook. All structures rehabilitated greater than 50% damage, or reconstructed greater than 50% have to meet present wind load requirements in NC Building Code.
CAM64	Educate home and property owners about Wildland/Urban Interface fire safety.	Wildfires	High	Inspections/Planning	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook. All structures rehabilitated greater than 50% damage, or reconstructed greater than 50% have to meet present wind load requirements in NC Building Code.
CAM65	Educate contractors about principles for quality redevelopment and safe housing development.	Hurricanes, Severe Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Inspections/ Planning	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook. All structures rehabilitated greater than 50% damage, or reconstructed greater than 50% have to meet present wind load requirements in NC Building Code.
CAM66	Increase driving safety awareness during thunderstorms. Improve road visibility by adding reflector tape, paint, etc. on all major roads throughout the county.	Hurricanes, Severe Nor'easters, Severe Thunderstorms, Tornadoes, winter storms	High	Public Works/Transportation	General Fund	As funds are available this is maintained by NCDOT. Road paint reapplied, reflectors replaced, resurfacing completed as needed.
CAM67	Amend Zoning Ordinances to require lightning detection devices be installed in public outdoor gathering areas such as school stadiums and ball parks.	Thunderstorms	High	Planning/Zoning, County Manager	General Fund	No action. County has not amended this action.

Table 7.2.2. – Chowan County Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CHO1	GIS mapping locations of damaged utilities caused by previous hurricanes.	Hurricanes	Medium	Chowan County GIS	General Fund	Chowan County views this as a critical tool in assessing vulnerability and potential Emergency Management issues that may arise during a natural hazard event. These efforts will be continued on an as needed basis following an event.
CHO2	Locate different funding sources that can aid in the improvements of drainage within the County.	Hurricanes, Floods, Nor'easters	High	Chowan County Administration	General Fund	The County has a fairly good handle on drainage issues within rural portions of the County. County administration will continue to address issues as they arise, if feasible through the use of grant funds.
CHO3	Provide public service messages that discuss preparations in the event of a hurricane to be sent out annually in the early spring.	Hurricane	High	Chowan County Emergency Management	General Fund	Emergency Management officials work closely with local media outlets to prepare citizens for hazards associated with Hurricane season. These efforts are generally outlined within the County's EOP
CHO4	Update and identify all areas not previously labeled on the 100-year flood map that were flooded during major rainfall events and hurricanes.	Hurricanes, Floods, Nor'easters	High	Chowan County Planning	General Fund	The County conducted this analysis following Hurricane Isabel, and will continue to do so following all substantial flooding/hurricane events.
CHO5	Elevate repetitive loss structures or acquire repetitive loss properties	Hurricanes, Floods, Nor'easters	High	Chowan County Planning	General Fund, Grants Fund	Currently the County does not have any structures that qualify for treatment as a repetitive loss property. The County has not treated any units over the last five years
CHO6	Determine specific reasons why each area was damaged (amount of times flooded, and whether this damage is expected from future flooding). This will work in concert with all future repetitive loss analysis.	Hurricanes, Floods, Nor'easters	High	Chowan County Planning	General Fund	The County conducted this analysis following Hurricane Isabel, and will continue to do so following all substantial flooding/hurricane events
CHO7	Consider and review all changes established through the updated NFIP Floodplain Mapping Program, when required.	Hurricanes, Floods, Nor'easters	High	Chowan County Planning, Chowan County Inspections	General Fund	New Action
CHO8	Use special consideration for development permits for structures proposed within the Areas of Special Flood Hazard (ASFH)	Hurricanes, Floods, Nor'easters	High	Chowan County Planning, Chowan County Inspections	General Fund	This process is carried out through enforcement of the County's Flood Damage Prevention Ordinance. These efforts will continue.
CHO9	Require all new structures finished floor elevation (FFE) be at or above the current BFE*.	Hurricanes, Floods, Nor'easters	High	Chowan County Planning, Chowan County Inspections	General Fund	This strategy was deemed unnecessary and therefore has been removed from the plan

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CHO10	Locate different funding sources that can aid in the improvements of drainage within the Town and County caused by regular flooding events (such as grants through CDBG, NCDENR, etc.)	Hurricanes, Floods, Nor'easters	High	Chowan County Planning, Chowan County Inspections	General Fund, Grant Funds	The County has a fairly good handle on drainage issues within rural portions of the County. County administration will continue to address issues as they arise, if feasible through the use of grant funds.
CHO11	Work with the curriculum directors of both the public and private schools to add all Mitigation Hazards prevention and preparedness information.	All Hazards	High	Chowan County Planning, Chowan County Inspections	General Fund	County Emergency Management Officials visit and work closely on an annual basis with local schools to prepare for natural disasters, especially tornadoes and hurricanes.
CHO12	Work with local charities, Meals on Wheels and/or Habitat for Humanity chapters, to apply non-structural mitigation measures to the homes of low-income senior citizens in during times of disaster.	All Hazards	High	Chowan County Administration, Chowan County Health Department	General Fund	New Action
CHO13	Compile flood mitigation information and make it available to Chowan County and Edenton residents and business owners."	Hurricanes, Flooding, Nor'easters	High	Chowan County Planning, Chowan County Inspections	General Fund, Grant Funds	This information is always available through the Town and County Inspections Office. The materials are provided by FEMA
CHO14	The County will assess erosion following substantial natural hazard events in an effort to insure that it does not encroach upon developed portions of the County.	Hurricanes, Flooding, Nor'easters, Erosion	High	Chowan County Planning, Chowan County Inspections	General Fund, Grants Fund	New Action
CHO15	Provide emergency broadcast the located and approximate time for areas likely to be hit by a tornado.	Tornadoes	High	Chowan County Emergency Management	General Fund, Grant Funds	Emergency Management officials work closely with local media outlets to prepare citizens for hazards associated with Hurricane season. These efforts are generally outlined within the County's EOP.
CHO16	Create a systematic warning system aimed at posting electrical highway signs that warn of extreme weather conditions.	All Hazards	High	Chowan County Emergency Management	General Fund, Grant Funds	The County maintains a County Emergency Notification System geared towards notifying citizens of impending inclement weather or emergency situations. This system is updated as funds are available.
CHO17	Improve the wind resistance of structures within the County and Town by continuing to enforce the North Carolina Building Code.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	High	Chowan County Planning, Chowan County Inspections	General Fund	Enforcement is accomplished through the issuance of building permits and inspections through the County's permitting office.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CHO18	Support efforts of utility providers to monitor trees and branches at risk of breaking or falling in windstorms.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	High	Chowan County Planning, Chowan County Inspections, Utility Providers	General Fund	Chowan County relies on the utility providers to conduct these efforts; the County will continue to support their efforts.
CHO19	Prepare County and Town notification when water conservation plans are in effect once the water levels drop below the revised County and Town water levels.	Drought	High	Chowan County Emergency Management	General Fund	Chowan County has, will continue to enforce the County's Water Shortage Management Plan. This plan outlines procedures for water rationing during periods of extreme droughts.
CHO20	Create a GIS map of areas in critical need of improvement.	All Hazards	High	Chowan County Land Records	General Fund, Grant Funds	The County has created a GIS website. In the process of budgeting and acquiring grants for survey equipment needed to accurately locate facilities (Incomplete).
CHO21	Require all public utility companies as well as County and Town-owned utilities to inspect and repair damage due to Hurricane within a 5-year time frame.	Hurricane	High	Chowan County Board of Commissioners & Town of Edenton Town Council	General Fund	Creating additional funding within County and Town utilities departments.
CHO22	Utilize GPS to transfer to GIS mapping system. Include consistent problem areas on the current flood maps. Those areas include: Pembroke Circle, Dillard Mill, and Cypress Point Marina, as well as Woodlawn Park.	Flooding	High	Chowan County Land Records	General Fund	The County has created a GIS website. In the process of budgeting and acquiring grants for survey equipment needed to accurately locate facilities.
CHO23	List areas in need of repair, replacement and improvement.	Flooding	High	Chowan County & Town of Edenton Administration	General Fund	There are no additional funds required for this measure. Complete.
CHO24	Determined priority level by past flooding experience, extent and value of damage, and cost of repairs.	Flooding	High	Chowan County & Town of Edenton Administration	General Fund	There are no additional funds required for this measure. Complete.
CHO25	Identify all structures located within the revised Areas of Special Flood Hazard (ASFH).	Flooding	High	Chowan Planning & Inspection Department	General Fund	This strategy was deemed ambiguous and vague. Due to these deficiencies it has been eliminated.
CHO26	For structures located within the ASFH, determine whether the structure's finished floor elevation (FFE) is above or below the base flood elevation (BFE).	Flooding	High	Chowan Planning & Inspection Department	General Fund	No additional costs are expected. Complete
CHO27	Identify structures that have been damaged by flooding in the past due to distance and/or height of structure.	Flooding	High	Chowan County & Town of Edenton Administration	General Fund	No additional costs are expected. Complete
CHO28	Require all new structures to include drainage ditches and/or culverts installed around perimeter of property to prevent flooding and flood damage to structures.	Flooding	Medium	Chowan Planning & Inspection Department	General Fund	No additional costs are expected. Complete
CHO29	Research possible seawall options to prevent tidal flooding.	Flooding	High	Chowan County Board of Commissioners & Town of Edenton Town.	General Fund, Grant Funds	Seawall constructed to minimize effects of 25-yr flood. Uneconomical to build larger structure without grants. Town attempting to capture grants for additional study and construction. Funding Hurdles.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CHO30	Begin monitoring erosion complaints, considering locations, possible events, and past complaints about the areas.	Erosion	Medium	Chowan County Planning & Inspection Department	General Fund	Budget to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy.
CHO31	Research and interview with property owners	Erosion	Medium	Chowan County Planning & Inspection Department	General Fund	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy.
CHO32	Research possible seawall options to prevent future erosion along Edenton Bay and rivers	Erosion	High	Chowan County Board of Commissioners & Town of Edenton Town Council	General Fund, Grant Funds	Seawall constructed to minimize effects of 25-yr flood. Uneconomical to build larger structure without grants. Town attempting to capture grants for additional study and construction.
CHO33	Consider bringing in fill and additional necessary materials to replace erosion in designated areas.	Erosion	Medium	Chowan County Board of Commissioners & Town of Edenton Town Council to consider repair measures.	General Fund	Soil to be replaced as needed. No Action at this Time.
CHO34	Posting signs in areas considered eroded	Erosion	Medium	Chowan County Planning & Inspection Department	General Fund	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy. No Action at this Time.
CHO35	Research and interview with property owners	Storm Surge	Medium	Chowan County Planning & Inspection Department	General Fund	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy. No Action at this Time.
CHO36	Document specific accounts of storm surge levels within different areas per storm & calculate value of loss. *Information to be included in future Hazard Mitigation Plan updates (once every 5 years).	Storm Surge	Medium	Chowan County Planning & Inspection Department	General Fund	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy. No Action at this Time.
CHO37	Research possible seawall options to prevent future erosion along Edenton Bay and rivers	Storm Surge	High	Chowan County Board of Commissioners & Town of Edenton Town Council	General Fund, Grant Funds	Seawall constructed to minimize effects of 25-yr flood. Uneconomical to build larger structure without grants. Town attempting to capture grants for additional study and construction.
CHO38	Provide public mailings to discuss what to do in case of expected storm surge.	Storm Surge	High	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	General Fund	County Webpage has been updated to reflect this information.
CHO39	Start radio or newspaper advertisement, to warn citizens of hazards and safety precautions that should be taken.	Tornadoes	High	Chowan County Emergency Services	General Fund	Program has been eliminated due to a lack of political will and tools available to achieve the stated outcome.
CHO40	Prepare a series of mailings to citizens discussing the proper safety procedures for each hazard addressed in this plan.	Tornadoes	High	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	General Fund	Information made available on County website. County/Town will budget for advertisements to invite public to view

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CHO41	Require all new structures to include drainage ditches and/or culverts installed around perimeter of property to prevent flooding and flood damage to structures.	Nor'easters	High	Chowan Planning & Inspection Department	General Fund	Program has been eliminated due to a lack of political will and tools available to achieve the stated outcome.
CHO42	Provide safety warning radio broadcasts, determining the approximate time and area a nor'easter would be likely to hit.	Nor'easters	Medium	EMS/Chowan County & Town of Edenton Fire & Law Enforcement	General Fund	The County has implemented a "One-Call" call alert contract. An auto dialer contacts every phone number in the county with automated message of pending danger. NOAA also sends alerts on radio and TV. Complete.
CHO43	Prepare a series of mailings to citizens discussing what the proper safety procedures for each hazard addressed in this Plan.	Nor'easters	High	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	General Fund	In information made available on County Website. County/Town will budget for advertisements to invite public to view.
CHO44	Post warning signs in areas stating the likelihood of fires in the area due to the current weather conditions, including the dangers that may lead to wildfires.	Wildfires	High	North Carolina Forestry Service, Chowan County Fire Department and Town of Edenton Fire Department.	General Fund	Implemented by State. Information also made available on County website.
CHO45	Require owners (by advertisement in the local papers) to annually remove any brush or downed limbs promptly to prevent fires from moving quickly along the ground.	Wildfires	High	Chowan County Board of Commissioners & Town of Edenton Town Council to add new amendment to ordinances	General Fund	Added new amendments to ordinances.
CHO46	Assign new regulations that will revise the current water level for both the Town of Edenton Water Department and the Chowan County Water Department.	Drought	Medium	County and Town Water Departments	General Fund	No additional costs to either the County or Town water departments. Town of Edenton has adopted a Water Shortage Response Plan. The County has received verbal agreement to purchase water from neighboring county in event of emergency. Complete, but remains open to be revised as needed.
CHO47	Start radio or newspaper advertisement, to warn citizens of hazards and safety precautions that should be taken.	Winter Storms	High	Chowan County Emergency Services	General Fund	Program has been eliminated due to a lack of political will and tools available to achieve the stated outcome.
CHO48	Prepare a series of mailings to citizens discussing what the proper safety procedures for each hazard addressed in this Plan.	Winter Storms	High	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	General Fund	Information made available on County website. County/Town will budget for advertisements to invite public to view.

Table 7.2.3 Town of Edenton Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
EDN1	Develop plan to assist property owners with safe and efficient post-disaster cleanup (New Strategy).	All Hazards	Medium	Edenton Public Works Department, Edenton Administration	General Fund, Grant Funds	New Action
EDN2	Improve stormwater drainage and land management preparation for flooding events (New Strategy).	Hurricanes, Nor'easters, Flooding	High	Edenton Planning Department	General Fund, Grant Funds	New Action
EDN3	Elevate repetitive loss structures or acquire repetitive loss properties.	Hurricanes, Floods, Nor'easters	High	Edenton Planning Department	General Fund, Grant Funds	Currently the Town does not have any structures that qualify for treatment as a repetitive loss property. There have not been any units treated over the last five years.
EDN4	Compile flood mitigation information and make it available to Chowan County and Edenton residents and business owners.	Hurricanes, Floods, Nor'easters	High	Edenton Planning Department, Chowan County Planning, Chowan County Inspections	General Fund, Grant Funds	This information is always available through the Town and County Inspections Office. The materials are provided by FEMA. Information is also made available on County Website. County/Town considering budget for advertisements to invite public to view.
EDN5	Prepare County and Town notification when water conservation plans are in effect once the water levels drop below the revised County and Town water levels.	Drought	High	Chowan County Emergency Management	General Fund	The Town of Edenton, along with Chowan County has, will continue to enforce the County's Water Shortage Management Plan. This plan outlines procedures for water rationing during periods of extreme droughts.
EDN6	Advocate the Use of Existing State and Federal Regulatory Programs for Protecting and Preserving Coastal Wetland Areas of Environmental Concern (New Strategy)	Hurricanes, Floods, Nor'easters	Medium	Edenton Planning Department	General Fund	New Action
EDN7	Support Improvements to Regional Transportation Systems for Safe Traffic Flow (New Strategy)	Hurricanes, Nor'easters, Flooding, Winter Storms	Medium	Edenton Planning Department, Edenton Administration, NCDOT	General Fund, Grant Funds	New Action
EDN8	Create a systematic warning system aimed at posting electrical highway signs that warn of extreme weather conditions.	All Hazards	High	Chowan County Emergency Management	General Fund, Grant Funds	The County maintains a County Emergency Notification System geared towards notifying citizens of impending inclement weather or emergency situations.
EDN9	Work with the curriculum directors of both the public and private schools to add all Mitigation Hazards prevention and preparedness information (Strategy reworded to include all hazards).	All Hazards	High	Chowan County Planning, Chowan County Inspections, Town of Edenton Planning Department	General Fund	County Emergency Management Officials visit and work closely on an annual basis with local schools to prepare for natural disasters, especially tornadoes and hurricanes. (Strategy reworded to include all hazards).
EDN10	Improve the wind resistance of structures within the County and Town by continuing to enforce the North Carolina Building Code.	Hurricanes, Nor'easters, Severe Thunderstorms, Tornadoes	High	Chowan County Planning, Chowan County Inspections, Town of Edenton Planning Department, Town of Edenton Inspections	General Fund	Enforcement is accomplished through the issuance of building permits and inspections through the County's permitting office.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
EDN11	Create a GIS map of areas in critical need of improvement.	Hurricanes	High	Chowan County Land Records	General Fund, Grant Funds	The County has created a GIS website. In the process of budgeting and acquiring grants for survey equipment needed to accurately locate facilities.
EDN12	GIS mapping locations of damaged utilities caused by previous hurricanes.	Hurricanes	High	Chowan County Land Records	General Fund, Grant Funds	The County has created a GIS website. In the process of budgeting and acquiring grants for survey equipment needed to accurately locate facilities.
EDN13	Require all public utility companies as well as County and Town-owned utilities to inspect and repair damage due to Hurricane within a 5-year time frame.	Hurricanes	High	Chowan County Board of Commissioners & Town of Edenton Town Council	General Fund	Incomplete and in process of creating additional funding within County and Town utilities departments.
EDN14	Locate different funding sources that can aid in the improvements of drainage within the Town and County.	Hurricanes	High	Chowan/Edenton Administration	General Fund, Grant Funds	Past drainage studies performed by Town and seawall constructed. Acquiring additional grants for further improvements.
EDN15	Provide public service messages that discuss preparations in the event of a hurricane to be sent out annually in the early spring.	Hurricanes	High	Chowan/Edenton Administration	General Fund, Grant Funds	Information made available on County Website. County/Town considering budget for advertisements to invite public to view.
EDN16	Utilize GPS to transfer to GIS mapping system. Include consistent problem areas on the current flood maps. Those areas include: Pembroke Circle, Dillard Mill, and Cypress Point Marina, as well as Woodlawn Park.	Flood	High	Chowan County Land Records	General Fund, Grant Funds	Incomplete, however the County has created a GIS website. In the process of budgeting and acquiring grants for survey equipment needed to accurately locate facilities.
EDN17	Update and identify all areas not previously labeled on the 100-year flood map that were flooded during major rainfall events and hurricanes.	Flood	High	Chowan County & Town of Edenton Administration	General Fund, Grant Funds	1 private home and 1 historic home have been elevated since 2005. Will continue to apply for grant assistance to elevate and or acquire such properties.
EDN18	List areas in need of repair, replacement and improvement.	Flood	High	Chowan County & Town of Edenton Administration	General Fund, Grant Funds	This strategy was deemed ambiguous and vague. Due to these deficiencies it has been eliminated.
EDN19	Determined priority level by past flooding experience, extent and value of damage, and cost of repairs.	Flood	High	Chowan County & Town of Edenton Administration	General Fund, Grant Funds	List updated and reprioritization post event.
EDN20	Determine specific reasons why each area was damaged (amount of times flooded, and whether this damage is expected from future flooding). The majority of these areas would be located in the Town of Edenton.	Flood	High	Chowan County & Town of Edenton Administration	General Fund, Grant Funds	The County conducted this analysis following Hurricane Isabel, and will continue to do so following all substantial flooding /hurricane events.
EDN21	Identify all structures located within the revised Areas of Special Flood Hazard (ASFH).	Flood	Medium	Chowan Planning & Inspection Department	General Fund	This strategy was deemed ambiguous and vague. Due to these deficiencies it has been eliminated.
EDN22	For structures located within the ASFH, determine whether the structure's finished floor elevation (FFE) is above or below the base flood elevation (BFE).	Flood	High	Chowan Planning & Inspection Department	General Fund	Information determined based upon updated FIRMs.
EDN23	Identify structures that have been damaged by flooding in the past due to distance and/or height of structure.	Flood	High	Chowan County & Town of Edenton Administration	General Fund	List of structures updated post event. Limited resources available to update regularly on regular basis post event (Incomplete data)

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
EDN24	Use special consideration for development permits for structures proposed within the Areas of Special Flood Hazard (ASFH).	Flood	High	Chowan Planning & Inspection Department	General Fund	All structures proposed within ASFH must meet flood damage prevention ordinance.
EDN25	Require all new structures finished floor elevation (FEE) be elevated at or above the current base flood elevation (BFE).	Flood	High	Chowan Planning & Inspection Department	General Fund	All structures proposed within ASFH must meet flood damage prevention ordinance thus requiring all new structures to meet or exceed BFE.
EDN26	Require all new structures to include drainage ditches and/or culverts installed around perimeter of property to prevent flooding and flood damage to structures.	Flood	High	Chowan Planning & Inspection Department	General Fund	On a case by case basis, the local Building Inspector and the Planning Board, if necessary, will determine if rerouting the flow of ditches is environmentally sound. Depending on the situation, a CAMA permit may also need to be issued before any installations begin.
EDN27	Locate different funding sources that can aid in the improvements of drainage within the Town and County caused by regular flooding events (such as grants through CDBG, NCDENR, etc..)	Flood	High	Chowan/Edenton Administration	Grant Funds	Chowan County & the Town of Edenton will be applying for aid through FEMA.
EDN28	Research possible seawall options to prevent tidal flooding.	Flood	High	Chowan County Board of Commissioners & Town of Edenton	Grant Funds	Seawall constructed to minimize effects of 25-yr flood. Uneconomical to build larger structure without grants. Town attempting to capture grants for additional study and construction.
EDN29	Compile flood mitigation information and make it available to Chowan County and Edenton residents and business owners.	Flood	High	Chowan County Planning & Inspection Department	General Fund	Information made is available on County Website. County/Town considering budget for advertisements to invite public to view.
EDN30	Work with the curriculum directors of both the public and private schools to add flood disaster, hurricane, tornado, and wildfire prevention and preparedness information.	Flood, Hurricane, Tornadoes, Wildfires	High	Chowan County EMS/EMT personnel and Chowan County & Town of Edenton Fire Dept. personnel	General Fund	Per state requirements, fire and tornado drills are routinely performed at local schools. Information also is available on County Website.
EDN31	Work with local charities, Meals on Wheels and/or Habitat for Humanity chapters, to apply non-structural mitigation measures to the homes of low-income senior citizens in the Flood Hazard Area.	Flood	High	Chowan County & Town of Edenton Administration to organize volunteer groups	Volunteer/Charitable, General Fund, Grant Funds	Seek out grant funds and partnerships with Charitable organizations where practical on a case by case basis (incomplete).
EDN32	Begin monitoring erosion complaints, considering locations, possible events, and past complaints about the areas.	Hurricanes, Nor'easters, Flooding, Thunderstorms	Medium	Chowan County Planning & Inspection Department	General Fund, Grant Funds	Budget being considered (for the County and Town) reflective on the amount of complaints and legitimacy of the complaints of erosion issues (incomplete).
EDN33	Research and interview with property owners regarding erosion.	Hurricanes, Nor'easters, Flooding, Thunderstorms	Medium	Chowan County Planning & Inspection Department	General Fund, Grant Funds	Budget being considered (for the County and Town) reflective on the amount of complaints and legitimacy of the complaints of erosion issues (incomplete).

