

Climate Smart Resiliency: Plans, Policies, and Projects Improvement Plan for the Town of Dryden, NY



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Overview

This document serves as a supplement to the Climate Smart Resiliency Planning Evaluation Tool, which is a survey of existing plans, policies and projects intended to help ensure that all community plans and policies will either help reduce or, at a minimum, not increase vulnerability. The main objective of this document is to highlight deficiencies in the Town of Dryden’s plans and local laws to date, suggest improvements to strengthen the municipality’s resilience to climate change, and document points of interest to the municipality identified through the planning process.

This document was completed, in part, to obtain points towards Climate Smart Communities certification. It follows the sections of the Climate Smart Resiliency Planning Tool. This document can also act as a road map for the Town of Dryden to incorporate climate resiliency vision, goals, and strategies into local plans and projects (CSC Pledge Element 7.4). At the end of the document is a list of potential actions for the Town to take and their correlating CSC Actions. Included are spaces to be filled to identify a timeline to complete the actions and the potential responsible parties.

Improvement Areas

Section 1: Community Plan Checklist

The objective of the community plan checklist section is to overview the plans, laws, and ordinances that a given municipality has established. The Town of Dryden has multiple municipal plans that incorporate elements of climate resiliency. These plans include: A Natural Resource Conservation Plan, a Stormwater Management Plan, a Flood

Damage Prevention Ordinance, an Evacuation Plan, an Emergency Response Plan, Operation Plan, Disaster Recovery Plan, as well as a Restoration Protection Plan.

An area of improvement is the establishment of an Open Space Plan as well as a Floodplain Management Plan. While the municipality does currently maintain an Open Space Inventory, that document is only intended as a list and description of open spaces within the municipality. A management plan on the other hand is, as the name implies, a long-term plan to manage the existing open space. Thus, because the sites have already been identified, developing a plan would not be too difficult. In addition to these two plans, while the municipality is covered by county-wide multi-hazard mitigation plan, it does not cover each municipality in detail. Thus, while the town does have some hazard mitigation planning in place, developing their own plan is crucial to better prepare for the region's increasingly extreme weather patterns; i.e. flooding, hurricanes, snow storms, droughts, electrical storms, etc. Finally, other plans that can contribute to Dryden's sustainable development and resiliency vision is: A comprehensive Plan which incorporates climate change, long-term Recovery Plan, Economic Development Plan, Capital Improvement Plan, Historic Preservation Plan, and Climate Action Plan. While some of these documents/ plans might not be absolutely necessary for a sparsely populated municipality like the Town of Dryden, it is worth for the municipality to weigh the contributions of each document and figure out how to best prepare and plan for a more sustainable future.

Section 2: Vulnerability & Risk Assessments

The Town of Dryden is well prepared and equipped regarding climate vulnerability and risk assessment, that is compared to much of the surrounding southern-tier region. While the municipality does not have its own Hazard Mitigation Plan and has not officially conducted a localized vulnerability assessment, the municipality is included and thus covered by a multi-jurisdictional Hazard Mitigation Plan which was completed in 2013. The assessment is a detailed review of all existing vulnerabilities and risks throughout the county and is updated frequently to maintain up to date information. Additionally, the Town of Dryden has conducted flood risk analysis through numerous

risk-mapping tools and has conducted extensive measures to communicate this information to the public and other parties that are involved.

Even though inter-municipal collaboration and municipal risk mapping has positioned Dryden to be generally well prepared for future climate change and flooding, there are still multiple aspects that could better prepare the community. The first and most influential action which could improve the community's resilience is participation in the National Flood Insurance Program. Although the Town of Dryden is not the most threatened by flooding in the region, there are portions of the municipality such as the Village of Dryden and Freeville which are vulnerable to climate change and extreme weather events. By participating in the NFIP, the municipality would not only guide future development to a more sustainable and flood resilient future but would also protect the community whenever the municipality incurs future flood damage. In addition, the town needs to better understand and identify future climate hazards that could potentially affect the region. By doing so, the municipality can better prepare and protect their community, thus mitigating the possibility of having problems that were the result of ill-preparedness.

