



## 9.33 TOWN OF OTTO

This section presents the jurisdictional annex for the Town of Otto. 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 Otto’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.

### 9.33.1 Hazard Mitigation Planning Team

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

**Table 9.33-1. Hazard Mitigation Planning Team**

Primary Point of Contact	Alternate Point of Contact
Name/Title: Robert Barber, Superintendent of Highways Address: 8842 Otto-East Otto Rd, Cattaraugus, New York, 14719 Phone Number: 716-474-6746 Email: skeeterspete@aol.com	Name/Title: Ron Wasmund, Supervisor Address: 8842 Otto-East Otto Rd, Cattaraugus, New York, 14719 Phone Number: 716-397-3087 Email: ronwas@msn.com
NFIP Floodplain Administrator	
Name/Title: Jeff Hollar, Code Enforcement Officer Address: 8842 Otto-East Otto Rd, Cattaraugus, New York, 14719 Phone Number: 716-307-3069	

### 9.33.2 Municipal Profile

The Town of Otto lies in the northwest part of Cattaraugus County in western New York. The town has a total area of 41.6 square miles. It shares its northern border with Erie County, and is bordered to the east by the Town of East Otto, to the southeast by the Town of Mansfield, to the southwest by the Town of New Albion, and to the west by the Town of Persia. There is one hamlet, Otto, located within the Town of Otto. The South Branch Cattaraugus, Cattaraugus, and Mansfield Creeks flow through the town.

Data from the 2018 U.S. Census American Community Survey indicate that 7.9 percent of the town population is 5 years of age or younger and 17.2 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 Otto was settled in 1816 before being formed in 1823 from the Town of Perrysburg. It was named after Jacob Otto, an agent of the Holland Land Company.

### 9.33.3 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 9.33-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Figure 9.33-1 at the end of this



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

**Table 9.33-2. 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	1	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</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>										
None identified										
<b>Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years</b>										
None anticipated										

SFHA Special Flood Hazard Area (1% flood event)

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

### 9.33.4 Capability Assessment

The Town of Otto 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 9.33.4). The Town of Otto 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 Town of Otto and where hazard mitigation has been integrated.



Table 9.33-3. 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? If yes, add Mitigation Action #.	
<b>Codes, Ordinances, &amp; Requirements</b>							
Building Code	Yes	Building Code	Local	Town of Otto	Yes	Yes	-
Comment: The Building Code refers to the Zoning Code and Subdivision Code.							
Zoning Code	Yes	Zoning Code	Local	Town of Otto	No	Yes	-
Comment: The Zoning Code refers to the Building Code. It is the purpose of this law to promote the public health, safety and general welfare. Specifically, the purpose of this law is: <ol style="list-style-type: none"> <li>1. To retain the unique community character of the Town of Otto as a rural, agriculturally based community</li> <li>2. To secure safety for its residents from flood, fire and other dangers, both natural and man made.</li> <li>6. To facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements.</li> <li>8. To implement the broad guidelines contained in the document, Vision 2020, which has been adopted by the Town Board of the Town of Otto as a policy for future development of the Town through the year 2020.</li> </ol>							
Subdivisions	Yes	Subdivision Code	Local	Town of Otto	No	Yes	-
Comment: The Subdivision Code refers to the Zoning Code.							
Stormwater Management	No	-	-	-	Yes	-	-
Comment: None							
Post-Disaster Recovery	Yes	9/11/2006	Local	OEM	No	Yes	-
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	Yes	Growth Management	Local	Town of Otto	No	Yes	-
Comment: None							
Site Plan Review	Yes	Site Plan Review	Local	Town of Otto	No	Yes	-
Comment: None							
Environmental Protection	Yes	Environmental Protection	Local	Town of Otto	Yes	Yes	-
Comment: None							
Flood Damage Prevention	Yes	Flood Damage Prevention	Local	FPA	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	No	2020-Otto-009
Comment: None							
Municipal Separate Storm Sewer System (MS4)	Yes	Municipal Separate Storm Sewer System (MS4)	Local	Town of Otto	Yes	Yes	-
Comment: None							
Emergency Management	Yes	8/15/2006 EOP	Local	OEM	Yes	Yes	-



