

Town of Washington

Climate-Smart Resiliency Planning

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Climate Smart Resiliency Planning Tool is a checklist to identify gaps in a community's planning process.

Cornell Cooperative Extension (CCE) evaluated opportunities for the Town of Washington to improve its community's resilience to climate change with the Climate Smart Resiliency Planning Tool (CSRPT or Planning Tool). The Planning Tool reviews many long-term and short-term aspects of climate change and storm preparedness by reviewing Town and County planning documents, activities, and management. CCE staff reviewed the Town of Washington and Dutchess County planning documents and consulted municipal staff members to complete the Planning Tool and develop recommendations based on the Planning Tool results. There was ongoing communication with the Town and Town's Climate Smart Communities Task Force throughout the project. The recommendations for opportunities to improve Washington's resilience to climate change and climate disasters are outlined in this report. The recommendations and report were presented to the Town Board and reviewed by the Town's Climate Smart Communities Task Force.

Municipal staff engaged in the Town of Washington Climate-Smart Planning assessment:

Margaret Schneible, *Conservation Advisory Commission Chair and CSC Coordinator*

Leslie Heaney, *Town Councilwoman and CSC Communities Liaison*

Chrissy Briggs, *Town Clerk*

Mary Alex, *Retired Town Clerk*

James Finley, *Building Inspector/Code Enforcement Officer*

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The completed assessment and recommendations highlight areas of opportunity for the Town of Washington to integrate storm and climate change preparedness into its municipal operations and planning.

Areas of Strength

- The Town has adopted the New York State Climate Smart Communities Pledge intending to become certified as a climate-smart community by focusing on specific actions within the NYS Climate Smart Communities Program to increase resiliency to climate change.
- The Town maintains active collaboration with neighboring municipalities, which leads to beneficial outcomes:
 - Partnership with Village of Millbrook on the continuation of a joint Town of Washington and Village of Millbrook Disaster Preparedness Council.
 - Collaboration with the Town of Clinton and the Village of Millbrook to create a joint Natural Resource Inventory (NRI).
- The Town of Washington adopted the FEMA-approved Dutchess County Hazard Mitigation Plan (2015), which:
 - Identifies and prioritizes climate hazards.
 - Describes the damage and cost of previous storms and disasters, past mitigation efforts, and estimates future financial losses that may result from flooding.
 - Includes municipal maps that indicate local hazard risks and identify critical facilities and infrastructure.
 - Includes adaptation strategies that have been evaluated and prioritized by cost, feasibility, timing, and efficacy.
- The Town proactively seeks grant funding. The following is an example of a relevant funded project:
 - Updated recreational building to address handicap access and senior usage funded through Community Development Block Grants (Approved in Spring 2023).

Areas of Opportunity

- The Town of Washington can leverage completion of the Climate Smart Resiliency Planning Tool for points toward Climate Smart Communities (CSC) certification under **CSC PE7 Action: Evaluate Policies for Climate Resilience (6 pts.)**. For more information on the Climate Smart Communities Program and the actions listed in this document, visit the Climate Smart Communities portal.¹
- The Town has a website capable of sharing documents, links, and plans with the public they could be leveraged to organize documents for the NYS Climate Smart Communities

¹ Climate Smart Communities Portal: <https://climatesmart.ny.gov/>

Program and earn points under pledge element PE9 of the Climate Smart Communities Program. For example, the Town can:

- Have pages on the Town website or separate websites for the Climate Smart Task Force.
- Restructure and update the contents "documents" tab or link to better itemize documents under appropriate topic headings so essential documents that need to be made publicly accessible when applying for certification under the NYS Climate-Smart Communities Program can be accessed easily and downloaded quickly.
- Have a dedicated page on the website for information on preparing for disasters and warning on imminent storms or weather events.
- The Town is encouraged to serve as an active participant in the next update of the Dutchess County Hazard Mitigation Plan.

