

Town of Woodbridge



Photo Credits: Woodbridgect.org, Wikipedica,, Hartford Courant,, Woodbridge Senior Center

Community Resilience Building Workshop Summary of Findings July 2018

Town of Woodbridge

Community Resilience Building Workshop

Summary of Findings

Overview

The need for municipalities, academic institutions, regional planning organizations, states and federal agencies to increase resilience and adapt to extreme weather events and a changing climate is strikingly evident amongst the communities of the state of Connecticut. Recent events such as Tropical Storm Irene and Sandy have reinforced this urgency and compelled leading communities like the Town of Woodbridge to proactively collaborate on planning and mitigating risks. Ultimately, this type of leadership is to be commended because it will reduce the vulnerability of municipal residents, infrastructure, and ecosystems and serve as a model for other communities in Connecticut, New England, and the Nation.

In the spring of 2018, the Town of Woodbridge embarked on certification via Sustainable CT. As part of that certification, Sustainable CT and the Nature Conservancy provided the Town with a voluntary process to conduct an assessment of climate change impacts. In July 2018, a municipal-based core team organized a Community Resilience Building Workshop facilitated by the Nature Conservancy in partnership with Sustainable CT. Representatives for the Town of Bethany were also in attendance with their specific findings provided in a separate report. The core directive of this effort was the engagement with and between community stakeholders to facilitate the assessment of climate vulnerabilities and the education, planning and ultimately implementation of priority adaptation actions for Woodbridge. The Workshop's central objectives were to:

- Define top local natural and climate-related hazards of concern;
- Identify existing and future vulnerabilities and strengths;
- Develop prioritized actions for the Town of Woodbridge;
- Identify opportunities to collaboratively advance actions to increase resilience.



For the Workshop, the Town of Woodbridge employed a unique “anywhere at any scale”, community-driven process known as the Community Resilience Building (CRB) Workshop (www.CommunityResilienceBuilding.org). The CRB’s Risk Matrix and various data and maps were integrated into the Workshop process to provide both decision-support and risk visualization around shared values and priorities across Woodbridge. Using this CRB process, rich with information, experience and dialogue, the participants produced findings which are outlined in this summary report. The following report provides an overview of the top hazards, current concerns and challenges, current strengths, and proposed actions to improve Woodbridge’s resilience to natural and climate-related hazards today, and in the future.

The summary of findings transcribed in this report, like any that concern the evolving nature of risk assessment and associated action, are proffered for comments, corrections and updates from workshop attendees and additional stakeholders alike. The leadership displayed by the Town of Woodbridge on community resilience building will benefit from the continuous and expanding participation of all those concerned.

Summary of Findings

Top Hazards and Vulnerable Areas for the Community

During the CRB Workshop, community members were asked to identify the top hazards for the Town of Woodbridge. The hazard of greatest concern to the participants was intense wind associated with winter storms and Nor’easters. The other hazards of greatest concern were precipitation-driven flooding from rivers and streams and extreme temperatures or heatwaves. These hazards have direct and increasing impacts on Woodbridge’s residents and resources such as its neighborhoods, natural areas (river corridors, wetlands, watersheds, parks), farms, roads, public and private drinking and wastewater systems, health care facilities, social support service to vulnerable populations, and other critical infrastructure and community assets.



Top Hazards and Areas of Concern for the Community

Top Hazards

- Wind (Nor'easters, winter storms)
- Flooding (precipitation-driven inland and river)
- Extreme Temperatures or Heatwaves

Areas of Concern in Woodbridge

Neighborhoods: Fountain Street, West River (approximately 60 homes).

Ecosystems: Dead and standing trees - travel corridors and buildings, Lake Chamberlin, town-owned open space and parks (invasive species infestations), West River, Race Brook, Wepawaug River, Alice Newton Street Park, air quality, West Rock State Park, Bladens River, Sargent River, Konolds Pond, Lake Dawson, Lake Watrous, Glen Lake.

Transportation: Route 63, Route 67, Route 42, Route 243, Fountain Street (icy conditions on hill), Peck Hill Road. Route 69 (Litchfield Turnpike) at Warren Road, Bradley Road, and Lucy Street/Merritt Avenue, Seymour Street.

Infrastructure: RWA Reservoirs, fire hydrants, water distribution system from reservoir to New Haven, City sewer south end (high school and JCC), private wells (contaminated due to surface flooding and power outages), cell tower power generators, privately owned assisted living (2 locations) and nursing home (1 location) facilities, urgent care clinic in Amity/New Haven, GNHWPCA sewage pump station (66 Ansonia Road), multiple dam sites around Woodbridge and Bethany, Community Center in Bethany, private septic systems, electric supply and distribution system, limited sheltering capacity at Center Building (no showers), regional shelter at Amity High School, sewage pump station on Route 213, foundations for private homes in West River neighborhood, one gas station, regional animal shelter, no health care clinics in Town, 7 Repetitive Loss properties (6 single-family homes, 1 non-residential), Regional Animal Control Facility/Shelter, RWA Water Treatment Plant (2035 Litchfield Turnpike).

