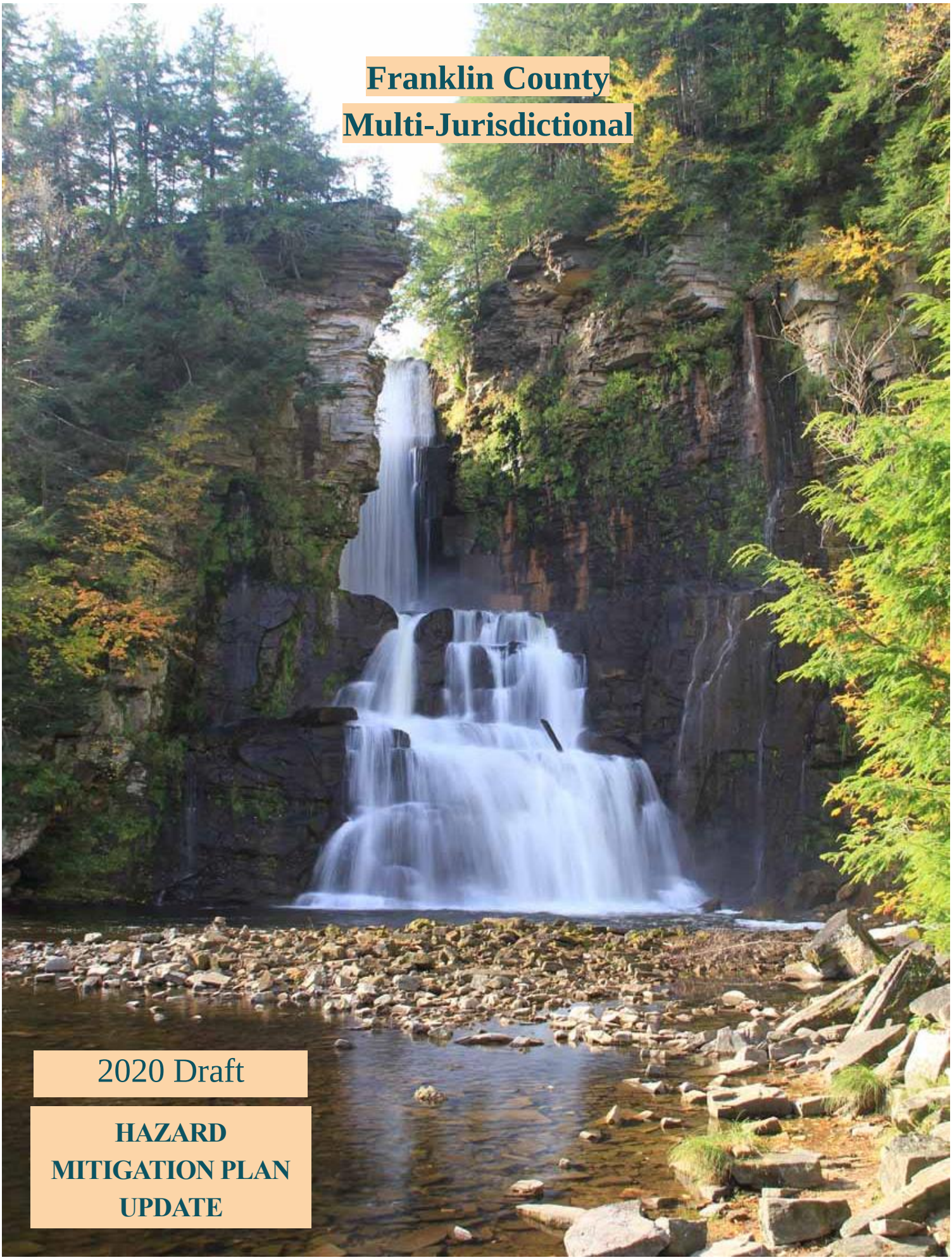


Franklin County Multi-Jurisdictional

2020 Draft

HAZARD MITIGATION PLAN UPDATE

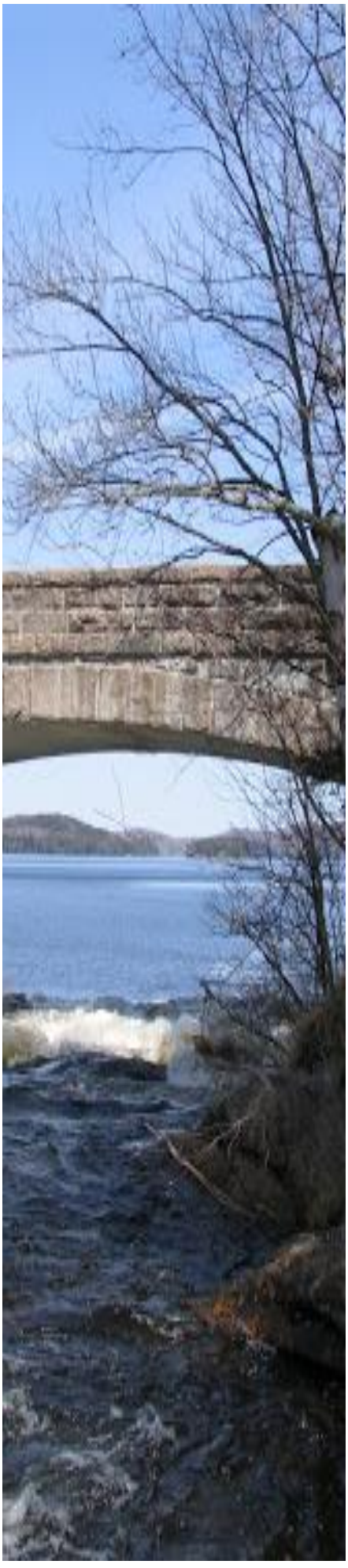


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1. INTRODUCTION

The Franklin County Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan was prepared in response to The Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 (also known as Public Law 106-390) improves the disaster planning process by increasing hazard mitigation planning requirements for hazard events. DMA 2000 requires states and local governments to prepare hazard mitigation plans and update these plans on a five-year basis to document their hazard mitigation planning process and identify hazards, potential losses, and mitigation needs, goals, and strategies. With the support of New York Division of Homeland Security and Emergency Services (DHSES) this type of planning facilitates cooperation between state and local governments, better preparing local jurisdictions to articulate needs for mitigation aimed at increased potential funding for more effective risk reduction projects in Franklin County. This plan is the required five-year update of the FEMA/DHSES approved, jurisdiction adopted 2015 Franklin County Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan.

The Franklin County Multi-Jurisdictional Hazard Mitigation Plan Update was updated according to the guidelines listed below.

Acts, laws, and guidance used to support plan development include:

- NYS Hazard Planning Standards Guide - 2017
- FEMA "Local Mitigation Planning Handbook", March 2013
- FEMA "Integrating Hazard Mitigation into Local Planning", March 1, 2013
- FEMA "Plan Integration: Linking Local Planning Efforts", July 2015
- Local Mitigation Plan Review Guide, October 1, 2011
- DMA 2000 (Public Law 106-390, October 30, 2000).
- 44 Code of Federal Regulations (CFR) Parts 201 and 206 (including: Feb. 26, 2002, Oct. 1, 2002,
- Oct. 28, 2003, and Sept. 13, 2004, Interim Final Rules.
- FEMA. 2004. "How-To Guide for Using HAZUS-MH for Risk Assessment.
- FEMA Document No. 433. February.
- FEMA Mitigation Planning How-to Series (FEMA 386-1 through 4, 2002), available at: http://www.fema.gov/fima/planhowto.shtm.
- FEMA "Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards", January 2013



Local governments create plans and provide resources to protect their citizens from hazards that threaten their communities and homes. The Franklin County Hazard Mitigation Plan addresses the four phases of Emergency Management: mitigation, preparedness, response, and recovery to best protect its citizens from hazardous situations.

Mitigation -Actions taken to prevent future disasters or minimizing the effects. Such activities take place before or after an emergency to reduce the chance of an emergency.

Preparedness – Plans and preparations to assist with response/rescue operations. Emergency evacuation plans, creation of intermediate and long-term shelters, stocking provisions all established before an emergency.

Response – Putting emergency plans and training into effect. Limiting loss of life, personal property and other potential outcomes. Then evaluation of response for future incidents.

Recovery -Actions taken to establish a return to normalcy, and/or create an even safer environment. Actions following an event; rebuilding destroyed property, repair of essential infrastructure and reopening essential services. Locating financial assistance for recovery.

The Franklin County Multi-Jurisdictional Hazard Mitigation Plan Update 2020 is being developed as part of an ongoing pre-disaster preparedness planning process in Franklin County. The original Franklin County Plan developed and FEMA-approved in 2008 was superseded by an update in 2015. This plan provides the required 5-year update to the 2015 plan. The 2020 Plan Update reflects any changes in hazard risk assessments, hazard profiles and mitigation actions within the county and addresses specific details for each of the jurisdictions and the county, including the Saint Regis Mohawk Reservation (added after completion of the 2008 Plan). The Franklin County Local Emergency Planning Committee (LEPC) is

authorized to promote policies, programs, and activities to reduce hazard risks in their area of responsibility. Examples of the above include:

- Encouraging municipalities to adopt comprehensive community development plans, zoning ordinances, subdivision regulations, emergency management plans, and building codes that consider and factor in the potential significant local hazard threats in and around the jurisdictions.
- Promoting compliance with, and enforcement of, existing laws, regulations, and codes, especially those that are related to hazard risks, e.g., building and fire codes, flood plain regulations, zoning.
- Encouraging and assisting water and wastewater treatment plants to replace chlorine use with a safer disinfectant.
- Encouraging and participating in municipal stream channel maintenance programs.
- Encouraging state and local Departments of Transportation to address dangerous conditions on roads used to transport hazardous materials carriers.

While the recently updated (2020) Comprehensive Emergency Management Plan identified three phases of comprehensive emergency management (prevention, response, and recovery), its primary focus remained on response and recovery readiness. Thus, as part of the ongoing effort to support sustainable communities by promoting safe working and living communities, a healthy environment, and a robust economy, Franklin County developed the Franklin County Multi-Jurisdictional Hazard Mitigation Plan to specifically address hazard mitigation.

The Franklin County Multi-Jurisdictional Hazard Mitigation Plan provides the framework for the county, and each jurisdiction therein, to implement actions to mitigate the most detrimental impacts of the natural hazards which most threaten the communities. The Plan, and subsequent updates, documents the planning process including the organizational process, public participation, the hazard risk assessment process, the hazard mitigation strategies developed, and how the county will maintain the plan to ensure that it is periodically evaluated and updated, and that it is considered as other planning activities occur.

The County of Franklin, nineteen participating towns therein, and the Villages of Brushton, Burke, Chateaugay, Malone, Saranac Lake, and Tupper Lake and the Saint Regis Mohawk Reservation intend to implement the Plan by coordinating the efforts of the partners (Table 1-List of Participating Jurisdictions). This collaboration will decrease the cost of plan development by each jurisdiction and the cost of implementation. During the update process the County, Towns, and Village established partnerships and the rapport needed for mitigation planning and the mitigation actions to be taken within the County. Table 1 list participating jurisdictions.

