

Town of Lansing, New York (360852)
Community Rating System (CRS)
Baseline Assessment and Potential Impact Report
March 2022



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Community Rating System Baseline Assessment and Impact Analysis Report

MARCH 2022

Prepared for:
Town of Lansing, New York

Prepared by:



TETRA TECH

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SECTION 1. INTRODUCTION

This Community Rating System (CRS) baseline assessment and impact analysis report has been prepared for the Town of Lansing (the Town) by Tetra Tech, Inc. (Tetra Tech) as part of Tompkins County's Resiliency and Recovery Plan supported with grant funding from New York State's Department of State.

1.1. CRS OVERVIEW

The CRS is a program administered by the Insurance Services Office (ISO), Verisk, under the National Flood Insurance Program (NFIP) on behalf of FEMA. Per the CRS Fact sheet dated June 30, 2021, the CRS was implemented in 1990 as a voluntary program for recognizing and encouraging community floodplain management activities that exceed minimum NFIP standards. Any community fully compliant with NFIP floodplain management requirements may apply to join the CRS. As of April 2021, over 1,500 Communities participate in the CRS. The CRS has 1,520 communities throughout the United States that participate in the program by implementing local mitigation, floodplain management, and outreach activities that exceed the minimum NFIP requirements. These CRS communities have over 3.6 million policyholders, accounting for more than 70% of all NFIP flood insurance policies.

Under the CRS, flood insurance premium rates are discounted to reward community actions that meet the three goals of the CRS: 1. Reduce flood damage to insurable property 2. Strengthen and support the insurance aspects of the NFIP 3. Encourage a comprehensive approach to floodplain management CRS Class Ratings.

The CRS uses a Class rating system that is similar to fire insurance rating to determine flood insurance premium reductions for residents. CRS Classes are rated from 9 to 1. Today, most communities enter the program at a CRS Class 9 or Class 8 rating, which entitles residents in Special Flood Hazard Areas (SFHAs) to a 5% discount on their flood insurance premiums for a Class 9 or a 10% discount for Class 8.

As a community engages in additional mitigation activities, its residents become eligible for increased NFIP policy premium discounts. Each CRS Class improvement produces a 5% greater discount on flood insurance premiums for properties in the SFHA. CRS Class changes occur on April 1 and October 1 of each year. A fact sheet providing additional information is provided as a reference at the end of this report.

1.2. BASELINE ASSESSMENT AND POTENTIAL IMPACT ASSESSMENT

The purpose of this report is to provide a baseline assessment of and recommendations for the Town's current floodplain management program as well as information on the Town's potential to participate in the CRS, including an assessment of creditable activities and a flood insurance impact analysis.

The report is divided into two major sections, the **baseline assessment**, and the **potential impact assessment**. These sections include the following information:

- Baseline Assessment
 - Floodplain Management Resource Analysis
 - Baseline Assessment Findings and Recommendations

- CRS Prerequisites
- Potential Impact Assessment
 - Overview of CRS Activities
 - Initial Estimation of CRS Credit
 - Summary Overview of CRS Credit
 - Flood Insurance CRS Impact Analysis

The Baseline Assessment is intended to provide an initial estimation of the Town's floodplain management capabilities. The consultant, Tetra Tech, interviewed key municipal officials to obtain feedback to determine the effectiveness of flood risk, regulations (and enforcement), planning, and administration as related to floodplain management. The Baseline Assessment provides a summary of the findings.

Detailed recommendations to improve floodplain management and to specifically align with CRS creditable activities are provided in the Section 3. CRS Potential Impact Assessment.

1.3. BASIC METHODOLOGY

This report was developed using information provided during interviews with local staff, review of local codes and ordinances, and industry best management practices.

1.4. CURRENT CRS STATUS

The Town of Lansing does not currently participate in the CRS and is classified as a CRS Class 10 community which means that flood insurance policyholders within the Town currently do not receive flood insurance premium savings. However, should the Town begin participation, all flood insurance policyholders will be eligible for a class discount of the Town regardless of being located inside the 1% chance of annual flood area, also known as the special flood hazard area (SFHA), or outside.

1.5. POTENTIAL TOWN OF LANSING CRS PARTICIPATION CLASSIFICATION

Based on the available information, the initial finding is that the Town of Lansing may participate in the CRS as a Class 9 community if it meets and follows the program prerequisites and requirements before applying to participate in the CRS.

Attaining Class 9 status would result in an estimated per policy discount of \$64 per year and a town-wide benefit of approximately \$1,600 in NFIP premium savings for current owners of NFIP insured properties. If the Town was able to achieve a Class 8 designation, that would provide an estimated per policy discount of \$94 per year and a town-wide benefit of approximately \$3,285 NFIP premium savings for owners of NFIP insured properties.

Based on review of communities participating across the country and depending on the level of participation/class of a community, operating a CRS program is estimated to require up to 13% of a full-time employee. This level of effort is inclusive of responding to resident inquiries, outreach, maintenance of records and data, and annual and cycle reporting.

The Town is urged to consider the costs and benefits of CRS participation in its decision as to whether it will pursue an application to the program. Should the Town opt not to participate in CRS, incorporating the

recommendations provided in this report will, nevertheless, improve the Town's floodplain management and support reduction in future flood impacts and increase of the health, safety, and welfare of its residents, businesses, and visitors.

An additional consideration in the decision to participate in the CRS is the fact that imminent county-wide preliminary updated digital flood insurance maps (DFIRMs) are expected to indicate increased flood risk across Tompkins County, though have very minimal impact to the number of properties in the floodplain. The benefits of premium discounts for participation are only slightly magnified.

Changes and improvements to fulfill prerequisites and enhance the Town's floodplain management program are provided in Specific CRS Program Recommendations found in Section 3.3.1.

Conclusion: Based on the activities and elements reviewed in this report, the Town would be able to obtain an estimated **907 points** for the activities it is already pursuing as detailed in Table 2. The Town would enter the CRS at the base level (Level 9) which results in a discount of 5% to flood insurance policy holders. Before applying to the CRS, the Town should review the recommendations for enhancing its CRS eligible activities.

1.6. CRS PREREQUISITES

A community wishing to participate in the CRS must demonstrate that it meets and complies with six prerequisites. Additional prerequisites are required for communities that wish to achieve CRS Class 8, 6, Class 4, and Class 1 ratings.

The prerequisites for CRS participation relevant to the Town of Lansing are as follows:

1. The community must have been in the regular phase of the National Flood Insurance Program (NFIP) for at least one year.
2. The community must be in full compliance with the minimum requirements of the NFIP and must have received acknowledgement of this correspondence from the regional office of the Federal Emergency Management Agency (FEMA) within six months of the community's initial CRS verification visit.
3. The community must maintain FEMA Elevation Certificates on all new buildings and buildings undergoing substantial repairs or improvements constructed in the SFHA after the community applies for CRS credit with a 90% accuracy rate. In addition, the community must develop a Construction Certificate Management Plan (CCMP).
4. If there are one or more repetitive loss properties in the community, the community must take certain actions. A repetitive loss property is any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling ten-year period since 1978. These include reviewing and updating the list of repetitive loss properties, mapping repetitive loss areas, describing the causes of the losses, and reaching out to those property owners each year to discuss flood mitigation opportunities. A community with 50 or more repetitive loss properties must also prepare a plan for addressing its repetitive flood problem.
5. The community must maintain all flood insurance policies that it has been required to carry on properties owned by the community.
6. As a prerequisite for achieving CRS Class 8, communities must adopt and enforce at least one foot of freeboard for residential buildings in all numbered zones of the Special Flood Hazard Area (SFHA).

For more information on these prerequisites, please refer to the [National Flood Insurance Program Community Rating System Coordinator's Manual](#) (FIA-15/2017; OMB No. 1660-0022) and [2021 CRS Addendum](#) document.

SECTION 2. BASELINE ASSESSMENT

2.1 OVERVIEW

The CRS is a voluntary program that recognizes and incentivizes local mitigation and floodplain management practices that exceed the minimum standards of the NFIP. To maintain CRS classification, a community must continue to implement the activities for which credit is provided. Because of this, it is important to assess the programmatic aspects of the Town of Lansing's floodplain management program to determine whether the Town is likely to maintain a CRS class once it is awarded. The following sections discuss the Town's current floodplain management program and offer recommendations for improvement.

2.2. FLOODPLAIN MANAGEMENT RESOURCE ANALYSIS

Tetra Tech conducted an interview with Town of Lansing staff on September 1, 2021, to perform a baseline assessment of the Town's floodplain management program using Tetra Tech's Baseline Assessment Tool (BAToolSM) Program-Mitigation Module. This module enables the evaluation of a community's ability to sustainably participate in the CRS. Actions recommended as a result of this review may be included in the BAToolSM Mitigation Module as part of the mitigation actions to be addressed by the community. Attending staff members included:

- Edward LaVigne - Town Supervisor
- C.J. Randall - Director of Planning; Town Local Floodplain Administrator
- Scott Russell – Town Zoning/Code/Fire Enforcement Officer
- John Zepko – Town Planner, Stormwater Management Officer
- Mikey Moseley - Superintendent of Highways
- Scott Doyle – Tompkins County Department of Planning & Sustainability

The BAToolSM Program consists of a series of weighted questions in four categories designed to assess and rate the programmatic nature of a community's floodplain management plan against industry best practices. The categories and examples of elements assessed under each category are as follows:

- Flood Risk:
 - Number of NFIP policies in the SFHA and claims on those policies
 - Number of repetitive loss properties
 - Programs for perishable data capture, such as a program to document high water marks after a flood event
- Programmatic Regulations:
 - Aspects of the flood damage prevention ordinance
 - Regulation to higher standards
 - Regulation beyond the FEMA mapped flood hazard areas
- Programmatic Planning:
 - Existence and integration with hazard mitigation and comprehensive plans
 - Established procedures for post-disaster substantial damage assessment procedures
 - Targeted flood mitigation projects
- Programmatic Administration:

- Number of staff available and their level of training
- Use of a standalone floodplain development permit
- Capability to administer a public outreach campaign

After the assessment, a community is scored in one of three categories indicating their potential to succeed in and remain in the CRS:

- **Green:** The community floodplain management program appears to be programmatic and community should be able to achieve and maintain CRS classification. In other words, floodplain management follows set procedures that can be replicated by others in the event of staff turnover.
- **Yellow:** The community has pieces of a complete floodplain management program, but there are enhancements that should be considered before applying to the CRS.
- **Red:** The community floodplain management program is not ready for the rigors of the CRS.

Encompassing 60.7 square miles, Lansing is the second-largest town in Tompkins County. The northern part of the Town is largely farmland, generating one third of the total farm product sales in Tompkins County, making it a vital agricultural community. The western border of Lansing is shaped by Cayuga Lake, and is bordered on the east by the Towns of Groton and Dryden, and on the south by the Town of Ithaca and City of Ithaca.

The Town of Lansing is located along Cayuga Lake at the confluence with Salmon Creek. Approximately two percent of the Town's land area is in the SFHA. Flood issues are localized mainly in the portion of Town near the lake, in particular Ladoga Park Road, and in the vicinity of Ludlowville Road near Brickyard and Lansingville Roads. In addition to riverine flooding, officials indicate that flash flooding occurs within the Town.