	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? If yes, add Mitigation Action #.	
Comment: None							
Climate Change	No	-	-	-	Yes	-	-
Comment: None							
Disaster Recovery Ordinance	Yes	8/15/2006 EOP	Local	OEM	No	Yes	-
Comment: None							
Disaster Reconstruction Ordinance	No	-	-	-	No	-	-
Comment: None							
Other	No	-	-	-	-	-	-
Comment: None							
<b>Planning Documents</b>							
Comprehensive Plan	Yes	EOP, County CEMP	Local	Local and County	No	Yes	-
Comment: None							
Capital Improvement Plan	Yes	Capital Improvement Plan	County	County	No	Yes	-
Comment: None							
Disaster Debris Management Plan	Yes	8/15/2006 EOP	Local and County	OEM	No	Yes	-
Comment: None							
Floodplain or Watershed Plan	Yes	LEWPA	County and State	County and State	No	Yes	-
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	No	-	-	-	No	-	-
Comment: None							
Shoreline Management Plan	No	-	-	-	Yes	-	-
Comment: None							
Community Wildfire Protection Plan	No	-	-	-	No	-	-
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? If yes, add Mitigation Action #.	
Forest Management Plan	No	-	-	-	No	-	-
Comment: None							
Transportation Plan	No	-	-	-	No	-	-
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	Yes	CEMP, 8/15/2006	County	OEM	Yes	No	2020-Otto-008
Comment: None							
Strategic Recovery Planning Report	No	-	-	-	-	-	-
Comment: None							
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	2012-CEPA 2018	County	OEM	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	County Health Department	No	Yes	-
Comment: None							
Other	No	-	-	-	No	-	-
Comment: None							

**Table 9.33-4. Development and Permitting Capability**

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes, Town of Otto Code Enforcement
Permits are tracked by hazard area. For example, floodplain development permits.	Yes, Town of Otto Zoning, Special Use Permits
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No, a buildable land analysis is noted in Section 4 (County Profile)





### Administrative and Technical Capability

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

**Table 9.33-5. Administrative and Technical Capabilities**

Resources	Available? (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	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Reverse 911, NY Alert, Everbridge
Maintenance programs to reduce risk	Yes	Local Highway Department
Mutual aid agreements	Yes	Cattaraugus County, NYSDOT
<b>Technical/Staffing Capability</b>		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Superintendent of Highways, Code Enforcement Officer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	No	Not local but county supplied
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-

### Fiscal Capability

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

**Table 9.33-6. 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 – Town Board
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	N/A
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No



Financial Resources	Accessible or Eligible to Use (Yes/No)
Other federal or state Funding Programs	Yes – CHIP’s, LEWPA
Open Space Acquisition funding programs	No
Other	Yes – LEWPA grants

### Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Otto.

**Table 9.33-7. Education and Outreach Capabilities**

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	Yes – Ronald Wasmund
Personnel skilled or trained in website development?	No
Hazard mitigation information available on your website; if yes, describe	No
Social media for hazard mitigation education and outreach; if yes, briefly describe.	No
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	No
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	No
Warning systems for hazard events; if yes, briefly describe.	Yes – Reverse 911, IPAWS, County Administrators
Natural disaster/safety programs in place for schools; if yes, briefly describe.	Yes – N/A
Other	No

### Community Classifications

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

**Table 9.33-8. 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)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
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.

Table 9.33-9. Adaptive Capacity

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

Jeff Hollar, Code Enforcement Officer

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

The Town of Otto does not maintain a list of property owners interested in flood mitigation. No RiskMap projects are currently underway in the town. Substantial Damage determinations are made by the Highway Superintendent, Town Supervisor, and Cattaraugus County Emergency Services. Highway infrastructure in the town has been mitigated after flood related disaster declarations.

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

Table 9.33-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
Town of Otto	0	0	\$0	0

Source: NYS DHSES 2020  
 Notes: RL Repetitive Loss

### Resources

The Code Enforcement Officer is responsible for floodplain administration in the Town of Otto. No certified floodplain managers are currently on the town’s staff. The town has access to resources from NYSDEC, FEMA, and the USACE to determine potential future flooding conditions due to climate change. Additional training for floodplain management staff would be welcomed by the town. NFIP administration services include Code CEO permitting, inspections, and citations.

### Compliance History

The FPA is unaware of any NFIP compliance issues in the Town. The Town of Otto’s most recent Community Assistance Contact took place on February 27, 2007. The Town has not had a Community Assistance Visit.







### Regulatory

The Town of Otto Zoning Board and Planning Board support floodplain management and the meeting of NFIP requirements. The Town does not participate in the Community Rating System program.

### Additional Areas of Existing Integration

**Town Website:** The town website (<http://www.ottony.org/default.html>) includes local announcements and government information.

### 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

Evacuation routes in the Town of Otto include County Route 12, County Route 11, County Route 13, County Route 68.