Table 1 List of Participating Jurisdictions

*No change since 2015 Update

Jurisdiction/Towns/Villages	Notice of Commitment to the Planning Process	Participated in Planning Meetings	Provided Mitigation Actions for 2020	Date of Formal Adoption of Plan (TBD)
Bangor	X	X	X	
Bellmont	X	X	X	
Bombay	X	X	X	
Brandon	X	X	X	
Brighton	X	X	X	
Burke	X	X	X	
Chateaugay	X	X	X	
Constable	X	X	X	
Dickinson	X	X	X	
Duane	X	X	X	
Ft. Covington	X	X	X	
Franklin	X	X	X	
Harrietstown	X	X	X	
Malone	X	X	X	
Moira	X	X	X	

Santa Clara	X	X	X	
Tupper Lake	X	X	X	
Waverly	X	X	X	
Westville	X	X	X	
Brushton	X	X	X	
Burke	X	X	X	
Chateaugay	X	X	X	
.Malone	X	X	X	
Saranac Lake	X	X	X	
Tupper Lake	X	X	X	
Saint Regis Mohawk Reservation*	X	X	X	
Franklin County	X	X	X	

Each jurisdiction has the primary responsibility for development and implementation of mitigation policies, strategies, and actions at the local level, however, several resources are available at the state and federal levels to assist the local governments in these endeavors. NYS Department of Homeland Security and Emergency Services (DHSES)is the agency providing planning assistance and guidance to the local jurisdictions at the state level. The Federal Emergency Management Agency provides grants, grant aids, planning tools and training in support of mitigation planning at the federal level. The County of Franklin does not have a Planning Office however cooperation between the Industrial Development Agency, the Franklin County Soil and Water Conservation District and the County contributes to uniform planning in the county and provides services in some capacity to the jurisdictions to assist them to consider, if not incorporate, hazard mitigation into on-going planning projects throughout the county.

Planning Process

The process to update the Plan and results are documented here; the original (2008) Plan and update (2015) planning process remains documented, Franklin County, the nineteen Towns and six Villages and the Saint Regis Mohawk Reservation, and others participated to update the 2020 Plan.

Update

Planning Meetings

Planning efforts for the 2020 update were seriously impacted by the COVID-19 pandemic through the entire state as well as Franklin County. The county and all jurisdictions met virtually throughout the data updating process. Planning efforts were ultimately accomplished through virtual telephone calls, GoToMeetings, email communications, and postal mail. Planning efforts were further supported by a website created for officials to provide input, ask questions, and review sections of the plan.

Summer 2020

The Franklin County Legislature with the Emergency Services Department contracted with Friends of the North Country, Inc., (Friends) a non-profit community development agency, to assist the county to update the Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan, (FEMA approved in 2015). The importance of public involvement in developing and gaining support for a meaningful plan is recognized and public support for a project is best achieved by engaging them in the planning process from the beginning.

Also, residents and officials are the most knowledgeable about their community and the hazards that have historically threatened or affected their communities. They are also most familiar with the specific locations/properties that are vulnerable. The public needs to be aware of potential hazards in their communities so they can take measures themselves to protect their lives and property.

The Local Emergency Planning Committee (LEPC), chaired by the Franklin County Office of Emergency Services remains the oversight committee for the Plan. Members include representatives of fire, health, law enforcement, public works, highway, and emergency services throughout the county.

As the oversight committee, the LEPC received quarterly hazard reports via the Office of Emergency Services since 2015.

Fall/Winter/Spring of 2020-2021

The consultant met with the Emergency Management Director for Franklin County and at his direction notified the LEPC in August to formally initiate the update process, establish a timeframe and to begin the update information-gathering process with committee support.

In August of 2020, letters of introduction and explanation were sent via direct mail (USPS) to every town and county jurisdiction, political officials, highway supervisor municipal clerks, fire departments, school officials notifying them of the hazard mitigation plan update process, requesting contact information and an indication of their desire to participate in the process. Regional agencies were advised of the process and encouraged to participate. In the communication, Friends of the North Country presented an overview of the Plan update process emphasizing the importance of jurisdictional and public participation and the requirement to maintain a current hazard mitigation plan. The consultant explained the type of information needed to maintain a meaningful plan and the importance of town and county agencies' active participation in the process. In follow up, participants were provided handouts to update hazard risks each participant recognized as impacting their community, focusing on events since 2015. The consultant cited the need for each jurisdiction to determine the outcome of mitigation actions delineated in the 2015 annex, providing details of the project or the reason it was not accomplished. The consultant then requested information relating to mitigation actions specific to each jurisdiction that might be accomplished over the next 5 years, and beyond that would mitigate the effects of natural disasters that may impact their area. Officials were asked to provide any added critical facilities, updating the 2015 list, and providing any land use/planning requirements within their specific jurisdiction. Identifying shelter facilities in their area.

Worksheets were provided for ease in communicating the information. Telephone, email, and the website were utilized by officials to provide information to the consultant. Jurisdictions have been able to submit information directly on forms pertinent to their town/village via the website. All jurisdictions participated in GoToMeeting work sessions with the consultant throughout the spring of 2021.

Public Participation

The mitigation plan update draft was made available for citizen review and comments in printed form and on-line on the Franklin County website and all jurisdictions with websites. Community review of the updated plan provides a valuable opportunity for citizens to understand the significance of hazard mitigation, so agencies and individuals are better able to respond in the event of a natural disaster. Copies of the updated Plan were available in strategic locations in the County and comments and recommendations were encouraged. Requests for comments were announced in press releases and public notices posted in local and County Offices. The Adirondack Park Agency provided insight and adjoining counties were advised of the draft plan update published on the Franklin County Emergency Services website at:

http://www.frcoemergencyservices.org/files.html

Opportunity for Public & Stakeholder Involvement

The draft multi-jurisdictional plan is available for public comment on the County website and in printed form at the County. Each jurisdictional annex is available at the town/village office and on appropriate websites. Requests for comments were announced in a press release and posted public notices in Town and County Offices. In August 2021 the draft Franklin County Hazard Mitigation Plan Update was posted on the County website for review at:

http://yourfirstdue.com/manager/data/1314997201/File/franklin_county_section_i.pdf

The following stakeholders were sent a link to the 2020 Plan Update for review and comment:

- Ed Adams, Franklin County Highway Superintendent
- Kathleen Strack, Franklin County Health Department
- Dan Kelleher, Adirondack Park Agency
- Derek Comins, Saint Regis Mohawk Emergency Services Director
- Chastity Miller, Franklin County Soil & Water Conservation District
- Don Dabiew, Franklin County Legislature
- Jeremy Evans, Industrial Development Agency

The Emergency Services Directors, who serve as Hazard Mitigation Coordinators from the neighboring counties - Essex, Clinton, Hamilton, and St. Lawrence were also provided the link for their review.

Continuing Opportunities for Public Involvement

This 2020 Plan Update will be implemented over the next five years. During this time public participation will be encouraged by the following:

The Franklin County Local Emergency Planning Committee (LEPC), chaired by Rick Provost, Emergency Services Director, generally meets quarterly; meetings are announced, and the public is encouraged to attend and/or offer input. During these meetings, the LEPC deliberates on specific hazard events and reduction actions that can be taken for those hazards determined to be most significant.

As part of their regular meeting agenda, the LEPC will periodically: consider the appropriateness of Mitigation Plan goals, objectives, and strategies for current and future conditions, and identify roadblocks to effective plan implementation.

As outlined in the recently updated (2020) Franklin County Comprehensive Emergency Management Plan, the LEPC reviews hazard reduction action proposals submitted that include:

- A description of the action
- A statement on the technical feasibility of the action
- The estimated cost of the action
- The expected benefits of the action and the estimated monetary value of each benefit
- An estimate of the level of community support for the action

The above information constitutes a Risk Reduction Report. Following review and discussion by the LEPC, Risk Reduction Reports are provided to the Emergency Services Office for review and the report(s) may be presented to the County Legislature for consideration of funding; in that event, action item proposals will be available to the public via the county website for review.

Public Invited

Community review of the updated plan provides a valuable opportunity for citizens to understand the significance of hazard mitigation, so agencies and individuals are better able to respond in the event of a natural disaster. Requests for comments were announced in press releases and posted public notices; subsequently, no comments from the public were received. During implementation of the Plan update, the quarterly meetings of the LEPC will continue to be advertised and open to the public. Risk Reduction Reports will be made available for public comment on the Franklin County web site as appropriate.

The Updated Hazard Mitigation Plan will be kept current for five years. Near the end of this five-year period, another plan update will be prepared, which will include an opportunity for public involvement and input. Meetings will be open to the public and advertised through press releases and flyers to be posted in municipal offices. Community members will be encouraged to provide input through their municipal representatives, and/or the public meetings.

Plan Integration

The 2020 Plan does not stand alone. It incorporates elements of other plans, studies, and reports as follows:

- Franklin County Hazard Mitigation Plan
- The hazards of concern (2015) were reviewed for the update, and most continue to be of concern.
- The status of actions (2015) was reviewed, and, on a case-by-case basis, decisions were made regarding maintaining the mitigation actions in the update.
- The 2020 Plan Update includes updated data and a current review of natural hazard risks and ways to mitigate those risks. In addition to specific mitigation actions/projects, covered later under Mitigation Strategy, the update and planning process afforded opportunities for enhancing other planning mechanisms considered by the jurisdictional representatives, key informants, et al.
- Franklin County CEMP – utilized for response and recovery details.
- Climate Change information was considered using NYSERDA and Cornell Cooperative Extension, as well as Cornell University, Paul Smiths College, and the Saint Regis Mohawk Reservation well-written document on Climate Change.

The Franklin County Comprehensive Emergency Plan provides the LEPC with information and hazard/risk response information; a component of that plan allows for reporting to the LEPC post-event for analysis and planning.

Although Franklin County does not currently have a Planning Department, the County is linked with the Farmland Protection Plan/Board, the regional Soil and Water Conservation agency, the Adirondack Frontier, and the Adirondack Park Agency. These agencies are cognizant of the Franklin County Multi-Jurisdictional Hazard Mitigation Plan from 2015 and the current update process.

The County intends to take the following actions to incorporate mitigation data, information, and concepts into the following:

Table 2 Integration into Existing and Future Planning Mechanisms

Jurisdiction	Planning Mechanism and How Incorporated
Franklin County	➢ Grant Applications – Will make use of appropriate maps and data from the Hazard Mitigation Plan. Will apply for Hazard Mitigation Grant Funding. ➢ Budget- Hazard Mitigation Actions will be considered for funding. ➢ Comprehensive Emergency Management Plan update will review the Hazard Mitigation Plan, integrating applicable information. Post-event reporting will enhance future mitigation efforts.



Adoption and Review

All participating jurisdictions and the Franklin County Legislature are required to adopt the updated plan before formal approval from FEMA (Appendix A). Following notification from FEMA that the updated Plan is "Approvable Pending Adoption," jurisdictional resolutions of adoption of the updated Plan will be made within a year from the approval date as required.

After plan update completion and approval, the LEPC and Franklin County Emergency Services Office will continue to provide direction, oversight, and assistance with an annual plan evaluation process. Committee planning and oversight will be done by the Hazard Mitigation Coordinator from the Franklin County Emergency Services Office.

