



## 9.31 CITY OF OLEAN

This section presents the jurisdictional annex for the City of Olean. 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 city participated in the planning process; an assessment of the City of Olean’s risk and vulnerability; the different capabilities utilized in the city; and an action plan that will be implemented to achieve a more resilient community.

### 9.31.1 Hazard Mitigation Planning Team

The following individuals have been identified as the City of Olean’s hazard mitigation plan primary and alternate points of contact.

Table 9.31-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Bob Ring/Director of Public Works Address: Municipal Building, Olean, NY 14760 Phone Number: (716) 376-5650 Email: bring@cityofolean.org	Name/Title: Tim Richardson/Fire Chief Address:101 East State Street, Olean, NY 14760 Phone Number: (716) 376-5604 Email: trichardson@cityofolean.org
NFIP Floodplain Administrator	
Name/Title: Robert Ring/Director of Public Works Address: Municipal Building, Olean, NY 14760 Phone Number: (716) 376-5650 Email: bring@cityofolean.org	

### 9.31.2 Municipal Profile

The City of Olean is located within the Town of Olean and is located in the southeastern part of Cattaraugus County in western New York State. The City of Olean is the largest city in the county and serves as its financial business, transportation, and entertainment hub. The City of Olean has a total area of 6.17 square miles. The city is located where Olean Creek flows into the Allegheny River.

The estimated 2018 population was 13,805, a 5.3 percent decrease in population from 2010 (14,578 persons).

Data from the 2018 U.S. Census American Community Survey indicate that 4.1 percent of the city population is 5 years of age or younger and 17.6 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 City of Olean was formed from a portion of the Town of Great Valley in 1831.

### 9.31.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.31-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Figure 9.31-1 at the end of this



annex illustrates the geographically delineated hazard areas and the location of potential new development, where available.

**Table 9.31-2. Recent and Expected Future Development**

Type of Development	2014		2015		2016		2017		2018	
<b>Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)</b>										
	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>
Single Family	1	0	0	0	1	0	0	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	2	0	1	0	0	0	0	0	2	0
<b>Total</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development		
<b>Recent Major Development and Infrastructure from 2014 to Present</b>										
Solean LLC	Utility	NA		1404 06-R- Buffalo St		None		Solar Field		
<b>Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years</b>										
Hotel	Commercial	82 units		1404 Buffalo St		None		New Hotel		

SFHA Special Flood Hazard Area (1% flood event)

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

### 9.31.4 Capability Assessment

The City of Olean performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Information on National Flood Insurance Program (NFIP) compliance.
- Classification under various community mitigation programs.
- The community’s adaptive capacity for the impacts of climate change.

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, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in Capability Assessment (Section 9.31.4). The City of Olean identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy. Appendix H provides the results of the planning/policy document review.



**Planning, Legal, and Regulatory Capability**

The table below summarizes the regulatory tools that are available to the City of Olean and where hazard mitigation has been integrated.

**Table 9.31-3. Planning, Legal, and Regulatory Capability**

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action	
<b>Codes, Ordinances, &amp; Requirements</b>							
Building Code	Yes	N/A	State and Local	Fire Department	Yes	No	2020-City of Olean-016
Comment: none							
Zoning Code	Yes	Chapter 28, 2000	Local	Fire Department	No	Yes	-
Comment: none							
Subdivisions	Yes	Subdivision Code	Local	Fire Department	No	Yes	-
Comment: none							
Stormwater Management	No	-	-	-	Yes	-	-
Comment: none							
Post-Disaster Recovery	No	-	-	-	No	-	-
Comment: none							
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes	Yes	-
Comment: none							
Growth Management	No	-	-	-	No	-	-
Comment: none							
Site Plan Review	Yes	Site Plan Review	Local	Codes/Planning	No	Yes	-
Comment: none							
Environmental Protection	Yes	Environmental Protection	State and Federal	NYS DEC/EPA	Yes	-	-
Comment: none							
Flood Damage Prevention	Yes	Flood Damage Prevention Ordinance Article III Chapter 9 1980	State/Local	Codes/Planning	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	No	2020-City of Olean-008
Comment: none							
Municipal Separate Storm Sewer System (MS4)	No	-	-	-	Yes	-	-
Comment: none							
Emergency Management	Yes	2006 EOP	Local	DPW/Police/Fire/Mayor	Yes	No	2020-City of Olean-015



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action	
Comment: none							
Climate Change	No	-	-	-	Yes	-	-
Comment: none							
Disaster Recovery Ordinance	No	-	-	-	No	-	-
Comment: none							
Disaster Reconstruction Ordinance	No	-	-	-	No	-	-
Comment: none							
Other	No	-	-	-	-	-	-
<b>Planning Documents</b>							
Comprehensive Plan	Yes	EOP, County CEMP	Local/County	Council/Mayor	No	Yes	-
Comment: none							
Capital Improvement Plan	Yes	Capital Improvement Plan	Local	Engineering/planning	No	Yes	-
Comment: none							
Disaster Debris Management Plan	No	-	-	-	No	-	-
Comment: none							
Floodplain or Watershed Plan	No	-	-	-	No	-	-
Comment: none							
Stormwater Plan	No	-	-	-	No	-	-
Comment: none							
Open Space Plan	No	-	-	-	Yes	-	-
Comment: none							
Urban Water Management Plan	No	-	-	-	No	-	-
Comment: none							
Habitat Conservation Plan	No	-	-	-	No	-	-
Comment: none							
Economic Development Plan	Yes	2011	Local	Community DEUP	No	Yes	-
Comment: none							
Shoreline Management Plan	No	-	-	-	Yes	-	-
Comment: none							



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action	
Community Wildfire Protection Plan	No	-	-	-	No	-	-
Comment: none							
Forest Management Plan	No	-	-	-	No	-	-
Comment: none							
Transportation Plan	Yes	2014	Local/State	County	No	Yes	-
Comment: none							
Agriculture Plan	No	-	-	-	Yes	-	-
Comment: none							
Other (this could include a climate action plan, tourism plan, business development plan, etc.)	No	-	-	-	-	-	-
Comment: none							
<b>Response/Recovery Planning</b>							
Comprehensive Emergency Management Plan	No	-	-	-	Yes	No	2020-City of Olean-015
Comment: none							
Strategic Recovery Planning Report	No	-	-	-	-	-	-
Comment: none							
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	Yes	-	-
Comment: none							
Post-Disaster Recovery Plan	No	-	-	-	No	-	-
Comment: none							
Continuity of Operations Plan	No	-	-	-	No	-	-
Comment: none							
Public Health Plan	Yes	Public Health Plan	County	Department of Health	No	Yes	-
Comment: none							
Other	No	-	-	-	No	-	-



**Table 9.31-4. Development and Permitting Capability**

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes; DPW/Code Enforcement
Permits are tracked by hazard area. For example, floodplain development permits.	No
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No

**Administrative and Technical Capability**

The table below summarizes potential staff and personnel resources available to the City of Olean.