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
EDN34	Research possible seawall options to prevent future erosion along Edenton Bay and rivers.	Hurricanes, Nor'easters, Flooding, Thunderstorms	High	Chowan County Board of Commissioners & Town of Edenton Town Council	General Fund, Grant Funds	Seawall constructed to minimize effects of 25-yr flood. Uneconomical to build larger structure without grants. Town attempting to capture grants for additional study and construction.
EDN35	Consider bringing in fill and additional necessary materials to replace erosion in designated areas.	Hurricanes, Nor'easters, Flooding, Thunderstorms	Medium	Chowan County Board of Commissioners & Town of Edenton Town Council	General Fund	Soil replaced as needed in designated areas, monitored for a case by case basis.
EDN36	Posting signs in areas considered eroded.	Hurricanes, Nor'easters, Flooding, Thunderstorms	Medium	Chowan County Planning & Inspection Department	General Fund, Grant Funds	Budget being considered (for the County and Town) reflective on the amount of complaints and legitimacy of the complaints of erosion issues (incomplete).
EDN37	Research and interview with property owners regarding storm surge damage.	Hurricanes, Nor'easters, Flooding, Thunderstorms, Tsunamis	Medium	Chowan County Planning & Inspection Department	General Fund, Grant Funds	Budget being considered (for the County and Town) reflective on the amount of complaints and legitimacy of the complaints as a result of damage caused by storm surge (incomplete).
EDN38	Document specific accounts of storm surge levels within different areas per storm & calculate value of loss. *In information to be included in future Hazard Mitigation Plan updates (once every 5 years).	Hurricanes, Nor'easters, Flooding, Thunderstorms, Tsunamis	Medium	Chowan County Planning & Inspection Department	General Fund, Grant Funds	Budget being considered (for the County and Town) reflective on the amount of complaints and legitimacy of the complaints as a result of damage caused by storm surge (incomplete). Information to be included in this update herein (Albemarle Regional Hazard Mitigation Plan).
EDN39	Research possible seawall options to prevent future erosion along Edenton Bay and rivers.	Hurricanes, Nor'easters, Flooding, Thunderstorms, Tsunamis	Medium	Chowan County Board of Commissioners & Town of Edenton Town Council	General Fund, Grant Funds	Seawall constructed to minimize effects of 25-yr flood. Uneconomical to build larger structure without grants. Town attempting to capture grants for additional study and construction.
EDN40	Provide public mailings to discuss what to do in case of expected storm surge.	Hurricanes, Nor'easters, Flooding, Thunderstorms, Tsunamis	High	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	General Fund	County Webpage is updated annually to reflect this information.
EDN41	Provide safety warning radio broadcasts, determining the approximate time and area a tornado would be likely to hit.	Tornado	High	EMS/Chowan County & Town of Edenton Fire & Law Enforcement	General Fund	The County has implemented a "One-Call" call alert contract. An auto dialer contacts every phone number in the county with automated message of pending danger. NOAA also sends alerts on radio and TV.
EDN42	Start radio or newspaper advertisement, to warn citizens of hazards and safety precautions that should be taken.	Tornado	High	Chowan County Emergency Services	General Fund	Chowan County does not have the resources or tools available to carry out this process; therefore, it has been eliminated from the plan.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
EDN43	Improve the wind resistance of structures within the County and Town by continuing to enforce the North Carolina Building Code through the County's minimum housing code.	Hurricanes, Nor'easters, Tornadoes, Thunderstorms	High	Chowan County Planning & Inspection Department	General Fund	Required by enforcing the NC State Building Code.
EDN44	Require all new structures to include drainage ditches and/or culverts installed around perimeter of property to prevent flooding and flood damage to structures.	Hurricanes, Nor'easters, Tornadoes, Thunderstorms	High	Chowan County Planning & Inspection Department	General Fund	Incomplete and required on a case by case basis
EDN45	Provide safety warning radio broadcasts, determining the approximate time and area a nor'easter would be likely to hit.	Nor'easters	High	EMS/Chowan County & Town of Edenton Fire & Law Enforcement	General Fund	The County has implemented a "One-Call" call alert contract. An auto dialer contacts every phone number in the county with automated message of pending danger. NOAA also sends alerts on radio and TV.
EDN46	Prepare a series of mailings to citizens discussing what the proper safety procedures for each hazard addressed in this Plan.	All Hazards	High	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	General Fund	Chowan County does not have the resources or tools available to carry out this process; therefore, it has been eliminated from the plan.
EDN47	Post warning signs in areas stating the likelihood of fires in the area due to the current weather conditions, including the dangers that may lead to wildfires.	Wildfires	High	North Carolina Forestry Service, Chowan County Fire Department and Town of Edenton Fire Department	State, General Fund	Implemented by State. Information also made available on County website.
EDN48	Require owners (by advertisement in the local papers) to annually remove any brush or downed limbs promptly to prevent fires from moving quickly along the ground.	Wildfires	High	Chowan County Board of Commissioners & Town of Edenton Town Council	General Fund	Incomplete and for consideration in future amendment to both County and Town Code of Ordinances.
EDN49	Assign new regulations that will revise the current water level for both the Town of Edenton Water Department and the Chowan County Water Department.	Drought	High	Chowan County Board of Commissioners & Town of Edenton Water Departments	General Fund	Town of Edenton has adopted a Water Shortage Response Plan. The County has received verbal agreement to purchase water from neighboring county in event of emergency.
EDN50	Start radio or newspaper advertisement, to warn citizens of hazards and safety precautions that should be taken.	Winter storm	High	Chowan County Emergency Services	General Fund	The County has implemented a "One-Call" call alert contract. An auto dialer contacts every phone number in the county with automated message of pending danger. NOAA also sends alerts on radio and TV.
EDN51	Prepare a series of mailings to citizens discussing what the proper safety procedures for each hazard addressed in this Plan.	Winter storm	High	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	General Fund	Information made is available on County Website. County/Town considering budget for advertisements to invite public to view.

Table 7.2.4 Currituck County Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CUR1	Improve storm water drainage in order to prevent flooding.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Floods	High	Currituck County Engineering, NCDOT, Currituck County Planning	General Fund	Routinely checking on an annual basis. Inspection of areas where prone to flooding are inspected prior and post event to remove any debris, etc. that may cause flooding. Completed stormwater management ordinance. Prepared and adopted a community-wide stormwater management master plan.
CUR2	Routinely inspect and clear debris from drainage system.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Floods	High	NCDOT, Currituck County Soil Conservation	General Fund, NCDOT Funds	Routinely checking on an annual basis. Inspection of areas where prone to flooding are inspected prior and post event to remove any debris, etc. that may cause flooding.
CUR3	Prepare stormwater drainage studies and planning for mitigation of known problem areas.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Floods	High	Currituck County Engineering, Currituck County Soil Conservation	Local Service Districts	Completed stormwater drainage studies and planning for known problem areas.
CUR4	Determine the feasibility of stormwater districts in watersheds, townships, or problem flooding areas through a study to mitigate against future flooding	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Floods	High	Currituck County Engineering, Currituck County Planning	General Fund	New Action
CUR5	Seek funding for public hazard mitigation projects.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Floods	Medium	Currituck County Administration, Currituck County Emergency Management	General Funds, Impact Fee, Grant Funds	Hazard grant funds received for generators at shelters.
CUR6	Identify bridges for retrofiting.	All Hazards	High	NCDOT, Currituck County Planning, Currituck County Emergency Management	NCDOT	Routinely checking and identifying bridges for retrofit and making recommendations for the State's Transportation Improvement Program at the annual RPO meeting for bridge repair/replacement funding.
CUR7	Work with NC DOT and neighboring communities to improve traffic flow throughout both mainland and the Outer Banks portion of Currituck County. "	All Hazards	High	Currituck County Planning, Currituck County Emergency Management, NCDOT	General Fund, Grant Funds, NCDOT	New Action
CUR9	Partner with NC DOT to evaluate congested areas on Hwy 12 and Caratoke Hwy and implement level of service standards for new development.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management, NCDOT	General Fund, Grant Funds, NCDOT	Evaluated congested areas on Hwy 12 and Caratoke Hwy and implemented level of service standards for new development.
CUR10	Encourage NC DOT to continue with road improvements (stop lights, turn/deceleration lanes, etc.)	All Hazards	High	Currituck County Planning, Currituck County Emergency Management, NCDOT	General Fund, Grant Funds, NCDOT	Evaluating and routinely checking for recommendations for road improvements (stop lights, turn/deceleration lanes, etc.) annually at RPO meeting for STIP funds and available funds that may be available to the Division.
CUR11	Continue to support efforts for planning, design, and construction of the Mid-County bridge project.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management, NCDOT	General Fund, Grant Funds, NCDOT	Supported efforts annually at RPO, however funding for Mid-County bridge project not available.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CUR12	Maintain participation and membership in the National Flood Insurance Program (NFIP) and the Community Rating System (CRS) Program.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Floods	High	Currituck County Planning	General Fund	New Action
CUR13	Support and continue NC Floodplain Mapping Program updates of flood and hazard maps as needed.	Nor'easter, Hurricane, Floods	High	Currituck County Planning	General Fund	Maintain and enforce updated flood hazard maps for structures to be located or additions to in the floodplain.
CUR14	Investigate the feasibility of adopting higher standards such as protection of critical facilities that will benefit the County's CRS rating and increase the discount of flood insurance for home owners. <i>(Strategy rewarded to include benefit of CRS and discount of flood insurance)</i>	Nor'easter, Hurricane, Floods	High	Currituck County Planning	General Fund	Investigated the feasibility of adopting higher standards such as freeboard and protection of critical facilities (completed). <i>(Strategy rewarded to include benefit of CRS and discount of flood insurance)</i>
CUR15	Develop a joint public outreach document that addresses all hazards (published by the Planning and Emergency Management Departments).	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	Progress continues on this strategy. Joint information has been posted in our local quarterly newsletter that is mailed to each household and posted on the county website.
CUR16	Continue to educate the public and increase awareness about hazards, how to develop and retrofit their properties against hazards, and individual responsibility for mitigating against hazard risk in order to protect public health, safety, and welfare.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	New Action
CUR17	Educate the public and inform them of the benefits of participation in the Fire Wise program	Wildfire	Medium	Currituck County Planning, Currituck County Emergency Management	General Fund	Completed
CUR18	Educate homeowners and builders on the benefits of sprinkler systems in residential structures.	All Hazards	Medium	Currituck County Planning, Currituck County Emergency Management	General Fund	Completed
CUR19	Increase public awareness and understanding of the locations and proper way to dispose of hazardous waste.	All Hazards	Medium	Currituck County Planning, Currituck County Emergency Management	General Fund	Developed an annual household hazardous materials collection site.
CUR20	Periodically survey the public to evaluate if public outreach efforts are effective in identifying potential flood hazards, public concern, and ways to mitigate against hazards.	Floods	High	Currituck County Planning, Currituck County Emergency Management	General Fund	Completed
CUR21	Protect private and county assets, buildings, and critical facilities through implementation of cost-effective and technically feasible mitigation actions.	All Hazards	High	Currituck County Administration, Currituck County Emergency Management	General Fund	New Action
CUR22	Establish appropriate buffers/setbacks between critical facilities and other uses that may be incompatible.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	This is complete for recently built critical facilities and will continue to be reviewed through our technical review committee.
CUR23	Educate, empower, and assist the most vulnerable populations from being impacted by potential hazards.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CUR24	Expand publications to include other languages.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	The county has developed the evacuation map in two languages and established interpreters, but we continue to work on other publications as well as making them available on the county website.
CUR25	Evaluate effectiveness of Currituck's warning systems.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	Completed and evaluated on annual basis.
CUR26	Educate and assist vulnerable populations in developing personal preparedness plans.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	New Action
CUR27	Partner with other County Departments, State, local agencies to educate and inform vulnerable populations about special needs registry with Social Services through community outreach (survey, website, social media, water bill).	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	New Action
CUR28	Improve the capability of the County to respond to hazards and improve the effectiveness of hazard mitigation strategies in regards to public safety response.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund	New Action
CUR29	Maintain and work to improve radio communications and technology throughout public safety programs.	All Hazards	High	Currituck County Emergency Management	General Fund	Completed
CUR30	Provide continuous training and information for first responders in hazard response.	All Hazards	High	Currituck County Emergency Management	General Fund	Allow county staff to attend regular training activities sponsored through FEMA, NCEM and County Emergency Management
CUR31	Improve water safety and water response through use agreements or easements with Homeowner Associations that have existing boat ramps with access to the sound.	Hurricanes, Nor'easters, Floods, Erosion	Medium	Currituck County Emergency Management	General Fund	New Action
CUR32	Coordinate response to bridge incidents for the Wright Memorial Bridge.	All Hazards	High	Currituck County Emergency Management, NCDOT	General Fund	Completed
CUR33	Develop a strategy to facilitate post-disaster and recovery plans with the private sector including homeowner associations and critical facilities.	All Hazards	High	Currituck County Planning, Currituck County Emergency Management	General Fund, Grant Funds	Completed
CUR34	Secure funding, design, and construct an EOC/Public Safety Facility.	All Hazards	High	Currituck County Administration, Currituck County Emergency Management	General Fund, Grant Funds	The public safety facility is the next building project, if funding can be secured.
CUR35	Secure pumps for stormwater pumping prior to storm events.	Hurricanes, Nor'easters, Severe Thunderstorm	High	Currituck County Engineering	General Fund, Grant Funds	New Action
CUR36	Improve the dissemination of information to the public prior, during, and after events.	All Hazards	High	Currituck County Emergency Management	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CUR37	Maintain partnerships with adjacent counties and municipalities to leverage and share resources.	All Hazards	High	Currituck County Emergency Management, Currituck County Planning	General Fund	New Action
CUR38	Continue to develop Community Emergency Response Teams (CERT)	All Hazards	High	Currituck County Emergency Management	General Fund, Grant Funds	Maintain updated list of CERT participants/volunteers that are available pre and post event.
CUR39	Create curriculums for all hazards preparedness to better educate the public.	All Hazards	Medium	Currituck County Emergency Management, Currituck County Planning	General Fund	Currently utilizing some or all of the CERT material. There are many good FEMA curriculums available as well. This strategy was not needed.
CUR40	Pursue mitigation of repetitive flood loss properties.	Hurricanes, Nor'easters, Floods	High	Currituck County Planning	General Fund	New Action
CUR41	Direct development away from high-risk and vulnerable areas and establish redevelopment standards that decrease hazard risk	Hurricanes, Nor'easters, Floods	High	Currituck County Planning	General Fund	Added requirement to development ordinances and enforced in development review.
CUR42	Preserve natural environmental features to naturally absorb water run-off and serve as wind buffers.	Hurricanes, Nor'easters, Floods	High	Currituck County Planning	General Fund	New Action
CUR43	Encourage clustering of residential lots outside of hazard areas in subdivision design/review and discourage development intensity and infrastructure improvements in known hazard areas.	Hurricanes, Nor'easters, Floods	High	Currituck County Planning	General Fund	Completed
CUR44	Adopt appropriate land use or other regulatory policies/ordinances that assist in the mitigation of repetitive loss properties.	Hurricanes, Nor'easters, Floods	High	Currituck County Planning	General Fund	Completed
CUR45	Preserve and/or restore natural and coastal areas or the natural functions of floodplains (coastal and riverine) and watershed areas.	Hurricanes, Nor'easters, Floods	High	Currituck County Planning	General Fund	New Action
CUR46	Protect/enhance landforms through both public and private efforts that serve as natural mitigation features by promoting dune grass plantings, installation of sand fencing, importing sand, and other appropriate measures.	Hurricanes, Nor'easters, Floods, Erosion	High	Currituck County Planning, Currituck County Engineering	General Fund	The County is pursuing creation of a dune enhancement program. The newly adopted Unified Development Ordinance provides regulations regarding dune protection, tree protection, and heritage tree replacement.
CUR47	Retain vegetation and require buffers in areas adjacent to wetlands, water bodies and Maritime forests	Hurricanes, Nor'easters, Floods, Erosion	High	Currituck County Planning, Currituck County Engineering	General Fund	Added requirement to development ordinances and enforced in development review.
CUR48	Evaluate the adoption of a County ordinance address protection to the primary or frontal dune or damage to vegetation on the frontal dune.	Hurricanes, Nor'easters, Floods, Erosion	High	Currituck County Planning, Currituck County Engineering	General Fund	New Action
CUR49	Evaluate allocating a portion of occupancy tax toward the dune planting program and shoreline restoration.	Hurricanes, Nor'easters, Floods, Erosion	High	Currituck County Administration, Currituck County Planning, Currituck County Engineering	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CUR50	Continue to educate elected officials and the public on the need for and benefits of sustained shoreline management strategies.	Hurricanes, Nor'easters, Floods, Erosion	Medium	Currituck County Planning, Currituck County Engineering	General Fund	New Action
CUR51	Work in conjunction with the Division of Coastal Management and the GIS Coordinator to track the extent of local beach erosion and annually produce a "State of the Beach" report.	Hurricanes, Nor'easters, Floods, Erosion	Low	Currituck County Planning, Currituck County Engineering	General Fund	New Action
CUR52	Create maps reflecting the historical migration of the marsh to track erosion.	Hurricanes, Nor'easters, Floods, Erosion	Medium	Currituck County Planning	General Fund	New Action
CUR53	Educate property owners on the natural and beneficial functions of floodplains, watersheds, and other natural/coastal areas.	Hurricanes, Nor'easters, Floods, Erosion	Medium	Currituck County Planning	General Fund	New Action
CUR54	Educate the development and agricultural communities as well as the public on the impacts of turbidity on floodplain/natural areas and mitigating best management practices.	Hurricanes, Nor'easters, Floods, Erosion	Medium	Currituck County Planning	General Fund	New Action
CUR55	Develop outreach materials and offer training on Low Impact Development (LID) best management practices that can be distributed to the public and engineering communities.	Hurricanes, Nor'easters, Floods, Erosion	Medium	Currituck County Planning	General Fund	New Action
CUR56	Create stormwater management ordinance.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Flooding	High	Currituck County Engineer, Planning	General Fund	Completed
CUR57	Prepare and adopt a community-wide stormwater management master plan.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Flooding	High	Currituck County Engineer, Planning	General Fund	Completed
CUR58	Incorporate manmade hazards such as hazardous materials spills and terrorism.	All Hazards	High	Hazard Mitigation Planning Committee	General Fund	Completed
CUR59	Explore regional hazard mitigation plans with surrounding counties.	All Hazards	Medium	Hazard Mitigation Planning Committee, Surrounding County officials	Hazard Mitigation Grant Funds	Completed with the development of the Albemarle Regional Hazard Mitigation Plan
CUR60	Encourage NC Building Code to strengthen building codes and incorporate those higher standards for hazard resistance to mitigate structure damage via sending delegation to the Code Council.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Flooding, Winter Weather, Earthquake	Medium	Currituck County Inspections	General Fund	This action statement could not be financially supported by the Inspections Dept.
CUR61	Adopt appropriate land use or other regulatory policies/ordinances that assist repetitive loss properties.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Flooding, Winter Weather, Earthquake	Medium	Currituck County Planning	General Fund	Completed with the adopted amendments to the Unified Development Ordinance.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CUR62	Investigate the feasibility of adopting higher standards such as freeboard and protection of critical facilities.	Nor'easter, Hurricane, Severe Thunderstorm, Tornado, Flooding, Winter	High	Currituck County Planning	General Fund	Completed with the adopted amendments to the Unified Development Ordinance.
CUR63	Create an ordinance to require that all utility lines will be buried in areas of new development.	Weather, Earthquake	Medium	Currituck County Planning	General Fund	Completed with the adopted amendments to the Unified Development Ordinance.
CUR64	Develop an annual household hazardous materials collection site.	Severe Thunderstorm, Tornado	High	Currituck County Public Works	General Fund, Grant Funds	Completed annually. Date TBA.
CUR65	Open a permanent hazardous materials collection site.	Flood, Extreme Heat	Medium	Currituck County Public Works	General Fund, Grant Funds	No funding available, however, contract with a vendor for annual collection site set up.
CUR66	Create fire/drought resistant plant list.	Flood, Extreme Heat	High	Currituck County Planning	General Fund	Updated as needed and available in Currituck Planning Office.
CUR67	Provide and educate people about fire/drought resistant plant list.	Wildfire, Drought	Medium	Currituck County Planning	General Fund	Updated as needed and available in Currituck Planning Office.
CUR68	Survey County owned property to retrofit for hazards.	Wildfire, Drought	High	Currituck County Public Works	General Fund	As budget allows, the County continues to work on gathering survey for County owned property.
CUR69	Continue to update and maintain flood maps and other hazard maps.	Nor'easter, Flood, Hurricane, Severe Thunderstorm, Tornado, Winter Weather, Wildfire, Earthquake	High	Currituck County Planning, GIS	General Fund	Updated as needed and available in Currituck Planning Office.
CUR70	Update and amend County ordinances as needed.	Nor'easter, Flood, Hurricane, Severe Thunderstorm, Tornado, Winter Weather, Wildfire, Earthquake	High	Currituck County Planning	General Fund	Completed with the adopted amendments to the Unified Development Ordinance. Updated as needed and available in Currituck Planning Office.
CUR71	Clarify and strengthen the Maritime Forest Ordinance.	Flooding, Drought	High	Currituck County Planning	General Fund	Completed.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
CUR72	Preserve natural environmental features to naturally absorb water run-off and serve as wind buffers.	Flooding, Drought	High	Currituck County Planning	General Fund	Completed with the adopted amendments to the Unified Development Ordinance.
CUR73	Continue communicating with other counties about hazard mitigation.	All Hazards	Medium	Currituck County Emergency Management	General Fund	Completed.
CUR74	Continue to work on requirement for a real estate disclosure statement for home buyers and renters.	Flooding	Medium		General Fund, Local Real Estate Commission	Incomplete. Developing working relationship with Real Estate Commission to garner support for providing disclosure.

