

### 30 JURISDICTIONAL ANNEXES

### 30.1 TOWN OF ORLEANS

This jurisdictional annex to the Jefferson County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Orleans with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Orleans, describes who participated in the planning process, assesses Orleans's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

### 30.2 HAZARD MITIGATION PLANNING TEAM

The Town of Orleans identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table A summarizes local officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table A. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact				
Name/Title: Kevin Rarick, Town Supervisor Address:20558 Sunrise Avenue, LaFargeville, NY 13656 Phone Number:(315) 658-9950 Email: orleanssuper@aol.com	Name/Title: Tammy Donnelly, Town Clerk Address:20558 Sunrise Avenue, LaFargeville, NY 13656 Phone Number:(315) 658-9950 Email: orleanstownclerk@aol.com				
National Flood Insurance Program Floodplain Administrator					
Name (Title: Lee Shime), Zening Enforcement Officer					

Name/Title: Lee Shimel, Zoning Enforcement Officer Address:20558 Sunrise Avenue, LaFargeville, NY 13656

Phone Number: (315) 658-9950 Email: orleanszoningofficer@gmail.com

#### 30.3 COMMUNITY PROFILE

# 30.3.1 Community Classifications

Table B summarizes classifications for community programs available to Orleans.

Table B. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	3	6/27/22
Community Rating System (CRS)	No		
Firewise Communities classification	No		
National Weather Service StormReady Certification	No		
Public Protection (ISO Fire Protection Classes 1 to 10)			
NYSDEC Climate Smart Community	No		
Other: Organizations with mitigation focus (advocacy group, non-government)			



N/A = Not applicable

### 30.3.2 Community Profile

The Town of Orleans has an area of 71 square miles and is located in the northern part of the County. The Town is bordered by the Town of Orleans and St. Lawrence River to the north, the Town of Theresa and Town of LeRay to the east, the Town of Pamelia and Town of Brownville to the south, and the Town of Clayton to the west. Interstate 81, and numerous state highways run directly through the Town of Orleans.

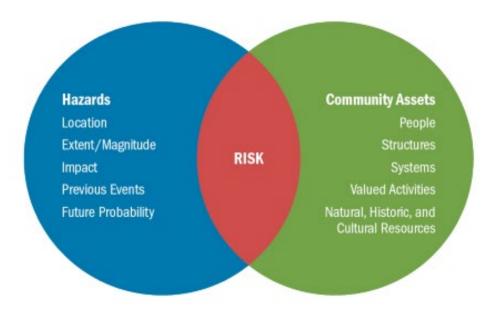
According to the U.S. Census, the 2020 population for the Town of Orleans was 2,788 which makes up 2.4 percent of the county population. Data from the 2022 American Community Survey indicates that 5.2 percent of the population is 5 years of age or younger, 19.5 percent is 65 years of age or older, 1.4 percent is non-English speaking, 14.5 percent is below the poverty threshold, and 11.3 percent is considered disabled.

#### 30.4 JURISDICTIONAL RISK ASSESSMENT

The hazard profiles in Volume I provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Orleans's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.



Risk is the relationship, or overlap, between hazards and community assets. The smaller the overlap, the lower the risk.

### 30.4.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Town are shown in Figure 1 through Figure 2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Orleans has significant exposure. The maps show the location of potential new development, where available.

Orleans (T) Ontario County Boundary Municipality Boundary Interstate State Highway U.S. Highway Alexandria (T) Waterbody **Critical Facilities** Emergency Shelter Parochial Airfield Education Airport Fire Station Pharmacy Ambulance Place of Hospital Station Worship Assisted Land Mobile Police Station Living Broadcast Tower Polling Site Bridge Library Post-Cell Tower Secondary Microwave Education Service Chemical Tower Potable Water Well Correctional Military Site Facility Primary Municipal Education Dam Building Theresa (T) Secondary Education Nursing **EOC** Clayton (T) Home Electric Cape Vincent (T) Development Power Plant **FEMA Flood Coastal Erosion** Hazard Area Hazard Area I-Percent Annual Chance Flood Extreme hiladelphia (T, 0.2-Percent Annual Chance Flood The flood hazard area depicted is the Q3 Flood Data dated: 03/01/1978 Moderate 0 LeRay (T) ☐ Miles 0 Pamelia (T) Sources: Jefferson County 2024; NYS Department of Transportation 2023-2024; USGS 2010-2011, 2020; New York Department of State 2020; FEMA: New York State Department of Environmental Conservation 2023, 2024; Federal Communications Commission 2024; HII.D 2023, 2024; NYS Department of Health 2024; National Plan and Provide Enumeration System 2023; USACE 2024. Brownville (T) Chaumont (V)

Figure 1. Orleans Flood and Coastal Erosion Hazard Area Extent and Location Map

Orleans (T) Ontario County Boundary Municipality Boundary Interstate State Highway U.S. Highway Waterbody **Critical Facilities** Parochial Emergency ★ Airfield Shelter Education 🔥 Airport 0 Fire Station Pharmacy Ambulance Place of Hospital Station Worship Land Mobile Assisted Police Station Broadcast Living Tower Polling Site Bridge Library Post-Cell Tower Secondary Microwave Education Service Chemical Tower Potable Storage Water Well Correctional Military Site Facility Primary Municipal Education Dam Building Secondary Nursing Education **EOC** Home New Electric Development Cape Vince Power Plant Landslide Susceptibility Wildland-Urban Hazard Area Interface/Intermix Hazard Area Philadelphia (T) Moderate Susceptibility/Low Incidence Intermix Low Incidence Interface 00  $\odot$ Pamelia (T) Sources: Jefferson County 2024; NYS Department of Transportation 2023-2024; USGS 2010-2011, 2020; University of Wisconsin-Madison 2023, MRLC Consortium 2021, U.S. Census Bureau 2020; New York State Department of Environmental Conservation 2023, 2024; Federal Communications Commission 2024; HIFLD 2023, 2024; NYS Department of Health 2024; National Plan and Provider Enumeration System 2023; USACE 2024 Brownville (T) Chaumont (V)

Figure 2. Orleans Landslide and WUI Hazard Area Extent and Location Map



# 30.4.2 Previous Event History

The history of natural and non-natural hazard events in Orleans is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table C provides details on loss and damage in Orleans during hazard events since the last hazard mitigation plan update.