Vulnerable Populations: Renters or Transients (West River Neighborhood), Elderly, Developmentally Disabled, Non-English Speaking, Low Income, Farmers (people and livestock), Volunteers (decline over time).

*Information above from workshop participants as well as from the SCRCOG Multi-Jurisdictional NHMP Update (2018).



Current Concerns and Challenges Presented by Hazards

The Town of Woodbridge has several concerns and faces multiple challenges related to the impacts of natural hazards and climate change. In recent years, Woodbridge has experienced a series of highly disruptive and damaging weather events including Tropical Storm Irene (August 2011), Tropical Storm Sandy, (October 2012), and winter Nor'easter Nemo (February 2013). Impacts from Irene included heavy rain-induced inland flooding and wind damage. Sandy caused extended power outages across large portions of Woodbridge. Winter storms drop excessive snow on the Town knocking out power and isolating residents and neighborhoods. The magnitude and intensity of these events and others across Connecticut has increased awareness of natural hazards and climatic change, while motivating communities like Woodbridge to comprehensively improve resilience.

This series of extreme weather events highlights that for Woodbridge the impacts from hazards are diverse; they range from flooding of roads and low-lying areas near rivers and wetlands during intense storms and heavy precipitation events to property damage from trees, wind, snow, and ice. Longer periods of elevated heat, particularly in July and August, have raised concerns about vulnerable segments of the population including the elderly and disabled. The combination of these issues presents a challenge to preparedness, response and mitigation priorities and requires comprehensive yet tailored actions for particular locations and/or areas across Woodbridge.

The workshop participants were generally in agreement that Woodbridge is experiencing more intense and frequent storms events and heat waves. The impacts have affected the daily activities of most residents. Additionally, there was a general concern about the challenges of being prepared with contingency plans for worst case scenarios during different times of the year (i.e. major disasters, storms, major hurricanes (Cat-3 or above)) particularly in the fall/winter due to more intense storms.



(Credit: Hip Postcards)



(Credit: Town of Woodbridge)



(Credit: CT Postcard)



Specific Categories of Concerns and Challenges

Electrical Supply and Distribution

Power restoration across Woodbridge as well as neighboring Bethany is a common and shared concern for these two communities. Given that both communities are located at the terminus of electrical distribution networks and have low population work against the pace of restoration by the two utility companies. In addition, both Woodbridge and Bethany are situated in close proximity to a large metropolitan area (New Haven) with higher density of electrical users and increased demand for restoration. Simply stated, the utilities are focused on restoring power for the larger, higher density customer areas most immediately versus Woodbridge and Bethany. This has resulted in long periods without electricity for residents in both these communities after major events.

Sheltering Capacity and Facilities

The Town of Woodbridge currently utilizes the Center Building for sheltering which is supplied electricity via the Town's microgrid. The facility is approved by the American Red Cross however, there are no showers and limited food service at this location. The facility can accommodate 110 people. Amity High School is also available as a regional shelter but is not regularly used. There are additional generators at the Woodbridge facility with twice monthly starts by the head custodian and a longer-term service contracts in place for engine maintenance every second year. Bethany has a shelter at the Amity Middle School which is equipped with a generator to run fridges and heating and cooling. The Workshop participants suggested that Woodbridge and Bethany should establish a dialogue to explore opportunities to share sheltering facilities, resources, and trained volunteers—thus capitalizing on each communities strengths in times of emergency. In addition, participants highlighted that many residents have the means to simply relocate to a hotel to the north away from town or often prefer to shelter in place (i.e. strong sense of self-reliance). Finally, there was a general concern expressed regarding the lack of evacuation signage to help residents navigate to the sheltering facilities.



Specific Categories of Concerns and Challenges continued...

Citizen Emergency Response Team (CERT)

The Town of Bethany has maintained a high level of readiness and volunteerism with their CERT program over the course of many decades. Their CERT program provides secondary support for professional emergency managers in Bethany including ambulance services, Fire, and Police. The program volunteers contributed approximately 1500 staff hours in calendar year 2017 via a secure and modest budget. Bethany conducts joint training with Beacon Falls to extend the reach of their CERT program. Woodbridge maintained a program for many years but it has lapsed recently. There is current interest in Woodbridge to potentially recharge their CERT program but dedicated capacity to administer the program is limited. The workshop participants suggested that there may be an opportunities for a regional CERT program that would allow for Woodbridge residents with interest in CERT to join Bethany's program in hopes that this combined group could service needs across multiple municipalities over time.

