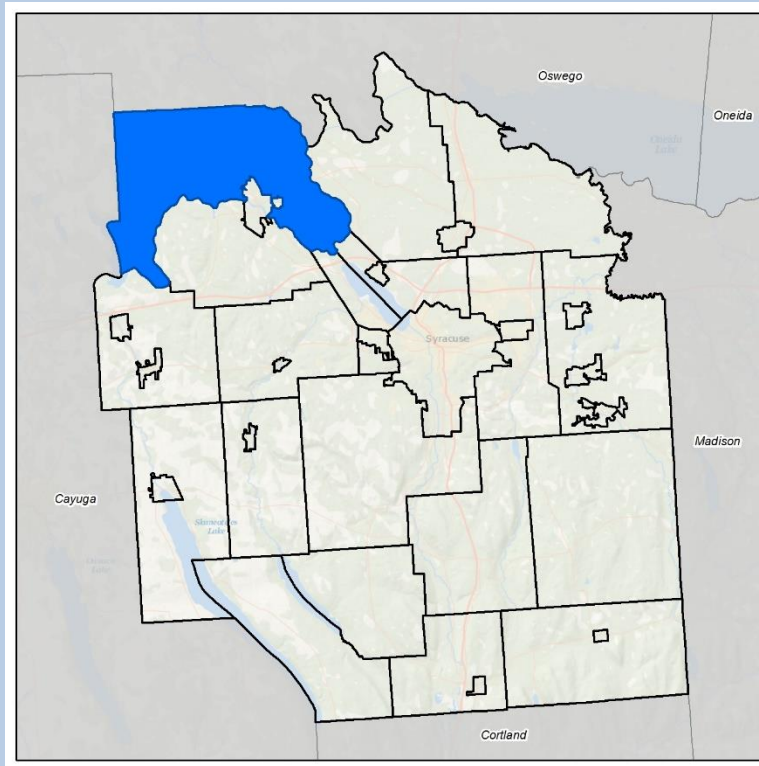




# MUNICIPAL ANNEX | Town of Lysander



Total Population  
(2010 Census)

**17,175**



Total Number of  
Buildings

**9,513**



Number of National  
Flood Insurance  
Program (NFIP) Policies  
and Percent in  
Regulatory Floodplain

**119 (57%)**

Number of Repetitive  
Loss (RL) Properties

**3**



Total Agricultural Land  
(acres)

**15,324.0**



Harmful Algal Bloom  
Impacted Waterbody

**No**



Total Land  
(square miles)

**62.8**

Percent of Buildings  
in Regulatory  
Floodplain

**5%**



Proposed  
Project  
Types

Structure and Infrastructure  
Projects, Education and  
Awareness Programs, Local  
Plans and Regulations, and  
Natural Systems Protection



Mitigation  
Focus

Multi-Hazard



## 9.18 TOWN OF LYSANDER

This section presents the jurisdictional annex for the Town of Lysander. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Lysander's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

### 9.18.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Lysander's hazard mitigation plan primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Name: Allen J. Yager, P.E. Title: Town Engineer Phone Number: 315-857-0291 Address: 8220 Loop Rd Baldwinsville, NY 13027 Email: engineer@townoflysander.org	Name: Joseph P. Saraceni Title: Town Supervisor Phone Number: 315-857-0281 Address: 8220 Loop Rd Baldwinsville, NY 13027 Email: supervisor@townoflysander.org
Floodplain Administrator	
Name: Tim Wolsey Title: Codes Enforcement Officer Phone Number: 315-638-1210 Address: 8220 Loop Rd Baldwinsville, NY 13027 Email: zoning@townoflysander.org	

### 9.18.2 Municipal Profile

The Town of Lysander lies along the northwestern border of Onondaga County in western New York State. The Town of Lysander has a total area of 64.6 square miles. The Seneca River/Erie Canal forms Lysander's southern boundary and the Oswego River is the town's eastern boundary line. Cross Lake is located on the western border of the town. The Oswego, Seneca, and Oneida Rivers join at the east town line. Beaver Lake is located west of the center of the town. New York State Route 370, West Genesee Road, is an east-west highway in the south part of Lysander. New York State Route 48 is a highway in the center of the town. New York State Route 31 intersects NY- 370 in the southeast part of Lysander. New York State Route 690 is a major highway leading out of the south part of Lysander. The Town of Lysander is bordered the west by the Towns of Ira and Cato in Cayuga County, on the south by the Towns of Elbridge, Van Buren, Geddes and Salina and on the east by the Town of Clay. The Village of Phoenix and the Towns of Schroppel and Granby, in Oswego County, border the northeast and north.

There are several communities located within the town: Baird Corners (hamlet), Belgium (hamlet), Cold Springs (hamlet), Jacksonville (hamlet), Jack's Reef (hamlet), Lamson (hamlet), Little Utica (hamlet), Lysander (hamlet), Planville (hamlet), Radisson (hamlet), Red Rock (hamlet), and West Phoenix (hamlet). The estimated 2016 population was 22,527, a 31.2 percent increase from the 2010 Census (17,175). The Village of Baldwinsville is split between the Town of Lysander and the Town of Van Buren. This will alter their population numbers because the 2012-16 ACS data reports town population numbers inclusive of village populations. The Town of Lysander is governed by a supervisor and four councilors.



Data from the 2016 U.S. Census American Community Survey estimates that 5.8 percent of the town population is five years of age or younger, and 16.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

### History and Cultural Resources

The Town of Lysander was a township in the Central New York Military Tract, and it was one of the original 11 towns when Onondaga County was formed in 1794. It was first settled by outsiders around 1797. Lysander was later reduced by the creation of the Towns of Hannibal (1806) and Cicero (1807). Lysander was reduced again on the formation of Oswego County in 1816.

### Growth/Development Trends

Table 9.18-1 summarizes major residential/commercial development and any known or anticipated major residential/commercial development and major infrastructure development that is likely to occur within the municipality in the next five years (as of October 2018). Refer to the map in Figure 9.18-1 of this annex which illustrates the hazard areas along with the location of potential new development.

**Table 9.18-1. Growth and Development**

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
<b>Recent Development from 2013 to present</b>					
Agrana Fruit Processing	Comm.	1	079.-01-10.9	NEHRP: D&E	Complete
Longview @ Radisson	Res.	62 Proposed	081.-01-29.1	Flood: 1% Annual Chance Flood NEHRP: D&E; Carbonate Bedrock	Under Construction
Collington Pointe East	Res	89 Proposed	3069, 3105, 3137 Patchett Road	NEHRP: D&E; Carbonate Bedrock	Under Construction
Whispering Oaks IV	Res	35 Proposed	8185 Emerick Road	NEHRP: D&E	Under Construction
Highland Meadows	Res	107 Proposed 60 +/- built to date	049.2.-03-06.4 049.2.-03-06.1	NEHRP: D&E	Under Construction
<b>Known or Anticipated Development in the Next Five (5) Years</b>					
Melvin Farms	Res.	TBD	060.-01-14.1, 060.-01-16.2 060.-01-18.0, 060.-01-21.0 060.-01-2.0 and 060.-03-02.1	Flood: 1% Annual Chance Flood; NEHRP: D&E	Design phase

\* Only location-specific hazard zones or vulnerabilities identified.