Table C. Presidential Disaster Declaration History in Orleans

Dates of Event	Event Type (Disaster Declaration)	Summary of Event	Summary of Damage and Losses in Orleans
December 23, 2022	Severe Snowstorm	Approximately 4' of blowing and drifting snow lasted several days	The Town incurred a lot of overtime.
November 18- 22, 2022	Severe Winter Storm (EM- 3589)	A winter storm caused more than six feet of snow to accumulate in Jefferson County. This intense snowfall has created extremely dangerous travel conditions, and as a result, numerous road closures and travel bans.	The Town did not incur any documented damages and losses.
October 31 – November 1, 2019	Severe Storm, Flood (DR-4472)	A storm system brought record breaking rains, damaging wind gusts (45 to 50 mph), a small Lake Ontario seiche, and river flooding to the region. Thousands of power outages occurred across the area, and wind-related damage closed hundreds of roads and did countless tree damage. High winds and lakeshore flooding continued into November 1.	The Town did not incur any documented damages and losses.
May 2 – August 6, 2017	Flood (DR-4348)	Six months of wet weather led to an over-accumulation of waters in Lake Ontario. Flooding from the lake began impacting areas in May and continued until early autumn. Waves destroyed public and private break walls all along the lake shore. Thousands of homes and buildings were affected flood waters. Several homes dropped off bluffs. In some areas shoreline erosion of 50 to 100 feet deep occurred. Sanitary sewer systems in lakeside communities were affected. Beaches, marinas, and state parks were closed all summer long with unknown economic losses to mainly seasonal businesses. In late May, the Governor imposed a 5-mph speed limit within 600 feet of the Lake Ontario and St. Lawrence River shore. By summer's end, damage estimates reached \$10 Million in Jefferson County.	The Town did not incur any documented damages and losses.



Dates of Event	Event Type (Disaster Declaration)	Summary of Event	Summary of Damage and Losses in Orleans
November 17- 26, 2014	Severe Winter Storm, Flood (DR-4204)	A winter storm moved into the region, causing temperatures to drop tremendously. Lake effect snow impacted counties bordering Lake Ontario and Lake Erie. Travel restrictions were instituted due to whiteout conditions. The storm produced heavy snowfall, high winds, and blizzard-like conditions, resulting in road closures, travel disruptions, power outages, and damage to public and private property.	The Town did not incur any documented damages and losses.
October 27 – November 8, 2012	Severe Storm (EM-3351)	Remnants of Hurricane Sandy brought strong winds and heavy rains. Rainfall amounts of two to five inches were measured across the area with some area creeks reaching bankful. High winds downed trees and power lines. Wind gusts were measured to 60 mph. Utilities reported tens of thousands of customers without power across the entire region.	The Town did not incur any documented damages and losses.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

N/A = Not applicable



# **30.4.3** Local Hazard Impacts Assessment

In the table below representatives from the Town of Orleans Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy.

Table D. Local Hazard Impacts Assessment

Hazard Name	Local Impacts
Dam Failure	There is a Dam located within in the Hamlet that used to be called Log Mills, and sometime before 2015 there was a dam compromise that resulted in failure. The dam ran perpendicularly to State Route 180, and the Town Library is located across the road. The dam failure resulted in the library flooding. The Town still experiences water damage in the basement whenever there is high precipitation. There is a large Milk company in the hamlet and some of the byproducts from the company used to be put in the creek, however mitigation was done to prevent this, and this could be why the dam was not rebuilt. The dam break created a wetland like habitat.  The Town is interested in rebuilding the dam, and the original purpose of the dam is unknown, as the dam was very old. There used to be a saw mill in this location a long time ago (there is a historical sign in the area). The reconstruction of the dam would most likely reduce flooding in the library.
Drought	The Town has reported minor agriculture impacts, including loss of hay and corn production.
Extreme Temperature	High temperatures can impact crop production. The Town offices, school and fire department can be heating/cooling shelters, and the Town office has backup power.
Flood	The St. Lawrence River and high water leads to flooding. Fishers Landing residents live closer together and some live on waterfront properties. There are culverts that run out to the river to facilitate drainage, and these pipes were submerged into the river creating flooding issues.  Some homes that have their own private septic system and have had issues with septic running into the river. The Town is waiting on funding to create a redundancy system to prevent this from happening.  Mullet Creek passes under Ledges Road and has been known to rise high enough to go over the road. The Town has just rebuilt the road to bring the elevation up, and no recent issues have occurred since this has been done.  There is a bridge over Chaumont River and there is little elevation difference between the river and the bridge which results in flooding during high water events. There are also beaver dams along parts of the river, on public and private lands that tend to negatively impact a lot of the Town Roads near this area.
Geological Hazards	The Town is experiencing more shakes, but there are no known impacts. There are also no steep slopes in the Town.
Severe Storm	The Highway Department patrols roads during storms to clear fallen trees and ensures dead trees are cleared. Most of the dead tree related problems are along State Roads, and the highway takes care of it, but it is State responsibility to monitor.  There are no structural impacts to buildings.