Community Communication and Collaboration

There was a universal recognition amongst the participants that there is an ongoing need to convene and coordinate a broad stakeholder effort to strengthen communications for Woodbridge as well as Bethany. While there is a track record of collaboration, the participants recommended surfacing opportunities to strengthen ties in several meaningful ways identified herein. One of which was to continue to update the list of people who have medical needs and/or health and mobility challenges to ensure they are informed before and remain safe after events. In Woodbridge, the Police Department works in tandem with Human Services to maintain a confidential list of people as well as their immediate family members who have voluntarily agreed to be contacted before and after emergency events to ensure proper care is provided. In addition, Bethany just updated their radio system which is viewed as an asset to emergency management professionals in Woodbridge. Woodbridge is in the process of updating its Emergency Radio System that will strengthen communications.



Current Strengths and Assets

Because of the recent experiences with extreme weather, the Town of Woodbridge is well acquainted with existing and shared strengths. Reinforcing best practices and enhancing available assets will generate greater benefits to the Town and adjoining communities like Bethany through increased resiliency to more frequent and intense storms, as well as to long term impacts from the ongoing increases in air temperature, precipitation, and drought.

- Clearly, the responsive and committed leadership exhibited by officials and staff is a very appreciated strength within the Town of Woodbridge. Ongoing collaboration between the Town, adjoining municipalities, South Central Regional Council of Government, business community, faith-based organization, and NGOs among others on the priorities identified below will help to advance comprehensive, cost-effective approaches to community resilience building.
- The Town has solid, highly experienced, staff with access to adequate, but limited, resources for most emergency situations. The overarching coordination amongst various departments including Police, Fire, and EMS was cited as an ongoing, and highly valued community strength despite the need to update and improve emergency management/action plans and maintain a flow of volunteers over time.
- Supportive social services for elderly, youth, and families as well as faith-based organizations were highlighted as important community assets.
- Relatively intact forested watershed surrounding ponds and wetlands across Woodbridge coupled with riparian corridors along waterways such as the West River which provide flood storage, enhance public amenities for recreation and gathering, and increase ecological function and biodiversity.
- Recent installation of a microgrid as well as other renewable energy sources will undoubtedly improve the Town's long-term resilience.
- Opportunities to further cultivate partnership with Bethany to accelerate resiliency were highlighted and invited by participants from both communities.



(Credit: Wikipedia)



Top Recommendations to Improve Resilience

A common thread throughout the workshop discussions was the recognition that Woodbridge needs to be better prepared through longer term community-based, contingency planning across all areas of concern. This need and additional core highlights surfaced by the Workshop participants are addressed below.

Higher Priority

- Continue to assess vulnerabilities of electrical supply and distribution systems across Woodbridge and Bethany and work with utilities to seek longer-term solutions. Town should continue to seek ways to diversify electric supply via renewable energy sources.
- Work closely with utilities across Woodbridge to put into place solutions that reduce the extent and duration of power outages (i.e. tree wire replacement, underground powerlines, tree trimming, etc.).
- Reassess viability and obstacles of solar net metering related to residential housing and facilities. Several locations are currently outfitted including Beacher Road School, High School, and Massaro Farm.
- Seek coordination and agreement with utilities on power restoration priorities for Woodbridge and Bethany in the aftermath of wide spread power outages.
- Assess and develop initial designs and engineering to reduce the flooding of Route 63 and 69 into New Haven from Woodbridge and Bethany. Work specifically with major employers such as the Yale-New Haven Hospital to develop contingency plans for employees returning home to Woodbridge in advance of flooding events on these roads.
- Continue to maintain onsite, supplemental power supply for cell tower in Woodbridge. Routinely connect with Verizon and ATT representatives regarding phone and internet usage contracts with Woodbridge Fire and Police. Incorporate the use of Verizon mobile unit to ramp up cell coverage in priority locations during and after emergencies.



Community Resilience Building Workshop Recommendations

Higher Priority (cont'd)

- Look into opportunities to install radio, fiber, and T1 communications to reduce geographic isolation of residents during emergency outreach efforts.
- Ensure Woodbridge's Junior Fire program remains active to help increase the flow of volunteers to the Fire Department over time.
- Continue to strength partnership between Department of Public Works and Fire Department to work on road clearing after major wind (downed trees) and winter storms (plowing). This will require ongoing coordination with utility to "Make Safe" roads from wires post storm.

Moderate Priority

- Routinely connect with the Regional Water Authority regarding management, maintenance, and contingency planning for Reservoirs as it relates to long-term concerns of drought and sustainable water supply.
- Assess the extent and location of contaminated private wells in Woodbridge and explore the source of contamination.
- Identify and examine the extent of impact from flooding of the West River on private homes and other structures. Current estimates are at approximately 50-60 with some multi-family dwellings. Once defined seek ways to remedy the impacts via mitigation measures which could include voluntary buyouts and increased up-stream floodplain storage.
- Review watershed management plans for West River to identify consideration of flooding extent and potential solutions to reduce impacts from flooding.
- Alert City of New Haven staff to the concerns associated with sewage pump on Ansonia Road next to Beecher Road. Ensure that supplemental power generation is secured for this pump in event of power outages at this location to prevent sewage back-ups.
- Seek ways to ensure the transportation of elderly requesting shelter at Town facilities is provided in advance of major events.
- Coordinate with Town of Bethany on volunteerism to ensure residents of both towns have ample access to opportunities that meet the greatest need.