Table 7.2.5 Dare County Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DAR1	Identify Funding to improve stormwater drainage and land management preparation for flooding	Hurricanes, Nor'easters, Severe Thunderstorms, Floods	Medium	Dare County Planning	General Fund, Grant Funds	Seek funding from mitigation sources at state/fed level. Utilize academic partners to leverage combined assessment revenues.
DAR2	Identify problem areas and prioritize projects to improve drainage systems throughout the county.	Hurricanes, Nor'easters, Severe Thunderstorms, Floods	High	Dare County Planning	General Fund	Actively pursue damage assessment using GIS mapping techniques after each significant event
DAR3	Enforce ordinances that prevent fill or structures without a drainage plan.	Hurricanes, Nor'easters, Severe Thunderstorms, Floods	High	Dare County Planning	General Fund	Routinely Enforce the Dare County flood ordinance regulations for fill in the VE flood zones.
DAR4	Assist property owners with safe and efficient clean up after storm events by implementing yearly contract with debris removal services	Hurricanes, Nor'easters, Severe Thunderstorms, Floods	Medium	Dare County Planning, Dare County Soil and Water Board	General Fund, Grant Funds	Continue yearly contract renewal with debris removal services. Compose media template for public outlining county debris plan and debris pick-up separation of items Seek FEMA/state funding for reimbursement after storm events
DAR5	Increase the number of properties that meet and exceed the published Base Flood Elevations	Hurricanes, Nor'easters, Severe Thunderstorms, Erosion, Flood, Tsunami	High	Dare County Planning, Dare County Emergency Management	General Fund	All new structures permitted under County's review have to meet or exceed the published Base Flood Elevations and based on annual permitting reports meet strategy.
DAR6	Utilize existing post storm information and GIS mapping to identify the most vulnerable structures in the County.	Hurricanes, Nor'easters, Severe Thunderstorms, Erosion, Flood, Tsunami	High	Dare County Planning, Dare County Emergency Management	General Fund, Grant Funds	County participate in Regional Plan that has vulnerability review of structures in County, will seek additional grant funding for mitigation of vulnerable structures identified.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DAR7	Implement a repetitive loss plan to reduce the potential damage from future events.	Hurricanes, Nor'easters, Severe Thunderstorms, Erosion, Flood, Tsunami	High	Dare County Planning, Dare County Hurricane Recovery	General Fund, Grant Funds	Additional grant funding to elevate 44 homes secured by Dare County after Hurricane Irene, work on elevation to be completed by 2015
DAR10	Identify and prioritize funding to mitigate vulnerable structures and develop the repetitive loss plan	Hurricanes, Nor'easters, Severe Thunderstorms, Erosion, Flood, Tsunami	High	Dare County Planning Emergency Management	General Fund, Grant Funds	Repetitive loss map/plan identified as CRS goal for 2015 update, incomplete.
DAR11	Implementation and Enforcement of CAMA Use Standards for Coastal Wetland AECs as Identified under 15NCAC7H, Section 0205 and 0208	Hurricanes, Nor'easters, Flood	Medium	Dare County Planning	Grant Funds	Dare County continues to provide LPO assistance in unincorporated Dare County. County per CAMA has adopted Land Use Plan. All development within AEC may require CAMA major permit and must be consistent with County's adopted plan.
DAR12	Continue to Administer the CAMA Local Enforcement Program and Maintain the Staff Necessary for this Work Refer Applicants to U.S. Army Corps of Engineers Permit Program, Specifically Section 404	Hurricanes, Nor'easters, Flood	Medium	Dare County Planning	General Fund	County provides Local Permit Officer assistance in unincorporated Dare County. As needed for individual development projects and subdivision projects County refers Applicants to U.S. Army Corps of Engineers Permit Program, Specifically Section 404 for Wetland development
DAR13		Hurricanes, Nor'easters, Flood	Medium	Dare County Planning	General Fund	
DAR14	Facilitate Implementation of Permit Program for Wetland Management	Hurricanes, Nor'easters, Flood	Medium	Dare County Planning	General Fund, Grant Funds	Incomplete. No local wetland permit program established, refer all applicants to US Army Corps of Engineers.
DAR15	Protect transportation routes and improve traffic flow along NC 12. Improve NC 12 to a two lane road and coordinate traffic signals.	Hurricanes, Nor'easters, Flood	Medium	Dare County Planning, Dare County Emergency Management, NCDOT	NCDOT	Annually attend RPO meetings that make recommendations for the State's Transportation Improvement Program. Funding that is programmed in STIP has to meet the criteria and recommended as Regional, Statewide project.
DAR16	Advocate the replacement of the Bonner Bridge.	Hurricanes, Nor'easters, Flood, Erosion	High	Dare County Planning, Dare County Emergency Management, NCDOT	NCDOT	NCDOT working to replace bridge; lawsuits from environmental courts have resulted in delays, no action.
DAR17	Establish secondary water supplies/points for fire protection efforts.	Hurricanes, Nor'easters, Flood, Wildfire	Medium	Dare County Fire Marshal	Grant Funds	New Action, funding to be sought.
DAR18	Acquire generators or other forms of redundant power supply to ensure that critical facilities and infrastructure remain operational where normal power supply is not available	All Hazards	Medium	Dare County Fire Marshal	Grant Funds	New Action, funding to be sought.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DAR19	Require Realtors to disclose flood zones. Develop and maintain relations with Real Estate Community and provide outreach and educational opportunities. Provide access to floodplain maps and floodplain information for the Real Estate Community.	Hurricanes, Nor'easters, Flood	Medium	Dare County Planning	General Fund	Expanded outreach includes Real Estate community and receives feedback on planned brochures. Completed: Flood disclosure required on Real Estate Disclosure Forms. Completed.
DAR20	Enhance NFIP information by distributing NFIP brochures and including up to date flood maps on the County website.	Hurricanes, Nor'easters, Flood	Medium	Dare County Planning, Dare County GIS	General Fund	Completed.
DAR21	Coordinate with NC Floodplain Mapping on public dissemination of updated floodplain maps.	Hurricanes, Nor'easters, Flood	High	NC Floodplain Mapping, Dare County Planning	General Fund	Updated Flood maps are posted on County's website.
DAR22	Continue to participate in the Community Rating System. Look for additional activities to implement to improve Class rating.	Hurricanes, Nor'easters, Flood	High	Dare County Planning	General Fund	Actively engages the CRS committee for Dare County. Annually do mailings that address drainage methods and storm recovery activities to the public.
DAR23	Continue participation in Storm Ready program.	Hurricanes, Nor'easters, Flood	High	Dare County Emergency Management	General Fund	New Action
DAR24	Develop Emergency Response Plan for Road/Bridge Loss	Bridge Collapse, Transportation Infrastructure Failure	High	Dare County Emergency Management, NCDOT	General Fund	County staff works closely with NCDOT officials and annually advocate at RPO meetings bridge/road improvements for State's Transportation Improvement Plan.
DAR25	Advocate for Beach Replacement	Hurricanes, Nor'easters, Flood, Erosion	High	DCBC/Manager	Grant Funds	Annually brief local representatives in State Legislature, invited to attend County's budget retreat.
DAR26	Circulate brochures on all hazards identified in the risk assessment to educate the public on protective actions that they can prepare for in their disaster plans.	All Hazards	Low	Dare County Emergency Management	General Fund	CRS outreach activities completed annually, brochures available in Planning offices. Expanded activities to include all hazards. Expanded outreach includes Real Estate community and receives feedback on planned brochures. Brief annually local representatives in State Legislature, invited to attend County's budget retreat. Flood maps are posted on County's website.
DAR27	Conduct annual outreach activities to increase awareness of all potential hazards that affect Dare County.	All Hazards	Medium	Dare County Emergency Management, Dare County Planning	General Fund	New Action
DAR28	Prioritize and Fund Critical Drainage Projects that improve stormwater drainage and land management preparation for flooding.	Hurricanes, Nor'easters, Flooding, Thunderstorms, Tidal Flooding	High	Dare County Planning	Grant Fund	Grants funds are secured when available to assist homeowners with drainage improvements. Received grants funds from Department of Agriculture for "snag and drag" cleanup of ditches in Wanchese. Phase 1 completed in fall 2014 and Phase 2 scheduled for mid-2015.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DAR29	Educate the public with assistance with safe and efficient clean up after storm events.	Hurricanes, Nor'easters, Flooding, Thunderstorms, Tidal Flooding	High	Dare County Planning	General Fund	Dare completes annual CRS outreach activity in August to all property owners in unincorporated Dare County. Additionally, a flood damage response placard to be used immediately following a flood event will be developed later this summer as part of our CRS outreach activities.
DAR30	Fund and implement assistance to property owners with safe and efficient clean up after storm events.	Hurricanes, Nor'easters, Flooding, Thunderstorms, Tidal Flooding	High	Dare County Planning	General Fund	Dare County has a storm debris agreement with a private contractor already in place should storm event occur. This allows for pre-positioning of equipment and personnel before event for faster responses to affected areas.
DAR31	Develop plan to increase the number of properties that meet and exceed Base Flood Elevation (BFE).	Hurricanes, Nor'easters, Flooding, Thunderstorms, Coastal Erosion, Tidal Flooding, Tsunami	High	Dare County Planning	General Fund	Flood Prevention Ordinance revised in January 2014 to require 1-foot freeboard for all new construction and substantial improvements. All utilities and ductwork must also be elevated to comply with 1-foot freeboard. Submission of elevation certificate to verify compliance with 1-foot freeboard is required.
DAR32	Prioritize funding to increase the number of properties that meet and exceed BFE.	Hurricanes, Nor'easters, Flooding, Thunderstorms, Coastal Erosion, Tidal Flooding, Tsunami	High	Dare County Planning	General Fund, Grant Funds	Elevation of hazard mitigation grant currently underway -- 44 homes to be elevated by end of 2016 with funding secured after Hurricane Irene. Full-time staff is employed to oversee grant project. Structures are all elevated to be consistent with freeboard requirement of Dare County Flood Prevention Ordinance.
DAR33	Lobby State Legislators to require realtors to disclose flood zones.	Hurricanes, Nor'easters, Tidal Flooding, Flooding	Medium	Dare County Planning	General Fund	Work with Dare's elected representatives in NC House and NC Senate for the consideration of legislation requiring disclosure standards for all real estate transactions including for sale by owners and long-term lease agreements.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DAR34	Lobby local realtors board to require realtors to disclose flood zones	Hurricanes, Nor'easters, Tidal Flooding, Flooding	Medium	Dare County Planning	General Fund	Inclusion of representatives from real estate industry on CRS committee for outreach activity. Development of disclosure brochures for distribution at local realtors' offices planned as part of 2015 CRS outreach activities. Amendments to flood ordinance, zoning ordinance and subdivision ordinance adopted in February 2015 requiring disclosures of flood hazard/CBRA zoning on all new plats, site plans, and at time of building permit issuance.
DAR35	Circulate Brochure on NFIP to enhance NFIP information.	Hurricanes, Nor'easters, Tidal Flooding, Flooding	High	Dare County Planning	General Fund	CRS outreach activities completed annually; brochures available in Planning offices. Links to NFIP information posted on Dare County webpage as part of CRS outreach activities.
DAR36	Put Flood Maps on the County's Website to enhance NFIP information.	Hurricanes, Nor'easters, Tidal Flooding, Flooding	High	Dare County Planning	General Fund	Flood zone layer available on Dare County GIS, link to flood maps also on Dare County webpage.
DAR37	Continue to Participate in CRS Activities to enhance NFIP information.	Hurricanes, Nor'easters, Tidal Flooding, Flooding	High	Dare County Planning	General Fund	Dare County remains an active participant in the CRS program, implementation of new activities to maintain current class 8 ranking with possible increase to class 7 are being developed. Development of PPI, enhanced webpage, freeboard, non-conversion deed restrictions are examples of some activities already adopted or in development.
DAR38	Update FIRM to enhance NFIP information.	Hurricanes, Nor'easters, Tidal Flooding, Flooding	High	Dare County Planning	General Fund	Anticipated August 2015 release of new FIRMS for Dare County, with procedures implemented by Dare County for adoption of new FIRMS and associated flood ordinance revisions as part of mapping initiative by end of 2016.

Table 7.2.6 Town of Duck Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DCK1	Continue to fund enforcement of current hazard mitigation regulations.	All Hazards	High	Town Council	General Fund	Town Council continues to annually fund Code Enforcement Position
DCK2	Improve stormwater drainage in vulnerable areas	Hurricanes, Nor'easters, Flood	High	Planning Board	General Fund	NCDOT drainage study completed. Additional work continues to resolve localized roadway flooding as funding and resources become available.
DCK3	Adopt and apply development policies that balance protection of natural resources and fragile areas with residential and economic development	Hurricanes, Nor'easters, Thunderstorms, Wildfire, Flooding	Medium	Town Council	General Fund	Adopted Town Code amendments including Tree and Vegetation Preservation, Land Disturbing Activities, Beach and Dune Management, Wind and Solar Energy, Ocean and Sound Overlay, Parking, Lot Coverage, etc. Currently working on ordinances related to Stormwater Management and low-impact development.
DCK4	Develop policies that minimize threats to life, property, and natural resources resulting from development located in or adjacent to hazard areas, such as those subject to erosion, high winds, storm surge, flooding, or sea level rise	Hurricanes, Nor'easters, Thunderstorms, Wildfire, Flooding	Medium	Town Council	General Fund	Adoption of revised Flood Insurance Rate Maps and Flood Damage Prevention Ordinance, Local Participation in CAMA LPO program, completed enrollment in FEMA Community Rating System, Enforcement of NC State Building Code Revisions and Amendments including Wind-Borne Debris Provisions. The Town has also revised policies related to oceanfront development including additional setbacks for accessory structures, new dune walkway standards, and remedies for structures encroaching on the ocean beach.
DCK5	Develop location, density, and intensity criteria for new, existing development and redevelopment including public facilities and infrastructure so that they can better avoid or withstand natural hazards	Hurricanes, Nor'easters, Thunderstorms, Wildfire, Flooding	Medium	Town Council	General Fund	Town Code revisions including lot coverage regulations, limitations on residential dwelling size (ratio of number of bedrooms to lot area), increased setbacks for accessory structures, additional elevation requirements for V-Zone structures.
DCK6	Identify areas most at risk and investigate strategies to reduce risk from wild land/urban interface fires	Wildfire	Medium	Fire Department, Town Staff	General Fund	New Action
DCK7	Investigate how the Town of Duck can become a Fire wise Community	Wildfire	Medium	Fire Department, Town Council	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DCK8	Collaborate with DVFD and the Town of Duck to educate the homeowners, developers and landscapers on designing fire safe communities.	Wildfire	Medium	Fire Department, Town Council	General Fund	New Action
DCK9	Develop dune maintenance education materials and make available online.	Hurricanes, Nor'easters, Flood, Erosion	High	Town Staff, Hired Consultant, Division of Coastal Management	General Fund, Grant Fund	Town distributes information regarding proper sand fence installation techniques and native vegetation information; the Town also provides copies of the NC Sea Grant Publication "The Dune Book" upon request.
DCK10	Provide information on good construction techniques for coastal communities	Hurricanes, Nor'easters, Flood, Erosion	High	Town Staff	General Fund	Continue to provide FEMA/NC Department of Insurance publications on Coastal Construction Techniques.
DCK11	Enroll in the FEMA Community Rating System and take advantage of the various mitigation strategies promoted by this program	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council, Town Staff	General Fund	Enrollment in the program has been completed. However, the Town continues to develop actions and strategies that will lower its CRS rating and therefore provide lower flood insurance premiums to property owners within the Town.
DCK12	Research the use and storage of propane and develop an ordinance to regulate these storage tanks	Hurricanes, Nor'easters, Flood, Erosion	High	Fire Department, Town Staff	General Fund	The Town needs is currently investigating the legal authority to regulate underground storage tanks since they are under the control of the NC Dept. of Agriculture.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DCK13	Mitigate ocean over wash and sound erosion by identifying vulnerable areas, developing public outreach information and disseminating this information to the public.	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	General Fund	The Town has been monitoring high oceanfront erosion areas by documenting storm damage and taking photos/video. The Town has used GIS information provided by Dare County and the North Carolina Division of Coastal Management to monitor movement of the oceanfront shoreline. Additionally, a beach erosion study has been developed for the Town by the USACOE and Coastal Planning and Engineering which documents erosion patterns and existing conditions. NCDOT in conjunction with the Towns of Duck and Southern Shores conducted a drainage study on NC.12 to determine areas vulnerable to flooding. The Town needs to develop a method to track sound side erosion. The Town distributes information regarding proper sand fence installation techniques and native vegetation information; the Town also provides copies of the NC Sea Grant Publication, "The Dune Book", upon request.
DCK14	Increase the amount of open space throughout the town by seeking land donations or making land purchases. Develop an open space plan to further enhance these areas.	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	General Fund	The Town has purchased an 11-acre park in the center of the Village Commercial area which is partially maintained as open space. The Town is 90 percent developed and there are few other areas available to purchase and maintain as open space. Town funds for this activity are limited. Future activities in this area will largely depend on the success of the Town in acquiring property with available grants