#### Sheltering

The Town of Otto has identified the following designated emergency shelter:

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Otto Fire Dept.	9099 Jark Road Cattaraugus, NY 14719	100	Yes	Yes	Yes	Volunteer EMTs	None

#### Temporary Housing

The Town of Otto has identified the following areas suitable for the placement of temporary housing for residents displaced by a disaster:

Site Name	Site Address	Infrastructure / Utilities Available (water, electric, septic, etc.)	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Lazy Acres	8625 Otto-Maples Road Cattaraugus, NY 14719	Water Electric Septic	30 units	Campground	Mutual Agreement with landowner
James Hill	8613 Otto-Maples Road Cattaraugus, NY 14719	Water Electric	100 Units	Vacant Farm Land/field	Mutual Agreement with landowner

#### Permanent Housing

The town has not identified suitable locations for the placement of permanent housing for structures located in the SFHA that may need to be relocated, or new properties that must be built once severely damaged properties





are demolished. A buildable land analysis is noted in Section 4 (County Profile). The Town of Otto will work with Cattaraugus County to identify regional locations for permanent housing (2020-Otto-012).

### 9.33.5 Hazard Event History Specific to the Town of Otto

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 Town of Otto’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 9.33-11 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 9.33-11. 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 Town of Otto did not report 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.	Severe flooding and culvert damages resulted in approximately \$2 million in infrastructure damages throughout the town
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 Town of Otto did not report damages.
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.	Minor flooding resulted in approximately \$3,500 in damages throughout the town
March 8, 2017	High Wind	No	A strong low pressure system brought strong and damaging winds to the entire region.	Downed trees across the roadway

Notes:

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

### 9.33.6 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 Town of Otto’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 Town of Otto. The Town of Otto 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 of Otto agreed with the calculated hazard rankings.

**Table 9.33-12. Hazard Ranking Input**

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

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

### 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 criteria, 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 9.33-13. Potential Flood Losses to Critical Facilities

Name	Type	Exposure 1% Event	Addressed by Proposed Action
Otto Fire Department	Fire Station	X	2020-Otto-001

Source: Cattaraugus County 2020

Identified Issues

The municipality has identified the following vulnerabilities within their community:

- North Otto Road in Zoar Valley continues to flood during heavy rain events. This is caused from farmers diversion ditch being full of sediments and trees allowing water to drain to the Cattaraugus Creek.
- The Colvin Road’s double culverts flood at times and need to be upgraded to a single arch culvert.
- The Scott Corners Road culvert at Wulf’s needs upgrade to a larger arch culvert.
- Skinner Hollow Road is exposed to landslide and continuous road repairs are necessary due to Cattaraugus Creek undermining the toe of the bank.
- Dunkleman Hill Road is exposed to landslide and continuous repairs are necessary due to Cattaraugus Creek eroding and dropping in elevation.
- Traffic Street double tubes need upgrade as the street floods over in heavy rain events.
- South Hill Road at Emke’s is exposed to landslide.
- The Town of Otto’s flood damage prevention ordinance requires update.
- Floodplain administration staff require additional training.
- Additional public education on wildfire risk is needed.
- The Town of Otto needs to identify locations for the placement of permanent housing.

9.33.7 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

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 9.33-14. 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		
B2.6	Replace repetitively damaged/undersized culvert in Town of Otto, Colvin Rd.	Flood	Debris buildup	Town	No Progress	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
B2.7	Replace repetitively damaged/undersized culvert in Town of Otto, Traffic St.	Flood	Rock-lined outlet, undersized, in need of replacement	Town	Ongoing Capability	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
B2.8	Replace repetitively damaged/undersized drainage pipe in Town of Otto on North Otto Rd on private property.	Flood	Drainage issue	Town	No Progress	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
B3.3	Stream Stabilization/diversion ditch in Town of Otto on North Otto Rd.	Flood		Town	Complete	Cost	\$340,000	1. Discontinue 2. 3. Completed in 2016
						Level of Protection	Headwalls poured, concrete tail walls; new culverts rock-lined for stream stabilization	
						Damages Avoided; Evidence of Success	Protected road condition & private property; reduced erosion	
B3.4		Flood		Town	Complete	Cost	\$550,000	1. Discontinue



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.
						Level of Protection	Se B3.3	
	Stream Stabilization/diversion ditch in Town of Otto on South Hill Rd.					Damages Avoided; Evidence of Success	Avoided flooding of hamlet of Otto, town's water and sewer system	2. 3. Complete
D2.4	Investigate possible changes to intersection of Dake Hill in Town of Otto.	Ice Storm	Intersection of Dake Hill & Gibson Hill; sight distance issues	Town	In Progress	Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. 3.
G1.10	Study slide conditions in the Town of Otto at Dunkleman Hill Rd.	Landslide	Contingent upon streambank work	Town	No Progress	Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. 3.



