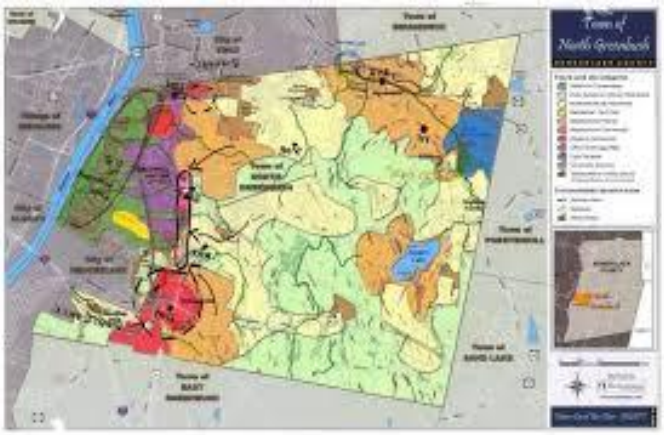
Town of North Greenbush

Climate Resilience Vision – January 13, 2022



Town of North Greenbush - Climate Resilience Vision

The Town of North Greenbush signed the Climate Smart Communities Pledge in November of 2019. The New York State Department of Environmental Conservation has developed and implemented the Climate Smart Community Certification Program to help local governments/municipalities take actions to reduce greenhouse gas emissions and adapt to a changing climate. The contents of this pledge indicate the town is committed to becoming a certified Climate Smart Community which is accomplished by taking steps which lead to accumulating points as prescribed by the Climate Smart Communities Program (goal of 120 points for Bronze certification). The number and types of tasks or steps a municipality can do are vast and not all steps and tasks are required to become certified. It is the role of each locality to select steps, with help from the community, that fit the needs of their respective footprint. Many steps are selected and carried out with guidance from the local Climate Smart Communities Task Force.

The vision statement is a project that was initiated by the Climate Smart Communities Task Force of North Greenbush with support from Cornell Cooperative Extension of Rensselaer County. This project is intended to represent the community members on the topic of strengthening the town's climate resiliency capacity. The final document serves as a guiding statement to help frame the direction the town aims to take when considering the longevity and well-being of the residents of North Greenbush. This project is made possible through the Climate Resilience Partnership. The Climate Resilience Partnership is a collaboration between Cornell Cooperative Extension associations in the Hudson Valley, with funding and assistance from the Hudson River Estuary Program and the New York State Water Resources Institute.

Cornell Cooperative Extension | Rensselaer County

Visions and Principles for a Climate Resilient Town (what would a climate resilient town look like)

The Town of North Greenbush recognizes the challenges brought about by development, changing infrastructure and demands of growth and how this compromises resilience to climate hazards. With public input the Town of North Greenbush recognizes the following principles to help enhance climate resilience throughout the town:

1. Prepared for future climate hazards
2. Mitigate the impact of severe weather events and adapt to climate change
3. Preserve natural resources and adequate green and open spaces
4. Encourage alternative renewable energy usage and promote energy conservation
5. Bike and pedestrian friendly
6. Knowledgeable residents and business owners
7. Support local agriculture
8. Encourage alternative transportation
9. Recycling of common hazardous materials
10. Minimize Noise and odor pollution

Be Prepared for Future Climate Hazards

Residents are educated and aware of future climate hazards. Emergency communication mechanisms as well as evacuation plans and flood zones are made available to the community.

Mitigate the impact of severe weather events and adapt to climate change

The Town will strengthen climate resiliency through the support of appropriate and relevant land use policies, programs and education. The Rensselaer County Multi-Jurisdictional Natural Hazard Mitigation Plan will be a guiding document. Utility wires will be kept clear of branches. Incorporation of land buffers and natural resources where appropriate to aid in increased absorptive capacities of storm water, minimizing impervious surfaces. Proper sized culverts and roadway supports are well managed and maintained. There are backup systems for electricity and broadband access. Efforts will be taken to reduce emissions overall, which will decrease contributing factors to climate change.

Preserve natural resources and adequate green and open spaces

Allow natural areas to regenerate to aid in stormwater control, carbon sequestering, and increase biodiversity. Preserve open and green space to aid in quality of life, aesthetic value and provide recreational opportunities. Some areas of consideration would be but not limited to the Appalachian Oak Hickory Forrest, Wynants Kill and Hudson River corridors to name a few. Maintain a “downtown” hub with safe and easy connections to traverse the town.

