



Ulster County 2021 Climate Smart Communities Recertification Documentation

PE 7 Action: Evaluate Policies for Climate Resilience

Background: Ulster County Department of the Environment facilitated completion of the Climate Smart Resiliency Planning self-assessment, with the focus being the evaluation of Ulster County plans and policies for climate resilience, as well as for cross referencing and consistency across plans. Relevant stakeholders were engaged through a series of targeted meetings with relevant departments and County staff, as well as presentations of the findings, where appropriate.

The completed assessment and recommendations highlight areas of opportunity for Ulster County to evaluate local and regional vulnerability to climate hazards and to integrate climate adaptation and resiliency into its municipal operations and planning. The project was a deliverable for the Ulster County Climate Change Adaptation Planning Project (i.e. *Climate Resilience Plan*), funded in part by the New York State Department of Environmental Conservation Climate Smart Communities (CSC) grant program.

Recommendations align with the CSC Program wherever applicable, facilitating the County's use of the CSC Program framework as it continues to demonstrate leadership in this state-wide program.

Documentation:

- Ulster County Climate Smart Resiliency Planning: Gap Analysis Report (2020)
- Ulster County Climate Smart Resiliency Planning Tool

Ulster County Climate Smart Resiliency Planning: Gap Analysis

Fall 2020

Prepared by Ulster County Department of the Environment

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BACKGROUND

The *Climate Smart Resiliency Planning Tool* (CSRPT) was developed as a non-regulatory tool to help local decision makers identify planning and adaptation opportunities to reduce their community's vulnerability to climate hazards, such as extreme precipitation, flooding, storm surge, sea level rise, extreme heat, heat waves, and drought. The tool is intended to initiate a facilitated discussion among local decision makers with the objective of identifying opportunities to improve local planning through incorporation of climate change considerations.

The self-assessment tool highlights the importance of local plan integration and consistency with municipal building codes and ordinances. By completing this self-assessment, local leaders can identify means to improve their resilience through existing planning, outreach, hazard mitigation, and response mechanisms.¹

Key County stakeholders engaged in the Climate Smart Resiliency Planning process:

- Office of the County Executive
- Department of the Environment
- Division of Emergency Management
- Planning Department
- Office of Economic Development
- Department of Health
- Climate Smart Committee & Climate Smart Communities Municipal Task Force

Ulster County Department of the Environment facilitated completion of the self-assessment using the CSRPT, with the focus being the evaluation of Ulster County plans and policies for climate resilience, as well as for cross referencing and consistency across plans. The stakeholders referenced above were engaged through a series of targeted meetings with relevant departments and County staff, as well as presentations of the findings, where appropriate. The completed assessment and recommendations highlight areas of opportunity for Ulster County to evaluate local and regional vulnerability to climate hazards and to integrate climate adaptation and resiliency into its municipal operations and planning. This project is a deliverable for the Ulster County Climate Change Adaptation Planning Project (i.e. *Climate Resilience Plan*), funded in part by the New York State Department of Environmental Conservation Climate Smart Communities (CSC) grant program.

Recommendations align with the CSC Program wherever applicable, facilitating the County's use of the CSC Program framework as it continues to demonstrate leadership in this state-wide program.

There are over 120 CSC actions available for municipalities under the CSC Program, with detailed information, resources, and examples available for each. The actions are organized under the following Pledge Elements:

CSC Pledge Elements

1. Build a climate-smart community.

¹ [New York State Climate Smart Communities Climate Smart Resiliency Planning: A Planning Evaluation Tool for New York State Communities Version 2.0](#)

2. Inventory emissions, set goals, and plan for climate action.
3. Decrease energy use.
4. Shift to clean, renewable energy.
5. Use climate-smart materials management
6. Implement climate-smart land use.
7. Enhance Community Resilience to Climate Change.
8. Support a green innovation economy.
9. Inform and inspire the public.
10. Engage in an evolving process of climate action.
11. Innovation
12. Performance

Ulster County Climate Smart Communities Certification

Ulster County was the first County to achieve Silver-level CSC certification in 2016, a notable achievement, and the CSC Program² serves as a framework for the County's climate action initiatives. The County continues to work towards implementing more of the identified actions in the CSC Program and has used that program in part to guide climate mitigation actions identified and prioritized in the roadmap section of the County's *Climate Action Plan*.

The *Climate Resilience Plan*, which is currently under development, will focus on climate adaptation strategies and will incorporate applicable recommendations that result from the CSRPT. The County is also currently compiling documentation to apply for Silver-level CSC recertification in 2021, and the completed CSRPT and this accompanying Gap Analysis will be included as the CSC *PE7 Action: Evaluate Policies for Climate Resilience* in the County's recertification application. The County Department of the Environment maintains a webpage which provides up to date information on both the County's and local municipality's CSC Program participation, certification documentation, and other resources (<https://ulstercountyny.gov/environment/climate-smart>).

PROCESS

Plans Review

The following Ulster County Plans were reviewed as part of this project, and detailed information and references are compiled in the accompanying *UlsterCounty-CSRPTool_V2*:

- Ulster County Comprehensive Plan:
 - *Open Space Plan* (2007)
 - *Ulster Tomorrow* (2007) & *Ulster 2040 – Building a People Centered Economy* (2020)
 - *2040 & 2045 Long Range Transportation Plans* (2015, 2020)
 - *Housing Strategies Plan* (2005)
- *Community Design Manual* (2017) *not considered part of the County's Comprehensive Plan, but relevant to include in this analysis

² <https://climatesmart.ny.gov/about/background/>

- *Stormwater Management Program Plan* (2013)
- *Multi-Jurisdictional Hazard Mitigation Plan* (2017)
- *Comprehensive Emergency Management Plan* (2014) & *Emergency Evacuation / Detour Route Annex* (2005)
- *Capital Improvement Program* (2019-2024)
- *Government Operations Climate Action Plan* (2019)
- *Community Health Assessment and Community Health Improvement Plan* (2019-2021)
- Ulster County Parcel Viewer
- *Climate Resilience Plan* (planned)

Self-Assessment

The following process was conducted to complete the Climate Smart Resiliency Planning Tool:

- The CSRPT self-assessment was completed (*UlsterCounty-CSRPTool_V2*)
 - The tool includes six tabs: *Plan Checklist, Vulnerability & Risk Assessment, Public Outreach, Plan Integration, Preparedness & Recovery, Hazard Mitigation*
 - All Plans listed in the *Checklist* tab were reviewed against both general and Plan-specific questions across the five remaining tabs
- The “*Ulster-MATRIX*” spreadsheet was developed (included as a tab in the *UlsterCounty-CSRPTool_V2*)
 - Integrates key self-assessment questions from throughout the CSRPT
 - Incorporates Climate Smart Communities Program actions relevant to various County Plans
- Gap Analysis: The specific CSRPT self-assessment questions and the *Ulster-Matrix* findings relevant to each Plan were incorporated into this Gap Analysis report

GENERAL FINDINGS

Strengths

- Comprehensive Plan:
 - The four documents which collectively serve as the County’s Comprehensive Plan provide a flexible, more readily adaptable set of plans over a traditional, stand-alone Comprehensive Plan
 - Plan updates: Recent Plan updates include the five-year update to the *2045 Long Range Transportation Plan* and *Ulster 2040 – Building a People Centered Economy*, a new economic development strategy replacing *Ulster Tomorrow* (2007). These updated Plans serve to better align with other County plans and lay the groundwork for integration of climate change and climate resiliency planning, as well as relevant Climate Smart Communities Program actions, where applicable
- Community Design Manual (2017):
 - The Manual is not an element of the comprehensive plan, however it contains some of the policies of the Ulster County Planning Board and is, more importantly, an open-source tool for communities that focuses on place types and the integration of overarching policies at the land use/area and site design level

- Multi-Jurisdictional Hazard Mitigation Plan (2017):
 - FEMA-approved
 - The County and 16 of its 24 jurisdictions opted to participate
 - This updated plan meets the requirements for the CSC PE7 Action: Hazard Mitigation Plan, and will be included in the County's 2021 silver-level CSC recertification application
 - The new Climate Change section and various Hazard Profiles included in the Risk Assessment lay the groundwork for integration of climate change and climate resiliency planning in plan update; acknowledges that "climate change is not a hazard in and of itself; rather, it is a condition that will exacerbate the impacts of hazards. Climate change is expected to increase the frequency and intensity of natural hazards..." (Section 3C – Risk Assessment, PDF pp. 188-192)
 - Update planned for 2022-23
- Government Operation Climate Action Plan (2019):
 - This new, 2019 Plan includes an update to the County's baseline greenhouse gas (GHG) inventory from 2012
 - The Plan meets the requirements for the CSC PE2 Actions: Government Operations GHG Inventory and Government Operations Climate Action Plan, and will be included in the County's 2021 silver-level CSC recertification application
- Climate Resilience Plan (planned):
 - The County is in the early stages of developing a *Climate Resilience Plan* (referred to above as the "Climate Change Adaptation Planning Project").
 - The Climate Smart Resiliency Planning Tool and this accompanying Gap Analysis are first steps towards this project, which will also include completion of a climate vulnerability assessment and development of climate adaptation strategies.
 - The Plan and climate adaptation strategies can be integrated into future County plan updates, where applicable
 - The Plan will meet the requirements for the CSC PE7 Actions: Evaluate Policies for Climate Resilience, Climate Vulnerability Assessment, and Climate Adaptation Plan, and the first two actions are planned for inclusion in the County's 2021 silver-level CSC recertification application

Opportunities

- For updates to all County plans, recommendations include:
 - Enhance integration/cross-referencing among the Plans
 - Reference the Ulster County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) and Comprehensive Emergency Management Plan (CEMP); also incorporate other studies, plans, and reports such as the Climate Action Plan (CAP), Climate Resilience Plan, Capital Improvement Program, and others, where applicable
 - Planning process documentation should describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information, (e.g., the multi-hazard mitigation plan, capital improvement program, etc.)
 - Explain the support and involvement of emergency managers, floodplain managers, coastal managers and public works officials, where applicable
 - Identify resilience within all Plan's mission, vision, or goals & address climate hazards, where applicable
 - Include estimates of future financial losses that may result from riverine flooding, coastal flooding, and sea-level rise in municipal policies and plans, where applicable

- Integrate and prioritize relevant actions under the CSC Program, where applicable
 - For the four Plans which collectively function as the Comprehensive Plan, this specifically includes the CSC PE6 Action: [Comprehensive Plan with Sustainability Elements](#) (none of the four individual Plans will likely count toward this CSC action as they are structured currently)
 - Recommendation for Plan-specific CSC actions to consider are included in this report
- Other recommendations:
 - Continue to facilitate and support buyout programs and land-acquisition programs to purchase land-conservation easements in hazard-prone (flood) areas
 - Trainings: Continue to support training for municipal planners and emergency managers in the use of the following risk-mapping tools (including Ashokan Watershed Stream Management Program staff and the County Division of Emergency Management and Departments of the Environment and Planning, among others), including for:
 - Flood insurance rate maps
 - Sea, Lake and Overland Surges from hurricanes
 - Shoreline change analysis
 - Cumulative risk assessments

DETAILED PLAN ANALYSES & SUMMARY RECOMMENDATIONS

The following section provides a detailed analysis of areas of both strength and opportunity for each County Plan included in the CSRPT self-assessment. All CSRPT self-assessment questions and the *Ulster-Matrix* summary findings may be found in the accompanying *UlsterCounty-CSRPTool_V2*.

Ulster County Comprehensive Plan

The Ulster County Comprehensive Plan webpage (<https://ulstercountyny.gov/planning/land-use>) provides an overview of the individual plans which function as elements of the Comprehensive Plan.