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

The Town of Otto 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:

- None identified

**Proposed Hazard Mitigation Initiatives for the Plan Update**

The Town of Otto 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 9.33-15 summarizes the comprehensive range of specific mitigation initiatives the Town of Otto 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 9.33-16 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.33-15. 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-Otto-001	Otto Fire Department Flood Protection	1	Flood	<p><b>Problem:</b> The Otto Fire Department is located in the Special Flood Hazard Area. Critical facilities must be protected to the 500-year flood level.</p> <p><b>Solution:</b> The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Fire Department to protect it to the 500-year 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 town will carry out the option.</p>	Yes 💧	None	Within 5 years	Engineer, Fire Dept	TBD by feasibility assessment	Ensures continuity of operations of Fire Department	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, EMPG, town budget	High	SIP	PP
2020-Otto-002	Culvert Upgrades	1	Flood, Severe Storm	<p><b>Problem:</b> The following culverts are at Traffic Street is undersized and needs to be replaced. Flooding occurs during heavy rain events.</p> <ul style="list-style-type: none"> <li>• Traffic Street at Harver Road</li> <li>• Scotts Corners Road at King Wolfs</li> <li>• Skinner Hollow Road</li> <li>• Gibson Hill Road (two locations)</li> <li>• Dake Hill at Gibson Hill Road</li> <li>• North Otto Road at Wickham Road</li> <li>• Wickham Road new North Otto Road</li> </ul> <p><b>Solution:</b> The town will replace and upsize the repetitively damaged/undersized culverts, following an engineering study to determine the appropriate size upgrades.</p>	No	None	Within 5 years	Engineer, Highway	\$10,000 per culvert	Reduction in culvert damages and flood risk	HMGP, BRIC, CHIPS, town budget	High	SIP	SP
	Salt and Sand Barn	1	Severe Storm,	<p><b>Problem:</b> The town requires a sand/salt structure to protect the salt</p>	Yes	None	Within 1 year		\$400,000	Continuity of road clearing	FEMA HMGP,	High	SIP	PP







Table 9.33-15. 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-Otto-003			Severe Winter Storm	and sand supplies from exposure to precipitation and runoff. The town currently does not have room to build a facility. <b>Solution:</b> The town will identify an appropriate property for a salt and sand barn and purchase the property. The Town Highway Department will then construct a salt sand barn with a structurally sound and weather-proof structure to protect the town salt and sand supply for winter storm response.				Administration, Highway Department		services in winter, reduction in runoff	BRIC, WQIP, USDA Community Facilities Grant Program, Municipal Budget			
2020-Otto-004	North Otto Road Drainage Pipe	1, 3	Flood, Severe Storm	<b>Problem:</b> The undersized drainage pipe on North Otto Road leads to drainage issues. The pipe is on private property. Flooding is caused from farmers diversion ditch being full of sediments and trees allowing water to drain to the Cattaraugus Creek. <b>Solution:</b> The town will advise the property owner of the best way to replace the repetitively damaged/undersized drainage pipe in Town of Otto on North Otto Rd on private property	No	None	Within 6 months	Engineer, FPA	Staff time	Property owner aware of mitigation actions to reduce flooding	Town budget	High	EAP	PI
2020-Otto-005	Sight Issues in Winter Storm Events	1	Winter Storm	<b>Problem:</b> Intersection of Dake Hill & Gibson Hill and Hebner Hill have sight distance issues which leads to dangerous conditions during winter storms. <b>Solution:</b> Investigate possible changes to intersection of Dake Hill in Town of Otto and Hebner Hill such as restructuring the roadways to reduce blind grade.	No	None	Within 5 years	Engineer	Medium	Reduction in accidents during winter storm events	CHIPS, town budget	High	SIP	PP
2020-Otto-006	Landslide Study	1, 3	Landslide	<b>Problem:</b> Landslide conditions exist at South Hill, Skinner Hollow, and Dunkleman Hill Rd.	No	None	Within 5 years	Engineer	Medium	Identification of landslide risk and	Town budget	High	LPR, NSP	PP, NR



