

Town of Pleasant Valley 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 Pleasant Valley 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 a presentation at a Town Board meeting.

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

Mark Figliozzi, Town Supervisor
Rebecca Seaman, Planning Board Chair
Meta Plotnik, Conservation Advisory Council Chair
John Dunn, Zoning Board Chair
Debby Glynn, Conservation Advisory Council Member

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

Areas of Strength

- Pleasant Valley's "Wetland, Waterbody, and Watercourse Protection Ordinance"
- The Town's municipal plans are focused on preserving the rural character of Pleasant Valley by protecting open space and farmland. The Master Plan and Zoning encourage walkable development in central zones and hamlets. The Town is also protective of its natural resources: any new, proposed development must undergo a resource analysis

Areas of Opportunity

- Pleasant Valley has a small, but active Conservation Advisory Council and other municipal staff, which can help with climate resiliency in the community.
- The Town is working on updating its zoning code right now to develop mixed-use districts. This offers the Town a chance to incorporate climate resiliency into these updates wherever applicable.
- The Pleasant Valley Town Center Feasibility Analysis identifies ways forward for developing the Town's central hamlet. The recommendations included in the feasibility analysis incorporate climate resiliency measures like green infrastructure and low impact development principles. The Town is also looking into a water system to encourage development in the central hamlet.
- The Pleasant Valley Recreation Master Plan mentions climate smart ways to improve the Town's parks, including moving recreational infrastructure out of the floodplain, leaving lands along creeks and waterbodies as open space or recreational areas, and improving and increasing access to the Wappinger Creek. Some of these recommendations are already in the works, including development of a new community park outside of the floodplain with amenities, like a pavilion and amphitheater.
- The Pleasant Valley Emergency Preparedness Action Plan has valuable information on emergency response and protocol. This plan could be expanded on to include some of the recommendations below to make it even more comprehensive.
- Pleasant Valley has engaged with the community in the past through surveys and stakeholder meetings. This could be expanded on as detailed in Section 3.
- The Town of Pleasant Valley 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 and the actions listed in this document, visit the Climate Smart Communities portal: <https://climatesmart.ny.gov/>.
- Pleasant Valley actively participates in the Wappinger Creek Intermunicipal Council, which provides opportunities for collaborative watershed-wide management, including efforts to address flooding, erosion, sedimentation and other hazards across municipal boundaries. The Village of Wappingers Falls received funding through the NYS Department of State Local Waterfront Revitalization Program¹ to complete a nine element watershed plan for the Wappinger Creek watershed, which encompasses the Town of Pleasant Valley.
- The Town received a Climate Smart Communities grant to relocate the Town Hall outside of the Wappinger Creek floodplain. This initiative could provide momentum for encouraging relocation of other flood-prone buildings in the town.

¹ <https://www.dos.ny.gov/opd/programs/lwrp.html>

Recommendations

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

Section 2- Vulnerability and Risk Assessment

- Conduct a full vulnerability assessment detailing the magnitude of consequences associated with current and future climate hazards. Include how these events will affect internal operations, people, public health, the environment, economy, and capital and operating costs. Consider utilizing the Department of State's Asset Inventory Worksheet and Risk Assessment Tool². Hudson Valley communities can work with The Nature Conservancy through their Community Resilience Building process³. **CSC PE7 Action: Climate Vulnerability Assessment (4-16 pts.).**
- Train and develop 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 Pleasant Valley's capacity, look to Dutchess County staff who have the capacity to use these resources.
- Expand beyond mitigation strategies to include climate adaptation strategies: **CSC PE7 Action: Climate Adaptation Strategies (2-8 pts.).**
 - Identify and categorize them 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
- Consider creating maps that show populations (especially vulnerable populations), building stock, and natural and cultural resources in relation to identified hazards. The Town could work with Dutchess County to complete these maps.
- Incorporate estimates of future financial losses resulting from flooding into plans

Section 3- Public Outreach and Engagement

- Add a link to the Town's website directing floodplain residents and businesses to Dutchess County's webpage on storm-preparedness⁴, including protecting homes from storm and wind damage. Additional outreach, including sharing FEMA storm-preparedness resources, can be done via television, radio, social media pages, etc. **CSC PE9 Action: Social Media (3 pts.).**
- Add a link to the Town website directing residents to Dutchess County's webpages⁵ on developing personal and family evacuation plans, at-home emergency kits, emergency supplies, evacuation kits (FEMA's Ready.gov checklist), and ASPCA's disaster

² <https://stormrecovery.ny.gov/community-regions/hudson-valley-and-westchester>

³ www.communityresiliencebuilding.com/crbworkshopguide

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

⁵ <http://www.co.dutchess.ny.us/QuickLinks/17006.htm>

preparedness steps for domesticated animals. Other public outreach on these topics could be conducted through social media pages, brochures, community newsletters, etc.

CSC PE9 Action: Social Media (3 pts.).