A press release and public notice are issued at the completion/submission of the draft announcing the availability of the draft plan at the County Emergency Services Building for review and public comment. A toll-free number, fax number, email and US Postal Service mailing address are provided so any interested individual can easily contact the hazard mitigation planning project manager following the "Approvable Pending Adoption" notification from FEMA. (The sites are handicapped accessible.) A link to the draft update of the Plan will be published on the Franklin County website home page at: http://franklincony.org

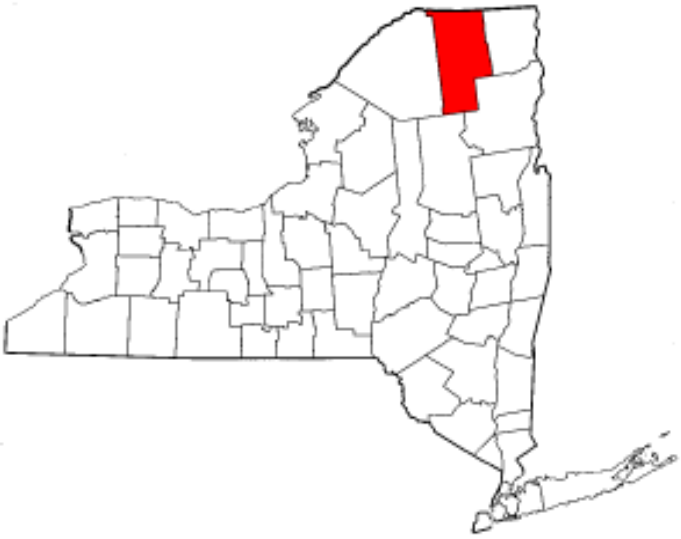


Jurisdictions will be requested to publish elements of the Plan Update on their respective websites to engage the stakeholders and the public in current and future hazard mitigation planning and keep them informed of community planning efforts

Table 3 Links for the respective websites are listed below:

Franklin County	https://www.governmentcounty.org/county-franklin-county-ny	Town of Franklin	https://townoffranklin.com/
St. Regis Mohawk Tribe	https://www.srmt-nsn.gov/	Town of Harrietstown	https://www.harrietstown.org
Town of Bangor	https://www.franklincountyny.gov/our_communities/bangor.php	Town of Malone	https://www.malonetown.com/
Town of Bellmont	http://www.townofbellmontny.org	Town of Moira	https://moirany.com/home.html/
Town of Bombay	http://www.bombayny.us	Town of Santa Clara	https://www.townofsantaclara.com/
Town of Brandon	https://www.citydirectory.us/town-brandon-new-york.html	Town of Tupper Lake/Village	https://www.tupperlakeny.gov/
Town of Brighton	www.townofbrighton.net	Town of Waverly	https://www.franklincountyny.gov/our_communities/waverly.php/
Town of Burke	http://www.burkeny.org/	Town of Westville	https://www.townofwestvilleny.org/
Town of Chateaugay	https://www.chateaugayny.org/	Village of Brushton	www.franklincountyny.gov/our_communities/brushton.php/
Town of Constable	https://www.townofconstable.com/	Village of Burke	www.nnyacgs.com/townofburke.html/
Town of Dickinson	https://www.townofdickinson.com/	Village of Chateaugay	www.nnyacgs.com/town_of_chateaugay.html/
Town of Duane	https://duaneny.com/	Village of Malone	www.villageofmalone-ny.com
Town of Fort Covington	https://www.townofcovington.com/	Village of Saranac Lake	https://www.saranaclakeny.gov/

2. BACKGROUND



Located in northern New York State, Franklin County is bordered on the east by Clinton County, on the west by St. Lawrence County, on the south by Essex and Hamilton Counties, and on the north by Quebec Province, Canada. Malone, the county seat, is about 70 miles southwest of Montreal, Canada; 155 miles north of Albany; and 195 miles northeast of Syracuse. It is a rural county comprised of small towns and villages. The total population is 50, 692, a decrease since 2015. Of county residents, 20.4% are 62 years of age or older and 19.6% are under the age of 18. ACS 2018 statistics indicate that the poverty rate in Franklin County is 18.2%, well above the state average.

The three main population centers of the county are the villages of Malone (population: 5,735), Saranac Lake (population: 5,242), and Tupper Lake (population: 3,710). The Village of Malone located in the Town of Malone (population: 14,139) is the county seat.

Franklin County is named for Founding Father Benjamin Franklin. Malone is the county seat and located just minutes south of the Canadian Border. Much of the county is within the Adirondack Park. Famed as the childhood home of Almanzo Wilder - immortalized in his wife Laura Ingalls Wilder's celebrated children's classic - Farmer Boy.

Main Industries: The earliest industry in the county was potash production. Other early industries included agriculture, especially the raising of hops (mainly used to brew beer) and potatoes, mills, and iron ore mining. The southern portion of the county benefited from the founding of sanatoriums for the treatment of tuberculosis and other ailments, based on the work of Dr. E.L. Trudeau. The Adirondacks, which were once a barrier to settlement, began to serve as a draw for tourists in the late 19th century, and now serve as one of Franklin County's defining features. Today industries include Biotech, Clean Energy, Medical, and Tourism.

Education: Franklin County is home to North Country Community College and Paul Smith's College. North Country Community College is sponsored by and serves Franklin and Essex counties, with campuses in Malone - Saranac Lake & Ticonderoga.

Water: The County is home to more than 670 bodies of water offering unparalleled year-round outdoor recreation. Paddle historic Adirondack canoe routes, part of the Northern Forest Canoe Trail, or New York State's only designated wilderness canoe area - the St. Regis Canoe Area.

Franklin County Water Shed

A watershed is an area of land that drains into a body of water, such as a river, lake, reservoir, estuary, sea, or ocean. The watershed includes the network of rivers, streams and lakes that convey the water, as well as the land from which water runs off. Watersheds are separated from adjacent watersheds by high points such as mountains, hills, and ridges. (NYS DEC)

Comprised of two watersheds most of Franklin County is in the 5,600 sq. miles of the St. Lawrence River watershed. 80% of Franklin County is impacted by this watershed.

The St. Lawrence River watershed is at the border of New York and Canada acting as a “gateway” between the North Atlantic Ocean and the Great Lakes.

The remaining 20% is in the Lake Champlain watershed. The southwest corner of the county is part of these 8,234 sq. miles of lakes, rivers, and streams. Lake Champlain flows north to the Richelieu River into Quebec and the St. Lawrence River.

Both the St. Lawrence and the Saranac River watersheds have recently been researched with the Soil and Water Conservation District of Franklin County issuing a report, The St. Lawrence Watershed Recommendations and Implementation Strategy and FEMA issuing the Risk Discovery Report 2018 of the Saranac River portion of the Lake Champlain Watershed. Both reports received input from the numerous municipalities within the watersheds and have made valuable recommendations for maintaining watershed health as well as actions municipalities can take to mitigate potential hazardous events.

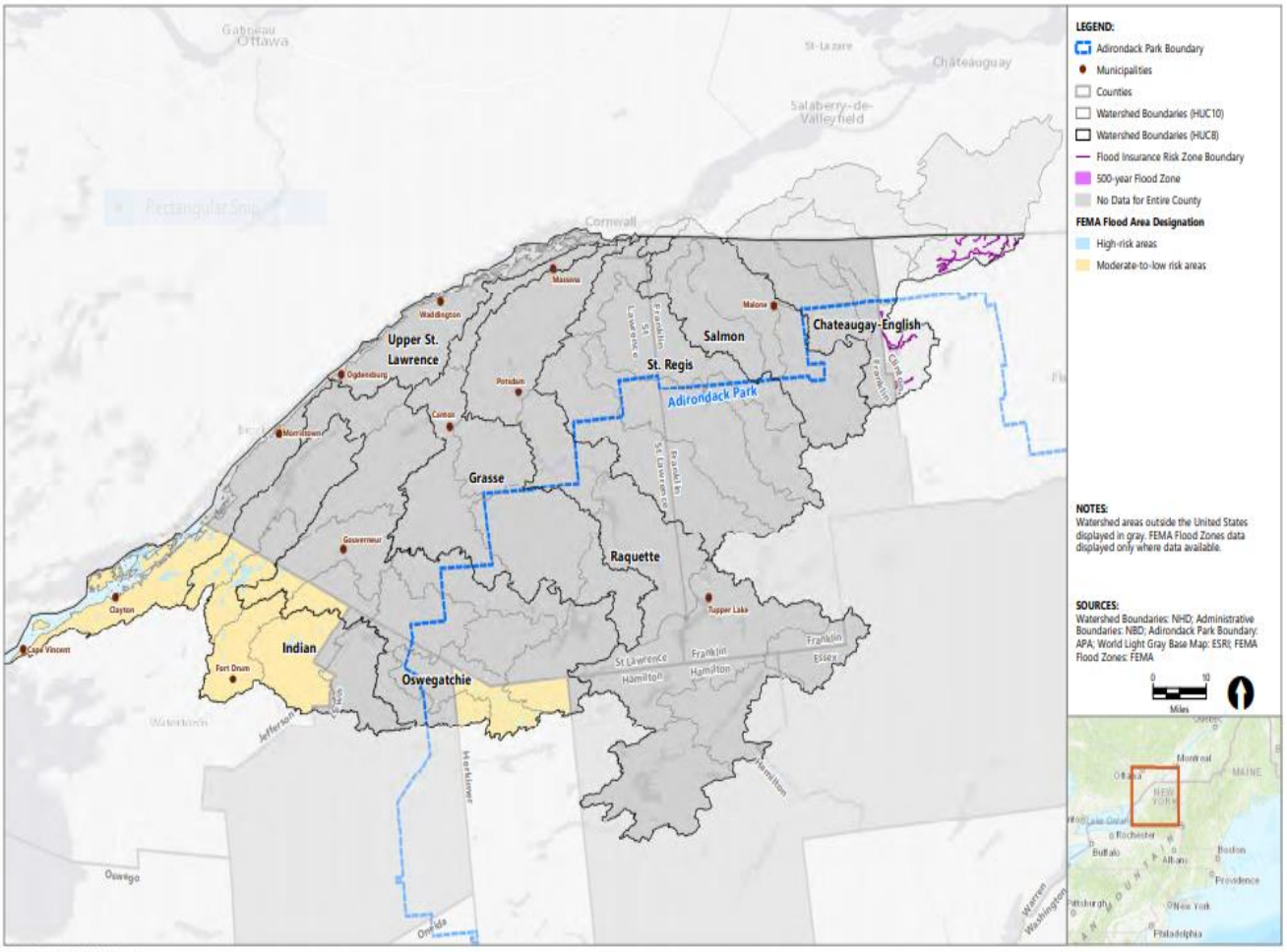
Table 4

St. Lawrence River Watershed

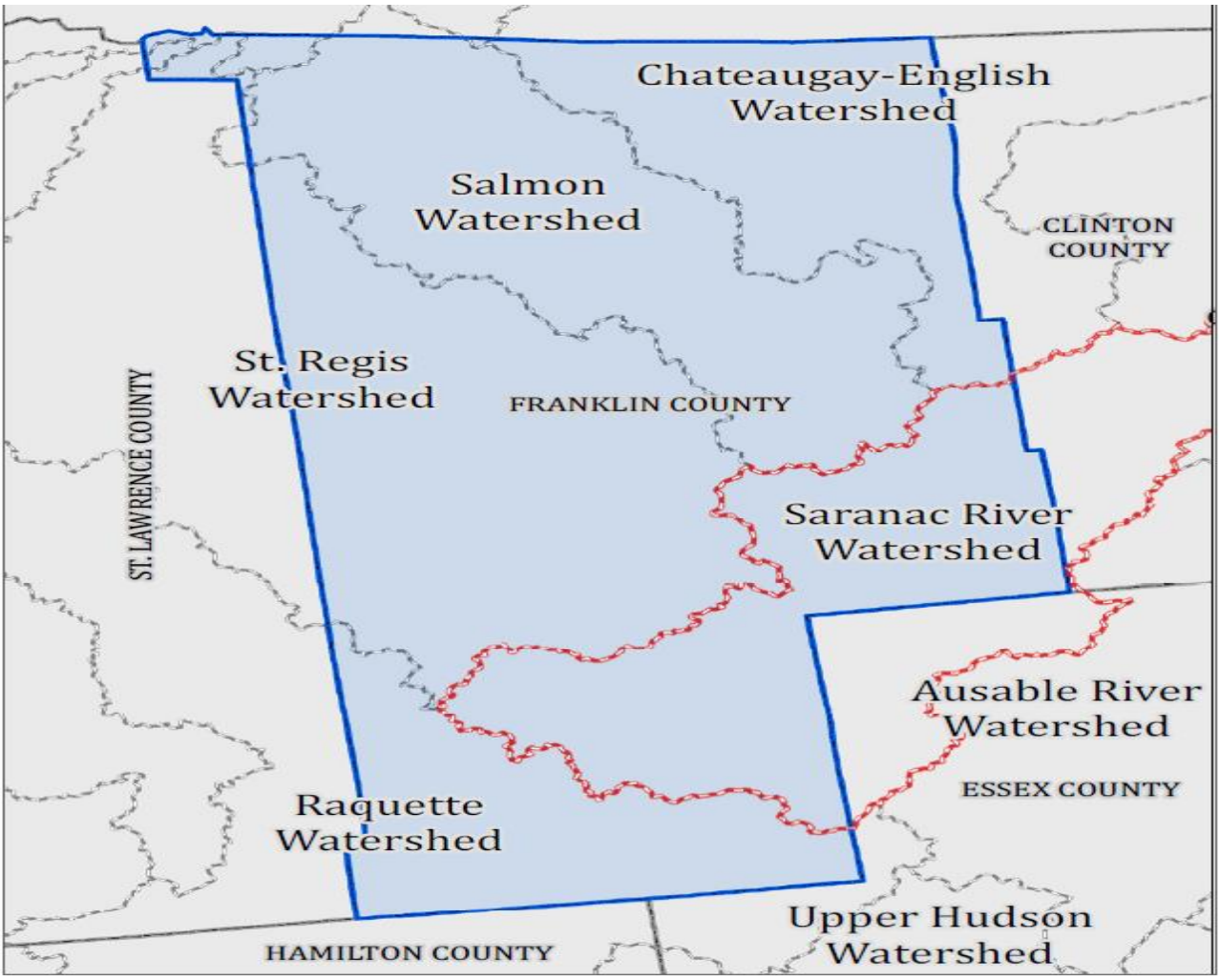
River	Town (S)	Sq. Miles
Raquette River	Tupper Lake Harrietstown	1259.6
St. Regis River	Santa Clara Waverly Brandon Brighton Duane Dickinson Moira St. Regis Mohawk	863.2
Salmon River	Franklin Malone Bangor Bombay Moira Ft. Covington Westville Dickinson Bellmont Brighton Constable	405.6
Chateaugay-English River	Chateaugay Burke Bellmont Constable	411.6