Lansing's Flood Damage Prevention Ordinance was adopted on July 7, 2017. Prior to its adoption on September 15, 2010, the Town underwent a Community Assistance Visit administered by the New York State Department of Environmental Conservation (NYSDEC), the report for which indicated two administrative issues and one potential violation as follows:

- The use of the standardized Floodplain Development Permit had been discontinued in recent years. A recommendation was made to re-institute one based on the NYSDEC model permit application.
- Elevation data was obtained for development in the SFHA; however, it was not always provided on a FEMA Elevation Certificate.

Lansing's Flood Damage Prevention Ordinance requires two feet of freeboard. The ordinance does not include standards for compensatory storage (a volume not previously used for flood storage and which shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the base flood elevation, which would be displaced by the proposed project). The Town also does not have procedures for tracking cumulative substantial improvement or damage due to issues associated with structure valuations. Elevation Certificates are required for the as-built elevation of the lowest floor or flood-proofed elevation of a property constructed in the regulatory floodplain. Officials indicated that the ordinance is based on a NYSDEC model with modifications to reference the Seneca Watershed Map, which has created confusion over which map (NFIP or Seneca Watershed) is considered the regulatory map.

A total of 34 flood insurance policies were in force in the Town as of July 2020. Total annual premiums for these policies totaled \$37,323 as of September 2021. Fifty-five flood insurance claims have been filed since 1978, and approximately \$466,000 in losses have been paid from insurance through July 2020. Town officials indicated that they are not aware of the current specific number of policies in force, number of claims, or total paid losses related to properties in the Town.

FEMA data identified eight repetitive loss properties in Lansing. As a result, the Town is considered a Category B community and must perform the following activities to comply with CRS requirements:

- Prepare a map of areas at risk of repetitive flooding (repetitive loss areas)
- Review and describe these areas' flood problems
- Prepare a list of all properties with insurable structures in the repetitive loss areas
- Conduct annual outreach to all the affected property owners, describing the flood risk and informing them of insurance and mitigation options for property protection

C.J. Randall, the Town's Director of Planning, was reported to be the floodplain administrator and has held those duties since June 2019. Per the Town's flood damage prevention ordinance the floodplain administrator is identified as *the person (or persons) appointed by the town to administer and implement this local law, including through the granting or denying of development permits in accordance with these provisions. In the town this person is the Director of Planning as noted in 2022 Resolution 22-57.* Ms. Randall has worked in a range of planning issues, including flood mitigation, in communities throughout New York State. In terms of managing and reviewing floodplain actions, the Town further benefits from the experience of Town Planner, John Zepko, who is a Certified Floodplain Manager. For engineering reviews, the Town retains an outside engineering firm (T.G. Miller, P.C.).

Follow up discussions with Town staff indicated that they had been involved in assessments of CRS in other communities they had worked in. As a part of their experience in other communities they found that the estimated cost for staff time to enroll and manage the program annually far exceeded the cost savings that flood insurance carriers would save so the community decided not to enroll. They expressed concern that the Town would need specialized professional consulting assistance to enroll and effectively participate in the program. Staff went on to say that while that was the case in other communities, they would support what needs to be done in Lansing should it decide to enroll in CRS.

All applications for development (including Elevation Certificates) in the SFHA are referred to the Town Engineering consultant, T.G. Miller for review and approval. Since 2019, the Town has kept records including floodplain development permits in a database called *Municipity*. It is unclear if these records can be queried by permit number. Regarding documentation of repetitive loss properties, the Town does not currently have a formal program in place.

It was determined that the Town's previous posted grading was a Residential 4 / Commercial 3 in 2016 in the Insurance Services Office (ISO) Building Code Effectiveness Grading Schedule (BCEGS®), which assesses community building codes and their enforcement, with special emphasis on loss mitigation from natural hazards. Municipalities with well-enforced, up-to-date codes should demonstrate better loss experience that can be reflected in lower insurance rates. The prospect of lessening catastrophe-related damage and ultimately lowering insurance costs provides an incentive for communities to enforce their building codes rigorously.

Tompkins County has a [webpage](#) dedicated to climate adaptation where among other items the [Tompkins County Hazard Mitigation Plan: 2021 Update](#) is posted. As part of the 2021 update to that plan, the County conducted public outreach on natural hazards, including flooding. While the Town supports the County's

public information efforts, it has not undertaken its own separate outreach activities on flood risk and prevention focused on floodplain residents.

Town staff members have a strong working knowledge of flooding issues in Lansing though opportunities for integrated floodplain management in most Town operations still exists. While many aspects of the Town’s overall program are adequate, the BAToolSM Program results a yellow rating, indicating that the Town should make some enhancements to its floodplain management program before applying to enter the CRS Program. Table 1 below shows the Town’s score for each BAToolSM Program category.

Table 1. BATool™ Rating for Each Programmatic Category

	Flood Risk	Programmatic-Regulations	Programmatic-Planning	Programmatic-Administration	Overall
Town of Lansing	Yellow	Yellow	Yellow	Yellow	Yellow

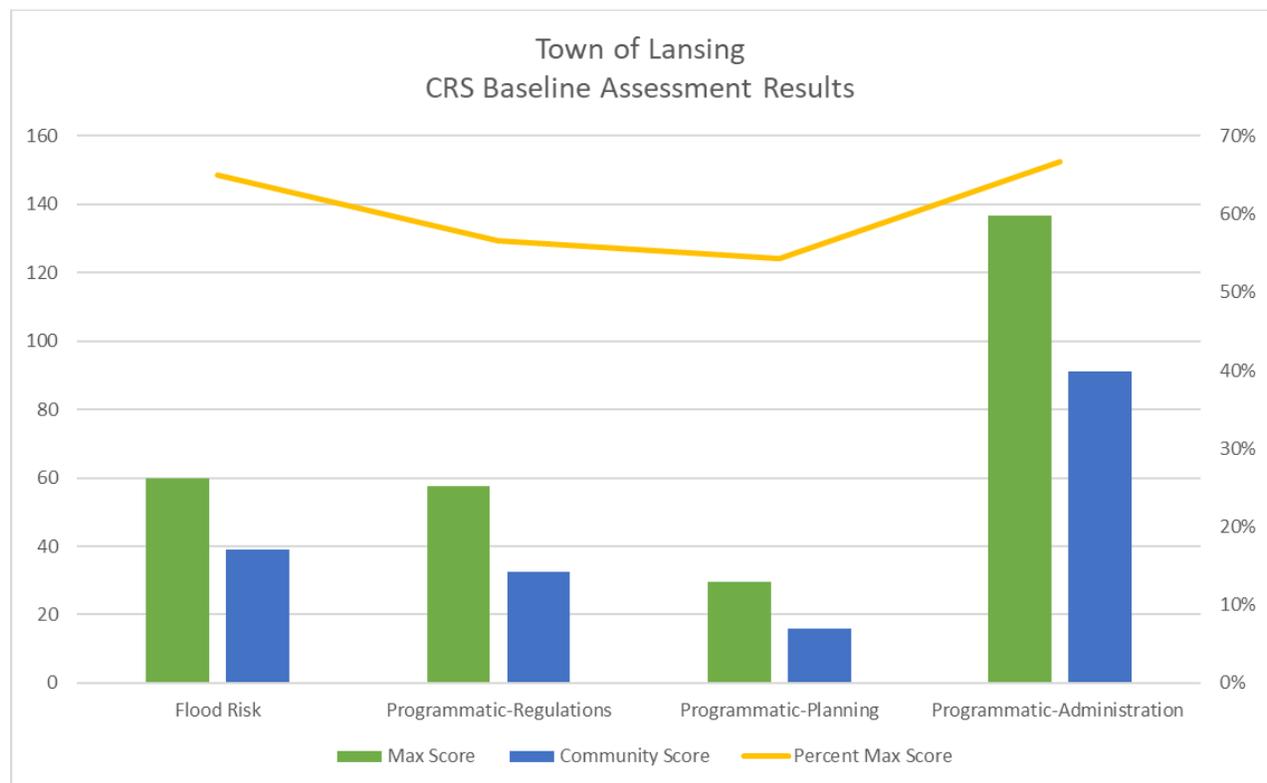


Figure 1. Town of Lansing Comparative CRS Baseline Results

2.3. BASELINE ASSESSMENT FINDINGS AND RECOMMENDATIONS

The following sections describe the major findings and issues from the baseline assessment and provide recommendations to improve and enhance the Town’s current floodplain management program to prepare for the CRS or simply to enhance risk reduction efforts.

2.3.1. Summary of Findings and Issues

The following is a summary of the major findings and issues noted during the baseline assessment interview. These findings and issues inform the recommendations found in Section 2.3.2 of actions that should be taken prior to applying to participate in the CRS. Attempting to apply before adjusting municipal policies and procedures may result in a formal directive to address any deficiencies within one year of the determination to be eligible to continue the application for participation. It is recommended that the Town address these issues at a minimum to ensure their sustainable participation in the CRS, if they choose to apply.

Flood Risk

- The Town of Lansing currently has three percent of its structures located in the regulatory floodplain. A limited number of NFIP claims have been filed since 1978, with a total of eight repetitive loss properties in the municipality, and it is estimated that fewer than 10 flood events occurred in the last 25 years that have caused damages.
- The Town is most vulnerable to flooding in and around Cayuga Lake, in particular in the vicinity of Ladoga Park. In addition, a history of flooding has been documented at Morris Park, Salmon Creek, Crooked Hill Road, Salmon Creek Road, and Ludlowville Road near Brickyard Road; however, there is no record of structural damages to residential or commercial buildings. Road damage from flooding occurs about every six years on Brickyard Road, Lansingville Road, including Town road infrastructure. Ludlowville Road experienced flood-related damage in multiple flood events about 10 years ago for which the County received State and federal mitigation funding to study the issue, design and build an upstream stormwater detention facility upstream of the Hamlet of Ludlowville and Salmon Creek.
- During the last flood event, the Town informally documented damages by taking photos during and after the event, but there is no formal protocol in place for capturing perishable data such as high-water marks or detailed damage assessments from an event.
- In addition to riverine flooding, officials indicate that flash flooding also occurs within the Town.
- It is noted that the Town is not adequately documenting the review of repetitive losses and is not conducting annual outreach to residents located in SFHAs. Review and documentation of repetitive loss properties as well as annual outreach are required CRS program activities.

Programmatic Regulations

- Lansing's flood damage prevention ordinance requires two feet of freeboard. The ordinance does not include standards for compensatory storage or procedures for tracking cumulative substantial improvement or damage due to issues associated with structure valuations. A consistent policy and procedure for tracking and addressing substantial improvements and damages is a CRS requirement. Going forward, addressing previous issues with floodplain administration and assessments of damaged structures will be considered by FEMA administration as part of the Town's application to the CRS.