### 9.18.3 Hazard Event History Specific to the Town of Lysander

Onondaga County has a history of natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The Town of Lysander's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Onondaga County. Table 9.188-2 provides details regarding municipal-specific loss and damages the town



experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

**Table 9.18-2. Hazard Event History**

Dates of Event	Event Type (Disaster Declaration if applicable)	Onondaga County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April – May 2011	Severe Storms, Flooding, Tornadoes, and Straight-Line Winds (FEMA-DR-1993)	Yes	<p>A slow moving warm front pushed northward across central New York late in the afternoon on April 25th. Severe weather developed, and in addition to reports of severe wind damage and hail, plenty of wind shear in the vicinity of the warm front allowed for a few super-cell thunderstorms and tornadoes to develop. In addition, areas of heavy rain caused significant flash flooding in several locations of central New York.</p> <p>On May 26, a deep upper level low pressure system shifted east from the mid-Mississippi Valley region through the afternoon and evening, allowing numerous showers and thunderstorms to develop. Many reports of large hail and damaging winds occurred in central New York.</p>	The town had multiple trees down in roadways and one road culvert washout during this event.
June 30- July 1, 2015	Flash Flood	No	An unseasonably strong storm system tapping into above normal moisture sources across the Great Lakes and Northeast triggered multiple heavy rain producing thunderstorms across the region. Localized torrential rainfall in central New York caused serious urban flash flooding in the Syracuse, NY metropolitan area. Damages are estimated between three and five million dollars.	Although the county was impacted, the town did not report damages.
July 1, 2017	Flash Flood	No	<p>A tropical moisture laden air mass produced numerous showers and thunderstorms which traveled repeatedly over the same areas of the Finger Lakes Region and Upper Mohawk Valley. Widespread flash and urban flooding developed in portions of Cayuga, Onondaga, Madison and Oneida counties. Hardest hit areas were the villages and towns of Moravia, Chittenango, Oneida, and Utica to name a few. Total rainfall amounts along a narrow corridor from Moravia to Utica generally ranged from 2.5 to 5 inches, most of which fell in less than 1 to 2 hours. Total damages from this event range from \$10-\$15 million dollars Countywide.</p>	The town had multiple trees down in roadways and had one stormwater culvert inlet back up with debris that flooded a home in the Radisson community.

*Notes:*

EM	Emergency Declaration (FEMA)
FEMA	Federal Emergency Management Agency
DR	Major Disaster Declaration (FEMA)
N/A	Not applicable



### 9.18.4 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazards of greatest concern and risk to the Town of Lysander. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

#### Hazard Risk Ranking

This section includes the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating town or village may have differing degrees of risk exposure and vulnerability compared to Onondaga County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Lysander. The town of Lysander has reviewed the County hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town changed the risk ranking of harmful algal bloom from low to medium, due to high exposure of residents and visitors in using waterways for recreation.
- The town changed the risk ranking of invasive species from low to high based on issues with emerald ash borer and phragmites.

**Table 9.18-3. Town of Lysander Municipal Hazard Ranking Input**

HAZARD	Drought	Earthquake	Flood	Geologic	Harmful Algal Bloom	Invasive Species	Severe Storm	Severe Winter Storm
RELATIVE RISK FACTOR	High	Low	Medium	Low	Low	High	High	High

Notes: The scale is based on the following hazard rankings as established in Section 5.3.

High = Total hazard priority risk ranking score of 5 and above

Medium = Total hazard priority risk ranking of 3.9 – 4.9

Low = Total hazard risk ranking below 3.8

\*The municipality changed the initial ranking of this hazard based on event history, municipal experience, and feedback from the municipality

#### Critical Facilities Flood Risk

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for state projects located in flood hazard areas. The law provides that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised two feet above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood even, or worst



damage scenario. For those that do not meet this criteria, the jurisdiction must identify an action to achieve this level of protection. (NYSDHSES 2017)

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

**Table 9.18-4. Potential Flood Losses to Critical Facilities**

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
Phoenix Dam-lock #1	Dam	X	X	-	-	T. Lysander-7
SENECA RIVER FD	Fire Station	X	X	11.1%	40%	T. Lysander-8
WEP Baldwinsville Sewage Treatment Plant	Waste Water Treatment Plant		X	-	-	-
OD1763	Well	X	X	21.9%	-	T. Lysander-9
OD735	Well	X	X	0.2%	-	T. Lysander-10

Source: FEMA 2016, SOPA 2018

## Identified Issues

The municipality has identified the following vulnerabilities within their community:

- The Town Offices and Town Highway Garage do not currently have emergency generators. Without emergency generators the town government and highway department will struggle to provide services to residents during prolonged power outages.
- The town also has 2 existing major developments relatively new developments, Melia Park & Chatham Woods, (greater than 40 homes each) which currently have only 1 point of entry.
- The town also has multiple older developments along the Seneca river and Cross Lake that have only one point of entry which are located in mapped flood hazard areas.

## 9.18.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of mitigation planning into existing and future planning mechanisms

## Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Town of Lysander.





Table 9.18-5. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
<b>Planning Capability</b>				
Comprehensive Plan	Yes 6/2014	Town	Planning Board	Comprehensive Plan
Capital Improvements Plan	No	-	-	-
Floodplain Management / Basin Plan	No	-	-	-
Stormwater Management Plan	Yes 6/2011	Town	Codes Office	Stormwater Management Plan
Open Space Plan	No	-	-	-
Stream Corridor Management Plan		-	-	-
Watershed Management or Protection Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Comprehensive Emergency Management Plan	No	-	-	-
Emergency Operation Plan	In progress	-	-	-
Evacuation Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Climate Adaptation Plan	No	-	-	-
Resilience Plan	No	-	-	-
Other Plans:	No	-	-	-
<b>Regulatory Capability</b>				
Building Code	Yes	NYS Building Code	Code Enforcement	Zoning Code, Chapter 320
Zoning Ordinance	Yes 6/2014	Town	ZBA	Chapter 320
Subdivision Ordinance	Yes 6/2014	Town	Planning Board	Chapter 270
NFIP Flood Damage Prevention Ordinance	Yes 11/2016	Town	Floodplain Admin.	Chapter 151
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	Town	Floodplain Admin.	State mandated BFE+2 for all construction, both residential and non-residential
Growth Management Ordinances	No	-	-	-
Site Plan Review Requirements	Yes 6/2014	Local	Planning Board	Chapter 320
Stormwater Management Ordinance	Yes	Local	Code Enforcement	Chapter 320



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Municipal Separate Storm Sewer System (MS4)	Yes	Local	-	-
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-
Real Estate Disclosure Requirement	Yes	State	NYS Department of State, Real Estate Agent	NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	-	-	-

### Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Lysander.