Open Space Plan (2007)

- Open Space Plan webpage: <https://ulstercountyny.gov/planning/open-space-plan>
- Opportunities:
 - Due for Update
 - Plan update considerations:
 - Update in coordination with the state open space plan
 - Enhance integration/cross-referencing among the Plans; and, as appropriate, reference the MJHMP and CEMP & incorporate other studies, plans, and reports such as the Climate Action Plan, Climate Resilience Plan, Capital Improvement Plan, etc.
 - Use maps to spatially define vulnerabilities in relationship to risks (to populations, buildings, critical infrastructure, natural and cultural resources, etc.), where applicable
 - Identify climate resilience within mission, vision, or goals & address climate hazards
 - Integrate future Climate Resilience Plan & climate adaptation strategies
 - Make recommendations to reduce hazard vulnerability through land-use planning

- Identify floodplain management as a priority
- Where applicable, use (or encourage) land-acquisition programs to purchase land-conservation easements in hazard-prone areas
- Integrate and prioritize relevant actions under the CSC Program, which may include:
 - PE 6 Action: Comprehensive Plan with Sustainability Elements:
 - Support alternative modes of transportation
 - Promote smart growth principles in land-use policies
 - Promote a healthy and safe community
 - Foster equity
 - Foster the efficient use of natural resources (e.g. water conservation)
 - Promote the development of (or the conservation of) local food systems
 - Protect drinking water sources from pollution
 - Promote adaptation to climate change (including strategies related to land use and public education and engagement)
 - And others
 - Other CSC Actions, where appropriate, which may include:
 - PE 6 Action: Natural Resources Inventory (*must be completed within last 10 years to count towards this action)
 - PE 7 Action: Conservation of Natural Habitats (entails conservation of priority natural areas identified in OSP or other analysis or plan)
 - PE 7 Action: Source Water Protection Program
 - Innovation: Innovative Approaches to Existing CSC Actions: Potential to include new NRI maps as layers in Parcel Viewer, for example (see City of Poughkeepsie: <https://arcg.is/0Xfaa>)

Ulster 2040 – Building a People Centered Economy (2020)

- Ulster 2040 hyperlink:
https://ulstercountyny.gov/sites/default/files/Ulster2040_FinalReport_v1.0.pdf
- Strengths
 - This new report was completed in September 2020
 - “emphasizes a rapid-prototyping and design-thinking approach”
 - Four “Target Clusters” identified as economic development priorities
 - Agriculture, Food & Beverage
 - Makers & Creators
 - Clean Energy & Environment
 - Health, Wellness & Care
- Opportunities
 - Plan update considerations:
 - Enhance integration/cross-referencing among the Plans; and, as appropriate, reference the MJHMP and CEMP & incorporate other studies, plans, and reports such as the Climate Action Plan, Climate Resilience Plan, Capital Improvement Plan, etc.
 - Identify climate resilience within mission, vision, or goals & address climate hazards
 - Integrate future Climate Resilience Plan & climate adaptation strategies
 - Identify economic vulnerabilities due to coastal hazards, where applicable
 - Incorporate sea level rise and other climate change effects into assessment of economic vulnerabilities, where applicable

- Consider integrating or updating the Farmland Protection Plan and its economic impacts section in conjunction with the Ag, Food & Beverage Cluster and possibly with an update to the NRI/OSP
- Integrate and prioritize relevant actions under the CSC Program, including:
 - PE 6 Action: Comprehensive Plan with Sustainability Elements:
 - Support alternative modes of transportation
 - Foster equity (including strategies for housing, schools, transportation, recreation, food, and environmental exposures)
 - Foster green economic development
 - Decrease dependence on fossil fuels and support energy efficiency and renewable energy production
 - Promote the development of (or the conservation of) local food systems
 - Protect drinking water sources from pollution
 - And others
 - Other CSC Actions, where appropriate, which may include:
 - PE 7 Action: Green Infrastructure (this action includes points for support the National Green Infrastructure Certification Program (NGICP) for community members to maintain, inspect and install green infrastructure projects)
 - PE 7 Action: Source Water Protection Program
 - PE 8 Action: Green Jobs Training
 - PE 8 Action: Green Economic Development Plans
 - PE 8 Action: Green Vendor Fairs
 - PE 8 Action: Buy Local/Buy Green Campaign
 - PE 8 Action: Brownfield Clean-up & Redevelopment
 - PE 8 Action: Incentives for Green Businesses
 - PE 8 Action: Financing Program for Building Energy Efficiency
 - Innovation: Innovative Approaches to Existing CSC Actions: For example, there may be potential to integrate the Ag, Food & Beverage and the Energy & Environment Target Clusters with CSC actions such as Conservation of Natural Habitats (linking to farmland preservation possibly), among others

2045 Long Range Transportation Plan (2020)

- 2045 LRTP webpage: <https://ulstercountyny.gov/transportation-council/long-range-transportation-plan>
- Strengths
 - The recent update was completed in September 2020 and builds on the 2040 LRTP's previous inclusion of climate adaptation and resiliency planning
 - The new Sustainability, Climate Change, and Transportation Resilience section (p.5 -1) includes recommendations to support electric vehicle deployment community-wide, incorporation of adaptation strategies, and completion of a community GHG inventory; also consideration of environmental justice; non-motorized local transportation networks; mitigation of transportation impacts on the environment.

- Includes new, relevant objectives under Goal 4 – Sustainability (p.7 -10): - to complete a UC Transportation Infrastructure Resiliency Plan, & Goal 8 -Transportation Equity (p. 7 -18); among others
- Opportunities
 - Plan update considerations:
 - Enhance integration/cross-referencing among the Plans; and, as appropriate, reference the MJHMP and CEMP & incorporate other studies, plans, and reports such as the Climate Action Plan, Climate Resilience Plan, Capital Improvement Plan, etc.
 - Identify climate resilience within mission, vision, or goals & address climate hazards
 - Integrate future Climate Resilience Plan & climate adaptation strategies
 - Use maps to spatially define vulnerabilities in relationship to risks (to populations, buildings, critical infrastructure, natural and cultural resources, etc.), where applicable
 - Integrate and prioritize relevant actions under the CSC Program, including:
 - PE 6 Action: Comprehensive Plan with Sustainability Elements, including:
 - Support alternative modes of transportation
 - Promote smart growth principles in land-use policies
 - Promote a healthy and safe community
 - Foster equity
 - Decrease dependence on fossil fuels & support energy efficiency & renewable energy production
 - Among others
 - Other CSC Actions, where appropriate, which may include:
 - PE 2 Action: Community Climate Action Plan: This project is planned for and will be facilitated by Department of the Environment in 2020-21, in partnership with the Planning Dept. and other County departments and stakeholders
 - PE 6 Action: Complete Streets Policy
 - PE 6 Action: GreenLITES certification (this DOT program is referenced in current Plan PDF p. 100)
 - PE 6 Action: Planning & Infrastructure for Bicycling & Walking
 - PE 6 Action: Alternative-fuel Infrastructure
 - PE 6 Action: Green Infrastructure

Housing Strategies Plan (2005)

- Housing Strategies Plan webpage: <https://ulstercountyny.gov/planning/housing/housing-strategies-plan>
- Strengths
 - This study examines the trends in the county's housing costs, its economy and the relationship between these factors and household income-wage growth as it relates to affordability, and provides an analysis examining household income versus housing costs (by home sales price trends and rents, etc.), as well strategies for development of workforce housing
- Opportunities
 - Update in Progress

- Plan update considerations:
 - Enhance integration/cross-referencing among the Plans; and, as appropriate, reference the MJHMP and CEMP & incorporate other studies, plans, and reports such as the Climate Action Plan, Climate Resilience Plan, Capital Improvement Plan, etc.
 - Identify climate resilience within mission, vision, or goals & address climate hazards
 - Integrate future Climate Resilience Plan & climate adaptation strategies
 - Integrate and prioritize relevant actions under the CSC Program, including:
 - PE 6 Action: Comprehensive Plan with Sustainability Elements including:
 - Promote smart growth principles in land-use policies
 - Foster equity (including strategies for housing, schools, transportation, recreation, food, and environmental exposures)
 - Foster green economic development
 - Decrease dependence on fossil fuels and support energy efficiency and renewable energy production
 - Among others
 - Other CSC Actions, where appropriate, including:
 - PE 8 Action: Green Economic Development Plans
 - PE 8 Action: Brownfield Clean-up & Redevelopment

Community Design Manual (2017)

- Community Design Manual webpage: <https://ulstercountyny.gov/planning/design-manual>
- The Manual is not considered part of the County's Comprehensive Plan, but it is relevant to include in this analysis
- Strengths
 - Many land-use controls (outside of farmland protection) are administered via local City, Town, and Village zoning codes and other regulations - and are therefore not within the jurisdictional control of Ulster County, however:
 - The Manual was issued by the Ulster County Planning Board and provides detailed guidance for local municipalities within the County in achieving smart growth objectives and in supporting preferred and sustainable development patterns through their local land use controls and approvals processes
 - The Manual is a tool intended for local decision makers and describes best practices for accommodating growth in each of five types of places (downtowns, crossroads, corridors, new neighborhoods, and rural), and provides details as well as tools and actions for each

Stormwater Management Program Plan (2013)

- Strengths
 - The County's Stormwater Management Program webpage provides information & resources: <https://ulstercountyny.gov/environment/stormwater-management>
 - The County Law includes stormwater management regulations which apply to areas beyond those that are regulated by federal or state storm water regulations:
 - Local Law Number 18 Of 2007 Prohibiting Illicit Discharges, Activities And Connections To The Ulster County Separate Storm Sewer System (pp.48-75)

- Opportunities
 - Plan update considerations:
 - Focus on pollution prevention at highway substations
 - County highway and other relevant staff training (priority for new staff onboarding)
 - Modernize outfall inspection system (to cloud-based)
 - Develop shared services system for local municipalities for inspection system(s)
 - For County properties, where applicable:
 - continue to include/implement strategies to reduce storm water runoff from roads, driveways, and parking lots, where applicable
 - continue identify runoff and drainage problems due to impervious surfaces
 - include green infrastructure and low-impact development considerations to decrease runoff, e.g., tree protection , impervious cover, riparian buffers, vegetated drainage channels, etc.
 - Coordinate with local municipalities to explore a watershed-wide approach to storm water management, where applicable
 - Integrate and prioritize relevant actions under the CSC Program, which may include:
 - PE 6 Action: Green Infrastructure
 - PE 1 Action: Partnerships with Other Entities (requirements include “implement complementary initiatives or collaborate on one cross-cutting issue that spans jurisdictional boundaries such as flooding”)

Multi-Jurisdictional Hazard Mitigation Plan (2017)

- Hazard Mitigation Plan webpage: <https://ulstercountyny.gov/emergency-services/hazard-mitigation/draft-plan-update>
- Strengths
 - County webpage
 - FEMA-approved
 - The County and 16 of its 24 municipalities opted to participate
 - Will count toward the CSC PE 7 Action: Hazard Mitigation Plan for the County’s 2021 recertification application
 - Consideration of the potential effects of climate change is included under various hazard profiles as well as in a stand-alone section (“Climate Change, PDF pp.188-192), laying the groundwork for future updates to build on
 - Identifies critical facilities and infrastructure that are located in vulnerable areas and should be protected, repaired or relocated (e.g., town facilities, bridges, roads, and wastewater facilities)
 - Identifies projects that could be included in pre-disaster grant applications. This may potentially expedite the application process for post-disaster Hazard Mitigation Grant Program acquisitions (this varies by municipality)
- Opportunities
 - Training of municipal employees in the use of FEMA's HAZUS-MH is a mitigation action in the Plan which has not yet been completed
 - Plan update considerations (update planned, 2022-23):

- Potential to link proposed mitigation actions to the capital budget and rehabilitation cycles
- Enhance integration/cross-referencing with the CEMP & Comprehensive Plan(s)
- The goal is for 100% participation by all local municipalities
- Evaluate if sea-level rise enhanced storm surge may be a hazard
- Integrate future Climate Resilience Plan & climate adaptation strategies: Natural hazards are assessed in the Plan primarily based on their historical occurrence, and do not specifically consider climate hazards and future climate change projections
- Describe past mitigation efforts e.g., shoreline stabilization and land acquisition, along with their costs and effectiveness
- Provide a general explanation of the environmental, social and economic consequences of failing to address natural hazards
- Consider using the Department of State Asset Inventory Worksheet and Risk Assessment Tool for the vulnerability and risk assessments
- Include municipal maps that indicate local hazard risks, such as flood zones, storm-surge and erosion rates
- Ensure that participating jurisdictions include a mitigation action(s) for each critical facility in that community to be mitigated to at least the 0.2% (500 year) flood risk level (inclusive of climate change projections)
- Ensure alignment with CSC PE 7 Action: Hazard Mitigation Plan

Comprehensive Emergency Management Plan (2014) & Emergency Evacuation / Detour Route Annex (2005)

- Comprehensive Emergency Management Plan (CEMP) webpage: <https://ulstercountyny.gov/emergency-services/management/plan.html>
- Strengths
 - The County provides floodplain information on the Flood Hazard Mitigation [webpage](#)
 - The County Road Closures [webpage](#) is kept updated
 - The CEMP includes an Emergency Evacuation / Detour Route Annex
 - The County Preparedness Tips [webpage](#) includes: snow & ice | heat | tornado | thunderstorms | hurricanes | flooding | disaster kit
 - The County has a Warming Centers [webpage](#) which is kept updated
- Opportunities
 - Due for update
 - Plan update considerations:
 - Enhance integration/cross-referencing with the MJHMP & Comprehensive Plan(s)
 - Consider developing/incorporating:
 - A Disaster Recovery Plan
 - A Long-term Recovery Plan
 - A Continuity of Operations Plan
 - Include a list of contacts for operators of municipal facilities

- Include steps for emergency protective measures e.g., sandbagging, erecting warning devices, and search and rescue
- Define responsibilities for municipal evacuation clearly, where applicable
- Identify the necessary time frame to evacuate residents and vacationers from storm-hazard areas
- Consider the possibility of evacuation of neighboring jurisdictions occurring concurrently
- In evacuation plan: identify and provide for groups that rely on public transportation (or lack private vehicles) for emergency evacuations
- Identify the conditions that would initiate a traffic lane reversal
- Consider the National Weather Service “Storm Ready Community” Program
- Consider including coastal flooding in the emergency response and short-term recovery plan and/or a flood response plan
- Integrate/plan for storm-preparedness outreach to floodplain residents and businesses
- Consider providing residents with guidance on the development of personal or family evacuation plans
- Consider expanding on information/outreach to property owners information on what to include in the following: At-home emergency kit; Emergency supplies; Evacuation kit
- Consider including public-information plans to provide residents with the following information prior to the threat of a storm: Expected inundation areas; Evacuation routes; Evacuation bus pick-up locations; Location of severe weather shelters; Location of pet shelters (and informing residents of ASPCA’s disaster preparedness steps for domesticated animals); FEMA’s “Are You Ready?” Guide?; and employment of multilingual and culturally sensitive approaches while providing residents with essential information
- Consider a heat-warning system
- For cooling centers, consider potential problems such as transportation obstacles, effects of power outages or flooding and other needs of vulnerable populations/communities
- Integrate and prioritize relevant actions under the CSC Program, including:
 - PE 7 Action: Heat Emergency Plan
 - PE 7 Action: Shade Structures Policy
 - PE 7 Action: Cooling Centers
 - PE 7 Action: Hazard Mitigation Plan

Capital Improvement Program (2019-2025)

