

The mission of the Hudson Watershed Resiliency Project (HEWRP) is to build long-term resilience to extreme weather and climate change in the Hudson River Estuary Watershed. The HEWRP is a collaboration of Cornell Cooperative Extensions of Columbia-Greene, Dutchess and Ulster Counties in partnership with the NYS Water Resources Institute at Cornell University and the NYS Department of Environmental Conservation's Hudson River Estuary Program.

The Hudson Estuary Watershed Resiliency Project in 2019

In 2019 the HEWRP worked directly with decision makers in 13 communities in the Hudson Valley to help them complete actions of the [NYS Climate Smart Communities \(CSC\) Certification Program](#) to enhance their ability to adapt to climate change through resiliency planning and implementation.

Road-Stream Crossing Management Plans

The HEWRP worked with two communities in 2019 to create Road-Stream Crossing Inventories and Management Plans. Utilizing data collected according to the North Atlantic Aquatic Connectivity Collaborative protocol and hydraulic data modeled by researchers at Cornell University, CCE staff created an inventory of all public road-stream crossings and address effective management of these crossings for aquatic connectivity and current and future flooding scenarios. CCE Staff facilitated workshops with municipal staff to develop a priority list of crossings in need of replacement based on the available data and community feedback. These management plans and priority lists are instrumental in providing communities the information they need to apply to funding to replace these structures and ensure their road-stream crossing infrastructure is resilient to future flooding.



CCE staff and NYS DEC HREP staff educating municipal officials and staff about road stream crossing data and prioritization methods.

Climate Smart Resiliency Planning



CCE staff presenting the results of the Climate Smart Resiliency Planning tool to municipal staff and volunteers from the Towns of LaGrange, Pleasant Valley, Poughkeepsie & Wappinger and the Village of Wappingers Falls at a Community Resilience Building workshop.

One of the most important tools local decision makers can utilize to build climate resiliency and make lasting change in their communities is through their local plans and ordinances. In 2019 the HEWRP utilized the [CSC Climate Smart Resiliency Planning](#) tool to help six communities review their existing plans, codes, and ordinances to identify gaps and vulnerabilities to climate change. CCE staff worked to review existing municipal documents and facilitated discussions with members of the community to complete the tool, identify strengths and opportunities for growth related to climate resiliency in the community, and prioritize recommendations for addressing identified gaps. The process also worked to encourage collaboration among elected officials and staff to address priority recommendations.

Climate Smart Communities Certification Assessment and Submission Assistance

In 2019 the HEWRP worked to help four communities in the Hudson Valley determine how many actions of the [CSC Certification Program](#) they had completed and for which they could receive credit and make recommendations for which actions to complete to achieve Bronze level certification in the program. This work functions as a road map for these communities and prioritizes additional projects that will increase their resiliency to climate change and better position the communities to apply for grant funding for projects. CCE staff will continue to work with these communities in 2020 to support achieving additional actions in the program and submitting them for credit in the CSC program.

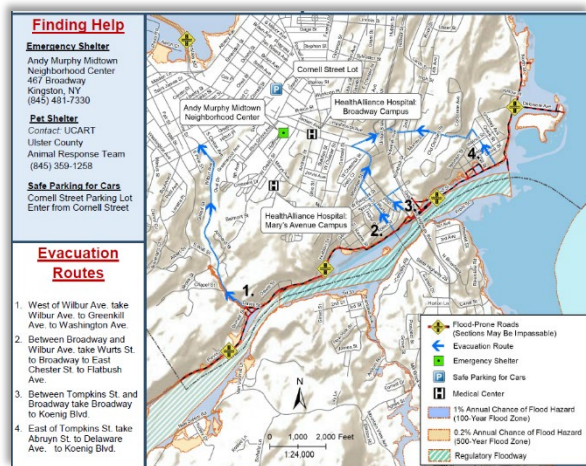


The Town of Red Hook Climate Smart Communities Task Force and CCE staff with the Town's plaque of recognition for Bronze level certification in the CSC Certification Program.

CCE staff also worked with three communities in 2020 to submit appropriate documentation for completed actions in the [CSC Certification Program](#). In September of 2019 it was announced that two of the three communities achieved Bronze level certification in the program and it's likely the third will achieve certification in 2020.

Water Infrastructure Inventory

CCE staff worked with partners in Ulster County to create a County inventory of water infrastructure assets and relevant documents including waste water treatment systems, drinking water sources and dams. This catalog will serve as a baseline tool for the Ulster County Water Quality Coordinating Committee to begin building an organized system of information for identifying needed projects and policies to achieve their mission of resilient watershed systems.



Flood Preparedness Guide

The HEWRP worked with the City of Kingston in 2019 to help the community create a Municipal Flood Preparedness Guide. The guide is a resource for residents that outlines community-specific emergency preparedness information such as flood prone roads and emergency shelter locations as well as information on what do to before, during and after a flood.

A map of floodplains, flood-prone roads, evacuation routes and emergency shelters included in the Kingston Flood Preparedness Guide.

For more information about the Hudson Estuary Watershed Resiliency Project contact Carolyn Klocker, CCE Dutchess County Environment & Energy Program Leader, at cak97@cornell.edu or (845) 677-8223.