Key Priorities

In discussions with the Town, extreme temperatures and heat waves, wind and power outages, and heavy snow and ice storms were identified as the climate disasters most often experienced by the Town. The municipality's top priority is updating its emergency plan and Comprehensive Plan:

- In discussions with Town officials, we learned that an outdated emergency response plan needs to be updated. Updating the current Emergency Plan may include guidance related to an up-to-date emergency response, short-term recovery planning, and climate hazards response. Create an up-to-date emergency plan that:
 - Clearly defines the roles of municipal officials and emergency responders.
 - Incorporates data and predictions related to natural hazards,
 - Identifies known and potential hazard areas and evacuation routes out of those areas,
 - Provides actions to take during, immediately after, and long-term following a climate disaster.
- Washington completed an update to the Comprehensive Plan in 2015 is in the process of an update, as of 2023. The Town should consider integrating the following elements of PE6 Action: Comprehensive Plan with Sustainability Elements:
 - Mention and incorporate resilience within the plan's mission, vision, and goals.
 - Reference and incorporate components of other relevant plans with sustainability elements (e.g., Natural Resource Inventory)
 - Explain the support and involvement of emergency managers and public works officials in creating the plan's contents.
 - Link recommendations to reducing hazard vulnerability through land-use planning.
 - Emphasize non-structural pre-disaster mitigation measures, such as acquiring land prone to damage from climate disasters.

- Include strategies that determine whether to relocate structures that repeatedly experience climate disasters (e.g., flood or wind damage), including identifying an equitable approach for community involvement in decision-making and potential funding sources.
- Cross-reference the County's multijurisdictional hazard mitigation plan.



Recommendations

The following opportunities emerged under each of the sections of the Climate Smart Resiliency Planning Tool assessment:

Section 1- Plan Checklist

- The Town does not have an Evacuation Plan, Disaster Recovery Plan, or Long-term Recovery Plan. Consider encompassing evacuation and recovery plans into the existing Emergency Management Plan.

Section 2- Vulnerability and Risk Assessment

- Washington's municipal employees do not have training in using FEMA's HAZUS-MH (a nationally standardized risk modeling methodology) or other risk-mapping tools. Consider participating in available training through the FEMA Emergency Management Institute.² If it is beyond the Town's capacity, look to Dutchess County staff who can use these resources.
- The Town currently does not use maps to spatially define vulnerabilities to climate risks for vulnerable populations (e.g., children, elderly), buildings, infrastructure, or cultural resources. Consider creating and using such maps.
- Conduct a complete vulnerability assessment detailing the consequences of current and future climate hazards **CSC PE7 Action: Climate Vulnerability Assessment (4-16 pts).** Include how these events will affect internal operations, people, public health, the environment, the economy, and capital and operating costs. Consider using the Department of the State's Asset Inventory Worksheet and Risk Assessment Tool.³
 - It should be noted that the completion of the Town of Washington 2023 Natural Resource Inventory could potentially earn the town up to 8 points (moderate scope) if the report outlines 1-3 climate hazards for the entire geographic area of the community.
- Ensure that vulnerability and risk assessments are shared with all relevant municipal officials and emergency managers.
- Incorporate estimates of future financial losses resulting from natural disasters into plans.

Section 3- Public Outreach and Engagement

*The information below can also be shared on the Town's social media and newsletter, etc. for CSC points. **CSC PE9 Action: Social Media (3 pts.)***

² FEMA Emergency Management Institute: <https://training.fema.gov/emi.aspx>

³ Department of the State's Asset Inventory Worksheet and Risk Assessment Tool: <https://stormrecovery.ny.gov/community-regions/udson-valley-and-westchester>

- Before the threat of a storm, have public information plans in place to provide residents with information, including expected areas of impact, evacuation routes, and locations of pet and severe weather shelters.
- Inform residents about available disaster resources through municipal website links, television, radio, and social media for points toward **CSC PE9 Action: Social Media (3 pts)**.⁴ Resources could include:
 - American Society for the Prevention of Cruelty to Animals (ASPCA) disaster preparedness steps for domesticated animals.⁵
 - FEMA's "Are You Ready" guide.⁶
 - FEMA's Homeowner's Guide to Retrofitting.⁷
 - Provide residents with guidance on developing personal and family evacuation plans or what to include in emergency or evacuation kits (FEMA's Ready.gov checklist).
- Consider developing a public outreach plan focused on climate outreach and engagement for points toward **CSC PE9 Action: Climate Change Education and Engagement (4-8 pts.)**.
 - Take advantage of festivals and other events held either in or near the Town of Washington to provide residents and visitors to the area with information about the Town's plans to become more resilient to climate change. This could be in the form of educational signage or in-person educational programs.
 - Hold a climate change education event at a Town function to inform the public about climate change, its effects on the Town, and efforts that the Town is making to make the community more resilient.
- Create a webpage for the Climate Smart Washington Task Force on the current Town website (or consider developing a new website) for points towards **CSC PE9 Action: Local Climate Action Website (3 pts.)**. The website could focus on:
 - *The efforts and accomplishments of the community to reduce Greenhouse Gas (GHG) emissions. The webpage may include:*
 - A description of the local government's goals and projects related to local climate change mitigation and adaptation. This can include links to local reports and plans, such as GHG inventory reports, climate action plans, vulnerability assessments, and reports on progress toward achieving GHG targets and other goals.
 - Ways residents and businesses in the community can participate in efforts led by the local government to reduce GHG emissions and build community resiliency to climate change.
 - A summary of actions residents and businesses in the community can take to reduce their GHG emissions. The summary could include links to external resources that provide more information and describe the support available for actions related to, for example, energy efficiency,