Encourage alternative renewable energy usage and promote energy conservation

The town will expand usage of solar panels and other renewable energy where appropriate. The installation of an electric vehicle charging station for the public. A fleet inventory / replacement plan to incorporate the potential of alternative fuel vehicles. Encourage community solar efforts.

Bike and pedestrian friendly

Safe walking and biking due to extensive sidewalks, road crossings, lanes and lighting. Linkages that connect residents to the "downtown" hub / businesses, natural areas and neighborhoods.

Knowledgeable residents and business owners

Multiple means for providing relevant information to the community on climate smart subjects. Offering programs as well as a robust and active website for the Town's Climate Smart web pages.

Support local agriculture

Consider the vulnerability of local agriculture to severe weather events and the negative impact it can have on local food supplies. Additionally, the benefit of thriving farms contributes to open space and quality of life of town residents.

Encourage alternative transportation

Capital District Transportation Authority (CDTA), carpooling and other public transport options will be available and promoted.

Recycling of common hazardous materials

Residents and businesses will have viable opportunities to dispose of common hazardous materials. Examples of this may include a variety of goods from paints to electronics. This may mean the development of a collaboration with a neighboring municipality and/or promotion of county wide offerings. Additionally, providing information about other means to recycle such as Habitat for Humanity and businesses that take old electronics as some examples.

Minimize Noise and odor pollution

Maintain a "downtown" hub and incorporate broad, safe and accessible biking and pedestrian access as an alternative to vehicular transportation. Supporting land use policy that minimizes impact of area industry/transportation/businesses on the quality of life of the residents of North Greenbush while supporting smart economic growth.

Appendix A - Process

Cornell Cooperative Extension of Rensselaer County and the Town of North Greenbush partnered to reach out to the public and a variety of stakeholders to seek and incorporate comments and information relevant to the creation of a Climate Resilience Vision for the Town of North Greenbush. With help from town council members and the Climate Smart Task Force members, individuals in the community considered influencers and/or representing populations that may be underserved was referred to CCERC staff. These names and contacts were reached out to and invited to participate in the vision process.

Public announcements were prepared and submitted to two primary newsprint/virtual newspapers: The Advertiser and the Troy Record. Information and invitations to encourage public input on the Climate Resilience Vision was also done through the Town of North Greenbush website and public electronic reader boards located on Main Street and the Defreestville Firehouse. Both electronic reader boards reach commuters and residents that travel on Route 4 and Main Street, which are the two most highly trafficked roads for those who live and/or work in the Town of North Greenbush.

A survey was designed and a link provided for the public to also provide comments for the vision. Promotion and access to this website was done through press releases, email and the town website. There were 15 that took this survey. Lastly, solicitation of public input was conducted along with 2 educational events that focused on Climate Smart yard and garden prep for the winter, utilizing information from the 2018 Cornell University Cooperative Extension Course Book for "Gardening in a Warming World – A Climate Smart Gardening Course" by Mary Walsh, Lorie Brewer and Annie Christian Reuter. One of these events took place as a tabling event at the town fair. The town fair is a three-day event held on the grounds of the Town Hall of North Greenbush located at 2 Douglas Street in Wynantskill. This fair attracted roughly 3000 residents over the course of the three-day weekend event. The second educational event was a public display the month of November at the entrance to the Town Hall Complex and the public library. This location is highly visible to anyone frequenting the library or utilizing the town hall. Library reported for the month of November they had 1000 patrons utilize the Library and had visibility to the display.

Appendix B -

All below responses and comments were collected through the two public meetings (September 23rd and December 3rd), the North Greenbush Town Fair (September 10th to 12th), the Town Climate Smart Task Force meetings and general comments collected through individual voluntary "call ins and/or emails" and electronic survey.

What would a future climate resilient Town of North Greenbush look like?

-Allow natural areas to regenerate, holding stormwater, sequestering carbon, providing highly oxygenated air and biodiversity

-Adequate number of electrical car charging stations

-Energy independence and public awareness

-Bike and pedestrian friendly (crosswalks, lanes, access)

-Adequate lighting

-Adequate pedestrian and biking crossings east to west of Route 4

-Access to the Hudson River

-Look into the potential of opening the underpass near the driving range to cross Route 4

-Encourage more Agriculture Activities – incentivizing farming (agriculture) through tax relief / easements. Suggestion of what Bethlehem and Guilderland have in place regarding farming.