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DCK15	Support programs and initiatives to annually assess shoreline changes (erosion and accretion)	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	General Fund	The Town has been monitoring high oceanfront erosion areas by documenting storm damage and taking photos/video. The Town has used GIS information provided by Dare County and the North Carolina Division of Coastal Management to monitor movement of the oceanfront shoreline. Additionally, a beach erosion study has been developed for the Town by the USACOE and Coastal Planning and Engineering which documents erosion patterns and existing conditions. The Town has enacted an additional tax to support beach management activities. It is anticipated that some of the revenue will be used in future years to collect detailed beach and dune profile information that will allow the town to track shoreline change.
DCK16	Develop/Update policies to deal with encroaching development on the Town beaches and to preserve the Towns dune system.	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	General Fund	The Town has adopted an ordinance to limit the encroachment of structures on the beach. Additionally, new setbacks have been adopted for accessory structures such as pools and dune decks to provide additional protection to the dune system. The Town has also prohibited sandbags.
DCK17	Stay informed and involved relative to Federal, State, and/or regional studies and initiatives concerning beach re-nourishment and maintenance	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	General Fund	The Town participates in the annual program established by the Dare County Shoreline Commission to provide funds for beach maintenance. The Town is actively participating in a beach nourishment project in conjunction with Dare County and the Towns of Kill Devil Hills and Kitty Hawk.
DCK18	Work with and support efforts by CAMA concerning beach re-nourishment and maintenance	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	General Fund	The Town participates in the CAMA LPO program and issues permits for regulated beach activities. The Town has adopted a Beach and Dune Management ordinance to protect dunes and dune vegetation. The Town is currently pursuing a strategy to nourish the beach.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DCK19	Seek ways to ensure residents receive information and links to technical assistance from the Division of Coastal Management concerning beach re-nourishment and maintenance activities and options such as sand fencing	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	General Fund	The Town provides information and issues CAMA permits to oceanfront property owners seeking to maintain their primary and frontal dunes. The Town website is used to provide this information as well.
DCK20	Lobby the NC Board of Transportation and the NC Department of Transportation and NC Turnpike Authority for the construction of the Mid-County Bridge	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council, NCDOT	NCDOT	The Town Council has issued several resolutions to support the construction of the Mid-Currituck Bridge and to identify the Town's preferred design alternative for the project. The Town has sent letters to NCDOT and NC Turnpike Authority Staff providing comments on the project studies that have been underway for several years. The Town frequently discusses the project at regular Town Council meetings and is kept informed of the status of the project by Town staff and residents who serve on a local committee to support construction of the bridge.
DCK21	Identify capital projects to address drainage issues on NC 12 and lobby NCDOT to have these items addressed	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	NCDOT	Engineering has been completed to rectify localized drainage projects on other parts of NC 12 and funding is being provided in the CIP annually. Drainage Project on NC12 at Waterfront Shops/Ston White has been funded in CIP for FY 2014.
DCK22	Develop an emergency communications network. Maintain a roster of business owners and homeowners associations.	All Hazards	High	Town Council	General Fund	This Town is actively maintaining this information and updates its list annually.
DCK23	Develop effective public information program to disseminate data on all hazards.	All Hazards	High	Town Council	General Fund	New Action
DCK24	Develop public education materials to educate beachgoers on beach safety (rip currents, beach holes, beach fires, etc.)	Rip Currents	High	Town Manager, Public Information Officer, Ocean Rescue	General Fund	Continue to develop and update materials on beach hazards to be distributed to the public.
DCK25	Meet with Currituck County and Southern Shores to discuss possible locations for a debris removal area	Hurricanes, Nor'easters, Thunderstorms	High	Town Manager	General Fund	Completed. Remove on subsequent update.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DCK26	Provide funding for stormwater improvements.	Hurricanes, Nor'easters, Thunderstorms	Medium	Town Council	General Fund	Town/NC DOT have completed major stormwater project on NC 12 in South Duck. Engineering has been completed to rectify localized drainage projects on other parts of NC 12 and funding is being provided in the CIP annually. Drainage Project on NC12 at Waterfront Shops/Ston White has been funded in CIP for FY 2014.
DCK27	Develop good construction materials information.	Hurricanes, Nor'easters	High	Planning Board	General Fund	New Action
DCK28	Identify available property for open space.	Hurricanes, Nor'easters, Coastal Erosion, Wildfire.	High	Town Council	General Fund	The Town has purchased an 11-acre park in the center of the Village Commercial area which is partially maintained as open space. The Town is 90 percent developed and there are few other areas available to purchase and maintain as open space. Town funds for this activity are limited. Future activities in this area will largely depend on the success of the Town in acquiring property with available grants.
DCK29	Develop and maintain the open space.	Hurricanes, Nor'easters, Coastal Erosion, Wildfire.	High	Town Council	General Fund	The Town drafted a Municipal Property Master Plan in 2004 in order to develop the Town Park property and this has now been completed. No other open space areas are currently being pursued for acquisition by the Town.
DCK30	Lobby the NC Board of Transportation and the NC Department of Transportation.	Hurricanes.	High	Town Council	NC DOT	NC DOT has completed a project to raise NC 12 in the southern portion of Town to address a flooding issue.
DCK31	Continue to research methods to disseminate information.	Hurricanes, Nor'easters, Tornadoes.	High	Town Council	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.
DCK32	Continue to identify who needs natural hazards information.	Hurricanes, Nor'easters, Tornadoes.	High	Town Council	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
DCK33	Continue to develop/disseminate this information (dune protection, wind, erosion).	Hurricanes, Nor'easters, Tornados.	High	Town Council	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.
DCK34	Continue to research methods to get information to citizens.	Hurricanes, Nor'easters, Tornados.	High	Town Council	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.
DCK35	Develop/disseminate hurricane information to provide to tourists.	Hurricanes, Nor'easters, Tornados.	High	Town Council	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.
DCK36	Continue to disseminate the information through realtors and businesses.	Hurricanes, Nor'easters, Tornados.	High	Department of Community Development	General Fund	Major improvements have been made to communicate with stakeholders. Use of social media and internet based communication tools has drastically improved the town's ability to disseminate and receive information.
DCK37	Develop and maintain a database of contact information for oceanfront property owners where storm damage is likely to occur.	Hurricanes, Nor'easters, Coastal Erosion.	High	Department of Community Development	General Fund	This information has been collected and is being actively maintained by the Town.
DCK38	Develop a method to post storm damage information on the Town website including property specific damage information.	Hurricanes, Nor'easters, Coastal Erosion.	High	Department of Community Development	General Fund	Property specific data has been posted to the Town's website via spreadsheet as it is collected by Damage Assessment teams. Photos of general damage have been posted to Facebook and other social media outlets to provide a summary of storm impacts.

Table 7.2.7 Town of Kill Devil Hills Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
KDH1	Continue to enforce the zoning ordinance and amend when necessary	Hurricanes, Nor'easters, Floods, Erosion	High	Planning Dept., Board of Commissioners, Building Inspect.	General Fund	Incomplete; KDH shall continue to monitor the zoning ordinances to enforce and amended based on community needs.
KDH2	Provide technical assistance to customers/citizens and continue to enforce current flood hazard ordinance.	Hurricanes, Nor'easters, Floods, Erosion	High	Planning Dept., Building Inspector, Board of Commissioners	General Fund	Customers provided technical assistance and flood damage prevention ordinance is enforced; BFE violations were corrected and others in process.
KDH3	Support efforts to preserve natural areas.	Hurricanes, Nor'easters, Floods, Erosion	High	Planning Dept.	General Fund	The Town took no action other than to maintain ownership of its natural areas.
KDH4	Continue to implement the stormwater management plan.	Hurricanes, Nor'easters, Floods, Erosion	Medium	Planning Dept., Public Services	General Fund	Plan was updated; concepts and Drainage projects were implemented.
KDH5	Continue mowing drainage ditches and conduct normal maintenance and storm event driven maintenance.	Hurricanes, Nor'easters, Floods, Erosion	High	Public Services, NCDOT	General Fund	Ditch maintenance schedule implemented which included pre & post storm events.
KDH6	Monitor changes to the State Building Code and modify local regulations as necessary to minimize damage.	All Hazards	High	Planning Dept., Building Inspector	General Fund	Inspectors accomplished annual training and enforced revisions to building codes.
KDH7	Expedite permitting for the relocation of repetitive loss situations.	Hurricanes, Nor'easters, Floods, Erosion	Low	Planning Dept.	General Fund	No repetitive loss relocation opportunities were present.
KDH8	Encourage repetitive loss properties to consider acquisition as a possible solution.	Hurricanes, Nor'easters, Floods, Erosion	Low	Planning Director, Board of Commissioners	Grant Funds	The Town took no action other than outreach efforts.
KDH9	Building Elevation – Continue enforcing the base flood elevation requirement of the Town's Flood Damage Prevention Ordinance.	Hurricanes, Nor'easters, Floods, Erosion	High	Asst. Planning Director, Building Inspector	General Fund	Required documentation for new construction and additions to existing structures.
KDH10	Maintain outreach efforts and continue making flood insurance available to the Town's residents.	Hurricanes, Nor'easters, Floods, Erosion	High	Planning Dept., Town Clerk	General Fund	Outreach included flood insurance and Biggert-Waters Insurance Reform and Grimm Waters Acts information.
KDH11	Continue ongoing beach nourishment efforts.	Hurricanes, Nor'easters, Floods, Erosion	High	Planning Director, Board of Commissioners	General Fund	Town contracted with a Consultant to provide permitting and offshore sand search information.
KDH12	Continue to utilize the zoning ordinance and the Land Use Plan to protect wetlands, implement and enforce CAMA AEC regulations and refer applicants to US Army Corps of Engineers for Section 404 wetlands.	Hurricanes, Nor'easters, Floods, Erosion	High	US Army Corps of Engineers, Planning Dept., NCDENR	General Fund	Continued awareness of wetland protection, but no implementation at this time.
KDH13	Continue to support coastal barrier protection efforts by the State.	Hurricanes, Nor'easters, Floods, Erosion	High	CAMA, Planning Dept.	General Fund	Continued awareness of coastal barrier, but no implementation at this time.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
KDH14	Continue to enforce local and state regulations.	Hurricanes, Nor'easters, Floods, Erosion	High	Planning Dept.	General Fund	Through plan approvals, site inspections and reporting to State.
KDH15	Support local CAMA officer with compliance efforts within the AECs.	Hurricanes, Nor'easters, Floods, Erosion	High	CAMA LPO	General Fund	Remained active with training and implemented the CAMA Local Permit Officer Program.
KDH16	Preserve surface water quality and enhance water quality through stormwater management and zoning.	Hurricanes, Nor'easters, Floods, Erosion	Medium	Planning Dept., Public Services	General Fund	Stormwater management plan was updated with a greater focus on water quality.
KDH17	Continue to enforce the Maritime Forest Environmental Zoning District.	Hurricanes, Nor'easters, Floods, Erosion, Wildfire	High	Planning Dept.	General Fund	Enforced the Maritime Forest Environmental District Ordinance.
KDH18	Facilitate a safe and efficient evacuation and where possible, reduce damage.	All Hazards	High	Dare County Control Group	General Fund	Participated with Dare County Control group for evacuation.
KDH19	Coordinate efforts to expedite reconstruction and rebuilding efforts in cooperation with Dare County Emergency Management staff.	All Hazards	High	Planning Dept.	General Fund	Participated with Dare County and Town staff for reconstruction and rebuilding efforts.
KDH20	Coordinate efforts to expedite recovery.	All Hazards	High	Planning Dept., Board of Commissioners	General Fund	Coordinated efforts within its own organization and with State and local agencies.
KDH21	Take appropriate actions to prevent and/or minimize damages to critical facilities. Use generators or other forms of redundant power to ensure that critical facilities and infrastructure remain operational.	All Hazards	High	Police, Fire & Rescue, Public Works, NC Dominion Power	General Fund	Train for preparedness, response and recovery and to protect critical facilities by utilizing shutters on windows. Accomplished scheduled maintenance of Town drainage ditches. No action at this time.
KDH22	Work with NCDOT Strategic Office of Planning to enhance and construct infrastructure for evacuation.	All Hazards	High	Planning Dept.	General Fund	No action taken.
KDH23	Implement Water Systems Master Plan.	Wildfire	High	Public Services, Water Department	General Fund	
KDH24	Develop ongoing protocols to assure the maintenance of critical public services.	All Hazards	Medium	Police, Fire & Rescue, Public Works, Dare County Emergency Management	Water Fund	Town Departments were exercised and trained for preparedness, response and recovery.
KDH25	Continue protection efforts concerning the Fresh Pond and maintain liaison with NC Division of Coastal Management concerning the development of the Kill Devil Hills Land Use Plan.	Hurricanes, Nor'easters, Flood, Winter Storm	High	Planning Dept., CAMA	General Fund	Continued awareness for Fresh Water Pond AEC, although no longer used as a potable water source.
KDH26	Continue to implement the stormwater management plan.	Hurricanes, Nor'easters, Flood, Erosion	Medium	Public Services	General Fund	Plan Updated with concepts implemented through site plan review.
KDH27	Encourage beach nourishment as a storm protection measure and search for funding.	Hurricanes, Nor'easters, Flood, Erosion	High	Board of Commissioners, Dare County Commissioners	General Fund	Contracted with Consultant to provide permitting and offshore supplements for beach nourishment.
KDH28	Maintain updated flood map information for citizens and customers.	Hurricanes, Nor'easters, Flood, Erosion	High	NC Division of Emergency Management, Planning Dept.	NCEM	Provided information to citizens through public outreach and customers.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
KDH29	Compile and maintain current information in the Kill Devil Hills Floodplain Management Library.	Hurricanes, Nor'easters, Flood, Erosion	Medium	CRS Coordinator	General Fund	Continued awareness to maintain the Floodplain Management Library; Scanning documents to enhance digital archives.
KDH30	Continue to utilize technical assistance from state and federal agencies and private consultants to provide appropriate technical assistance to citizens and customers.	All Hazards	High	Building Inspector, Planning Dept.	General Fund	Continues to utilize outside resources.
KDH31	Initiate outreach projects to inform the public on Town and County initiatives that will reduce hazard related losses of property and life.	All Hazards	Medium	Planning Dept., Dare County Emergency Management	General Fund	Continued annual outreach projects through joint mailings, public library and Town website.
KDH32	Work with print, radio, and television media to effectuate outreach efforts in cooperation with Dare County and neighboring municipalities to educate the public on additional hazards identified in the risk assessment.	All Hazards	Medium	Planning Dept., Dare County Emergency Management	General Fund	Provided printed information and continues to air a hurricane awareness video for television and provided website updates for its citizenry.
KDH33	Develop updated floodplain map for public dissemination (New Strategy).	Hurricanes, Nor'easters, Flood, Erosion	Medium	Planning Dept.	General Fund	The Town continues to maintain updated flood maps and provide information to citizens through public outreach and customers (New Strategy).
KDH34	Continue to participate in CRS (New Strategy).	Hurricanes, Nor'easters, Flood, Erosion	High	Planning Dept.	General Fund	(New Strategy).
KDH35	Circulate brochure specifically on NFIP (New Strategy).	Hurricanes, Nor'easters, Flood, Erosion	Medium	Planning Dept.	General Fund	(New Strategy).
KDH36	Conduct contractor's meeting as a refresher to local developers and industry professionals on floodplain regulations and required documentation (New Strategy).	Hurricanes, Nor'easters, Flood, Erosion	Medium	Planning Dept.	General Fund	(New Strategy).

Table 7.2.8 Town of Kitty Hawk Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
KHK1	Implement beach and dune renourishment projects	Hurricanes, Nor'easters, Flood, Erosion	High	Town Council	General Fund, Grant Fund	Beach Renourishment project set to begin for Kitty Hawk Beaches in 2016.
KHK2	Implement stormwater drainage improvements per the studies/plan	Hurricanes, Nor'easters, Flood, Erosion	High	Town Manager, Public Works	General Fund, NCDOT	Projects are implemented as funding and resources are available. 2011 - The Town of Kitty Hawk and N.C. Department of Transportation jointly funded a stormwater management plan that identifies areas prone to significant flooding and offers recommendations for improving stormwater drainage issues in each of these areas. 2012 - The Town hired an engineering consultant to complete more detailed specifications and begin the permitting process for installation of drainage improvements in seven (7) of the areas facing stormwater drainage issues. 2013 - Further studies and permitting are on hold pending the identification of a funding source for the outfall projects. The Town is in discussions with NCDOT as a funding partner, as the outfalls would relieve significant flooding issues on N.C. Highway 12.
KHK3	Revise the storm preparedness, response, and recovery plan for Kitty Hawk	Hurricanes, Nor'easters, Flood, Erosion	High	Town Staff, Town Council	General Fund	The Town continues to monitor this plan and update it annually.
KHK4	Educate homeowners on various mitigation techniques and resources available to them	All Hazards	High	Town Planning	General Fund	Town Planning staff provide information to citizens via telephone, in person office visits and they also provide handouts and with bi-annual mailings.
KHK5	Provide homeowners with the resources necessary to individually hazard-proof their own homes	Hurricanes, Nor'easters, Flood, Erosion	High	Town Planning, Town Inspections	General Fund	Town Planning staff provide information to citizens via telephone, in person office visits and they also provide handouts and with bi-annual mailings.
KHK6	Encourage homeowners to conduct an inventory of their assets to assist with damage claims	All Hazards	High	Town Planning, Police Department	General Fund	Town Planning staff provide information to citizens via telephone, in person office visits and they also provide handouts and with bi-annual mailings.

KHK7	Encourage mitigation of Repetitive Loss Properties (New Strategy).	Hurricanes, Nor'easters, Flood, Erosion	High	Town Planning, Property Owners	General Fund, Grant Fund, Property Owners	Town Planning staff provides information to citizens via telephone, in person office visits and they also provide handouts and with bi-annual mailings (New Strategy).
KHK8	Educate citizens about dune vegetation	Hurricanes, Nor'easters, Flood, Erosion	High	Town Planning, Town Public Works	General Fund	Town Planning staff provide information to citizens via telephone, in person office visits and they also provide handouts.
KHK9	Establish town plans for mitigation and recovery through information on disaster planning, recovery and reconstruction	All Hazards	High	Town Staff, Town Council	General Fund	The Town reviews existing plans and regulations on an annual basis. Staff also reviews its Mitigation Plan Annually as part of the CRS Program.
KHK10	Clean out culverts, ditches, and waterways to relieve standing water and facilitate the stormwater drainage	Hurricanes, Nor'easters, Flood, Erosion, Severe Thunderstorms	General Fund, NCDOT	High	Town Public Works, NCDOT	Public Works routinely monitors culverts, ditches and waterways to make sure they are clear of debris. Coordinates with NCDOT on waterway debris removal and cleaning.
KHK11	Collect beach erosion data annually	Hurricanes, Nor'easters, Flood, Erosion	NC Coastal Management	High	NC Coastal Management	The Town will continue to obtain annual beach erosion data from NC Coastal Management
KHK12	Update and improve the protocols and procedures (local, county, and state) by which the citizens in Kitty Hawk are made aware of impending storm events and expected impacts	Hurricanes, Nor'easters, Flood, Erosion	General Fund	High	Town Council, Dare County Emergency Management	Protocols and Procedures are updated by Town Staff, in conjunction with Dare County Emergency Management, on an annual basis and also immediately after each storm event.
KHK13	Work with the Dare County Control Group to prepare the provision of needed equipment and services to persons and businesses in need of assistance.	All Hazards	General Fund	High	Town Council, Dare County Emergency Management	Town Staff works with the Dare County Control Group to make sure equipment and services are provided after each storm event.
KHK14	Work with Dare County to improve the communication systems between all public safety departments within the towns, county, and state so that in the event of a disaster, all entities will be able to communicate with one another.	All Hazards	Town Council, Town Staff, Dare County Emergency Management, Dare County Sheriff's Department	Capital Reserve Fund	High	Communications systems are checked annually and prior to impending events. The Town will continue to work with Dare County Emergency Management to enhance the communication system.
KHK15	Define procedures and practices to maintain critical facilities and services to the maximum extent possible during and after a storm event	All Hazards	Town Staff, Town Council	General Fund	High	Town Staff continues to research procedures and practices aimed at protecting critical facilities and make sure these facilities are operational before, during and after hazard events.
KHK16	Implement beach and dune renourishment projects as funding becomes available	Hurricanes, Nor'easters, Flood, Erosion	Town Council	General Fund, Grant Funds	High	Beach renourishment projects for Kitty Hawk are slated to begin in 2016.
KHK17	Encourage NC Department of Transportation to elevate Kitty Hawk's highway to Kitty Hawk Landing	Hurricanes, Nor'easters, Flood, Erosion	Town Council, NCDOT	NCDOT	High	Town Council continues to lobby NCDOT for funding for this project.

KHK18	Maintain updated flood map information for citizens and customers	Hurricanes, Nor'easters, Flood, Erosion	NCEM, Town Planning and Inspections	NCEM	High	Updated Flood Maps and Floodplain information is available upon request from the Planning and Inspections Department.
KHK19	Initiate outreach projects to inform the public on Town and County initiatives that will reduce hazard related losses of property and life	All Hazards	High	Town Planning	General Fund	Town Planning staff provide information to citizens via telephone, in person office visits and they also provide handouts and with bi-annual mailings.