Community Resilience Building Workshop Recommendations

Moderate Priority (cont'd)

- Ensure the refrigeration capacity to store extra medications is maintained with the Fire Department in the event that shortages or deliveries get curtailed from New Haven locations. Coordinate directly with Seabridge Pharmacy who has a delivery service.
- Maintain emergency contact list for residents that have mobility issues and link with senior center vans if possible prior to emergency situations.
- Secure pool of emergency volunteers with training (CERT) to cover shifts in the event that the Woodbridge Senior Center becomes an overnight shelter.
- Look to strengthen the local farming community via CSA organic farms on or off municipal property such as Massaro Farm to ensure a regular source of locally produced goods for Woodbridge residents and facilities.



(Credit: Adam Wheichel/TNC)

Lower Priority

- Continue to maintain animal shelter at old firehouse during event requiring evacuation of residents and their pets.
- Maintain microgrid in Woodbridge Town Center.
- Look to assist Bethany during major events with portable generator provisioning if available and not in use.
- Routinely checkup on two assisted living facilities and nursing facility in Woodbridge to ensure contingency plans for during emergencies are up to date and that the generators are adequately maintained. Re-identify key management personnel at facilities in the event of changes in staff.



Community Resilience Building Workshop Recommendations

Lower Priority (cont'd)

- Work to have seniors fill out emergency contact information cards to be managed by the appropriate people at senior care and living facilities in Woodbridge.
- Complete open space trail system to connect Bethany with Woodbridge to help strengthen relationships between residents of both communities.
- Explore the concerns among residents of negative air quality alterations across the Town due to proximity to urban centers and climate change.
- Exercise where necessary anti-blight ordinance to remove dead and standing trees on private property that pose hazard to residents and property.
- Define collaborative opportunities between Bethany and Woodbridge to strengthen farming communities and help to encourage the younger generation to embrace farming as a way of life in the community. This should include increased attention placed by residents and municipal leadership to support locally grown and distributed produce and livestock.
- While not a large concern, continue to increase awareness about minimizing wild-fires through outdoor campfires and other potentially careless behavior.
- If desirable, the additional sheltering capacity at the JCC should be examined. Determine if the power generated from the solar panels could be used as a source of power at the facilities independent of the electrical grid (i.e. SB9 - virtual net metering).
- Continue to evaluate which trees need to be trimmed during work by utility in collaboration with Town's tree warden.
- Seek to fill vacancies on various commissions to ensure continuity of leadership in critical roles.
- Identify and circulate to residents the radio station frequency of an existing station to broadcast emergency notifications and other important information to provide coverage when phones, cell towers, and internet is down. Work to ensure that residents have access to hand cranked radios and/or have surplus batteries on hand to run radios. Local stations associated with academic institutions in New Haven were suggested as possibilities.



Community Resilience Building Workshop Recommendations

Lower Priority (cont'd)

- Maintain pandemic influenza clinic potential at Senior Center.
- Conduct maintenance of over 1000 acres of open space in Woodbridge to ensure access and use by residents to increase resilience of community health. For example, the Alice Newton Street Park (200 acres) behind Woodbridge Town Hall.
- Identify opportunities to work to minimize the mental health impacts from major events on youth and children (i.e. recent tornado and sense of security).



(Credit: Adam Whelchel/TNC)



(Credit: Adam Whelchel/TNC)



CRB Workshop Participants: Department/Organization

Town of Woodbridge - Office of the First Selectmen

Town of Woodbridge - Sustainability Committee

Town of Woodbridge - Police Department

Town of Woodbridge - Communications

Town of Woodbridge - Fire Department

Town of Woodbridge - Senior Center

Sustainable CT - Equity Working Group/Town of Woodbridge

JCC of Greater New Haven

CRB Workshop Project Team: Organization and Role

Woodbridge Core Team

Beth Heller - First Selectman - Woodbridge

Sheila McCreven - Communications Director, Office of the Woodbridge First Selectman

Workshop Team

The Nature Conservancy – Adam Whelchel, Ph.D. (Lead Facilitator)

Sustainable CT - Jessica LeClair (Support Lead)

The Nature Conservancy - Victoria Hoyland (Support)

Sustainable CT Fellows - Alessandra Alling & Torin Radicioni (Scribes)

Recommended Citation

Town of Woodbridge (2018). Community Resilience Building Workshop Summary of Findings. Town of Woodbridge, Sustainable CT, The Nature Conservancy. Woodbridge, Connecticut.

Acknowledgements

Special thanks to the Town of Woodbridge First Selectwoman, staff, and community members for their willingness to embrace this process in hopes of a more resilient future for Woodbridge. Additional thanks to the Town for providing convening space for this CRB Workshop. Thank you to Sustainable CT for providing refreshments and food. Finally, thanks to the scribes that recorded the workshop dialogue.