- The BCEGS provides an indication of the level of the Town's building codes in effect and how the community enforces its building codes. It was determined that the Town's previous posted grading was a Residential 4 / Commercial 3 in 2016 in the ISO's BCEGS. Participating in the BCEGS will enable points in CRS activity 430, Higher Regulatory Standards. Furthermore, a community must have received and continue to maintain a BCEGS classification of 5/5 or better (residential/ personal and commercial). A BCEGS classification is a prerequisite for attaining a Class 6 or better.

Programmatic Planning

- The Town's in-house and contracted engineering staff are aware of the potential flooding hazards the community faces but do not have the capacity to integrate floodplain management and administration into other areas of municipal administration. Setting a formal policy limiting future development in floodplain areas would support a stronger floodplain management program.

Programmatic Administration

- The Town's overall floodplain management administration provides a good basis for comprehensive floodplain management but could use additional procedures to accommodate sustainable participation in the CRS. Participation in the program would in turn further strengthen and organize the Town's floodplain management efforts as well as benefit flood insurance policyholders.

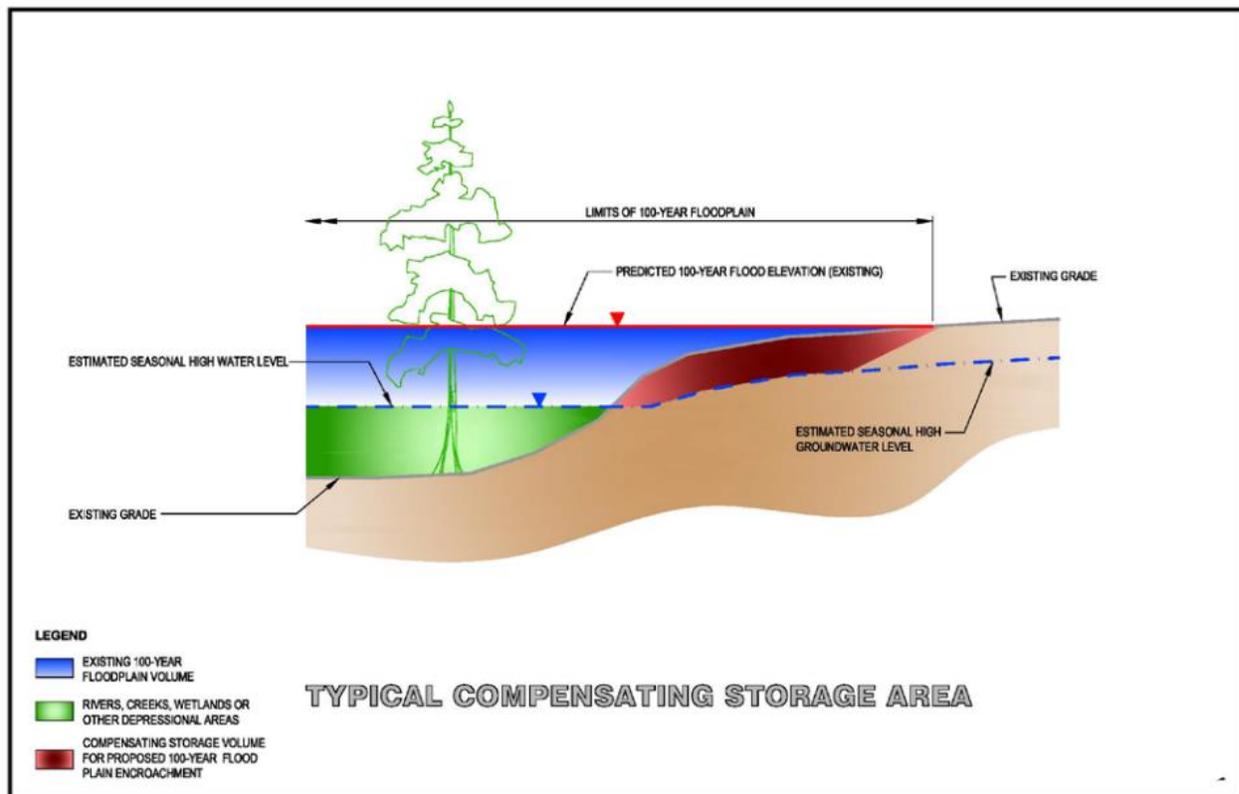
2.3.2. Recommendations for Improvement of Overall Floodplain Management Program

Based on the findings and issues noted above, the following changes and improvements should be made to a) fulfill prerequisites for the CRS and, more importantly, b) enhance the Town's floodplain management program. Separate CRS Program Specific Recommendations are listed at the end of the document in Table 5.

Flood Risk

- Map and update the list of repetitive loss properties annually and conduct regular outreach to those property owners regarding potential risk reduction actions. (*Mandatory Prerequisite*)
- Create formal protocol for capturing perishable data such as high-water marks or detailed damage assessments from an event. (*Optional/CRS Credit*)

Figure 2. Compensatory Storage Offsets Reduction of Water Storage Due to Fill in the SHFA



Source: https://www.envisionalachua.com/files/managed/Document/865/5f-i_Stormwater_Management.pdf. Technical memorandum, stormwater Management, Envison Alachua Sector Plan, May 1, 2015, revised June 4, 2015. Accessed 2/28/22.

Programmatic Regulations

- Consider enacting compensatory storage requirements, particularly for projects located in riverine flood zones. Compensatory storage preserves areas of the floodplain that can store flood water and minimizes increases in flood heights due to development. (*Optional/CRS Credit*)
- Develop a consistent policy for assessing damaged structures and making substantial damage assessments¹ (*NFIP requirement*) as well as undertake substantial damage training. (*Optional/CRS Credit*)
- Consider tracking cumulative improvements and/or repairs to structures and use the cumulative value of improvements and/or repairs to determine substantial improvements (any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement) or damages. (*Optional/CRS Credit*)
- Update the Town of Lansing Flood Damage Prevention Ordinance to ensure that substantial damage and substantial improvement determinations are cumulative in nature. (*Optional/CRS Credit*)

- Consider lowering the threshold of substantial damage and/or substantial improvement in the Town’s flood damage prevention ordinance to below 50 percent of the market value of the structure. *(Optional/CRS Credit)*
- Examine enhancements to building code enforcement such as code administration, plan reviews, and field inspection, and track those enhancements through the BCEGS® rating. *(Optional/CRS Credit)*
- Explore opportunities to enhance regulations for the 500-year flood zone and known hazardous areas located outside the SFHAs, such as requiring additional freeboard for structures and utilities in these areas. *(Optional/CRS Credit)*
- Update the Flood Damage Prevention Ordinance to identify the floodplain administrator. *(Optional/CRS Credit)*

Programmatic Planning

- Update the Town’s comprehensive plan to ensure land use supports good floodplain management to avoid development of Floodprone areas and incorporate actions recommended as part of the Town’s Annex in the *Tompkins County Hazard Mitigation Plan: 2021 Update*. *(Optional/CRS Credit)*
- Adopt a National Incident Management System–compliant Emergency Operations Plan/Community Emergency Management Plan. This activity will bolster the Town’s response and preparedness for flooding and other hazards. The proposed post-disaster action plan should address standardizing damage assessments and address reconstruction in the wake of a flood event. *(Optional/CRS Credit)*
- Ensure appropriate floodplain management staff, including the floodplain administrator and building code officials, are involved in the development and implementation of the Town Comprehensive Plan, the *Tompkins County Hazard Mitigation Plan: 2021 Update*, and the Emergency Operations Plan. *(Optional/CRS Credit)*
- Develop a flood warning and response plan that integrates municipal emergency operations to address flooding and gain additional credit through the CRS. *(Optional/CRS Credit)*

Programmatic Administration

- Develop policies and procedures for determining substantial damage and improvements when permit applications are received. Ensure that only the structure’s value is part of the determination. *(Mandatory Prerequisite)*
- Organize and formalize the process for record-keeping of development in the SFHAs.
- Organize and undertake outreach specific to residents and property owners in SFHAs. Outreach efforts should cover preparation for disasters, information about mitigation, and warnings about flooding events. *(Mandatory Prerequisite)*
- Develop a substantial damage response plan to provide a procedure for capturing post-event perishable data and to guide efficient post-disaster efforts to address regulatory requirements. *(Optional/CRS Credit)*

SECTION 3: POTENTIAL IMPACT ASSESSMENT

CRS participation can have an array of potential impacts for local communities, such as A) a stronger floodplain management program and B) reduced flood insurance premiums for residents insuring structures in SFHAs.

If a municipality wants to improve a specific aspect of its existing floodplain management efforts, the CRS has 19 credited activities to guide those efforts and allocate credits for application and maintenance of CRS status. The following subsection on CRS activities provide an overview of likely sources of credit for the Town to meet the prerequisites and participate in the CRS program.

In addition to improving floodplain management, there can be savings to community members in flood insurance premiums. The following subsection on the flood insurance impact assessments for the Town at various CRS class ratings will help inform that potential impact.

3.1. IMPROVING FLOODPLAIN MANAGEMENT: OVERVIEW OF CRS ACTIVITIES

The following overview of CRS activities is based on the [2017 CRS Coordinator's Manual](#) (OMB No. 1660-0022) and the [2021 CRS Addendum](#), which is the current effective manual as of the preparation of this report. This section will describe the objective of each of the 19 activities.

Activity 310—Elevation Certificates:

The objective of this activity is to maintain correct FEMA Elevation Certificates and other needed certifications for new and substantially improved buildings in the SFHA.

Credit is provided if the community maintains FEMA Elevation Certificates for new and substantially improved construction. A CCMP is required for the full 38 points. To participate in the CRS program, a community must maintain completed FEMA Elevation Certificates on all buildings constructed, substantially improved, or constructed in the SFHA after its initial date of application to the CRS program with 90% accuracy. The community must agree to use the certificate and make copies available to any inquirer. All discussions about FEMA Elevation Certificates also apply to FEMA's flood-proofing certificate and the residential basement flood-proofing certificate.

Maximum Points: 116

Performance Expectations: FEMA Elevation Certificates are required for all new construction and/or substantial improvements within the floodplain from the date of application forward. FEMA Elevation Certificates must be reviewed for completeness and accuracy. Ninety percent of the obtained FEMA Elevation Certificates must be error-free for the Town to remain eligible for participation in the CRS program.

Activity 320—Map Information Service:

The objective of this activity is to provide inquirers with information about local flood hazards and flood-prone areas.

Credit is given for providing inquirers with information from the community's FIRM, including whether a property is in an SFHA, which zone, and the base flood elevation. Credit depends on publicizing this service and advising inquirers about the mandatory flood insurance purchase requirement.

Maximum Points: 90

Performance Expectations: The map information service must be advertised annually, and the municipality must keep a log and record of the service provided.

Activity 330—Outreach Projects:

The objective of this activity is to provide the public with information needed to increase flood-hazard awareness and to motivate actions to reduce flood damage, encourage purchase of flood insurance, and protect the natural functions of floodplains.

This activity credits public information projects that reach directly out to people, rather than a service to respond to inquiries. To receive credit under this activity, a community may participate in one or more of the following types of projects:

1. Design and carry out public outreach projects.
2. Create a pre-flood plan for public information activities to be ready for the next flood. A pre-flood plan is a collection of outreach projects prepared in advance, but not delivered, until a flood occurs.
3. Implement an ongoing public information effort to design and transmit the messages that the community determines are most important to its flood safety and the protection of its floodplains' natural functions. This plan is reviewed and updated annually.
4. Create outreach projects that are conducted or endorsed by stakeholder organizations.