Table 7.2.9 Town of Nags Head Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH1	Continue to enforce the minimum requirements of the National Flood Insurance Program and update town policies and procedures applicable to future map revisions and changes in FEMA requirements	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning	General Fund	New Action
NGH2	Maintain the town's freeboard requirement and consider additional measures for flood damage reduction recognized by FEMA and the CRS program to reduce flood losses	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning	General Fund	New Action
NGH3	Support the continued education and training of the Town's Building Inspectors and planning staff in inspections and mitigation activities. This shall include maintaining staff as certified floodplain managers.	All Hazards	High	Planning	General Fund, Grant Funds	2011: Inspectors attend periodic training workshops and have increased training as a result of BCEGS.
NGH4	Develop a program to identify businesses and material storage areas where significant amounts of toxic or hazardous products are stored which would be subject to flooding.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Public Safety - Fire	General Fund	Through annual fire prevention inspections, Nags Head Fire staff evaluates and determines protection of toxic or hazardous products stored in areas prone to flooding.
NGH5	Continue to identify properties in repetitive loss areas and inform property owners in these areas of flood mitigation actions they can take to reduce flood losses.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning	General Fund	The Town informs repetitive loss property owners of yearly retrofitting workshops held in the fall or winter.
NGH6	Petition FEMA through the Town's state and regional NFIP representatives to consider adopting realistic regulations regarding the determination of destroyed structures. Specifically, this would apply to structures which are located on the public beach that are not eligible for flood insurance until they collapse.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Low	Town Council	General Fund	New Action
NGH7	Continue Town participation in the Community Rating System program and seek ways to improve the town's class six (6) rating.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning/Planning Board/Board of Commissioners	General Fund	The Town is actively training on the 2013 CRS manual in preparation for its 2015 five year cycle visit.
NGH8	Train town staff on the 2013 CRS Manual.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH9	Following a severe storm or hurricane, evaluate reconstruction and repairs efforts for compliance with the adopted zoning ordinance, CAMA regulations, and all other applicable local, state and federal regulations	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning	General Fund	The Town enforces all regulations and other applicable local, state and federal regulations and enforcement of all CAMA regulations in accordance with CAMA rules and the Local Permitting Officer Program.
NGH10	Continue to maintain, enforce and evaluate the effectiveness of the comprehensive stormwater management ordinance adopted in 2014.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning, Public Works	General Fund	New Action
NGH11	Evaluate methods to improve the effectiveness and property owner participation in the Town's Septic Health Program. This may include additional measures to monitor septic system operations with routine inspections.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning, Septic Health	General Fund, Grant Funds	New Action
NGH12	Consider seeking authority and adopting regulations which would allow qualified Town staff to inspect sewer treatment facilities and on-site septic systems after a storm. These regulations should also allow staff to request the corrective actions necessary to ensure proper operation of these systems.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning, Septic Health	General Fund	Town staff is trained to inspect systems, but no authority to enter private property has been requested. In 2007 the Town adopted a regulation that prohibits "pump and haul" operations for residential uses where the septic system cannot be repaired.
NGH13	The Town shall take a proactive approach to educating citizens on the negative implications of using a septic system that has suffered storm damage. The Town will develop educational materials informing homeowners on the proper care of a system impacted by floodwaters.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning, Septic Health	General Fund, Water Fund	Town is currently programming and evaluating the Town's "Septic Health Initiative"
NGH14	Continue the town's program to nourish its beaches as a means to mitigate damage to oceanfront properties and infrastructure.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Board of Commissioners/Town Manager/Public Works/Planning	Dare County Shoreline Fund, Town Municipal Service Districts	The Town carried out a successful beach nourishment project. This project will be completed by Spring of 2017. The Town received required permits in late 2010.
NGH15	Continue to pursue funding sources for the Town's beach nourishment program from Dare County and other levels of government	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Board of Commissioners/Town Manager	General Fund	In 2005, Dare County enacted an increase in the general sales tax devoted to beach nourishment. Although it was repealed in 2006 the Town currently receives interest payments from the fund. The Town uses the funds for Town wide sand fencing projects.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH16	Through joint efforts with other local governments and organizations such as the North Carolina Beach and Inlet Waterways Association, actively lobby the State for a state policy and strategy on beach nourishment and beach nourishment. This shall also include an annually funded state program to support local nourishment activities.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Board of Commissioners	General Fund	In 2005, Dare County enacted an increase in the general sales tax devoted to beach nourishment that was repealed in 2006. In 2008, the Town established a beach nourishment fund. In 2009, the Town applied for a Water Resources grant that was not funded. Because of the lack of financial assistance from federal and state government, Nags Head raised taxes in 2011 to help pay for the \$36 million nourishment project.
NGH17	Develop and implement a shoreline management plan to assist with stabilization of the beach between nourishment cycles. This may include a town program to provide planting and sand fencing based on a set of criteria for evaluating shoreline and dune conditions.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Public Works/Planning	General Fund, Dare County Shoreline Fund	New Action
NGH18	In coordination with Dare County and other Dare County municipalities, develop a long-term strategy for beach nourishment including financing, permitting, and ongoing project implementation.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Board of Commissioners/Town Manager	General Fund, Dare County Shoreline Fund	New Action
NGH19	Monitor and evaluate changing shoreline conditions on an annual basis as part of an overall shoreline management strategy.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Public Works/Consultant	General Fund, Dare County Shoreline Fund	New Action
NGH20	Seek methods to remove structures located on the public beach which degrade the recreational and natural quality of the environment, create public health and safety hazards to beachgoers, and impede the ability of life safety personnel to move along the shoreline.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Board of Commissioners/Town Manager/Town Attorney	General Fund	Since the Veterans Day Storm, the Town has facilitated the relocation or demolition of 17 homes.
NGH21	Actively seek grants to acquire property for the purpose of mitigating damage, improving water quality, and preserving open space.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning/Public Works	General Fund	New Action
NGH22	Maintain an emergency transportation route parallel to US 158. This may include Wrightsville Avenue, Memorial Avenue and even the Nags Head Woods Road as needed.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Public Works/Public Safety	General Fund, Grant Fund	Wrightsville, Memorial and even the Nags Head Woods Road could be used as needed for emergency access if something happens to US158.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH23	Through the budget and CIP process, request funds to comprehensively review and improve the Town's drainage system.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Board of Commissioners/Public Works	General Fund	The Town established a Stormwater Utility, funded by a \$2 per month charge on all water bills, in the spring of 2005. The first project funded was a major update to the Town's Stormwater Management Plan, and the creation of a Stormwater CIP. The list of stormwater management projects has been expanded greatly as a result of Tropical Storm Beryl and the wet season experienced from June through August of 2012. The Town is working to develop engineered solutions with NCDOT to prioritize projects as funds permit.
NGH24	Continue to evaluate revenue sources to implement stormwater improvements and address localized drainage issues. This may include the reevaluation of the Town's Stormwater Utility, as necessary.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Board of Commissioners/Town Manager/Public Works	General Fund/Stormwater Fund	New Action
NGH25	Continue to develop and implement a strategically prioritized list of stormwater projects as part of the Town's Capital Improvement Program.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Board of Commissioners/Town Manager/Public Works	General Fund/Stormwater Fund	The list of stormwater management projects has been expanded greatly as a result of Tropical Storm Beryl and the wet season experienced from June through August of 2012. The Town is working to develop engineered solutions with NCDOT to prioritize projects as funds permit.
NGH26	Collect necessary survey data and asset information to evaluate and program drainage and transportation projects as well as maintenance activities.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Public Works	General Fund/Stormwater Fund	New Action.
NGH27	Continue to identify and evaluate solutions to address areas of repetitive flooding.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Public Works	General Fund/Stormwater Fund	The Town Department of Public Works continually works to mitigate the impacts of flooding within identified areas of repetitive flooding within residential neighborhoods. Recent examples of drainage infrastructure improvement projects servicing neighborhoods include Nags Head Pond, Nags Head Acres, Vista Colony and Carolinian Circle Subdivisions as well as drainage pipe replacement projects along S. Memorial Ave., Albatross St. and Nags Head Realty all of which are located in the northern end of Town.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH28	Perform annual maintenance of the Town's drainage system including vegetation removal, sediment removal, culvert cleaning and the re-establishment of drainage grade lines to improve drainage flow.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Public Works	General Fund/Stormwater Fund	The performance of an annual drainage maintenance program which includes vegetation removal, sediment removal, culvert cleaning and the re-establishment of drainage grade lines to improve drainage flow. The Town continues to explore and investigate innovative solutions to unconventional drainage problems. This includes the implementation of a groundwater lowering system along the western portion of the Vista Colony Subdivision to lower surrounding surface and groundwater increasing available stormwater storage capacity in advance of storm events.
NGH29	Explore and investigate innovative solutions to unconventional drainage problems. An example includes the implementation of a groundwater lowering system along the western portion of the Vista Colony Subdivision to lower surrounding surface and groundwater increasing available stormwater storage capacity in advance of storm events	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Public Works	General Fund/Stormwater Fund	This includes the implementation of a groundwater lowering system along the western portion of the Vista Colony Subdivision to lower surrounding surface and groundwater increasing available stormwater storage capacity in advance of storm events.
NGH30	Incorporate drainage improvements into roadway, pathway, and related development projects in an effort to eliminate impediments, improve flow and enhance hydraulic capacity which can effectively result in an increased level of service and system efficiency. Examples include the continued development of the W. Side Multi-Use Path, Holy Trinity Catholic Church, Flicker St. and Moongate Subdivision located in the Village of Nags Head.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Public Works	General Fund/Stormwater Fund	Continue with the approach of incorporating drainage improvements into roadway, pathway, and related development projects in an effort to eliminate impediments, improve flow and enhance hydraulic capacity which can effectively result in an increased level of service and system efficiency. Examples include the continued development of the W. Side Multi-Use Path, Holy Trinity Catholic Church, Flicker St. and Moongate Subdivision located in the Village of Nags Head.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH31	The Town shall develop contingency plans for Town streets and waterlines that may be lost as a result of erosion. This can include development of alternative routes or access, or upfront declaration of the potential for future improvements.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Public Works	General Fund/Stormwater Fund	The Town has identified alternative means of access to several properties along the ocean front where property owners agreed to work cooperatively. The Town modified development regulations to assist with providing access to properties where a Town road has been damaged or lost. The Town took action to officially close Surfside Avenue in 2011 as a Town Road when it was lost due to erosion. In 2012, the Town worked with the Nature Conservancy, and Clean Water Management Trust Fund to relocate a portion of Nags Head Woods Road damaged by Hurricane Irene in coordination with a sound side stabilization and natural restoration project.
NGH32	Maintain public safety communications with Colony Ridge staff to assist with evacuation procedures prior to an event if necessary and the helipad has been preserved for use if needed during or after an event.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Planning/ Hurricane Recovery	General Fund	In 2012, Fire, Police, Emergency Management and EMS Staff met with representatives of The Outer Banks Hospital and Colony Ridge Nursing Home to determine methods to best serve the affected special needs population. These interactive meetings identified several deficiencies. Steps have been taken to mitigate hazards and implement new procedures.
NGH33	Conduct a study to determine future impacts of recurring flooding associated with sea level rise on town infrastructure including streets, waterlines, electric power utilities, and wastewater systems.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning/Public Works/Board of Commissioners	General Fund, Grant Funds	New Action
NGH34	As part of the ongoing evaluation of the Nags Head Urban Wild Fire Interface Plan, continue to evaluate the need for and maintain fire breaks in wild land urban interface areas including residential communities adjacent to Nags Head Woods and the Cape Hatteras National Seashore.	Wildfire	High	Public Safety – Fire/Nature Conservancy/NPS	General Fund, Grant Funds	An evaluation was completed in 2012 and no changes were made to current plan.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH35	To mitigate the impact of wild land urban interface fires, plan and participate in controlled burn activities as necessary to strategically reduce fuel loads in Nags Head Woods and other areas.	Wildfire	High	Public Safety – Fire/Nature Conservancy/NPS	General Fund, Grant Funds	In February and April of 2013, the Town, NC Forestry and The Nature Conservancy worked together to prescribe burn 50+ acres of private sound front marsh area in Nags Head Woods. This was the first intentional fire in this area and homeowners were pleased with the tremendous fuel reduction afforded by the prescribed burn.
NGH36	The Town shall continue the program to remove dead wood in critically fire prone areas.	Wildfire	Medium	Public Safety – Fire	General Fund	Homeowners may access the fire prevention staff to determine an optimal way to create fire safe landscaping.
NGH37	Continue to educate property owners to maintain fire safe landscaping and vegetation adjacent to structures.	Wildfire	Medium	Public Safety – Fire	General Fund	New Action
NGH38	The Town shall evaluate the Nags Head Woods Fire Plan on a regular basis and coordinate information with Nature Conservancy Staff. Strategies to seek grant funding for fuel reduction activities shall be pursued. Continue public education on prescribed burn and fuel reduction activities.	Wildfire	High	Public Safety – Fire, Nature Conservancy, National Park Service	General Fund, Grant Funds	Currently, homeowners may access the fire prevention staff to determine an optimal way to create fire safe landscaping. A series of fire prevention fuels reduction meetings were conducted to inform/educate the public of the forthcoming Nags Head Woods Marsh controlled burn in March 2012. A series of public fuel reduction meetings were conducted in the fall of 2012 to answer homeowner questions about Nags Head Wood fire prevention and planning for prescribed burns to be conducted in the spring of 2013.
NGH39	The Town shall continue cooperation with the US Forest Service and Dare County for mutual aid fire protection.	Wildfire	Medium	Public Safety – Fire	General Fund	Nags Head Fire Rescue provided mutual aid structural firefighting services to all those Dare County Fire Departments requesting assistance in 2011/2012, as well as utilizing incoming resources to assist in mitigating hazards exceeding the capabilities of Nags Head Fire Rescue. Nags Head continues to maintain excellent mutual aid working relationships with all Dare County fire departments.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH40	As part of the annual CIP process, the Town shall continue to inventory and recommend improvements to fire hydrants, water distribution infrastructure, and other town infrastructure in support of fire planning efforts.	Wildfire	Medium	Public Safety – Fire, Public Works	General Fund, Water Fund	In 2008 the inventory was reviewed and updated. An additional 1,640 feet of 8-inch waterline under design for US 158 Bypass from Bonnett to Baltic streets was determined to be needed. Lack of funding has prevented the line from being built. A detailed Hydraulic Study was completed in 2010. Several projects to improve domestic flow, and fire protection, were recommended. These have been prioritized and will be constructed when funds are available. The 2013-2014 budgets allowed for funding of five additional fire hydrants spaced equally along Wellfield Road.
NGH41	The Town shall update its Water Supply Shortage Plan and evaluate recommendations to implement water restrictions during periods of drought.	Drought, Wildfire	Medium	Public Works	General Fund, Water Fund	New Action
NGH42	The Town shall continue to cooperate with Dare County on the development of additional water supply well facilities.	Drought, Wildfire	Medium	Public Works	General Fund, Water Fund	The Town continues to cooperate with Dare County as requested. Additional wells and 2 million gallons of treatment capacity added to Dare County Water Plant in Kill Devil Hills in 2005-2006.
NGH43	The Town shall improve fire protection in Nags Head Woods with the installation of 'dry hydrants' and maintenance and improvements to Nags Head Woods Road.	Wildfire	Medium	Public Safety – Fire, Public Works	General Fund, Water Fund	The Nags Head Woods road is maintained by Nags Head Public Works and roadway material is added as needed to maintain an acceptable driving surface.
NGH44	On issues of mutual concern, the Town shall coordinate recovery and post storm response activities with Dare County, the State of North Carolina, and the Federal Government.	All Hazards	Medium	Board of Commissioners, Town Manager, Outside Agencies	General Fund	The Town participates in preparedness meetings such as the VA/NC hurricane meeting and hurricane recovery exercises with adjacent jurisdictions (mutual aid).
NGH45	The town shall continue to maintain and improve its emergency operations and communications infrastructure including its EOC, backup EOC, mobile command center and critical facilities by adding backup generators or other equipment.	All Hazards	Medium	Public Safety, Town Manager	General Fund	New Action
NGH46	Following a severe storm the Town shall establish an information center staffed with Town, State and Federal employees who are available to assist property owners in the reentry and recovery process.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Public Safety, Public Information Officer	General Fund, Grant Fund	New Action.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH47	Following a declared emergency storm event, only those areas where damage assessment is complete and that have been declared relatively secure shall be open to the public.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Public Safety, Public Information Officer, Planning	General Fund	Material, staffing and procedures have been identified to carry out this task.
NGH48	The Town shall identify and implement methods to streamline the damage assessment process to provide information to Dare County, the state, and any other agencies assisting the town with recovery efforts. This shall also include methods to expedite the availability of damage and condemnation information to Town staff and the public.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Planning	General Fund	Town's equipment used to collect digital information in the field proved unreliable in the field and will be discontinued. The Planning and Development Department's installation of Blue Prince Software and trial usage of cell phone devices in the field will be used to determine a better digital collection approach. The Town will use a trained team to collect data and photos from the field.
NGH49	The Town shall continue to pre-position debris removal agreements on a yearly basis.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Town Manager	General Fund	The Town has secured agreements with two debris haulers, a memorandum of Agreement with Dare County (for debris removal using their contractor) and one debris monitoring contractor.
NGH50	The Town shall obtain pre-storm authorization from the NC Department of Transportation (DOT) to clear DOT maintained roads after storm events.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Town Manager	General Fund	This was accomplished in 2007 and again in 2012.
NGH51	The Town shall maintain its mutual aid agreements and reevaluate as necessary to maintain post-storm assistance with building inspections, damage assessment, utilities repair and public facilities maintenance, and additional public safety personnel. The Town shall continue participate in the Statewide Mutual Aid Compact.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Town Manager	General Fund	The Town has mutual aid agreements with other Dare County agencies. The Town also participates in the Statewide Mutual Aid Compact. The Town will no longer enlist community volunteers for the damage assessment process after a storm, but has pre-identified Town personnel to work with the Planning and Development Department on damage assessment so that the process is timelier and utilizes only personnel authorized to use Town equipment and those covered under Town liability insurance.
NGH52	The Town shall maintain a well trained staff level damage assessment team.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Planning	General Fund	New Action.
NGH53	The Town shall follow the Incident Command Structure and maintain a designated Emergency Management Coordinator and Deputy Emergency Management Coordinator.	All Hazards	High	Public Safety, Town Manager	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH54	Annually update emergency plans concerning critical facilities and include these in the Town's Emergency Operations Plan.	All Hazards	High	Public Safety, Town Manager	General Fund	New Action
NGH55	The Town shall continue to improve methods to provide public information after a storm. This shall include an automated voice messaging system with storm damage and re-entry information, a Mayor's radio broadcast, email broadcasts, improved real-time website information with relevant local contact information, available information at traffic stops, and designation of a post-storm public information officer.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning, Public Information Officer, Public Safety	General Fund	The Town is capable of providing these services through the Town's PIO and Dare County Joint Information Center.
NGH56	The Town shall communicate post-storm recovery and operations policies and procedures to residents and property owners prior to hurricane season. The Town shall consider providing this information in the Town Newsletter and email broadcast, on the Local Government Access Channel, through the Town Website, and through social media.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning, Public Information Officer, Public Safety	General Fund	Information is provided to residents and property owners and through new media and traditional media outlets.
NGH57	In its Emergency Operations Plan, the Town shall detail the process for distributing information internally and externally to the public before and after storms.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	Medium	Planning, Public Information Officer, Public Safety	General Fund	In 2006, the Town adopted an "Emergency Operations Plan" which details duties of Town staff before, during and after an emergency. That Plan was updated in August 2012 based on staff review of "lessons learned from hurricane Irene.
NGH58	The Town shall continue its fire education program. This includes newsletter and newspaper articles on fire protection as well as grants from the State Division of Forestry for fire education.	Wildfire	Medium	Public Safety - Fire	General Fund	In 2011/2012, fire safety related topics and newsletter articles were distributed, and the website updated with current fire prevention information. The "Change your Clock, Change your Battery" program resulted in the installation of numerous new smoke detectors placed in homes in Town. Fire Prevention e-mails, tweets and other valuable life safety information were forwarded to the public from the United States Fire Administration, helping to advance injury prevention in Nags Head. Fire information is supplied face to face to the community via the annual October Youth Fire Prevention Night and National Fire Prevention week activities.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH59	The Town shall request authorization to extend any ocean outfall, which will be affected by any renourishment project.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Public Works, Planning	General Fund, Grant Fund	The Town's CAMA permit for Beach Nourishment was modified to permit the extension of the outfalls to be affected by the widened beach. Three outfalls were extended as part of the project. No recent action due to lack of support.
NGH60	The Town will sponsor studies designed to determine the financial contribution the beach makes to the Outer Banks and the region.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Town Managers Office, Planning, Board of Commissioners	General Fund	
NGH61	Following a severe storm the Town shall consider purchasing land in damage prone areas.	Thunderstorm	High	Town Managers Office, Planning	General Fund, Grant Fund	In 2013 the Town purchased an oceanfront piece of property in South nags Head to be used for public beach access.
NGH62	The Town shall consider the applicability of requiring "V Zone" structural certification for structures in the 100-year (A) flood zone.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Planning	General Fund	No additional action needed as the new flood maps addressed the Town's concerns. This will be removed next update.
NGH63	The Town will actively work with FEMA and the State during the Statewide floodplain mapping project.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Planning	General Fund, Grant Fund	Completed
NGH64	The Town shall develop regulations to require fuel tanks, including LP tanks to be adequately anchored to prevent flotation or submersion in the event of flooding.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Public Safety, Planning	General Fund, Grant Fund	The Town developed a regulation stating all new LP tank installations must meet the current building code. COMPLETE.
NGH65	During a hurricane the Town maintains a staff of essential personnel and elected officials within Town Hall, using the Town Hall building as the Emergency Operations Center of "EOC." When available the Town shall consider acquiring or building a command facility. Essential components may include a mobile radio transmission tower, satellite internet capability and enhanced telephone service.	Hurricanes	High	Mayor, Manager, Planning/Public Works, Administrative Services	General Fund	The Town has established the former Outer Banks Medical Center facility as a backup EOC. In 2006 the Town acquired a mobile command center. In 2012 the Town acquired and installed a HAM radio Tower for use during emergency events. NO RECENT ACTION.
NGH66	Following a hurricane the Town shall establish an information center staffed with Town, State and Federal employees who are available to assist property owners in the reentry and recovery process.	Hurricanes	High	Mayor, Manager, Planning, Administrative Services	General Fund	The Town has established areas and identified personnel to carry out the above as part of the ICS Plan. In addition, the Town's public information officer participates in a county wide Joint Information Section, an integral part of the ICS.
NGH67	The Town leases space to mobile phone service providers on the Town's two water tanks. Cellular phone service provides an essential form of communication after a storm. The Town shall consider requiring cellular phone service providers to structurally design their tower mounted equipment to withstand greater wind loads than is required by the State building code.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Administration, Town Managers Office	General Fund	The Town enforces the State Building Code. A new fire alarm control panel was also installed and fire alarm service completed in the Town's emergency command center.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH68	The Town shall designate a Staff level Director and Deputy Director of Emergency Management.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Administration, Public Safety	General Fund	In August of 2013 the Town hired a Deputy Fire Chief who will fulfill the role of Deputy Director of Emergency Management.
NGH69	The Town will develop regulations requiring a greater street standard (dimensional and construction) where it can be reasonably demonstrated that nearby streets may be destroyed by a storm or other natural event and that the proposed street may be required to accept greater amounts of traffic.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Low	Planning, Public Works	General Fund, Grant Funds	Other coastal communities are being contacted to determine if this is a possible option, and if adopted, would it be enforceable.
NGH70	Prior to a flooding event, the Town's Street Department shall assemble the necessary traffic barricades and equipment to address flooding conditions noted in this plan.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Public Works	General Fund	The Town shall continue to monitor storm events of significance allowing reasonable time to actively assemble storm mitigation strategies. The Town will also continue to work on these strategies making them as efficient as possible.
NGH71	The Town shall identify alternative means of ingress and egress to the Outer Banks Hospital site and Colony Ridge Nursing Home facility.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Planning, Public Safety	General Fund	This has been investigated and no feasible alternative exists. However, public safety will be in communications with Colony Ridge staff to assist with evacuation procedures prior to an event if necessary and the helipad has been preserved for use if needed during or after an event. COMPLETE.
NGH72	The Town shall extend the "Red Drum" outfall (most northern outfall) to efficiently drain the NCDOT conveyance system. NDOT is currently in design.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Planning, Public Works	General Fund, Grant Funds	NCDOT is currently in the design process for the extension of this outfall, which is critical to improving drainage conveyance in the northern part of Town.
NGH73	The Town Department of Public Works continually works to mitigate the impacts of flooding within identified areas of repetitive flooding within residential neighborhoods.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Public Works	General Funds	Drainage infrastructure improvement projects servicing neighborhoods include Hags Head Pond, Hags Head Acres, Vista Colony and Carolina Circle Subdivisions as well as drainage pipe replacement projects along S. Memorial Ave., Albatross St. and Nags Head Realty all of which are located in the Northern end of Town.
NGH74	The Town has restructured the portion of the stormwater management ordinance as it relates to the use of fill. This approach is to treat runoff as the source and reduce the burden of Town drainage infrastructure from managing runoff originating from single-family development.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Public Works, Planning	General Fund, Grant Funds	COMPLETE.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH75	The Town shall continue aggressive monitoring of entry into condemned homes to prevent safety hazards.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Planning	General Fund	The Town shall continue to monitor homes in the community which a pose a hazard risk.
NGH76	Town shall create a policy that damaged Town infrastructure be built back to established Town standards only if it can be demonstrated that there is a reasonable and they have a reasonable expectation to survive future hazard events.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	All Town Departments	General Fund	Waterlines have been replaced only if they meet these criteria.
NGH77	Storm damage reconstruction shall reflect pre-storm conditions to the extent possible. Redevelopment shall comply with the Land Use Classification Map and the zoning ordinance.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Planning	General Fund	Complete, will be removed next update.
NGH78	As the amount of available vacant oceanfront land diminishes, the Town can expect redevelopment of existing sites. It is the Town's position that the existing oceanfront development regulations adequately address concerns such as building height and density, and that currently permitted uses adequately represent the desired uses for the oceanfront.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Planning	General Fund	Complete; will be removed next update.
NGH79	The Town shall require Hurricane Evacuation plans from sensitive, vulnerable or critical facilities which are likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood or hurricane, including, but not limited to: hospitals, nursing homes, police stations and fire stations	Hurricanes	High	Planning, Public Safety	General Fund	Critical facilities are being updated annually and added to Emergency Operations Plan.
NGH80	The design of the proposed elementary school shall address flooding and hurricane resistant construction.	Hurricanes; Flooding	High	Planning, Public Safety	General Fund	Project Complete, will be removed next update.
NGH81	It is strongly urged that evacuation drills and tornado drills be conducted at the proposed elementary school.	Hurricanes, Flood, Tsunami	High	Public Safety	General Fund	Police and Fire Departments are participating with and supporting School preparation activities.
NGH82	The town will identify important areas to be acquired as open space and shall request funds for acquisition of these areas through the budget, CIP, and grant process.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Planning	General Fund, Grant Funds	The Town purchased the "Whalebone Park" site in the fall of 2008. It has been developed as a park that serves children between the ages of 2 and 12 and incorporates features which meet ADA guidelines. The park also allows for inclusive play for all children regardless of physical or sensory abilities. The Town is working with the Coastal Area Land Trust to look at additional properties for easement or conservation along the Roanoke Sound as part of a Boardwalk development effort.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH83	The Town will consider an incentive program rewarding those developers which set aside additional open space in perpetuity.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	Medium	Planning	General Fund	No action taken as of this date but is being considered as part of stormwater and fill updates currently under development by the Planning Board.
NGH84	The Town shall continue to acquire land for open space and recreational purposes.	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion, Tsunami	High	Planning	General Fund	The Town purchased the "Whalebone Park" site in the fall of 2008. It has been developed as a park that serves children between the ages of 2 and 12 and incorporates features which meet ADA guidelines. The park also allows for inclusive play for all children regardless of physical or sensory abilities. The Town is also working with the Coastal Area Land Trust to look at additional properties for easement or conservation along the Sound as part of a Boardwalk development effort. The Town also completed and adopted a Parks and Recreation Plan in 2011. In 2011-12, the Town Board of Commissioners initiated a process of identifying and researching the feasibility of purchasing additional properties.
NGH85	The Town shall continue the program to remove dead wood in critically fire prone areas.	Fire	High	Public Safety	General Fund	Homeowners may access the fire prevention staff to determine an optimal way to create fire safe landscaping.
NGH86	The Town shall continue to review the water system throughout the Town for fire protection capabilities and prioritize capital improvements as necessary.	Fire	High	Public Safety, Town Managers Office, Public Works	General Fund	In 2009, Nags Head Fire staff worked with Nags Head Water staff to implement waterline improvements to benefit Northridge Subdivision, Old Nags Head Cove, West Side Court and Gray Eagle Street. No recent activity.
NGH87	With the installation of the new water tank, the Town shall install a new 12 inch water line from the Public Works facility to Barnes Street. This will increase fire flow to north end neighborhoods.	Fire	High	Public Works, Public Safety, Planning	General Fund, Grant Funds	Complete, will be removed next update.
NGH88	The Town shall research available data on underground storage tanks and leaking underground storage tanks.	Fire	High	Planning, Public Safety	General Fund	Underground fuel tanks, when required by fire code, have been removed or brought into compliance with Fire Code and DEHNR standards.
NGH89	The Town shall coordinate with Kill Devil Hills regarding fencing around their portion of the Fresh Pond.	Water	High	Public Works, Town Manager's Office	General Fund	The Fresh pond water treatment plant has been permanently decommissioned. Complete.
NGH90	The Town shall continue to evaluate the implementation of water restrictions during periods of drought.	Water	High	Public Works, Town Manager's Office	General Fund	The Town has developed a Water Shortage Supply Plan.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
NGH91	The Town of Nags Head shall continue to monitor develop and the installation of onsite septic systems with the Fresh Pond Area of Environmental Concern.	Water	High	Planning	General Fund	Process monitored through the development and permitting process.