Table 9.33-15. 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> Conduct landslide study to determine landslide risk and potential mitigation actions.						potential mitigation actions.				
2020-Otto-007	Town Hall Backup Power	1	All Hazards	<p><b>Problem:</b> Backup power sources are necessary to maintain critical services for critical facilities. The Town Hall lacks a permanent power source. The Town Hall location houses the Town Hall, Court, Clerk, and DPW.</p> <p><b>Solution:</b> The Town Engineer will research what size generator is necessary to supply backup power to the Town Hall. The town will then install a backup power generator and necessary electrical components.</p>	Yes	None	1 year	Engineer, OEM	\$50,000	Ensures continuity of operations of Town Hall	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, EMPG, Municipal Budget	High	SIP	ES
2020-Otto-008	Update Emergency Operations Plan	1, 3	All Hazards	<p><b>Problem:</b> The town's Emergency Operations Plan was last updated in 2006. The Plan requires updated.</p> <p><b>Solution:</b> The town will update the plan and include hazard mitigation integration concepts.</p>	No	None	Within 1 year	OEM	\$3,000	Updated plan with hazard mitigation integration	Town budget	High	LPR	ES
2020-Otto-009	Flood Damage Prevention Ordinance	1, 2	Flood	<p><b>Problem:</b> The Town of Otto's flood damage prevention ordinance requires update.</p> <p><b>Solution:</b> The town will adopt an updated flood damage prevention ordinance to maintain NFIP compliance.</p>	No	None	Within 6 months	FPA	Staff time	NFIP compliance	Town budget	High	LPR	PR
2020-Otto-010	FPA Training	3	Flood	<p><b>Problem:</b> Floodplain administration staff require additional training.</p> <p><b>Solution:</b> The Town FPA and staff who assist with floodplain administration will attend trainings and workshops offered by FEMA and NYS to develop additional floodplain administration skills.</p>	No	None	1 year	Administration	Staff time, potential attendance fees	Increased quality of floodplain administration	Town budget	High	LPR	PR
2020-Otto-011	Wildfire Outreach	3	Wildfire	<p><b>Problem:</b> Additional public education on wildfire risk is needed.</p> <p><b>Solution:</b> The town will conduct outreach to residents, business</p>	No	None	1 year	Administration	\$1,000	Increased wildfire awareness and personal	Town budget	High	EAP	PI





Table 9.33-15. 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
				owners, and organizations about what they can do to protect their structures from wildfires.						actions taken to mitigate risk				
2020-Otto-012	Identification of Permanent Housing Locations	1	All Hazards	<p><b>Problem:</b> The Town of Otto needs to identify locations for the placement of permanent housing.</p> <p><b>Solution:</b> The Town of Otto will work with Cattaraugus County to identify regional locations for permanent housing.</p>	No	None	Within 6 months	Administration	Staff time	Permanent housing locations identified	Town budget	High	LPR	ES
2020-Otto-013	North Otto Road	1	Flood	<p><b>Problem:</b> North Otto road experiences flooding which limits access and slows emergency response.</p> <p><b>Solution:</b> The town will elevate North Otto Road 3 feet to keep the roadway surface above potential flood levels.</p>	No	None	2 years	Highway Department	\$200,000	Reduction in flood frequency of North Otto Road, Access and emergency response maintained	HMGP, BRIC, CHIPS, town budget	High	SIP	PP

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
- 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 9.33-16. 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	Total	High / Medium / Low
2020-Otto-001	Otto Fire Department Flood Protection	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2020-Otto-002	Culvert Upgrades	0	1	1	1	1	1	0	1	1	1	1	0	1	1	11	High
2020-Otto-003	Traffic Street Culvert	1	0	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-Otto-004	North Otto Road Drainage Pipe	0	1	1	1	1	0	1	1	1	1	1	0	1	1	11	High
2020-Otto-005	Sight Issues in Winter Storm Events	1	0	1	0	1	1	0	1	1	1	0	0	1	1	9	High
2020-Otto-006	Landslide Study	1	1	0	1	1	1	0	1	1	1	0	0	1	1	10	High
2020-Otto-007	Town Hall Backup Power	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2020-Otto-008	Update Emergency Operations Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2020-Otto-009	Flood Damage Prevention Ordinance	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2020-Otto-010	FPA Training	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2020-Otto-011	Wildfire Outreach	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2020-Otto-012	Identification of Permanent Housing Locations	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2020-Otto-013	North Otto Road	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High

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



### 9.33.8 Proposed Mitigation Action Types

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

Table 9.33-17. 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	X
Landslide	X		X			X		X		X
Severe Storm	X	X		X		X	X		X	X
Severe Winter Storm	X	X				X				X
Utility Interruption	X									X
Wildfire	X			X			X			X

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

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

The Town of Otto 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: Superintendent of Highways, Supervisor, and Code Enforcement Officer. The Superintendent of Highways 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 (Meeting Documentation).

### 9.33.10 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Otto 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. The maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Otto has significant exposure. These maps are illustrated below.