- Capital Improvement Program hyperlink:
<https://ulstercountyny.gov/sites/default/files/Adopted%20Capital%20Program%202020-2025.pdf>
- Opportunities
 - Capital improvement plans and budgets should support development in preferred safer growth areas (e.g., through investment in wastewater treatment facilities and roads), where applicable
 - Consider the risk of flooding and coastal hazards and sea level rise when upgrading existing municipal infrastructure, where applicable
 - Consider the risk of flooding and coastal hazards and sea-level rise on proposed infrastructure projects, where applicable

- Incorporate projections of flooding and sea-level rise into risk assessments over the expected service life of municipal infrastructure, where applicable
- Incorporate, if appropriate, existing plans, studies, reports, and technical information

Government Operations Climate Action Plan (2019)

- Climate Action Plan webpage: <https://ulstercountyny.gov/environment/climate-action-plan>
- Strengths
 - This new Plan includes:
 - The Ulster County Government Sustainability Initiatives Guide (2019 – an update to the 2013 Guide)
 - A Carbon Neutral Government Operations Strategy
 - A Greenhouse Gas (GHG) Inventory for Government Operations - an update to the 2012 baseline inventory
 - An Implementation Roadmap - This outlines specific actions under the following Focus Areas:
 - Buildings & Other Facilities
 - Vehicle Fleet
 - Transit Fleet
 - Policy & Procedure
 - Scope 3 Emissions (employee commutes, business travel, contracted services, supply chain, etc.)
 - The Plan meets the requirements for the CSC PE2 Action: Government Operations GHG Inventory and PE 2 Action: Government Operations Climate Action Plan, and will be included in the County's 2021 silver-level CSC recertification application
- Opportunities
 - Potential to link proposed Climate Action Plan actions to the capital budget and rehabilitation cycles
 - Potential to include/incorporate into Community GHG Inventory & Climate Action Plan (planned)
 - Plan update considerations:
 - Ensure alignment with relevant CSC Program Actions, including:
 - PE 2 Action: Government Operations GHG Inventory
 - PE 2 Action: Government Operations Climate Action Plan
 - PE 10 Action: Updates to Strategies and Plans
 - Performance: Reduce GHGs from Government Facilities
 - Performance: Reduce GHGs from Government Vehicles
 - Performance: Reduce Solid Waste from Government Operations

Ulster County Parcel Viewer

- Ulster County Parcel Viewer map: <https://ulstercountyny.gov/maps/parcel-viewer/>
- Strengths
 - There are many available resource layers, including:
 - water resources

- geology & soils
 - ecological data (including a habitat cores layer)
 - tourism & recreation
- Opportunities
 - Potential to integrate additional layers, such as maps from an updated Natural Resources Inventory/OSP (see City of Poughkeepsie online NRI maps example: <https://arcg.is/0Xfaa>)
 - Align with CSC Actions, where appropriate, which may include:
 - PE 6 Action: Natural Resources Inventory (*must be completed within last 10 years to count towards this action)
 - Innovation: Innovative Approaches to Existing CSC Actions: Potential to include new NRI maps as layers in Parcel Viewer, for example (see City of Poughkeepsie: <https://arcg.is/0Xfaa>)

Climate Resilience Plan (Planned, 2020-2022)

- Strengths
 - Various elements of the Plan will count as specific CSC Program actions for the County's 2021 recertification application, to potentially include: PE7 Action: Evaluate Policies for Climate Resilience; PE7 Action: Climate Vulnerability Assessment, and PE 7 Action: Climate Adaptation Plan
 - Will build out various climate change *adaption* actions under the CSC program (whereas climate *mitigation* actions are the focus of the Government Operations Climate Action Plan)
 - Will provide a framework for the County to cohesively incorporate climate adaptation and resilience considerations throughout its planning efforts and actions
- Opportunities
 - Considerations for plan development:
 - Potential to link proposed adaptation strategies and actions to the capital budget and rehabilitation cycles
 - Consider using maps to spatially define vulnerabilities -- including extreme precipitation and riverine, flooding, landslides, sea-level rise, coastal storms, storm surge, and coastal flooding, extreme temperatures and heat waves, high winds, heavy snow and/or ice storm -- in relationship to risk for:
 - Populations, e.g., elderly, children, poor, disabled
 - Buildings, e.g., business and residential
 - Infrastructure, e.g. roads, schools, wastewater treatment facilities, hospitals, public works, power plants, drinking water treatment facilities
 - Natural resources, e.g. wetlands, critical habitats, rare species, dunes, beaches, bluffs
 - Cultural resources, e.g., historic districts, properties, and landmarks, libraries, museums, recreational areas
 - Consider including:
 - Historic storm effects via participatory mapping, public surveys, stakeholder meetings; and local adoption of projections of sea-level rise from the State Sea Level Rise Task Force report or more recent studies

- Potential coastal-hazard effects on infrastructure, land uses, housing and community facilities
- Encouraging use of green infrastructure techniques to help prevent flooding
- Emphasizing non-structural pre-disaster mitigation measures such as acquiring flood-prone lands and adopting No Adverse Impact flood plain regulations
- Discussing 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
- Identifying areas of significant public investment, water dependent uses and critical infrastructure that require structural protection because options for relocation, elevation or employment of non-structural measures are not feasible
- The Department of State Asset Inventory Worksheet and Risk Assessment Tool for the vulnerability and risk assessments
- Align with the following CSC Actions:
 - PE 7 Action: Evaluate Policies for Climate Resilience: The completed CSRPT and this accompanying Gap Analysis report will count towards this action
 - PE 7 Action: Climate Vulnerability Assessment:
 - Identifies Climate Hazards
 - Characterizes risks, to include:
 - Likelihood of occurrence
 - Magnitude
 - Conditions that could amplify the magnitude of the hazard
 - CSRPT recommendations include evaluating the following climate risks to the community: extreme precipitation and riverine flooding; landslides; sea-level rise; coastal storms, storm surge, and coastal flooding; extreme temperatures and heat waves; high winds; heavy snow and/or ice storms
 - PE 7 Action: Climate Adaptation Plan:
 - Creation of a community-developed climate adaptation and resilience vision statement using an inclusive public engagement process
 - Creation and adoption of a standalone climate adaptation plan (or chapter within a climate action plan or other planning document) that includes implementation strategies to directly address local vulnerabilities and planning gaps, using an inclusive public engagement process
 - CSRPT recommendations include evaluating and prioritizing adaptation strategies by cost; feasibility; timing of implementation; efficacy; and co-benefits

Section1:CommunityPlanChecklist	Yes	No	Adoption Year	Update Frequency	Notes	References 1	References 2
1.1 Municipal Master Plan	Yes			Varied, per Plan	<p>The Ulster County Planning Department is responsible for managing the County's Comprehensive Plan Document. The department has and continues to accomplish this task through the adoption of individual Plans:</p> <ul style="list-style-type: none"> -HOUSING STRATEGIES PLAN (2005) -2045 LONG RANGE TRANSPORTATION PLAN (9/2020) -OPEN SPACE PLAN (2007) -ULSTER 2040 - BUILDING A PEOPLE CENTERED ECONOMY (9/2020) -Also see the Ulster County Planning Board COMMUNITY DESIGN MANUAL (2017) <p>**Indicates the Plans that function as part of the Comprehensive Plan</p>	https://ulstercountyny.gov/planning/land-use	
1.2 Zoning Ordinance		No	N/A		Not AHJ, however see <i>Ulster County Planning Board Community Design Manual (2017)</i>	https://ulstercountyny.gov/sites/default/files/documents/planning/Community%20Design%20Manual_31mb.pdf	
1.3 Subdivision Ordinance		No	N/A		Not AHJ, however see <i>Ulster County Planning Board Community Design Manual (2017)</i>	https://ulstercountyny.gov/sites/default/files/documents/planning/Community%20Design%20Manual_31mb.pdf	
1.4 Open Space Plan**	Yes		2007	10 years (per Climate Smart Communities Program)	<p>ULSTER COUNTY OPEN SPACE PLAN</p> <p>~Natural Resources Inventory and full Plan may be due for update: Final Report Sections 1&2 "This NRI will be constantly updated as new information becomes available" (p.18)</p>	https://ulstercountyny.gov/planning/open-space-plan	https://ulstercountyny.gov/planning/planning/land-use/text
1.5 Natural Resource Conservation Plan		No				https://ulstercountyny.gov/environment/invasive-species	
1.6 Stormwater Management Plan	Yes		2013		<p>ULSTER COUNTY STORMWATER MANAGEMENT PROGRAM PLAN (SWMP)</p> <p>~The MS4 Stormwater Annual Report is published annually</p>	https://ulstercountyny.gov/environment/stormwater-management	
1.7 Coastal Plan or Element in Other Plan		No	N/A		Not AHJ		
1.8 Shoreline Restoration Plan		No	N/A		Not AHJ		
1.9 Coastal Erosion Hazard Area Ordinance		No	N/A		Not AHJ		
1.10 Multi-Hazard Mitigation Plan	Yes		2017	5 years (2022 update planned)	<p>MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN</p> <p>~FEMA approved</p> <p>~The County and 16 of its 24 jurisdictions opted to participate</p>	https://ulstercountyny.gov/emergency-services/hazard-mitigation/draft-plan-update	
1.11 Floodplain Management Plan		No	N/A		<p>Not AHJ</p> <p>~However the <i>Flood Hazard Mitigation Planning and Local Technical Assistance</i> County webpage outlines the municipal technical assistance provided by the County and describes the partnership between the County Department of Environment, Cornell Cooperative Extension of Ulster County, and the Ashokan Watershed Stream Management Program</p>	https://ulstercountyny.gov/environment/stormwater-and-pollution-prevention/flood-hazard-mitigation	
1.12 Flood Damage Prevention Ordinance		No	N/A		<p>Not AHJ</p> <p>~However all municipalities in the county participate in the NFIP and are in "good standing"; each one has a State-approved flood damage prevention law on the books as of their most recent FIRM map adoption (which was in 2016 for half of County and in 2009 for the other half)</p>		
1.13 Evacuation Plan	Yes		11-2005		ULSTER COUNTY EMERGENCY EVACUATION / DETOUR ROUTE ANNEX	https://ulstercountyny.gov/sites/default/files/documents/EvacuationAnnex.pdf	

1.14 Emergency Response & Short-term Recovery Plan	Yes		6-2014		ULSTER COUNTY COMPREHENSIVE EMERGENCY MANAGEMENT PLAN (CEMP) ~Plan & Maps may be due for update	https://ulstercountyny.gov/emergency-services/management/plan.html	
1.15 Continuity of Operations Plan		No			Not included in the CEMP		
1.16 Disaster Recovery Plan	Yes				~Disaster recovery is outlined on the County's Emergency Services webpage ~Included in the CEMP under: National Response Framework Section IV. Recovery (p. 40) A. Damage Assessment B. Planning for Recovery C. Reconstruction D. Public Information on Recovery Assistance	https://ulstercountyny.gov/emergency-services/management/plan.html	
1.17 Long-term Recovery Plan	Yes				~Included in the CEMP under: C. Reconstruction (pp. 46-48) 1. Reconstruction consists of two phases: a) Phase 1 - short term reconstruction to return vital life support systems to minimum operating standards; b) Phase 2 - long term reconstruction and development which may continue for years after a disaster and will implement officially adopted plans and policies, including risk reduction projects, to avoid conditions and circumstances that led to the disaster	https://ulstercountyny.gov/emergency-services/management/plan.html	
1.18 Economic Development Plan/Strategy**	Yes		9-2020		ULSTER 2040 report	https://ulstercountyny.gov/ulster2040Report	https://ulstercountyny.gov/planning/land-use
1.19 Capital Improvements Plan	Yes		2019-2024	2025	CAPITAL IMPROVEMENT PROGRAM	https://ulstercountyny.gov/sites/default/files/2019%20Adopted%20Capital.pdf	
1.20 Metropolitan Transportation Plan*	Yes		9-2020	5 years	2045 LONG RANGE TRANSPORTATION PLAN	https://ulstercountyny.gov/transportation-council/long-range-transportation-plan	
1.21 Historic Preservation Plan			N/A		Not AHJ		
1.22 Local Waterfront Revitalization Plan			N/A		Not AHJ		
1.23 Climate Action Plan	Yes		2019	10 years	GOVERNMENT OPERATIONS CLIMATE ACTION PLAN	https://ulstercountyny.gov/sites/default/files/ulster%20County%20Government%20Operations%20Climate%20Action%20Plan%202019_web.pdf	
1.24 Other: Community Greenhouse Gas Emissions Inventory		No	Planned		~ The County's current ICLEI membership grants access to the ClearPath tool for completion of GHGs; 2020-21 Community GHGI is planned	https://iclei.usa.org/clearpath/	

1.25 Other: Ulster County Planning Board Community Design Manual**	Yes		2017		COMMUNITY DESIGN MANUAL ~although many land-use controls (outside of farmland protection) are administered via local City, Town, and Village zoning codes and other regulations - and are therefore not within the jurisdictional control of counties in New York State - the Community Design Manual provides detailed guidance for local municipalities within the County in achieving smart growth objectives and in supporting preferred and sustainable development patterns through their local land use approvals processes	https://ulstercountyny.gov/sites/default/files/documents/planning/Community%20Design%20Manual_31mb.pdf	
1.26 Other: Housing Strategies Plan**	Yes		2005	5 years	~"This study examines the trends in the county's housing costs, its economy and the relationship between these factors and household income-wage growth as it relates to affordability." Update in progress.	https://ulstercountyny.gov/planning/housing/housing-strategies-plan	
1.27 Other: Community Health Assessment and Community Health Improvement Plan	Yes		2019-2021	2 years	COMMUNITY HEALTH ASSESSMENT AND COMMUNITY HEALTH IMPROVEMENT PLAN ~Priorities: Prevent Chronic Diseases and Promote Well-Being and Prevent Mental and Substance Use Disorders ~"Every three years NYSDOH requires Local Health Departments and hospitals to submit Community Health Assessments, Service Plans, and Health Improvement Plans. These assessments and plans are meant to meet several requirements from state public health law and the Affordable Care Act."	https://ulstercountyny.gov/sites/default/files/documents/health/UC%20CHA-CHIP%202019-21.pdf	
1.28 Other: Ulster County Parcel Viewer	Yes				ULSTER COUNTY PARCEL VIEWER ~There are many available resource layers, including: -water resources -geology & soils -ecological data (including a habitat cores layer) -tourism & recreation ~There is potential to integrate additional layers, such as maps from a Natural Resources Inventory/OSP update (see City of Poughkeepsie online NRI maps example - https://www.poughkeepsie.ny.us/arcgis/arcgis/rest/services/NRI/MapServer)	https://ulstercountyny.gov/maps/parcel-viewer/	https://arcgis.com/arcgis/rest/services/NRI/MapServer