**Table 9.31-5. Administrative and Technical Capabilities**

Resources	Available? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Community Development
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Olean Local Development Code
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	County
Maintenance programs to reduce risk	Yes	DPW
Mutual aid agreements	Yes	Police/Fire
<b>Technical/Staffing Capability</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	DPW/Community Development
Engineers or professionals trained in building or infrastructure construction practices	Yes	DPW
Planners or engineers with an understanding of natural hazards	Yes	DPW
Staff with expertise or training in benefit/cost analysis	Yes	DPW, Auditor
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	Yes	Sewer/Water
NFIP Floodplain Administrator (FPA)	Yes	DPW
Surveyor(s)	No	-
Emergency Manager	Yes	Fire and Police
Grant writer(s)	Yes	Community Development/DPW
Resilience Officer	No	-
Other	No	-

**Fiscal Capability**

The table below summarizes financial resources available to the City of Olean.

**Table 9.31-6. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes





Financial Resources	Accessible or Eligible to Use (Yes/No)
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	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other	No

### Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Olean.

**Table 9.31-7. Education and Outreach Capabilities**

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	Yes, Fire
Personnel skilled or trained in website development?	Yes, IT Dept
Hazard mitigation information available on your website; if yes, describe	No
Social media for hazard mitigation education and outreach; if yes, briefly describe.	Yes, Twitter/Facebook
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	Yes, City of Olean Emergency Preparedness Response Team
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	Yes, Press Release
Warning systems for hazard events; if yes, briefly describe.	Yes, NY Alert
Natural disaster/safety programs in place for schools; if yes, briefly describe.	Yes, fire and severe storm programs
Other	No

### Community Classifications

The table below summarizes classifications for community programs available to the City of Olean.

**Table 9.31-8. Community Classifications**

Program	Participating? (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)	Yes	Unknown	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-





Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

### Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating.

- The city does not currently have access to resources to determine the possible impacts of climate change upon the municipality and would rely on the county.

**Table 9.31-9. Adaptive Capacity**

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Flood	Medium
Landslide	Medium
Severe Storm	High
Severe Winter Storm	High
Utility Failure	Medium
Wildfire	Medium

- \*High Capacity exists and is in use
- Medium Capacity may exist; but is not used or could use some improvement
- Low Capacity does not exist or could use substantial improvement
- Unsure Not enough information is known to assign a rating

### National Flood Insurance Program

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

#### NFIP Floodplain Administrator (FPA)

Robert Ring, Director of Public Works.

#### National Flood Insurance Program (NFIP) Summary

The city does not keep a list of areas prone to flooding but they have identified that south of the Alleghany River is susceptible to flooding. The city does not maintain a list of property owners interested in flood mitigation and there are not any RiskMAP projects currently underway in the city. The county makes Substantial Damage determinations for the city. No properties have been mitigated. The flood hazard maps adequately address the flood risk within the city.

The following table summarizes the NFIP statistics for the City of Olean.







Table 9.31-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
City of Olean	68	29	\$214,595	0

Source: NYS DHES 2020  
RL Repetitive Loss; SRL Severe Repetitive Loss

Resources

NYS DEC, City of Olean DPW, and Fire Codes is responsible for floodplain management. There are not any certified floodplain managers on staff, but they do have access to resources to determine possible future flooding conditions from climate change. The city’s floodplain management staff needs assistance to support its floodplain management program as well as plan development. The NFIP administration services the city provides includes engineering and permit renewal. The city determines if proposed development on an existing structure would qualify as a substantial improvement with SEQR. The barriers to running an effective program in the community include political influence, education, and training.

Compliance History

The city does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was on November 3, 2009 and the most recent Community Assistance Contact (CAC) was on June 4, 2013.

Regulatory

The city’s Flood Damage Prevention Ordinance is Article III Chapter 9 1980. The floodplain management program does not meet the requirements because it does not include the required freeboard. SEQR, Codes/Engineering Review, and Site Review are local ordinances, plans, and programs that support floodplain management and meeting the NFIP requirements. The City of Olean does not participate in the CRS program.

Additional Areas of Existing Integration

**City Website:** The City of Olean’s website (<https://www.cityofolean.org/>) hosts city information and announcements.

Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all 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.

Evacuation Routes

The City of Olean does not have any pre-planned evacuation routes besides Eden Heights which is to evacuate to the east to the Pines if 25<sup>th</sup> Street is blocked.

Sheltering

The city has two designated shelters. Both accommodate pets and are ADA compliant. One site is the Olean Municipal Building located at 101 E State St and it has backup power, water, and a bomb shelter, but does not provide medical services. The second site is John T. Ash Community Building and it does not have backup



power or provides medical services. The city also identified the high school and middle school as potential shelters as well.

### Temporary Housing

The City of Olean has identified four temporary housing locations

- Olean High School – 410 W Sullivan St, Olean, NY
- Olean Intermediate Middle School – 410 W Sullivan St, Olean, NY
- John Ash Community Center – 112 N Barry St, Olean, NY
- Olean Recreation Center (non-flood event) – 112 N Barry St, Olean, NY

### Permanent Housing

The City of Olean did not identify any permanent housing in the event of an emergency but the county has identified temporary housing locations in Figure 9.31-1 and Figure 9.31-2.

## 9.31.5 Hazard Event History Specific to the City of Olean

Cattaraugus County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) 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 City of Olean’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Cattaraugus County. Table 9.31-11 provides details regarding municipal-specific loss and damages the city 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 9.31-11. Hazard Event History**

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
October 27- November 8, 2012	Hurricane Sandy (FEMA-EM-3351)	Yes	Remnants of Hurricane Sandy brought strong winds and heavy rains to western and north central New York. Rainfall amounts of two to five inches were measured across the area with some area creeks reaching bankful. The high winds downed trees and power lines throughout the region. Wind gusts were measured to 60 mph.	Although the county was impacted, the City of Olean did not report any damages.
May 13-22, 2014	Severe Storms and Flooding (FEMA-DR-4180)	Yes	Heavy showers and embedded thunderstorms trained across the western Southern tier. Rainfall amounts of one to three inches in just a few hours resulted in flash flooding across the region. Roads and culverts were washed out. Numerous roads were water-covered and closed.	Although the county was impacted, the City of Olean did not report any damages.
November 17-26, 2014	Severe Winter Storm, Snowstorm, and Flooding (FEMA-DR-4204)	Yes	Lake effect snow resulted in heavy snowfall across the region.	Although the county was impacted, the City of Olean did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
July 14, 2015	Flash Flood	No	Numerous rounds of storms along a stationary cold front resulted in flash flooding. Damaging winds occurred in some areas of the county.	Although the county was impacted, the City of Olean did not report any damages.
March 8, 2017	High Wind	No	A strong low pressure system brought strong and damaging winds to the entire region.	Some property damage from trees resulting in \$2,000 in damage

Notes:

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

### 9.31.6 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 City of Olean’s risk assessment results and data used to determine the hazard ranking.