Hazard Name	Local Impacts
Severe Winter Storm	Winter storms result in significant increases in overtime, an increase in sand and salt, and wear and tear on equipment. The Town has issues with snow drifts on roads that have already been cleared in conjunction with the wind, and the Town runs a night crew to help mitigate the issues. The Town also has contracts with the state.  The Highway Barn was built back in the 70's and trucks have gotten significantly bigger, so some equipment must be left outside. Highway also has a cold storage barn for retired equipment. There have been issues with equipment not starting up due to cold temperatures and the equipment ages quicker in outside elements.
Wildfire	A few fields have caught fire and all of the culvert pipes used are plastic and there have been issues where these culverts have caught fire and collapsed.

# 30.4.4 Vulnerable Community Assets

In the table below representatives from the Town of Orleans Hazard Mitigation Planning team assessed specific impacts to the assets included in the table below. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table E. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture	No known impacts	Local Roads	See above
Airports	Not applicable	Major Employers	No known impacts
Area: Concentration of Businesses	No known impacts	Medical Centers (non- hospital)	Not applicable
Area: Concentration of Residences	There is flooding in the Hamlet and congested trailer parks are in the Town.	Natural Resources	St. Lawrence River is a big resource for the Town and water height is a concern.
Bridges	Most of the bridges in the Town are owned by the County, but there are three bridges that are located on Town roads that need to be addressed. The Highway Department is intending to fix two of these, because they are very old and dated and one is on a seasonal road. All bridges need to be able to fit the snowplow. There is also a bridge that goes over State Route 180 and the bridge is in terrible condition and possibly needs to be red flagged.	Neighborhoods	No known impacts

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities	
	Cemetery Road Bridge is old and deteriorating and experiences significant flooding.			
	Whisky Street has a bridge and is a seasonal road that is a mile from Cemetery Road and gets the same flooding as the bridge above.			
	Peel Dock Road Bridge is old and deteriorating, and the highway tried to patch it, but it needs to be rebuilt or changed into a culvert.			
City Hall/Courthouse	The Town Hall has backup power	Parks and Recreational Sites	No known impacts	
College/University	Not applicable	Place of Worship	No known impacts	
Community Centers/Hubs	Not applicable	Private Property	No known impacts	
Community Activities: major local events including festivals and economic drivers such as beaches, skiing, farming, fishing, etc.	No known impacts	Public Transportation	Not applicable	
Cultural/Historic Buildings/Sites	The Town has an older church that has been restored via Town resident donations. There are no known impacts other than occasional wind damage	Schools (K-12)	The Town has one K-12 school that was used as a shelter before for heating/cooling.	
Culverts	The Town has a culvert pipe budget and inspects and replaces pipes on an as needed basis. Original pipes were galvanized.  Pine Avenue and Sprucedale have galvanized driveway culverts that have not been addressed. A farmer removed vegetation that bordered the road and there have been issues in the spring with thaw and intense precipitation events that overwhelms the pipes. The ends of the culverts are also crushed down. Impacts of flooding from these pipes results in issues with the stormwater system and it needs to be shutdown.	Small Businesses	No known impacts	

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Elder-care Facilities	No known impacts	Supermarkets/Grocery Stores	No known impacts
Fire/Police Stations	Town has three fire stations that are combined under one department. All the fire stations have backup power.	Transportation - Mobile Asset Storage	The Highway Barn was built back in the 70's and trucks have gotten significantly bigger, so some equipment must be left outside. Highway also has a cold storage barn for retired equipment. There have been issues with equipment not starting up due to cold temperatures and the equipment ages quicker in outside elements.
Gas Stations	No known impacts	Utilities	No known impacts
Highways	The State has started to replace things and make upgrades regarding highways.	Wastewater Treatment Plants	The Town has one waste water treatment plant. DEC allows so many gallons of outflow, and the number of units in the sewer have increased the outflow. The Town is currently trying to get DEC to allow an increase in outflow in the Chaumont River.  Another wastewater treatment is privately owned, and there are no known impacts.  There is a sewer district on Route 12 which is new, no known impacts, however a large RV campground complains about the smell and they have attempted at increasing chlorine to reduce smell.
Hospitals	Not applicable	Waterfront	See other sections of table
Other	No known impacts	Drinking Water Resources	No known impacts

### 30.4.5 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I.

The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table F. Hazard Ranking

Hazard Name	Frequency (2011 – present): Increased, Decreased, Stayed the Same	Impacts (2011 – present): Increased, Decreased, Stayed the Same	Description of frequency and impacts (2011 – present):	Future Events (present – 2030): Will Increase, Decrease, Stay the Same	2025 Ranking
Dam Failure	Stay the same	Stay the same	-	Stay the same	Low
Drought	Stay the same	Stay the same	-	Stay the same	Low
Extreme Temperature	Stay the same	Stay the same	-	Stay the same	Medium
Flood	Increase	Increase	-	Increase	High
Geologic Hazards	Stay the same	Stay the same	-	Stay the same	Low
Severe Weather	Increase	Increase	-	Increase	High
Severe Winter Weather	Increase	Increase	-	Increase	High
Wildfire	Stay the same	Stay the same	Dependent on rainfall/drought conditions	Stay the same	Medium

### 30.4.6 Critical Facilities

Table G. Critical Facilities Flood Vulnerability

		Vulnerability			
Name	Туре			Addressed by Proposed Action	Already Protected to 0.2% Flood Level
LAFARGEVILLE FIRE	Fire Station	X	X	Action 2025-OrleansT- 06.	-



		Vulnerability				
Name	Туре	1% Annual Chance Event	0.2% Annual Chance Event	Addressed by Proposed Action	Already Protected to 0.2% Flood Level	
Thousand Island Bridge Authority - Microwave Tower	Microwave Service Tower	Х	Х	Action 2025-OrleansT- 06.	-	

Source: Jefferson County 2024; New York State Department of Environmental Conservation 2023, 2024; Federal Communications Commission 2024; HIFLD 2023, 2024; NYS Department of Health 2024; National Plan and Provider Enumeration System 2023; USACE 2024; NYS Department of Transportation 2023

The municipality does not have any identified high hazard potential dams within the jurisdiction.