1.29 Other: Resilience Plan	(planned 2020-22)			<p>To include:</p> <ul style="list-style-type: none"> ~report characterizing local climate change hazards ~vulnerability assessment (identify risks & prioritize) ~adaptation strategies (characterize, evaluate & prioritize) ~municipal resource kit for use by both the County and local municipalities ~CSRPT recommendations: <ul style="list-style-type: none"> --include historic storm effects via participatory mapping, public surveys, stakeholder meetings; and local adoption of projections of sea-level rise from the State Sea Level Rise Task Force report or more recent studies --identify potential coastal-hazard effects on infrastructure, land uses, housing and community facilities --use maps to spatially define vulnerabilities in relationship to risks: (to populations, buildings, critical infrastructure, natural and cultural resources, etc.) --encourage using green infrastructure techniques to help prevent flooding --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 -- Identify areas of significant public investment, water dependent uses and critical infrastructure that require structural protection because options for relocation, elevation or employment of non-structural measures are not feasible --Use the Department of State Asset Inventory Worksheet and Risk Assessment Tool for the vulnerability and risk assessments 		
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Section 2: Vulnerability & Risk Assessments	Yes	No	Notes	Definitions	References 1	References 2
2.1 Does the municipality have a localized hazard risk and vulnerability assessment?		No	A climate vulnerability assessment will be developed as part of the upcoming Resilience Plan. ~ See the Ulster County Multi-Jurisdictional Hazard Mitigation Plan (UCMJHMP) however: the focus is on planning for the mitigation of natural hazards (primarily based on their historical occurrence, not projected future occurrence). Per the UCMJHMP:		https://ulstercountyny.gov/emergency-services/hazard-mitigation/draft-plan-update	
2.2 Have current and future climate hazards been identified?	Yes, partially		~With climate change, it is anticipated that extreme temperature events will be more common occurrences in the years ahead. (p. 73) ~The frequency and intensity of coastal storms and severe weather events is expected to increase in the future due to climate change (p. 85). ~While it is unknown how climate change will impact regional water supplies, the State Plan reports that water resources are stressed and any added stress from climate change will only increase the competition for water resources. Warmer climates increase potential drought frequency, severity, and create longer-lasting events. (p. 102) ~The frequency of intense precipitation events in Ulster County is expected to increase in the future with climate change; this is likely to result in more riverine and flash flooding events. (p. 118) ~Future occurrences of wildfires in the County is considered to be certain, particularly if drought conditions become more prevalent in the future with climate change. (p. 140) ~ Climate change is not a hazard in and of itself; rather, it is a condition that will exacerbate the impacts of hazards. Climate change is expected to increase the frequency and intensity of natural hazards such as flooding, drought, wind, and wildfires. (p. 188-192) Per the 2045 LRTP: "It is critical to ensure that evacuation, emergency response, and short and long-term recovery are not impeded by loss of facilities. This is done through assessing vulnerability and applying adaptation strategies to selected infrastructure." (pp. 106-7)	Climate hazards include higher temperatures, heavy precipitation, sea-level rise, storm surge & flooding, disruption of natural resource life cycles and a variety of human health risks.	Impacts of climate change	
2.3 Have potential risks been prioritized as follows?						
2.3.1 Likelihood of a given effect, e.g. virtually certain/already occurring, high, moderate, low	Yes, partially		~The hazard profiling and risk assessment processes were used to generate hazard classifications according to a "Priority Risk Index" (PRI) - a tool used to measure the degree of risk for identified hazards in a particular planning area. (pp. 226-227) ~Table/matrix of PRI ranking on pp. 229, 231 ~Key Risk Findings listed for Ulster County p. 233-234			
2.3.2 Magnitude of consequence, e.g., disruption of internal operations, capital and operating costs, number of people affected, public health, economy, and environment.	Yes, partially		~See note above ~Also, SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES includes detailed profiles for each of the hazards identified and described in Appendix 2.1. Each hazard profile includes a general description of the location of each hazard, its extent (magnitude or severity), notable historical occurrences and the probability of future occurrences.			
2.3.3 Are conditions identified that could amplify the effect of a hazard, e.g. storm surge inundation at a high tide or erosion of stabilized shorelines?	Yes, partially		~See notes above			
2.4 Have municipal employees utilized any of the following vulnerability assessment modalities?						
2.4.1 HAZUS-MH	Yes		~See Table 1.8 (p. 45): HAZUS-MH database for emergency facilities and utilities - The database of assets from HAZUS was imported on a GIS platform to determine assets at risk from delineable hazards incorporated throughout the document, but primarily in Sections 2 and 3. ~Data on EOCs and wastewater treatment facilities was obtained from HAZUS (p. 142)	HAZUS-MH - a tool developed by FEMA to help communities estimate potential losses from natural disasters.	HAZUS-MH	
2.4.2 Other:		No	NO, however this is a Mitigation Action of ours in the 2009 and 2017 UCMJHMP			
2.5 Are municipal employees trained in the use of FEMA's HAZUS-MH?		No	NO, however this is a Mitigation Action of ours in the 2009 and 2017 UCMJHMP ~Numerous Free trainings are planned for late 2020-early 2021 (administered by the Ashokan Watershed Stream Management Program)			
2.6 Have adaptation strategies been identified and categorized as follows:						
2.6.1 Type	Yes, partially		~A list of general adaption strategies are outlined on pp. 189-190 ~The County's Resilience Plan will incorporate adaption strategies (anticipated completion date 2021)			
2.6.2 Administration		No	~See note above			
2.6.3 Condition		No	~See note above			
2.6.4 Timing		No	~See note above			
2.6.5 Geography		No	~See note above			
2.7 Have adaptation strategies been evaluated and prioritized as follows:						
2.7.1 Strategy cost		No	~The County's Resilience Plan will incorporate adaption strategies (anticipated completion date 2021), potential to include costs, if feasible to do so			
2.7.2 Strategy feasibility		No	~See note above			
2.7.3 Timing of Implementation		No	~See note above			

2.7.4 Efficacy		No	~See note above			
2.7.5 Co-benefits		No	~See note above			
2.8 Have stakeholders linked adaptation strategies to the capital budget and rehabilitation cycles?		No	~See note above			
2.9 Are maps used to spatially define the following vulnerabilities in relationship to risks?						
2.9.1 Populations, e.g., elderly, children, poor, disabled		No	~The County's Resilience Plan could potentially incorporate these maps ~Some NFIP Repetitive Loss Property Clusters are mapped and included in the UCMJHMP tables (pp. 112-117)			
2.9.2 Buildings, e.g., business and residential		No	~The County's Resilience Plan could potentially incorporate these maps			
2.9.3 Infrastructure, e.g. roads, schools, wastewater treatment facilities, hospitals, public works, power plants, drinking water treatment facilities	Yes		~See note above ~Not mapped, but depicted in Table 3b.3 – Critical Infrastructure and Utilities by Jurisdiction (p. 145) ~The Hudson 7, with support from Ulster and Dutchess Counties, will be completing drinking water source mapping and a contaminant/threat inventory in 2020-21 using NYSDEC's draft DWSP2 Framework (two municipalities are located in Ulster with the Hudson River as their drinking water source)			Hudson 7 - Drinking Water Intermunicipal Council
2.9.4 Natural resources, e.g. wetlands, critical habitats, rare species, dunes, beaches, bluffs		No	~The County's Resilience Plan could potentially incorporate these maps			
2.9.5 Cultural resources, e.g., historic districts, properties, and landmarks, libraries, museums, recreational areas		No	~The County's Resilience Plan could potentially incorporate these maps			
2.10 Have the following been identified as climate risks to the community?				~Climate risks specifically are not identified in the County's UCMJHMP; the "risks" included in this section are identified as hazards in the UCMJHMP, based primarily on their historical occurrence"		
2.10.1 Extreme precipitation and riverine flooding		No	~Included in UCMJHMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazards: Hurricanes and Tropical Storms; Flood ~TNC's Natural Resource Navigator map tool could potentially be used to map this this, as well as the Hudson River Flood Impacts Decision Support System (HRFIDSS) (hyperlinks in cells F32, G32) ULSTER COUNTY COMPREHENSIVE EMERGENCY MANAGEMENT PLAN (CEMP): ~"REDUCE FLOOD EXPOSURE...Mitigation opportunities should focus on flooding and flood prone areas. The number one goal should be to protect vulnerable populations by reducing their exposure to flooding. This may be accomplished through acquisitions, elevations or relocation programs, and where proven effective, decreasing flood elevations by stream management techniques and resolving man made hydraulic constrictions. In addition to these reactionary activities, there must be local land use controls and infrastructure investment policies that discourages inappropriate land use and development in flood prone areas."(p.4) ~"The County should also maximize hazard mitigation funding to create a more resilient transportation and public works infrastructure. While engaging in these major public works projects, it is critical to utilize a science based approach to stream management. Factors such as climate change must be considered in siting and potentially relocating critical infrastructure such as water and sewer facilities" (p.22)		TNC Natural Resource Navigator & Coastal Resilience map tool	HRFIDSS
2.10.2 Landslides		No	~Included in UCMJHMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139): "the probability of future landslides in the County can be expressed as high" ~Included in UCMJHMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazards: Hurricanes and Tropical Storms; Flood ~"Transportation, communications, and governmental services may be severely impacted. Impacts would be exacerbated when coincident with high tides, or during prolonged types of events that extend across several tidal cycles. Sea level rise will increase impacts over time." (p. 162)			
2.10.3 Sea-level rise		No	~NOAA Sea Level Rise Viewer and/or Scenic Hudson's Sea Level Rise Mapper can be used to map this risk (cells F44, G44)			
2.10.4 Coastal storms, storm surge, and coastal flooding		No	~Both Riverine and Coastal flooding are included in HMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazard: Flood ~UCMJHMP re: Storm surge: "based on new data from Superstorm Sandy, the hazard is identified as a significant hazard to be addressed in the plan update" (p. 62); only listed as a hazard for the 7 Hudson coastal municipalites (pp. 8, 17, 38); and is also included under other hazards (flood, etc.) ~Coastal storms are included in HMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazards:Nor' easter; Hurricanes and Tropical Storms ~NOAA Sea Level Rise Viewer and/or Scenic Hudson's Sea Level Rise Mapper can be used to map this risk (cells F44, G44)			