**Table 9.18-6. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Town Supervisor
Maintenance programs to reduce risk	Yes	Town Engineer
Mutual aid agreements	Yes	-
<b>Technical/Staffing Capability</b>		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Town Engineer
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer
NFIP Floodplain Administrator (FPA)	Yes	Codes Enforcement Officer
Surveyor(s)	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
Warning systems/services	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Staff with expertise or training in benefit/cost analysis	Yes	Town Engineer





Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Professionals trained in conducting damage assessments	Yes	Town Engineer

### Fiscal Capability

The table below summarizes financial resources available to the Town of Lysander.

**Table 9.18-7. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes (drainage districts)
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other	Yes

### Community Classifications

The table below summarizes classifications for community programs available to the Town of Lysander.

**Table 9.18-8. Community Classifications**

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Natural disaster/safety programs in/for schools	No	-	-
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	No	-	-



Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public-private partnership initiatives addressing disaster-related issues	No	-	-
Other	No	-	-

Note:

N/A Not applicable

NP Not participating

- Unavailable

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule (<https://www.isomitigation.com/bcegs/>)
- The ISO Mitigation online ISO's Public Protection website at <https://www.isomitigation.com/ppc/>
- New York State Climate Smart Communities (<http://www.dec.ny.gov/energy/56876.html>)
- The National Weather Service Storm Ready website at <https://www.weather.gov/stormready/communities>
- The National Firewise Communities website at <http://firewise.org/>

### Self-Assessment of Capability

The table below provides an approximate measure of the Town of Lysander's capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

**Table 9.18-9. Self-Assessment Capability for the Municipality**

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and regulatory capability	X – Limited Staff		
Administrative and technical capability	X – Limited Staff		
Fiscal capability	X – Limited Staff		
Community political capability	X – Limited Staff		
Community resiliency capability	X – Limited Staff		
Capability to integrate mitigation into municipal processes and activities	X – Limited Staff		



## National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

### NFIP Floodplain Administrator (FPA)

Tim Wolsey, Lysander Codes Enforcement Officer

### National Flood Insurance Program (NFIP) Summary

The Town of Lysander does not maintain lists/inventories of properties that have been flood damaged and does not make substantial damage estimates. The town does not make Substantial Damage Estimates. No properties are currently in the process of mitigation and it is unknown how many property owners are interested in mitigation.

The following table summarizes the NFIP statistics for the Town of Lysander.

**Table 9.18-10. NFIP Summary**

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Town of Lysander	119	63	\$559,107	3	0	68

Source: FEMA Region 2 2018.

(1) Policies, claims, RL, and SRL statistics provided by FEMA Region 2, and are current as of June 30, 2018. Total number of RL properties does not include SRL properties. Number of claims represents claims closed by July 31, 2018.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(3) Number of policies inside and outside of flood zones is based on latitude and longitude coordinates provided by FEMA Region 2 in the policy file. FEMA noted that for a property with more than one entry, more than one policy may have been in force or more than one Geographic Information System (GIS) specification was possible. Number of policies and claims, and claims total, exclude properties outside Onondaga County boundary, based on provided latitude and longitude coordinates.

RL Repetitive Loss

SRL Severe Repetitive Loss

## Resources

The FPA is the sole person responsible for floodplain administration. NFIP administration services and functions include permit review for development in the floodplain and record keeping. The town does not conduct flooding related outreach. The FPA noted that they do not have access to resources to determine possible future flooding conditions from climate change. The FPA stated they do not feel adequately supported and feel lack of staff is a barrier to running an effective floodplain management program. The FPA noted they would consider attending continuing education and/or certification training on floodplain management if it were offered in the County for all local floodplain administrators.

## Compliance History

The Town of Lysander is in good-standing in the NFIP. The most recent compliance audit [e.g. Community Assistance Visit (CAV)] was August 2018. The town maintains compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. The town regularly determines if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.



## Regulatory

The Flood Damage Prevention Ordinance for the Town of Lysander exceeds the FEMA and State minimum standards. The FPA noted that there are other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements. The FPA stated that the town has considered joining the Community Rating System (CRS) program to reduce flood insurance premiums for their insured and would attend a CRS seminar if offered locally.

## Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures, which is also indicated below.

## Planning

### Existing Integration

**Comprehensive Plan:** The Town of Lysander's Comprehensive Plan includes information on natural hazard risk but does not refer to the Countywide Hazard Mitigation Plan. The Plan (CLUP), adopted in 2015, was developed to best meet the town's desire to encourage sustainable residential, industrial and commercial development in a manner consistent with the retention of all the town's unique characteristics. The plan is driven primarily by near-term constraints to its Wastewater Treatment Plant capacity, and one of the CLUP's key recommendations is to replace the Transfer of Development Rights system with zoning incentives for conservation easements to redirect development away from prime farmland and other important environmental areas (such as the shorelines of the Oswego River, Seneca River, and Cross Lake. Additional recommendations that include river setbacks and overlay controls designed to regulate the amount of clearing of natural vegetation along the shore. Furthermore, the town's plan emphasizes the need to protect the waterways from faulty septic systems.

**Stormwater Management Plan:** The Town of Lysander is an MS4 Regulated Community and has a formal Stormwater Management Plan. The Plan specifies projects/actions/initiatives to reduce the volume of stormwater, or otherwise mitigate stormwater flooding.

**Onondaga County Hazard Mitigation Plan:** The Town of Lysander supports the implementation, monitoring, maintenance, and updating of this Plan. The town supports County-wide initiatives identified in Section 9.1 of the County Annex.

The Town of Lysander does not have a Re-Development Plan, Growth Plan, Economic Development Plan, Open Space Plan, Watershed or Stream Corridor Management Plan, Local Waterfront Revitalization Plan, a Continuity of Operations/Continuity of Government (COOP/COG) plan(s), Comprehensive Emergency Management Plan, Post-Disaster Recovery Plan/Strategic Recovery Plan, resilience plan/strategy, or Climate Adaptation Plan/strategy.