Figure 9.33-1. Town of Otto Hazard Area Extent and Location Map 1

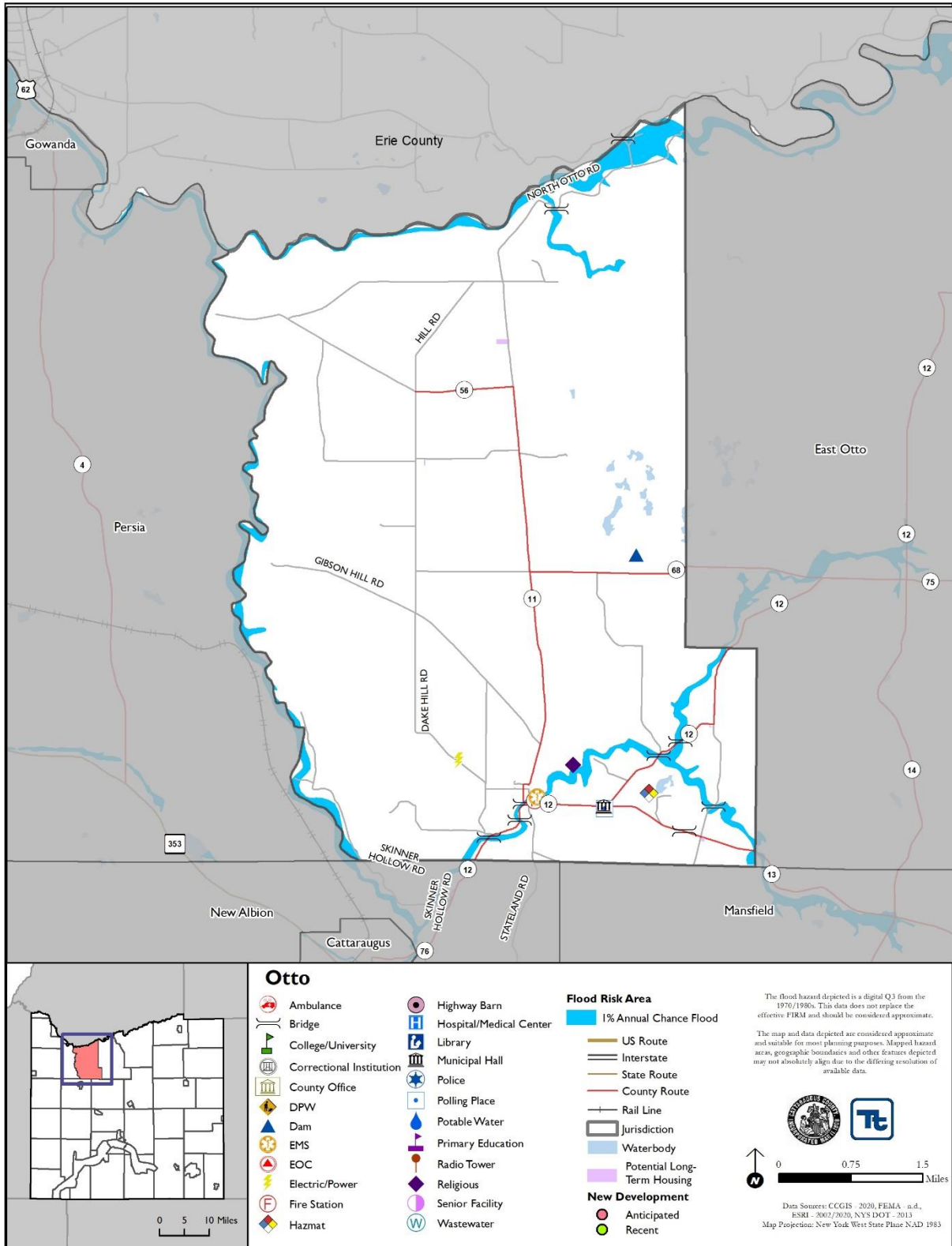
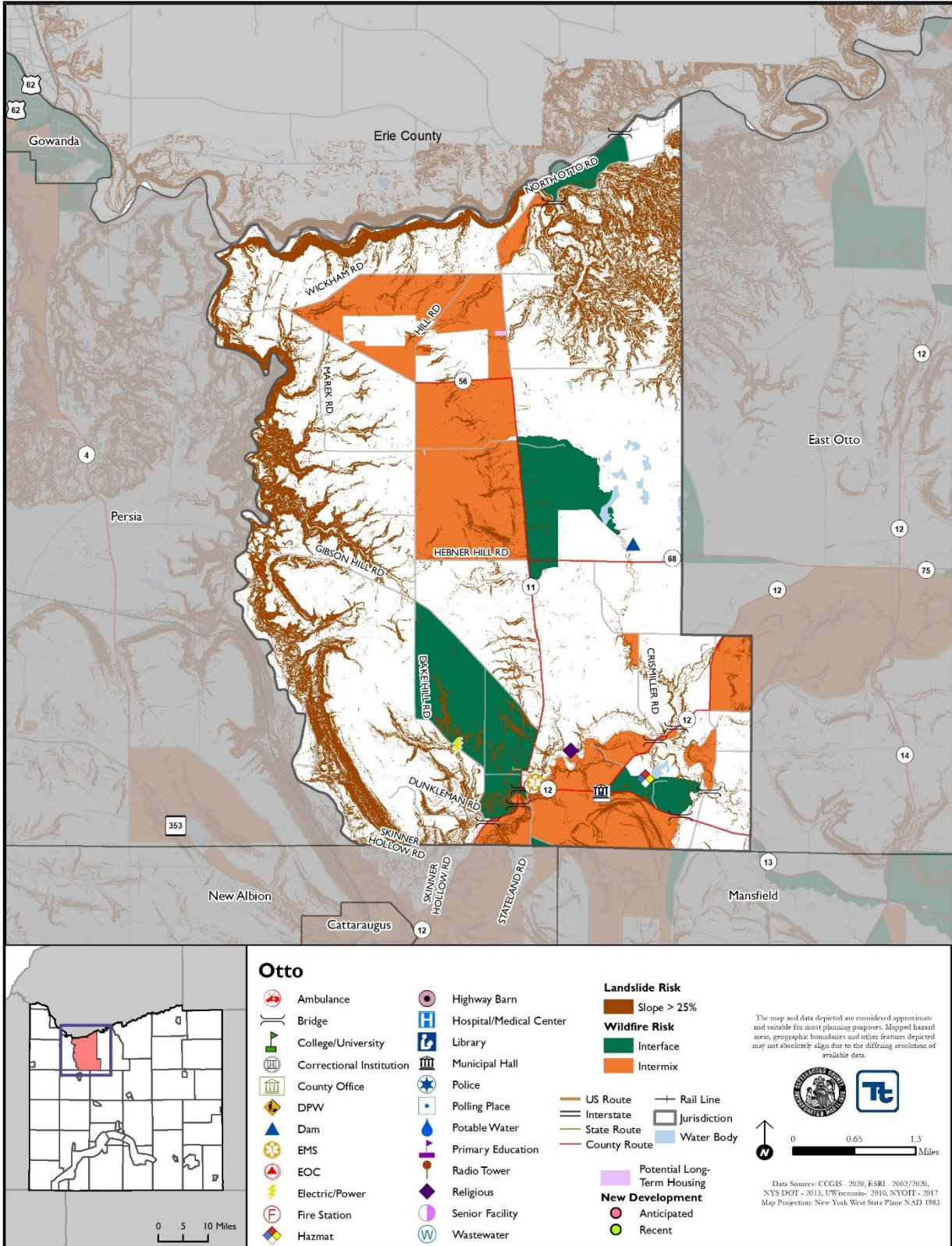