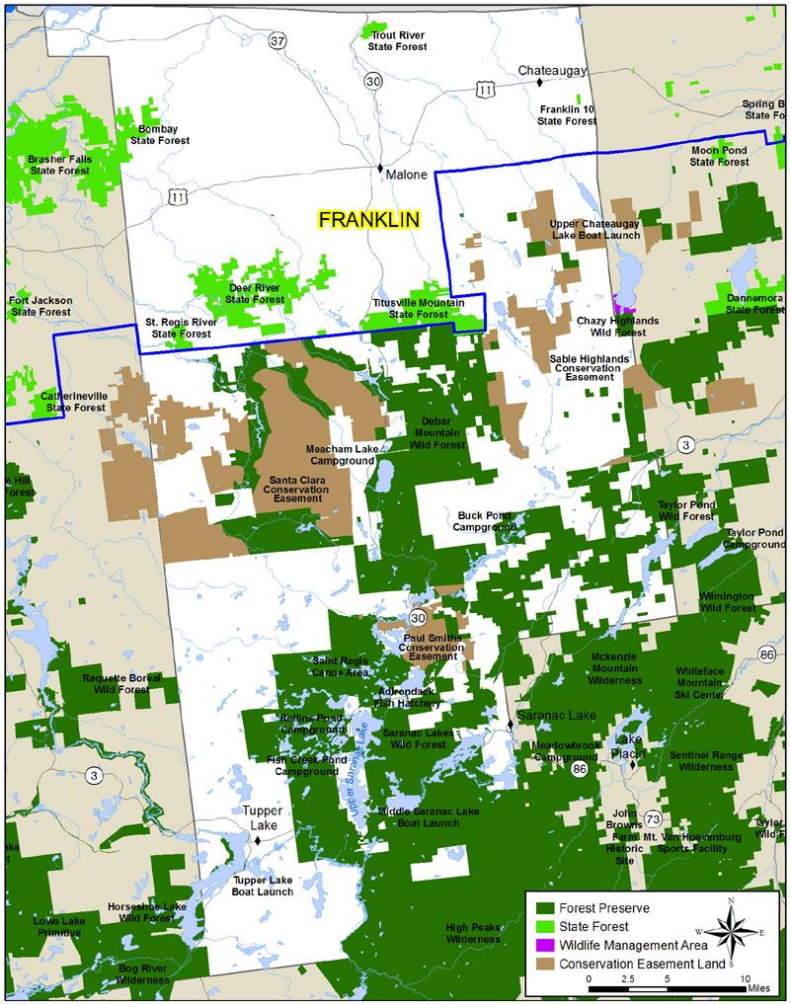
Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton Bellmont Duane Santa Clara Harrietstown Tupper Lake Franklin	608.1



Map 15
FEMA Flood Zones in St. Lawrence River Watershed in New York State
St. Lawrence River Watershed Revitalization Plan


Chateaugay-English Watershed
Salmon Watershed
CLINTON COUNTY
St. Regis Watershed
FRANKLIN COUNTY
ST. LAWRENCE COUNTY
Saranac River Watershed
Ausable River Watershed
ESSEX COUNTY
Raquette Watershed
Upper Hudson Watershed
HAMILTON COUNTY



Land Use and Assets

Franklin County has a total land area of 1,697 square miles. Of the total land area of the county, 3.89% is water. On average, there are 31 people and 15 homes per square mile. The northern one-third of the county is mostly agricultural and is in the St Lawrence River Valley Plain. The southern two-thirds is rugged and mountainous forestland, falling in the boundaries of the Adirondack State Park. According to 2017 USDA statistics, 140,717 acres of the county's land is farmland, a decrease since 2012. There are 636 farms in the county with an average size of 221 acres. The two main crops are hay and corn for silage. Livestock includes primarily cattle and layers(chickens). Like most counties in the United States, Franklin County has experienced significant decline in its farm sector over the last half-century.

Housing Stock

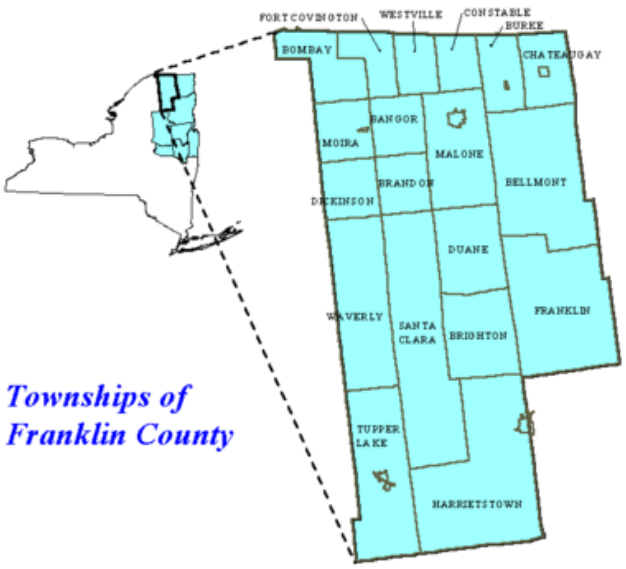
Franklin County has a particularly aged housing stock. A significant majority of the housing units in the County are nearly fifty years old. According to the 2018 ACS, Franklin County has 25,650 housing units, of which 19,088 are occupied. Out of the 25,650 total housing units, 47.7% were built prior to 1960 and 18.4% were built prior to 1939. Several communities within the County have approximately three-quarters of their housing stock built prior to 1960 and several more Franklin County communities have many units built prior to 1939. Manufactured housing accounts for 11.3% of the housing stock.

Roadways

U.S. Route 11 running east/west bisects the upper third of the county. State Route 30 runs centrally, north/south, from Malone south through Paul Smiths and on to Tupper Lake. Route 30 and Route 11 serves as the major evacuation routes in times of a disaster. State Route 37 runs from Hogansburg to Fort Covington, continuing to Malone. State Route 3 bisects the lower third of the county running northeast/southwest as it passes through the County – from the easternmost edge, bordering Clinton County, to Saranac Lake and on to Tupper Lake. The entire segment of State Route 3 that is in Franklin County is also within the boundaries of the Adirondack Park, as is most of State Route 30.

Local Governance and Planning Capabilities

Comprised of seven members, the Franklin County Board of Legislators is the decision-making body for the County. The Legislature is responsible for establishing County policies, reviewing the administration of government, appropriating funding, levying taxes, reviewing and adopting the annual budget and enacting resolutions and local laws. Working closely with the legislators on county matters is the County Manager, the Emergency Preparedness Director, Highway Superintendent and the Building and Grounds Superintendent who is also responsible for Code Enforcement. The Adirondack Park Agency is responsible for land use management in approximately two-thirds of Franklin County. Without a County Planning Office any land use and building decisions are managed by each individual municipality.



Townships of Franklin County

Town governments are comprised of an elected Town Board and Supervisor whose responsibilities include maintaining town infrastructure and roads. Villages in Franklin County are governed by elected Mayors and Village Boards. Saint Regis Mohawk Tribe is governed by an elected Tribal Council.

All town and village local Code Enforcement Officials throughout Franklin County will continue to stay current with all regulations by maintaining updated NYS Building Code reference guides and making use of NYS training Webinars and Workshops. In their role as Floodplain Administrators these same individuals will continue to work closely with NYSDEC. NYSDEC provides links to Climate Smart Communities webinars for training and also a Stormwater Training Calendar for training sessions available around NYS. NYSDEC will provide technical assistance when requested. Link is www.dec.ny.gov/energy/84359.html. To support their awareness, floodplain officials may download the most recent FEMA Study Guide and Desk Reference for floodplain administrators. Link is www.fema.gov/floodplain-management-requirements.

Guided by NFIP compliance requirements, plans developed for proposed projects, with respect to critical facilities, shall protect those facilities to a 500-year flood event, or the actual worst-case damage scenario to be designed by the project engineer(s) in collaboration with the local floodplain administrators, local code officials, DEC, and other cognizant authorities. Development has been minimal since the previous plan county-wide.

For the purposes of this multijurisdictional plan, 2020 update, all towns, villages, jurisdictions, in Franklin County, and the Saint Regis Mohawk Tribe/Akwesasne are represented and participated in the original plan (2008), the 2015 update, and are continuing to be a part of the 2020 update.

Table 5 Jurisdiction, Population, Hazard Mitigation Coordinator -2020 (ACS 2018)

Jurisdiction	Population	Coordinator
Town of Bangor	2,241	Gary Monica, Supervisor
Town of Bellmont	1,434	Bruce Russell, Supervisor
Town of Bombay	1,295	Christopher Jock, Supervisor
Town of Brandon	566	Michael Lawrence, Supervisor
Town of Brighton	1,435	Peter Shrope, Supervisor
Town Burke	1,465	William Wood, Supervisor
Town of Chateaugay	2,253	Donald Bilow, Supervisor
Town of Constable	1,578	Richard Onufer, Supervisor
Town of Dickinson	823	Sherry Smith, Supervisor
Town of Duane	175	Edward J. Lemieux, Sr., Supervisor
Town of Fort Covington	1,604	Patricia Manchester, Supervisor
Town of Franklin	1,140	Dorothy Brown, Supervisor
Town of Harrietstown	5,507	Michael Kilroy, Supervisor
Town of Malone	14,139	Andrea Stewart, Supervisor
Town of Moira	2,811	Darrin Jock, Supervisor
Town of Santa Clara	339	Andrew McGill, Supervisor
Town of Tupper Lake	5,826	Patricia Littlefield, Supervisor
Town of Waverly	1,022	Chad E. Rivers, Supervisor
Town of Westville	1,812	Rod J. Lauzon, Supervisor
Village of Brushton	486	Kevin Pentalow, Mayor
Village of Burke	212	Craig Dumas, Mayor
Village of Chateaugay	858	Matthew R. Clarke, Mayor
Village of Malone	5,735	Andrea Dumas, Mayor
Village of Saranac Lake	5,242	Clyde Rabideau, Mayor
Village of Tupper Lake	3,710	Paul A. Maroun, Mayor
St. Regis Mohawk Tribe	3,331	Derek Comins
Franklin County	50,692	Donald Dabiew, Chairman

As indicated above, Franklin County is a predominantly rural community characterized by below average median household income of $51,696, with 18.2% of the population below the poverty level (ACS 2018.) Limited tax base, staff, and planning expertise restrict local planning capabilities. There is no regional planning body into which Franklin County is incorporated; the County itself has no planning department. The nineteen towns and the County have Code Enforcement Officials as do the six Villages. Code Officers serve as the Floodplain manager in their respective municipalities. Most Town Supervisors are part-time officials with regular work obligations. Planning, engineering, and surveying needs are primarily conducted by private contractors hired on an as-needed basis.