-Maintain a "center of the town" essence. The hub with intentional spokes to other parts of town

-Be prepared for emergencies: power backup, good emergency communication mechanism, cell towers, etc.

-Expanded emphasis on and implementation of opportunities to retain underdeveloped green spaces, provide and encourage safe, town wide biking/pedestrian/mass transit to reduce local traffic, flood control, installation of public (not just privately owned) alternative energy resources.

-Green space and shade areas balanced with developed areas where drainage is good and diverted to other

-Much the same as now, but better prepared for expected weather extremes

-An increased use of solar as a power source and electric vehicles.

-Wind resistance for utilities (increased likelihood of storm damage based on greater frequency and intensity). Preservation of natural space – perhaps in combination with green energy infrastructure. Investment in/strategic infrastructure planning and zoning (e.g. less reliance on personal vehicles by making areas more walkable or allowing certain retail spaces in otherwise exclusively residentially zoned areas).

-A town with intact/preserved natural resources, sufficient/broad vegetated buffers on streams and green infrastructure/natural ecosystems to naturally combat the effects of climate change. Heavy use of green energy.

-More open space, solar or wind farms available for community buy-in, encouragement for sustainable agriculture, restored roads that's don't flood or crumble in the rain, open spaces walking trails and bike paths to encourage forms of transportation other than cars

-Contain green space for recreation and green building incentives. ZEV charging stations and demonstration gardens for water wise use

What are some climate related hazards-threats?

-Flooding due to impermeable surfaces

-Flooding due to waterways (Wynantskill, Mill Creek, Snyder's Lake, Hudson River)

-Erosion

-Power Outages

Extreme Heat/Cooling (schools? Generators?)

-Town Hall is very inefficient

-Poor communication

-Loss of Municipal, water supply and other (private)

-Wind

-Ice Storms

-Pandemic or public health emergencies

-Fire

-Noise pollution and diesel fumes from construction and heavy truck traffic. County roads used like thruways, speed limits ignored, birds unable to hear one another.

-Over development

-Flooding: poor air quality caused by fireworks from the Bruno Stadium; trees/branches fall in roadways from wind.

-Flooding – particularly flash flooding – blizzards, poor air quality from known/expected sources and from disaster-related sources such as wildfires, drought.

-Flooding – along the Wynants Kill and around Snyder's Lake

-There is nowhere in North Greenbush where residents can dispose of electronics, hazardous waster such as unused paints or pesticide, etc. on a regular basis. No other times that might dump. The one recycling day organized by the Town Climate Smart Coordinator was commendable, but it was just one day; we already had another commitment

-Flooding all over from flash flooding

-Flooding and wind damage

-Continual displacement of its natural resources for residential and commercial development have reduced the ability for natural ecosystems to mitigate heavy rainfall events/flooding/erosion. Excessive traffic impacting air quality. Less vegetation and more pavement has made it hotter during heat waves

What are some of the town's current strengths?

- The Town has taken the Climate Smart Pledge and has a motivated Climate Smart Committee.
- Town is part of the National Flood Insurance Program and tracks repetitive loss properties
- 2020 Updated County Multi-Jurisdictional Hazard Mitigation Plan
- Local Waterfront Revitalization Plan filed (1990)
- Knowledgeable and hardworking Town staff and Elected Officials dedicated to Strengthening the Town of North Greenbush.
- Strong relationship with the RPI Tech Park (critical due to proximity to the Hudson River).

- Variety of people recognizing awareness
- Climate Smart Task Force in place
- Resources available (Local/State/Other) and private
- Currently no limitations on solar installations
- Using methane from old landfill to heat HVCC
- Location – Above Hudson – elevation which means minimal temperature swings
- Tree population
- Open space and farms – availability of conservation preservation opportunities and development rights purchases (Soil and water/NRCS/FSA and ASA)

What are some of the town's opportunities?