### Opportunities for Future Integration

Updates to the Comprehensive Plan or new plans could include information on natural hazard risk and refer to the Countywide Hazard Mitigation Plan.



## Regulatory and Enforcement (Ordinances)

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### Existing Integration

The town has multiple ordinances pertaining to the mitigation of hazards. These ordinances include the Establishment of Boards (see Operational and Administration below), Fire Prevention Ordinance, Flood Damage Prevention Ordinance, Environmental Quality Review Ordinance, Stormwater Management Ordinance, Zoning Ordinance, Subdivision of Land Ordinance. The town also adheres to the New York State Fire Prevention and Building Code. The municipal Code and ordinances are available on the town website (<http://www.townoflysander.org/>).

**Zoning Ordinance:** The Zoning Ordinance (Ch.320), most recently updated in 2018, creates general standards that provide regulations and restrictions of locations, construction and use of buildings and the division of districts with overlay controls. Specifically, the ordinance establishes various districts such as the NYS Flowage Easement District and a Riverfront Development Overlay which provide regulations to steer development away from hazard areas.

The Town of Lysander's municipal zoning, subdivision regulations, and site plan review process consider natural hazard risk and require developers to take additional actions to mitigate natural hazard risk. The Planning Board/ZBA are provided with maps to guide their decisions with respect to natural hazard risk management.

### Opportunities for Future Integration

The town is going to use feedback from the most recent community assistance visit to make any necessary updates to ordinances to include natural hazards and hazard mitigations. The town is planning to create a wellhead protection overlay district with the assistance of the Village of Baldwinsville.

## Operational and Administration

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### Existing Integration

**Planning Board:** The Town of Lysander's Planning Board meets on the second Thursday of the month at 7:00 PM in town hall. The Planning Board deals with subdivisions, site plans and controlled site uses. The Board supports land use decisions, public health and safety and assure compliance with regulations, ordinances and the Comprehensive Plan

**Zoning Board of Appeals:** The Town of Lysander's Zoning Board of Appeals meets the first Monday of the month, as needed, at 7:30 PM in town hall. The Zoning Board of Appeals deals with specific use permits, variances, and land uses.

**Retrofitting/Removal of Structures from Hazard Prone Areas:** Where appropriate, the Town of Lysander supports the retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. The town works to identify facilities that are viable candidates for each strategy based on cost-effectiveness. Implementation of these actions are based on available funding.

**Mutual Aid Agreements:** The Town of Lysander works to create/enhance/ maintain mutual aid agreements with neighboring communities.

**Stream Team Program:** The Town of Lysander supports/participates in the Stream Team program offered by the Onondaga County SWCD, to assist in the removal of debris, log jams, etc. in flood vulnerable stream sections.



The Town of Lysander does not have a municipal planner, contract planning firm, or other boards or committees that include functions with respect to managing natural hazard risk. NFIP Floodplain Management functions are performed by the Codes Enforcement Officer. Stormwater Management functions are performed by the Town Engineer. The Town Engineer has experience with developing Benefit-Cost Analysis and can perform Substantial Damage Estimates. The town does not have staff or contract with firms that have experience in preparing grant applications for mitigation projects. No town staff have job descriptions that involve natural hazard risk, but staff do not receive training or continuing professional education which supports natural hazard risk reduction. The Codes Enforcement Officer participates in associations, organizations, groups or other committees that support natural hazard risk reduction and build hazard management capabilities. The Town Engineer and Highway Department are responsible for the town's hazard management programs.

### Opportunities for Future Integration

The town could hire staff or contract with firms that have experience in preparing grant applications for mitigation projects.

### Funding

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#### Existing Integration

The Town of Lysander does not have a line item for mitigation projects/activities in the municipal budget, but has a Capital Improvements Budget. Which includes budget for the Town Highway and Drainage District budgets which provide funding for maintenance of stormwater facilities. The town has not pursued or been awarded grant funds for mitigation-related projects. The town does not have any other mechanisms to fiscally support hazard mitigation projects.

Pre-disaster mitigation funds will be available upon FEMA approval of this plan, along with other funding available through the state and federal sources, such as the NYS Department of Conservation (Climate Smart Communities Grants, Water Quality Improvements Program, Trees for Tribes), NYS Environmental Facilities Corporation (Wastewater Infrastructure Engineering Planning, Clean Water Revolving Loan Fund, Green Innovation Grant Program), New York State Energy Research and Development Authority (Clean Energy Communities Program), and Empire State Development.

### Opportunities for Future Integration

The town could apply for grants and allocate funding from the municipal budget funding to support hazard mitigation projects.

### Education and Outreach

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#### Existing Integration

The Town of Lysander operates a municipal website (<http://www.townoflysander.org/>) posts information regarding upcoming community events and important municipal decisions. The website provides information related to safety and hazard mitigation including local emergency response contact information, current project information, Storm Water regulations, and links to related ordinances (see Regulatory and Enforcement).

The Town of Lysander conducts and facilitates community and public education and outreach for residents and businesses to include, but is not be limited to, the following to promote and effect natural hazard risk reduction:

- Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the municipal homepage referencing the Onondaga County HMP webpages.





- Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation.
- Use the town email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures.
- Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.

### Opportunities for Future Integration

The town could include information on natural hazards on the town website and develop outreach programs.

### Sheltering, Evacuation, and Temporary Housing

Temporary housing, evacuation routes, and sheltering measures must be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

#### Temporary and Permanent Housing

The Town of Lysander has not identified the following potential sites for the placement of temporary housing for residents displaced by a disaster or potential sites suitable for relocating houses of the floodplain and/or building new homes once properties in the floodplain are acquired. To accommodate longer term housing needs of permanently displaced residents, there is an existing supply of vacant housing units within the county which may be able to satisfy and absorb those housing needs. The county also has ample buildable land availability throughout its communities to satisfy construction of new housing units if needed, as mapped in Section 4, figure 4-20 in Volume I of this plan. Of note, given the nature of the hazards of concern to Onondaga County, the extent of housing need is also not likely to exceed currently available housing stock for all but the most extreme and widespread hazard events.

#### Evacuation and Sheltering Needs

The Town of Lysander has established the following emergency shelters:

- Belgium Cold Springs Fire District Station 1: 3368 Patchett Road, Baldwinsville, NY 13027; The Fire Station is ADA compliant, has backup power, and has EMT's on staff. The Town is unsure of the Station's capacity or if it is able to accommodate pets.