Maximum Points: 350

Performance Expectations: Credited outreach projects must be disseminated at least annually to retain credit.

Activity 340—Hazard Disclosure:

The objective of this activity is to disclose a property's potential flood hazard to prospective buyers before the lender notifies them of the need for flood insurance.

Credit is provided if both potential sellers and real estate agents advise prospective property purchasers of the flood hazard. Other disclosure methods may also be credited.

Maximum Points: 80

Performance Expectations: The community has no annual performance requirements.

Activity 350—Flood Protection Information:

The objective of this activity is to provide the public with information about flood protection that is more detailed than that provided through outreach projects.

Credit is provided if the local library maintains documents about flood insurance, flood protection, floodplain management, and the natural and beneficial functions of floodplains. Additional credit is provided if similar information is available on the community's website.

Maximum Points: 125

Performance Expectations: Web links must be tested at least annually to verify that they are still active and contain the credited information.

Activity 360—Flood Protection Assistance:

The objective of this activity is to provide one-on-one, property-specific help to people who are interested in protecting their properties from flooding.

Credit is granted if a community provides technical advice to interested property owners and publicizes the services available. This activity credits telling individuals what they can do to protect their own properties from flood damage.

Maximum Points: 110

Performance Expectations: The service must be advertised annually, and the municipality must keep a log and record of the assistance provided.

Activity 370—Flood Insurance Promotion:

The objective of this activity is to improve flood insurance coverage in the community.

This activity provides credit for a three-step process that allows communities to assess their needs and receive credit for improving their coverage. The process consists of the following three steps:

Step 1: Flood insurance coverage assessment (FIA). This credit is provided for assessing the community's current level of coverage and identifying shortcomings.

Step 2: Coverage improvement plan (CP). The plan is prepared by a committee that has representation from local insurance agents.

Step 3: Implementation of the coverage improvement plan (CPI). The plan's projects are implemented.

Maximum Points: 220

Performance Expectations: The municipality must implement the recommendations of the insurance coverage improvement plan.

Activity 410—Flood Hazard Mapping:

The objective of this activity is to improve the quality of mapping used to identify and regulate floodplain development.

This activity provides credit for developing regulatory maps and flood data for floodplain management purposes in areas where FEMA does not provide such data, or for mapping to a higher standard than that

required by FEMA, as well as credit for regulating areas based on flood data not provided with the community's FIRM or for a flood study conducted to a higher standard than FEMA's Flood Insurance Study (FIS) criteria, such as sea level rise.

Maximum Points: 802

Performance Expectations: The community has no annual performance requirements.

Activity 420—Open Space Preservation:

The objectives of this activity are to:

1. Prevent flood damage by keeping flood-prone lands free of development.
2. Protect and enhance the natural functions of floodplains.

Credit is given for areas in a regulated floodplain that are permanently preserved as open space. Additional credit is given for parcels of open space that are protected by deed restrictions or that have been preserved in or restored to their natural state. Credit is also given for measures that require or encourage less development in floodplains.

Maximum Points: 2,870

Performance Expectations: The community has no annual performance requirements unless there is a change to the regulations or zoning ordinances.

Activity 430—Higher Regulatory Standards:

The objective of this activity is to credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the NFIP.

Under this activity, numerous higher regulatory approaches are credited that provide more protection to new development, redevelopment, and existing development. These include freeboard, foundation protection, more stringent building-improvement rules, protection of critical facilities, preservation of floodplain storage, protecting the natural and beneficial functions of floodplains, limiting building enclosures below the flood level, and mapping and regulating areas subject to special flood hazards. Additional measures proposed by a community will be evaluated and scored accordingly.

Maximum Points: 2,042

Performance Expectations: The municipality must maintain documentation of enforcement of credited standards to be provided with annual recertification.

Activity 440—Flood Data Maintenance:

The objective of this activity is to make community floodplain data more accessible, current, useful, and accurate so that the information contributes to the improvement of local regulations, insurance ratings, planning, disclosure, and property appraisals.

Under this activity, credit is provided for putting FIRM flood boundary and floodway delineations on a digitized mapping system or implementing another method that allows for quick revision and reprinting of a floodplain map. Flood hazard data could also be maintained on computerized parcel records. This activity

also includes credit for adding and/or maintaining elevation reference marks and overlaying the community's floodplain mapping (including the FIRM) on the zoning map, the assessor's map, or other maps used regularly by community staff.

Maximum Points: 222

Performance Expectations: The municipality must make sure that credited data are still available and being used.

Activity 450—Stormwater Management:

The objective of this activity is to prevent future development from increasing flood hazards to existing development and to maintain and improve water quality.

This activity credits the following approaches to regulating new development in the watershed:

- Regulating developments on a case-by-case basis to ensure that the peak flow of stormwater runoff from each site will be no greater than the runoff from the site before it was developed.
- Regulating developments according to a stormwater management master plan that analyzes the combined effects of existing and expected development on drainage through and out of the watershed.
- Regulating activities throughout the watershed to minimize erosion that results in sedimentation.
- Regulating the quality of stormwater runoff.

Maximum Points: 755

Performance Expectations: The municipality must maintain documentation of enforcement of credited standards.

Activity 510—Floodplain Management Planning:

The objective of this activity is to credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impacts of the hazard on the community and help meet other community needs.

This activity provides credit for preparing, adopting, implementing, evaluating, and updating a comprehensive floodplain management plan. FEMA also requires a multi-hazard mitigation plan as a prerequisite for mitigation funding. The CRS program and FEMA do not specify what activities a plan must recommend, but they only recognize plans that have been prepared according to the standard planning process explained in FEMA regulations and Section 511 of the CRS Coordinator's Manual. Additional credit can be earned for development of a substantial damage response plan that provides the community a procedure for inspections of possible substantially damaged structures and permitting to remain NFIP compliant.

Maximum Points: 762

Performance Expectations: Annual progress reports for credited floodplain management plans and repetitive loss area analyses must be prepared and submitted with annual recertification.

Activity 520—Acquisition and Relocation:

The objective of this activity is to encourage communities to acquire, relocate, or otherwise clear existing buildings out of the SFHA

This activity credits either acquisition or relocation of an insurable building from the path of flooding, as long as the community can document that the property will stay vacant. The credit is based on the number of buildings cleared as a portion of the total number of buildings in the community's SFHA. The credit is provided only if the site qualifies for credit under Activity 420 (Open Space Preservation).

Maximum Points: 2,250

Performance Expectations: The community has no annual performance requirements.

Activity 530—Flood Protection:

The objective of this activity is to protect buildings from flood damage by:

1. Retrofitting the buildings so that they suffer no or minimal damage when flooded.
2. Constructing small flood control projects that reduce the risk of floodwaters reaching the buildings.

This credit is based on the number of insurable buildings in the regulatory floodplain that have been retrofitted since the date of the community's original FIRM. For the purposes of this activity, accessory structures such as garages or sheds are not counted as insurable buildings. Extra credit is given for protecting buildings on FEMA's repetitive loss list (see Section 501 of the CRS Coordinator's Manual) and critical facilities.

Maximum Points: 1,600

Performance Expectations: The community has no annual performance requirements.

Activity 540—Drainage System Maintenance:

The objective of this activity is to ensure that the community keeps its natural streams, channels and storage basins clear of debris so that their flood-carrying and storage capacity are maintained.

Credit is provided for keeping the channels and storage basins (detention or retention) of a community's drainage system clear of debris to maintain their carrying and storage capacity during flood events, and to protect water quality. A community can receive credit for the following drainage system maintenance activities:

- Inspecting and maintaining channels
- Monitoring problem sites
- Having a capital improvement program that benefits the drainage system
- Implementing and publicizing "no dumping" regulations
- Inspecting and maintaining storage basins
- Maintaining coastal (shoreline) erosion protection measures, if applicable

Maximum Points: 570

Performance Expectations:

The municipality must maintain documentation of enforcement of credited standards.

Annual logs and records must be maintained to document the performance of the credited activity.

Activity 610—Flood Warning and Response:

The objective of this activity is to encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

Credit is provided for a community that, at a minimum, has adopted a flood warning and response program that includes:

- A flood threat recognition system that identifies an impending flood
- Methods to warn the public of the impending flood
- A plan for flood response operations
- Coordination with critical facility operators

Maximum Points: 395

Performance Expectations: The municipality must perform an annual flood exercise of the credited emergency plan or document via after action report of a real flooding incident.

Activity 620—Levees:

The objective of this activity is to encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

This activity provides credit to communities protected by levees that are properly maintained and operated but are not high enough to meet the criteria for base flood levees. A community may also receive credit for a levee that protects to the base flood elevation or above if the levee is not reflected on the community's FIRM. No credit is offered under this activity if the area protected by the levee is designated as an AO, A99, AR, B, C, or X zone; or an AE or A-numbered zone with the base flood elevation lower than the level on the water side of the levee.

Maximum Points: 235

Performance Expectations: The municipality must perform an annual flood exercise of the credited emergency plan.

Activity 630—Dams:

The objectives of this activity are to:

1. Encourage states to provide dam safety information to communities.
2. Encourage communities, in turn, to provide timely identification of an impending dam failure, disseminate warnings to those who may be affected, and coordinate emergency response activities to reduce the threat to life and property.

Credit is provided for a community program that mitigates the threat to its floodplain properties from a failure of an upstream dam through emergency preparedness.

Maximum Points: 160

Performance Expectations: The municipality must perform an annual flood exercise of the credited emergency plan.

3.2. INITIAL ESTIMATION OF CRS CREDIT

The following sections provide information on likely sources of CRS credit for the Town of Lansing. To participate in the CRS, communities must earn at least **500 points** to qualify as a Class 9 community. The Town is currently a Class 10 community and by qualifying as a Class 9 community, residents of the Town who carry flood insurance would benefit from 5% reduction in their insurance premium.

The activities and associated Town-specific points outlined below do not represent all possible creditable activities and elements for CRS participating communities but are likely sources of credit for a community just entering the program. The activities and associated points were chosen for review based on the New York State Based Credit Report² and activities discussed during the baseline assessment. Many of these credits are granted on the assumption that the Town is complying with minimum state and federal requirements for floodplain management-related activities. All credit indicated below is subject to verification from ISO or CRS specialists. Many of these activities could be enhanced by the Town to maximize credit.

Activity 310—Elevation Certificates

38 - 86 points out of 116

Element 312.a.—Maintaining Elevation Certificates

38 points

This activity is a CRS participation prerequisite. If a community is not already doing so, it must begin maintaining FEMA Elevation Certificates as a condition of participation. Based on the information provided during the baseline assessment, the Town requires that the elevation of the lowest floor of a building be certified and reviews the FEMA Elevation Certificates for completeness or accuracy.

