

# Town of Poughkeepsie Climate Smart Planning

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

The Climate Smart Resiliency Planning Tool was used to evaluate opportunities for the Town of Poughkeepsie to improve its community's resilience to flooding and climate change. The Planning Tool reviews many long- and short- term aspects of storm and climate change preparedness by reviewing Town and County planning documents, activities and management. Documents were reviewed, and municipal staff members were consulted in the process of completing the assessment. The assessment and recommendations have been shared through discussions at Town Council meetings.

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

Jay Baisley, Town Supervisor

Michael Welti, Director of Municipal Planning

Kristen Taylor, Town Planner

Eric Hollman, Town Planner

Jim Challey, Zoning Board of Appeals, Comprehensive Plan Review Committee

Bill Carlos, Town Board Member, Comprehensive Plan Review Committee

Ann Shershin, Town Board Member, Comprehensive Plan Review Committee

Carl Whitehead, Planning Board Chairman

Tim Sickles, Building Department

Tom Wiacek, Building Inspector, Floodplain Permit Coordinator

Lissett Tucker, Zoning Administrator

Don Beer, Town Engineer

Sean Crimmins, Town Engineer

Marc Pfiefer, Highway Superintendent

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

## Areas of Strength

- Participated in the Lower Wappinger Creek Watershed Community Resilience Building workshop with neighboring communities.
- The Town has an active Conservation Advisory Council and CSC Climate Smart Task Force. Both committees build capacity for pursuing climate resiliency related projects and maintain an active public social media presence on the Town’s website.
  - CSTF is assisting with a Climate Smart Communities Certification Program Certification Assessment.
  - Town CAC is assisting with background research for a Natural Resources Inventory and Open Space Plan.
- The Town has an active Comprehensive Plan Update Committee and is completing a Comprehensive Plan update (**CSC PE6 Action: Comprehensive Plan with Sustainability Elements (3-21 pts). \*Supported by a CSC Grant**)
- The Town has adopted the Climate Smart Communities pledge.
- Great relationship with neighboring municipalities, which leads to beneficial collaborations
  - Tri-Municipal Wastewater Treatment System Upgrades (2013, 2014, and 2015 MIG awards – joint applications among Town of Wappinger, Village of Wappingers Falls and Town of Poughkeepsie)
  - City of Poughkeepsie and Town of Poughkeepsie Water Treatment Plant Upgrade
  - Lower Wappinger Community Boathouse
    - Connects public to local waterways and is a community asset
  - Hudson Seven Drinking Water Collaborative
- The Town is actively engaged in the Wappinger Creek Watershed Intermunicipal Council and the Dutchess County MS4 Committee and could utilize these relationships moving forward to collaborate on and obtain funding for adaptation and mitigation projects.
- Received grants relevant to resiliency planning:
  - Climate Smart Communities Grant for Comprehensive Plan Update
  - Hudson River Greenway Grant
  - GIS Infrastructure Mapping Project
  - \$400,000 grant to remove silt/debris from catch basins (DEC grant, 75% cover)
  - Pace Land Use Law Center Streamlining Land Use Regulations
- Pursuing:
  - Natural Resources Inventory/Open Space Plan
  - Climate Action Planning Institute (CAPI)

## Areas of Opportunity

- The Town is currently working on a Comprehensive Plan update and formed a Comprehensive Plan Review Committee.
  - Consider incorporating insights from the CRB workshop and CSRP tool process.
- The Town has an active website that can be utilized to share more information.
- Flooding and drinking water protection are issues of concern in specific areas.
- Trees/invasive species is a concern, and there is interest in completing an Open Space Plan/Natural Resources Conservation Plan with support from the Town CAC.
- Many of the Town's housing stock is older. The Town is conducting an analysis of housing stock through comp. plan update. Consider spearheading an initiative to engage residents in weather proofing/winterizing and conducting energy audits of their homes to improve energy efficiency and resiliency to hazardous weather events.
  - Suggestion to partner with NYSEERDA's Community Energy Engagement Program.
- The Town is a good candidate for the Centers and Greenspaces Greenway Guide concept and is a member of the Greenway Connections Compact.
- The Town is a registered Climate Smart Community. It can leverage completion of this Climate Smart Resiliency Planning Tool for points toward Climate Smart Communities certification. **CSC PE7 Action: Climate Smart Resiliency Planning (6 pts.)**. For more information on the Climate Smart Communities Certification Program, visit the Climate Smart Communities portal: <https://climatesmart.ny.gov/>