The town has not established evacuation routes or evacuation procedures. Per the County Emergency Management Plan, in the event of a hazard occurrence, the Department of Emergency Management is tasked with coordinating evacuation procedures with the Sheriff's Department, the On-Scene Commander, the Transportation Coordinator, the ARC, hospitals, special facilities, the fire service and the Health Department. The Sheriff's Department is responsible for implementing traffic control procedures including coordination of vehicular traffic and protection of resources, facilities and services in the affected areas. As noted in Section 4, Figure 4-19 in Volume I of this plan, the primary roads and highways are the evacuation routes for Onondaga County; the county is fortunate to have a variety of well-connected arterial and collector roadways to provide a variety of routing options during times of large-scale evacuation.

The American Red Cross (ARC) has primary contractual responsibility to provide sheltering, including short term housing, for Onondaga County individuals and families during an emergency occurring in Onondaga County. Services of the ARC include emergency sheltering needs, mass care, feeding, information and referral, and special population assistance. A confidential shelters list is maintained by the Department of Emergency





Management and the ARC which identifies capacity for 15,000+ residents across Onondaga County. The ARC is responsible for maintaining shelter and temporary housing agreements with selected facilities.

### **9.18.6 Mitigation Strategy and Prioritization**

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This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

#### **Past Mitigation Initiative Status**

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The following table indicates progress on the community's mitigation strategy identified in the 2013 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.18-11. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
TLY-0	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: <ul style="list-style-type: none"><li>• Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the municipal homepage referencing the Onondaga County HMP webpages.</li><li>• Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation.</li><li>• Use the town email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures.</li><li>• Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.</li></ul> Municipal outreach activities to be supported by the County, as identified at County initiative OC-0.							
	See above.	All Hazards		Municipal officials and floodplain administrators supported by the County (through SOCPA and EM)	Ongoing capability	Cost		1. Discontinue  2.  3. Ongoing capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
TLY-1a	Where appropriate, support retrofitting of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.	Flood, Severe Storm, Severe Winter Storm		Municipality (likely through NFIP Floodplain Administrator)	Ongoing capability	Cost		1. Discontinue  2.  3. Ongoing capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
TLY-1b	Where appropriate, support purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for	Flood, Severe Storm, Severe Winter Storm	Unknown	Municipality (likely through NFIP Floodplain Administrator)	Ongoing capability	Cost	0	1. Discontinue  2.  3. Ongoing capability
						Level of Protection	0	
						Damages Avoided; Evidence of Success	0	



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	relocation based on cost-effectiveness versus retrofitting. Where relocation is determined to be a viable option, consider implementation of that action based on available funding.							
TLY-2	Begin the process to apply to participate in the Community Rating System (CRS) to further manage flood risk and reduce flood insurance premiums for NFIP policyholders. This shall start with the submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community's current compliance with the NFIP is established.	Flood		NFIP Floodplain Administrator with support from NYSDEC, SOEM, FEMA	No Progress	Cost	0	1. Include in 2019 HMP 2. 3.
						Level of Protection	0	
						VBV-4 Damages Avoided; Evidence of Success	0	
TLY-3	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	All Hazards		Municipality (through mitigation planning point of contacts)	Ongoing capability	Cost	0	1. Discontinue 2. 3. Ongoing capability
						Level of Protection	0	
						Damages Avoided; Evidence of Success	0	
TLY-4	Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance	Flood		Municipality (likely through NFIP Floodplain Administrator)	Ongoing capability	Cost	0	1. Discontinue 2. 3. Ongoing capability
						Level of Protection	0	
						Damages Avoided; Evidence of Success	0	



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	actions identified as Initiatives TLY-0, 1a, 1b, 2, and 8 through 12.							
TLY-5	Continue to develop, enhance, and implement existing emergency plans.	All Hazards		Municipal Emergency Manager with support from County OEM and SEMO	No Progress	Cost	0	1. Include in 2019 HMP 2. 3.
						Level of Protection	0	
						Damages Avoided; Evidence of Success	0	
TLY-6	Create/enhance/ maintain mutual aid agreements with neighboring communities.	All Hazards		Local Emergency Management, DPW and Roads	Ongoing capability	Cost		1. Discontinue 2. 3. Ongoing capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
TLY-7	Support County-wide initiatives identified in Section 9.1 of the County Annex.	All Hazards		Local departments (as applicable for specific initiative)	Ongoing capability	Cost		1. Discontinue 2. 3. Ongoing capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
TLY-8	Support/Participate in the Stream Team program offered by the Onondaga County SWCD, to assist in the removal of debris, log jams, etc. in flood vulnerable stream sections.	Flood		County, OCSWCD (Mark Burger)	Ongoing capability	Cost		1. Discontinue 2. 3. Ongoing capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
TLY-9	Indian Springs Residential District along Connell Terrace, Crego Street, Mercer Street, Mott Road and Dexter Parkway: Construct a new stormwater drainage system within the Indian Springs residential development for efficient collection and conveyance of surface water runoff and private sump pump discharges along Connell Terrace, Crego Street, Mercer Street, Mott Road and Dexter Parkway. Proposed infrastructure would address the reoccurrence of localized flooding of the streets, residential basements and downstream businesses fronting NYS Route 370, and would serve to sustain the pavement sections of these town roads. Stormwater facilities will generally include 1.5 to 2.0 miles of smooth interior corrugated piping ranging in diameter from 6” to 24”, drainage inlets, roadway under-drains, and individual sump connector pipes at each lot fronting new storm sewer pipes. These facilities will dovetail on the back of the Dexter Parkway/NYS Route 370 stormwater improvements currently being constructed by the town under a joint project with the NYSDOT to prevent the reoccurrence of severe seasonal flooding of NYS Route 370.							
	See above.	Flood		Lysander Highway Department,	In progress	Cost		1. Include in 2019 HMP 2.
						Level of Protection		



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				Lysander Planning and Zoning, Onondaga County WEP		Damages Avoided; Evidence of Success		3.
TLY-10	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	Flood		NFIP Floodplain Administrator, with support from NYSDEC, SOEM, FEMA	Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
TLY-11	<p>Participate in RL/SRL property owner outreach and education activities, provided by FEMA, as initiated and coordinated by the County initiative OC-35, described herein.</p> <p>Within the first year of Plan adoption, request FEMA to conduct a mitigation workshop targeting those communities with significant numbers of flood vulnerable properties and Repetitive Loss/Severe Repetitive Loss (RL/SRL) properties (e.g. Towns of Cicero, DeWitt, Elbridge, Lafayette, Lysander, Manlius; Village of Skaneateles; City of Syracuse). This program should address the specific interests and concerns of these flood vulnerable communities in the County which includes:</p> <ul style="list-style-type: none"> <li>Gaining a better understanding of the available mitigation grant programs, including the procedural requirements of a RL/SRL community under this program;</li> <li>Understanding how flood vulnerable and RL/SRL communities can enhance their efforts to encourage and support property owners to mitigate their properties,</li> <li>Understanding how flood vulnerable and RL/SRL communities can best leverage existing data, information and studies (e.g. NFIP data) to target specific properties for mitigation, and</li> <li>Learning what resources are available to conduct/complete Repetitive Loss Area Analyses, and gather critical data (e.g. structure elevations) to screen and move properties through the applicable mitigation grant programs.</li> </ul> <p>The County shall promote this workshop through established groups and forums including the OC SWCD and the ongoing County Hazard Mitigation Planning Committee. Further, the County shall continue to conduct meetings as needed with these flood vulnerable communities, with the support of NYSOEM and FEMA, to assist communities as they work to address their flood vulnerable and RL/RSL properties.</p>							
	See above	Flood		Local floodplain administrator working with County Hazard Mitigation Coordinator	No progress	Cost		1. Include in 2019 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
TLY-12	<p>Participate in regional, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including:</p> <ul style="list-style-type: none"> <li>Support the performance of enhanced risk and vulnerability assessments for hazards including flooding, earthquake, wind, and land failure.</li> <li>Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use.</li> </ul>							