Section 3: Public Outreach and Engagement

The Town of Dryden has conducted some outreach around climate change and flood resiliency. These activities include conducting participatory mapping, public surveys, and stakeholder meetings. In addition to engagement, the community has been provided with basic procedural information on preparedness before, during, and after a natural disaster. Finally, community members have also been provided with mitigation measures on how to mitigate flooding on their property and conduct smart land use activities.

Unfortunately, the community lacks a basic evacuation plan for local residents. In order to best prepare a community, it is highly advised to provide all community members with some version of a flood preparedness guide which lists all necessary information during and after a flood including emergency contacts. Additionally, as previously mentioned in section 2, the town does not actively participate with the National Flood Insurance Program and thus does not provide necessary information recommended by FEMA such as the "*Are You Ready?*" *Guide* and measures to protect homes against wind and storm

damage. However, while the community lacks these recommended systems/ procedures, it is important to realize that overall the community is better prepared than most communities in Upstate New York. Nevertheless, it is vital to recognize that there is always more room to improve and be well equipped for future climate trends.

Section 4: Integration of Municipal Plans

The Town of Dryden effectively covers most of the Integration of Municipal Plans portion of the Climate Smart Resiliency Planning Tool. A lot of the success in this section comes from Dryden having a very thorough Comprehensive Plan which is currently in the process of being updated to incorporate climate change and mitigation, an Open Space Plan, Natural Resource Management Plan, Hazard Mitigation Plan, and a Stormwater Management Plan. As a result of having this large collection of plans, the municipality is well positioned to mitigate flooding and prepare the community to become more resilient to adapting to climate change.

On the other hand, while the Town of Dryden does have many of the plans and documents that are listed on the CSRP tool, there are certain elements that are missing which could help improve the preparedness of Dryden NY. While the Comprehensive Plan is currently in the process of being updated to include and address climate change and flood resiliency, it would not be addressing relocation of structures that are constantly flooded or are located in vulnerable floodplains. In addition, the Town of Dryden only has an Open Space Inventory that was developed in 2003 and has not been updated. Once the inventory is updated, an open space management plan that follows the state open space plan guidelines could be a very useful addition that would boost to community's resiliency. In terms of the multi-hazard mitigation plan, because it is a county-wide plan, it does not include a detailed analysis of Dryden and thus could be missing necessary information that could help empower the community and its resiliency. Such information that is relevant to the region and could be incorporated is addressing droughts, heat waves, transportation accessibility, and developing a timeline to achieve community resiliency goals. Finally, as previously mentioned, the municipality could further improve its preparedness by actively participating in the National Flood Insurance Program which would not only protect and insure damage caused by flooding, but would

also help communities prepare and develop in a way to withstand increasingly extreme weather patterns.

Section 5: Disaster Preparedness and Recovery

In terms of *Disaster Preparedness and Recovery*, the Town of Dryden has basic measures in place that would keep the community safe. For example, the town does have an emergency response and short-term recovery plan in place, as well as a well-equipped designated emergency operation center, an emergency response team, designated emergency shelters outside of flood zones, a public emergency response communication system, and has clearly defined measures to conduct damage assessments. In addition, the community has some basic measures in place to help farmers become more resilient to flooding and tolerate potentially disastrous weather events. Because the town of Dryden does have multiple flood hazard zones throughout the municipality, this preparedness is necessary to best prepare for the changing weather patterns.

As previously mentioned, there is no formal emergency plan that is specific to the Town of Dryden, however as previously mentioned there is the multi-hazard mitigation plan for Tompkins County. This means that the Town of Dryden has a lot of opportunities to become a more resilient community. A few methods for increased resilience are: (1) joining FEMA's Community Rating System, which helps bolster floodplain properties against floods while also giving discounts on flood insurance premiums, (2) creating Short-term/Long-term Recovery Plans, (3) incorporating climate change and resiliency/ recovery measures into the existing Farmland Protection Plan, (4) developing an Evacuation Plan, and (5) creating a Continuity of Operation Plan. There are also smaller tasks that can help improve resilience such as installing a heat warning system or creating more pre-disaster mitigation measures.