2.10.5 Extreme temperatures and heat waves		No	~Included in UCMJHMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139): as a hazard: "Extreme temperature events will continue to have a high probability of occurrence in Ulster County... it is anticipated that the threat to human lives and safety is increasing due to growing elderly populations in many of Ulster County's municipal jurisdictions...With climate change, it is anticipated that extreme temperature events will be more common occurrences in the years ahead." ~Included reference to NYSDOH Heat Vulnerability index maps (cell F36) here		https://www.health.ny.gov/environmental/weather/vulnerability_index/index.htm	
2.10.6 High winds		No	~Included in UCMJHMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazards: Extreme Wind (p.161); Hurricanes and Tropical Storms; Nor'easters; Winter Storms; Drought			
2.10.7 Heavy snow and/or ice storms		No	~Heavy snow included in UCMJHMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazards: Nor'easters; Winter Storms ~Ice storms included in HMP SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazards: Winter Storms			
2.11 Are municipal planners and emergency managers trained in the use of the following risk-mapping tools?						
2.11.1 Flood insurance rate maps	Yes		The local floodplain managers and town supervisors, etc. are well-versed in the Ashokan basin watershed and other parts of the County such as Saugerties and New Paltz. Trainings have been done annually by AWSMP staff that are open to planning and zoning/building departments throughout the county.	Flood Insurance Rate Maps, or FIRMS, are official maps produced by FEMA that identify areas at risk of flooding, as well as National Flood Insurance risk premium zones in a community.	FIRMs	
2.11.2 Sea, Lake and Overland Surges from hurricanes		No		Storm Surge is an abnormal rise of water generated by a storm, often a hurricane.	SLOSH	
2.11.3 Shoreline change analysis		No		Shoreline changes through erosion or accretion can be analyzed in geographic information system (GIS).	NOAA Shoreline website	
2.11.4 Cumulative risk assessments		No		A tool to assist communities in understanding the aggregation of risks from multiple environmental stressors.	USEPA Cumulative Risk Assessment Framework	
2.11.5 Sea level rise inundation mapsA37:A44	Yes, partially		In part; Hudson River towns including the City Kingston have been exposed to this tool and give it quite a bit of thought when reviewing projects.	Mapping tools to help communities visualize impacts from coastal flooding and sea-level rise.	NOAA Sea Level Rise Viewer	Scenic Hudson Sea Level Rise Mapper
2.11.6 Other:						
2.12 Have vulnerability and risk assessments been directly shared with municipal planners, public work officials, transportation planners, and other appropriate municipal, county or state officials?	Yes, partially		Yes, Local Flood Analysis (in 7 hamlets from three towns) and the NY Rising Plans were completed, covering 9 municipalities (the focus is on flooding)		NY Rising Plan	https://catskillstreams.org/lfa/
2.13 Has inland (riverine) flooding been identified as a hazard in this community? If yes, complete the following:	Yes		According to the UCMJHMP, it is the number one hazard in the County and the only hazard classified as "high"		UC Multi-Jurisdictional Hazard Mitigation Plan (page 52)	
2.13.1 Are emergency managers and planners aware of potential riverine flooding extents in the community?	Yes		Yes, of the 300+ mitigation actions noted in the plan, more than 200 pertain to flooding			
2.13.2 Are local planners, emergency managers and public works officials aware of the location of riverine repetitive loss properties?	Yes		The Ashokan Basin watershed communities have resources available via the Ashokan Watershed Stream Management Program		Ashokan Watershed Stream Management Program (AWSMP)	
2.13.3 Does the community track riverine repetitive loss properties within the National Flood Insurance Program ?	Yes		Yes, via the County Department of Environment	National Flood Insurance Program, or NFIP, a federally-subsidized insurance program aimed at reducing the impact of flooding on private and public structures.	NFIP	
2.13.4 Do any plans or reports describe the damage and cost of previous storms, riverine floods, or erosion?	Yes		This information is included in the UCMJHMP but the County Department of Environment has also downloaded and compiled all of the available loss data provided by FEMA for flooding		Ulster County Flood Hazard Mitigation webpage	
2.13.5 Do any plans or reports estimate future financial losses that may result from riverine flooding?		No	Not directly, other than the HAZUS estimates included in the UCMJHMP			
2.14 Have sea-level rise, coastal storms, storm surge and coastal flooding been identified as hazards? If so, answer the following:		No	Coastal Erosion, Storm Surge, and Wave Action were not identified as a significant hazards in the UCMJHMP			
2.14.1 Are emergency managers and planners aware of potential coastal flooding extents in the community?		No				
2.14.2 Are local planners, emergency managers and public works officials aware of the location of coastal repetitive loss properties?		N/A				
2.14.3 Does the community track riverine coastal loss properties within the National Flood Insurance Program?		N/A				
2.14.4 Do any plans or reports describe the damage and cost of previous coastal storms, floods, or erosion?		No				
2.14.5 Is a significant part of the community in a V-zone or A-zone as defined on a FEMA flood insurance rate map?		N/A				
2.14.6 Does the community contain lands within the Coastal Erosion Hazard Area ?		No	The Hudson River south of the federal dam in Troy is all listed as NYSDEC Coastal Waters, however it appears that the Erosion Hazard maps online do not include Ulster County	Coastal Erosion Hazard Areas are coastal shoreline areas that are vulnerable to erosion, and are identified in maps produced by NYS DEC. Coastal Erosion Hazard Areas are regulated and permits are required for construction and other activities.	NYS DEC Coastal Erosion Hazard Management Program	
2.14.7 Have areas of the coastline most prone to erosion hazards been identified?		No	Coastal Erosion, Storm Surge, and Wave Action were not identified as a significant hazard in the UCMJHMP			

2.14.8 Has the community used all available authorities to restrict or prohibit any activities, development or other actions in such erosion hazard areas, in order to minimize damage to property, and to prevent the exacerbation of erosion hazards?		N/A- No	Coastal Erosion, Storm Surge, and Wave Action were not identified as a significant hazard in the UCMJHMP			
2.14.9 Has the community developed a build-out analysis using existing zoning ordinances? If so, answer the following:		N/A- No	Coastal Erosion, Storm Surge, and Wave Action were not identified as a significant hazard in the UCMJHMP			
2.14.9.1 Has the build-out analysis been compared to the extent of storm surge scenarios?		N/A- No	Coastal Erosion, Storm Surge, and Wave Action were not identified as a significant hazard in the UCMJHMP			
2.14.9.2 Has the build-out analysis been compared to projected sea-level rise scenarios?		N/A- No	Coastal Erosion, Storm Surge, and Wave Action were not identified as a significant hazard in the UCMJHMP			
2.14.10 Do any plans or reports describe the damage and cost of previous coastal storms, floods, or erosion?		N/A- No	Coastal Erosion, Storm Surge, and Wave Action were not identified as a significant hazard in the UCMJHMP			
2.14.11 Are emergency managers and planners aware of potential storm-surge heights in the community?		No	Coastal Erosion, Storm Surge, and Wave Action were not identified as a significant hazard in the UCMJHMP			
2.14.12 Do any plans or reports estimate future financial losses that may result from sea-level rise?		No				
2.14.13 Has the community undertaken a vulnerability and risk assessments using the Department of State Asset Inventory Worksheet and Risk Assessment Tool?		No			Governor's Office of Storm Recovery	
2.14.14 Has the community adopted the projections of sea-level rise from the State Sea Level Rise Task Force report or more recent studies for planning purposes?		No	~The County's Resilience Plan could potentially incorporate these	NYS has adopted official sea-level rise projections.	NYS DEC Official SLR Projections NYS Sea Level Rise Task Force Report	

Section 3: Public Outreach and Engagement	Yes	No	Notes	Definitions	References 1	References 2
3.1 Has the public been involved in the identification of historic storm effects, such as storm-surge elevations, flood-prone streets, beach erosion and overwash, or property loss through any of the following means?						
3.1.1 Participatory mapping		No	~As part of the Resilience Plan, there is the potential for the internal County working group to complete TNC's Community Resiliency Building workshop and accompanying risk matrix (cell G3)	Participatory mapping is a process in which stakeholders create maps that indicate important environmental, cultural social and economic features. Often used in land use decision-making.	NOAA Participatory Mapping Guide	TNC Community Resilience Building Workshop materials
3.1.2 Public surveys		No	~These will be conducted as part of developing the County's Resilience Plan			
3.1.3 Stakeholder meetings		No	~These will be conducted as part of developing the County's Resilience Plan			
3.2 Does the municipality have publicly visible high water mark signs ?		No		High Water Mark signs are a public awareness tool that indicate how high the water reached on a building, bridge or other infrastructure under flood conditions.	NOAA High Water Mark signs	
3.3 Has the public been involved in defining an overall acceptable level of natural-hazard risk?		No				
3.4 Does the municipality provide the public with information on the natural and beneficial functions of floodplains, wetlands and green infrastructure?	Yes		~The County has several webpages with information and resources, including on the demonstration rain garden and bioretention areas adjacent to the County Office Complex and Department of the Environment parking lots		https://ulstercountyny.gov/environment/stormwater-and-green-infrastructure	
3.5 Does the municipality provide access to floodplain maps?	Yes		~The County's Flood Hazard Mitigation Planning and Local Technical Assistance webpage provides links to FEMA's National Flood Hazard Layer (NFHL) and Flood Map Service Center; also several Town's Flood Analyses and/or Flood Hazard Mitigation Plans are linked there		https://ulstercountyny.gov/environment/stormwater-and-pollution-prevention/flood-hazard-mitigation	
3.6 Does the municipality publicize the availability of floodplain information to property owners and businesses?		No	Not AHJ, however this is provided via the Flood Mitigation Planning webpage		https://ulstercountyny.gov/environment/stormwater-and-pollution-prevention/flood-hazard-mitigation	
3.7 Does the municipality publicize the availability of floodplain information to insurance agents, real estate agents, and lenders?		No	Not AHJ, however this is provided via the Flood Mitigation Planning webpage			
3.8 Does the municipality conduct storm-preparedness outreach to floodplain residents and businesses using the following methods?						
3.8.1 Website	Yes		The County Preparedness Tips webpage includes: snow & ice heat tornado thunderstorms hurricanes flooding disaster kit		https://ulstercountyny.gov/emergency-services/management/prep.html#kit	
3.8.2 Brochures and newsletters		No				
3.8.3 Community meetings		No				
3.8.4 Television or radio		No				
3.8.5 Other:						
3.9 Does the community provide easy access to coastal erosion area hazard maps?		No				
3.10 Does the community provide residents with guidance on the development of personal or family evacuation plans?		No				
3.11 Does the municipality provide property owners information on what to include in the following?						
3.11.1 At-home emergency kit	Yes		~The County Preparedness Tips webpage includes: snow & ice heat tornado thunderstorms hurricanes flooding disaster kit		https://ulstercountyny.gov/emergency-services/management/prep.html#kit	
3.11.2 Emergency supplies	Yes		~See note above			
3.11.3 Evacuation kit	Yes		~See note above			
3.12 Does the community have public-information plans in place to provide residents with the following information prior to the threat of a storm?						

3.12.1 Expected inundation areas		No	Not AHJ			
3.12.2 Evacuation routes		No	~However County Road Closures webpage is kept updated & the CEMP includes an Emergency Evacuation / Detour Route Annex		https://ulstercountyny.gov/emergency-services/road-closures	https://ulstercountyny.gov/sites/default/files/documents/EvacuationAnnex.pdf
3.12.3 Evacuation bus pick-up locations		No	This could potentially be included in an update to the CEMP			
3.12.4 Location of severe weather shelters	Yes		~The County has a Warming Centers webpage which is kept updated		https://ulstercountyny.gov/emergency-services/warming-centers	
3.12.5 Location of pet shelters		No	~The County Emergency Management Plan webpage includes a link to Ulster County Animal Response Team Annex document (cell E29) ~Also, see UlsterCorp's re: the "UCART" volunteer program (cell F29)	https://www.ulstercorps.org/collaborations/ucart-ulster-community-animal-response-team/		
3.13 Has the community informed residents of ASPCA's disaster preparedness steps for domesticated animals?		No		Tips for including pets in your family's disaster preparedness efforts.	ASPCA Disaster Preparedness	
3.14 Has the community informed residents of FEMA's "Are You Ready?" Guide?		No			FEMA "Are You Ready?" Guide	
3.15 Does the community actively inform property owners of FEMA suggested means to protect their homes against storm and wind damage ?		No			FEMA Guidance on Protecting Homes from Storms	
3.16 Does the municipality provide the public with flood mitigation information?		No	~Per row 9 above: The County's Flood Hazard Mitigation Planning and Local Technical Assistance webpage provides links to FEMA's National Flood Hazard Layer (NFHL) and Flood Map Service Center; also several Town's Flood Analyses and/or Flood Hazard Mitigation Plans are linked there		https://ulstercountyny.gov/environment/stormwater-and-pollution-prevention/flood-hazard-mitigation	
3.17 Does the municipality refer home builders to FEMA's coastal construction manual ?		No			FEMA Guidance on Coastal Construction	
3.18 Does the municipality employ multilingual and culturally sensitive approaches while providing residents with essential information?		No				