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps
	Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types) based on FEMA-154 “Rapid Visual Screening of Buildings for Potential Seismic Hazards” methodologies, or “Rapid Observation of Vulnerability and Estimation of Risk - ROVER. It is recognized that these programs will likely need to be initiated and supported at the Regional and/or State level, and will likely require training, tools and funding provided at the regional, state and/or federal level.							
	See above.	All Hazards		Local building code official and/or engineer working with OC EM	No progress	Cost		1. Discontinue  2.  3. No longer a priority
						Level of Protection		
						Damages Avoided; Evidence of Success		



### Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Lysander has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2013 Plan:

- The Town of Lysander has performed ongoing maintenance projects to reduce the impact of flooding but has not identified specific mitigation projects/activities that have been completed but were not identified in the previous mitigation strategy in the 2013 Plan.

### Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Lysander participated in a mitigation action workshop on January 14, 2018 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

Table 9.18-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Lysander would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.18-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.





Table 9.18-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
T. of Lysander -1	Waterfront properties elevations and buyouts	1	Flood	Waterfront properties (homes and camps) along the Seneca and Oswego Rivers are low-lying and prone to flooding. When flooded, roads in this area are closed which impacts the accessibility to groceries, health care, and emergency response.	The town will work with property owners to conduct elevation of properties. For properties that cannot be elevated, the town will work to buyout the impacted properties.	No	None	Within 5 years	Code Enforcement	\$3 Million	Properties no longer exposed to flooding damages.	HMGP, PDM, FMA	High	SIP	PP
T. of Lysander -2	Invasive Species Mitigation	1, 2, 4	Invasive Species	Emerald ash borer is an invasive species of concern for the town. Emerald ash borer are killing the ash trees in the town. The dead trees are then more prone to falling on roadways and power lines, leading to closed roads and power outages. Power outages can: disrupt communications, water, and	The town will work with an arborist to conduct a tree study within the Town of Lysander to identify all high risk trees and trees impacted by emerald ash borer. The town will then remove all identified high risk trees and infected trees.	No	None	Within 2 years	Highway Department	\$250,000	Reduction in power loss and closed roadways.	Town Budget, HMGP	High	NSP	NR, PP



Table 9.18-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				transportation; close retail businesses, grocery stores, gas stations, ATMs, banks, and other services; cause food spoilage and water contamination; and prevent use of medical devices. Blocked roadways prevent emergency personnel from getting to areas of the community, putting the life and safety of residents at risk.											
T. of Lysander -3 (former TLY-2)	Begin the process to apply to participate in the Community Rating System (CRS)	1, 2, 3, 6	Flood	Need to manage flood risk and reduce flood insurance premiums for NFIP policyholders	Submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community's current compliance	No	None	Within 1 year	NFIP Floodplain Administrator with support from NYSDEC, SOEM, FEMA	Staff time	Reduced flood insurance premiums and higher floodplain administration standards	Municipal budget	High	LPR	All



Table 9.18-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
T. of Lysander -4 (former TLY-5)	Continue to develop, enhance, and implement existing emergency plans.	1, 5, 6	All Hazards	Emergency plans are in need of updating.	with the NFIP is established. Continue to develop, enhance, and implement existing emergency plans. Reference the County Hazard Mitigation Plan in updates.	No	None	Within 5 years	Municipal Emergency Manager with support from County OEM and SEMO	Staff time	Updated emergency plans	Municipal budget	High	LPR	ES
T. of Lysander -5 (former TLY-9)	Construct a new stormwater drainage system within the Indian Springs residential development for efficient collection and conveyance of surface water runoff and private sump pump discharges along Connell Terrace, Mott Road Exeter	1, 3, 5, 6	Flood, Severe Storm	Problem: Indian Springs Residential District along Connell Terrace, Crego Street, Mercer Street, Mott Road and Dexter Parkway: reoccurrence of localized flooding of the streets, residential basements and downstream businesses fronting NYS Route 370. Need to sustain the pavement sections of these town roads.	Solution: Proposed infrastructure would address the Stormwater facilities will generally include 1.5 to 2.0 miles of smooth interior corrugated piping ranging in diameter from 6" to 24", drainage inlets, roadway under-drains, and individual sump connector pipes at each lot fronting new storm sewer pipes. These facilities will dovetail on the back of the Dexter Parkway/NYS Route 370 stormwater improvements currently being constructed by the town under a joint project with the	No	None	Within 5 years	Lysander Highway Department, Lysander Planning and Zoning, Onondaga County WEP	\$750,000	Efficient collection and conveyance of stormwater and private sump pump discharges.	FEMA PDM with local Capital Improvements Budget for 25% cost share.	High	SIP	SP



Table 9.18-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	Drive, and Eaden Lane.			NYSDOT to prevent the reoccurrence of severe seasonal flooding of NYS Route 370.											
T. of Lysander -6 (former TLY-11)	Participate in RL/SRL property owner outreach and education activities, provided by FEMA, as initiated and coordinated by the County	1, 2, 3, 5	Flood	Problem: Repetitive loss property owners are in need of proper education	Solution: Within the first year of Plan adoption, request FEMA to conduct a mitigation workshop targeting those communities with significant numbers of flood vulnerable properties and Repetitive Loss/Severe Repetitive Loss (RL/SRL) properties. This program should address the specific interests and concerns of these flood vulnerable communities in the County which includes: •Gaining a better understanding of the available mitigation grant programs, including the procedural requirements of a RL/SRL community under this program; •Understanding how flood vulnerable and RL/SRL communities can enhance their efforts to encourage and support property owners to mitigate their properties, •Understanding how flood vulnerable and RL/SRL communities can best leverage existing data, information and studies (e.g. NFIP data) to target specific properties for mitigation, and •Learning what resources are available to conduct/complete Repetitive Loss Area Analyses, and	No	None	Within 1 year	Local floodplain administrator working with County Hazard Mitigation Coordinator	Staff time	Property owners educated on possible mitigation actions	Existing budgets	High	EAP	PI