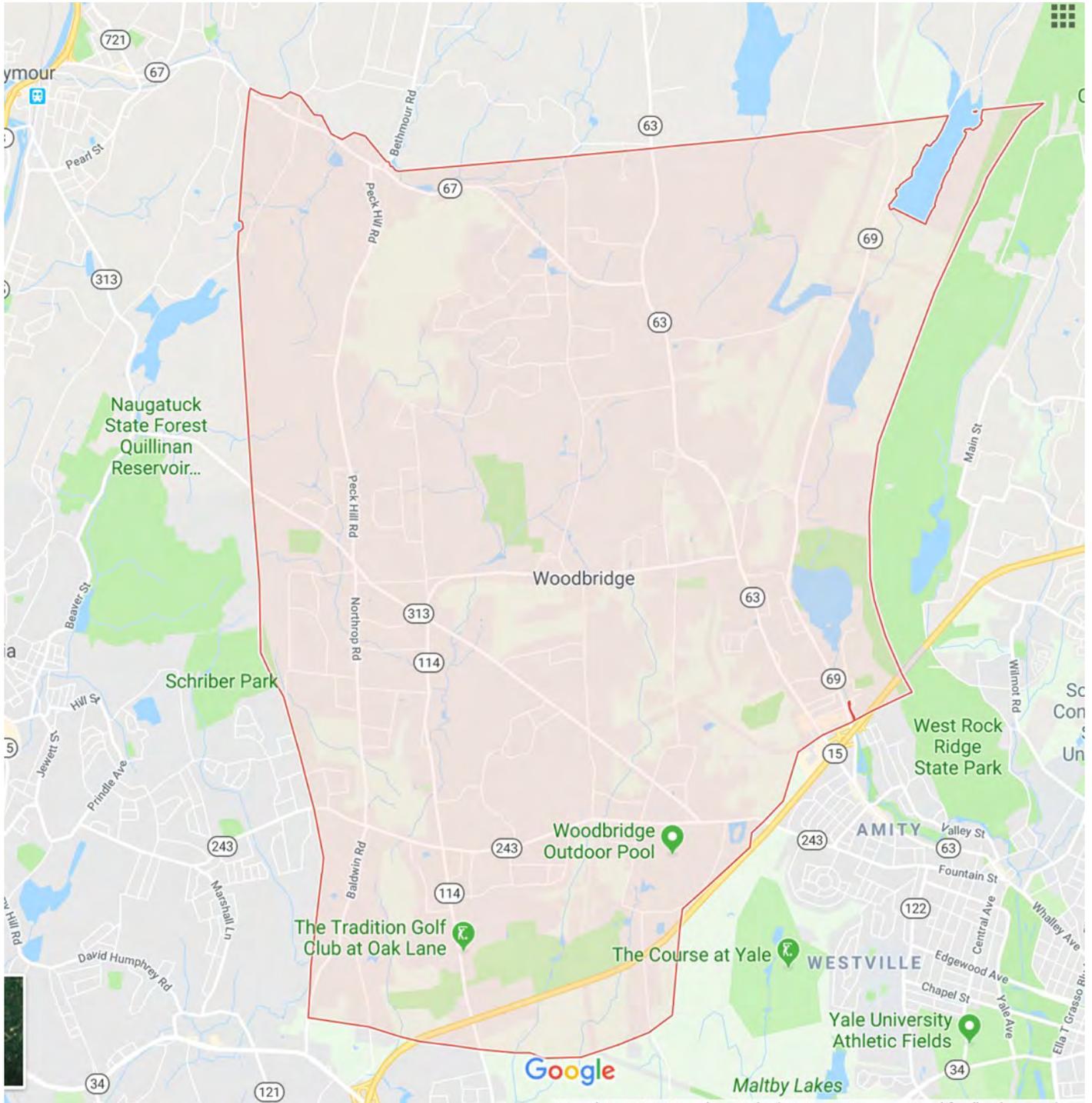
This project was made possible in part through the generous contribution of the Workshop team by The Nature Conservancy and Sustainable CT to conduct Woodbridge's Community Resilience Building Workshop in close partnership with the Town's Core Team.