All communities receive at least 38 points for meeting the prerequisite. Credit for this activity necessitates verification of a CCMP that outlines procedures to ensure that FEMA Elevation Certificates are required and filled out properly to document building compliance with regulatory provisions of the Town's floodplain management ordinance. Failure to annually verify that at least 90 percent of the Town's FEMA Elevation Certificates on file are complete and accurate through an audit procedure may result in the community's removal from the CRS program. Since this activity is a prerequisite for CRS participation, credit is mandatory for program eligibility.

Element 312.b.—Maintaining Elevation Certificates for post-FIRM buildings up to 48 points

Because the Town has not joined the CRS but is already maintaining Elevation Certificates, credit can be earned based upon the number of post-FIRM buildings with Elevation Certificates it has on file. The Town

² <https://crsresources.org/files/200/sbc/new-york-sbc-2017.pdf>

can also receive credit for the number of buildings that have been built or substantially improved in the SFHA between the initial FIRM effective date and the date the Town will apply to the CRS.

Activity 320—Map Information Service

0 points out of 90

Element 322.a.—Basic FIRM information

0 points

The Town does not currently meet the requirements for this credit; however, 30 points could be awarded with development of standard operating procedures (i.e., developing a procedure to ensure that all the information required to rate a flood insurance policy, including the NFIP Community Number, FIRM date, flood zone, Base Flood Elevation (BFE), and other information, is provided to the requesting party). The Town’s ability to provide this information must be publicized annually, and it must document requests for this information.

Element 322.b.—Additional FIRM information

0 points

Additional credit can be awarded if the Town agrees to provide information that goes above and beyond the basic FIRM requirements, such as including design flood elevation data. This information is not used for insurance rating purposes but is included on the Town’s FIRM. Information on the Town’s FIRM that would need to be provided includes the location of the floodway. The Town is not currently eligible for credit under this element but would be eligible for up to 20 points if the procedures identified in ‘Basic FIRM information’ were developed.

Element 322.c.—Other flood problems not shown on the FIRM

0 points

The Town of Lansing currently does not document or provide information on areas of localized or stormwater flooding or floodprone roadways. This sort of information on other flood problems could also be maintained and provided and supplemented with local drainage problems to earn additional credit.

Activity 330—Outreach Projects

0 points out of 350

Element 332.a.—Outreach projects

0 points

The Town has supported the County’s public information efforts surrounding flood prevention and mitigation, but it does not independently create or disseminate its own outreach information to educate or engage its residents. The amount of credit given depends on the number of CRS topics covered and the type of outreach (e.g., informational, general, targeted) conducted.

The Town has the potential to employ a flood specific webpage and municipal staff can produce and distribute educational brochures, articles, pamphlets, and other printed and digital materials, as well as host webinars, social media campaigns or in-person events to educate the public. These capabilities could be leveraged to earn up to 200 points for outreach projects.

A Program for Public Information (PPI) can help design an entire public information program, not just outreach projects. A Program for Public Information that covers other types of public information endeavors, such as a website and technical assistance, can result in increased credit under other activities. Up to 80 points added to Outreach Project credits and up to 20 points added to Flood Response Preparations credits, for projects that are designed and implemented as part of an overall public information program.

For details regarding additional elements that provide credit opportunities under this activity, refer to the CRS Coordinator’s Manual [here](#).

Note: Although the total of all elements in this activity exceeds 350 points, the maximum credit is 350 points.

Activity 340—Hazard Disclosure

10 points out of 80

Element 342.b.—Other disclosure requirements

10 points

A total of 10 points is awarded based on New York State Based Credit in this activity. The credit is awarded in accordance with New York State Real Property Law, Section 462, containing requirements for property condition disclosure statements. Under penalty of law, every seller of residential real property prior to a purchase contract must complete and sign a property condition disclosure statement. The statement includes the following questions:

- Is any or all of the property located in a SFHA?
- Are there any flooding, drainage, or grading problems that resulted in standing water on any portion of the property?
- Is any or all of the property located in a designated wetland?

Any seller submitting a knowingly false or incomplete property condition disclosure statement is subject to a \$500 fine

Activity 350—Flood Protection Information

0 points out of 125

Element 352.a.—Flood protection library

0 points

Ten points can be earned for having each of the nine publications listed in the CRS Coordinator’s Manual available at the Lansing Community Library. The publications can be ordered through FEMA and added to the library’s collection with minimal effort.

Element 352.b.—Locally pertinent documents

0 points

Once 352.a is met, an additional 10 points can be earned for having documents available at Lansing Community Library that cover flood hazards, flood protection, and natural floodplain functions. Many of these documents can be the same as those that the Town maintains, such as the Tompkins County Hazard Mitigation Plan, the FIRM, the FIS, and floodplain management ordinance. Additional materials can include aquatic and riparian habitat guides, information on floodplain management, and guides to flood mitigation.

Element 352.c.—Flood protection website

0 points

The Town of Lansing hosts a website, but it does not include a page dedicated to flood information.

To become eligible in 352.c, the Town should host a page with flood information, links to additional flood resources, including a link to Floodsmart or FEMA’s flood insurance page, as well as a directory of flood protection information. Staff must check that the links are working monthly.

Including this information on the Town’s website can earn up to 77 points.

Activity 360—Flood Protection Assistance**0 points out of 110****Element 362.a.—Property protection advice****0 points**

The Town’s floodplain administrator must be available to provide one-on-one advice to individuals who request it. In addition, the Town’s ability to provide this advice must be publicized annually, and the Town must keep a log recording when individuals request advice. Once this process is implemented, the Town would be eligible for up to 25 points.

Element 362.b.—Protection advice provided after a site visit**0 points**

The Town’s floodplain administrator could also be made available to visit individual properties and provide site-specific advice for protecting those properties. To receive credit for this activity, the Town must earn credit under Element 362.a. The Town’s ability to provide this advice must be publicized annually, and the Town would need to keep a log of site visits conducted. The Town could earn up to 30 points for this activity.

Element 362.c.—Financial assistance advice**0 points**

The Town’s staff could also earn up to 10 points by providing advice on flood mitigation financial assistance programs that may be available to Town residents.

Element 362.d.—Advisor training**0 points**

Staff could take and graduate from training courses provided by FEMA’s Emergency Management Institute (EMI), making the Town eligible for an additional 10 points.

Activity 370—Flood Insurance Promotion**0 points out of 220**

Town staff have not undertaken any activities that would result in scoring points for flood insurance promotion. To obtain credit under this activity, the Town could consider the following.

Element 372.a – Flood Insurance Coverage Assessment

The Town can assess the community’s current level of coverage and identify shortcomings (up to 220 points).

Element 372.b – Coverage Improvement Plan

The Town can prepare a plan by a committee with representation from local insurance agents to promote flood insurance (up to 30 points).

Element 372.c – Coverage Improvement Plan Implementation

The Town can implement a coverage improvement plan (up to 60 points).

Element 372.d.—Technical Assistance

The Town can offer assistance to the public that would encourage people to purchase flood insurance or improve their existing flood insurance (35 points).

Element 372.e.—Flood Insurance Brochures

The Town can distribute flood insurance brochures to residents and property owners (25 points).

Element 372.f.—Flood Insurance Meeting

The Town can support a town hall or open house to promote, educate, and assist with flood insurance (40 points).

Element 372.g.—State Required Continuing Education

The Town can earn points if New York State mandates continuing education credits for insurance agents, the Town (up to 15 points).

Activity 410—Flood Hazard Mapping	0 points out of 802
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The Town has not conducted additional flood studies (other than the FIRM and FIS) to develop base flood elevations or floodways.

Activity 420—Open Space Preservation	215 points out of 2870
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The Town does not have formal open space conservation in its code; however, there are several conservation easements, many of which the Town co-holds, which protects farmland, natural areas, and active flood plains. Note: Open space preservation credit receives an impact adjustment for the area for the percentage of preserved land in the SFHA. The impact adjustment estimated for open space preservation is the proportion of the SFHA that is preserved (sans developable land for which higher regulatory standards are credited in Activity 430).

Element 420(a)—Open space preservation

estimated 215 points

The Town currently is involved with formal open space preservation, which, in part, protects floodplain areas. The maximum credit for this activity is 1,450 points. The Town must identify a set of parcels that it considers preserved open space. Credit for this element is calculated by multiplying the ratio of preserved open space in the SFHA to the total area of the SFHA by 1,450. Based on an initial analysis of easements held by Tompkins County, the Town of Lansing and the Finger Lakes Land Trust and land protected by New York State 107 acres of the SFHA are currently formally protected of the nearly 800 acres of SFHA in Lansing (13% of SFHA). $13\% \times 1,450 = 194$. The Town must provide formal documentation of open space protection upon verification.

Element 422.b.—Deed restrictions

0 points

To receive credit under this activity, the Town must have deed restrictions on parcels to preserve open space. Parcels for which the Town has deed restrictions to preserve open space are eligible for up to 50 points. If the parcel is roughly 40 percent of the SFHA, the parcel could earn 20 points.

Element 422.c.—Natural functions open space

0 points

The Town does not currently have their own open space, critical habitat inventory. For the Town to earn points under this activity, areas preserved in their undeveloped natural state or designated as critical habitat must be inventoried and documented.

Element 422.d – Special flood-related hazards open space **0 points**

The Town does not have special flood-related hazard or flood-related low-density zoning regulations.

Element 422.e – Coastal erosion open space **0 points**

The lakefront is not experiencing rates of erosion exceeding 1.5 feet per year; therefore, the Town would not be eligible for points in this element.

Element 422.f – Open space incentives **0 points**

The Town does not have open space incentives.

Element 422.g – Low-density zoning **0 points**

Open space subdivision design, cluster development, transfers of development rights, and planned unit developments are regulatory approaches that can require or encourage developers to set aside floodplains and other areas as dedicated open space. Unless the regulations specifically identify certain undeveloped floodplains and mandate that they be set aside, there is no open space preservation credit for these regulations because there is no assurance that the developer will set aside specific areas. However, such regulations are credited under Section 421.e, open space incentives. Once the parcel is set aside and preserved as open space, it may qualify for credit as publicly owned land. The Town has a low-density zoning district referred to in Article II Land Use Control Areas, Section 270-4, but this cannot be credited under this activity unless a detailed description of the number of units allowed per acre is provided.

Element 422.h – Natural shoreline protection **0 points**

Credit for this element will include an impact adjustment based upon the percentage of protected shoreline in the Town.

Activity 430—Higher Regulatory Standards **78 Points out of 2,042**

Note: Higher regulatory standards credit receives an impact adjustment for the area affected by the regulations. An impact adjustment will be part of the calculations for higher regulatory standards based on the proportion of the floodplain that is developable (sans preserved open space credited in Activity 420).

Element 432.a – Development limitations **0 points**

The Town does not prohibit fill, buildings, or storage of materials in the SFHA.

Element 432.b.—Freeboard **0 points**

There are standards for freeboard in the Lansing Local Law as well as in the Uniform Code of New York State. Lansing requires a minimum of two feet of freeboard as follows:

- Town of Lansing Code, Chapter 142 Flood Damage Prevention adopts two feet of freeboard in any A zone that has a Base Flood Elevation (BFE). If there is no base flood elevation, the minimum elevation standard is the highest adjacent grade plus three feet. However, there are currently no A zones without base flood elevations within the Town limits.
- Town of Lansing Code, Chapter 142, requires that any non-residential structure floodproofing be two feet above BFE.