## Recommendations

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

### Section 2- Vulnerability and Risk Assessment

- Consider training and developing staff capacity for using vulnerability assessment (like FEMA's HAZUS-MH) and risk-mapping tools (like flood insurance rate maps and cumulative risk assessments). If it is beyond the Town's capacity, look to Dutchess County staff who have the capacity to use these resources.
- In the 2021 update of the County Hazard Mitigation plan, expand to include more climate adaptation strategies in the list of mitigation strategies. This could also potentially be included in a vulnerability assessment: **CSC PE7 Action: Climate Adaptation Strategies (2-8 pts.)**.
  - Identify and categorize by type, administration, condition, timing and geography
  - Evaluate and prioritize adaptation strategies using metrics, such as strategy cost, feasibility, timing of implementation, efficacy and co-benefits
  - Consider linking these strategies to capital budget cycles

- In the next Hazard Mitigation Plan update, consider updating maps to show populations (especially vulnerable populations), building stock, and natural and cultural resources in relation to identified hazards. The Town could utilize County resources for this.
- Continue to track riverine repetitive loss properties with the National Flood Insurance Program<sup>1</sup> and notifying emergency managers and public works officials of the location of riverine repetitive loss properties.
- Consider incorporating estimates of future financial losses resulting from riverine and coastal flooding into next Haz. Mit. plan and/or report updates.
- Complete a build-out analysis using existing zoning ordinances as part of the Comprehensive Plan update and consider comparing it to the extent of storm surge scenarios and projected sea-level rise scenarios.
- Consider formally adopting the projections of sea-level rise from the State Sea Level Rise Task Force report<sup>2</sup>

### Section 3- Public Outreach and Engagement

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

- Involve the public in the identification of historic storm effects, such as storm-surge elevations, flood-prone streets, overwash, or property loss through participatory mapping, public surveys, and stakeholder meetings. In one of the stakeholder meetings, allow the public to identify an overall acceptable level of natural-hazard risk. This could occur through the Comprehensive Plan Update surveys, if decided.
- Provide the public with information on the natural and beneficial functions of floodplains, wetlands and green infrastructure.
  - This could be incorporated into the Comprehensive Plan update and be an initiative that the CAC assists with.
- Create a webpage on the Town's website that is dedicated to storm/emergency preparedness and flood mitigation.
  - Publicize the availability of floodplain information to property owners, businesses, insurance agents, real estate agents, and lenders
  - Add a link directing residents and businesses to the Dutchess County DER's webpage on storm-preparedness<sup>3</sup> and webpages<sup>4</sup> that provide information on what to include in an at-home emergency kit, emergency supplies, and evacuation kit (FEMA's Ready.gov checklist).
  - Provide residents with information on expected inundation areas, evacuation routes, and evacuation bus pick-up locations, location of severe weather shelters

<sup>1</sup> <https://www.fema.gov/national-flood-insurance-program>

<sup>2</sup> [http://www.dec.ny.gov/docs/administration\\_pdf/slrffinalrep.pdf](http://www.dec.ny.gov/docs/administration_pdf/slrffinalrep.pdf)

<sup>3</sup> <http://www.co.dutchess.ny.us/QuickLinks/17006.htm>

<sup>4</sup> <http://www.co.dutchess.ny.us/QuickLinks/17006.htm>

and pet shelters prior to the threat of a storm **CSC PE7 Action: Early Warning Systems and Evacuation Plans (under review<sup>5</sup>)**.