Table 7.2.10 Town of Manteo Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
MAN1	Making use of Dare County's flood plain, parcel data, and aerial photographs in digital format.	Hurricanes, Nor'easters, Flood	Medium	Town Planner	General Fund	Town of Manteo receives data from Dare County monthly that is used in overlaying capabilities it the Town's use of GIS data.
MAN2	Maintains documents about flood insurance, flood protection, flood plain management, and the natural and beneficial functions of flood plains	Hurricanes, Nor'easters, Flood	Medium	Town Planner	General Fund, Grant Funds	All documents are located and accessible to the public in the planning office of the Town of Manteo and updated as new information is changed at the State and Federal levels.
MAN3	Assist local real estate agents with information handouts that will advise potential buyers to investigate the flood hazard for the property they are considering purchasing.	Hurricanes, Nor'easters, Flood	High	Town Planner	General Fund	The planning department is accessible during the normal business hours to provide information to local realtors advising the buying public of property that may be located within a Special Flood Hazard Area.
MAN4	Send a flood protection flyer to all property owners in Manteo through a community newsletter, utility bill or other document. The flyer would include a general identification of the local flood hazard, flood safety, flood insurance, property protection, flood plain development permit requirements, and drainage system maintenance.	Hurricanes, Nor'easters, Flood	High	Public Works	General Fund	Completed. Upon new information that is available to the Town, new information is shared through the community's newsletter and can be sent with utility bill.
MAN5	Continue to stay current with all Community Rating System reporting requirements to ensure continued program participation.	Hurricanes, Nor'easters, Flood	High	Town Planner, Assistant Town Manager	General Fund	The Town along with Dare County are now recognized as a Storm Ready Community.
MAN6	Continue our policy controlling the development of critical public facilities in the 100-year flood plain in cases where viable alternatives exist.	Hurricanes, Nor'easters, Flood, Severe Thunderstorms, Erosion	Low	Town Planner	General Fund	All permit approvals for new facilities have to meet the Town's Flood Hazard Prevention Ordinance, and upon verification that facility may be located in Special Flood Hazard Area, where viable an alternative location is sought.
MAN7	Continue to actively pursue state and federal grant funds to assist in the hazard mitigation recommendations included in the plan	All Hazards	Low	Town Planner, Assistant Town Manger	General Fund	Town Staff is actively seeking grant applications for mitigation activities.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
MAN8	Continue to encourage projects undertaken by the Manteo Police Department, Fire-Rescue-EMS, Public Works, and Planning Departments that will lessen the vulnerability of the Town and its residents to natural hazards.	All Hazards	Medium	Police, Fire, EMS, Public Works, Planning	General Fund, Grant Funds	Town reviews on an annual basis particularly during budget preparation, priority review of projects that lessen vulnerability of the Town and its residents to natural hazards.
MAN9	Continue to enhance the Water and Sewer Department's back-up generator system as well as continued and expanded use of SCADA, which allows for remote monitoring of all sewer lift stations	All Hazards	Public Works	General Fund, Grant Funds	Medium	New Action
MAN10	Mayor and other council members to participate in Dare County's Emergency Management training sessions.	All Hazards	Medium	Town Council	General Fund	County keeps Mayor and Council abreast of training opportunities available and invites representative to Council meetings offering training.
MAN11	Continue to maintain ditching along streets to facilitate drainage Public	Hurricanes, Nor'easters, Flood, Severe Thunderstorms, Erosion	Low	Public Works	General Fund	Reviewed during each budget cycle and on rotation as part of Town's Powell Bill program.
MAN12	Continue to update and use the existing Manteo Police Emergency Plan	All Hazards	Low	Police	General Fund	Presently utilizing Manteo Police Emergency Plan. Will be updated to reflect changes from Regional Plan.
MAN13	The Town Planner will actively research and identify mitigation initiatives for grant applications and establish target dates for completion.	All Hazards	Low	Town Planner	Grant Funds	Town Planner actively seeks grant funding opportunities that give priority to mitigation initiatives.
MAN14	Building inspector /Planner to enforce Town codified ordinances which include NFIP approved Flood Ordinance	Hurricanes, Nor'easters, Flood, Severe Thunderstorms, Erosion	Low	Town Planner, Building Inspector	General Funds	Town enforces adopted NFIP approved flood damage prevention ordinance.
MAN15	The Town Planner to file for grant applications.	All Hazards	High	Town Planner	Grant Funds	Town Planner actively seeks grant funding opportunities that give priority to mitigation initiatives.
MAN16	Building inspector /Planner to enforce Town codified ordinances which include NFIP approved Flood Ordinance.	Hurricanes, Floods, Nor'easters	High	Town Planner, Building Inspector	General Funds	This process is carried out through enforcement of the Town's Flood Damage Prevention Ordinance. These efforts will continue.
MAN17	Continue to acquire and maintain back-up generators for lift stations and to supply electricity to critical Town facilities during periods of power outage.	Hurricanes, Thunderstorms, Tornadoes, Flooding, Winter Storms, Nor'easters	Low	Public Works	General Fund	New Action
MAN18	Public Works Director to have regularly scheduled maintenance of storm water system.	Hurricanes, Thunderstorms, Flooding, Nor'easters	Low	Public Works	General Fund	New Action

Table 7.2.11 Town of Southern Shores Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
SOS1	Enforcement of the Zoning Ordinance as a hazard mitigation tool	All Hazards	High	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to enforce the adopted Zoning Ordinance. Zoning Permits are issued for new development, changes in use, and new uses in order to ensure compliance.
SOS2	Identify "at risk" X Zone properties for added emphasis on flood risks and notify the responsible agencies about discrepancies between floodplain maps (FIRM versus SLOSH).	Hurricane, Nor'easter, Severe Thunderstorm, Flood	High	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to identify at risk properties following storm events by utilizing GIS data and in the field observations.
SOS3	Continue enforcement of the Flood Damage Prevention Ordinance	Hurricane, Nor'easter, Severe Thunderstorm, Flood, Erosion	High	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to enforce the Flood Damage Prevention Ordinance. Building permits are not issued unless plans demonstrate compliance with the established requirements
SOS4	Continue the enforcement of the NC State Fire Prevention Code, referenced by the Town Fire Code	Wildfire	High	Dare County Fire Marshall	General Fund	The Dare County Fire Marshall continues to conduct inspections (contracted service) of non-residential properties to ensure compliance.
SOS5	Continue enforcing the Lot Disturbance provisions of the Zoning Ordinance	Hurricane, Nor'easter, Severe Thunderstorm, Flood, Erosion	High	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to enforce the Lot Disturbance provisions of the Zoning Ordinance. No grading, filling, or other alteration of the topography or elevation of any unimproved lot, or demolition and clearing of improved property, nor any manmade change to any improved real estate resulting in the discharge of stormwater onto adjacent property and requiring a building permit, is undertaken without prior issuance of a lot disturbance permit.
SOS6	Continue the periodic controlled burns of marshland to reduce wildfire fuels	Wildfire	High	Southern Shores Volunteer Fire Department	General Fund	Has not been satisfied since 2009 as a result of piers/docks being built over the marsh areas so this is being removed.
SOS7	Continue the testing of fire hydrants once a year and recording data	Wildfire	Medium	Planning/Code Enforcement Department	General Fund	The Southern Shores Volunteer Fire Department continues to test fire hydrants once a year and records data. The last test was conducted in November, 2014.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
SOS8	Continue implementation of the Waterways and Beaches Ordinance	Hurricane, Nor'easter, Severe Thunderstorm, Flood, Erosion	High	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to implement the Waterways and Beaches Ordinance. The Town Community Resource Officer and contracted lifeguard service conduct patrols of the beach to ensure compliance. All development along Town waterways is approved following demonstration of compliance. The Town continues to send Notices of Violation for canal obstructions when warranted.
SOS9	Seek the maximum points available from the Community Rating System to keep flood insurance costs to the citizens as low as possible	Flood	Medium	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to seek the maximum points available from the Community Rating System. The Town's last cycle visit was in 2010 which gave the Town a rating of Class 7 which is recertified annually until the next cycle visit in 2015. Communities with a Class 7 rating receive a 15% discount on insurance policies issued for properties in special flood hazard areas (SFHA's).
SOS10	Conduct the Canal Inspection and Debris Removal program twice a year	Hurricane, Nor'easter, Severe Thunderstorm, Flood, Erosion	High	Planning/Code Enforcement Department	General Fund	The Southern Shores Civic Association Boat Club conducts inspections of the canals every three to four weeks. The amount of debris has been minimal following completion of the Town's canal dredging project
SOS11	Continue enforcement of the state building code, including wind load requirements	Hurricane, Nor'easter, Severe Thunderstorm, Winter Storms, Tornadoes	High	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to enforce the state building code, including wind load requirements. All building plans must demonstrate compliance prior to issuance of a building permit. The Building Inspector continues to conduct inspections during construction and no Certificate of Occupancy is issued unless all requirements are satisfied.
SOS12	Continue enforcement of the Beach and Dune Management Ordinance	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning/Code Enforcement Department	General Fund	The Town Community Resource Officer and contracted lifeguard service conduct patrols of the beach to ensure compliance

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
SOS13	Coordinate wildfire prevention efforts with tree preservation policies	Wildfire	Low	Planning/Code Enforcement Department, Southern Shores Volunteer Fire Department	General Fund	The Planning and Code Enforcement Department encourages all property owners to contact the Southern Shores Volunteer Fire Department prior to any open burning. The Department also coordinates with property owners and the fire department to make sure burns are not conducted on preserved trees.
SOS14	Continue enforcing Coastal Area Management Act (CAMA) regulations	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to enforce the Coastal Area Management Act (CAMA) regulations. The Town's Local Permit Officers continue to review and issue Minor Permits in accordance with the Coastal Area Management Act (CAMA).
SOS15	Continue enforcing the state Erosion and Sedimentation Control regulations	Hurricanes, Nor'easters, Flood, Thunderstorm, Erosion	High	Planning/Code Enforcement Department	General Fund	When applicable, all new development must obtain a State-issued permit prior to issuance of a building permit.
SOS16	Continue to have a standing Reconstruction Task Force	All Hazards	High	Reconstruction Task Force	General Fund	A new Reconstruction Task Force was appointed at the November 4, 2014 Town Council meeting
SOS17	Communicate with citizens about plans and the problems of providing services after a storm event	Hurricane, Nor'easter, Severe Thunderstorm, Flood	Medium	Reconstruction Task Force	General Fund	The Town utilizes social media and a bi-weekly newsletter to disseminate information regarding storm events and their affects
SOS18	Develop a better flood warning system	Hurricane, Nor'easter, Severe Thunderstorm, Flood	Low	Planning/Code Enforcement Department	General Fund	New Action
SOS19	Continue to monitor plans for the Mid-Currituck Bridge to expedite evacuation	All Hazards	High	Town Council	General Fund	The Town Council continues to monitor the NC Turnpike Authority plans for the Mid-Currituck Bridge to expedite evacuation. However, due to a lack of funding, the future construction of the bridge is uncertain
SOS20	Encourage food stores and pharmacies within the town to have alternative power supplies during and after storm events	All Hazards	Low	Planning/Code Enforcement Department	General Fund	The Planning and Code Enforcement Department continues to encourage food stores and pharmacies within the Town to have alternative power supplies during and after storm events. Provide guidance and potential funding source information as requested.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
SOS21	Continue to provide an Emergency Operations Center	All Hazards	High	Administration	General Fund	To ensure the protection of the citizens, the Town will continue to operate its Emergency Operations Center during disasters. Coordinates with Dare County Emergency Operations Center for support.
SOS22	Keep emergency plans current and provide staff with continuing education opportunities	All Hazards	Low	Administration	General Fund	Town Administration updates its Emergency Management Plan annually and provides Town Staff with continuing education opportunities
SOS23	Educate citizens on expected impacts of hazards on daily lives	All Hazards	High	Planning/Code Enforcement Department	General Fund	A bi-weekly newsletter is distributed to citizens with information regarding the impacts of hazards on daily lives
SOS24	Continue current public information outreach efforts regarding flooding	Hurricane, Nor'easter, Severe Thunderstorm, Flood	High	Planning/Code Enforcement Department	General Fund	The Town mails an informational brochure to all property owners within a Special Flood Hazard Area annually to provide important floodplain information. The most recent mailing occurred in June 2014.
SOS25	Continue e-mail and website services	All Hazards	Medium	Administration	General Fund	The Town continues to use its website and email services to publish and share important with its citizens.
SOS 26	Provide property owners and developers with information regarding the construction of FEMA "Safe Rooms" from the effects of tornadoes and severe storms.	Tornadoes, Severe Thunderstorms	Medium	Planning/Code Enforcement Department	General Fund	Incomplete; An increasing number of property
SOS 27	Develop guidelines for reconstruction efforts.	All Hazards	High	Planning/Code Enforcement	General Fund	Complete.

Table 7.2.12 Gates County & Gatesville Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency/Department	Potential Funding Source	Implementation Status
*GAT1	Open waterways by clearing debris in ditches throughout county to minimize localized flooding.	Hurricanes, Nor'easters, Floods, Severe Thunderstorms	High	NCDOT	NCDOT	Working with NCDOT to get debris removed from ditches; Millpond Bridge Project- NCDOT completed this project correcting a flooding issue at the Dam/spillway and traffic concerns by separating pedestrian and automobile traffic.
*GAT2	Expansion of US Highway 13/158 for greater evacuation capacity.	All Hazards	Medium	Gates County Emergency Management, NCDOT	NCDOT	Continue to discuss widening project with NCDOT. Working with NCDOT on creating a delivery schedule for the project.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency/Department	Potential Funding Source	Implementation Status
*GAT3	Increase public awareness of local hazard mitigation plan and emergency response plan.	All Hazards	High	Gates County Emergency Management	General Fund	County Emergency Management Officials visit and work closely on an annual basis with local schools to prepare for natural disasters, especially tornadoes and hurricanes. Mass Notification Implementation- Gates County investigated and purchased Code RED as mass notification for emergencies.
*GAT4	Continue to enforce existing building code and fire code, and investigate appropriate ways to advance these codes for greater future effectiveness with regard to natural hazards.	All Hazards	Medium	Gates County Planning and Zoning	General Fund	Enforcement is accomplished through the issuance of building permits and inspections through the County's permitting office.
*GAT5	Annually review the Flood Damage prevention ordinance and ensure regulations are in place to mitigate potential losses from events.	Hurricanes, Nor'easters, Floods, Severe Thunderstorms, Erosion	High	Gates County Planning and Zoning	General Fund	Review of Flood Damage Prevention Ordinance and other codes conducted annually.
*GAT6	Annually review HMP strategies and actions as they effect the Land Use Plan and Gates County Zoning Ordinance	All Hazards	Medium	Gates County Planning and Zoning	General Fund	Continue to conduct annual review of HMP strategies as well as making the necessary changes to Land Use and Zoning codes as recommended in updated plans.
*GAT7	Ensure floodplain mapping and management are considered in planning documents such as Land Use, Zoning Ordinance	All Hazards	Medium	Gates County Planning and Zoning	General Fund	Reference to flood maps and floodplain regulations are made in Zoning and Land Use codes are currently being enforced.
*GAT8	Increase emergency management training opportunities for town personnel.	All Hazards	Medium	Gates County Emergency Management, Gatesville Administration	General Fund, Grant Funds	Town staff attends regular training activities sponsored through FEMA, NCEM and County Emergency Management. Gates County continues to add additional EMS and Local Law Enforcement and as a result frees other staff to attend training.
*GAT9	Increase community awareness of wildlife-related issues and wildland fire safety by utilizing the Fire wise program and its resources (www.firewise.org).	Wildfire	High	NCDNR	Not required.	Continue to work closely with the Gates County Fireman's Association to educate residents on wildfire issues and safety. Fire Wise as a program has not been adopted due to the lack of defined "communities". Actions have been taken to adopt a portion of NFPA 1144 which addresses access and addressing to ensure firefighting operations can go on without delay.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency/Department	Potential Funding Source	Implementation Status
*GAT10	Further educate the public through ongoing public meetings.	All Hazards	High	Gates County Emergency Management	Not required.	The County is continually seeking alternative forms of communication with the public, however turnout for hazard mitigation remains low.
*GAT11	Increase EMS and law enforcement personnel resources.	All Hazards	High	Gates County Manager	General Fund	Incomplete. Reviewed annually at budget retreat with Board of Commissioners.
*GAT12	Keep power/utility right-of-way clear by routinely pruning trees and clearing tree limbs.	Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes, Winter Storms	Medium	NC Power and Roanoke Electric	Utility companies provide this service countywide.	Power/Utility right of way clearance is done on a routine basis with little input from this committee. The utility companies however ensure that vital infrastructure lists are maintained and the utilities serving them remain in proper order.
*GAT13	Investigate the potential advantages and disadvantages, if any, of joining the NFIP's Community Rating System (CRS).	Flood	Medium	Gates County Emergency Management	Not required.	There is a halt on the project due to time constraints; however, the Planning Department has begun collecting data to be presented to key decision makers of the County.