The flood damage prevention ordinance does not include restrictions on fill or require compensatory storage. Credit of up to 280 points for this element will be based on documentation of enforcement. FEMA

Elevation Certificates for new development in the floodplain must be reviewed to confirm compliance with the freeboard requirement.

Element 432.c.—Foundation protection

Up to 35 points

All new buildings must be constructed on foundations that are designed and sealed by a registered design professional as complying with International Building Code (IBC), International Residential Code (IRC) or ASCE24. In accordance with New York State regulations, the Town of Lansing must enforce the Uniform Code of New York State. Per the Building Code of New York State, “The design and construction of buildings and structures located in flood hazard areas, including coastal high hazard areas and coastal A zones, shall be in accordance with Chapter 5 of ASCE 7 and ASCE 24.” The Residential Code of New York State (Section 1612.2) allows construction in accordance with ASCE 24 but does not require it, and ASCE 7 is not mentioned. Partial points may be obtained because the requirement only pertains to structures other than one- or two-family residential buildings. The Town is eligible for up to 35 points, but this number will be impact adjusted to remove the areas in the SFHA that are preserved as open space.

Element 432.d – Cumulative substantial improvements

0 points

The Town does not have cumulative substantial improvements.

Element 432.e – Lower substantial improvements

0 points

The Town does not have substantial improvement thresholds lower than 50 percent.

Element 432.f – Protection of critical facilities

0 points

The Town does not have requirements for the protection of critical facilities.

Element 432.g – Enclosure limits

0 points

The Town does not limit enclosures below the base flood elevation.

Element 432.h.—Building Code

48 points

Up to 100 points may be obtained for adopting and enforcing the International Code Series. New York State requires all municipalities to enforce the Uniform Code of New York State. The Uniform Code has adopted the 2018 International Building Code series with amendments. With one exception, the amendments render the code more restrictive than the International Building Code. The one exception is for Class 4 buildings as identified in ASCE 24-14 Table 1-1. Class 4 buildings and structures contain essential facilities and services. ASCE 24-14 requires Class 4 buildings to be constructed to the higher elevation of BFE plus two feet or the 2% Chance Annual Flood Area flood elevation. The Uniform Code of New York State only requires construction to the BFE or Design Flood Elevation(DFE) (whichever is higher) plus two feet.

As a result, the Town should be awarded the following points :

- 20 points for the adoption and enforcement of the IBC
- 20 points for the IRC
- 3 points for the International Plumbing Code
- 3 points for the Mechanical Code
- 2 points for the International Fuel Gas Code

Element 432.i.—Local Drainage Protection**0 points**

The Town of Lansing building code does not require building permit applicants to provide positive drainage away from the building site.

Element 432.j.—Manufactured Home Parks**0 points**

Fifteen points are available for removing the elevation exemption for manufactured homes in existing parks. The Residential Code of New York State, as well as Chapter 142 of the Lansing Code, do not include that exemption.

Element 432.k.—Coastal A Zones**0 points**

Up to 500 points for enforcing V-zone rules inland from the V zone boundary. While the effective FIRM does not contain any V zones or Coastal A zones (areas landward of the Limit of Moderate Wave Action), the Advisory Flood Map for Rockland County, which was adopted by the Town of Lansing in its local law, does contain Coastal A zone areas. The following standards apply:

- Section 112-14(A)(2) of the Town code prohibits fill for structural support of buildings within V zones and areas of moderate wave action.
- Section 112-15(4) requires free of obstruction or breakaway walls below the lowest floor in an area of moderate wave action, and restricts use of the space to parking, building access, or storage. It also prohibits the use of this space for human habitation.
- Section 112-17 of the code requires residential structures in an area of moderate wave action to meet V zone standards.
- Section 112-19 requires nonresidential structures in coastal high hazard areas to meet V zone construction standards and prohibits floodproofing. While the section does not explicitly mention Areas of Moderate Wave Action, the definitions section includes an area within a Zone AE that is bounded by a line labeled “Limit of Moderate Wave Action.”

The Uniform Code of New York State contains all the Coastal A zone requirements contained in the Uniform Code 2018 series. This requires V zone construction requirements in a Coastal A zone with a single exception: for residential structures, a stem wall foundation supporting a floor system above and backfilled with soil or gravel to the underside of the floor system is permitted.

The eligible points will be adjusted based upon the size of the Coastal A zone. Because the effective FIRM does not contain Coastal A zones, the Town will not be able to earn credit at this time.

Element 432.o.—Other Higher Standards**Up to 100 points**

Up to 100 points are available for other regulations not specifically addressed in the CRS manual. While the examples provided do not apply to Lansing, the Town is encouraged to produce evidence of higher standards over and above those required by the NFIP.

Points in this element will be adjusted based on the area of the SFHA to which these standards apply.

Element 432.p – Regulations Administration**30 points**

The Town Planner and Town engineer are both Certified Floodplain Managers. The Town engineer reviews and approves proposed development projects in the floodplain on behalf of the floodplain administrator. However, if the Town documents that any new development is reviewed by a Certified Floodplain Manager, added credit is granted.

Activity 440—Flood Data Maintenance**130 points out of 222****Element 442.a.—Additional Map Data****88 points**

The Town does not yet have digital mapping creditable through this activity but can qualify for credit through demonstrated use of existing mapping assets provided by Tompkins County or by creating a Lansing-specific interface. However, digital maps anticipated in Spring 2022 will provide credit for this activity.

Credit may be awarded for this element based on the data sets maintained by the Tompkins County Geographic Information Systems (GIS) Division. The Town should demonstrate familiarity with and use of the County's GIS resources and consider adding Lansing-specific information to a mapping platform that can be used by Town residents and staff. The County GIS data includes the following:

- FEMA flood maps, including SFHA, base flood elevations, flood zones, and the 500-year floodplain (available at <https://tcddata-tompkinscounty.opendata.arcgis.com/datasets/flood-zones/explore?location=42.443581%2C-76.467871%2C10.37>) **22 points**
- Corporate limits, streets, and parcels (available as a basemap at <https://tcddata-tompkinscounty.opendata.arcgis.com/content/tcparceldwg/about>) **20 points**
- FIRM zone attributes (available as a basemap at <https://tcddata-tompkinscounty.opendata.arcgis.com/datasets/flood-zones/explore?location=42.443581%2C-76.467871%2C10.37>) **10 points**
- Topographic maps at 20-foot interval contours (available as a basemap at <https://tcddata-tompkinscounty.opendata.arcgis.com/datasets/topography-20-contours/explore?location=42.443165%2C-76.467871%2C10.00>) **10 points**
- Building footprints (available as baselayer map at <https://apps.geocortex.com/webviewer/?app=615b6d34dd374aa9bf75626b78fb0ed0> and <https://tompkinscounty.maps.arcgis.com/home/item.html?id=f2585e751d014a99a455bb599636998>) **26 points**

Element 442.b.—FIRM Maintenance**15 points**

Credit can be earned for having all FIRMs, flood insurance studies, and flood boundary and floodway maps issued for the Town available for review by the public at Town Hall. Additional credit can be granted for having all flood hazard boundary maps similarly available. As historic FIRMs are available from FEMA, the Town could earn 15 points relatively easily.

Element 442.c.—Benchmark Maintenance**27 points**

The Town does not have a program to maintain benchmarks for surveyors. However, benchmarks in the region are available through the U.S. Geological Survey that meet the standards of this element provided the Town keeps this data on file in the future. ISO is likely to provide this credit to the Town.

Element 442.d.—Erosion Data Maintenance**0 points**

The Town does not maintain coastal erosion data.

Activity 450—Stormwater Management**126 points out of 755****Element 452.a.—Stormwater Management Regulations****96 points**

As a Municipal Separate Storm Sewer System (MS4) community, the Town of Lansing is required to develop and enforce requirements in accordance with New York State’s MS4 guidelines. Chapter 225 of the Lansing Code covers stormwater control. The code applies to any construction activity resulting in land disturbance of greater than one acre, less than one acre, if part of a larger common plan of development or sale, or less than one acre, but part of a prior project.

Section 225-28(1) requires Stormwater Pollution Prevention Plans for covered land development activities that include a construction phasing plan consistent with New York State Standards and Specifications for Erosion and Sediment Control for any land development of over one-half acre.

The developer must include post-construction water quantity and quality controls (Section 225-28B (3) if disturbing five acres or more or one to five acres exclusive of single-family residences or agricultural properties.

The controls must be in accordance with NYS Stormwater Management Design Manual (NYSDEC) and New York State Standards and Specifications for Erosion and Sediment Control, or the equivalent.

The Town earns an estimated 96 points for stormwater management and low-impact development using the state uniform minimum credit. Credit for this activity is dependent on the Town’s documentation and the enforcement of stormwater management regulations.

Element 452.b.—Watershed Master Plan**0 points**

The Town does not have a watershed master plan.

Element 452.c.—Erosion and Sedimentation Control Regulations**10 points**

Up to 40 points are available. The New York State Standards and Specifications for Erosion and Sediment Control contains detailed standards for controlling runoff during construction. Only 10 points should be available as Lansing’s requirements pertain to land disturbance of over one acre. The full 40 points requires controls of land disturbed due to construction of over 1,000 square feet.

Element 452.d.—Water Quality Regulations**20 points**

State uniform minimum credit has been approved for water quality standards based on a technical review of state regulations.

Activity 510—Floodplain Management Planning**50 to 250 Points out of 762****Element 510.a.—Floodplain Management Planning****Points TBD**

The Tompkins County Hazard Mitigation Plan, adopted by the Town, has not been submitted to ISO for credit reviewed as a floodplain management plan. The planning process to develop the County plan followed the NYS Division of Homeland Security and Emergency Services guidance and the requirements of the Disaster Mitigation Act of 2000 (DMA 2000); points for the Hazard Mitigation Plan will be determined by ISO review.

Element 510.b.—Repetitive Loss Area Analysis**0 Points**

The Town has not developed a repetitive loss area analysis.

Element 510.c.—Natural Floodplain Functions Plan**0 Points**

The Town has not adopted a plan to protect natural functions within the SFHA.

Element 510.d.—Substantial Damage Management Plan**X Points?**

The Town can develop a substantial damage management plan that would promote inspections, permitting, and managing an inventory of structures that have been or are subject to flooding, including repetitive loss properties or minus-rated structures.

Activity 520—Acquisition and Relocation**0 points out of 2,250**

The Town has not implemented any property acquisition or relocation. Therefore, the Town is ineligible for points in Activity 520.

Activity 530—Flood Protection**0 points out of 1,600**

The Town can gain points for any buildings that have been elevated above the base flood elevation. To apply for points, the Town will need to determine the number of buildings that have been elevated and their elevation in relation to the base flood elevation.

Activity 540—Drainage System Maintenance**0 points out of 570****Element 542(a)—Channel Debris Removal****0 points**

Only natural conveyance areas are eligible for this credit.

To earn credit, the Town would need to develop an inventory and mapping of the natural conveyance system and show that inspections take place at least annually.