- Share the link from the Dutchess County DER's webpages<sup>6</sup> to the ASPCA's disaster preparedness steps for domesticated animals
- Share FEMA suggested means<sup>7</sup> to protect homes against storm and wind damage with property owners in the community
- Publicize the availability of floodplain information to property owners, residents and businesses, including guidelines to retrofit existing development for flood and wind risks.
  - Inform residents of the NY-Alert program<sup>8</sup> and how they can sign up
- Consider developing a public outreach plan focused on climate outreach and engagement comprised of the elements above: **CSC PE9 Action: Climate Change Education and Engagement (4-8 pts.)**.
- Consider completing a municipal flood guide to provide the public with emergency preparedness resources, community assets and evacuation information.
- Consider employing multilingual and culturally sensitive approaches while providing residents with essential information

#### Section 4- Integration of Municipal Plans

- Engage the Comprehensive Plan Review Committee to consider the following in the 2019 Comprehensive Plan update: **CSC PE6 Action: Comprehensive Plan with Sustainability Elements (3-21 pts)**
  - Clearly identify climate resilience within the mission, vision, or goals and address climate hazards specifically, referencing the Hazard Mitigation Plan (2016). This could be completed through a Climate Resilience Vision. **CSC PE7 Action: Climate Resilience Vision (3 pts)**.
  - Explain the support and involvement of emergency managers, floodplain managers, coastal managers and public works officials
  - Go beyond including citizens and public officials in the process to include civic organizations and businesses as well.
  - Identify potential coastal-hazard effects on infrastructure, land uses, housing and community facilities
  - Include recommendations to reduce hazard vulnerability through land-use planning
  - Encourage using green infrastructure techniques to help prevent flooding

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<sup>5</sup> Definition of "Under Review": These actions are currently being revised by the Climate Smart Communities interagency team and will be uploaded to the portal within the next few weeks.

<sup>6</sup> <http://www.co.dutchess.ny.us/QuickLinks/17006.htm>

<sup>7</sup> <https://www.ready.gov/severe-weather>

<sup>8</sup> <https://alert.ny.gov/>

- Emphasize non-structural pre-disaster mitigation measures such as acquiring flood-prone lands and adopting No Adverse Impact flood plain regulations
- Discuss strategies to determine whether to relocate structures that have been repeatedly flooded, including identifying an equitable approach for community involvement in relocation decisions and potential funding sources
- When planning for development along the river's edge, consider planning development that will help connect people to the river and accommodate water during floods
- Plan for costs associated with the follow-up inspection and enforcement of land development regulations and building codes
- Clearly identify safer growth areas in the community, adopt policies to encourage smart growth development in these areas, change land-use codes and regulations to allow for this type of development, and use capital improvement plans and budgets to support development in these areas
- Strive to reduce vulnerability in coastal zones through non-structural measures
- As much as possible, zone floodways and other frequently flooded areas for open space or recreation, and make sure zoned land uses are compatible with coastal hazards
- Consider updating/strengthening local ordinance to protect wetlands or eroding cliffs from development or disturbance.
- Continue pursuing funding for creating an NRI and Open Space Plan. **CSC PE6 Action: Natural Resources Inventory (8-10 pts.).**
  - Utilize the Town's Hudsonia Significant Habitats Report (2008) as content.
  - Consider incorporating principles of a Community Preservation Fund in conjunction with a Community Preservation Fund
- The next time the Hazard Mitigation Plan is updated (2021), consider:
  - Including projects that could be included in pre-disaster grant applications and expediting the application process for post-disaster Hazard Mitigation Grant Program acquisitions
  - Including cost and effectiveness details for past mitigation efforts
  - Providing a general explanation of the environmental, social and economic consequences of failing to address natural hazards
  - Consider updating the hazard map to include storm surge and erosion rates
  - Including inland riverine erosion, sea-level rise enhanced storm surges, landslides, tropical storms, hurricanes, and Nor'easters as a hazards
  - Addressing transportation and other needs of particularly vulnerable populations, such as homeless, low income, elderly, special needs and disabled
  - Corresponding mitigation goals with measurable mitigation objectives
  - Including a process for intergovernmental coordination for mitigating hazards
  - Continuing to consult with neighboring governments and Dutchess County EMO to coordinate disaster responses and hazard mitigation strategies