### 30.5 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 appreciating a jurisdiction's overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table H through Table L.

# 30.5.1 Development and Permitting

Table H. Development and Permitting Capability

Question	Answer
Does your municipality or the county issue building permits for development in your community?	Jefferson County
What is your process for tracking building permits?	The Town requires a zoning permit first; Jefferson County enforces the state building code.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes, Zoning Permit asks if the property is located within the Flood Hazard Area.
Does your community have a buildable land inventory? If yes, please describe.	No

Table I. Number of Building Permits for New Construction Issued Since the Previous HMP

	New Construction Permits Issued				
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total	
2019					
Total Permits	14	0	1	15	
Permits within SFHA	0	0	0	0	
2020					
Total Permits	16	0	0	16	
Permits within SFHA	0	0	0	0	
2021					
Total Permits	10	0	3	13	
Permits within SFHA	0	0	0	0	
2022					
Total Permits	11	0	1	12	
Permits within SFHA	0	0	0	0	
2023					
Total Permits	28	0	2	30	
Permits within SFHA	0	0	0	0	
2024					
Total Permits	17	0	5	23	
Permits within SFHA	0	0	0	0	

SFHA = Special Flood Hazard Area (1% flood event)

Table J. Recent Major Development and Infrastructure from 2011 to 2018

 21	 	Known Hazard Zones	Description / Status of Development
	None Identified		

Table K. Recent Major Development and Infrastructure from 2019 to Present

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones	Description / Status of Development
Route 12 Water District	Water District	Approximately 350	-	None Identified	Fully Built
Thousand Island Park Sewer Upgrade	Sewer Upgrade	-	-	None identified	Ongoing project for the last 5 years and will continue in the future
Fishers Landing Town Dock	Town Dock	-	-	None Identified	Fully Built

Table L. Known or Anticipated Major Development and Infrastructure in the Next Five Years

1 2	<i>7</i> 1		Location (address and/or block and lot)		Description / Status of Development
Collins Landing Sewer	Sewer	_	-	None Identified	Waiting on financing

#### 30.6 NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table A is responsible for maintaining this information.

### 30.6.1 NFIP Statistics

Table M summarizes the NFIP policy and claim statistics for Orleans.

Table M. Orleans NFIP Summary of Policy and Claim Statistics

# Policies	8
# Claims (Losses)	8
Total Loss Payments	\$38,753.37
# Repetitive Loss Properties (NFIP definition)	0
# Repetitive Loss Properties (FMA definition)	0
# Severe Repetitive Loss Properties	0

NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978.

FMA Definition of Repetitive Loss: FEMA's Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.

Source: FEMA 2024

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

The HMP Team provided information on participation in and continued compliance with the NFIP in the table below.

Table N. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	St. Lawrence River
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Lee Shimel, Zoning Enforcement Officer
What local department is responsible for floodplain management?	Zoning
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law 3 of 1984
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	3/1/78
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit Review
What are the barriers to running an effective NFIP program in your community, if any?	FEMA map updates- knowing which properties are located in the floodplain currently.

NFIP Topic	Comments
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	More localized training
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Determine high water mark for the property
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Permitting
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Yes, the Zoning Permit asks this. Unsure on number
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Some residents experience flooding from snow that blocks up ditches/blocks water up and allows for precipitation to runoff fields that leads to basement flooding. Sometimes snow plows pushes snow to block up areas that impact water flow.
Does the community maintain elevation records? If yes, please describe.	No
Are there any repetitive loss (RL) or severe repetitive loss (SRL) structures in the community? If yes, how many of each category?	There are no repetitive or severe repetitive loss properties
Describe any areas of flood risk with limited NFIP policy coverage.	No
How does the community teach property owners or other stakeholders about the importance of flood insurance?	People may inquire when obtaining a zoning permit and then are given information. Additionally, banks educate those interested.
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Map Service Center and DEC map viewer.

NFIP Topic	Comments
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Zoning considers flood risk
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	CAC: November 19, 2014 CAV: June 22, 2022
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

### 30.7 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Orleans performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Orleans to identify opportunities for integrating mitigation concepts into ongoing Town procedures.



# 30.7.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards.

#### **Ordinances**

Jefferson County has an Emergency Management Ordinance which charges the County with maintaining a Comprehensive Emergency Management Plan to identify local measures that may prevent disasters, to develop local mechanisms to coordinate local resources and personnel for service during and after disasters, support the facilitation of delivery of services to aid citizens and reduce human suffering resulting from disaster, and to provide for short- and long-term recovery and redevelopment after disasters.

Jefferson County has Site Plan and Subdivision Codes that are relevant to development within a certain distance of County interests. Development applications in the areas across the County are sent to County Planning for review to promote coordination of land use decisions and local/county impacts. These County capabilities are inclusive of Orleans and the jurisdiction often partners with the County. To learn more about these capabilities please see Jefferson County's Jurisdictional Annex.

The HMP Team inventoried its existing ordinances against the full capability list of hazard mitigation-related capabilities. The absence of other kinds of ordinances was not considered a gap in local capabilities. The table below summarizes the ordinances currently in place in the Town.