Section 6: Hazard Mitigation Implementation

The Town of Dryden has effectively used a couple tools to manage development in hazard prone areas. Some of these tools include: conservation overlay districts/cluster

development, zoning for open or recreational space, establishing protective coastal, riparian, and wetland buffer ordinances. The municipality also has taken action to conserve land, such as acquiring development rights, actively conserving flood prone areas, and actively maintaining protective structures on a timely manner. Some Dryden community officials have also completed training around retrofitting flood prone residential buildings, which can help with local hazard mitigation.

In terms of Hazard mitigation, the town of Dryden has multiple aspects in which the municipality can improve and thus become more resilient. The first is the adoption of a Climate Action Plan that would take into account the potential change in hazard frequency or magnitude in the future and create appropriate mitigation strategies. The second important topic is increased work on shoreline stabilization to prevent damage due to flooding or erosion. In addition, municipal officials can be better prepared by receiving training in post-flood stream intervention training. These hazard mitigation actions can be accomplished through numerous different FEMA grant programs.

Table of potential actions towards climate resilience for the Town of Dryden identified through the Climate Smart Resiliency Planning Process.

<u>Potential Actions</u>	<u>Relevant CSC Actions</u>
Section 1: Community Plan Checklist	
Adopt an Open Space Plan	<ul style="list-style-type: none"> • <u>6.17</u>: Develop a Natural Resource Inventory • <u>6.19</u>: Preserve Natural Areas Through Zoning or Other Regulations • <u>7.5</u>: Incorporate Climate Resiliency Vision, Goals, and Strategies into Local Plans and Projects • <u>7.13</u>: Conserve Natural Areas for Species Migration and Ecosystem Resilience
Adopt an Evacuation Plan	<ul style="list-style-type: none"> • <u>7.22</u>: Develop or Enhance Early Warning Systems and Community Evacuation Plans • <u>7.7</u>: Develop and Implement a Heat Emergency Plan
Adopt a Short-Term Recovery Plan	<ul style="list-style-type: none"> • <u>7.6</u>: (would contribute to) Update the multi-hazard mitigation plan to address changing conditions and identify specific actions to reduce vulnerability to natural hazards
Adopt a Long-Term Recovery Plan	<ul style="list-style-type: none"> • <u>7.6</u>: (would contribute to) Update the multi-hazard mitigation plan to address changing conditions and identify specific actions to reduce vulnerability to natural hazards
Section 2: Vulnerability and Risk Assessments	
Adopt a Local Hazard Mitigation Plan	<ul style="list-style-type: none"> • <u>7.1</u>: Conduct a Vulnerability Assessment • <u>7.4</u>: Develop Climate Adaptation Strategies • <u>7.5</u>: Incorporate Climate Resiliency Vision, Goals, and Strategies into Local Plans and Projects • <u>7.6</u>: Update the multi-hazard mitigation plan to address changing conditions and identify specific actions to reduce vulnerability to natural hazards
Conduct a Cumulative Risk Assessment	<ul style="list-style-type: none"> • <u>7.1</u>: Conduct a Vulnerability Assessment