Element 542(b)—Problem Site Maintenance**0 points**

If the Town identifies known problem areas, staff would need to develop written procedures and provide proof of inspections and maintenance.

Element 542(c)—Capital Improvement Program**0 points**

The Town does not have a formal capital improvement program to correct drainage problems.

Element 542(d)—Stream Dumping Regulations**0 points**

The Town does not have stream dumping regulations.

Element 542(e)—Storage Basin Maintenance**0 points**

The Town would need to formalize storage basin maintenance procedures and ensure that inspections and maintenance take place annually to earn points in this element.

Activity 610—Flood Warning and Response**0 points out of 395**

While the Town has flood warning and response procedures, it is ineligible for points in this activity due to a lack of an adopted flood warning and response plan.

Activity 620—Levees**0 points out of 235**

As the Town does not have any levee systems, it is not eligible for points in this activity.

Activity 630—Dams**0 points out of 160**

As the Town does not have any high hazard dams with the potential of inundating the Town, it is not eligible for points in this activity.

Activity 710—Community Growth Rate Adjustment Factor**1.11**

The community growth rate adjustment factor for Town of Lansing is determined by the official County Growth Adjustment, which is calculated by ISO and provided to each community and available at <https://crsresources.org/700-2/>. The 2021 Community Growth Rate Adjustment Factor for Tompkins County is 1.11.

Summary Overview of Potential CRS Credit

Table 2 summarizes potential CRS credits for the Town of Lansing by activity and source and should be reviewed in context of the narrative discussion above. All credits indicated are subject to verification by an ISO/CRS specialist.

If the Town of Lansing applies to the CRS and obtains a CRS classification for which the Town receives a benefit (CRS Class 1-9), it will be required to recertify annually. Each year, the Town Supervisor must recertify that the community is continuing to implement the activities for which CRS credit has been provided. Recertification forms are sent to each participating community annually by their ISO/CRS specialist. Communities must complete the recertification forms, attach requested documentation, and submit the completed forms by February 1 of each calendar year following classification. The documentation requested supports performance of activities that are implemented regularly, such as outreach projects or maintenance procedures.

Based on the activities and elements reviewed in this report, the Town would be able to obtain an estimated **907 points** for the activities it is already pursuing as detailed in Table 2. The Town would enter the CRS at the base level (Level 9) which results in a discount of 5% to flood insurance policy holders. Before applying to the CRS, the Town should review the recommendations for enhancing its CRS eligible activities.

Table 2. Initial CRS Potential for Town of Lansing

CRS Activity	Credit Points Available	New York State Based Credit	Credit from Town Programs	Total	% of Maximum Credit
310-Elevation Certificates	116	—	38-86	38-86	33-76%
320-Map Information Services	90	—	—	—	—
330-Outreach Projects	350	—	—	—	—
340-Hazard Disclosure	80	10	—	10	13%
350-Flood Protection Information	125	—	—	—	—
360-Flood Protection Assistance	110	—	—	—	—
370-Flood Insurance Promotion	220	—	—	—	—
410-Flood Hazard Mapping ^a	802	—	—	—	—
420-Open Space Preservation ^a	2,870	—	215	215	7.5%
430-Higher Regulatory Standards ^a	2,042	—	Up to 338	338	17%
440-Flood Data Maintenance ^a	222	—	130	130	59%
450-Stormwater Management ^a	755	—	126	126	17%
510-Floodplain Management Planning	762	—	50-200	50-200	
520-Acquisition and Relocation	2,,250	—	—	—	—
530-Flood Protection	1,600	—	—	—	—
540-Drainage System Maintenance	570	—	—	—	—
610-Flood Warning and Response	395	—	—	—	—
620-Levees	235	—	—	—	—
630-Dams	160	—	—	—	—
710-Community Growth Rate Adjustment ^a	1.11	—	—	—	—
Total Credit	13,574	10	Up to 1,105	907-1,105	6.7-8%
Potential CRS Classification					8 or 9
% Premium Discount					5%-10%

a. Credit will be adjusted by ISO's most current community growth rate adjustment factor (the 2021 factor is 1.11).

3.3. REDUCE FLOOD INSURANCE PREMIUMS: FLOOD INSURANCE CRS IMPACT ANALYSIS

Table summarizes flood insurance statistics for Town of Lansing as of September 3, 2021. Table 3 illustrates the potential flood insurance premium reductions for Town of Lansing by CRS classification. Table also shows the discounts per policy as well as the aggregated premium discounts.

Table 3. Flood Insurance Statistics for Town of Lansing as of September 3, 2021

	SFHA	Non-SFHA	Total
Total Policies in Force	25	10	
Premium	\$31,767		\$37,323
Average Premium	\$1,271		\$1,066

Table 3. Flood Insurance Premium Reduction Potential for Town of Lansing

CRS Class Discount in SFHA		SFHA	Non-SFHA ^a	Total
09 (5%) 500-999 pts	Per Policy	\$64	\$54	\$48
	Town-wide	\$1,588		\$1,696
08 (10%) 1,000-1,499 pts.	Per Policy	\$127		\$94
	Town-wide	\$3,177		\$3,285
07 (15%) 1,500-1,999 pts.	Per Policy	\$191		\$139
	Town-wide	\$4,765		\$4,873
06 (20%) 2,000-2,499 pts.	Per Policy	\$254		\$188
	Town-wide	\$6,353		\$6,569
05 (25%) 2,500-2,999 pts.	Per Policy	\$318		\$233
	Town-wide	\$7,942		\$8,158
04 (30%) 3,000-3,499 pts.	Per Policy	\$381		\$278
	Town-wide	\$9,530		\$9,746
03 (35%) 3,500-3,999 pts.	Per Policy	\$445		\$324
	Town-wide	\$11,118		\$11,334
02 (40%) 4,000-4,499 pts.	Per Policy	\$508		\$369
	Town-wide	\$12,707		\$12,923
01 (45%) 4,500+ pts.	Per Policy	\$572		\$415
	Town-wide	\$14,295		\$14,511

a. Non-SFHA properties receive a 10% discount for CRS Class 1-6 and 5% for CRS Class 7-9.

The rows highlighted indicate the savings that Town policyholders will receive based on the estimation that the Town will be awarded the amount of CRS points to earn a Class 7 rating. While the Town has the potential to enter the program at a higher-class rating, it is advisable to enter at a slightly higher-class rating that is sustainable and then gradually apply for additional points as the Town's floodplain management program increases capabilities.

Source: All data provided by NFIP Bureau Statistical Agent as of September 3, 2021. Premium discounts calculated using standard insurance industry rating parameters.

In addition to the 25 SFHA policies and the two non-SFHA policies, the Town has eight preferred risk policies (low-cost flood insurance policies owners and tenants of eligible buildings located in the moderate-risk B, C, and X Zones in the NFIP). These policies are currently ineligible for CRS discounts. However, due to pending changes to the NFIP program's rate methodology through [Risk Rating 2.0](#), as of April 2022 all NFIP policies will receive the same rate of premium discounts. This change will standardize CRS premium discount rates throughout Lansing and lead to increased savings throughout the community as SFHA policies make up 71 percent and non-SFHA policies, which currently receive a lower discount rate than SFHA policies, comprise less than one percent of policies in the Town, while preferred risk policies account for 23 percent.

In addition, changes to the Town's FIRM in the future are likely to result in an expansion of the SFHA. Expansion of the SFHA will also lead to more potential NFIP policies being eligible for maximum premium discount rates, with or without any potential changes as a result of Risk Rating 2.0.

With these concepts in mind, the Town appears to be a good candidate for the CRS with future changes to the NFIP and FIRM mapping likely to result in greater financial justification for the Town's entry to the program.

3.3.1 CRS Program-Specific Recommendations

The following recommendations include activities that the Town must undertake to meet CRS participation requirements and relatively simple actions that the Town can implement to earn points for activities that are referred to in the sections above as not earning points based on the Town's current floodplain management program.

Table 5. CRS Program Specific Recommendations for the Town of Lansing				
Potential action	Mandated or Recommended	Able to Be Done in House?	Level of Effort/Cost	Potential Points
Activity 310—Elevation Certificates:				
Maintain Elevation Certificates and ensure that they have been filled out completely.	Mandated	In house	Low	38 points
Continue collecting and maintaining Elevation Certificates from post-FIRM buildings prior to the date of CRS enrollment.	Recommended	In house	Low	Up to 48 points
Begin collecting and maintaining Elevation Certificates for pre-FIRM buildings.	Recommended	In house	Low	Up to 30 points
Activity 320—Map Information Services:				
Annually publish availability of Town's floodplain administrator to provide information necessary to rate a flood insurance policy. Develop a log to be filled out when individuals request information. Develop standard operating procedures (i.e., method to ensure that all the information required to rate a flood insurance policy, including the NFIP Community Number, FIRM date, flood zone, BFE, floodway, and more, is provided to the requesting party).	Recommended	In house	Low	Up to 50 points
Begin to maintain information on flood problems not shown on the FIRM.	Recommended	In house	Low	Up to 20 points
Provide information above and beyond the requirements for basic FIRM information, such as local drainage problems and mapping, that shows the importance of natural floodplain functions.	Recommended	In house	Low	Up to 20 points
Activity 330—Outreach Projects:				
Develop a Program for Public Information (PPI) to organize outreach efforts, involve non-governmental officials in designing outreach, and receive credit on existing outreach efforts.	Recommended	Contracted	Medium	Up to 80 points
Increase the use of pre-existing social media accounts (Facebook, Instagram) to conduct annual outreach.	Recommended	In house	Low	Up to 200 total points for outreach
Increase the amount of flood information available to residents and update and release annually.	Recommended	In house	Low	
Conduct targeted outreach to specific populations.	Recommended	In house	Low	
Organize outreach to be conducted through stakeholders.	Recommended	Partner with stakeholders	Low	
Develop a pre-flood plan of outreach actions.	Recommended	In house or contracted	Medium	Up to 50 points
Activity 340—Hazard Disclosure:				
Ask or mandate real estate agents to notify those interested in purchasing properties located in the SFHA about flood hazards and flood insurance purchase requirements.	Recommended	Partner with real estate agents	Low	Up to 25 points