Section 4: Integration of Municipal Plans		Yes	No	Notes	Definitions	References
4.1	Has the community adopted a comprehensive plan ?		No	<p>The Ulster County Planning Department is responsible for managing the County's Comprehensive Plan Document. The department has and continues to accomplish this task through the adoption of individual Plans:</p> <ul style="list-style-type: none"> -HOUSING STRATEGIES PLAN (2005) -2045 LONG RANGE TRANSPORTATION PLAN (9/2020) -OPEN SPACE PLAN (2007) -ULSTER 2040 - BUILDING A PEOPLE CENTERED ECONOMY (9/2020) -Also see the Ulster County Planning Board COMMUNITY DESIGN MANUAL (2017) <p>**Indicates the Plans that function as part of the Comprehensive Plan</p>		https://ulstercountypg.com/files/land-use
4.1.1	Does the comprehensive plan reference the local multi-hazard mitigation plan and disaster recovery plans?		N/A	"Of the four individuals Plans used collectively as the Comprehensive Plan, the UCMHMP & CEMP are not directly referenced in any		https://ulstercountypg.com/files/2045LongRangeTransportationPlan.pdf
4.1.2	Does the comprehensive plan explain the support and involvement of emergency managers, floodplain managers, coastal managers and public works officials?		No	<p>"See note above</p> <p>"The 2045 LWRP does include:</p> <ul style="list-style-type: none"> -under the Regional Vision, Transportation: "Ulster County has a more sustainable and resilient transportation system in which...key roads and bridges provide an adequate level of service to residents and businesses for evacuation, emergency response, and recovery in extreme weather events" (p. 106) -& under Goal 4 -Sustainability "Complete an Ulster County Transportation Infrastructure Resiliency Plan no later than 2021 ... in coordination with Ulster County Departments of Public Works and the Environment" (p. 124) <p>"The OPEN SPACE PLAN includes:</p> <ul style="list-style-type: none"> -under Vision & Goals: "Create an ongoing collaborative effort between the UlsterCounty Legislature, Planning Board, EMC, Department of the Environment, Public Works, Information Services and other Ulster County departments, key stakeholder groups and other levels of government to develop decision-making and implementation plans." (Section 2&3, p. 21) 		
4.1.3	Does the planning process documentation describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information, e.g., the multi-hazard mitigation plan, capital improvement plan?	Varied, by Plan				
4.1.4	Did the preparation of the comprehensive plan involve a broad base of the community, such as public officials, civic organizations, businesses, and citizens?	Varied, by Plan		<p>-HSP= Not significantly, primarily a consultant-driven study, completed with support from the Ulster County Housing Consortium</p> <p>-ULSTER 2040 = yes, project facilitated by a working group consisting of local stakeholders & County staff (p. 4-5)</p> <p>-OSP = Stakeholder input outlined in Final Report Section 1 and 2, p. 20; Also, "Ensure legitimacy with the broad participation of stakeholders" is included in Open Space Plan Vision and Goals (p.21)</p> <p>-LRTP = 5 year update primarily completed by Ulster County Transportation Council Policy Committee / County transportation planning staff (p.21), with public input</p>		
4.1.5	Does the comprehensive plan provide a clear explanation of participation techniques used in its development?	Varied, by Plan		<p>-HSP= Yes (SWOT) interviews and analysis starting on p. 28, UC Housing Consortium p. 30,35)</p> <p>-ULSTER 2040= Yes (p.4-5)</p> <p>-OSP = yes (Final Report Section 1 and 2 p.19, 20)</p> <p>-LRTP = yes - 4 virtual public workshops + stakeholder focus groups, public survey, etc. (pp.21, 108-113)</p>		
4.1.6	Does the comprehensive plan identify resilience within its mission, vision, or goals?	Varied, by Plan		<p>HSP= No</p> <p>-ULSTER 2040: "Resiliency and Sustainability" (p.12) are included as part of the report's vision, however these are referring to the economy in general and not climate change specifically</p> <p>-OSP = No, although the Principles include: " #10: Balance consideration of present and future generations through sustainable development (i.e., development that meets the needs of the present without compromising the ability of future generations to meet their own needs) - Final Report Section 4 p.3</p> <p>-2045 LRTP = Yes, under new Section V. SUSTAINABILITY, CLIMATE CHANGE AND TRANSPORTATION RESILIENCE (p.98-107).</p> <p>- Also included under goals such as "Objective 4.1 – Resiliency Planning a) Complete an Ulster County Transportation Infrastructure Resiliency Plan no later than 2021." (p. 123) &</p> <p>- Objective 4.2 – Resiliency Plan Implementation a) Implement the high priority recommendations for critical infrastructure resiliency by 2025 (p.124)</p>		
4.1.7	Are hazards addressed among the elements of the municipal master plan?		No	HSP= No, ULSTER 2040 = No, OSP = No, LRTP = No		
4.1.8	Does the plan identify potential coastal-hazard effects on infrastructure, land uses, housing and community facilities?		No	<p>HSP= No, ULSTER 2040= No</p> <p>-OSP = No, although acknowledges "Flooding is an increased concern as the dynamic processes of streams, development, and climate change increase over time." (Final Report Section 4 p. 19)</p> <p>-LRTP = Not specifically, although discussion of under new Section V. SUSTAINABILITY, CLIMATE CHANGE AND TRANSPORTATION RESILIENCE (p.105)</p>		
4.1.9	Does the plan make recommendations to reduce hazard vulnerability through land-use planning?		No	<p>-OSP = No not directly, however includes these recommendations:</p> <ul style="list-style-type: none"> "Develop policies that guide development away from flood prone and aquifer recharge areas and provide for open space and aquifer friendly activities for these areas (Final Report Section 4 p. 20) & "Open Space Database and Clearinghouse: The Planning Board has compiled extensive information on planning tools, concepts, financial and legal resources, "Best Management Practices" for open space protection. By linking this set of tools to a capacity building and educational program for individuals, communities, and decision-makers, the county will provide access to more consistent, standardized methods for a coordinated approach for development and conservation among our communities (p. 14) <p>-LRTP = Yes, "Resiliency planning for transportation infrastructure and land use has been occurring and will be of critical importance moving forward" p. 111 &</p> <ul style="list-style-type: none"> - under Goals "Objective 7.1: Land Use a) Implement transportation investments that support the goals of regional, county and local land use plans, throughout the life of the Plan." (p.129) 		
4.1.10	Does the plan identify how often it should be updated?	Varied, by Plan				
4.1.11	Does the comprehensive plan identify flood-prone areas and discourage development in those areas or require strategies to reduce flood damage to buildings?		No	<p>HSP= No, ULSTER 2040= No</p> <p>OSP = Not specifically</p> <ul style="list-style-type: none"> - see call D11 note re: flood prone areas and guiding development away from... - does include a discussion under Floodplains on the National Flood Insurance Protection Program and FIRMS, etc. (Final Report Section 3 pp. 18-19) <p>LRTP = Not specifically, however included under Goals, "Objective 4.2 – Resiliency Plan Implementation a) Implement the high priority recommendations for critical infrastructure resiliency by 2025." (p.124)</p>		
4.1.12	Does the comprehensive plan encourage using green infrastructure techniques to help prevent flooding?		No	<p>HSP= No</p> <p>ULSTER 2040= No (but GI is included under Clean Energy & Environment Cluster Priorities - p.24,25)</p> <p>OSP = No</p> <p>LRTP = No</p>		
4.1.13	Does the comprehensive plan emphasize non-structural pre-disaster mitigation measures such as acquiring flood-prone lands and adopting No Adverse Impact flood plain regulations?		No	HSP= No, ULSTER 2040= No, LRTP = No		
4.1.14	Does the comprehensive plan or hazard mitigation plan 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?		No	-OSP = No, but does include discussion of New York City Watershed Protection & related programs (Final Report Section 3 p. 12), but it does not discuss the Ashokan Watershed Stream Management Program specifically...		
4.2	Is the community planning for development (e.g. parks, river-based recreation) along the river's edge that will help connect people to the river AND accommodate water during floods?		No	HSP= No, ULSTER 2040= No, OSP = No, LRTP = No		
4.2.1	Are floodways and other frequently flooded areas zoned for open space or recreation?		N/A			
4.2.2	Does the community use subdivision regulations to ensure low densities within the floodplains?		N/A			
4.2.3	Have non-conforming use and structure standards been revised to encourage safer rebuilding in flood-prone areas?		N/A			
4.2.4	Do zoning or floodplain regulations require elevation of two or more feet above Base Flood Elevation?		N/A			
4.2.5	Has the community adopted the International Building Code or American Society of Civil Engineers (ASCE) standards that promote flood-resistant building?		N/A			
4.2.6	Does the community plan for costs associated with the follow-up inspection and enforcement of land development regulations and building codes?		N/A			
4.2.7	Does the local comprehensive plan or hazard mitigation plan clearly identify safer growth areas in the community?		N/A			
4.2.8	Has the community adopted policies to encourage development in these areas?		N/A			
4.2.9	Has the community planned for new development in safer areas to ensure that it is compact, walkable and has a variety of uses?		N/A	However the COMMUNITY DESIGN MANUAL includes these considerations under its "Preferred Development" section (p.22) and encourages this type of development, where appropriate		
4.2.9.1	Has the community changed its land-use codes and regulations to allow for this type of development?		N/A			
4.2.9.2	Have land development regulations been audited to ensure that development in safer areas meets the community's needs for off-street parking requirements, building height and density, front yard setbacks and that these regulations do not unintentionally inhibit development in these areas?		N/A			

4.2.9.3 Do capital improvement plans and budgets support development in preferred safer growth areas (e.g., through investment in wastewater treatment facilities and roads)?		No	Not specifically, but N/A for County...		
4.2.9.4 Have building codes been upgraded to promote more flood-resistant building in safer locations?		N/A			
4.3 Has the community adopted the concepts of No Adverse Impact of the Association of State Floodplain Managers?		N/A		No Adverse Impact , or NAI , is a floodplain management approach recommended by the Association of State Floodplain Managers that aims to help coastal communities achieve disaster resilience. "NAI is an approach by which the action of any community or property owner, public or private, is not allowed to adversely affect coastal resources or the property rights of others."	NAI Checklist
4.3.1 Does the community have a local ordinance to protect dunes, bluffs or eroding cliffs from development or disturbance?		N/A			
4.3.2 Does the community have a local ordinance to protect wetlands?		N/A			
4.4 Does the community have an open space or other natural resources management plan?	Yes				
4.4.1 If so, does the plan identify floodplain management as a priority?		No			
4.4.2 Is actively managed open space maintained in a manner that provides flood protection?		No			
4.4.3 Is the plan adopted as part of the municipal comprehensive plan?	Yes				
4.4.4 Is the local open space plan updated in coordination with the state open space plan?		No			MSA Open Space Plan
4.4.5 Does the community participate in the state open space plan updates?		N/A- No			
	Yes		MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN (UCMHMP) -FEMA approved	FEMA Hazard Mitigation Plan, or HMP, formalizes community efforts to reduce loss of life and property from natural disasters. A FEMA-approved HMP is a condition for receiving certain types of non-emergency disaster assistance.	FEMA Hazard Mitigation Planning
4.5 Does the municipality have a FEMA-approved multi-hazard mitigation plan?		No	"The UCMHMP does outline the four Plans used as the Comprehensive Plan (p. 193, 201-203)		
4.5.1 Does the multi-hazard mitigation plan cross-reference with the local comprehensive plan?		No			
4.5.2 Was a certified floodplain manager included in the hazard-mitigation planning process?	Yes		The County's Environmental Planner is a CFM		
4.5.3 Does the multi-hazard mitigation plan describe the support and involvement of local government departments and offices?	Yes		Yes, that is one of the requirement of the plan and planning process		
4.5.4 Does the multi-hazard mitigation plan provide a clear explanation of public participation used during its development?	Yes		Yes, that is one of the requirement of the plan and planning process		
4.5.5 Does the multi-hazard mitigation plan identify critical facilities and infrastructure that are located in vulnerable areas and should be protected, repaired or relocated (e.g., town facilities, bridges, roads, and wastewater facilities)?	Yes		Yes, for all of the participating jurisdictions that have critical facilities in the SPHA they have included mitigation actions that will protect them to the 500-year level. Many other mitigation actions identified are bridges and culverts upising to at least the 100-year return interval.		
4.5.6 Does the multi-hazard mitigation plan identify projects that could be included in pre-disaster grant applications and does it expedite the application process for post-disaster Hazard Mitigation Grant Program acquisitions?	Yes		It varies by participating jurisdiction, but many mention PDM or HMGP funding as possible source. ("FEMA's PDM funding does not exist anymore, it is now called BRIC "Building Resilient Infrastructure & Communities")		
4.5.7 Does the multi-hazard mitigation plan describe past mitigation efforts e.g., shoreline stabilization and land acquisition, along with their costs and effectiveness?		No			
4.5.8 Does the multi-hazard mitigation plan provide a general explanation of the environmental, social and economic consequences of failing to address natural hazards?	Yes		Partially - it uses HAZUS software to generate these estimates. There is much potential to expand on this and this will be done with respect to this in the next update.		
4.5.9 Does the multi-hazard mitigation plan include municipal maps that indicate local hazard risks, such as flood zones, storm-surge inundation and erosion rates?		No	There are maps for some of these hazards but only at the County-level scale, which are not necessarily very usable for an area the size of Rhode Island.		
4.5.10 Does the plan consider inland riverine erosion as a hazard?		No			
4.5.11 Does the plan identify shoreline erosion as a hazard?		No	Not specifically, however includes: -Re: Storm surge "based on new data from Superstorm Sandy, the hazard is identified as a significant hazard to be addressed in the plan update" (p. 62); only listed as a hazard for the 7 Hudson coastal municipalities (pp. 8, 17, 38); and is also included under other hazards (flood, etc.) & -SLR is included under SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazards: Hurricanes and Tropical Storms; Flood; also "Transportation, communications, and governmental services may be severely impacted. Impacts would be exacerbated when coincident with high tides, or during prolonged types of events that extend across several tidal cycles. Sea level rise will increase impacts over time." (p. 140).		
4.5.12 Does the plan identify sea-level rise enhanced storm surges as hazards?		No			
4.5.12.1 Are zoned land uses compatible with coastal hazards?		N/A			
4.5.13 Does the plan identify landslides as a hazard?	Yes				
4.5.14 Does the multi-hazard mitigation plan consider high winds and tornadoes as hazards?	Yes				
4.5.15 Does the plan identify drought as a hazard?	Yes				
4.5.15.1 Does the plan identify specific conservation measures for acknowledged drought thresholds?	Yes, partially		Under Section 6 Mitigation Strategies, several actions are listed to "Reduce the possibility of damage and losses due to drought" (p254)		
4.5.16 Does the plan identify extreme temperatures and heat waves as hazards?	Yes				
4.5.17 Does the plan identify heavy snowfall as a hazard?		No	Not specifically, however heavy snow included in SECTION 3a- RISK ASSESSMENT: HAZARD PROFILES (pp. 68-139) under the following hazards: Nor'easters; Winter Storms		
4.5.18 Does the plan identify tropical storms, hurricanes and Nor'easters as hazards?	Yes				
4.5.19 Does the plan address transportation and other needs of particularly vulnerable populations, such as homeless, low income, elderly, special needs and disabled?	Yes				
4.5.20 Does the plan specify timelines for completing projects and achieving goals?	Yes		Each of the 300+ mitigation actions have an estimated timeline		
4.5.20.1 Do mitigation goals correspond with measurable mitigation objectives?	Yes				
4.5.21 Is a process for intergovernmental coordination explained for mitigating natural hazards?		No			
4.5.22 Does the plan identify critical facilities and infrastructure that are located in vulnerable areas and should be protected, repaired or relocated?	Yes		Yes, several are included as specific actions in the County Jurisdictional Annex doc (cell F 65)		Appendix 1.2 - Jurisdictional Annexes
4.5.23 Have neighboring local governments been consulted to coordinate disaster responses and hazard-mitigation strategies?	Yes		Yes, 16 the 24 local jurisdictions opted to participate in the UCMHMP		
4.5.24 Does the plan identify opportunities to incorporate hazard mitigation into existing planning mechanisms, e.g., land-use planning, capital investments, shoreline restoration projects?		No			
4.5.25 Does the multi-hazard mitigation plan identify projects that could be included in pre-disaster grant applications and does it expedite the application process for post-4.5.25. Does the multi-hazard mitigation plan identify projects that could be included in pre-disaster grant applications and does it expedite the application process for post-disaster Hazard Mitigation Grant Program acquisitions?	Yes		Yes, but these vary by community		
4.6 Does the municipality have an adopted floodplain management plan?		N/A			
4.6.1 Is it incorporated as an element of the comprehensive plan?		N/A			
4.6.2 Is the floodplain plan incorporated in the open space plan?		N/A			
4.6.3 Is it incorporated in the stormwater management plan?		N/A			
4.6.4 Is it incorporated in the multi-hazard mitigation plan?		N/A			
4.6.5 Does the municipality have a certified floodplain manager on staff?	Yes		Ashokan Watershed Stream Management Program: "The Ashokan Watershed Stream Management Program is a collaborative effort of New York City Department of Environmental Protection, Cornell Cooperative Extension of Ulster County and Ulster County Soil and Water Conservation District. The program promotes a coordinated approach to stream protection and management within the Ashokan Reservoir watershed"	Certified Floodplain Manager , or CFM, is a program of the Association of State Floodplain Managers that recognizes continuing education and professional development of floodplain management professionals.	https://ashokanarea.org/ashokanwatershed/streammanagement/
4.6.6 Was a certified floodplain manager included in the planning process?	Yes				CFM Program Information
4.6.7 Was a licensed professional planner included in the planning process?	Yes				
4.6.8 Does the municipality participate in the National Flood Insurance Program ?	Yes				NFIP
4.6.9 Does the municipality have a flood damage prevention ordinance?		N/A			
	Yes		ULSTER COUNTY STORMWATER MANAGEMENT PROGRAM PLAN (SWMP) -The MS4 Stormwater Annual Report is published annually -Under the SPDES MS4 regulations, Ulster County is considered a "Traditional Non-land Use Control MS4" (a municipal entity that does not have jurisdiction over land use issues-e.g., zoning and building permit issuance). As such, our public includes our staff, contractors, and visitors. The County's education efforts focus on internal staff development and educating the visitors to our County facilities on pollution prevention. The County is also very committed to providing technical, mapping, and GIS support to all of the municipal MS4 communities within Ulster County. (p. 4-3)		MS4 Stormwater Management Program Manual
4.7 Does the municipality have a stormwater management plan					