Table O. Ordinances

Capability Type	In Place in Municipality	Comments	Responsible Department / Agency / Organization
Building Codes	Yes	All of the communities in Jefferson County regulate construction through the use of a building code. The Town of Orleans adheres to a building code through County authority. Building codes regulate construction standards and are developed for specific geographic areas of the country. They consider the type, frequency, and intensity of hazards present in the region. Structures built to applicable building codes are inherently resistant to many hazards such as strong winds, floods, and earthquakes. Due to the location specific nature of the building codes, these are very valuable tools for mitigation.	Town Planning Board
Flood Damage Prevention Ordinance	Yes, Local Law 3 of 1984	This ordinance is designed to protect communities from flood hazards by implementing regulations that ensures the land use and development practices account for the flood risks, requires vulnerable structures to be constructed to withstand flood damage, and to control changes to the natural floodplain and stream channels to prevent increased flood hazards.	Floodplain Administrator
Real Estate Disclosure Requirements	Yes, Property Condition Disclosure Act, NY Code - Article 14 §460-467	In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York	NYS Department of State, Real Estate Agent

Capability Type	In Place in Municipality	Comments	Responsible Department / Agency / Organization
		opt not to complete the statement and instead pay the credit.	
Subdivision Code	Yes, Town of Orleans Subdivision Law	Subdivisions are considered part of a plan for the orderly, efficient and economical development of the Town. Land to be subdivided shall be such that it can be used safely for building or development purposes without danger to health or peril from fire, flood, or menace and without resulting in significant damage to the ecology of the area in which it is located.	Town Planning Board
Zoning/Land Use Code	Yes, Town of Orleans Zoning Ordinance, October 2012	Zoning is a useful tool to consider when developing a mitigation strategy. It can be used to restrict new development, require low-density development, and designate specific uses (e.g. recreational) in the hazard prone areas. Private property rights must be considered, but enacting a zoning ordinance can reduce or potentially eliminate damages from future hazard events.	Town Planning Board

#### **Plans**

Jefferson County has an Agriculture Plan (Jefferson County Agricultural and Farmland Protection Plan, 2016); Climate Adaptation / Resilience Plan (North Country Regional Sustainability Plan, 2013); Comprehensive Emergency Management Plan; County Emergency Preparedness Assessment (CEPA); Continuity of Operations Plan (Jefferson County Government COOP – COG Plan, 2023); Economic Development Plan (Jefferson County Comprehensive Economic Development Strategy, 2021); Public Health Plan (Jefferson County Public Health Service Strategic Plan 2023-2027); Threat and Hazard Identification and Assessment (THIRA); Tourism Plan; Transportation Plan (Jefferson County Coordinated Transportation Plan for Mobility Services, 2021); and other recent plans that are all countywide in scope and implementation and are applicable to the Town of Orleans. To learn more about these capabilities please see Jefferson County's Jurisdictional Annex.

The HMP Team inventoried its existing plans against the full capability list of hazard mitigation-related capabilities. The absence of other kinds of plans was not considered a gap in local capabilities. The table below summarizes the plans currently in place.

Table P. Plans

Capability Type	In Place in Municipality	Comments	Responsible Department / Agency / Organization
Comprehensive Plan	Yes, Town of Orleans Comprehensive Land Use Plan, 2019	A comprehensive plan is a document which illustrates the overall vision and goals of a community. It serves as a guide for the community's future and often includes anticipated demographics, land use, transportation, and actions to achieve desired goals. Integrating mitigation concepts and policies into a comprehensive plan provides a means for implementing initiatives through legal frameworks and enhances the opportunity to reduce the risk posed by hazard events.	Town of Orleans Comprehensive Plan Committee

# 30.7.2 Administrative and Technical Capability

Jefferson County Code, Fire Prevention and Building Code department currently enforces the New York State Uniform Fire Prevention and Building Code in 31 municipalities that chose not to enforce the Code at the local level, including the Town of Orleans. The Department employs Code Enforcement Officers and clerical staff to ensure that new construction and areas of public assembly conform to the provisions of the State Uniform Code. Proper enforcement of the Code protects property and encourages quality development that enhances public safety and the economy of the County. The office's two major program responsibilities include existing and new building permit administration (i.e.: plan review, issuing permits, construction inspections and issuing certificates of occupancy) and mandated fire safety inspections.

Jefferson County has an Economic Development Commission (Jefferson County Comprehensive Economic Development Strategy); Emergency Management (Jefferson County Office of Fire & Emergency Management), County Department of Planning; County Public Health Department (including Administration and Finance, Home Healthcare Services, Medical Examiner's Office, Emergency Medical Services); County Highway Department, among others, whose programs and services serve the entire County, including the Town of Orleans. To learn more about these capabilities please see Jefferson County's Jurisdictional Annex.

The HMP Team inventoried its existing Administrative and Technical Capabilities against the full capability list of hazard mitigation-related capabilities. The absence of other staff was not considered a gap in local capabilities. The table below summarizes staff and personnel resources.

Capability Type	In Place in Municipality	Comments
Maintenance Programs	Yes	Town of Orleans Highway Department conducts stormwater maintenance which is in dire need of repair and replacement due to outdated infrastructure. Pipes connecting are all galvanized and are rotted out (pipes are located along state, county and local roads - no one wants to take responsibility for it), snowplowing, tree trimming.
Mutual Aid Agreements	Yes	County and municipal agreements
Planning Board	Yes	The Planning Board consists of five members.
Public Works/Highway Department	Yes	The Highway Department conducts routine maintenance and clears Town owned roadways.
Zoning Board of Appeals	Yes	The Zoning Board consists of six members.

Table Q. Administrative and Technical Capabilities

# 30.7.3 Fiscal Capability

The table below summarizes financial resources available to Orleans.

Table R. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan (2011)? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes, TI Park Sewer upgrades
Authority to levy taxes for specific purposes	Yes, Fire District
User fees for water, sewer, gas, or electric service	Yes, quarterly billing for water/sewer
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	No
Other State funding programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes, CHIPS

# 30.7.4 Education and Outreach Capability

The table below includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table S. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns (such as Firewise, Storm Ready, Severe Weather Awareness Week, school programs, public events)	No

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Hazard mitigation information available on your website	No
Local News	Yes, Announces road closures
Natural disaster/safety programs in place for schools	Yes, evacuation drills and fire drills
Organizations that conduct outreach to socially vulnerable populations and underserved populations	No, County
Public information officer or communications office	No
Social media for hazard mitigation education and outreach	Yes, Town can post on website as needed
Warning systems for hazard events	Yes, Reverse 911 and IPAWS at the County
Other	No

# 30.7.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above.

- Strong: Capacity exists and effectively manages the impacts of this hazard.
- Moderate: Capacity exists but is not used or needs some improvement.
- Weak: Capacity exists and needs substantial improvement
- None: Capacity does not exist.