Planning

Town and Village governments have the authority to develop general or comprehensive plans. However, due to limited funds, staff, and technical expertise, few municipalities have pursued the development of such plans. Like many municipalities, Franklin County has no general or comprehensive plan.

Franklin County has a Farmland Protection Plan with a Farmland Protection Board as well as a Right to Farm Law. The County utilizes the Adirondack Frontier (Industrial Development Agency) and the Franklin County Soil and Conservation Agency.



The table below lists jurisdictions in Franklin County and **basic land use tools in place** for each locale; other known/reported plans and land use strategy(ies) is/are noted in the Jurisdictional Annex. All jurisdictions have a Code Enforcement Officer who is also the designated Floodplain Administrator. *(Information accessed from jurisdictions and Franklin County Soil and Conservation Agency)*

Table 6 Basic Land Use Tools in Place

Municipality	Comprehensive Plan	Local Waterfront Revitalization Plan	Site Plan Review	Zoning Law	Subdivision	Waterbody/Shore Protection	Floodplain/Flood Protection	Waste Management/Junk Yard	Wastewater/On-site Septic	Stormwater	Agriculture	Smart Growth	APA Regulations
Saint Regis Mohawk		P	X			X	P	X	X	X	X		
Bangor								X					
Bellmont			X	X	X	X	X	X	X	X	X		X
Bombay								X					
Brandon								X					
Brighton						X	X	X	X	X	X	X	X
Burke													
Chateaugay													
Constable								X					
Dickinson	X		X	P		X	X	X	X	X	X		X
Duane						X	X	X	X	X	X		X
Fort Covington								X					
Franklin						X	X	X	X	X	X		X
Harrietstown			X	X	X	X	X	X	X	X	X		X
Malone	P	X	X	X	X			X					
Moira													
Santa Clara	P		X	X	X	X	X	X	X	X	X		X
Tupper Lake	X	X	X	X	X	X	X	X	X	X	X	X	X
Waverly				X	X	X	X	X	X	X	X		X
Westville				X				X					
Brushton (V)								X					
Burke (V)													
Chateaugay(V)													
Malone (V)	X	X	X	X		X	X	X	X	X			
Tupper Lake (V)	X	X	X	X	X	X	X	X	X	X	X	X	X
Saranac Lake (V)	X	X	X	X	X	X						X	X

LEGEND

X = Local Regulation, in effect

P = In Process of Being Developed or Adopted

Regulatory planning and land management tools are dispersed among agencies and municipalities. Generally, building codes, zoning ordinances, subdivision regulations, and growth management ordinances are the prerogative of Town or Village governments. In those jurisdictions with planning programs and permitting processes that meet APA guidelines and have been approved by the APA as an Adirondack Park Approved Local Land Use Program, the municipality may review and approve certain projects locally. Presently none of the Towns in Franklin County have an Adirondack Park Approved Local Land Use Program. If a Town or Village regulatory process has not been approved, review and permitting is done by both the jurisdiction and the APA or solely by the APA.

In accordance with Hazard Mitigation Plan requirements, participating jurisdictions and the County of Franklin have been advised that the development of (future) proposed plans must consider protection of critical facilities to a 500-year flood event, or the actual worst-case damage scenario, whichever is greater.

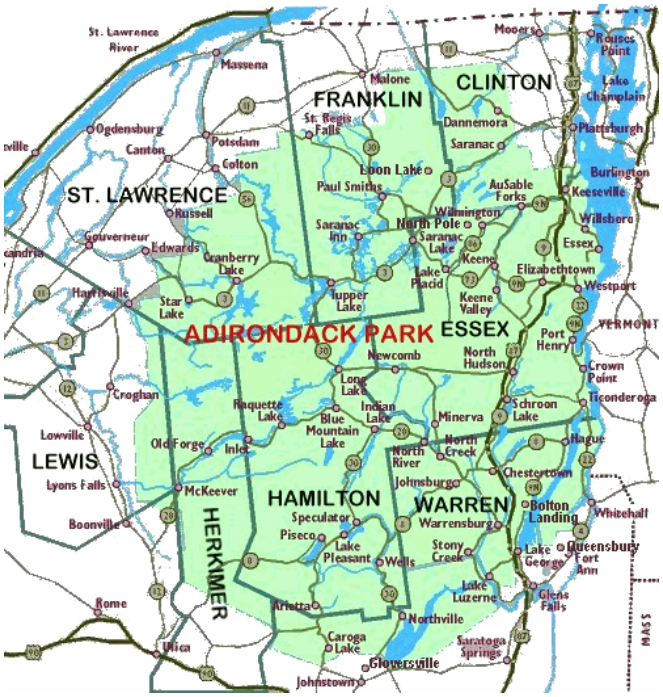
The Adirondack Park

Two-thirds of the land area of Franklin County falls within the boundaries Adirondack Park. Upon its creation in 1971, the Adirondack Park Agency's first task was to develop, in consultation with the Department of Environmental Conservation, a management plan for the administration of all State land in the Adirondack Park. The resulting plan, the Adirondack Park State Land Master Plan (Master Plan), still governs the management of State land.

"THE LANDS OF THE STATE, NOW OWNED OR HEREAFTER ACQUIRED, CONSTITUTING THE FOREST PRESERVE AS NOW FIXED BY LAW, SHALL BE FOREVER KEPT AS WILD FOREST LANDS. THEY SHALL NOT BE LEASED, SOLD OR EXCHANGED, OR BE TAKEN BY ANY CORPORATION, PUBLIC OR PRIVATE, NOR SHALL THE TIMBER THEREON BE SOLD, REMOVED OR DESTROYED." (Article 14 1984 NYS Constitution)

The Master Plan classifies State land within the Adirondack Park into seven categories according to characteristics and ability to withstand use: Wilderness, Primitive, Canoe, Wild Forest, Intensive Use, Historic and State Administrative. The NYS Department of Environmental Conservation manages State land in the park according to Adirondack Park State Land Master Plan guidelines. The following state/public land classification definitions are taken from the Adirondack Park State Land Master Plan:

1. ***Wilderness***



A wilderness area, in contrast with those areas where man and his own works dominate the landscape, is an area where the earth and its community of life are untrammeled by man--where man himself is a visitor who does not remain. A wilderness area is further defined to mean an area of state land or water having a primeval character, without significant improvement or permanent human habitation, which is protected and managed so as to preserve, enhance and restore, where necessary, its natural conditions, and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least ten thousand acres of contiguous land and water or is of sufficient size and character as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological or other features of scientific, educational, scenic or historical value.

2. Primitive

A primitive area is an area of land or water that is either:

- Essentially wilderness in character but, (a) contains structures, improvements, or uses that are inconsistent with wilderness, as defined, and whose removal, although a long-term objective, cannot be provided for by a fixed deadline, and/or, (b) contains, or is contiguous to, private lands that are of a size and influence to prevent wilderness designation; or,
- Of a size and character not meeting wilderness standards, but where the fragility of the resource or other factors require wilderness management.

3. Canoe

A canoe area is an area where the watercourses or the number and proximity of lakes and ponds make possible remote and unconfined water-oriented experiences in an essentially wilderness setting.

4. Wild Forest

A wild forest area is an area where the resources permit a somewhat higher degree of human use than in wilderness, primitive or canoe areas, while retaining an essentially wild character. A wild forest area is further defined as an area that lacks the sense of remoteness of

wilderness, primitive or canoe areas and that allows for a wide variety of outdoor recreation activities.

5. ***Intensive Use***

   An intensive use area is an area where the state provides facilities for intensive forms of outdoor recreation by the public. Two types of intensive use areas are defined by this plan: campground and day use areas.

6. ***Historic***

   Historic areas are locations of buildings, structures or sites owned by the state (other than the Adirondack Forest Preserve itself) that are significant in the history, architecture, archeology or culture of the Adirondack Park, the state, or the nation; that fall into one of the following categories:
   - State historic sites.
   - Properties listed on the National Register of Historic Places.
   - Properties recommended for nomination by the Committee on Registers of the New York State Board for Historic Preservation; and that are of a scale, character, and location appropriate for designation as an historic area under this master plan and the state has committed resources to manage such areas primarily for historic objectives.

7. ***State Administrative***

   State administrative areas are areas where the state provides facilities for a variety of specific state purposes that are not primarily designed to accommodate visitors to the park.

The New York State legislature adopted the Adirondack Park Land Use and Development Plan and Map in 1973. The text of the Plan is found in the Adirondack Park Agency Act. Section 805 of the Act describes the different private land use area classifications as follows:

1. ***Hamlet Areas***

   Range from large, varied communities that contain sizable permanent, seasonal, and transient populations with a great diversity of residential, commercial, tourist and industrial development and a high level of public services and facilities, to smaller, less varied communities with a lesser degree and diversity of development and a generally lower level of public services and facilities.

2. ***Moderate Intensity Use Areas***

   Those areas where the capability of the natural resources and the anticipated need for future development indicate that relatively intense development, primarily residential in character, is possible, desirable, and suitable. These areas are primarily located near or adjacent to hamlets to provide for residential expansion. They are also located along highways or accessible shorelines where existing development has established the character of the area.

Those areas identified as moderate intensity use where relatively intense development does not already exist are generally characterized by deep soils on moderate slopes and are readily accessible to existing hamlets.

3. Low Intensity Use Areas

Are readily accessible areas, normally within reasonable proximity to a hamlet, where the physical and biological resources are tolerant and can withstand development at an intensity somewhat lower than found in hamlets and moderate intensity use areas. While these areas often exhibit wide variability in the land's capability to support development, they are generally areas with deep soils, moderate slopes and no large acreages of critical biological importance. Where these areas are adjacent to or near hamlets, clustering homes on the most developable portion of these areas makes possible a relatively high level of residential units and local services.

4. Rural Use Areas

Where natural resource limitations and public considerations necessitate stringent development constraints. These areas are characterized by substantial acreages of one or more of the following: shallow soils, relatively severe slopes, significant ecotones, critical wildlife habitats, and/or proximity to scenic vistas or key public lands. These areas are frequently remote from existing hamlet areas or are not readily accessible. Consequently, these areas are characterized by a low level of development and variety of rural uses that are generally compatible with the protection of the relatively intolerant natural resources and the preservation of open space. These areas and the resource management areas provide the essential open space atmosphere that characterizes the park.

5. Resource Management Areas

Are those lands where the need to protect, manage and enhance forest, agricultural, recreational, and open space resources is of paramount importance because of prevailing natural resources and public considerations. Open space uses, including forest management, agriculture, and recreational activities, are found throughout these areas. Many resource management areas are characterized by substantial acreages of one or more of the following: shallow soils, severe slopes, elevation of over twenty-five hundred feet, flood plains, proximity to designated or proposed wild and scenic rivers, wetlands, critical wildlife habitats or habitats of rare and endangered plant and animal species. Other resource management areas include extensive tracts under active forest management that are vital to wood-using industry and necessary to ensure its raw material needs. Important and viable agricultural areas are included in resource management areas, with many farms exhibiting a high level of capital investment for agricultural buildings and equipment. These agricultural areas are of considerable economic importance to segments of the park and provide for a type of open space compatible with the park's character.