4.7.1 Was a certified floodplain manager included in the planning process?			?		
4.7.2 Does the stormwater management plan include green infrastructure and low-impact development regulations to decrease runoff, e.g., tree protection ordinances, impervious cover limits, riparian buffers, vegetated drainage channels and cluster development?		N/A	"However County has several sites with green infrastructure which are maintained by County DFW staff who are trained in these practices"		
4.7.3 Does the plan identify runoff and drainage problems due to impervious surfaces?		N/A	"For County properties, included under MCM 5: Post-Construction Stormwater Management activities/practices (p. 21)"		
4.7.4 Has the community implemented strategies to reduce storm water runoff from roads, driveways, and parking lots?		N/A	"For County properties, included under MCM 4: Construction Site Stormwater Runoff Control (p. 19)"		
4.7.5 Does the plan identify constraints if the municipality reaches impervious coverage levels allowed by land-use and zoning designations?		N/A			
4.7.6 Has the community coordinated with neighboring jurisdictions to explore a watershed-wide approach to storm water management?		N/A	However, "Ulster County Department of the Environment also supports local watershed groups, providing them with technical and mapping assistance, management plan reviews, and sending out water examination and testing equipment" (p. 16)		
4.7.7 Do storm water management regulations apply to areas beyond those that are regulated by federal or state storm water regulations?	Yes		Local Law Number 18 Of 2007 Prohibiting Illicit Discharges, Activities And Connections To The Ulster County Separate Storm Sewer System (pp.48-75)		
4.7.8 Does the plan describe the municipal responsibilities for inspection and maintenance of stormwater facilities?	Yes				
4.7.9 Has the community developed a storm water utility to serve as a funding source for storm water management activities?		No			
4.7.10 Does the plan identify how often it should be updated?		No	However the MS4 Stormwater Annual Report is published annually		
4.8 Does the community have a capital improvements plan?	Yes				
4.8.1 Were a licensed professional planner, engineer, and certified floodplain manager involved in the planning process?					
4.8.2 Does the plan consider the risk of flooding and coastal hazards and sea level rise when upgrading existing municipal infrastructure?					
4.8.3 Does the capital improvement plan consider the risk of flooding and coastal hazards and sea-level rise on proposed infrastructure projects?		No	At least two project specify reduced flood risk: Frost Valley "Big Turn" Reconstruction CP p.60; the Harry Thayer Park Project includes "facilities to include portable restroom and portable, small tourism center that can be temporarily relocated prior to a flood." p.72		
4.8.4 Does the capital improvement plan incorporate projections of flooding and sea-level rise into risk assessments over the expected service life of municipal infrastructure?		No			
4.8.5 Does the plan incorporate, if appropriate, existing plans, studies, reports, and technical information?		No			
4.8.6 Does the plan identify how often it should be updated?	Yes				
4.9 Does the municipality have an economic development plan or strategy?	Yes		Per the ULSTER 2040 report: "The findings are intended to guide and focus economic development investments by the County and its partner agencies." "emphasizes a rapid-prototyping and design-thinking approach" "clean energy & environment" are included as one of the four economic development priorities" "we will focus our efforts on making our economy more resilient and sustainable. We will consider its vulnerability, and we will develop solutions that enable it to withstand future shocks."		
4.9.1 Does the plan identify economic vulnerabilities due to coastal hazards?		No - N/A			
4.9.2 Does the plan incorporate sea level rise and other climate change effects into its assessment of economic vulnerabilities?		No	Not specifically, but does include mention of potential impacts of climate change (p. 12, 23)		
4.10 Does the community have a local waterfront revitalization plan, special area management plan, beachfront management plan or shoreline management plan?		N/A		Local waterfront revitalization plan, or LWRP, is a plan devised by a community for preferred and accepted land uses on their waterfront. This program is supported by NYS Department of State.	LWRP
4.10.1 Do these plans identify the threat of coastal storms and erosion?		N/A			
4.10.2 Do these plans identify the threat of sea level rise and other climate related hazards?		N/A			
4.10.3 Do these plans identify the vulnerability of wildlife and habitat to coastal hazards?		N/A			
4.11 Has the municipality developed a coastal resilience plan?		N/A			
4.11.1 Has the municipality strived to reduce vulnerability in coastal zones through non-structural measures wherever possible?		No - N/A			
4.11.2 Have areas of significant public investment, water dependent uses and critical infrastructure that require structural protection because options for relocation, elevation or employment of non-structural measures are not feasible been identified?		N/A	N/A for most County projects: some County bridges and culverts have been right-sized for future flood events		

Section 5: Disaster Preparedness and Recovery	Yes	No	Notes	Definitions	References
5.1 Is the municipality recognized as a Storm Ready Community ?		No	SUNY New Paltz is, and is within Ulster County	Storm Ready is a program offered through the National Weather Service to help communities to take a proactive approach to preparing for extreme weather and natural disasters.	https://www.weather.gov/stormready/
5.2 Does the community have a general emergency warning system?		No			
5.3 If the community is located along a river, does it have an early flood-warning system?	Yes		The County has a robust network of USGS stream gages and several have real-time, call-in capability that act as an early warning system. There is no siren that sounds to signal evacuation however		
5.4 Are emergency responders aware of real-time ocean and estuarine observing systems and stream gauging information?	Yes				
5.5 Does the community relay weather related threats to the public in at least two forms of communication?	Yes		Through Social Media outlets and through NY Alert		
5.6 Does the community have an emergency response and short-term recovery plan and/or a flood response plan that includes coastal flooding?		No			
5.6.1 Does the plan describe a hierarchy of authority during emergencies?	Yes		The Comprehensive Emergency Response Plan (CEMP) does.		
5.6.2 Does the plan identify first responders?	Yes		The CEMP does, however it not include names of individuals, but does identify agencies, etc		
5.6.3 Does the plan include a list of contacts for operators of municipal facilities?		No	While this list is not in the CEMP the County does have a list that is used.		
5.6.4 Is the plan a municipal plan (rather than county or state)?		No	N/A		
5.6.5 Does the plan indicate the required update frequency?	Yes		Annual updates required to Emergency Manager by March 1		
5.6.6 Does the plan include steps for emergency protective measures e.g., sandbagging, erecting warning devices, and search and rescue?		No			
5.6.7 Does the plan include organizational framework to conduct a preliminary damage assessment?	Yes		Yes, Section IV, part A (page 40) of the CEMP		
5.6.8 Are the best available projections concerning the frequency and severity of extreme storm events incorporated into the municipality's emergency response/operations plan?		No			
5.6.9 Does the emergency response/operations plan include coordination and communication among critical stakeholders such as community-based organizations, local businesses, local health departments, utilities and local government leaders?	Yes				
5.7 Does the community have a designated emergency operations center?	Yes				
5.7.1 Is it located outside of flood-hazard areas?	Yes				
5.7.2 Is it designed to withstand high winds?	Yes				
5.7.3 Does it have elevated back-up power?		No	This would not be needed since the EOC is outside the floodplain		
5.8 Does the community have adequate designated storm shelters?	Yes		There are numerous Red Cross approved shelters throughout the 1,160-square mile County - so there are both localized shelters and a regional shelter at SUNY Ulster in Stone Ridge (centrally located to the County)		
5.8.1 If the community does not have a designated storm shelter within the community, is there an established memorandum of agreement with a neighboring community or county to provide constituents shelter?			N/A - County has a shelter		
5.8.2 Are storm shelters located outside flood-hazard areas, including storm-surge inundation areas?	yes				

5.8.3 Are storm shelters designed to withstand high-wind effects?	yes				
5.9 Does the community have an evacuation plan?	Yes		These are developed by each component municipality within the county. There are certain major routes that are designated by the County as well		
5.9.1 Are responsibilities for municipal evacuation clearly defined?		No	Not at the County level, they are at the local level, where available		
5.9.2 Does the plan identify the necessary time frame to evacuate residents and vacationers from storm-hazard areas?		No			
5.9.3 Does the plan identify where evacuation routes are prone to flooding?	Yes		The major County routes were designated in areas that avoided floodplains		
5.9.4 Is there more than one route identified to evacuate the community?		No	Yes (we are a County the size of Rhode Island)		
5.9.5 Does the evacuation plan consider the possibility of evacuation of neighboring jurisdictions occurring concurrently?		No			
5.9.6 Does the evacuation plan identify and provide for groups that rely on public transportation (or lack private vehicles) for emergency evacuations?		No	Not specifically, however the County Bus Service (UCAT) would be called upon to assist when needed		
5.9.7 Does the plan identify the conditions that would initiate a traffic lane reversal?		No			
5.9.8 Does the plan identify local and state evacuation assistance programs for the following special needs?					
5.9.8.1 Hospitals			Component Municipalities have their own internal plan which included assistance from the County as needed/when requested.		
5.9.8.2 Nursing Homes			Component Municipalities have their own internal plan which included assistance from the County as needed/when requested.		
5.9.8.3 Prisons			Component Municipalities have their own internal plan which included assistance from the County as needed/when requested.		
5.9.8.4 Residents without personal transportation			UCAT would be called upon to assist when needed		
5.9.8.5 Elderly			Component Municipalities have their own internal plan which included assistance from the County as needed/when requested.		
5.9.8.6 Disabled			Component Municipalities have their own internal plan which included assistance from the County as needed/when requested.		
5.9.8.7 Schools			Component Municipalities have their own internal plan which included assistance from the County as needed/when requested.		
5.10 Does the community maintain and promote a special needs registry?	Yes		Managed through UC Department of Social Services (DSS)/Office for the Aging (OFA) and Office of Emergency Management		
5.11 Does the municipality inform residents of the NY-Alert program?	Yes		Local Municipalities encourage residents to sign up	NY-Alert is a service offered by NYS to alert citizens of hazards and emergencies via email or telephone.	https://www.nyalert.gov/
	Yes		Local FD coordinate/responsible for this effort. County assists the DRRC (faith-based volunteers) sheltering/feeding/UCAnimal Response Team (UCART)	Community emergency response teams, or CERT is a program offered by FEMA to train volunteers in basic response skills so that they can assist others in their communities following a disaster when professional emergency responders are not immediately available to help.	https://www.fema.gov/community-emergency-response-teams
5.12 Does the municipality have a volunteer community emergency response team?					
5.13 Does the community have a portable communications system that can operate under poor weather conditions and when electrical power is not available?	Yes				
5.14 Is there an adequate heat-warning system in place?		No	NY Alert system would be utilized; there is no siren or similar notification system		
5.15 Is a cooling-center program established that considers potential problems such as transportation obstacles, effects of power outages or flooding and other needs of vulnerable populations/communities?	Yes		Cooling centers are run by component municipalities as needed (not County supported); there is a County supported warming center with a webpage however		