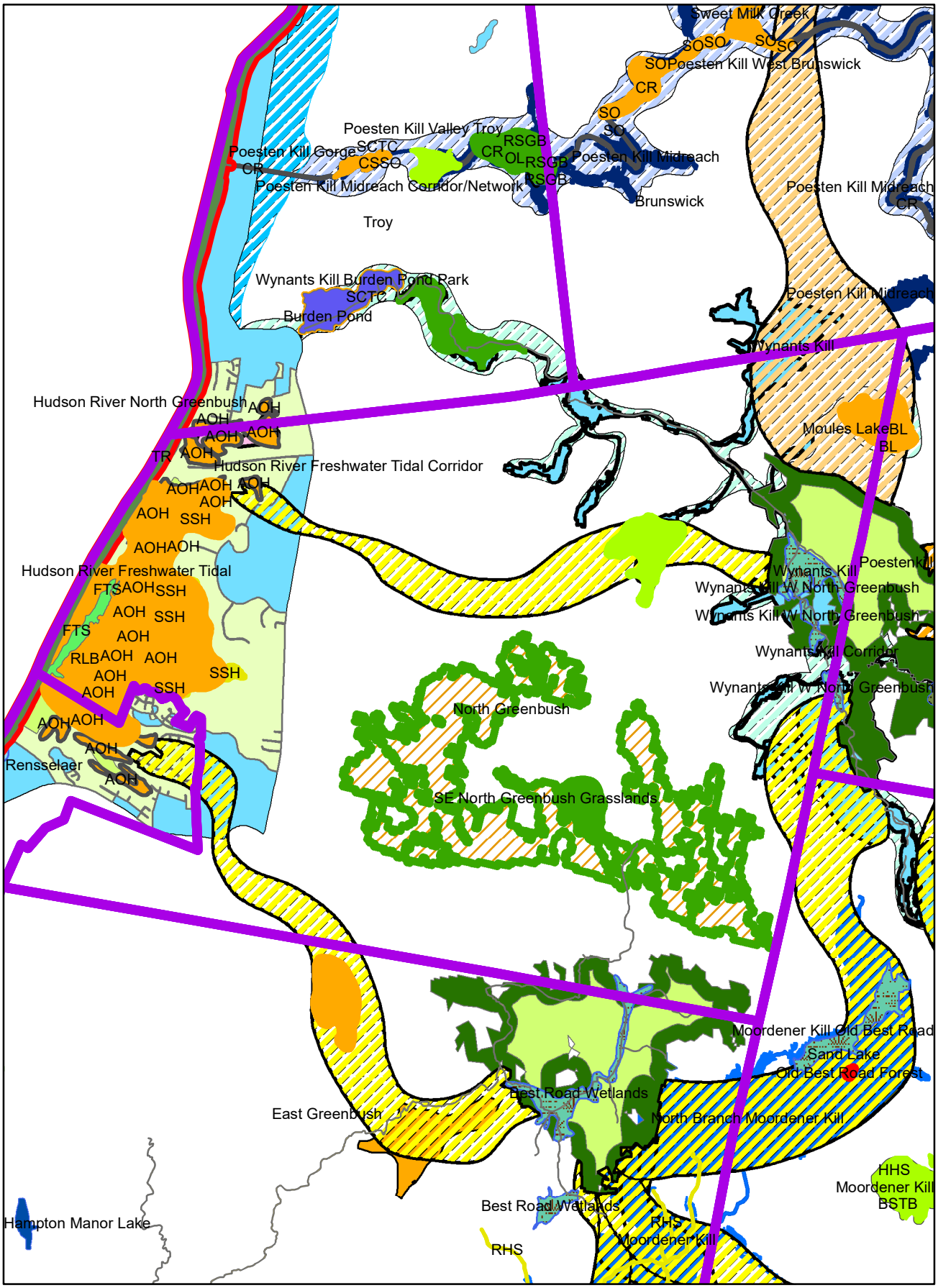
- Lower energy use
- Increase efficient energy
- Increase infrastructure for pedestrians/biking
- Better connection (crossings / access to river)
- Review comprehensive plan and update (2009)
- Revise zoning

- Hold Harmless Legislation – pertaining to recreation i.e., dog parks
- Near State Capitol
- Encourage environmentally friendly infrastructure (parking lots-buildings) enhancements to development
- Adequate (not over) parking
- CDTA Service to better access NGB
- 0 emissions vehicles – especially buses/school
- Using solar development into other recreation and park opportunities
- Hudson Valley Community College – explore partner opportunities
- RPI Tech Park – explore partner opportunities
- Re-assessing possible opportunities for the town hall usage/modifications
- Proximity to NYSERDA and potential demo site etc.
- Funding for New Town Hall

Appendix C –

Maps developed by Dr. David Hunt as part of his Rensselaer County Biodiversity Greenprint Project – designing an ark for the native species of Rensselaer County.

Map 2. Composite County-Important Biodiversity Sites.



Most Important Layers on bottom.

Map 3. Local Physiographic Areas.