6. Industrial Use Areas

Are those areas that are substantial in size and located outside of hamlet areas and are areas where existing land uses are either predominantly of an industrial or mineral extraction nature or have been identified by local and state officials as potential sites for new industrial development.

The Adirondack Park Agency regulates development in accordance with these classifications, the entire Adirondack Park Agency Act, and the Agency's regulations. The APA provides land-use and density maps and comprehensive technical assistance and oversight for commercial and residential development proposals within their jurisdiction; local zoning regulations still apply both inside and outside of the park. While a detailed full review of Agency development guidelines is beyond the scope of this plan, it should be noted that the permitting process is administered according to project and land use classification. The Adirondack Park Land Use and Development Plan guides development into areas most suitable for use based upon a variety of natural, cultural, and historic characteristics. The APA further encourages the use of NYS Smart Growth development principles which can be found at:

http://smartgrowthny.org.

New land use and development projects, involving but not limited to road improvements, vegetative cutting, wetlands, flood mitigation techniques (e.g., river stabilization), culverts, bridges, and dam repairs/replacements, could require APA review. Project sponsors should seek Agency input early in the development process and submit jurisdictional inquiry Forms to the Agency during predevelopment.

APA jurisdiction covers approximately 2/3 of Franklin County. The Regulations of the Adirondack Park Agency 9 NYCRR, Subtitle Q (Part 570 et seq.) are incorporated by reference in their entirety. The APA is the cognizant authority relevant to land use, land use planning and enforcement within its jurisdiction. Representatives from the APA reviewed this document and appropriate revisions were made.

Land Use Classification Acreage by County and municipality within the Adirondack Park - May 2017

Municipality	Franklin County	Town of Bellmont	Town of Brighton	Town of Duane	Town of Franklin	Town of Harrietstown	Town of Santa Clara	Town of Tupper Lake	Town of Waverly	Village of Saranac Lake, Town of Harrietstown	Village of Tupper Lake, Town of Tupper Lake
Hamlet	7,009.0	332.4	211.5		588.2	1,622.9	55.8	1,538.9	391.2	1,103.8	1,164.3
Moderate Intensity	9,190.3	922.5	1,493.7	28.9		1,606.9	841.5	3,859.9	436.9		
Low Intensity	20,637.6	931.1	1,812.2	1,157.1	7,374.5	2,502.5	2,431.8	4,428.5			
Rural Use	131,568.1	47,962.9	1,617.7	12,342.3	39,723.9	5,095.1	2,077.9	3,723.1	19,025.1		
Resource Mngmnt.	269,485.9	38,705.9	20,716.5	4,472.4	19,662.2	23,235.8	55,051.4	53,339.6	54,302.0		
Industrial Use	621.4					557.0		64.4			
Wilderness	56,612.3					56,612.3					
Canoe Area	17,325.2		898.2			316.0	16,111.1				
Primitive	7,833.7			797.3		404.7	6,522.7		109.1		
Wild Forest	167,561.2	6,309.5	22,491.7	27,937.6	40,642.3	32,670.1	26,092.4	6,746.3	4,669.9	1.4	
Intensive Use	1,750.0			361.0	299.8	35.3	1,049.3	3.7		0.7	
Historic	0.5						0.5				
State Admin	352.9		88.7			49.8	71.1	143.4			
Pending State	2,485.2	0.1	2.8	1,461.5	13.6		716.8		290.3		
Pending Private	3.5				0.5	0.5	0.8	1.8			
Water	43,340.2	2,094.9	3,372.1	2,086.3	3,603.7	10,803.8	11,649.3	8,217.8	1,421.9	87.4	3.0
Grand Total	735,777.0	97,259.3	52,705.1	50,644.4	111,908.7	135,512.7	122,672.4	82,067.4	80,646.4	1,193.3	1,167.3

National Flood Insurance Program

Established in 1968, the National Flood Insurance Program (NFIP) provides federally backed flood insurance for residents of those communities that enact and enforce regulations to regulate development within floodplain areas. Property must be located within a community that participates in the NFIP to be eligible for the federally backed flood insurance.

To be eligible for the NFIP, a community must adopt and enforce a floodplain management ordinance to regulate proposed development in floodplains and designate a local floodplain coordinator/administrator. The program is designed to ensure that new construction does not worsen existing flood hazards and has a better chance of withstanding flood events.

According to the Community Status Book, twenty-four Franklin County communities are participating in the National Flood Insurance Program. Choosing not to participate is the Town of Chateaugay resulting from a democratic decision made at a public meeting. Jurisdictions in Franklin County continue to take the actions necessary to maintain rating in the Community Status Book, the National Flood Insurance Program and refer to the CRS Manual at:

http://crsresources.org/

Current NFIP data by jurisdiction (below):

Data covers Jan 1, 1978, through report "AS OF" date; Provides claims to date (count) and claims to date ($) Data is not disaster specific.

Table 7 NFIP Loss Statistics for Franklin County- (update reflected in blue)

Jurisdiction	Total Losses	Closed Losses	Open Losses	CWOP Losses	Total Payments
Town of Bangor	1	0	0	1	$0
Town of Bellmont	2	1	0	1	$2,944.54
Town of Bombay	4	4	0	0	$24,186.22
Town of Brighton	24	13	0	11	$5,1000
Town of Dickinson	1	1	0	0	$11,000
Town of Ft. Covington	1	1	0	0	$3,893
Town of Malone	8	6	0	2	$79,000
Village of Malone	5	3	0	2	$13,399.34
Village of Saranac Lake	10	4	0	6	$10,247.27
Town of Tupper Lake	6	2	0	4	$4,270.68
Village of Tupper Lake	5	4	0	1	$15,358.60
Town of Waverly	4	4	0	0	$113,150.10
Town of Westville	1	1	0	0	$2,991.97
Franklin County	**38**	**27**	**0**	**11**	**270,000**

Source: Mitigate NY –https://mitigateny.availabs.org

Total losses = all losses submitted regardless of status, total claims
Closed losses = losses that have been paid
Open losses = losses that have not been paid in full
CWOP losses = closed without payment
Total payments = total amount paid on losses

The following Franklin County towns are listed in the Mitigate NY data, but show no losses; Burke, Chateaugay, Constable, Franklin, Harrietstown, Santa Clara, and St. Regis Mohawk Reservation

Repetitive Loss (RL)

Source: Mitigate NY –https://mitigateny.availabs.org

The Flood Mitigation Assistance Program (FMA) once known as the SRL Program helps homeowners in the NFIP who have suffered repeated flood damage to access FEMA funds to buy-out, elevate or flood proof the property to eliminate the risk of future damages protect the lives of local responders, reduce the burden of future response and recovery costs to the State and local government, and eliminate future claims under the National Flood Insurance Fund (NFIF). In New York State the Federal cost-share for projects approved under the SRL Program is up to 90%. The non-federal cost share falls to the property owner and/or the local government. There are 4 repetitive losses, 3 properties, 0 mitigated with $30,000 paid out in the Franklin County. According to the NYS Office of General Services State-Owned Asset

Inventory, there are no NYS properties in the 100-year flood plain or the 500-year floodplain in Franklin County.

Flood Zone Data

Definitions of FEMA Flood Zone Designations Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

High Risk Coastal Areas in communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all these zones. ZONE DESCRIPTION "V" Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.

High Risk Areas in communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all these zones: ZONE DESCRIPTION "A" Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown, below, within these zones.

CID	Community Name	Total Premium	V-Zone	A-Zone	No. Policies	Coverage	Total Claims Since 1978	Total Paid Since 1978
360268	BANGOR, TOWN OF	$0	0	0	0	$0	1	$0
361392	BELLMONT, TOWN OF	$21,866	0	14	17	$2,842,800	3	$2,945
360269	BOMBAY, TOWN OF	$1,843	0	3	4	$202,600	4	$24,186
361163	BRIGHTON, TOWN OF	$863	0	0	2	$700,000	0	$0
361480	BRUSHTON, VILLAGE OF	$75	0	0	1	$5,000	0	$0
361395	CONSTABLE, TOWN OF	$634	0	0	2	$450,000	0	$0
361122	DICKINSON, TOWN OF	$2,971	0	2	5	$881,600	1	$10,924
360270	FORT COVINGTON, TOWN OF	$2,505	0	2	5	$1,097,000	1	$3,893
361397	FRANKLIN, TOWN OF	$9,022	0	5	7	$1,264,100	0	$0
361124	HARRIETSTOWN, TOWN OF	$21,955	0	4	10	$2,210,000	0	$0
360271	MALONE, TOWN OF	$7,308	0	7	12	$1,722,000	8	$80,819
360272	MALONE, VILLAGE OF	$15,714	0	12	14	$2,729,200	5	$13,399
361125	MOIRA, TOWN OF	$1,091	0	1	1	$75,000	0	$0
361398	SANTA CLARA, TOWN OF	$1,173	0	0	3	$1,050,000	0	$0
361162	TUPPER LAKE, TOWN OF	$2,948	0	0	8	$2,380,000	6	$4,271
360274	TUPPER LAKE, VILLAGE OF	$1,622	0	1	3	$299,800	5	$15,359
361126	WAVERLY, TOWN OF	$381	0	0	1	$508,000	4	$113,150
361123	WESTVILLE, TOWN OF	$180	0	0	1	$42,000	1	$2,992

FIRM/CAC/CAV

FEMA initiated the FEMA Flood Risk Study Kickoff Meeting –attended by stakeholders in Franklin County where FEMA and their project contractor, STARR II, discussed the new countywide study to update flood risk products, FIRM (Flood Insurance Rate Maps), in Franklin County on February 10, 2021. FEMA and its NYS partners along with Franklin County will be collecting data and visiting the area to begin updating existing FIRM maps of the county and begin work to provide FIRM maps of all municipalities in Franklin County. *The chart on page 33 provides the status of municipalities in Franklin County.*

CID	Community Name	County	No Variances	No Rep Losses	CAC Date	CAV Date	No BCX Claims	Total Area Pop.	LOMCs	No Policies	FIRM Date
360273	SARANAC LAKE, VILLAGE OF	ESSEX FRANKLIN	0	0		9/29/2016	0	5,377	34	18	1/2/1992
360268	BANGOR, TOWN OF	FRANKLIN	0	0			0	2,300	0	0	
361392	BELLMONT, TOWN OF	FRANKLIN	0	0		6/14/2019	0	1,500	94	17	8/5/1985
360269	BOMBAY, TOWN OF	FRANKLIN	0	0		12/27/2019	0	1,247	1	4	2/15/1985
361393	BRANDON, TOWN OF	FRANKLIN	0	0			0	333	0	0	
361163	BRIGHTON, TOWN OF	FRANKLIN	0	0			0	1,666	0	2	
361480	BRUSHTON, VILLAGE OF	FRANKLIN	0	0		9/22/1993	0	479	0	1	2/19/1986
361394	BURKE, TOWN OF	FRANKLIN	0	0			0	1,755	0	0	2/19/1986
361479	BURKE, VILLAGE OF	FRANKLIN	0	0			0	312	0	0	
361481	CHATEAUGAY, VILLAGE OF	FRANKLIN	0	0			0	846	0	0	
361395	CONSTABLE, TOWN OF	FRANKLIN	0	0			0	1,425	0	2	
361122	DICKINSON, TOWN OF	FRANKLIN	0	0	5/19/2017	9/14/1993	0	786	1	5	3/18/1986
361396	DUANE, TOWN OF	FRANKLIN	0	0			0	165	0	0	
360270	FORT COVINGTON, TOWN OF	FRANKLIN	0	0		7/2/2012	0	1,880	11	5	12/23/1983
361397	FRANKLIN, TOWN OF	FRANKLIN	0	0	3/3/2004	9/23/2015	0	1,041	15	7	9/24/1984
361124	HARRIETSTOWN, TOWN OF	FRANKLIN	0	0		12/20/2019	0	5,621	30	10	1/3/1985
360271	MALONE, TOWN OF	FRANKLIN	0	2	2/6/2007	6/25/2012	0	13,580	9	12	9/4/1985
360272	MALONE, VILLAGE OF	FRANKLIN	0	0	5/4/2006	6/20/2012	0	6,075	7	14	4/3/1978
361125	MOIRA, TOWN OF	FRANKLIN	0	0	7/8/1992	9/22/1993	0	2,800	1	1	4/15/1986
361398	SANTA CLARA, TOWN OF	FRANKLIN	0	0			0	390	0	3	
361162	TUPPER LAKE, TOWN OF	FRANKLIN	0	0		9/26/2019	0	6,137	0	8	1/2/1950
360274	TUPPER LAKE, VILLAGE OF	FRANKLIN	0	0		3/15/2016	0	4,067	2	3	3/1/1987
361126	WAVERLY, TOWN OF	FRANKLIN	0	0	5/16/2016	9/14/1993	0	1,022	2	1	12/4/1985
361123	WESTVILLE, TOWN OF	FRANKLIN	0	0	4/17/2018	9/15/1993	0	2,340	4	1	2/15/1985

3. RISK ASSESSMENT

The first step in developing an effective hazard mitigation strategy is understanding vulnerability. A community's vulnerability is determined by two factors: the hazard events that threaten the community and the community's level of preparedness. This risk assessment section of the Plan reviews the steps taken to determine which hazards pose the greatest threat to the communities of Franklin County.