Table 5. CRS Program Specific Recommendations for the Town of Lansing

Potential action	Mandated or Recommended	Able to Be Done in House?	Level of Effort/Cost	Potential Points
Ask or mandate real estate agents to provide brochures or handouts that advise potential buyers to investigate the flood hazard for a property.	Recommended	Partner with real estate agents	Low	Up to 8 points
Ask or mandate real estate agents to disclose to prospective buyers other flood-related hazards, such as erosion, subsidence, or sea level rise, for a property.	Recommended	Partner with real estate agents	Low	Up to 8 points
Activity 350—Flood Protection Information:				
Make the nine publications listed in the CRS Coordinator's Manual available at Lansing Community Library.	Recommended	In house	Low	10 points
Create Town flood mitigation webpage to provide flood protection information.	Recommended	In house	Low	Up to 77 points
Make documents that cover flood hazards, flood protection, and natural floodplain functions available at Lansing Community Library. Additional information can include aquatic and riparian habitat guides, information on floodplain management, and guides to flood mitigation.	Recommended	In house	Low	10 points
Post Elevation Certificates online on the municipal website.	Recommended	In house	Low	Up to 30 points
Activity 360—Flood Protection Assistance:				
Advertise that one-on-one advice about flooding and mitigation is available to individuals who request it annually and keep a log recording when individuals requested advice, who met with them, and what was discussed.	Recommended	In house	Low	Up to 25 points
Add additional advertisement that a service is available for a representative of the Building Department to visit the site in question and review problems with the inquirer.	Recommended	In house	Low	Up to 30 points
Add an extra service for financial assistance for locating and applying for funding for mitigation, flood insurance, SBA grants, etc.	Recommended	In house	Low	10 points
Have staff in the Building Department (and any department that provides financial assistance) complete training through EMI.	Recommended	In house	Low	10 points
Activity 370—Flood Insurance Promotion:				
Undergo a three-step process to assess the Town's flood insurance needs and improve flood insurance coverage. The Town would need to assess the current flood insurance coverage, develop a plan to increase flood insurance participation, and implement the plan.	Recommended	Contracted	Medium	Up to 220 points
Designate a staff member to conduct one-on-one assistance to discuss flood insurance. This service would need to be publicized. Additional points would be available if the individual was also an Associate in National Flood Insurance .	Recommended	In house	Low	Up to 35 points
Include flood insurance brochures with building permits or other distribution directly to property owners.	Recommended	In house	Low	Up to 25 points
Hold an annual community town hall meeting or open house to promote flood insurance.	Recommended	In house	Low	Up to 40 points
Activity 420—Open Space Preservation:				

Table 5. CRS Program Specific Recommendations for the Town of Lansing				
Potential action	Mandated or Recommended	Able to Be Done in House?	Level of Effort/Cost	Potential Points
Establish deed restrictions on open space parcels. Points would be based on the size of the area that is deed restricted.	Recommended	In house and Partners	Low	Points based on the size of the area that is deed restricted.
Activity 430—Higher Regulatory Standards:				
Update Flood Damage Prevention Ordinance to include the requirement for two-foot freeboard for manufactured homes and mechanical equipment in numbered zones. (For Class 9 only, may not need to reference manufactured homes to garner 150 points but will not meet Class 8 pre-requisite.)	Recommended	In house	Low	Up to 200 points for Class 8 or lower
Establish cumulative substantial improvements.	Recommended	In house	Low	Up to 90 points
Elect to use a threshold lower than 50 percent for “substantial improvements.”	Recommended	In house	Low	Up to 20 points
Require new critical facilities be protected to at least one foot above the 500-year flood level.	Recommended	In house	Low	40 points
Establish limitations on enclosures beneath elevated structures, such as restricting allowable materials or prohibiting enclosures entirely.	Recommended	In house	Low	Up to 390 points
Train floodplain administrator and additional staff to become certified floodplain managers or complete EMI courses.	Recommended	In house	Low	Up to 55 points
Store records in an offsite location (outside the SFHA), ensuring that records are transferred or copied once a year.	Recommended	In house	Low	5 points
Activity 440—Flood Data Maintenance:				
Include building elevations as digitized information in available mapping.	Recommended	In house	Low	Up to 14 points
Activity 450—Stormwater Management:				
Institute more stringent requirements for stormwater management, such as regulating all sized developments or designing stormwater management to withstand higher-level storms.	Recommended	In house	Low	Up to 107 points
Develop a watershed management plan. This would allow the Town to pursue a class ranking lower than a Class 5 in the future.	Mandated for Class 4	Contracted	Medium	Up to 315 points
Activity 510—Floodplain Management Planning:				
Develop and adopt a stand-alone floodplain management plan to result in better scoring than the Tompkins County HMP.	Recommended	Contracted	Medium	Total points of up to 382 points
Complete a repetitive loss area analysis.	Recommended	Contracted	Medium	140 points
Develop a natural floodplains function plan.	Recommended	Contracted	Low	100 points
Complete a substantial damage management plan.	Recommended	Contracted	Medium	Up to 140 points
Activity 520—Acquisition and Relocation:				
Acquire flood-prone properties and return them to naturally functioning open space. This would also earn credit under Activity 420 for Open Space.	Recommended	In house	High	Up to 2,250 points

Table 5. CRS Program Specific Recommendations for the Town of Lansing				
Potential action	Mandated or Recommended	Able to Be Done in House?	Level of Effort/Cost	Potential Points
Activity 530—Flood Protection:				
Support and track the mitigation of structures.		Partner with homeowners	High	Up to 1,600 points
Activity 540—Drainage System Maintenance:				
Develop an inventory and mapping of the natural conveyance system, develop procedures for annual inspection and maintenance, and record inspection and maintenance in a log.	Recommended	Partner with Tompkins County	Medium	Up to 250 points
Establish a capital improvement program that corrects drainage problems.	Recommended	In house	Low	Up to 70 points
Establish and publicize stream dumping regulations.	Recommended	In house	Low	Up to 30 points
Establish annual inspection and maintenance of public and private storage basins.	Recommended	In house	Low	Up to 120 points
Activity 610—Flood Warning and Response:				
Establish a flood warning and response plan. This would allow the Town to pick up additional points throughout Activity 610 for emergency warning dissemination, flood response operations, and critical facilities planning. It would also help to predict flood elevations and arrival times at specific locations within the Town.	Recommended	Contracted	Medium	Up to 340 points
Become a StormReady Community.	Recommended	Partner with NWS	Medium	25 points
Total points available for low- to medium-effort activities* <i>*These points are provided as a guide, but it is anticipated that the Town would choose to pursue those best aligned with their capabilities, as combining activities may present a higher level of effort than can be addressed with existing resources.</i>				Up to 3,932 points

3.3.2 Inquiries Regarding CRS Application

Prior to applying to the CRS program, the Town of Lansing will need to secure a Letter of Good Standing in regard to floodplain management from the FEMA Region II office at (212)-680-3600..

Once the Town decides to formally apply to the CRS, inquiries should be directed to:

Gina Agosta, Certified Floodplain Manager
ISO/CRS Specialist
ISO Community Hazard Mitigation
gagosta@iso.com

Should the Town of Lansing be interested in applying prior to August 2022, Tetra Tech will be available to support development of a CRS and Letter of Intent for submission to FEMA Region II.

ACRONYMS AND DEFINITIONS

1-Percent Chance Flood Event: A flood event having a one percent chance of occurring in any given year. Also referred to as a 100-year flood event.

0.2 Percent Flood Event: A flood event having a 0.2 percent chance of occurring in any given year. Also referred to as a 500-year flood event.

100-Year Flood Event: A flood event having a one percent chance of occurring in any given year. Also referred to as ‘base flood’.

500-year Flood Event: A flood event having a 0.2 percent chance of occurring in any given year.

Base flood: The flood having a 1% chance of being equaled or exceeded in any given year, also known as the “100-year” or “1% chance” flood. The base flood is a statistical concept used to ensure that all properties subject to the National Flood Insurance Program are protected to the same degree against flooding.

BCEGS: Building Code Effectiveness Grading Schedule. When communities submit a modification or undergo a cycle verification, they must meet the BCEGS prerequisite in order to achieve or remain a CRS Class 6 or better.

BFE: Base Flood Elevation. The elevation of the crest of the base or 1% annual chance flood (also known as the 100-year flood).

Category B Community: A community with at least one, but fewer than 50, repetitive loss properties that have not been mitigated.

Compensatory Storage: The NFIP floodway standard in 44CFR 60.3 (d) restricts new development from obstructing the flow of water and increasing flood heights. However, this provision does not address the need to maintain flood storage. Especially in flat areas, the floodplain provides a valuable function by storing floodwaters. When fill or buildings are placed in the flood fringe, the flood storage areas are lost, and flood heights will go up because there is less room for the floodwaters. This is particularly important in smaller watersheds which respond sooner to changes in the topography. One approach that may be used to address this issue is to require compensatory storage to offset any loss of flood storage capacity. Some communities adopt more restrictive standards that regulate the amount of fill or buildings that can displace floodwater in the flood fringe. Community Rating System credits are available for communities that adopt compensatory storage requirements (<https://www.fema.gov/glossary/compensatory-storage>)

CRS: Community Rating System.

Design Flood Elevation (DFE): The elevation of the highest flood (generally the BFE including freeboard) that a retrofitting method is designed to protect against. Also referred to as Flood Protection Elevation.

DFIRM: Digital Flood Insurance Rate Map.

FEMA: Federal Emergency Management Agency. Most of the National Flood Insurance Program field work and community coordination is done by the 10 FEMA Regional Offices, which are listed at <https://www.fema.gov/fema-regional-contacts>.

FIRM: Flood Insurance Rate Map. An official map of a community, on which FEMA has delineated both the Special Flood Hazard Areas and the risk premium zones applicable to the community. Most FIRMs include detailed floodplain mapping for some or all of a community's floodplains. In most cases, the date of the first FIRM issued to a community is the date the community entered the Regular Program of the National Flood Insurance Program.

Floodplain: Any land area susceptible to being inundated by flood waters from any source. A Flood Insurance Rate Map identifies most, but not necessarily all, of a community's floodplain as the Special Flood Hazard Area.

Flood Damage Prevention Ordinance: A local law adopted to mitigate and prevent flood damage.

Freeboard: A margin of safety added to the base flood elevation to account for waves, debris, miscalculations, lack of data, or changes in climate.

IBC: International Building Code

IRC: International Residential Code:

ISO: The Insurance Services Office, Inc., a corporation that conducts verification of community CRS credit and program improvement tasks for FEMA.

NFIP: National Flood Insurance Program.

PPI: A Program for Public Information can help design an entire public information program, not just outreach projects. A Program for Public Information that covers other types of public information endeavors, such as a website and technical assistance, can result in increased credit under other activities. Up to 80 points added to Outreach Project credits and up to 20 points added to Flood Response Preparations credits, for projects that are designed and implemented as part of an overall public information program.

Regulatory Floodplain: For purposes of the Community Rating System, the regulatory floodplain is the flood-prone land area that is subject to a community's floodplain development or floodplain management regulations. The regulatory floodplain includes, at a minimum, the Special Flood Hazard Area (SFHA) (see definition) but may also incorporate other areas outside the SFHA that are also subject to a community's floodplain development or floodplain management regulations.

Risk Rating 2.0: FEMA is updating the [National Flood Insurance Program's](#) (NFIP) risk rating methodology through the implementation of a new pricing methodology called **Risk Rating 2.0**. The methodology leverages industry best practices and cutting-edge technology to enable FEMA to deliver rates that are actuarially sound, equitable, easier to understand and better reflect a property's flood risk.

Repetitive Loss Property: A property for which two or more National Flood Insurance Program losses of at least \$1,000 each have been paid within any 10-year rolling period since 1978.

SFHA: Special Flood Hazard Area: The base floodplain delineated on a Flood Insurance Rate Map that a community must regulate under the requirements of the National Flood Insurance Program. The SFHA is included in a community's regulatory floodplain.

Substantial damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its condition before it was damaged would equal or exceed 50% of the market value of the structure before the damage occurred.

Substantial improvement: Any. reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the. structure before the start of construction of the improvement.