5.16 Does the community have a continuity of operations plan?		No			
5.16.1 Does the plan provide guidance on post-disaster waste management and debris removal?			No, other than it falls under the supervision of the County Emergency Managers responsibilities.		
5.16.1.1 Is machinery for debris removal located outside of flood hazard areas?	Yes				
5.16.1.2 Are routes to waste-disposal facilities passable in the event of a flood?	Yes				
5.16.1.3 Are temporary waste-disposal staging areas identified in the event of a disaster?		No	N/A?		
5.17 In the event of a disaster, are procedures defined to conduct habitability and substantial damage assessments?	Yes		Page 40 of the CEMP		
5.18 Does the community store FEMA elevation certificates outside of flood-hazard areas?			N/A. Elevation Certificates are filed with the local municipality	FEMA elevation certificates provide documentation that buildings located in Special Flood Hazard Areas are properly elevated. Elevation certificates can be used by the property owner to obtain flood insurance.	https://www.fema.gov/elevation-certificate
5.19 Does the community have a long-term recovery plan ?		No		A long-term recovery plan provides guidelines on steps the community will take to re-establish a pre-disaster condition or better, and enable to community to sustain itself.	http://www.dhSES.ny.gov/planning/cemp/documents/NYS-CEMP-Vol.3-Long-Term-Recovery-2017.pdf
5.19.1 Does the plan identify redevelopment opportunities outside of flood-hazard areas?			N/A since there is no long term recovery plan		
5.19.2 Does the plan advocate the use of advisory flood maps to define post-disaster redevelopment building elevations?			N/A since there is no long term recovery plan		
5.19.3 Does the plan identify opportunities to retrofit or relocate existing structures or infrastructure in hazard-prone areas?			N/A since there is no long term recovery plan		
5.19.4 Does the plan utilize risk and vulnerability mapping to determine the location of future development?			N/A since there is no long term recovery plan		
5.19.5 Has the community identified the lines of coordination in transitioning from short-term to long-term recovery?			N/A since there is no long term recovery plan		
5.19.6 Does the plan include an organizational framework that facilitates the effective coordination and use of state, federal, and NGOs resources in a manner that provides maximum benefit for the disaster area?			N/A since there is no long term recovery plan		
5.19.7 Does the plan identify roles and functions of elected and appointed officials, state and federal agencies, and NGOs?			N/A since there is no long term recovery plan		
5.19.8 Does the recovery plan 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?			N/A since there is no long term recovery plan		
5.20 Has the community adopted floodplain development limits that prohibit or reduce any new encroachment and fill in river corridors and fluvial erosion hazard areas?		No	N/A - County does not regulate floodplains in NYS		
5.21 Has the community encouraged agricultural and other landowners to implement pre-disaster mitigation measures, such as the following?					
5.21.1 Storing hay bales and equipment in areas less likely to be flooded?			N/A since there is no long term recovery plan		
5.21.2 Installing ponds or swales to capture storm water?			N/A since there is no long term recovery plan		

5.21.3 Planting vegetation that can tolerate inundation?			N/A since there is no long term recovery plan		
5.21.4 Using land management practices to improve the capability of the soil on their lands to retain water?			N/A since there is no long term recovery plan		
5.21.5 Have long-term recovery plans been developed for areas vulnerable to flooding and coastal storms?			N/A since there is no long term recovery plan		
5.22 Does the local government have the authority to establish a temporary post-disaster building moratorium?			N/A since there is no long term recovery plan		

Section 6 – Hazard Mitigation Implementation			Yes	No	Notes	Hyperlink 1	Hyperlink 2	Definitions	References
6.1	Has the municipality taken the Climate Smart Communities Pledge ?	Yes			~silver-level certified CSC (2016) ~recertification planned (April 2021)	https://climatesmart.ny.gov/actions-certification/participating-communities/certification-report?tx_sicert_certification%5Bcertification%5D%5B_identify%5D=75&tx_sicert_certification%5Baction%5D=show&tx_sicert_certification%5Bcontroller%5D=Certification&cHash=ea7646186c7cb3761f88233873bce6c		Climate Smart Communities is a network of NY communities engaged in reducing greenhouse gas emissions and improving climate resilience.	http://www.dec.ny.gov/energy/50845.html
6.2	Has the municipality created a local Climate Action Plan ?	Yes			~government operation CAP (2019)	https://ulstercountyny.gov/environment/department-environment		A Climate Action Plan describes the policies and measures that a local government will enact to reduce greenhouse gas emissions and increase the community's resilience to climate change.	http://www.dec.ny.gov/energy/67101.html
6.3	Is the municipality active in the National Flood Insurance Program's Community Rating System ?				~N/A for County ~Ashokan Watershed Stream Management Program collaboration with Towns of Shandaken, Olive, Wood-stock, and Hurley to support application to FEMA for	https://ashokanstreams.org/about-the-program/	http://www.fbiit.us/DocumentCenter/View/17848/NFIP_CRS_Fact_Sheet_2017_508OK?bidid=	The FEMA Community Rating System is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceeds the minimum National Flood Insurance requirements.	https://www.fema.gov/national-flood-insurance-program-community-rating-system
6.4	Has the municipality proposed the relocation of public buildings, critical facilities, or infrastructure out of flood hazard areas as a result of the multi-hazard mitigation plan or other planning tools?		N/A		N/A for County, however several within County: Boiceville Fire Station, Shandaken Town Hall/Highway Garage; Town of Olive Town Offices and DPW facility; etc.				
6.5	Has the municipality used its multi-hazard mitigation plan to propose retrofitting public buildings, critical facilities and other infrastructure to withstand flood damage?	Yes			Numerous mitigation actions in the 2017 Plan call for this				
6.6	Do municipal building codes exceed the state's 2-foot freeboard above base flood elevation requirement?		N/A						
6.7	Have building and permitting officials completed training on retrofitting flood-prone residential buildings?	Yes						Training on retrofitting floodprone buildings is available through FEMA.	https://training.fema.gov/emc/courses/crsdetail.aspx?uid=E279&ctype=R
6.8	Have building and permitting officials completed training in FEMA's Coastal Construction Manual ?		N/A	No defined Coastal areas				Training on Residential Coastal Construction is available through FEMA.	Coastal Construction Manual
6.9	Have community officials competed post-flood stream intervention training?		N/A						
6.10	Does the community provide property owners with guidelines to retrofit existing development for flood and wind risks?		N/A						
6.11	Does the municipality utilize any of the following tools to manage development in hazard-prone areas?								
6.11.1	Transfer of development rights or purchase of development rights		N/A						
6.11.2	Conservation overlay districts or cluster development		N/A						
6.11.3	Zoning for open or recreational space		N/A	County does not do zoning					
6.11.4	Protective coastal, riparian and/or wetland buffer ordinances		N/A	County does not enforce/create ordinances					
6.11.5	Rolling easements		N/A						
6.11.6	Buyouts of vulnerable properties	Yes		Three different buyout programs have been facilitated by Ulster County since 2005					
6.11.7	Other:								
6.12	Does the municipality use land-acquisition programs to purchase land-conservation easements in hazard-prone areas?	Yes		In part - Ulster County does reach out to land trusts and state/city entities regarding open space parcels in floodplains/wetlands that come up for tax auction					
6.13	Does the community utilize impact fees, accommodation taxes or user fees to acquire properties in hazard areas?		N/A						
6.14	Does the municipality have a plan for shoreline stabilization ?		N/A					Shoreline stabilization - protecting or restoring natural shorelines have many ecological and resilience benefits.	http://www.dec.ny.gov/permits/50534.html
6.15	Is the automatic replacement of hardened structures prohibited?		N/A						
6.16	Are sustainable enhanced methods of shoreline protection encouraged through incentives or regulation?		N/A						
6.17	Does the community inform property owners of preferred sustainable shoreline protection techniques, including non-structural and ecologically enhanced methods?		N/A	However the AWSMP does					
6.18	Does the municipality have a plan in place to control invasive plant species, especially near the shoreline?		N/A						
6.19	Does the community engage in dune, wetland or shoreline restoration?		N/A						
6.20	Has the community established special area ordinances for habitat preservation?		N/A						
6.21	Does the community utilize impact fees, accommodation taxes or user fees to pay for shoreline protection and restoration, wetland restoration or riparian buffers?		N/A						
6.22	Are community flood control or other protective structures (e.g., levees, flood or sea walls) inspections on schedule?		N/A						
6.23	Has the community used any of the following grant programs to implement mitigation projects?								
6.23.1	FEMA Hazard Mitigation Grant Program	Yes		2009 and 2017 Multi-Jurisdictional Hazard Mitigation Plan and subsequent update				The purpose of the FEMA Hazard Mitigation Grant Program is to help communities implement hazard mitigation measures following a Presidential major disaster declaration.	https://www.fema.gov/hazard-mitigation-grant-program
6.23.2	FEMA Pre-disaster Mitigation Grant Program		No					The FEMA Pre-disaster Mitigation Grant Program is designed to assist States, U.S. Territories, Federally-recognized tribes, and local communities in implementing a sustained pre-disaster natural hazard mitigation program	https://www.fema.gov/pre-disaster-mitigation-grant-program

6.23.3 FEMA Flood Mitigation Assistance Program	No				The FEMA Flood Mitigation Assistance Grant Program provides resources to assist states, tribal governments, territories and local communities in their efforts to reduce or eliminate the risk of repetitive flood damage to buildings and structures insurable under the National Flood Insurance Program	https://www.fema.gov/media-library-data/1455710459301-048a67862580037b30cd640a802a9053/FY16_FMA_Fact_Sheet.pdf
6.23.4 HUD Community Development Block Grants	Yes				The Community Development Block Grant, or CDBG, program provides annual grants on a formula basis to 1209 general units of local government and States.	https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs
6.23.5 Other:	Yes	NYCDEP NYFBBO; CWC FHMIP; AWSMP SMIP; RNSP SMIP; NYSDEC HREP				

PE7 Action: Evaluate Policies for Climate Resilience

6 Points

BRONZE PRIORITY



SILVER PRIORITY

A. Why is this action important?

Local government decision makers often have the greatest capacity to influence the resiliency of their communities to climate change. Typically, they are the first to respond to emergencies and they understand the physical and social characteristics of their communities. With climate change bringing more extreme weather, local decision makers have the responsibility to examine vulnerabilities and take action to protect community assets. Some strategies utilized in local plans and projects may help to build a community's resilience to climate change, while others may fail to consider how climate change will affect their implementation. Sometimes slight modifications to existing policies or projects can help a community more effectively prepare for climate change.

Conducting an evaluation of existing plans, policies, and projects will expose gaps and vulnerabilities and ultimately help ensure that they will either help, reduce, or, at a minimum, not increase vulnerability. The Climate Smart Communities (CSC) program developed a procedure to conduct such a survey: [Climate Smart Resiliency Planning](#). Climate Smart Resiliency Planning (CSRP) is a procedure for holding a facilitated discussion and completing a questionnaire that is designed to stimulate ideas and collaboration among local government staff and officials. Implementing CSRP is a great early step for local decision makers to make progress on climate change adaptation and creates an opportunity to integrate climate considerations into local government operations.

B. How to implement this action

Conduct a self-evaluation of local plans, policies, and projects using the [Climate Smart Resiliency Planning](#) procedure. This action can be accomplished as a standalone project or as part of another effort such as a climate action plan, a vulnerability assessment, a comprehensive plan, or climate adaptation plan. CSRP is designed to help municipal staff and officials work collaboratively to recognize the opportunities to enhance community resilience in existing plans and begin to create a set of integrated planning documents that identify vulnerabilities, assess risk, and describe appropriate adaptation strategies. Because it is focused on existing government policies and projects, CSRP is often one of the first steps in climate adaptation planning and should be followed by a climate vulnerability assessment, as per [PE7 Action: Climate Vulnerability Assessment](#).

To implement CSRP, put together a team to plan the effort and identify the most knowledgeable and relevant staff members that will contribute to the self-evaluation. A person should be appointed as a facilitator to elicit participation in discussions, oversee documentation of the CSRP process, and ensure that every question is answered. Although not necessary, local governments may find it useful to appoint someone not associated with the municipality to serve as the facilitator, e.g., a contractor who is familiar with the region and with climate change adaptation strategies, a knowledgeable volunteer from the CSC task force, or a [NYSERDA Clean Energy Community coordinator](#). Additionally, as the CSRP tool is primarily focused on flooding, communities may find it valuable during this process to explore other tools that directly address planning for hazards such as extreme heat and drought.

To be eligible for points under this CSC action, CSRP must have been implemented within five years of the application date. Applicants must follow the steps in the CSRP guide and fill out the [CSRP tool](#). The CSRP tool is the Excel spreadsheet that contains the questions and checklists for each of the six sections; it provides a place to take notes and identify gaps or deficiencies in local plans, policies, and projects. Applicants must also provide a summary report of the findings and show that they engaged municipal staff and officials across departments in the discussion of climate vulnerabilities as they relate to local plans, policies, and projects.

C. Timeframe, project costs, and resource needs

The timeframe for this action largely depends on the size of the local government and the number of plans, policies, and projects that are evaluated as part of this process. A typical timeframe is one to three months. The costs are mainly related to staff time, although some local governments may choose to hire a contractor to act as a facilitator, document the process, and help produce the summary report.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments and all departments. The department or office that leads climate and sustainability efforts is most likely to be responsible for this action. This action is often led by the chief elected official's office or by the department of the environment or planning. Volunteer groups such as the CSC task force may assist, but detailed input from knowledgeable municipal staff and officials is necessary.

E. How to obtain points for this action

Six points are available for local governments that implement CSRP and provide the required documentation.

F. What to submit

Submit a copy of the completed CSRP tool and the summary report of the findings. At minimum, the summary report must describe the evaluation process (including a record of engaging municipal staff and officials across departments) and the gaps that were identified in local plans, policies, and projects as they relate to community vulnerability to climate change. The CSRP process must have been implemented within five years of the application date.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

G. Links to additional resources or examples

- [CSC Climate Smart Resiliency Planning – A Planning Evaluation Tool for New York State Communities](#)
- Piermont, NY [Climate Smart Resilience Planning: Results and Recommendations \(2014\)](#)
- Red Hook, NY [Climate Smart Resilience Planning Tool](#) and [Recommendation Summary](#)
- [EPA Flood Resilience Checklist](#)
- [NOAA Coast Smart Community Scorecard](#)

H. Recertification Requirements

For recertification, local governments must provide updated CSRP documentation every five years that reflects any infrastructure changes or any new plans, policies, or projects that were not addressed in the initial report.