

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 Dutchess, Columbia-Greene 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 2018

In 2018 the HEWRP worked directly with decision makers in 14 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 three communities in 2018 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.



CCE staff worked with municipal officials and staff to develop recommendations reports on ways the community could update their plans and codes to increase their climate resiliency.

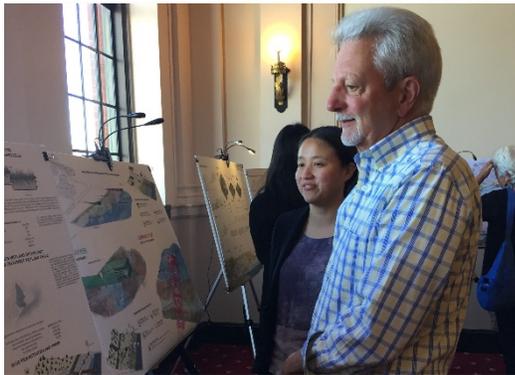
Climate Smart Resiliency Planning

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 2018 the HEWRP utilized the [CSC Climate Smart Resiliency Planning](#) tool to help ten 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

In collaboration with the Town’s Conservation Advisory Committee, in 2018 the HEWRP worked to help the Town of Red Hook assess how many actions of the [CSC Certification Program](#) it had completed and for which it 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 the community and prioritizes additional projects that will increase its resiliency to climate change and better position the community to apply for grant funding for projects. CCE staff will continue to work with the Town in 2019, as well as with three other communities, to support them in the submittal process to achieve certification in the CSC program.

Climate Adaptive Design Support

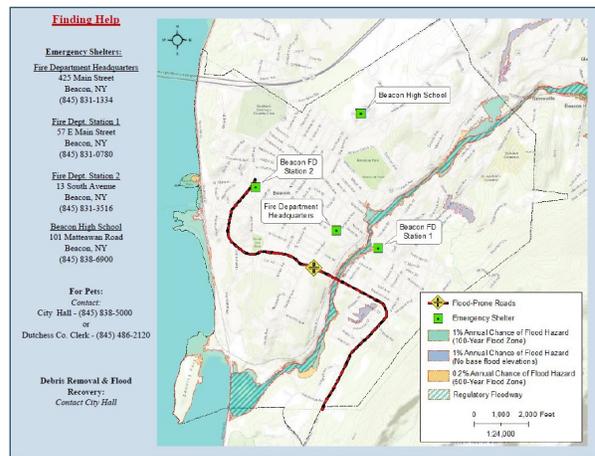


A Cornell CAD student shares her design with a Kingston community member.

In 2018 the HEWRP provided support to the [Cornell Climate Adaptive Design \(CAD\) Studio](#) to assist with implementation of project outreach to obtain community input in identifying climate adaptive design elements to incorporate in both upcoming and existing projects in the City of Kingston. The CAD Studio links Cornell students in landscape architecture with flood-risk Hudson Riverfront communities to explore design alternatives for more climate resilient and connected waterfront areas. CCE staff helped engage community stakeholders throughout the studio to help inform the design process and support more usable results for the City. Staff also worked with partners and the City to host a Waterfront Resiliency Summit and High Water Festival highlighting Kingston’s Past, Present and Future on the waterfront, with the CAD projects representing the future of Kingston.

Flood Preparedness Guide

The HEWRP worked with the City of Beacon in 2018 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, and emergency shelters included in the Beacon 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.



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