A gradient of certainty was developed to summarize the confidence level regarding the input used to populate the hazard ranking. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and create increased understanding of the data used to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.
- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.

### Hazard Ranking

This section provides 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 (Risk Assessment) 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 jurisdiction may have differing degrees of risk exposure and vulnerability compared to Cattaraugus 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 City of Olean. The City of Olean 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 City of Olean indicated the following:

- The City of Olean decided to change flood, severe storm, and severe winter storm from low to high based on previous hazard events.

Table 9.31-12. Hazard Ranking Input

Flood*	Landslide	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
High	Low	High	High	High	Low

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

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

### Critical Facilities

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 states 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 2’ 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 event, or worst damage scenario. For those that do not meet this criterion, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-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 9.31-13. Potential Flood Losses to Critical Facilities

Name	Type	Exposure	Addressed by Proposed Action
		1% Event	
National Grid	Electric/power	X	2020-City of Olean-002
City of Olean- M13 Well House	HAZMAT	X	2020-City of Olean-003
City of Olean- Well Site	Potable Water	X	2020- City of Olean-004

Source: Cattaraugus County 2020

### Identified Issues

The city has identified the following vulnerabilities within their community:

- There are flooding and waterflow issues within the city.
- The National Grid facility is in the special flood area and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- City of Olean- M13 Well House is in the special flood area and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The City of Olean- Well Site is in the special flood area and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- Waterline on Washington St is outdated and undersized.
- Levees in the city are outdated.





- South of Allegany River in city limits is isolated from the rest of the community and not protected by levees. City water tanks are also across the river in south Olean.
- The City of Olean lacks an updated flood damage prevention ordinance.
- Floodplain administration staff require additional training.
- Additional public education on wildfire risk is needed .
- Lack of backup power for City Streets Garage on 701 Barry Street, John Ash Community Center on 112 N Barry Street, and Olean Recreation Center at 551 E State Street.
- Culverts require upgrade on Front St at Johnson Brook, Seven Ave at Kings Brook.
- Erosion occurs at Two Mile Creek- Edgewood Avenue to Homer Street (property damage).
- Erosion occurs at Kings Brook- Brook St to Seneca Avenue, threatening properties.
- Properties in the floodplain: E Riverside Dr 10-20 homes, York Street, north end 10-20 residential, W River Rd, north of street 10-20 homes.
- The following facilities are exposed to wildfire: South Olean water tanks, Stardust Water Tank, Sewage Treatment Plant, Pines and Eden Heights due to life hazards, as well as high dollar properties.
- The following facilities are exposed to landslide: South Olean water tanks, Stardust Water Tank, Sewage Treatment Plant, Pines and Eden Heights due to life hazards, as well as high dollar properties.
- The Fire department lacks a Wildfire and Flood Rescue Pickup Truck.
- The Fire department requires more training and equipment for the hazards they face.
- The city barn salt garage needs replaced.
- The city's wireless network needs upgrade.

### 9.31.7 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 2014 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 9.31-14. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost		
B2.30	Hydraulic study of under drains city-wide	Flood	City	Outdated drain infrastructure throughout the city	No progress			1. Include in 2020 HMP, as Action 2020-City of Olean-001 2. 3.



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

The City of Olean has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2014 Plan:

- Not identified

### Proposed Hazard Mitigation Initiatives for the Plan Update

The City of Olean participated in a mitigation action workshop in September 2020 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 9.31-15 summarizes the comprehensive range of specific mitigation initiatives the City of Olean 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 9.31-16 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2020-City of Olean-001	Hydraulic study of under drains city-wide	1,3	Flood	<p><b>Problem:</b> There is flooding and waterflow issues within the city</p> <p><b>Solution:</b> Encourage FEMA to conduct hydrologic and hydraulic analysis to study existing flooding and waterflow concerns in the city. Then the city will install appropriate drainage infrastructure</p>	No	None	Within 1 year	City Board	Staff time	Flooding and waterflow issues identified and able to be resolved/mitigated	Municipal budget	High	SIP	SP
2020-City of Olean-002	Work with National Grid Facility owner to protect the facility to the 0.2% annual chance flood event	1	Flood	<p><b>Problem:</b> The National Grid facility is in the special flood area and vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.</p> <p><b>Solution:</b> The city will contact facility manager at National Grid to discuss options to protect the facility to the 0.2% annual chance flood event</p>	Yes	None	Within 6 months	FPA	<\$100	Facility can continue operations and emergency coordination is established	Operating Budget	Med.	EAP	PI
2020-City of Olean-003	Protect City of Olean- M13 Well House to the 0.2% annual chance flood event	1	Flood	<p><b>Problem:</b> City of Olean- M13 Well House is in the special flood area and vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.</p> <p><b>Solution:</b> The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the M13 Well House to protect it to the 0.2% annual chance</p>	Yes	None	Within 5 years	Engineer, Facility Manager	TBD by feasibility assessment	Ensures continuity of operations of M13 Well House	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG, city budget	High	SIP	PP





Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				flood level. Options include: <ul style="list-style-type: none"> <li>•Elevation of facility</li> <li>•Floodproofing of facility</li> <li>•Mobile flood barriers</li> </ul> Once the most cost-effective option is identified, the city will carry out the option.										
2020-City of Olean-004	Protect City of Olean- Well Site to the 0.2% annual chance flood event	1	Flood	<p><b>Problem:</b> The City of Olean- Well Site is in the special flood area and vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.</p> <p><b>Solution:</b> The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Well Site to protect it to the 0.2% annual chance flood level. Options include:  <ul style="list-style-type: none"> <li>•Elevation of facility</li> <li>•Floodproofing of facility</li> <li>•Mobile flood barriers</li> </ul>           Once the most cost-effective option is identified, the city will carry out the option.</p>	Yes	None	Within 5 years	Engineer, Facility Manager	TBD by feasibility assessment	Ensures continuity of operations of Well Site	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG, city budget	High	SIP	PP
2020-City of Olean-005	Water distribution system improvements	2	Utility Failure	<p><b>Problem:</b> Waterline on Washington St is outdated and undersized and needs to be replaced. Existing lines often break due to extreme cold events, resulting in constant leaks and the need to replace lines.</p>	No	None	3 years	City of Olean	\$100,000	Water supply system updated and improved	HMGP, CDBG, City budget	High	SIP	SP





Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<b>Solution:</b> The city will work with the county to replace the waterline with a 4000' waterline on Washington St.										
2020-City of Olean-006	Levees in the city need to be improved	2	Flood, Severe Storm	<b>Problem:</b> Levees in the city are outdated. <b>Solution:</b> Conduct an engineering study to determine what needs updated and then the city will conduct the levee improvements.	No	None	Within 5 years	NYSDEC	\$15,000	Reduction in stormwater flooding	HMGP, BRIC, CDBG, City budget	Med.	SIP	SP
2020-City of Olean-007	Conduct a feasibility study to identify best actions to prevent flooding south of Allegany River	2	Flood, Severe Storm	<b>Problem:</b> South of Allegany River in city limits is isolated from the rest of the community and not protected by levees. City water tanks are also across the river in south Olean. <b>Solution:</b> Conduct a feasibility study south of Allegany River to see if levees would be beneficial.	No	None	Within 5 years	Engineer	\$25,000	Potential reduction in stormwater flooding	HMGP, BRIC, CDBG, City budget	Med.	LPR, SIP	SP
2020-City of Olean-008	Update Flood Damage Prevention Ordinance	2	Flood	<b>Problem:</b> City of Olean lacks an updated flood damage prevention ordinance <b>Solution:</b> The city will update the flood damage prevention ordinance	No	None	Within 6 months	City board	<\$100	Meet NFIP requirements, buildings built to a higher standard.	City budget	High	LPR	PR
2020-City of Olean-009	Floodplain Administrator to attend training on floodplain management	3	Flood	<b>Problem:</b> Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.	No	None	Within 5 years	Cattaraugus County Emergency Management/Cattaraugus County	\$3,000	Certified floodplain managers trained Floodplain management improved.	County budget	High	SIP	PR





Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<b>Solution:</b> Obtain/host training and certification for floodplain managers				Codes Department						
2020-City of Olean-010	Provide information to residents, business owners, and organizations about what they can do to prevent their structures from wildfires.	3	Wildfires	<p><b>Problem:</b> Additional public education on wildfire risk is needed</p> <p><b>Solution:</b> the city will develop an outreach program to educate the public about wildfires and what they can do to protect their structures.</p>	No	None	1 year	City board	\$4,000	Public educated and better prepared and protected from hazards	City budget	High	EAP	PI
2020-City of Olean-011	Generators for City Streets Garage, John Ash Community Center, and Olean Recreation Center	2	All Hazards	<p><b>Problem:</b> Lack of backup power for City Streets Garage on 701 Barry St, John Ash Community Center on 112 N Barry St, and Olean Recreation Center at 551 E State St.</p> <p><b>Solution:</b> Purchase and install generators for City Streets Garage, John Ash Community Center, and Olean Recreation Center.</p>	No	None	6 months	City, DPW	\$80,000-90,000 per generator	Facilities will have access to backup power in the event they lose power during a storm	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG, Municipal Budget	High	SIP	PP
2020-City of Olean-012	Culverts on Front St at Johnson Brook	2	Flood, Severe Storm	<b>Problem:</b> Built in the 1930's, this culvert is undermined, deteriorating, and undersized. The culvert is at risk of failing and at risk of overtopping in the event of flood waters. Front St is a busy street and one of the two routes from east Olean to West Olean. Front Street is likely to be an evacuation route if east Olean were to be evacuated due to	No	None	3 years	City DPW	\$485,000	Properly sized culverts installed to prevent road flooding	Bridge New York-NYS DOT	High	SIP	SP





Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				flooding or another hazard. <b>Solution:</b> Remove existing culvert and replace with a new culvert roughly 1.5 times the culvert opening size. The new culvert would be a box culvert and while the new culvert is installed, Johnson Brook would undergo erosion control along the banks immediately adjacent to the culvert opening.										
2020-City of Olean-013	Identify projects to prevent further erosion occurring at Two Mile Creek- Edgewood Ave to Homer Street and Kings Brook- Brook St to Seneca Ave	2	Flood, Severe Storm	<b>Problem:</b> Erosion occurring at Two Mile Creek- Edgewood Ave to Homer Street (property damage) and erosion occurring at Kings Brook- Brook St to Seneca Ave threatening properties <b>Solution:</b> Conduct feasibility study to determine best action to prevent further erosion at Two Mile Creek and Kings Brook and implement identified actions.	No	None	Within 5 years	Highway Department, City	TBD on project selected from study	Two Mile Creek and Kings Brook protected from erosion	HMGP, BRIC	High	NSP	NR
2020-City of Olean-014	Potential acquisition/elevation projects for E Riverside Dr, York Street, and W River Rd	2	Flood, Severe Storm	<b>Problem:</b> E Riverside Dr 10-20 homes, York Street, north end 10-20 residential, W River Rd, north of street 10-20 homes prone to flooding <b>Solution:</b> Conduct an engineering study to determine best action	No	None	Within 5 years	City of Olean	TBD on engineering study	Residences protected from flooding	HMGP, CBDG, BRIC	High	SIP	PP



Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				(elevation, buyout) to protect homes from flooding. Then the city will implement best action										
2020-City of Olean-015	Update the Emergency Operations Plan.	2	All Hazards	<p><b>Problem:</b> The city has an outdated Emergency Operations Plan</p> <p><b>Solution:</b> The city will update the city's Emergency Operation Plan to include current hazards identified in the Hazard Mitigation Plan.</p>	No	None	Within 1 year	County, city	<\$100	EOPs updated	Municipal budget	High	LPR	ES
2020-City of Olean-016	Update Building Code	2	All Hazards	<p><b>Problem:</b> Building codes in the city are outdated</p> <p><b>Solution:</b> The city will update building codes so buildings are built to withstand hazards they face.</p>	No	None	Within 1 year	County, city	<\$100	Building Codes to provide standards to protect buildings from hazards	Municipal Budget	High	LPR	PP
2020-City of Olean-017	Assess the site-specific vegetation conditions and determine necessary mitigation measures to protect critical facilities from wildfire	2	Wildfire	<p><b>Problem:</b> South Olean water tanks, Stardust Water Tank, Sewage Treatment Plant, Pines and Eden Heights, as well as high dollar properties are potentially exposed to wildfires</p> <p><b>Solution:</b> Assess the site-specific vegetation conditions and determine necessary mitigation measures to protect South Olean water tanks, Stardust Water Tank, Sewage Treatment Plant, Pines and Eden Heights, as well as high dollar properties from wildfires.</p>	Yes	None	Within 1 year	City, Fire Dept, Facility owners	<\$100 for outreach	Critical facilities protected from wildfires	Municipal Budget	Med.	LPR	PP



Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2020-City of Olean-018	Assess the site-specific slope conditions and determine necessary mitigation measures to protect the facilities from landslide	2	Landslide	<p><b>Problem:</b> South Olean water tanks, Stardust Water Tank, Sewage Treatment Plant, Pines and Eden Heights, as well as high dollar properties are potentially exposed to landslides</p> <p><b>Solution:</b> Assess the site-specific slope conditions and determine necessary mitigation measures to protect South Olean water tanks, Stardust Water Tank, Sewage Treatment Plant, Pines and Eden Heights, as well as high dollar properties from landslides</p>	Yes	None	Within 1 year	City, facility owners	TBD on project	Critical facilities protected from landslides	Municipal Budget	Med.	LPR	PP
2020-City of Olean-019	Purchase a Wildfire and Flood Rescue Pickup Truck	2	Wildfire, Flood	<p><b>Problem:</b> No heavy-duty pickup truck with Wildfire Capability during that season while being utilized as a Support vehicle the rest of the year. The city has a vehicle that is at the end of its service life and is essential to these types of operations.</p> <p><b>Solution:</b> Purchase a ¾ or 1-ton crew cab pickup truck. The truck will have a skid unit that will be installed during wildfire season and rescue cap with rollout ray rescue operations the rest of the season. The vehicle would respond to incidents and also have towing capability to deliver</p>	Yes	None	1 year	Fire Department	\$100,000	Adequate equipment to deal with brush fires and flooding	HMGP, Municipal Budget, Assistance to Firefighter's Grant	High	SIP	ES





Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				trailers, boats ,and personnel to the scene of an incident										
2020-City of Olean-020	City Garage Salt Barn	2	Severe storm, Severe winter storm	<p><b>Problem:</b> The storage facility for road salt is located at the City Garage site where preparation for plowing and salting operations take place. The salt barn structure was built in 1910 and the overall condition of the building is poor. The building is not repairable and should be replaced.</p> <p><b>Solution:</b> Conduct an engineering study to design a new and efficient salt barn. The city will then demolish existing salt barn and replace with hybrid-canvas salt storage building on same site.</p>	Yes	No	2-3 years	City DPW	\$60,000	Loss of salt investment, safety of streets/ sidewalks	HMGP, municipal budget	High	SIP	PR, ES
2020-City of Olean-021	Wireless WAN Tower	2	Severe winter storm, Severe storm, Utility failure	<p><b>Problem:</b> the city's wireless wide area network which provides phone communication and internet connectivity to all our facilities except the Olean Municipal building is housed on top of a private building and does not have backup power on site. Loss of power of the private building results in losses of phone and internet communication in the buildings and requires 24-hour staffing of water and wastewater</p>	Yes	No	1-2 years	City DPW	\$100,000	Loss of communication, 24-hr staffing	HMGP	High	SIP	ES





Table 9.31-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>departments when communications go down.</p> <p><b>Solution:</b> Decommission existing wireless communication equipment, relocate to city property at the water reservoir site in South Olean with new communication equipment and backup power either through generator or solar backup.</p>										
2020-City of Olean-022	City of Olean Fire Department Flood Preparedness	2	Flood, Severe storm	<p><b>Problem:</b> The City of Olean Fire Department is under-equipped to handle medium to large scale flooding incident with entrapment or people in the water. Costs with training, equipment, and maintaining technical skills is an issue.</p> <p><b>Solution:</b> Increase members trained and equipped to mitigate and respond to this issue by having a third to half of all members trained at the Swiftwater/Flood Rescue Technician level as well as equipping them with the appropriate level of PPE.</p>	No	None	2 years	Fire Department	\$60,000	Life safety	Grants, city budget	High	EAP	ES

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







Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
Med.	Medium
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
BRIC	Building Resilient Infrastructure and Communities

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.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

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



Table 9.31-16. 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 Objectives	Total	High / Medium / Low
2020-City of Olean-001	Hydraulic study of under drains city-wide	0	1	1	1	1	1	1	0	1	1	1	0	0	0	9	High
2020-City of Olean-002	Protect National Grid Facility to the 0.2% annual chance flood event	0	1	0	1	1	0	1	1	1	0	0	0	1	1	8	Medium
2020-City of Olean-003	Protect City of Olean-M13 Well House to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2020-City of Olean-004	Protect City of Olean-Well Site to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2020-City of Olean-005	Water distribution system improvements	1	1	0	1	1	1	0	1	1	1	1	1	0	0	10	High
2020-City of Olean-006	Levees in the city need to be improved	1	1	0	1	1	1	0	1	1	1	0	0	0	0	8	Medium
2020-City of Olean-007	Conduct a feasibility study to identify best actions to prevent flooding south of Allegany River	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-City of Olean-008	Update Flood Damage Prevention Ordinance	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2020-City of Olean-009	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2020-City of Olean-010	Provide information to residents, business owners, and organizations about what they can do to prevent their structures from wildfires.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High



Table 9.31-16. 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 Objectives	Total	High / Medium / Low
2020-City of Olean-011	Generators for City Streets Garage, John Ash Community Center, and Olean Recreation Center	1	1	1	1	1	1	0	0	1	1	1	1	1	0	11	High
2020-City of Olean-012	Culverts on Front St at Johnson Brook	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-City of Olean-013	Identify projects to prevent further erosion occurring at Two Mile Creek- Edgewood Ave to Homer Street and Kings Brook- Brook St to Seneca Ave	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-City of Olean-014	Potential acquisition/elevation projects for E Riverside Dr, York Street, and W River Rd	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-City of Olean-015	Update the Emergency Operations Plan.	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2020-City of Olean-016	Update Building Code	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2020-City of Olean-017	Assess the site-specific vegetation conditions and determine necessary mitigation measures to protect critical facilities from wildfire	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2020-City of Olean-018	Assess the site-specific slope conditions and determine necessary mitigation measures to protect the facilities from landslide	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High



Table 9.31-16. 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 Objectives	Total	High / Medium / Low
2020-City of Olean-019	Purchase a Wildfire and Flood Rescue Pickup Truck	1	1	0	1	1	1	0	1	1	1	1	1	1	0	11	High
2020-City of Olean-020	City Garage Salt Barn	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2020-City of Olean-021	Wireless WAN Tower	1	1	1	1	0	1	0	0	1	1	1	1	1	0	9	High
2020-City of Olean-022	City of Olean Fire Department Flood Preparedness	1	1	1	0	1	1	0	1	1	1	1	0	1	0	10	High

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



### 9.31.8 Proposed Mitigation Action Types

The table below indicates the range of proposed mitigation action categories.

Table 9.31-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Flood	X	X		X	X	X			X	X
Landslide	X	X		X	X	X				X
Severe Storm	X	X				X			X	X
Severe Winter Storm	X	X				X			X	X
Utility Failure	X	X				X				X
Wildfire	X	X		X		X	X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

### 9.31.9 Staff and Local Stakeholder Involvement in Annex Development

The City of Olean 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 city departments, including: the Public Works Director. The Public Works Director represented the community on the Cattaraugus 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).

### 9.31.10 Hazard Area Extent and Location

Hazards area extent and location maps have been generated for the City of Olean that illustrates 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 is considered to be adequate for planning purposes. The maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the City of Olean has significant exposure. The maps are illustrated below.