Appendix

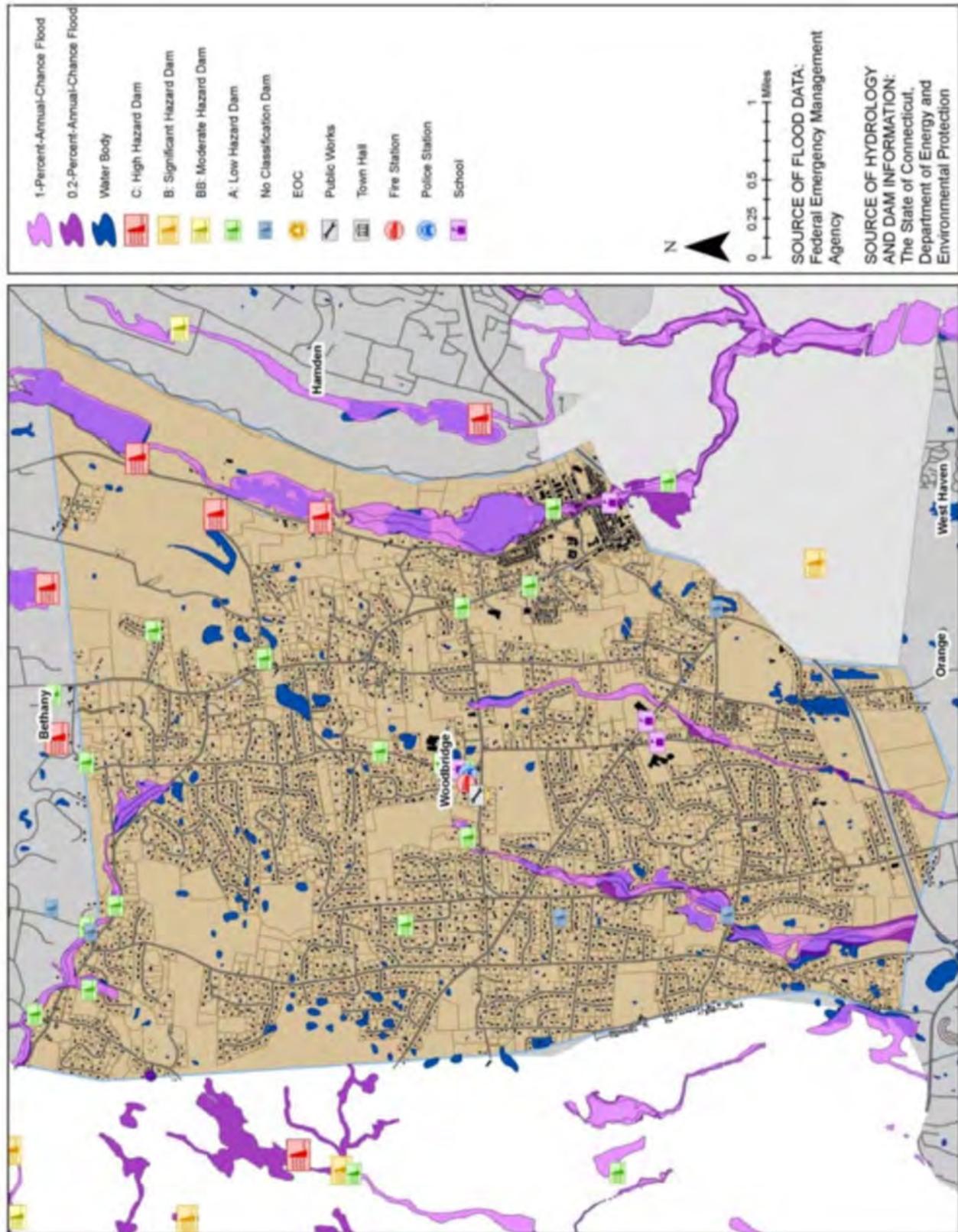
Base Map





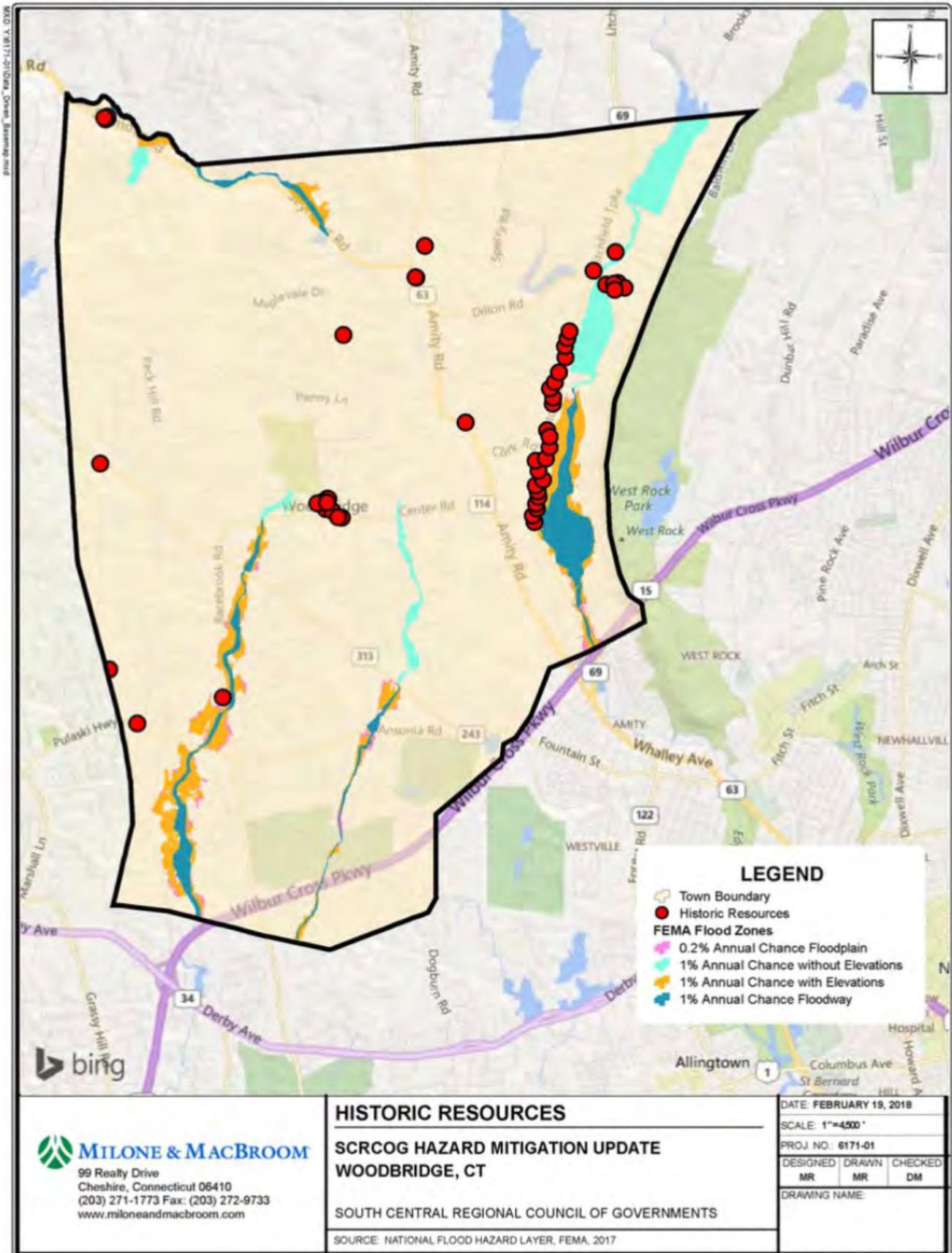