*Gates County will be responsible for all mitigation actions shown herein, for the Town of Gatesville, See Appendix B.

Table 7.2.13 Hertford County (Cofield, Como, Harrellsville and Murfreesboro) Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
**HER1	Maintain a continuously updated list of all approved shelters.	All Hazards	High	Hertford County Emergency Management	General Fund	Annual updates to shelter list and have MOU for sheltering with Red Cross.
**HER2	Continuously maintain, on the County's website, instructional information on ensuring that onsite sheltering is as safe an option as possible.	All Hazards	High	Hertford County Emergency Management	General Fund	Website currently being maintained and updated by County.
**HER3	Inspect local shelters to determine compliance with American Red Cross (ARC) Shelter Standards.	All Hazards	Medium	Hertford County Emergency Management, American Red Cross	General Fund	Annual updates to shelter list and have MOU for sheltering with Red Cross.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
**HER4	Maintain continuous contact/working relationship with electric service providers in the County to address the following (1) disaster preparedness techniques (e.g. tree trimming, vegetation planting requirements, pole replacement), (2) identify critical electrical facilities needing retrofit or upgrade and map with elevation reference marks and (3) communication with County officials during and immediately after a natural hazard event that results in loss of electrical power. Improve capability of secondary power source at all County and Municipal Critical Facilities	Hurricanes, Nor'easters, Severe Thunderstorms, Winter Storms	High	Hertford County Emergency Management, Municipal Administration, Electrical Utility Providers	General Fund, Grant Funds, Utility Providers	Adding generators to County Facilities in capital improvement projects for secondary power. Electric Cooperative is on Local Emergency Planning Committee.
**HER5		All Hazards	Medium	Hertford County Emergency Management, Municipal Administration, Hertford County Public Works, Municipal Public Works	General Fund, Grant Funds	As funds come available, generators are being added to County Facilities.
**HER6	Retrofit all County and Municipal facilities for lightning protection.	Severe Thunderstorms	Medium	Hertford County Emergency Management, Municipal Administration, Hertford County Public Works, Municipal Public Works	General Fund, Grant Funds	As funds come available, lightning protection products are being planned for and installed on County and Municipal Facilities.
**HER7	Support through local ordinances conservation easements on all flood prone property and impose such easements on all properties acquired with public assistance funds	Hurricane, Nor'easters, Floods	High	Hertford County Emergency Management, Municipal Administration, Hertford County Public Works, Municipal Public Works	General Fund, Grant Funds	New Action
**HER8	Coordinate open space planning and preservation with all local certified CAMA land use plans.	Hurricane, Nor'easters, Floods, Erosion	Low	Hertford County Emergency Management, Municipal Administration, Hertford County Administration	General Fund	New Action
**HER9	Provide annual review of development restrictions in floodplain areas and maintain initiatives to ensure limited residential and commercial development in the floodplain and protection of critical facilities.	Hurricane, Nor'easters, Floods, Erosion	High	Hertford County Emergency Management, Municipal Administration, Hertford County Administration	General Fund	New Action
**HER10	The MAC will review "firewise" zoning and subdivision standards and recommend their appropriateness for incorporation into existing (or new) zoning or subdivision ordinances. (Source http://www.firewise.org)	Wildfire	Medium	MAC in concert with the County and Participating Municipalities	General Fund	Completed (Community Wildfire Protection Program. Hazard reduction burns conducted by the NC Forest Service. NC Forest Service continues to educate the public on wildfire prevention.
**HER11	Coordinate public education on the hazards of wildfires with the NC Forestry Services ongoing wildfire education program.	Wildfire	Medium	Hertford County Emergency Management, Municipal Administration, Hertford County Administration	General Fund	N.C. Forest service continues to educate the Public.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
**HER12	Review County and Municipal Zoning, Subdivision, and Flood Damage Prevention Ordinances for improved control of flooding hazards and improvement of drainage.	Hurricane, Nor'easters, Floods, Erosion	High	Hertford County Inspections, Municipal Administration, Hertford County Administration	General Fund	The County continues to monitor ordinances and have not issuing building permit without Flood Elevation Certificate.
**HER13	Adopt and annually update a capital improvement plan with an emphasis on mitigation for critical facilities including relocation and retrofitting.	All Hazards	Medium	Hertford County Administration, Municipal Administration	General Fund	Incomplete at this time; As funding comes available, County will continue to work towards adopting a CIP with an emphasis on mitigation for critical facilities (relocating & retrofitting).
**HER14	At the local government staff level, work with the North Carolina Dept. of Transportation (NCDOT) and the Regional Planning Organization to identify drainage problem areas and develop resolutions for drainage issues created by NCDOT facilities, including inspections of channels, retention basins, and, as needed, pursue debris removal	Hurricane, Nor'easters, Floods, Erosion	Medium	Hertford County Emergency Management, Municipal Administration, Hertford County Administration, NCDOT	General Fund	Incomplete at this time; working with NCDOT to implement a working plan on how to best fix drainage issue and then ultimately how to fund them as well.
**HER15	Apply for all available funding from the Hazard Mitigation Grant Program (HMGP) and funds to assist with the mitigation of severe repetitive loss properties to relocate structures out of the floodplain.	Hurricane, Nor'easters, Floods, Erosion	High	Hertford County Emergency Management, Municipal Administration, Hertford County Administration	General Fund, Grant Funds	Incomplete at this time. Applied and awarded two (2) grants for debris removal.
**HER16	Require a finished floor elevation certificate for all development within the special flood hazard area (SFHA) in both incorporated and unincorporated portions of the County. All elevation certificates should be submitted on an official FEMA elevation certificate. No certificate of occupancy shall be issued for any development within a defined special flood hazard area without the submittal of the required elevation certificate.	Hurricane, Nor'easters, Floods, Erosion	High	Hertford County Inspections, Municipal Inspections	General Fund	The County continues to monitor ordinances and have not issuing building permit without Flood Elevation Certificate.
**HER17	Inspect debris blockage problems and secure funds for the clearance of debris from rivers, streams and tributaries	Hurricane, Nor'easters, Floods, Erosion	High	Hertford County Soil and Water Conservation, Hertford County Administration, Municipal Administration	General Fund	Applied and awarded two (2) grants for debris removal.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
**HER18	Maintain a map information service involving the following: (1) Provide information relating to Flood Insurance Rate Maps (FIRM) to all inquirers, including providing information on whether a given property is located within a flood hazard area. (2) Provide information regarding the flood insurance purchase requirement on the county's website. (3) Maintain historical and current FIRM's. (4) Locally advertise once annually in the local newspaper. (5) Provide information to inquirers about local floodplain management requirements. (6) Include in the county's newsletter (all property owners) and on the county's website a letter on flood insurance. (7) Notify property owners within a flood prone area that they are subject to flooding. (8) Maintain a log of inquiries including: date, FIRM zone of subject property, address/location of subject property, indication that inquirer was informed of insurance purchase requirement.	Floods	High	Hertford County and Ahoskie Inspections Departments	General Fund	(1) FIRM maps are located in respective county and Ahoskie inspection departments and the information is included on GIS maps. (2) Incomplete (3) Located in respective county and Ahoskie inspection offices (4) Incomplete (5) Information provided upon request (6) County does not have newsletter Letter on flood insurance should be handled under item 2. (7) & (8) Incomplete.
**HER19	Hertford County will once annually mail a notice to all property owners whose land is located within a special flood hazard area. This notice should clearly state that the recipients' property is susceptible to flooding.	Floods	High	Hertford County and Ahoskie Inspections Departments	General Fund	New Action
**HER20	Hertford County will work with local real estate agencies to ensure that agents are informing clients when property for sale is located within a Special Flood Hazard Area (SFHA). The County will provide these agencies with brochures documenting the concerns relating to development located within flood prone areas. Maintain a copy of the brochure and disclosure statements from at least five (5) local real estate agencies confirming brochure availability.	Floods	High	Hertford County and Ahoskie Inspections Departments	General Fund	County provides brochures to local real estate agencies documenting concerns relating to development within flood hazard areas. The County continues to provide a copy of the brochure to at least (5) local real estate agencies. The County will replace the brochures upon SFHA changing as a result of new FIRMs.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
**HER21	Hertford County will make information regarding hazards and development regulations within the floodplains through the following: (1) The County Planning Director will ensure that the local library maintains information relating to flooding and flood protection. (Maintain dates of distribution and librarian certification of availability.) (2) The County will provide a link on their website to FEMA resources addressing flooding and flood protection.	Floods	High	Hertford County Inspections Department	General Fund	(1) The County provides the local library with information relating to flooding and flood protection. (2) A link is provided on the County's website to FEMA resources addressing flooding and flood protection.
**HER22	Hertford County will coordinate with the Hertford County School System Hazards Awareness Educational Programs for use by educators within the Hertford County School System.	All Hazards	Low	MAC with Staff Support from Hertford County and participating municipalities	General Fund	Upon available resources.
**HER23	Hertford County will provide comprehensive services regarding planning and development activities within the defined SFHA. These services will include (1) Provide site-specific flood and flood related information on an as needed basis, (2) Maintain a list of contractors with experience in floodproofing and retrofitting techniques at the Building Inspections Dept., (3) Maintain materials providing an overview of how to select a qualified contractor at the Building Inspections Dept., (4) Site visits will be performed upon request by the Building Inspections Dept. to review occurrences of flooding, drainage, and sewer problems—if applicable, inspector should provide one-on-one advice to the property owner; (5) Advertise the availability of services once annually within the local newspaper; and (6) Maintain a log of all individuals assisted through these services, including site visits.	Floods	High	Hertford County and Ahoskie Inspections Departments	General Fund	(1) FIRM maps are located in respective county and Ahoskie inspection departments and the information is included on GIS maps. (2) the County maintains a list of contractors specific to flood proofing and retrofitting (3) Located in respective county and Ahoskie inspection offices (4) Incomplete (5) Incomplete (6) Incomplete
**HER24	Hertford County will maintain a comprehensive Geographic Information System (GIS) with current FIRM panels in an effort to make this information readily available to County citizens. In addition to this digital data, bound copies of all historical and current FIRM panels will be maintained within the Hertford County Planning Department.	Floods	High	Hertford County Inspections Department	General Fund, Grant Funds	Hertford County maintains a comprehensive Geographic Information System (GIS) with current FIRM panels in an effort to make this information readily available to County citizens: http://www.hertfordcountync.gov/departments/departments-a-1/gis-land-records/ . In addition to this digital data, bound copies of all historical and current FIRM panels are maintained within the Hertford County Planning Department.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
**HER25	Maintain a registry of special needs individuals which has been coordinated with the Hertford County Department of Social Services. This list will include: (1) Persons on life support systems, (2) Persons dependent on electricity for medical equipment, and (3) Persons with severe mental handicap or mental illness.	All Hazards	High	Hertford County Emergency Management	General Fund	Special Needs Registry is readily available and maintained.
**HER26	The MAC, in conjunction with Hertford County and the participating municipal jurisdictions, will work on the five-year implementation of this plan.	All Hazards	Medium	Hertford County and all participating jurisdictions	General Fund	The Hertford County Multi-Jurisdictional Plan will be replaced by the Albemarle Regional Hazard Mitigation Plan and the five-year implementation of the plan will begin upon adoption. Action strategies incomplete and being implemented will be carried forward accordingly.
**HER27	Maintain dialogue with the Tri-County Airport Authority to effectively regulate land use as the County continues to grow and encroach upon the airport environs.	Man-made Hazards	Low	Hertford County Planning Department	General Fund	Planning Director sits on the Tri-County Airport Board and maintains dialogue.
**HER28	Hertford County will continue to support the NC Office of Dam Safety's efforts to monitor and inspect all dams throughout the state. The county will rely on this agency to ensure that all dam facilities, both public and private, are properly maintained and stable.	Man-made Hazards	Low	NC Office of Dam Safety	General Fund	County continues to support NC Office of Dam Safety.
**HER29	Maintain a list of all hazardous material sites or transport corridors in Hertford County.	Man-made Hazards	Medium	Hertford County Emergency Management	General Fund	Hazardous Material site visits have been conducted on all EHS facilities and Plans have been created and added to the county Emergency Operations Plan.

**Notes: Hertford County will be handling mitigation strategies for the Towns of Cofield, Como, Harrellsville and Murfreesboro respectively. See Appendix B.

Table 7.2.14 Pasquotank County-Elizabeth City Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PAS1	Utilize best available data to identify the location and potential impacts of natural hazards on people, property and natural environment.	All Hazards	High	Planning, GIS, Emergency Management	General Fund, Grant Funds	Staff will continue to utilize FEMA Floodplain data provided by NCFMP along with tax parcel data to locate vulnerable areas. Storm Surge data from NOAA will also be used.
PAS2	Establish periodic monitoring and review of Multi-Hazard plan and ordinances to determine effectiveness at preventing and mitigating hazards.	All Hazards	High	Planning, Inspections Emergency Management, LEPC, Emergency Response Agencies	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PAS3	Continue to ensure through proper planning, zoning and building codes that all safety measure are in place for new construction and placement.	All Hazards	High	Planning, Inspections, County Commissioners/City Council	General Fund	Enforcement is accomplished through the issuance of building permits and inspections through the County's permitting office.
PAS4	Continue efforts for post-storm planning in an effort to reduce the time required to return the affected community to pre-storm status.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes, Winter Storms	High	Public Works, Solid Waste, Emergency Management	General Fund	County has just completed the RFP process for a new Debris Removal Contract and Debris Monitoring Contract. A Disaster Recovery Plan has been completed.
PAS5	Maintain "Storm Ready Community" Status	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes, Winter Storms	High	Emergency Management	General Fund	Information provided during various public events/educational events. Also posted to EM website and via social media. A notification plan is in place to alert critical facilities of watches/warnings. Coordination with the NWS should continue and additional methods of disseminating early warnings to the community/critical facilities should be continually evaluated and explored.
PAS6	Ensure that building codes are enforced to prevent damages from high winds.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes, Winter Storms	High	Inspections, Engineers, County Commissioners/City Council	General Fund	Enforcement is accomplished through the issuance of building permits and inspections through the County's permitting office.
PAS7	Continue to enforce regulatory measures that ensure new development will not increase flood threats to existing properties.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms	High	Planning, County Commissioners/City Council	General Fund	Pasquotank County has established a stormwater program and fee to conduct clearing and snagging maintenance activities on the County's major streams and ditches, and perhaps some dredging where permitted by the Army Corp of Engineers. The objective is to keep the downstream and forested areas clear of debris that impedes free flowing drainage.
PAS8	Minimize economic and property losses due to flooding through continued compliance in the National Flood Insurance Program (NFIP).	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms	High	Planning, Emergency Management, County Commissioners/City Council	General Fund	The flood damage prevention ordinance is reviewed annually to ensure that it is current, FIRMS are up to date and proper enforcement is being accomplished.
PAS9	Join the Community Rating System (CRS).	Hurricanes, Nor'easters, Flooding,	High	Planning, Emergency Management, County Commissioners/City Council	General Fund	New Action

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PAS10	Develop and maintain comprehensive water management policies for Pasquotank County/Elizabeth City considering the connections between land-use, urban growth, and surface water, and ground water issues.	Hurricanes, Nor'easters, Flooding	High	Planning, CAMA, County Commissioners/City Council, Emergency Management	General Fund	New Action
PAS11	Seek/Encourage the development and implementation of long-term cost effective and environmentally sound mitigation projects.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms	Medium	Emergency Management, County Commissioners/City Council	Grant Funds	New Action
PAS12	As Funding allows, reduce flood-related damage to repetitive flood loss properties and structures through the buyout program.	Hurricanes, Nor'easters, Flooding	Medium	Emergency Management, County Commissioners/City Council, Finance Departments	Grant Funds	New Action
PAS13	Encourage critical facilities to apply structural hazard mitigation and sustainability concepts when building or remodeling their facilities; to include back-up power sources.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	Medium	Emergency Management	General Funds, Grant Funds	New Action
PAS14	Acquire generators or other forms of redundant power supply to ensure that critical facilities and infrastructure remain operational where normal power supply is not available.	Hurricanes, Nor'easters, Severe Thunderstorms, Winter Storms, Tornadoes	Medium	Emergency Management	General Fund, Grants	A generator has been installed at the Pasquotank County Courthouse capable of running the critical functions of the county. Also, a Transfer Switch has been installed at the County/City's primary pre-hurricane shelter.
PAS15	Maintain Debris Removal and Monitoring Services Contracts	Hurricanes, Nor'easters, Severe Thunderstorms, Winter Storms, Tornadoes	Medium	Emergency Management, Public Works, Solid Waste, County Commissioners/City Council	Staff Time	New Action
PAS16	Educate and inform residents, businesses and visitors via public education, social media and print materials on ways to mitigate disasters including steps that they can protect themselves.	All Hazards	High	Emergency Management	General Fund, Grant Funds	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook.
PAS17	Encourage the use of weather radios/severe weather warning apps especially in schools, rest homes, convalescent homes, retirement centers and other locations where people congregate to inform them of the approach of severe weather.	All Hazards	High	Emergency Management	General Fund	New Action
PAS18	Increase awareness of hazards affecting Pasquotank County and provide information to assist in good decision-making.	All Hazards	High	Emergency Management	General Fund, Grant Funds	New Action
PAS19	Educate home and property owners about flood-proofing and wind-proofing measures.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	Medium	Planning/Inspections, Emergency Management	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PAS20	Continue to enforce the North Carolina Building Code. The requirement that new structures or structures undergoing significant renovation be resistant to wind loads of 110 m.p.h. is of particular importance.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	High	Planning/Inspections	General Fund	The Planning and Code Enforcement Department continues to enforce the state building code, including wind load requirements. All building plans must demonstrate compliance prior to issuance of a building permit. The Building Inspector continues to conduct inspections during construction and no Certificate of Occupancy is issued unless all requirements are satisfied.
PAS21	Educate contractors about safe housing development through written materials or a county sponsored symposium.	Hurricane, Flooding, Tornado, Thunderstorm	High	Planning/Inspections	General Fund	The Planning and Code Enforcement Department continues to enforce the state building code, including wind load requirements.
PAS22	Hold a county/city-sponsored hazard mitigation symposium for the county residents and surrounding municipalities, including information on preparedness for all hazards significant to Pasquotank County.	Hurricanes, Tornadoes, Thunderstorms,	High	Planning/Inspections, Emergency Management, County Commissioners/City Council	General Fund	Information is disseminated via various forums to include: talks to Civic Groups, distribution of information at Festivals/Public Events, Social Media, etc.
PAS23	Provide homeowners information on wind resistant measures.	Hurricanes, Tornadoes, Thunderstorms	High	Planning/Inspections	General Fund	Information is disseminated via various forums to include: talks to Civic Groups, distribution of information at Festivals/Public Events, Social Media, etc.
PAS24	Educate mobile home contractors and owners about wind proofing measures, including wood and light steel construction connectors and anchoring systems.	Hurricanes, Tornadoes, Thunderstorms	High	Planning/Inspections	General Fund	Information is disseminated via various forums to include: talks to Civic Groups, distribution of information at Festivals/Public Events, Social Media, etc.
PAS25	Post information about Pasquotank County's emergency evacuation routes.	Hurricanes, Tornadoes, Thunderstorms	High	Emergency Management Agency	General Fund	Information provided during various public events/educational events. Also posted to EM website and via social media.
PAS26	Review the Pasquotank-Camden-Elizabeth City Multi-Hazard Emergency Operations Plan annually and update the plan as necessary. Ensure all County and City departments continue to develop guidelines for response to emergencies and to maintain departmental operations. Work with County and City departments to ensure each department possesses a clear understanding of department responsibilities as outlined in the Pasquotank-Camden-Elizabeth City Multi-Hazard Emergency Operations Plan.	Hurricanes, Tornadoes, Thunderstorms	High	All County/City Departments,	General Fund	Annual update of Multi-Hazard Plan, conduct exercises with departments addressing their roles and responsibilities as outlined in the Multi-Hazard Plan