⁴ This action was identified as a priority action by municipal staff.

⁵ ASPCA's Disaster Preparedness for Domesticated Animals: <https://www.asPCA.org/pet-care/general-pet-care/disaster-preparedness>

⁶ FEMA's "Are You Ready" Guide: <https://www.fema.gov/media-library/assets/documents/7877>

⁷ FEMA's Homeowner's Guide to Retrofitting: <https://www.fema.gov/media-library/assets/documents/480>

renewable energy, and clean transportation options, such as electric vehicles.

- *Information pertaining to storm/emergency preparedness and flood mitigation. Consider making this webpage available in Spanish and English, with culturally sensitive approaches. The webpage may include:*
 - The availability of floodplain information to property owners, businesses, insurance agents, real estate agents, and lenders⁸.
 - Add a link directing residents and businesses to the Dutchess County DER's webpage on storm preparedness⁹.
 - Add a link directing residents to the Dutchess County DER's webpages that provide information on what to include in an at-home emergency kit¹⁰, emergency supplies, and evacuation kit.
 - Provide residents with guidance on the development of personal or family evacuation plans¹¹.
 - Provide residents with information on expected inundation areas, evacuation routes, evacuation bus pick-up locations, and location of severe weather shelters and pet shelters before the threat of a storm.
 - Share the link from the Dutchess County DER's webpages¹² to the ASPCA's disaster preparedness steps for domesticated animals.
 - Share information on the NY-Alert program¹³ and how residents can sign up.
 - Include information on the natural and beneficial functions of floodplains, wetlands, and green infrastructure, and information on flood mitigation.
 - Share information on the new Ready Dutchess app¹⁴ as well as the new vulnerable populations sign-up¹⁵.

Section 4- Integration of Municipal Plans

- When updating the Town Comprehensive Plan, include sustainability elements within its contents for meeting **CSC PE6 Action: Comprehensive Plan with Sustainability Elements (3-21 pts)**, including:
 - Mention and incorporate resilience within the plan's mission, vision, and goals.
 - Reference and incorporate components of other relevant plans with sustainability elements (e.g., Natural Resource Inventory)

⁸ FEMA's Flood Map Service Center: <https://msc.fema.gov/portal/search>

⁹ Dutchess County Department of Emergency Response: <http://www.co.dutchess.ny.us/QuickLinks/17006.htm>

¹⁰ Dutchess County Family Emergency Plan and Supplies: <https://www.dutchessny.gov/Departments/Emergency-Response/Family-Emergency-Plan-and-Supplies.htm>

¹¹ FEMA's evacuation guide: <https://www.ready.gov/evacuation>

¹² Dutchess County Emergency Pet Planning: <https://www.dutchessny.gov/Departments/Emergency-Response/Pet-Planning.htm>

¹³ NY Alert Program: <https://alert.ny.gov/>

¹⁴ Ready Dutchess App: <https://www.dutchessny.gov/Departments/County-Executive/New-Tools-Help-Residents-Prepare-for-Emergencies.htm>

¹⁵ Dutchess County AFN Registry: <https://www.dutchessny.gov/Needs-Registry-Form/Registry-For-Individuals.aspx>