Table T. Adaptive Capacity

Hazard	Adaptive Capacity: Strong, Moderate, Weak, None
Dam Failure	None
Drought	Moderate
Extreme Temperature	Weak
Flood	Moderate
Geological Hazards	None
Severe Storm	Strong
Severe Winter Storm	Strong
Wildfire	None



#### 30.8 MITIGATION STRATEGY AND PRIORITIZATION

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

### 30.8.1 Past Mitigation Action Status

The Town did not participate in the last plan.

### **30.8.2** Additional Mitigation Efforts

Since the adoption of the County's first HMP, Orleans has made significant mitigation progress in the following areas:

XXXX

#### 30.8.3 Identified Issues

The Town of Orleans has identified the following vulnerabilities within their community for mitigation strategy development:

- The Highway Garage is severely undersized and numerous pieces of equipment currently sit outside
  which impacts the lifespan of the equipment, which hinders the Town from being able to perform
  continuity of operations. The Highway Garage is located on a small piece of land and the garage would
  have to be relocated.
- There used to be an old dam located within the Hamlet called Log Mills Dam. Prior to 2015, there was a compromise with the dam that resulted in failure and created wetland like conditions. The break also resulted in the flooding of the Town library and the Town continues to experience water damage in the basement after a high precipitation event. The original use of the dam is connected to a historical saw mill that was once located in the Town and the Town is interested in reconstructing the dam to reduce the library flooding to ensure the history of the area is captured.
- Recent storm events have resulted in severe rainfall which overwhelmed bridges and caused flooding
  due to undersized bridges. There are numerous bridges located in the Town that are of infrastructure and
  flooding concerns including: a bridge over the Chaumont River, a bridge on Cemetery Road, a bridge on
  Whisky Street which is a seasonal road, a bridge on Peel Dock Road, and one that goes over State
  Route 180 that may need to be red flagged. The Town knows other bridges may also need to be upsized
  and mitigated but needs an inventory of where to focus on.
- Recent storm events have resulted in severe rainfall which overwhelmed culverts and caused flooding due to undersized and damaged culverts. There are numerous culverts located in the Town that are of infrastructure and flooding concerns. A farmer removed vegetation that bordered Pine Avenue and Sprucedale which led to overwhelmed culverts during the spring thaw and intense precipitation events. The flooding from these culverts results in issues with the stormwater system in the Town. Additionally, the Town has experienced a few field fires where the culvert pipes that are made out of plastic have caught fire and collapsed. The Town knows that other culverts may also need to be upsized and mitigated but needs an inventory of where to focus on.
- The Town has a wastewater treatment plant that increasingly has more outflow due to the number of sewer units in the Town. The Town is allotted so many gallons of outflow per DEC and needs to explore other options in how to handle increased outflow or needs permission for an increase in outflow in the Chaumont River.
- There are three facilities that are located in the Town floodplain but may not be Town owned. These facilities include:
  - La Fargeville Fire Department





# 30.8.4 Proposed Hazard Mitigation Actions for the HMP Update

Orleans participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e, analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities.

Implementation of these actions are dependent upon available funding (grants and local match availability) and local capacity and may be modified or omitted at any time based on the occurrence of new hazard events and changes in local priorities.

Volume I identifies fourteen evaluation criteria for prioritizing the mitigation actions. Below, Table U provides the prioritization criteria score for each proposed mitigation action.

# Action 2025-OrleansT-01. Highway Garage

Lead Agency:	Town Highway Department		
Supporting Agencies:	Town Administration		
Hazards of Concern:	Dam Failure, Drought, Extreme Temperature, Flood, Geologic Hazards, Severe Weather, Severe Winter Weather, Wildfire		
Description of the Problem:	The Highway Garage is severely undersized and numerous pieces of equipment currently sit outside which impacts the lifespan of the equipment, which hinders the Town from being able to perform continuity of operations. The Highway Garage is located on a small piece of land and the garage would have to be relocated.		
Description of the Solution:	The Town will consult with an engineer to determine the best location and size for an upgraded and weather-proofed highway garage facility that has the capacity to store all the vehicles that should be kept inside, while having room for the Town to be able to perform continuity of operations within the garage. The Town will be responsible for ensuring routine maintenance is performed in the garage. The Town will also ensure the new garage has a backup power source.		
Estimated Cost:	TBD based on Engineer		
Potential Funding Sources:	HMGP, Town Budget		
Implementation Timeline:	Within 5 Years		
Goals Met:	1, 2, 3, 4, 6, 7		
Benefits:	The Town will have a proper-sized Town highway garage that can store all of the tools that need to be kept in a more temperature-controlled setting.		
Impact on Socially Vulnerable Populations:	The Town population will be better protected by a fully prepared Public Works.		
Impact on Future Development:	Any future development will have support from a fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.		
Impact on Critical Facilities/Lifelines:	Any critical facilities will have support from the fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.		
Impact on Capabilities:	This action strengthens the Highway Department's functionality which allows for more efficient work to be performed.		
Climate Change Considerations:	Climate change is likely to increase severity but decrease the frequency of severe weather events such as high winds and severe winter weather. This action considers the chance of more severe weather and temperature extremes.		
Mitigation Category	Structure and Infrastructure Projects		
CRS Category	Property Protection, Emergency Services, Public Information		
Priority	High		
Alternative	Action	Evaluation	
	No action	-	
	Rely on neighboring municipalities for equipment	Does not fix current issue of leaks and damage in the facility	
	Rely on neighboring County for equipment	Does not fix current issue of leaks and damage in the facility	