- Develop methods for providing residents with information on expected inundation areas and evacuation procedures and routes prior to the threat of a storm. **CSC PE7 Action: Early Warning Systems and Evacuation Plans (under review⁶).**
- 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.).**

Section 4- Integration of Municipal Plans

- When next updating the Town's comprehensive plan: **CSC PE6 Action: Comprehensive Plan with Sustainability Elements (3-21 pts.).**
 - Reference and incorporate components of any relevant plans (e.g. Open Space, Recreation Master Plan, etc.)
 - Explain the support and involvement of emergency managers and public works officials
 - Explicitly mention and incorporate resilience within the plan's mission, vision and goals
 - Link recommendations to reducing hazard vulnerability through land-use planning
 - Emphasize non-structural pre-disaster mitigation measures, such as acquiring flood-prone lands
 - Consider including strategies that determine whether to relocate structures that repeatedly flood, including identifying an equitable approach for community involvement in decision-making and potential funding sources
- Review and incorporate elements from the state open space plan into the next update of the Town Open Space Plan where appropriate
- Periodically update the community on available resources through Dutchess County and the local fire department on water conservation measures for droughts. **CSC PE7 Action: Water Conservation and Reuse (under review).**
- Address transportation and other needs of vulnerable populations, like homeless, low income, elderly, special needs and disabled populations, in all relevant plans
- Consider creating a plan combining elements of a capital improvements plan and economic development plan. **CSC PE8 Action: Green Economic Development Plans (4 pts.).** The plan could:
 - Include a licensed professional planner and engineer in the planning process

⁶ 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.

- Consider the risk of flooding when upgrading existing municipal infrastructure and on proposed infrastructure projects
- Incorporate projections of flooding into risk assessments over the expected service life of municipal infrastructure
- Incorporate existing plans, studies, reports and technical information
- Identify economic vulnerabilities due to hazards
- Incorporate climate change effects into its assessment of economic vulnerabilities

Section 5- Disaster Preparedness and Recovery

- Consider becoming a Storm Ready Community
- Consider developing some type of early flood-warning system. **CSC PE7 Action: Early Warning Systems and Evacuation Plans (under review).**
- Regularly update the list of contacts for operators of municipal facilities in the Pleasant Valley Emergency Preparedness Action Plan
- Include steps for emergency protective measures (sandbagging, erecting warning devices, search teams) in the Pleasant Valley Emergency Preparedness Action Plan
- Ensure that all storm shelters are located outside of flood-hazard areas
- Inform residents of the NY-Alert program and Dutchess Delivery and how they can sign up to receive updates on road closures, emergency events, etc.
- Expand beyond warming/cooling/charging services already offered by establishing a cooling-center program that considers potential problems, such as transportation obstacles, effects of power outages or flooding, and other needs of vulnerable populations/communities. **PE7 Action: Cooling Centers (under review).**
- Consider developing a local continuity of operations plan. This plan could include:
 - Guidance on post-disaster waste management and debris removal
 - Whether or not machinery for debris removal is located outside of flood hazard areas
 - If routes to waste-disposal facilities are passable in the event of a flood
 - Whether or not temporary waste-disposal staging areas are identified in the event of a disaster
- Consider developing a long-term recovery plan. This plan could:
 - Identify redevelopment opportunities outside of flood-hazard areas
 - Advocate the use of advisory flood maps to define post-disaster redevelopment building elevations
 - Utilize risk and vulnerability mapping to determine the location of future development
 - Identify the lines of coordination in transitioning from short-term to long-term recovery

- Include an organizational framework that facilitates the effective coordination and use of state, federal, and NGO resources in a manner that provides maximum benefit for the disaster area
- Identify roles and functions of elected and appointed officials, state and federal agencies, and NGOs in relation to long-term recovery
- Include provisions to reduce greenhouse gas emissions from reconstructed areas through improved energy efficiency, use of renewable sources of energy, and application of smart-growth principles
- Incorporate and encourage using green infrastructure techniques that can help prevent flooding in all relevant plans and development projects. **CSC PE7 Action: Green Infrastructure for Stormwater Management (under review)**. Consider encouraging developers and agricultural and other landowners to implement pre-disaster mitigation measures, including:
 - Installing ponds or swales to capture stormwater
 - Planting vegetation that can tolerate inundation
 - Using land management practices to improve the capability of the soil to retain water

Section 6- Hazard Mitigation Implementation

- Officially submit the paperwork for the Climate Smart Communities pledge and consider eventually becoming a certified Climate Smart Community
- Consider developing a Climate Action Plan. **CSC PE2 Action: Government Operations Climate Action Plan (12-16 pts.) or Community Climate Action Plan (16pts.)**.
- Consider updating municipal building codes to exceed the state’s 2-foot freeboard above base flood elevation requirement. **CSC PE7 Action: Local Freeboard Requirement (under review)**.
- Have community officials complete post-flood stream intervention training. For more information on this training, including upcoming scheduled trainings, visit the DEC’s webpage.⁷
- Support land-acquisition programs to purchase land-conservation easements in hazard-prone areas. **CSC PE7 Action: Restoration of Floodplains and Riparian Buffers (2 pts.)**.
- Consider engaging in wetland or shoreline restoration, including controlling invasive plant species, of the Wappinger Creek and other waterbodies. **CSC PE7 Action: Restoration of Floodplains and Riparian Buffers (1-10 pts.) or PE7 Action: Nature-based Shoreline Protection (under review)**.

Additional Recommendations

- Ensure all plans have a recommended update frequency, even if it is just a goal for when the plan should be updated or reviewed and not an official, mandated update frequency

⁷ <https://www.dec.ny.gov/lands/86450.html>

Potential Funding Sources

DEC Climate Smart Communities Grant Program: <https://www.dec.ny.gov/energy/109181.html>

DEC Grant Applications: <https://www.dec.ny.gov/pubs/grants.html>

DEC 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

NYS Department of State Grants (including Local Waterfront Revitalization Program):

<https://www.dos.ny.gov/funding/>