To creating the 2008 plan, hazard identification was conducted by six methods: 1) review of written historical records; 2) input from public officials and their constituents; 3) interviews with local experts; 4) HAZNY analysis; 5) review of FEMA and FEMA recommended websites; and 6) review of the New York State Hazard Mitigation Plan.

The review of written historical records focused primarily on local press coverage of past hazard events. Two local press publications figured prominently in documenting particularly significant hazard events of the region: "Ice Storm '98: A North Country Disaster" and "North Country Century," both published by the *Press Republican*. In addition to local press coverage, press releases made by the New York State Office of the Governor were also reviewed.

Input from public officials and their constituents was solicited via direct-mail and email correspondence, telephone conversations, scheduled interviews, at public meetings, and in public notices.

For the 2008 Plan, Franklin County Office of Emergency Management and Friends of the North Country, Inc. conducted a hazard analysis using the automated Hazard New York (HAZNY) program. HAZNY is an automated interactive spreadsheet that asks specific questions regarding potential hazards in a community and records and evaluates the responses to these questions. HAZNY also includes historical and expert data on selected hazards. HAZNY analysis was conducted for each of the municipalities of Franklin County (19 towns, 6 villages, 1 county). The analysis examined up to 36 potential hazards in terms of: 1) scope (geographic area vulnerable); 2) cascade effects (potential to trigger secondary hazards); 3) frequency; 4) hazard duration; 5) incident stabilization; and 6) potential impact. In 2008 the municipalities of Franklin County, including the county, ranked seven naturally occurring hazards highest.

For the 2015 update, jurisdictional representatives ranked natural hazards by reviewing past hazards history, considering recent hazard events, and prioritizing hazards specific to their jurisdiction. Information was elicited from jurisdictional leaders, highway superintendents, code enforcement officers, fire officials and planning boards. Details for each specific jurisdiction are found in Section II. (Results are in Table of Potential Hazards, below). Specific exposures and concerns are discussed in the hazard profiles and the loss estimates. Mitigation actions that are ongoing or planned for each jurisdiction and the county are based on the evaluations conducted in this risk assessment portion of the plan. As in the original plan, other experts consulted included climatologists from the Plattsburgh campus of the State University of New York, the Adirondack Park Agency, the New York State Department of Environmental Conservation, State Police, the local National Weather Service out of Burlington, Vermont, and the Red Cross. Franklin County agencies participating include Emergency Services, Highway, Soil and Water Conservation, Public Health and Sheriff. (Appendix A)

For the 2020 Plan update, regional officials, jurisdictional officials including supervisors, highway supervisors, clerks, fire departments, schools were contacted to provide their assessment of the natural hazard risks confronting Franklin County. The list, developed from Mitigate NY, was provided to individuals for their assessment of primary risks in their specific town, village, or region. Responses were collated to provide an overall view of Franklin County hazard risks and those specific to each jurisdiction. Results have been added to the chart showing results from 2008 and 2013. Results from the 3 plans demonstrate the hazard risks over a more than ten-year span and clearly indicate hazard risks that remain a consistent concern for Franklin County. (Table 8)

Table 8 Potential Hazards

	Potential Hazards Considered a Threat	Hazard of Concern 2005	Hazard of Concern 2013	Hazard of Concern 2020	Rationale for adding/deleting hazards of concern
1	Flood/Ice Jams	x	x	x	May result from spring thaw, includes flash floods.
2	Winter Storm / Heavy Snow/ Ice Event	x	x	x	Extreme cold is a concurrent hazard in many storm events.
3	Severe Storms/Hail/High Winds	x	x	x	High winds often create extended power outages due to the topography of the county.
4	Earthquake	x	x	x	One area of Franklin County has experienced slight effects.
5	Tornadoes	x			This hazard is not a significant concern. NCDC database includes only 1 tornado in the county since 1950. High winds will be addressed in Severe Storms
6	Wildfire	x	x	x	Concern due to state owned forest lands and the county topography makes reaching fires difficult before they are out of control.
7	Landslide				Landslides were considered for addition to the update. This hazard was not added because small areas of the County are considered by USGS to have "high Susceptibility but low incidence." Emergency management experts in the county did not corroborate this risk
8	Extreme Cold				See extreme temperatures below
9.	Hurricane				Hurricanes were considered for addition to the update. This hazard was not added as a hazard of concern because hurricanes dissipate when the travel over land, as they would to reach the County. Any high winds as a remnant of a hurricane or tropical storm will be covered under Severe Storms.
10	Subsidence				Subsidence was considered for addition to the update; the hazard was not added because there were no occurrences within the county to date and none expected. Westville and Franklin noted subsidence as a concern and may re-visit for next update.
11	Drought				Drought was considered for addition to the 2013 and 2020 plan. It was not added because the impact on wild/forest fires is covered under Wildfire.
12	Ice Storms	x			Continues to be a concern (see Winter Events)
13	Extreme Temperatures	x		x	This hazard will no longer be treated as a hazard of concern on its own. Instead, it will be dealt with in the context of mitigating other hazards (e.g., winter storms, severe storms) that may cause an extended loss of power which is especially dangerous when temperatures are extremely low.

Local representatives from the jurisdictions, including Saint Regis Mohawk Tribe, identified the hazards/risks that impact their region. Each jurisdiction recognizes the potential vulnerability of historical, structural and/or geological characteristics in their specific region. Maps in Section II indicate concentrations of structures found within each jurisdiction. In the Implementation Strategy Plan, mitigation actions fall into each hazard category listed above as well as a multi-hazard category. This multi-jurisdictional plan encompasses specific actions handled directly by the jurisdiction, as well as county wide actions, with input and oversight from within each jurisdiction.

The New York State Hazard Mitigation Plan 2014 included regional risk assessments. Planning Area 4 of the State Plan includes Clinton, Essex, Franklin, Jefferson, Lewis, and St. Lawrence counties. According to the State Hazard Mitigation Plan, the top hazards for the planning area are:

Natural Hazards	**Rank**
Flood	High
Winter storm - severe	High
Windstorm	Moderate
Ice Storm	Moderate
Wildfire	Moderate
Drought	Moderate
Dam Failure	Moderate

2020 Update

In Mitigate NY 2019, hazard concerns in Franklin County include Flood/Ice Jams, Winter Storm/Heavy Snow, Severe Storms/Hail/High Winds/Lightening, Earthquake, Tornadoes, Wildfire, Landslide, Extreme Heat/Cold, Hurricane, Subsidence, Drought, Ice Storms

	Potential Hazards Considered a Threat	**Annualized Damage (Mitigate NY)**		**Potential Hazards Considered a Threat**	**Annualized Damage (Mitigate NY)**
1	Flood/Ice Jams	$734,375	**7**	Landslide	0
2	Winter Storm / Heavy Snow/ Ice Event	$133,875	**8**	Extreme Cold/Heat	$21,875
3	Severe Storms/Hail/High Winds/Lightening	$147,125	**9.**	Hurricane	$4,604
4	Earthquake	0	**10**	Subsidence	0
5	Tornadoes	$417	**11**	Drought	0
6	Wildfire	0	**12**	Ice Storms	$116,667

The following hazards were identified as threats to Franklin County by one of the methods described above but will not be profiled further because either they are not natural hazards and, therefore, not the principal target of this hazard mitigation plan or because further investigation suggested that the hazards were not an imminent threat to Franklin County or any of the municipalities within.

Hazard Materials in Transit

Definition: *The uncontrolled release of material during transport, which when released can result in death or injury to people and/or damage to property and the environment through the material's flammability, toxicity, corrosiveness, chemical instability and/or combustibility.*

According to historical precedence, it appears that the threat level is low for hazardous material (HAZMAT) being spilled while in transit through Franklin County. Analysis of historical records and data collected by the New York Department of Environmental Conservation (DEC) indicated that there have been very few such spills and none that would qualify as major. However, at the municipal level there was a great deal of concern expressed about the possibility and impact of such a spill.

Since HAZMAT spills are not natural disasters nor do they appear to be an imminent threat, they will not be specifically addressed in this plan. The plan will, however, address areas subject to road blockage as a multi-hazard mitigation objective. Spills or other events that affect road closures can prevent vehicular access to significant areas. Therefore, this aspect of HAZMAT spills will be addressed as a multi-hazard mitigation objective.
The County 2020 CEMP addresses this issue, its implications for Franklin County and the protocols to be followed in the event of an incident.

Water Supply Contamination

Definition: *The contamination or potential contamination of surface or subsurface public water supply by chemical or biological materials that results in restricted or diminished ability to use the water source.*
These types of events are not considered natural disasters; however, Franklin County and the jurisdictions within have Emergency Preparedness Plans to address the effects of water contamination events. (Comprehensive Emergency Management Plan 2020)

Although water contamination was not ranked as a high threat to Franklin County or any of the municipalities during risk assessment meetings, a few municipalities did have some concern about open road salt and sand storage causing water contamination. Municipal representatives and the Franklin County Soil and Water Conservation District field representative noted that several private wells have been contaminated by sand or salt run-off. In response, many municipalities have already installed storage sheds. While no damage estimates were readily available when this plan was completed, it is apparent that in comparison to the social, environment, and economic costs of water contamination, the sheds are inexpensive. Therefore, when municipalities expressed interest in constructing salt and sand storage facilities, it was included in 2020 as a mitigation objective for that jurisdiction.

Dam Failure

Definition: *An uncontrolled release of impounded water resulting in downstream flooding.*

Below is a list of dams in Franklin listed by DEC and the Office of the NYS Comptroller in 2017 as a high or moderate hazard. All the municipalities indicated that the dams in their jurisdictions are regularly inspected for defects. The Lake Flower Dam in the Village of Saranac Lake is listed as a "high" threat to downstream communities by the New York State Department of Environmental Conservation. The Village of Saranac Lake has an Emergency Action Plan in event of dam failure and, more importantly, a detailed monitoring process.