Resources and Maps Used During Workshop

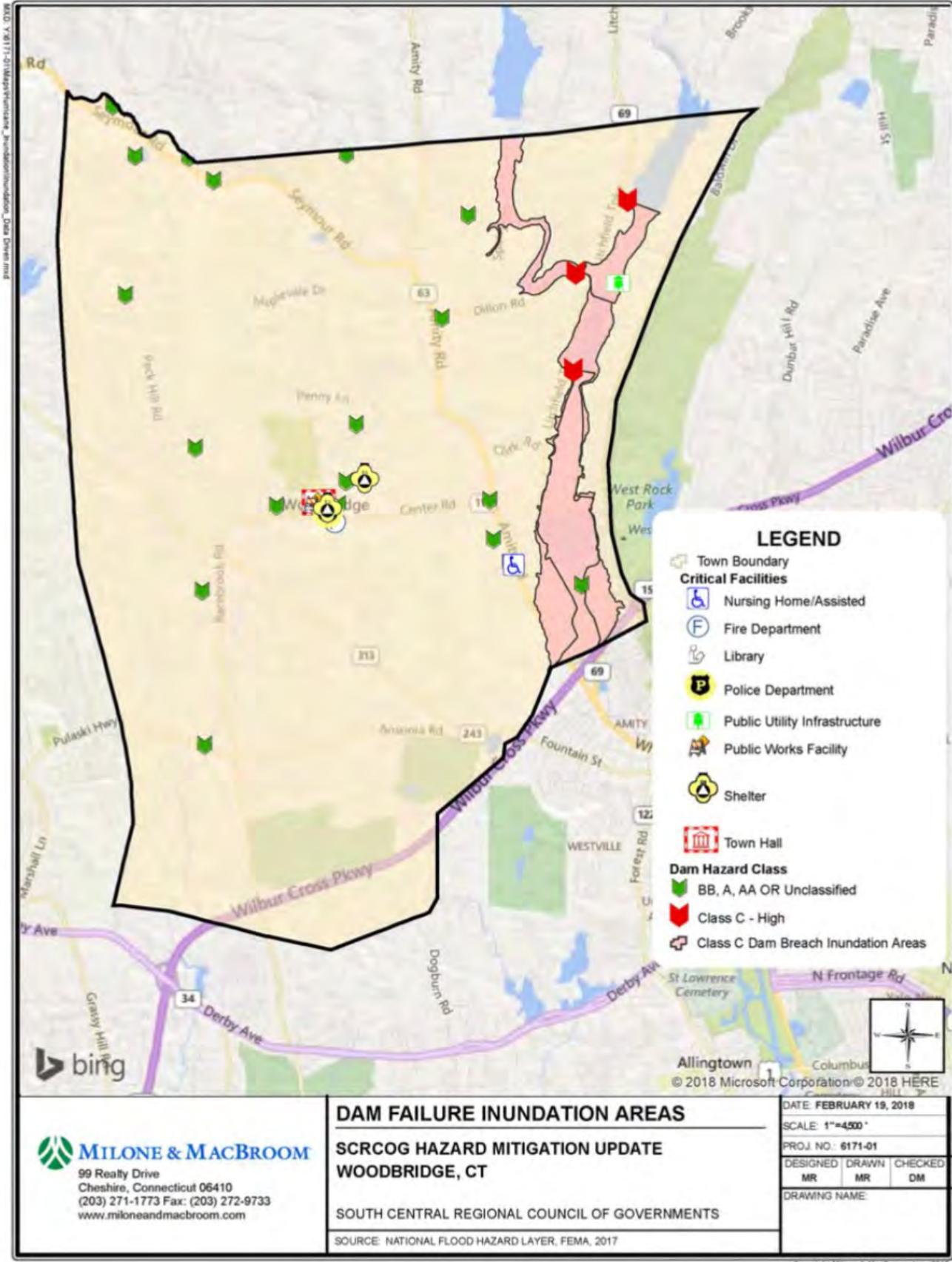




MAP 4.39 Flood Hazard Areas - Woodbridge