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PAS27	Monitor trees and branches at risk of breaking or falling in windstorms. Prune or thin trees or branches on county/city property when they would pose an immediate threat to property, utility lines or other significant structures or critical facilities in the community.	Hurricanes, Thunderstorms, Tornadoes	High	Public Works, County Maintenance	General Fund	Collaborative efforts between City/County toward vegetation monitoring
PAS28	Continue efforts to develop continuity of operational plans (COOP) for county/city departments.	Hurricanes, Thunderstorms	High	City/County Departments, Pasquotank County Manager, Elizabeth City Manager	General Fund	Continuity of operations for planning efforts are currently underway in the county/city.
PAS29	Encourage the installation of generator switches in new construction critical facilities. As projects go through Technical Review Committee, applicants can be encouraged to pre-wire facilities for a generator. New construction critical facilities that would benefit from pre-wiring include but are not limited to public schools, local government facilities, facilities that may be utilized as storm shelters, adult care facilities, etc.	Hurricanes	High	Pasquotank County Board of Commissioners, Elizabeth City Council, Planning Boards	General Fund	A generator has been installed at the Pasquotank County Courthouse capable of running the critical functions of the county. Also, a Transfer Switch has been installed at the County/City's primary pre-hurricane shelter.
PAS30	Record all tax parcel information and floodplain locations in a GIS system including repetitive loss areas, areas of greatest risk, and vulnerable populations. This information will be provided to the GIS Coordinator by the Emergency Management Agency.	Hurricanes, Flood, Tornadoes, Thunderstorms	High	GIS Coordinator	General Fund	Complete; will be updated as needed.
PAS31	Continue efforts to acquire the "Perry Properties" located in the area of Ehringhaus Street and McMorrine Street in Elizabeth City utilizing hazard mitigation grant funding for repetitive flood loss properties.	Flooding	High	Pasquotank County Managers, Elizabeth City Manager, Emergency Management Agency	General Fund, Grant Funds	No action taken, As funding comes available action will be taken to acquire "Perry Properties".
PAS32	Continue efforts to acquire repetitively flooded properties in the Oxford Heights subdivision of Elizabeth City utilizing hazard mitigation grant funding.	Flooding	High	Pasquotank County Managers, Elizabeth City Manager, Emergency Management Agency	General Fund, Grant Funds	No action taken, As funding comes available action will be taken to acquire "Perry Properties".
PAS33	Participate in the Community Rating System (CRS)	Flooding	High	Pasquotank County Board of Commissioners, Elizabeth City Manager	General Fund	County/City is in compliance with NFIP. Continued participation in CRS.
PAS34	Revise zoning and subdivision ordinances to increase lot sizes in areas with poor soils.	Flooding	High	Pasquotank County Board of Commissioners, Elizabeth City Manager	General Fund	Update – Complete – County lots increased to 43,000 square feet
PAS35	Reduce the vulnerability of infrastructure and the built environment by identifying infrastructure (i.e. pumping stations, roads) in the city/county that is repetitively damaged by flooding and consider ways to reduce those vulnerabilities.	Flooding	High	Pasquotank County Board of Commissioners, Elizabeth City Manager	General Fund, Grant Funds	Update – Infrastructure has been identified. County/City seeks ways to reduce vulnerabilities and opportunities for Mitigation Funding.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PAS36	As with other hazards of concern to Pasquotank County and the City of Elizabeth City, a hazard mitigation symposium should be held for its residents, including information on preparedness for all hazards significant to its jurisdiction. The symposium should encourage property owners in flood prone areas to consider the options of elevation, relocation, and flood proofing.	Flooding	High	Emergency Management Agency	General Fund	Information regarding flood proofing has been provided via various forums.
PAS37	Distribute information identifying flood prone areas within the county/city. Address the need for evacuation and family preparedness plans especially for residents living within flood prone areas.	Flooding	High	Emergency Management Agency	General Fund	EM also maintains a Special Needs Registry – evacuation and family preparedness information is made available to this population as well as the non-English speaking population in Pasquotank County/Elizabeth City.
PAS38	Incorporate shoreline vegetation protection buffers into the City of Elizabeth City's Unified Development Ordinance as a stipulation to development in and near areas of environmental concern.	Flooding	High	Elizabeth City Council, Planning	General Fund	No Action Taken At This Time
PAS39	In order to reduce storm water runoff, the city should minimize construction of additional impervious surfaces within the floodplain. Elizabeth City's Stormwater Management Ordinance addresses mitigation measures to control the adverse effects of increased storm water runoff associated with both future land development and existing developed land within the City.	Flooding	Medium	Elizabeth City Council, Planning	General Fund	Stormwater management is being implemented as part of land development within the city.
PAS40	Provide new home and property buyers with information on wind proofing. This information may be most efficiently dispersed by the tax assessor's office because all home transactions are recorded there.	Hurricanes, Tornadoes, Thunderstorms	High	Tax Department	General Fund	Information is being provided at the tax assessor's office.
PAS41	Warning System Improvements.	Hurricanes, Tornadoes, Thunderstorms	High	Emergency Management Agency	General Fund	Citizens are given information regarding free applications available for severe weather alerts and are also encouraged to purchase weather radios.
PAS42	Encourage the practice of placing storm shelters in all mobile home areas and subdivisions.	Tornadoes, Thunderstorms	High	Pasquotank County Board of Commissioners, Elizabeth City Council	General Fund	No action taken; As funding comes available these storm shelters shall be planned and constructed.
PAS43	As with other hazards of concern to Pasquotank County and the City of Elizabeth City, the county/city can sponsor a hazard mitigation symposium for its residents, including information on preparedness for all hazards significant to Pasquotank County.	Hurricanes, Flood, Tornadoes, Thunderstorms	High	Emergency Management Agency	General Fund	Information is distributed during public events and is posted on Camden-Pasquotank Emergency Management Website and Facebook.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PA544	Encourage the installation of lightning detection devices be installed in public outdoor gathering areas such as school stadiums and ball parks.	Hurricanes, Flood, Tornadoes, Thunderstorms	High	Pasquotank County Board of Commissioners, Elizabeth City Council	General Fund	No action taken; As funding becomes available lightning protection devices are to be installed on public outdoor gathering areas.
PA545	In order to minimize injury from lightning strikes, shelters should be placed every 10 acres in all public open space recreation areas. This recommendation should be encouraged by the county and the city.	Hurricanes, Tornadoes, Thunderstorms	High	Pasquotank County Board of Commissioners, Elizabeth City Council	General Fund	No action taken; As funding becomes available lightning protection shelters shall be installed in recreational areas.
PA546	Provide new home and property buyers with information on wind proofing. This information may be most efficiently dispersed by the tax assessor's office because all home transactions are recorded there.	Tornadoes, Thunderstorms	High	Tax Department	General Fund	Information is being provided at the tax assessor's office.
PA547	Driving in storm conditions can create hazardous road conditions, including decreased ability for drivers to see road boundaries. To improve road visibility, reflector tape or paint along road edges and in the dividing line should be placed on all major roads through city/county.	Hurricanes, Thunderstorms	High	Public Works, NCDOT	General Fund, Grant Funds	No action taken; As funding becomes available, highway reflector material is being installed.

Table 7.2.15 Perquimans County Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PER1	Monitor trees and branches at risk of breaking or falling in windstorms. Prune or thin trees or branches on county property when they would pose an immediate threat to property, utility lines, or other significant structures or critical facilities in the county.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	Medium	Buildings and Grounds	General Fund	Continue to monitor vegetation overgrowth.
PER2	Create a preferred foliage and wind resistant tree list for the County. Distribute the list to property owners in an effort to reduce the risk of trees and plants from breaking in high wind events.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	Medium	Planning	General Fund	Incomplete; to implement as "best management practice" in brochure and/or soft regulatory requirement through text amendments to the zoning ordinance and run with other updates that the County will be dealing with once the CAMA Plan update is adopted.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PER3	Record all tax parcel information and floodplain locations in a GIS system including repetitive loss areas, areas of greatest risk, and vulnerable populations. Maintain and update GIS layers that identify critical facilities/infrastructure and other facilities to include childcare centers, mobile home parks/subdivisions, and senior care facilities.	Flood	Medium	Planning, GIS, Emergency Management	General Fund	Tax parcel information relating to repetitive loss areas is being updated.
PER4	Consider participating in the Community Rating System (CRS).	Flood	Medium	Board of Commissioners, Building Inspections, Planning Department	General Fund	This has not been pursued.
PER5	Continue to review rebuilding activities after major storm events to determine how revisions to existing policies and procedures could help minimize repetitive losses.	All Hazards	Medium	Building Inspections	General Fund	Incomplete- continue to monitor Local building codes to assure they meet the ever-changing State updates and continue to educate staff on a yearly basis.
PER6	Ensure that mobile manufactured homes are installed and secured properly.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	High	Building Inspections	General Fund	Incomplete- continue to monitor Local building codes to assure they meet the ever-changing State updates and continue to educate staff on a yearly basis.
PER7	Complete the review and consider adoption of "Stormwater and Drainage Management Standards" to augment current zoning and subdivision ordinances, as included in the Planning Board's Fiscal Year 2009-2010 Work Program. The TRC has recommended adoption of this Ordinance.	Hurricanes, Nor'easters, Flooding, Erosion	High	Planning Department	General Fund	Complete; Stormwater standards complete and enacted.
PER8	Continue to enforce the North Carolina Building Code. Enforce the use of wind-resistant construction techniques used in coastal regions. The requirement that new structures or structures undergoing significant renovations be resistant to wind loads of 110 mph is of particular importance.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	Medium	Building Inspections	General Fund, Grant Funds	Incomplete- continue to monitor Local building codes to assure they meet the ever-changing State updates and continue to educate staff on a yearly basis.
PER9	Continue to acquire destroyed or substantially damaged properties and relocate households. Seek State and Federal funding. (voluntary program)	All Hazards	Medium	Board of Commissioners	General Fund, Grant Funds	Incomplete- continue to monitor any opportunity to utilize Federal funding to acquire damaged properties and any relocation efforts.
PER10	Maintain and annually update the county Emergency Operations Plan. This plan should contain detailed information on responsible parties and contact information. This information should be updated as positions and contact information change.	All Hazards	High	Emergency Management	General Fund	Incomplete- continue to update operations plans and monitoring detailed information of responsible parties assuring accurate information is always relevant.
PER11	Maintain evacuation routes.	All Hazards	Medium	NCDOT, Board of Commissioners	NCDOT	Incomplete- continue to collaborate with all departments to maintain routes preparedness and continue to educate staff and property owners along routes.
PER12	Enhance existing Warning Systems	All Hazards	Medium	Emergency Management, Emergency Services	General Fund, Grant Funds	Reverse 911 system instituted,

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PER13	Ensure adequate evacuation time in case of major hazard events.	All Hazards	High	Emergency Management, Emergency Services	General Fund	Incomplete- continue to collaborate with all departments to maintain routes preparedness and continue to educate staff and property owners along routes. "CERTS" established during 2010 planning timeframe.
PER14	Promote and encourage the training of Community Emergency Response Teams (CERT) throughout the county	All Hazards	Medium	Emergency Management	General Fund, Grant Funds	
PER15	Work to develop continuity of operations plans (COOP) for county/town departments, assisted living facilities, long-term care facilities, day care centers, etc.	All Hazards	High	Board of Commissioners, Emergency Management	General Fund	Incomplete; continued efforts through collaborative meeting events and mail solicitation. Continued education within county/town staff on proper out-reaches to care facilities.
PER16	In order to reduce storm water runoff, the county should minimize construction of additional impervious surfaces within floodplains. This should include limiting construction of impervious surface parking lots in the areas near the rivers.	Hurricanes, Nor'easters, Flooding, Erosion	Low	Board of Commissioners	General Fund	Incomplete- to be added to the Planning Board's Work Program and scheduled during next 5-year HMP period. Continue to work with CAMA and provided staff yearly education opportunities.
PER17	Continue to support NC Sedimentation Control Commission efforts to ensure erosion and sedimentation control measures are properly installed and maintained during construction.	Hurricanes, Nor'easters, Flooding, Erosion	High	Planning Department, Natural Resource Conservation Service, Soil and Water Conservation	General Fund	Incomplete- to be added to the Planning Board's Work Program and scheduled during next 5-year HMP period.
PER18	Encourage the installation of generator switches in new construction critical facilities and existing shelters. As projects go through TRC, applicants can be encouraged to pre-wire facilities for a generator.	All Hazards	High	Planning Department, Board of Commissioners	General Fund, Grant Funds	Transfer switches have been installed.
PER19	Perquimans County should sponsor a hazard mitigation symposium for county residents, including information on preparedness for all significant hazards. The symposium should address the options of elevation, relocation, and flood proofing	Flooding	Medium	Board of Commissioners, Emergency Management	General Fund	Not yet pursued- however EMC hold annual Hurricane briefings for first responders and other interested citizens and residents.
PER20	Post information about emergency evacuation routes.	All Hazards	High	Emergency Management	General Fund	Incomplete- continue to collaborate with all departments to maintain routes preparedness and continue to educate staff and property owners along routes through soft mailers and county/town websites.
PER21	Use written materials to educate contractors about principles for quality redevelopment and safe housing development.	All Hazards	Medium	Building Inspections	General Fund	Incomplete- continue to educate staff on a yearly basis, continue to provide daily mailers to contractors based on state building updates.
PER22	Provide new home and property buyers with information on wind proofing. The information is probably most effectively dispersed by the Building Inspections Department.	Hurricanes, Nor'easters, Flooding, Severe Thunderstorms, Tornadoes	Medium	Administration	General Fund	Incomplete- continue to educate staff on a yearly basis, continue to provide daily mailers to property buyers based on state building updates.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
PER23	Create and disperse information about the plan and relevant emergency response actions the public can take.	All Hazards	High	Emergency Management, Emergency Services	General Fund	Incomplete- continue to educate staff on a yearly basis, continue to provide daily mailers to property buyers based on state building updates.
PER24	Continue to provide flood maps for public use with staff continuing to be available for public assistance.	Flooding	High	Planning Department, Building Inspections	General Fund	Complete- Worked with State to provide flood maps and have them posted on NCFLOODMAPS.com for public access/use.
PER25	Collect FEMA and NCEM educational material on natural hazards and place in public library.	All Hazards	High	Emergency Management	General Fund	Incomplete- continue to monitor Federal guideline updates, educating staff on State/Federal requirements, distributing this information to the public via mailers and various public common facilities.
PER26	Develop and distribute information to the public regarding the requirements for anchoring LP gas tanks.	Hurricanes, Nor'easters, Flooding	Medium	Planning Department	General Fund	Incomplete- Ultimately regulated by NC Public Ag and NC Flood, but continue to monitor updates through these organizations and educate staff members who in turn educate the community via mailers and public common facilities.

Table 7.2.16 Town of Hertford Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency/Department	Potential Funding Source	Implementation Status
***HFT1	Update the CAMA Land Use Plan in conjunction with the County's Core Land Use Plan.	All Hazards	Medium	Town Manager	General Fund	The Town will continue to monitor its CAMA Land Use Plan and will make updates as needed to address the impacts of hazards on the Town. CAMA requires updates every 5 years.
***HFT2	Consider revising Hertford's Zoning Ordinance and Subdivision Regulations to improve storm water management practices in developments.	Flood	Low	Town Manager	General Fund	The town will review its Zoning Ordinance and Subdivision Regulations and make necessary amendments to enhance its stormwater management practices and protect against future flooding.
***HFT3	Update the Town of Hertford's Zoning Ordinance and Subdivision Regulations.	All Hazards	Low	Town Manager	General Fund	The town will review its Zoning Ordinance and Subdivision Regulations and make necessary amendments to help it mitigate the impacts of hazards on future development.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency/Department	Potential Funding Source	Implementation Status
***HFT4	Work in conjunction with NCDOT and other agencies to ensure that storm water facilities are maintained to allow for reasonable flows	Hurricanes, Nor'easters, Flood, Severe, Thunderstorm, Erosion	Medium	Town Manager	General Fund, NCDOT	Continue to coordinate with NCDOT to ensure drainage ways are kept clear of debris.
***HFT5	In cooperation with Perquimans County, continue to review areas adversely impacted by major storm events and to examine existing policies that can minimize repetitive losses in those areas.	Hurricanes, Nor'easters, Flood, Severe, Thunderstorm, Erosion	Medium	Perquimans County, Town Manager	General Fund	Continue to work with Perquimans County to identify vulnerable areas and repetitive loss properties, and develop policies and guidelines to minimize the impacts to these areas.
***HFT6	Work to develop continuity of operations plans (COOP) for county/town departments, assisted living facilities, long-term care facilities, day care centers, etc.	All Hazards	High	Town Manager	General Fund	Develop a Continuity of Operations Plan, along with Perquimans County, to ensure town operations can remain operational during a disaster event.
***HFT7	In conjunction with NCDOT, continue to examine the roadways of the town to determine if improvements are needed in areas affected by development and that all roadway are sufficient to carry traffic in time of evacuation.	All Hazards	Medium	Town Manager, NCDOT	General Fund, NCDOT	Continue to partner with NCDOT to make sure roadways are maintained so they can provide safe and efficient routes.

***Perquimans County will be responsible for all mitigation actions shown herein, for the Town of Hertford, See Appendix B.

Table 7.2.16 Town of Winfall Mitigation Strategies

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
WIN1	Complete Land Use Plan and ensure that hazard mitigation objectives are addressed.	All Hazards	High	Town Council, Planning Board, Perquimans County	General Fund	Incomplete- continue to update Land Use Plan and hold collaborative efforts to educate all parties on mitigation objectives via meetings or email correspondence.
WIN2	Update as needed the wastewater collection system and water system ordinances to meet hazard mitigation objectives.	All Hazards	Medium	Planning Board, Town Council	General Fund	Perquimans County assumed Winfall's water system during the 2010 planning timeframe.
WIN3	Continue to encourage efforts towards countywide water systems with Perquimans County.	All Hazards	Medium	Town Council	General Fund	Incomplete- Continue to collaborate with Perquimans County by holding meetings to discuss benefits of a countywide system. Continue to consult engineers on efficiency data and rates.
WIN4	Continue efforts to improve roads and bridges (both public and private) for critical services – fire, rescue, medical, evacuation, etc.	All Hazards	Medium	Town Council	General Fund	Work with RPO on recommendations, provide list and attend annual meeting for the State's Transportation Improvement Program for road and bridge improvement, (annual) based on priorities of RPO and budget.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
WIN5	Seek funding and/or action to clear debris in canals, waterways and drainage ditches to prevent flooding and to improve drainage and water quality.	Hurricanes, Nor'easters, Flood, Severe Thunderstorms, Winter Storms, Erosion	Medium	Town Council	General Fund, Grant Funds	Incomplete- funding is the key component driving the lack of forward movement.
WIN6	Work with the County Building Inspector to continue to enforce the NC Building Code, in particular, the tie down of buildings and resistance to wind loads.	Hurricanes, Nor'easters, Flood, Severe Thunderstorms, Winter Storms, Tornadoes	Medium	Town Council	General Fund	Continued enforcement of "required" NC Building Code with regards to tie down of buildings and wind load.
WIN7	Minimize construction of impervious surfaces adjacent to floodplains or near storm water drainage routes that empty into the river.	Hurricanes, Nor'easters, Flood,	Medium	Zoning Administrator	General Fund	The town follows the State's Stormwater regulations when dealing with impervious surfaces adjacent to floodplains or near storm water drainage on a case by case basis when the community is involved.
WIN8	Establish program for evacuation and improvement of Town critical services and facilities – wastewater collection system.	All Hazards	Medium	Town Council, Fire Department, Town Staff	General Fund	Incomplete- continue to organize collaborative efforts with public works and consultants. Continue to effort wastewater program based on meetings and outreach.
WIN9	Continue to partner with Perquimans County in the annual review and update of the Emergency Operations Plan (i.e. evacuation warnings, removal of persons in flood prone areas).	All Hazards	High	Town Council, Police, Fire, Perquimans County	General Fund	Reverse 911 system instituted during 2010 planning timeframe.
WIN10	Evaluate access problems for critical facilities; develop protection options. Identify alternate command post sites.	All Hazards	High	Police Department, Town Staff, Town Council	General Fund	Incomplete- continue outreach to care facilities providing
WIN11	Work to develop continuity of operations plans (COOP) for county/town departments, assisted living facilities, long-term care facilities, day care centers, etc.	All Hazards	High	Town Council, Town Staff	General Fund	Evaluated and scheduled for completion in 2015.
WIN12	Continue to work on removal of projectile/debris such as junked vehicles, mobile homes and dilapidated homes.	Hurricanes, Nor'easters, Flood, Severe Thunderstorms, Winter Storms, Tornadoes	Medium	Town Council, Town Staff	General Fund	Incomplete- continue efforts between all departments to monitor debris and enacting measures of removal on timely basis. Continue to educate the public on these efforts via mail and website.
WIN13	Continue to evaluate those businesses with potential hazardous liquids for adequate protection of the public.	All Hazards	Medium	Town Council, Fire Department	General Fund, Private Funds	Incomplete
WIN14	Participate in the annual review and update of the Hazard Mitigation Plan.	All Hazards	High	Town Council, Planning Board	General Fund	Participated in Update of Regional Plan
WIN15	Establish both a regular and emergency plan to communicate with residents.	All Hazards	High	Town Council	General Fund	Incomplete- continued efforts with the community to best understand dynamics of the community and how best to develop these plans efficiently and effectively.

Action #	Description/Strategy	Hazard(s) Addressed	Relative Priority	Lead Agency / Department	Potential Funding Source	Implementation Status
WIN16	Disseminate information on emergency actions procedures – notification, shelters, evacuation routes, etc.	All Hazards	High	Town Council, Town Staff	General Fund	Incomplete- continue towards creating a committee to generate required information to the public through mailing and website. Continue to educate staff members on the importance of this information as a community and keeping it updated. Reviewed on annual basis during budget preparation (Nov-June).
WIN17	Each Town department establish/update plans for their respective operations for emergency operation situations.	All Hazards	High	Town Council, Town Staff	General Fund	
WIN18	Continue to partner with Perquimans County to improve warning system, to ensure residents understand the system and that homebound residents are notified.	All Hazards	Medium	Police Department, Fire Department, Town Council	General Fund	Reverse 911 system instituted during 2010 planning timeframe.