Facilitate Document Sharing with public officials or planners	<ul style="list-style-type: none"> • <u>10.3</u>: Cooperate with neighboring communities and partner agencies
Section 3: Public Outreach and Engagement	
Create public-information plans	<ul style="list-style-type: none"> • <u>9.1</u>: Create a climate change education, outreach, and engagement program, focusing on mitigation and adaptation • 9.3: Host climate related educational seminars, workshops, conferences, or fairs • 9.4: Maintain a website on local climate protection efforts
Develop a more (municipality-specific) comprehensive emergency warning system	<ul style="list-style-type: none"> • <u>7.22</u>: Develop or enhance early warning systems and community evacuation plans
Maintain a Special Needs registry	<ul style="list-style-type: none"> • <u>7.22</u>: Develop or enhance early warning systems and community evacuation plans
Section 4: Integration of Municipal Plans	
Emphasize hazards and green infrastructure in Comprehensive Plan	<ul style="list-style-type: none"> • <u>6.1</u>: Develop and Adopt a Comprehensive Plan with Sustainability Elements
Promote compact and walkable development and clustered development	<ul style="list-style-type: none"> • 6.10: Implement strategies that support bicycling and walking • <u>8.4</u>: Incorporate sustainability requirements in local government funded programs or projects • <u>6.9</u>: Adopt a complete streets policy
Establish a Floodplain Management Plan	<ul style="list-style-type: none"> • <u>7.11</u>: Adopt a floodplain management and protection ordinance to reduce vulnerability to flooding and erosion
Adopt No Adverse Impact policies in floodplains	<ul style="list-style-type: none"> • <u>8.3</u>: Include green industries in economic development plans
Create a Capital Improvements Plan	<ul style="list-style-type: none"> • <u>8.3</u>: Include green industries in economic development plans • 8.9: Establish incentives for green industry or businesses to locate in community
Update current Zoning Laws	<ul style="list-style-type: none"> • <u>6.19</u>: Preserve Natural Areas Through Zoning or Other Regulations

	<ul style="list-style-type: none"> • <u>6.2</u>: Incorporate Smart Growth Principles into Land-use Policies and Regulations • <u>7.5</u>: Incorporate Climate Resiliency Vision, Goals, and Strategies into Local Plans and Projects
Create a Stormwater Utility	<ul style="list-style-type: none"> • 7.16: Use green infrastructure to manage stormwater in developed areas • 7. 17: Conserve wetlands and forests to manage stormwater, recharge groundwater and mitigate flooding
Section 5: Disaster Preparedness and Recovery	
Join FEMA’s Community Rating System	<ul style="list-style-type: none"> • <u>7.15</u>: Promote community flood prevention strategies through the National Flood Insurance Program Community Rating System
Create a Short-term Recovery Plan	<ul style="list-style-type: none"> • <u>7.6</u>: Update the multi-hazard mitigation plan to address changing conditions and identify specific actions to reduce vulnerability to natural hazards
Create a Long-term Recovery Plan	<ul style="list-style-type: none"> • <u>7.6</u>: Update the multi-hazard mitigation plan to address changing conditions and identify specific actions to reduce vulnerability to natural hazards
Create an Evacuation Plan/ Flood Preparedness Guide	<ul style="list-style-type: none"> • <u>7.6</u>: Update the multi-hazard mitigation plan to address changing conditions and identify specific actions to reduce vulnerability to natural hazards
Create a Continuity of Operations Plan	<ul style="list-style-type: none"> • <u>7.6</u>: Update the multi-hazard mitigation plan to address changing conditions and identify specific actions to reduce vulnerability to natural hazards
Install a general emergency warning system	<ul style="list-style-type: none"> • <u>7.22</u>: Develop or enhance early warning systems and community evacuation plans
Section 6: Hazard Mitigation Implementation	
Establish a Climate Action Plan	<ul style="list-style-type: none"> • <u>2.5</u>: Develop a Government Operations Climate Action Plan • <u>2.6</u>: Develop a Community Climate Action Plan
Staff post-flood intervention training session	<ul style="list-style-type: none"> • <u>7.4</u> Action: Climate Adaptation Strategies • <u>7.8</u> Restoration of Floodplains & Riparian Buffers
Utilize Additional Hazard Mitigation Tools	<ul style="list-style-type: none"> • 7.10: Create or update a watershed assessment to identify flooding and water quality priorities • 7.6: Update the multi-hazard mitigation plan to address changing conditions and identify specific strategies to reduce vulnerability to natural hazards