Table 9.18-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				gather critical data (e.g. structure elevations) to screen and move properties through the applicable mitigation grant programs. The County shall promote this workshop through established groups and forums including the OC SWCD and the ongoing County Hazard Mitigation Planning Committee. Further, the County shall continue to conduct meetings as needed with these flood vulnerable communities, with the support of NYSOEM and FEMA, to assist communities as they work to address their flood vulnerable and RL/RSL properties.											
T. of Lysander -7	Protect the Phoenix Dam-lock #1 to the 500-year flood level.	1, 2	Flood	The Dam is located in the 100-year floodplain. The town does not have jurisdiction over the facility.	The town will contact the facilities manager and discuss options for protecting the facility to the 500-year flood level	Yes	None	Within 6 months	Floodplain administrator	<\$100	DPW protected to the 500-year flood level	HMGP	Medium	EAP	PI
T. of Lysander -8	Protect the Seneca River Fire Station to the 500-year flood level.	1, 2	Flood	The Fire Station is located in the 100-year floodplain. The Town does not have jurisdiction over the facility.	The town will contact the facilities manager and discuss options for protecting the facility to the 500-year flood level	Yes	None	Within 6 months	Floodplain administrator	<\$100	DPW protected to the 500-year flood level	HMGP	Medium	EAP	PI
T. of Lysander -9	Protect Well OD1763 to the 500-year flood level.	1, 2	Flood	The Well is located in the 100-year floodplain. The	The town will contact the facilities manager and	Yes	None	Within 6 months	Floodplain administrator	<\$100	DPW protected to the 500-	HMGP	Medium	EAP	PI



Table 9.18-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				well is owned by the Village of Baldwinsville.	discuss options for protecting the facility to the 500-year flood level						year flood level				
T. of Lysander -10	Protect Well OD735 to the 500-year flood level.	1, 2	Flood	The DPW is located in the 100-year floodplain. The well is owned by the Village of Baldwinsville.	The town will contact the facilities manager and discuss options for protecting the facility to the 500-year flood level	Yes	None	Within 6 months	Floodplain administrator	<\$100	DPW protected to the 500-year flood level	HMGP	Medium	EAP	PI

**Notes:**

Not all acronyms and abbreviations defined below are included in the table.

\*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
PDM	Pre-Disaster Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.





- *Natural Systems Protection (NSP)* – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)* – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- *Preventative Measures (PR)* - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities

Critical Facility:


Yes  Critical Facility located in 1% floodplain





Table 9.18-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
T. of Lysander-1	Waterfront properties elevations and buyouts	1	1	1	1	1	1	0	1	0	1	0	0	1	1	10	High
T. of Lysander-2	Invasive Species Mitigation	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
T. of Lysander-3 (former TLY-2)	Begin the process to apply to participate in the Community Rating System (CRS)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
T. of Lysander-4 (former TLY-5)	Continue to develop, enhance, and implement existing emergency plans.	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High
T. of Lysander-5 (former TLY-9)	Construct a new stormwater drainage system within the Indian Springs residential development for efficient collection and conveyance of surface water runoff and private sump pump discharges along Connell Terrace, Mott Road Exeter Drive, and Eaden Lane.	0	1	1	0	1	1	0	1	1	1	0	1	1	1	10	High
T. of Lysander-6 (former TLY-11)	Participate in RL/SRL property owner outreach and education activities, provided by FEMA, as initiated and coordinated by the County	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
T. of Lysander-7	Protect the Phoenix Dam-lock #1 to the 500-year flood level.	0	1	0	1	1	0	1	1	1	0	0	0	1	1	8	Medium
T. of Lysander-8	Protect the Seneca River Fire Station to	0	1	0	1	1	0	1	1	1	0	0	0	1	1	8	Medium



Table 9.18-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
	the 500-year flood level.																
T. of Lysander-9	Protect Well OD1763 to the 500-year flood level.	0	1	0	1	1	0	1	1	1	0	0	0	1	1	8	Medium
T. of Lysander-10	Protect Well OD735 to the 500-year flood level.	0	1	0	1	1	0	1	1	1	0	0	0	1	1	8	Medium

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



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### **9.18.7 Future Needs To Better Understand Risk/Vulnerability**

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None at this time.

### **9.18.8 Staff and Local Stakeholder Involvement in Annex Development**

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The Town of Lysander followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: the Town Engineer and Code Enforcement Officer. The Town Engineer represented the community on the Onondaga County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meetings).