- Explain the support and involvement of emergency managers and public works officials in creating the plan's contents.
- Link recommendations to reducing hazard vulnerability through land-use planning.
- Emphasize non-structural pre-disaster mitigation measures, such as acquiring land prone to damage from climate disasters.
- Include strategies that determine whether to relocate structures that repeatedly experience climate disasters (e.g., flood or wind damage), including identifying an equitable approach for community involvement in decision-making and potential funding sources.
- Cross-reference the County's multijurisdictional hazard mitigation plan.
- Prepare an official source water protection plan considering climate change to meet **CSC PE7 Action: Source Water Protection (6-10 pts.)**.
 - Utilize the framework identified in the NYS Department of Environmental Conservation's "A Framework for Creating a Drinking Water Source Protection Program."¹⁶
 - When drawing up the plan, create a diverse stakeholder group with at least one member familiar with local and regional climate change concerns.
 - Establish goals for protecting drinking water supplies from climate change-related impacts and formulate a vision for resilient water infrastructure.
 - Assess drinking water supplies in Town and potential contamination sources.
 - Consider the projected climate change impacts on those supplies over time, such as the increased frequency and severity of precipitation events that may cause increased pollution from surface runoff from urban and agricultural lands.
 - Identify and create an implementation plan, including achievable timelines, protection and management strategies for the community's drinking water sources, and funding strategies.

Section 5- Disaster Preparedness and Recovery

- Although the county is part of the Storm Ready Community program, the Town of Washington is not an individual Storm Ready community. Consider participating in the National Weather Service Storm Ready Community program¹⁷, which helps communities proactively prepare for extreme weather and natural disasters.
- Encourage vulnerable residents to sign up for the Dutchess County Access & Functional Needs (AFN) Registry¹⁸. Residents who have a physical or mental disability and would need assistance leaving their homes quickly in the event of an emergency are encouraged to sign up so resources can be planned accordingly during an emergency

¹⁶ NYSDEC's A Framework for Creating a Drinking Water Source Protection Program: https://www.dec.ny.gov/docs/water_pdf/dwsp2draftframework.pdf

¹⁷ National Weather Service Storm Ready Community Program: <https://www.weather.gov/StormReady>

¹⁸ Dutchess County AFN Registry: <https://www.dutchessny.gov/Needs-Registry-Form/Registry-For-Individuals.aspx>

event. This information can be shared with local municipalities to integrate into emergency planning.

- Schedule and advertise county-led Citizen Preparedness Training¹⁹.
- Create a Heat Emergency Plan **CSC PE7 Action: Heat Emergency Plan (6 pts.)**. Be sure to designate cooling center locations (e.g., firehouse) where vulnerable populations can go and how the community will respond during a prolonged heat emergency.
- Formally designate cooling centers **CSC PE7 Action: Cooling Centers (1-9 pts.)**. To implement this action:
 - Identify and assess cooling centers.
 - Implement new cooling centers or upgrade existing ones.
 - Promote awareness of cooling centers.
 - Implement additional services to encourage the utilization of cooling centers.
- Create a formal evacuation plan with routes out of known climate hazard areas.
- Create an up-to-date emergency response, short-term recovery plan, and climate hazards response plan. In discussions with Town officials, we learned that an outdated emergency response plan needs to be updated. Create an up-to-date emergency plan that:
 - Clearly defines the roles of municipal officials and emergency responders.
 - Incorporates data and predictions related to natural hazards,
 - Identifies known and potential hazard areas and evacuation routes out of those areas,
 - Provides actions to take during, immediately after, and long-term following a climate disaster.
- Designate and advertise the location, route, and emergency circumstances of storm shelters within the community or establish a memorandum of agreement with a neighboring community to provide constituents shelter in the event of a storm emergency.

Section 6- Hazard Mitigation Implementation

- Continue pursuing Climate Smart Communities Certification.
- Expand the use of county, state, and federal grant programs (when available) to implement mitigation and resiliency projects.
- Consider engaging in wetland restoration and creating riparian buffers. This could be paid through grant money or a state program.

¹⁹ Dutchess County Citizen Preparedness Training: <https://www.dutchessny.gov/Departments/Emergency-Response/Citizen-Preparedness-Training.htm>

Potential Funding Sources

- [DEC Climate Smart Communities Grant Program](#)
- [DEC Grant Applications](#)
- [DEC Hudson River Estuary Program Grants](#)
- [FEMA Hazard Mitigation Grant Program](#)
- [FEMA Building Resilient Infrastructure and Communities Program](#)
- [FEMA Flood Mitigation Assistance Grant Program](#)
- [HUD Community Development Block Grants](#)
- [NYS Department of State Grants \(including Local Waterfront Revitalization Program\)](#)
- [NYS Local Waterfront Revitalization Program \(LWRP\)](#)