- Consider creating a floodplain management plan with the help of a licensed professional planner and a certified floodplain manager, and incorporate it into the Comprehensive Plan, Hazard Mitigation Plan, and Stormwater Management Plan.
- Consider updating the Town’s Flood Damage Prevention ordinance to go ‘above and beyond’ the minimum measures required by FEMA and the State. This could include: regulations requiring elevation of three or more feet (instead of the standard two) above base flood elevation for new construction standards; prohibiting critical facilities in the floodplain; cumulative substantial improvement; and more.
- The next time the Stormwater Management Plan is updated, consider:
  - Including a certified floodplain manager in the process
  - Identifying constraints if the municipality reaches impervious coverage levels allowed by land-use and zoning designations
  - Applying the regulations to areas beyond those that are regulated by federal or state storm water regulations
  - Expanding the stormwater utility funding source for stormwater management activities outside of the Drainage Districts and Stormwater Maintenance Districts to include the entire town.
  - Including a minimum set timeframe for updating the plan.
- Consider updating the Town’s Local Waterfront Revitalization Plan
  - Identify the threat of storms and erosion, sea level rise and other climate related hazards, and the vulnerability of wildlife and habitat to coastal hazards

### Section 5- Disaster Preparedness and Recovery

- Consider becoming a Storm Ready Community
- Consider developing some type of early flood-warning system.
- Consider training emergency responders in real-time ocean and estuarine observing systems and stream gauging information
- Relay weather related threats to the public in at least two forms of communication
- In the next update of the Emergency Preparedness Plan, consider:
  - Updating a list of contacts for operators of municipal facilities and indicating the required update frequency
  - Providing steps for emergency protective measures
  - Including the best available projections concerning the frequency and severity of extreme storm events
  - Including coordination and communication methods among critical stakeholders such as community-based organizations, local businesses, local health departments, utilities and local government leaders
  - Defining procedures to conduct substantial damage assessments after a disaster
- Maintain a Special Needs Registry and vulnerable populations database

## Section 6- Hazard Mitigation Implementation

- Continue pursuing Climate Smart Community Certification
- Consider developing a Climate Action Plan: **CSC PE2 Action Government Operations Climate Action Plan (12-16 pts.)** This will be especially relevant if the CAPI is funded.
- Consider using the Hazard Mitigation Plan to propose retrofitting public buildings, critical facilities and other infrastructure to withstand flood damage.
- Have building and permitting officials completed training on:
  - Retrofitting flood-prone residential buildings
  - Post-flood stream intervention training
- Consider expanding utilized tools for managing development in hazard-prone areas to include techniques such as transfer or purchase of development rights, conservation overlay districts, or zoning for open or recreational space.
- Consider establishing special area ordinances for habitat preservation and strengthening the Town's Wetlands ordinance. **CSC PE7.17 Conserve Wetlands and Forests to Manage Stormwater, Recharge Groundwater and Mitigate Flooding (2pts)**

## Potential Funding Sources

This section will list any applicable local, state, and federal funding available.

- NYSDEC Climate Smart Communities Grant Program: <https://www.dec.ny.gov/energy/109181.html>
- NYSDEC Grant Applications: <https://www.dec.ny.gov/pubs/grants.html>
- NYSDEC Hudson River Estuary Program Grants: <https://www.dec.ny.gov/lands/5091.html>
- FEMA Hazard Mitigation Grant Program: <https://www.fema.gov/hazard-mitigation-grant-program>
- FEMA Pre-disaster Mitigation Grant Program: <https://www.fema.gov/pre-disaster-mitigation-grant-program>
- FEMA Flood Mitigation Assistance Grant Program: <https://www.fema.gov/flood-mitigation-assistance-grant-program>
- HUD Community Development Block Grants: [https://www.hud.gov/program\\_offices/comm\\_planning/communitydevelopment/programs](https://www.hud.gov/program_offices/comm_planning/communitydevelopment/programs)
- NYS Department of State Grants (including Local Waterfront Revitalization Program): <https://www.dos.ny.gov/funding/>
- Hudson Valley Greenway Community Grants: <https://hudsongreenway.ny.gov/grants-funding>