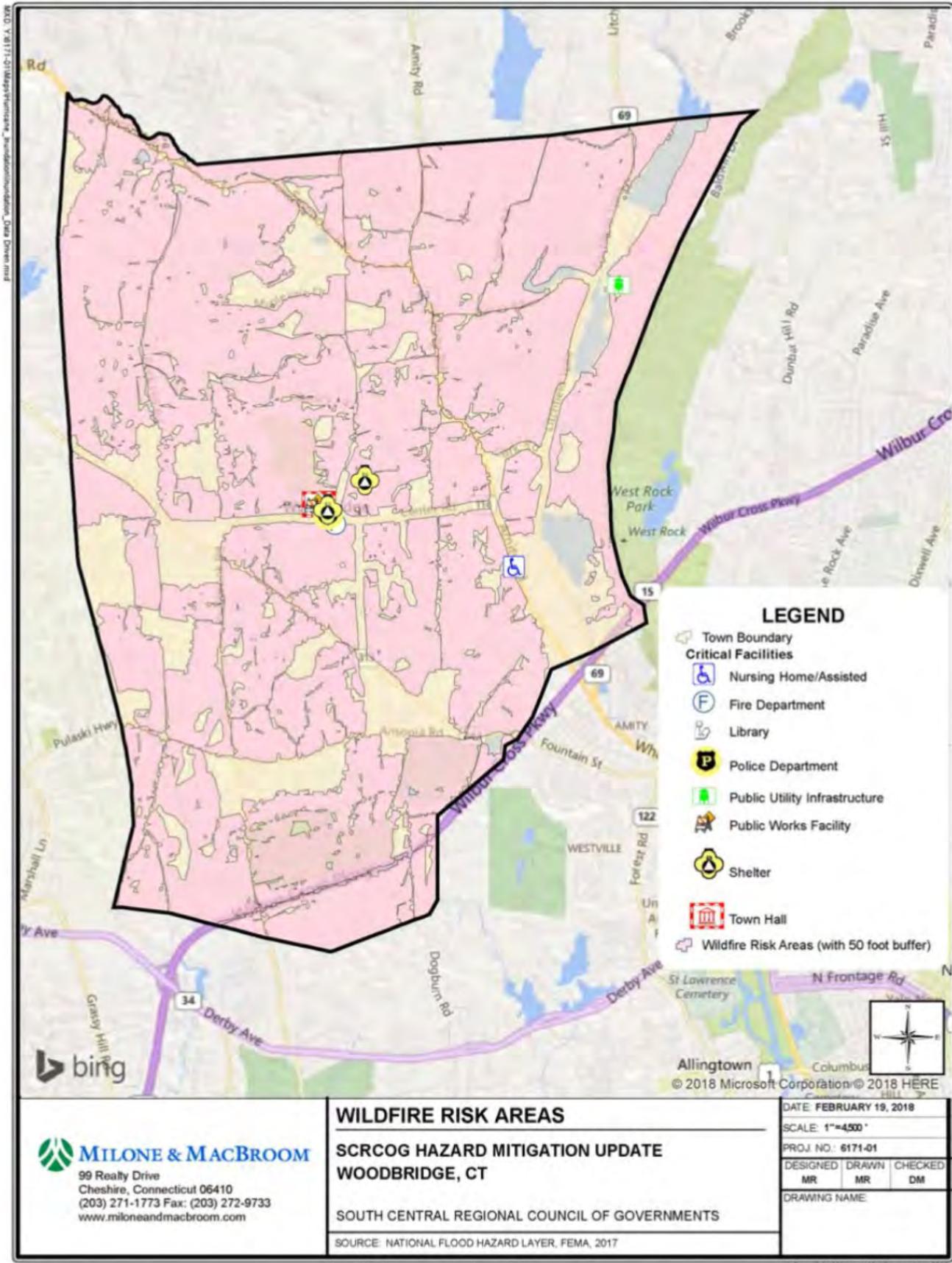




Photo Credits: Wikipedia



Photo Credits: Woodbridge Senior Center