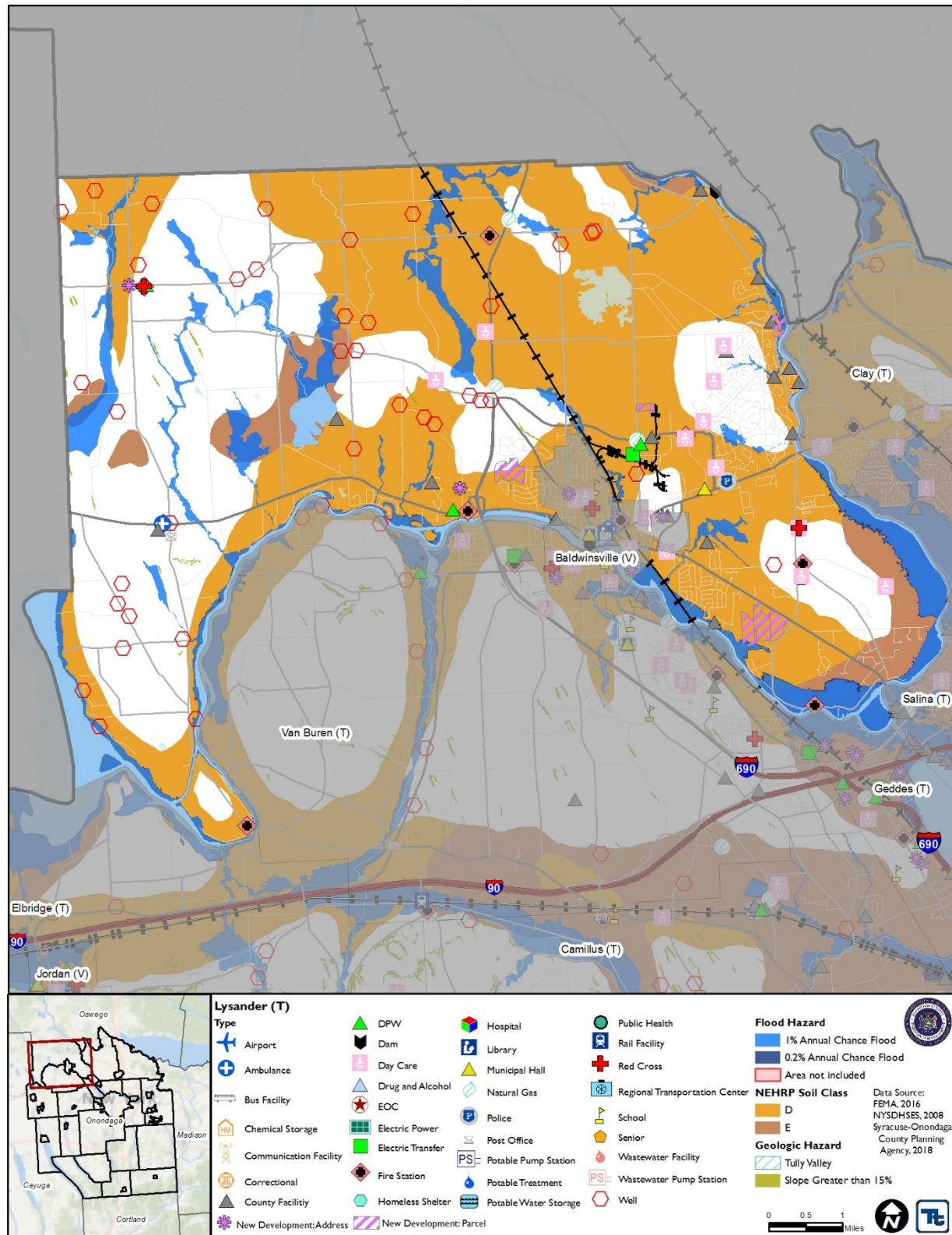
### **9.18.9 Hazard Area Extent and Location**

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Hazard area extent and location maps have been generated for the Town of Lysander that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Lysander has significant exposure. A map of the Town of Lysander hazard area extent and location is provided on the following page. This map indicates the location of the regulatory floodplain as well as identified critical facilities within the municipality.



Figure 9.18-1. Town of Lysander Hazard Area Extent and Location Map





Action Worksheet			
<b>Project Name:</b>	Waterfront properties elevations and buyouts		
<b>Project Number:</b>	T. of Lysander-1		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood		
<b>Description of the Problem:</b>	Waterfront properties (homes and camps) along the Seneca and Oswego Rivers are low-lying and prone to flooding. When flooded, roads in this area are closed which impacts the accessibility to groceries, health care, and emergency response.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	The town will work with property owners to conduct elevation of properties. For properties that cannot be elevated, the town will work to buyout the impacted properties.		
<b>Is this project related to a Critical Facility?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	100 year+ event: Elevated properties raised to BFE +2'	<b>Estimated Benefits (losses avoided):</b>	Properties no longer exposed to flooding damages.
<b>Useful Life:</b>	30 years for elevations, 100 years for buyouts	<b>Goals Met:</b>	1
<b>Estimated Cost:</b>	\$3 Million	<b>Mitigation Action Type:</b>	Structure and Infrastructure Project
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 5 years
<b>Estimated Time Required for Project Implementation:</b>	Within 5 years	<b>Potential Funding Sources:</b>	HMGP, PDM, FMA
<b>Responsible Organization:</b>	Code Enforcement	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	
	Flood wall	\$6.5 million	No cost effective
	Complete buyout	\$6 million	Not cost effective/necessary
Progress Report (for plan maintenance)			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Action Worksheet		
<b>Project Name:</b>	Waterfront properties elevations and buyouts	
<b>Project Number:</b>	T. of Lysander-1	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Properties will be protected from future flooding
Cost-Effectiveness	1	Each property will be analyzed to determine whether buyout or elevation is most cost-effective
Technical	1	
Political	1	There is public support for the project
Legal	1	
Fiscal	0	The project will require grant funding
Environmental	1	
Social	0	Any necessary buyouts would result in removal of population from the area.
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Within 5 years
Agency Champion	1	Code Enforcement
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	





Action Worksheet			
<b>Project Name:</b>	High Risk Tree Mitigation		
<b>Project Number:</b>	T. of Lysander-2		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Invasive Species, Severe Storm, Severe Winter Storm		
<b>Description of the Problem:</b>	Emerald ash borer is an invasive species of concern for the town. Emerald ash borer are killing the ash trees in the town. The dead trees are then more prone to falling on roadways and power lines, leading to closed roads and power outages. Power outages can: disrupt communications, water, and transportation; close retail businesses, grocery stores, gas stations, ATMs, banks, and other services; cause food spoilage and water contamination; and prevent use of medical devices. Blocked roadways prevent emergency personnel from getting to areas of the community, putting the life and safety of residents at risk.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	The town will work with an arborist to conduct a tree study within the Town of Lysander to identify all high risk trees and trees impacted by emerald ash borer The town will then remove all identified high risk trees and infected trees.		
<b>Is this project related to a Critical Facility?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	To be determined: Roadways	<b>Estimated Benefits (losses avoided):</b>	Reduction in power loss and closed roadways.
<b>Useful Life:</b>	10 years	<b>Goals Met:</b>	1, 2, 4
<b>Estimated Cost:</b>	\$250,000	<b>Mitigation Action Type:</b>	Natural Systems Protection
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 2 years
<b>Estimated Time Required for Project Implementation:</b>	2 years	<b>Potential Funding Sources:</b>	Town budget, HMGP
<b>Responsible Organization:</b>	Highway Department	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	
	Cut down all trees	\$8 million	Not cost effective, negative public reception
	Tree study of only high risk tree areas	\$20,000	Study and mitigation not done town-wide
Progress Report (for plan maintenance)			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			





Action Worksheet		
<b>Project Name:</b>	High Risk Tree Mitigation	
<b>Project Number:</b>	T. of Lysander-2	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will prevent critical services like power loss and evacuation routes from being compromised during severe storm and severe winter storm events.
Property Protection	1	Project will prevent property damage from falling trees.
Cost-Effectiveness	1	
Technical	1	
Political	1	The public is supportive of the project.
Legal	1	The town has the legal authority to complete the project.
Fiscal	0	
Environmental	1	Prevents spread of emerald ash borer.
Social	1	
Administrative	1	
Multi-Hazard	1	Invasive Species, Severe Storm, Severe Winter Storm
Timeline	0	
Agency Champion	1	Highway Department
Other Community Objectives	1	Control of invasive species
Total	12	
Priority (High/Med/Low)	High	