Figure 9.31-1. City of Olean Hazard Area Extent and Location Map 1

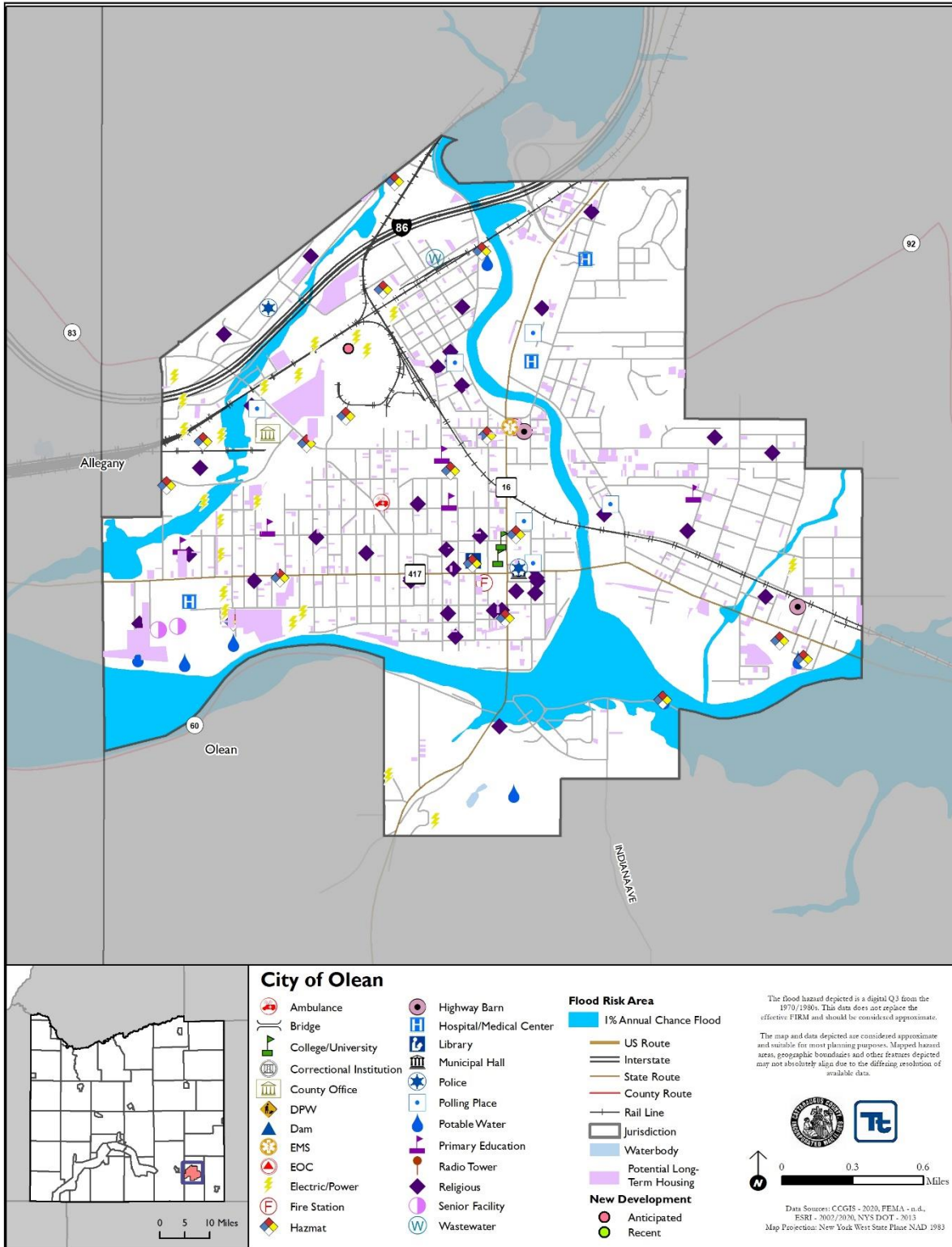
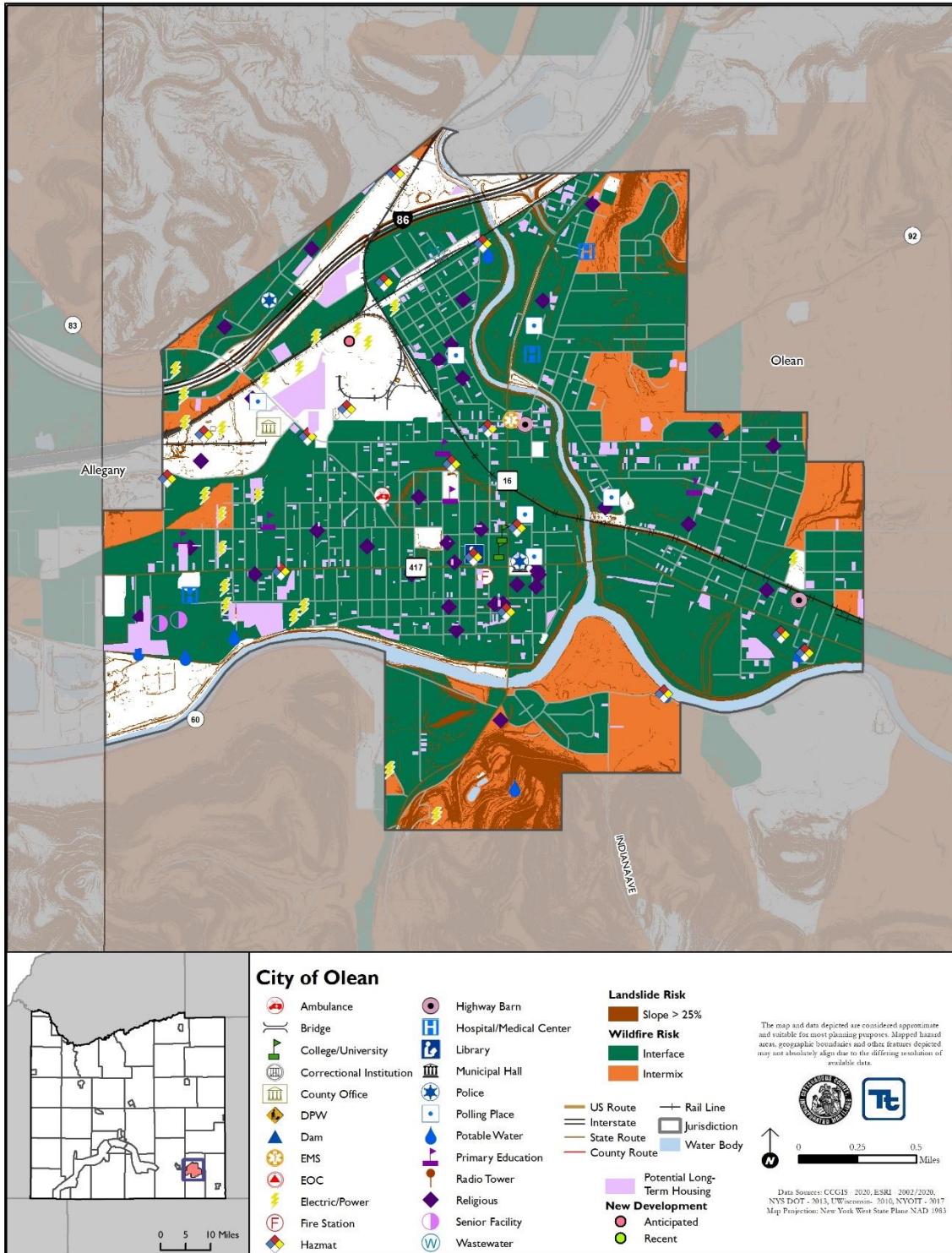