Figure 9.33-2. Town of Otto Hazard Area Extent and Location Map 2







Action Worksheet			
<b>Project Name:</b>	Otto Fire Department Flood Protection		
<b>Project Number:</b>	2020-Otto-001		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood		
<b>Description of the Problem:</b>	The Otto Fire Department is located in the Special Flood Hazard Area. Critical facilities need to be protected to the 500-year flood level.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	<p>The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Fire Department to protect it to the 500-year 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 town 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 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	500-year flood level	<b>Estimated Benefits (losses avoided):</b>	Ensures continuity of operations of Fire Department
<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 Projects (SIP)
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 and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget
<b>Responsible Organization:</b>	Engineer, Fire Department	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Relocate Fire Department	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>	Otto Fire Department Flood Protection	
<b>Project Number:</b>	2020-Otto-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of Fire Department
Property Protection	1	Project will protect Fire Department from flood damage.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town 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, Fire Department
Other Community Objectives	1	Protection of critical services
<b>Total</b>	11	
<b>Priority (High/Med/Low)</b>	High	



Action Worksheet			
<b>Project Name:</b>	Culvert Upgrades		
<b>Project Number:</b>	2020-Otto-002		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm		
<b>Description of the Problem:</b>	<p>The following culverts are at Traffic Street is undersized and needs to be replaced. Flooding occurs during heavy rain events.</p> <ul style="list-style-type: none"> <li>• Traffic Street at Harver Road</li> <li>• Scotts Corners Road at King Wolfs</li> <li>• Skinner Hollow Road</li> <li>• Gibson Hill Road (two locations)</li> <li>• Dake Hill at Gibson Hill Road</li> <li>• North Otto Road at Wikham Road</li> <li>• Wickham Road new North Otto Road</li> </ul>		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	The town will replace and upsize the repetitively damaged/undersized culverts, following an engineering study to determine the appropriate size upgrades.		
<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 Special Flood Hazard Area?</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>	At least a 5-year event; will be determined once project is complete	<b>Estimated Benefits (losses avoided):</b>	Reduction in culvert damages and flood risk
<b>Useful Life:</b>	30 years	<b>Goals Met:</b>	1
<b>Estimated Cost:</b>	\$10,000 per culvert	<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>	HMGP, BRIC, CHIPS, Town budget
<b>Responsible Organization:</b>	Engineer, Highway	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current 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>	Culvert Upgrades	
<b>Project Number:</b>	2020-Otto-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Project will protect roadway from flooding, culvert damages
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town 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 5 years
Agency Champion	1	Engineer, Highway
Other Community Objectives	1	
<b>Total</b>	11	
<b>Priority (High/Med/Low)</b>	High	