# Action 2025-OrleansT-02. Town Library Mitigation

Lead Agency:	Town Administration		
Supporting Agencies:	Town Highway Department, Town Library Manager's		
Hazards of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	There used to be an old dam located within the Hamlet called Log Mills Dam. Prior to 2015, there was a compromise with the dam that resulted in failure and created wetland like conditions. The break also resulted in the flooding of the Town library and the Town continues to experience water damage in the basement after a high precipitation event. The original use of the dam is connected to a historical saw mill that was once located in the Town and the Town is interested in reconstructing the dam to reduce the library flooding to ensure the history of the area is captured.		
Description of the Solution:	The Town will consult with an engineer about the feasibility of reconstructing the dam to reduce flooding at the library and capture the history of the Town. Once the feasibility is determined, the Town will acquire funding for either the reconstruction of the dam or the flood proofing of the library. The best and most cost-effective solution will be implemented.		
Estimated Cost:	TBD after feasibility study		
Potential Funding Sources:	HMGP, FMA, Town Budget		
Implementation Timeline:	Within 5 Years		
Goals Met:	1, 2, 3, 4, 6, 7		
Benefits:	The Town will experience less flooding in the library and will have a historical piece of the Town's history restored.		
Impact on Socially Vulnerable Populations:	The Town's residents will experience less flooding and roadways that are impacted by the wetland from the dam will also be clearer for emergency access.		
Impact on Future Development:	Mitigating the broken dam allows for drier areas where some infrastructure may be developed.		
Impact on Critical Facilities/Lifelines:	The library is a facility that can operate as an emergency heating and cooling station for the Town during Code Red and Code Blues and mitigating the flood risk would ensure it can remain as an emergency heating/cooling station.		
Impact on Capabilities:	This action improves the Town's capabilities to reduce flooding.		
Climate Change Considerations:	Climate change is likely to increase severity but decrease the frequency of severe weather events such as high winds and severe winter weather. This action considers the chance of more severe weather and temperature extremes.		
Mitigation Category	Structure and Infrastructure Projects		
CRS Category	Property Protection, Emergency Services		
Priority	High		
Alternative	Action	Evaluation	
	No action	-	
	Purchase moveable flood barriers	Does not solve issue or basement flooding	
	Relocate Library	Not cost effective	
		l .	



# Action 2025-OrleansT-03. Bridge Upsize Inventory

Lead Agency:	Town Highway Department	
Supporting Agencies:	Town Administration, NYSDOT, County Highway	
Hazards of Concern:	Flood, Severe Storm, Severe Winter Storm	
Description of the Problem:	Recent storm events have resulted in severe rainfall which overwhelmed bridges and caused flooding due to undersized bridges. There are numerous bridges located in the Town that are of infrastructure and flooding concerns including: a bridge over the Chaumont River, a bridge on Cemetery Road, a bridge on Whisky Street which is a seasonal road, a bridge on Peel Dock Road, and one that goes over State Route 180 that may need to be red flagged. The Town knows other bridges may also need to be upsized and mitigated but needs an inventory of where to focus on.	
Description of the Solution:	The Town will contract an engineer to complete an engineering survey of the identified bridges in the Town that are undersized and contribute to flooding to determine the proper size that is necessary to eliminate or reduce flooding. The Town Highway Department will work with the County and State to complete the necessary upsizing for these bridges. The Town will also continue to compile a Bridge Inventory that details the status and damage of bridges in the Town and will acquire necessary funding to ensure proper adjustments are made to protect the Town from flooding.	
Estimated Cost:	TBD after Survey and Inventory	
Potential Funding Sources:	HMGP, FMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	1, 2, 3, 4, 6, 7	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to bridges and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on Socially Vulnerable Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	<ul> <li>Transportation routes are more likely to remain open</li> <li>Evacuation routes will remain intact.</li> <li>Access to health and medical facilities will be maintained, both for healthcare workers and the population who require treatment for injuries and illness.</li> </ul>	
Impact on Capabilities:	Identifying the bridges that are at greatest risk of damage or failure can allow resource staging to take place where the need is greatest ahead of a flood event.	
Climate Change Considerations:	Climate change is likely to result in more frequent and severe rainfall events. This action upsizes bridge sizes to meet changing stormwater needs as the result of climate change.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Preventative Measures, Property Protection, Structural Flood Control Projects	
Priority	High	
Alternative	Action Evaluation	



No action	-
Remove roadway	Roadway cannot be removed
	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events and will not significantly lower water levels.



# Action 2025-OrleansT-04. Culvert Inventory and Repair

Lead Agency:	Town Highway Department	
Supporting Agencies:	Town Administration, County, NYSDOT	
Hazards of Concern:	Flood, Severe Storm, Severe Winter Storm	
Description of the Problem:	Recent storm events have resulted in severe rainfall which overwhelmed culverts and caused flooding due to undersized and damaged culverts. There are numerous culverts located in the Town that are of infrastructure and flooding concerns. A farmer removed vegetation that bordered Pine Avenue and Sprucedale which led to overwhelmed culverts during the spring thaw and intense precipitation events. The flooding from these culverts results in issues with the stormwater system in the Town. Additionally, the Town has experienced a few field fires where the culvert pipes that are made out of plastic have caught fire and collapsed. The Town knows that other culverts may also need to be upsized and mitigated but needs an inventory of where to focus on.	
Description of the Solution:	The Town will contract an engineer to complete an engineering survey of the identified culverts in the Town that are undersized and contribute to flooding to determine the proper size that is necessary to eliminate or reduce flooding. The Town will acquire funding to upsize the culverts along Pine Avenue and Sprucedale after the engineer determines the proper size. The Town will also continue to compile a Culvert Inventory that details the status and damage of culverts in the Town and will acquire necessary funding to ensure proper adjustments are made to protect the Town from flooding and collapsed culverts. The Town will also ensure that any area that may be a higher wildfire risk does not have plastic culverts.	
Estimated Cost:	TBD after Survey and Inventory	
Potential Funding Sources:	HMGP, FMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	1, 2, 3, 4, 6, 7	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on Socially Vulnerable Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	<ul> <li>Transportation routes are more likely to remain open</li> <li>Evacuation routes will remain intact.</li> <li>Access to health and medical facilities will be maintained, both for healthcare workers and the population who require treatment for injuries and illness.</li> </ul>	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow resource staging to take place where the need is greatest ahead of a flood event.	
Climate Change Considerations:	Climate change is likely to result in more frequent and severe rainfall events. This action is to increase culvert sizes to meet changing stormwater needs as the result of climate change.	
Mitigation Category	Structure and Infrastructure Project	