Figure 9.31-2. City of Olean Hazard Area Extent and Location Map 2





City of Olean Action Worksheet			
<b>Project Name:</b>	Protect City of Olean- M13 Well House to the 0.2% annual chance flood event		
<b>Project Number:</b>	2020-City of Olean-003		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood		
<b>Description of the Problem:</b>	City of Olean- M13 Well House is in the special flood area and vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	<p>The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the M13 Well House to protect it to the 0.2% annual chance flood level. Options include:</p> <ul style="list-style-type: none"> <li>•Elevation of facility</li> <li>•Floodproofing of facility</li> <li>•Mobile flood barriers</li> </ul> <p>Once the most cost-effective option is identified, the city will carry out the option.</p>		
<b>Is this project related to a Critical Facility?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the Special Flood Hazard Area?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 0.2%-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	0.2% annual chance flood event	<b>Estimated Benefits (losses avoided):</b>	Ensures continuity of operations of M13 Well House
<b>Useful Life:</b>	TBD by feasibility assessment	<b>Goals Met:</b>	1
<b>Estimated Cost:</b>	TBD by feasibility assessment	<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>	1 year	<b>Potential Funding Sources:</b>	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, city budget
<b>Responsible Organization:</b>	Engineer, Facility Manager	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Relocate M13 Well House	N/A	Not possible
	Build levee around facility	N/A	No space for full levee system
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>	Protect City of Olean- M13 Well House to the 0.2% annual chance flood event	
<b>Project Number:</b>	2020-City of Olean-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of M13 Well House
Property Protection	1	Project will protect the M13 Well House from flood damage.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Within 5 years
Agency Champion	1	Engineer, Facility manager
Other Community Objectives	1	Protection of critical services
<b>Total</b>	11	
<b>Priority (High/Med/Low)</b>	High	



City of Olean Action Worksheet			
<b>Project Name:</b>	Protect City of Olean- Well Site to the 0.2% annual chance flood event		
<b>Project Number:</b>	2020-City of Olean-004		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood		
<b>Description of the Problem:</b>	The City of Olean- Well Site is in the special flood area and vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	<p>The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Well Site to protect it to the 0.2% annual chance flood level.</p> <p>Options include:</p> <ul style="list-style-type: none"> <li>•Elevation of facility</li> <li>•Floodproofing of facility</li> <li>•Mobile flood barriers</li> </ul> <p>Once the most cost-effective option is identified, the city will carry out the option</p>		
<b>Is this project related to a Critical Facility?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the Special Flood Hazard Area?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 0.2%-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	0.2% annual chance flood event	<b>Estimated Benefits (losses avoided):</b>	Ensures continuity of operations of Well Site
<b>Useful Life:</b>	TBD by feasibility assessment	<b>Goals Met:</b>	1
<b>Estimated Cost:</b>	TBD by feasibility assessment	<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>	1 year	<b>Potential Funding Sources:</b>	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, city budget
<b>Responsible Organization:</b>	Engineer, Facility Manager	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Relocate Well Site	N/A	Not possible
	Build levee around facility	N/A	No space for full levee system
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>	Protect City of Olean- Well Site to the 0.2% annual chance flood event	
<b>Project Number:</b>	2020-City of Olean-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of Well Site
Property Protection	1	Project will protect the Well Site from flood damage.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Within 5 years
Agency Champion	1	Engineer, Facility manager
Other Community Objectives	1	Protection of critical services
<b>Total</b>	11	
<b>Priority (High/Med/Low)</b>	High	



City of Olean Action Worksheet			
<b>Project Name:</b>	Generators for City Streets Garage, John Ash Community Center, and Olean Recreation Center		
<b>Project Number:</b>	2020-City of Olean-011		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	All Hazards		
<b>Description of the Problem:</b>	Lack of backup power for City Streets Garage on 701 Barry St, John Ash Community Center on 112 N Barry St, and Olean Recreation Center at 551 E State St is a major concern. The city Streets Garage is where all the City's fleet vehicles are maintained, including emergency vehicles and plows. The Josh Ash Community Center is used as temporary housing and a warming area in the event of an emergency. The Olean Recreation Center is the largest building used as temporary housing.		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	Purchase and install generators for City Streets Garage, John Ash Community Center, and Olean Recreation Center.		
<b>Is this project related to a Critical Facility?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the Special Flood Hazard Area?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 0.2% year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	Backup power	<b>Estimated Benefits (losses avoided):</b>	Facilities will have access to backup power in the event they lose power during a storm
<b>Useful Life:</b>	20 years	<b>Goals Met:</b>	2
<b>Estimated Cost:</b>	\$80,000-\$90,000 per generator	<b>Mitigation Action Type:</b>	Structure and Infrastructure Project
<b>Plan for Implementation</b>			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 1-2 years
<b>Estimated Time Required for Project Implementation:</b>	3 months	<b>Potential Funding Sources:</b>	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
<b>Responsible Organization:</b>	City DPW	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation
<b>Three Alternatives Considered (including No Action)</b>			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
<b>Progress Report (for plan maintenance)</b>			
<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>	Generators for City Streets Garage, John Ash Community Center, and Olean Recreation Center	
<b>Project Number:</b>	2020-City of Olean-011	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of facilities
Property Protection	1	Project will protect facilities from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	1-2 years
Agency Champion	1	City DPW
Other Community Objectives	0	
<b>Total</b>	11	
<b>Priority (High/Med/Low)</b>	High	



City of Olean Action Worksheet			
<b>Project Name:</b>	Culverts on Front St at Johnson Brook		
<b>Project Number:</b>	2020-City of Olean-012		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm		
<b>Description of the Problem:</b>	Built in the 1930's, the culvert is undermined, deteriorating, and undersized. The culvert is at risk of failing and at risk of overtopping in the event of flood waters. Front St is a busy street and one of the routes from east Olean to West Olean. Front St is likely to be an evacuation route if East Olean were to be evacuated due to flooding or another hazard.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	Remove the existing culvert and replace with a new culvert roughly 1.5 times the culvert opening size. The new culvert would be a box culvert, while the new culvert is installed, Johnson Brook would undergo erosion control along the banks immediately adjacent to the culvert opening.		
<b>Is this project related to a Critical Facility?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input checked="" type="checkbox"/>	No <input 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>	N/A	<b>Estimated Benefits (losses avoided):</b>	Properly sized culverts installed to prevent road flooding
<b>Useful Life:</b>	50 years	<b>Goals Met:</b>	2
<b>Estimated Cost:</b>	\$465,000	<b>Mitigation Action Type:</b>	Structure and Infrastructure
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 3 years
<b>Estimated Time Required for Project Implementation:</b>	18 months	<b>Potential Funding Sources:</b>	Bridge New York-NYSDOT
<b>Responsible Organization:</b>	City DPW	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Remove road	\$20,000	Roadway cannot be removed
	Relocate road to another location	\$50,000	Roadway will still need to cross stream, costly
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>	Culverts on Front St at Johnson Brook	
<b>Project Number:</b>	2020-City of Olean-012	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Road will not be hazardous to drive on
Property Protection	1	Project will protect roadway from flooding, culvert damages
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Flood
Timeline	0	Within 3 years
Agency Champion	1	City DPW
Other Community Objectives	1	
<b>Total</b>	12	
<b>Priority (High/Med/Low)</b>	High	