Action Worksheet			
<b>Project Name:</b>	Salt and Sand Barn		
<b>Project Number:</b>	2020-Otto-003		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	Severe Storm, Winter Storm		
<b>Description of the Problem:</b>	The town requires a sand/salt structure to protect the salt and sand supplies from exposure to precipitation and runoff. The town currently does not have room to build a facility.		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	The town will identify an appropriate property for a salt and sand barn and purchase the property. The Town Highway Department will then construct a salt sand barn with a structurally sound and weather-proof structure to protect the town salt and sand supply for winter storm response.		
<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 type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to 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>	Continuity of road clearing services in winter, reduction in runoff
<b>Useful Life:</b>	50 years	<b>Goals Met:</b>	
<b>Estimated Cost:</b>	\$400,000	<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 year
<b>Estimated Time Required for Project Implementation:</b>	3 months	<b>Potential Funding Sources:</b>	FEMA HMGP, BRIC, WQIP, USDA Community Facilities Grant Program, Municipal Budget
<b>Responsible Organization:</b>	Administration, Highway Department	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Capital Improvements, 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.
	Hire contractor for roadway treatment	Variable based on rate and number of applications per year; assumed at \$600 per mile	Costly, most contractors are too small to service the entire Town
	Contract with Town of Brookhaven for roadway treatment	Variable based on rate and number of applications per year; assumed at \$600 per mile	Costly
<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>			



Evaluation and Prioritization		
<b>Project Name:</b>	Salt and Sand Barn	
<b>Project Number:</b>	2020-Otto-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
<b>Life Safety</b>	1	Protects continuity of services to keep roadways clear for safe travel and emergency response.
<b>Property Protection</b>	0	
<b>Cost-Effectiveness</b>	1	
<b>Technical</b>	1	The project is technically sound
<b>Political</b>	1	There is public support for the project
<b>Legal</b>	1	The town has the legal authority to complete the project
<b>Fiscal</b>	0	Project requires funding support
<b>Environmental</b>	1	Project will reduce chance of runoff and groundwater contamination
<b>Social</b>	1	
<b>Administrative</b>	1	
<b>Multi-Hazard</b>	1	Severe Storm, Winter Storm
<b>Timeline</b>	1	Within 2 years
<b>Agency Champion</b>	1	Administration, Highway Department
<b>Other Community Objectives</b>	1	Continuity of critical services
<b>Total</b>	12	
<b>Priority (High/Med/Low)</b>	High	



Action Worksheet			
<b>Project Name:</b>	Town Hall Backup Power		
<b>Project Number:</b>	2020-Otto-007		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	Utility Failure		
<b>Description of the Problem:</b>	Backup power sources are necessary to maintain critical services for critical facilities. The Town Hall lacks a permanent power source. The Town Hall location houses the Town Hall, Court, Clerk, and DPW.		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	The Town Engineer will research what size generator is necessary to supply backup power to the Town Hall. The town will then install a backup power generator and necessary electrical components.		
<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 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>	Ensures continuity of operations of Town Hall
<b>Useful Life:</b>	20 years	<b>Goals Met:</b>	1, 2, 7
<b>Estimated Cost:</b>	\$50,000	<b>Mitigation Action Type:</b>	Structure and Infrastructure Projects (SIP)
<b>Plan for Implementation</b>			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Immediately after funding received
<b>Estimated Time Required for Project Implementation:</b>	1 year	<b>Potential Funding Sources:</b>	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
<b>Responsible Organization:</b>	Engineer, OEM	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard Mitigation, Emergency Management
<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>	Town Hall Backup Power	
<b>Project Number:</b>	2020-Otto-007	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of Town Hall
Property Protection	1	Project will protect Town Hall from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Utility Failure
Timeline	1	1 year
Agency Champion	1	Town Board, Engineer
Other Community Objectives	1	
<b>Total</b>	12	
<b>Priority (High/Med/Low)</b>	High	