CRS Category	Preventative Measures, Property Protection, Structural Flood Control Projects	
Priority	High	
Alternative	Action	Evaluation
	No action	-
	Elevate affected roadways	Not cost effective
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.



### Action 2025-OrleansT-05. Wastewater Treatment Plant

Lead Agency:	Town Administration		
Supporting Agencies:	Facility Managers, DEC		
Hazards of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Town has a wastewater treatment plant that increasingly has more outflow due to the number of sewer units in the Town. The Town is allotted so many gallons of outflow per DEC and needs to explore other options in how to handle increased outflow or needs permission for an increase in outflow in the Chaumont River.		
Description of the Solution:	The Town will consult with DEC to see how they can increase the amount outflow into the Chaumont River and will ensure all documentation is filled out and submitted appropriately. If DEC does not allow for an increase, the Town must evaluate other options for the increase in outflow from the sewer and will acquire funding to implement the best and most costeffective solution.		
Estimated Cost:	TBD after DEC conversation		
Potential Funding Sources:	HMGP, DEC, Town Budget		
Implementation Timeline:	Within 5 Years		
Goals Met:	1, 2, 3, 4, 6, 7		
Benefits:	The Town will be able to handle the increased outflow from the sewer system and will maintain in good standings with DEC.		
Impact on Socially Vulnerable Populations:	Some socially vulnerable populations may be disproportionately impacted by increased outflow, and this action aims to ensure the Town can process the increased outflow.		
Impact on Future Development:	Increasing the outflow capacity allows for increased development that may continue to contribute to the increased outflow.		
Impact on Critical Facilities/Lifelines:	The wastewater treatment plant is a critical facility, and this action aims to ensure the functionality of the facility and ensures that the outflow is properly managed before it becomes a larger issue.		
Impact on Capabilities:	This action improves wastewater management in the Town and ensures the Town maintains good standing with DEC.		
Climate Change Considerations:	Climate change is likely to result in more frequent and severe rainfall events, which may increase the outflow.		
Mitigation Category	Local Plans and Regulations		
CRS Category	Preventative Measures		
Priority	High		
Alternative	Action	Evaluation	
	No action	-	
	Build another wastewater treatment plant	May not be the best and most cost- effective solution for the Town	
	Deposit outflow into the Chaumont River	The Town must consult with DEC prior to depositing more than their allotted amount	



### Action 2025-OrleansT-06. Critical Facilities in the Floodplain

Lead Agency:	Floodplain Administrator						
Supporting Agencies:	Town Administration, Facility Owners						
Hazards of Concern:	Flood, Severe Storm						
Description of the Problem:	There are two facilities that are located in the Town floodplain but are not be Town owned. These facilities include:  La Fargeville Fire Department Thousand Island Bridge Authority Microwave Service Tower						
Description of the Solution:	The Town will contact the facility owners and will explain the mitigation measures available, including conducting a feasibility assessment to determine what additional floodproofing measures would be needed at the La Fargeville Fire Station and the Thousand Island Bridge Authority Microwave Service Tower to protect each to the 500-year flood level. Options include:  • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the facility owners will work with the Town to carry out the option.						
Estimated Cost:	TBD based on chosen option						
Potential Funding Sources:	FMA, HMGP, Facility Owners, Town Budget						
Implementation Timeline:	Within 5 Years						
Goals Met:	2, 5, 6, 7						
Benefits:	Ensures continuity of operations at facilities that are identified as critical to the County and/or municipality.						
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that socially vulnerable populations rely on.						
Impact on Future Development:	The risk of significant damage occurring to the structure will be reduced, which will allow critical operations to be maintained or only briefly interrupted in severe events. This provides continued support to both current and future development in the service area.						
Impact on Critical Facilities/Lifelines:	This action will protect Town critical facilities by maintaining the critical services that the facilities provide.						
Impact on Capabilities:	This action improves continuity of operations during a flood event, allows for a more rapid return to pre-disaster capabilities after a flood event, and faster deployment of post disaster capabilities.						
Climate Change Considerations:	This action addresses anticipated increases in flooding frequency and severity through protection to the 500-year (0.2-percent annual chance) flood level.						
Mitigation Category	Structure and Infrastructure Projects						
CRS Category	Emergency Services, Property Protection						
Priority	High						
Alternative	Action	Evaluation					
	No action	-					
	Relocate facilities	Relocation is expensive and results in loss or delay of critical services in the immediate area					



Purchase moveable flood barriers

May not be cost effective

Table U. Summary of Prioritization of Actions

		Scores for Evaluation Criteria															
Project Number	Project Name	Life Safety	Property Protection	Cost- Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	High / Medium / Low
Action 2025- OrleansT-01.	Highway Garage	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
Action 2025- OrleansT-02.	Town Library Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
Action 2025- OrleansT-03.	Bridge Upsize Inventory	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
Action 2025- OrleansT-04.	Culvert Inventory and Repair	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
Action 2025- OrleansT-05.	Wastewater Treatment Plant	0	1	1	1	1	0	1	1	1	1	1	1	1	1	12	High
Action 2025- OrleansT-06.	Critical Facilities in the Floodplain	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High

Note: Volume I, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)