City of Olean Action Worksheet			
<b>Project Name:</b>	Purchase a Wildfire and Flood Rescue Pickup Truck		
<b>Project Number:</b>	2020-City of Olean-019		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Wildfire, flood		
<b>Description of the Problem:</b>	The City of Olen Fire Department is in need of a Heavy-Duty pickup truck with Wildfire Capability during that season, while being utilized as a Support Vehicle the rest of the year. Presently, they have a vehicle that is at the end of its service life and is essential to these types of operations.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	Purchase a ¾ or 1-ton crew cab pickup truck that would fit these roles. The truck would have a skid unit that would be installed during wildfire season and rescue cap with rollout ray for rescue operations the rest of the season. The vehicle would not only response to incident, but would have towing capability to deliver trailers, boats, and personnel to the scene of an incident.		
<b>Is this project related to a Critical Facility?</b>	Yes <input checked="" type="checkbox"/>	No <input 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>	N/A	<b>Estimated Benefits (losses avoided):</b>	Life safety, incident stabilization, property and environmental preservation
<b>Useful Life:</b>	10-15 years	<b>Goals Met:</b>	2
<b>Estimated Cost:</b>	\$75,000-100,000	<b>Mitigation Action Type:</b>	Structure and infrastructure
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 1 year
<b>Estimated Time Required for Project Implementation:</b>	2 weeks	<b>Potential Funding Sources:</b>	HMGP, city budget, Assistance to Firefighter's Grant
<b>Responsible Organization:</b>	City of Olean, Fire Department	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Mutual Aid	N/A	If city is affected, mutual air partners will be as well
	Share a vehicle with DPW/Water/Sewer Dept	\$75,000	Increase in wear and ear on the vehicle and not available when needed
Progress Report (for plan maintenance)			
<b>Date of Status Report:</b>	As of September 28, 2020, the Olean Fire Department has applied for the Assistance to Firefighter's Grant for the truck.		
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>	The city relies on Mutual Aid for wildfires if they cannot get to it with Fire Engines. They have a ½ ton that is used for towing the boat and small trailers but it does not have ground clearance that the new vehicle would have.		





Action Worksheet		
<b>Project Name:</b>	Purchase a Wildfire and Flood Rescue Pickup Truck	
<b>Project Number:</b>	2020-City of Olean-019	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will allow for Fire Department to conduct rescue missions
Property Protection	1	
Cost-Effectiveness	0	
Technical	1	
Political	1	
Legal	1	City has legal authority to complete project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Wildfire, flood
Timeline	1	Within 2 weeks
Agency Champion	1	Fire Department, City
Other Community Objectives	0	
<b>Total</b>	11	
<b>Priority (High/Med/Low)</b>	High	



City of Olean Action Worksheet			
<b>Project Name:</b>	City Garage Salt Barn		
<b>Project Number:</b>	2020-City of Olean-020		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Severe Winter storm, Severe Storm		
<b>Description of the Problem:</b>	The storage facility for road salt is located at the City Garage site where preparation for plowing and salting operations take place. The salt barn structure was built in 1910 and the overall condition of the building is poor. The building is not repairable and should be replaced.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	The city will demolish existing salt barn and replace with a structurally sound and weather-proof structure to protect the town salt supply for winter storm response on same site.		
<b>Is this project related to a Critical Facility?</b>	Yes <input checked="" type="checkbox"/>	No <input 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>	Structure to meet building code	<b>Estimated Benefits (losses avoided):</b>	Loss of salt investment mitigated, safety of streets/sidewalks
<b>Useful Life:</b>	20 years	<b>Goals Met:</b>	2
<b>Estimated Cost:</b>	\$60,000	<b>Mitigation Action Type:</b>	Structure and Infrastructure
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 2-3 years
<b>Estimated Time Required for Project Implementation:</b>	6 months	<b>Potential Funding Sources:</b>	HMGP, City budget
<b>Responsible Organization:</b>	City of Olean DPW	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Build salt barn in a new location	N/A	No problem with current location
	Make improvements not demolish	N/A	Building is beyond repair
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>	City Garage Salt Barn	
<b>Project Number:</b>	2020-City of Olean-020	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects continuity of services to keep roadways clear for safe travel and emergency response.
Property Protection	0	
Cost-Effectiveness	1	
Technical	1	The project is technically sound
Political	1	There is public support for the project
Legal	1	The city has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	Project will reduce chance of runoff and groundwater contamination
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Winter Storm
Timeline	1	Within 2-3 years
Agency Champion	1	City of Olean DPW
Other Community Objectives	1	Continuity of critical services
<b>Total</b>	12	
<b>Priority (High/Med/Low)</b>	High	



City of Olean Action Worksheet			
<b>Project Name:</b>	Wireless WAN Tower		
<b>Project Number:</b>	2020-City of Olean-021		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	Severe winter storm, Severe Storm		
<b>Description of the Problem:</b>	The city's wireless wide area network which provides phone communication and internet connectivity to all facilities except the Olean Municipal building is housed on top of a private building and does not have backup power on site. Loss of power of the private building results in losses of phone and internet communication in the buildings and requires 24 hour staffing of water and wastewater departments when communications go down. Yes		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	Decommission existing wireless communication equipment, relocate to city property at the water reservoir site in South Olean with new communication equipment and backup power through a generator.		
<b>Is this project related to a Critical Facility?</b>	Yes <input checked="" type="checkbox"/>	No <input 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>	N/A	<b>Estimated Benefits (losses avoided):</b>	No loss of communication, 24 hour staffing
<b>Useful Life:</b>	20 years	<b>Goals Met:</b>	2
<b>Estimated Cost:</b>	\$100,000	<b>Mitigation Action Type:</b>	Structure and Infrastructure
<b>Plan for Implementation</b>			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 1-2 years
<b>Estimated Time Required for Project Implementation:</b>	1 month	<b>Potential Funding Sources:</b>	Grants, city budget
<b>Responsible Organization:</b>	City DPW	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation
<b>Three Alternatives Considered (including No Action)</b>			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
<b>Progress Report (for plan maintenance)</b>			
<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>	Wireless WAN Tower	
<b>Project Number:</b>	2020-City of Olean-021	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of facilities
Property Protection	1	Project will protect facilities from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	The city has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Winter Storm, Severe Storm
Timeline	1	1-2 years
Agency Champion	1	City, DPW
Other Community Objectives	0	
<b>Total</b>	9	
<b>Priority (High/Med/Low)</b>	High	