Table 9 High Hazard Dams

High Hazard Dam	**Jurisdiction**
Ballards Dam	Village of Malone
Lake Flower Dam	Village of Saranac Lake
Bartlett Carry Dam	Town of Harrietstown, privately owned
Chasm Falls Power Dam	Town of Malone
Chasm Power Co. Dam	Town of Chateaugay
Forge Dam	Town of Bellmont
Franklin Falls Dam	Town of Franklin
Memorial Recreation Pond Dam	Village of Malone
Hogansburg Hydro-Dam (Removed in 2016)	Saint Regis Mohawk Tribe/NYSDEC

Utility Failure

Definition: *Any interruption or loss of electrical service due to disruption of power generation or transmission caused by accident, sabotage, natural hazards, equipment failure, or fuel shortage.* This is of moderate concern and is a hazard resulting from the cascade effect in the event of other hazards.

Structural Collapse

Definition: *A sudden structural failing, partial or fully of buildings, bridges, or tunnels, threatening human life and health.* This is of moderate concern and is a hazard resulting from the cascade effect in the event of other hazards.

Hazard Profiles

1.Flood /Flash Flood/Ice Jams:

Definition - Flood: *A general and temporary condition of partial or complete inundation on normally dry land, usually a natural, cyclical occurrence in waterbodies or drainage ways. When "normal" banks of water bodies overflow, a potentially violent/destructive waterway can form.* Definition - Flash Flood: *Flooding that begins within 6 hours, and often within 3 hours, of the heavy rainfall or rapid snowmelt can transform a small stream into a violent waterway*. Inadequate drainage systems in urban areas can create destructive "runoff".

Definition - Ice Jam: *Large accumulation of ice in rivers or streams interrupting the normal flow of water and often leading to flooding conditions and/or damage to structures. Flooding and flash flooding is the highest-ranking concern in the county.* Ice jams are of concern and can lead to similar destructive situations. Mitigation measures for flooding are anticipated to have similar results to ice-jam flooding as to seasonal, storm, and other causes of flooding.

Flood profile:
Location:
- Riverine and adjacent low-lying property throughout the
- County/Saint Regis Mohawk Reservation

Extent:
- See map and narrative discussion.

Cascade effects:
- Highly likely to trigger another hazard.

Frequency:
- Frequent event (occurs more than once a year)

Potential impact:
- Serious injury or death is unlikely.
- Severe physical and/or economic damage to private property.
- Moderate to severe structural damage to community infrastructure and critical facilities in proximity.

Past hazard events: According to Mitigate NY and NCDC Storm Event Records, Franklin County had 50 reported floods, 3 considered severe, between 1996 and 2017. Reported property damage totaled approximately 17.6 million dollars, with 734K annual damage. The 2 tables below present a summary of those events. Flooding in Franklin County primarily affects the roadways. Flood waters spill over roadways, damage bridges, and erode ditches to a degree that warrants immediate repair and/or road closure. Road closure often means emergency vehicles must travel many extra miles to arrive at a location. Locations are scattered throughout the county. The area's most prone to flood events are shown on the flood maps for each of the municipalities.

The Village of Saranac Lake incurred severe damage to bridges and the wastewater treatment plant. Businesses and homes were evacuated because of runoff from heavy rain and snowmelt. (Details below #1)

Heavy rain and snowmelt caused flooding in the Village of Tupper Lake and on Route 3 in the Town between the Village and Wawbeek. Homes were surrounded by water and residents had to be evacuated. (Details below #2 Winter Storm)

The Tribal Building on the Saint Regis Mohawk Reservation sustained extensive flood damage in 2000. (No additional details available)

One location in the County with significant and repeated damages to residential properties is the 300 block of Lower Park Street in the Town of Malone. The 300 block is in the Town just outside of the jurisdiction of the Village of Malone *(see Town of Malone Flood Map)* In January of 2004, approximately 20 people were evacuated from their homes as ice jams caused floodwater to swell from the banks of the Salmon River. A total of nine homes were severely flooded. Ice jam induced floodwater threatened residences again in January of 2005. Again, in January of 2013 this area flooded because of ice jams in the Salmon River. Twelve homes were evacuated. State officials are pursuing assistance from DEC and National Grid with the issues. (Details below in Table 10)

Table 10 Flood Hazard Events (1998-Current)

Description of Event	Area(s) Affected	Date of Onset	Property Damage ($)	Deaths	Injuries
Ice Storm	All Akwesasne	01/08/1998	$200,000	0	0
Flood	Tribal Building		$20,000	0	0
Flash Flood	Town of Malone	07/9/2007	$100,000	0	0
2015 Hazard Mitigation Updates					
Flood	Towns of Dickinson and Waverly	08/22/2010	$60,000	0	0
Flood	Towns of Bombay and Malone	09/30/2010	$100,000	0	0
Flood (#1)	Village of Saranac Lake	04/27/2011	$6,000,000	0	0
Flash Flood	Town of Duane	04/28/2011	$75,000	0	0
Flood (#2)	Village and Town of Tupper Lake	04/28/2011	$3,000,000	0	0
Flood/Ice Jam (#3)	Town of Malone	01/24/2013	$150,000	0	0
Flood	Brandon	06/11/2013	$4,170,000	0	0
Flood	Axton	04/15/2014	$355,000	0	0
Flood	St. Regis Falls	04/15/2014	$1,000,000	0	0
Flash Flood	Saranac Lake	07/3/2014	$50,000	0	0
Flash Flood	Lake Colby	07/3/2014	$50,000	0	0
Flash Flood	Franklin Falls	07/3/2014	$10,000	0	0
2020 Hazard Mitigation Updates					
Flash Flood	Loon Lake	05/29/2016	$10,000	0	0
Flash Flood	Saranac Lake	06/28/2016	$50,000	0	0
Flash Flood	Fay	06/29/2017	$5,000	0	0
Flash Flood	South Bombay	07/07/2017	$5,000	0	0
Flood	Fort Covington	01/12/2018	$150,000	0	0
Flood	Hogansburg	01/12/2018	$50,000	0	0
Flash Flood	Fort Covington	02/21/2018	$100,000	0	0
Flash Flood	Whippleville	06/18/2018	$25,000	0	0

(Data is from Mitigate NY and NOAA) Between May 2016 and June of 2018 Franklin County coped with nine flash flood events including property damage amounts totaling 405.00K. The Town of Ft. Covington and nearby Hogansburg (SRMT) experienced 300K losses in 2018. Anecdotal information appears in the specific jurisdictional annex.

**Please note that FEMA awarded a Hazard Mitigation Grant Program award to buy out certain properties on Lower Park Street to end the threat to residents who now reside elsewhere. According to the U.S. Army Corp of Engineers, a shallow portion of the Salmon River causes slushy water and ice chunks to restrict the normal flow of the river. They have suggested that dredging would allow the river to flow better and thus alleviate the ice jam induced flooding.

There are no other locations identified in Franklin County where flooding threatens life and property on a regular basis and in a similar fashion as on Lower Park Street and the Salmon River area.

Probability of future events: Given the regularity with which flooding has occurred, the likelihood of future floods is very high.

Potential impact: Flooding can cause extensive damage to both public and private properties, contaminate drinking water, disrupt transportation, disrupt communication, and disrupt power. Flood related ditch erosion has historically been a significant cause of damage to roads and highways throughout the county. While Franklin County does not have a history of flood related deaths, conditions exist in which fatalities could occur. Many Franklin County citizens have only one or two roads that access their residences and thus are more likely to attempt to traverse flooded roadways in their vehicles. The scenario of one road access to residences is true in sections of the Saint Regis Mohawk Reservation. Potential flooding in portions of the reservation may be alleviated with the decommissioning of the Hogansburg Dam.

Vulnerable areas: See narrative and flood maps.

Estimate of potential losses: See municipal flood property loss tables in appendices. In Appendix E, county assets are sorted by 'use classification'; To provide an estimate potential loss 1, 5, and 10% of assets were calculated, and the totals are listed as a quick reference. These totals represent percentage of loss of total assets in the jurisdiction. The second table in Appendix E represents calculations of potential losses determined by "Parcels Substantially Close to the 100 Year Floodplain"; buildings are again classified by use, and only those assets close to the floodplain are listed as vulnerable. (Appendix E data sources = Franklin County Tax Rolls 2019, FIRM maps)

2. Winter Storm:

Definition: *A storm system that develops in late fall to early spring and deposits wintry precipitation, such as snow, sleet, or freezing rain, with a significant impact on transportation systems and public safety.*

Heavy snow – Snowfall accumulating to 6 inches in 12 hours or less.
Blizzard – A winter storm characterized by low temperatures, wind speeds of 35 miles per hour or greater, and sufficient falling and/or blowing snow in the air to frequently reduce visibility to ¼ mile or less for a duration of at least three hours.
Severe blizzard – A winter storm characterized by temperatures near or below 10 degrees F, winds exceeding 45 mph, and visibility reduced by snow to near zero for a duration of at least 3 hours.

Winter storm profile:
Location:
- Entire County/Saint Regis Mohawk Reservation

Extent:
- Refer to above definition

Cascade effects:
- Some potential to trigger another hazard

Frequency:
- Frequent event (occurs more than once a year)

Potential impact:
- Serious injury or death is unlikely
- Moderate physical and/or economic damage to private property
- Moderate structural damage to community infrastructure

Past hazard events: Winter storms visit the North Country with such regularity that they are not noteworthy events, although heavy snowfalls and blizzard conditions occur several times each winter. In reviewing data for the 5-year plan update, the National Climatic Data Center reports several winter storm/heavy snow/sleet events in Franklin County since 2007.

The Table below indicates Winter related events from 2007 to February 2020, including an ice storm in January 2020 that produced 550K total property damages in Franklin County. There were no crop damages, injuries, or loss of life. Anecdotal information can be found in the jurisdictional annexes. Only winter storms with property damages are listed here.

Table 11 Winter Storm Events (2007–Current)

Event Type	Date	Property Damage	Anecdotal
Heavy Snow	02/14/2007	$35,000	Snow totals include 21 inches in Tupper Lake, 20 inches in Saranac Lake
Winter Storm	04/15/2007	$30,000	Heavy, wet snow causing power outages and road closures
Winter Storm	03/07/2008	$30,000	Sleet, heavy freezing rain with a ½ inch or more of accumulation
Winter Storm	10/28/2008	$35,000	Heavy wet snow, 16 inches in Tupper Lake, 14 inches in Saranac Lake
2015 Hazard Mitigation Updates			
Winter Weather	4/27/2010	$20,000	Heavy wet snow, Malone 14 inches, Chasm Falls 18 inches, power outages
Winter Storm	02/05/2011	$30,000	Heavy wet snow, structure damage, garages, barns, carports
Winter Storm	12/26/2012	$25,000	Snowfall totals Westville 17 inches, Malone 13 inches, Tupper Lake 12 inches

2020 Hazard Mitigation Updates		
Winter Weather	01/29/2015	$5,000
Winter Weather	02/01/2015	$5,000
Winter Storm	02/02/2015	$10,000
Winter Storm	02/16/2016	$10,000
Winter Weather	04/06/2016	$5,000
Winter Storm	02/12/2017	$10,000
Winter Storm	03/14/2017	$25,000
Winter Weather	12/12/2017	$5,000
Winter Weather	12/22/2017	$10,000
Winter Weather	12/25/2017	$0
Winter Storm	01/12/2018	$10,000
Winter Storm	02/07/2018	$10,000
Winter Weather	03/07/2018	$5,000
Winter Weather	03/07/2018	$5,000
Winter Storm	03/13/2018	$10,000
Winter Storm	11/15/2018	$15,000
Winter Storm	11/26/2018	$15,000
Winter Storm	01/08/2019	$10,000
Winter Storm	01/19/2019	$10,000
Winter Storm	02/12/2019	$10,000
Winter Storm	03/22/2019	$10,000
Winter Storm	11/11/2019	$10,000
Winter Storm	12/29/2019	$50,000
Ice Storm	01/12/2020	$25,000
Winter Storm	01/15/2020	$5,000
Winter Storm	01/18/2020	$5,000
Winter Storm	02/06/2020	$15,000

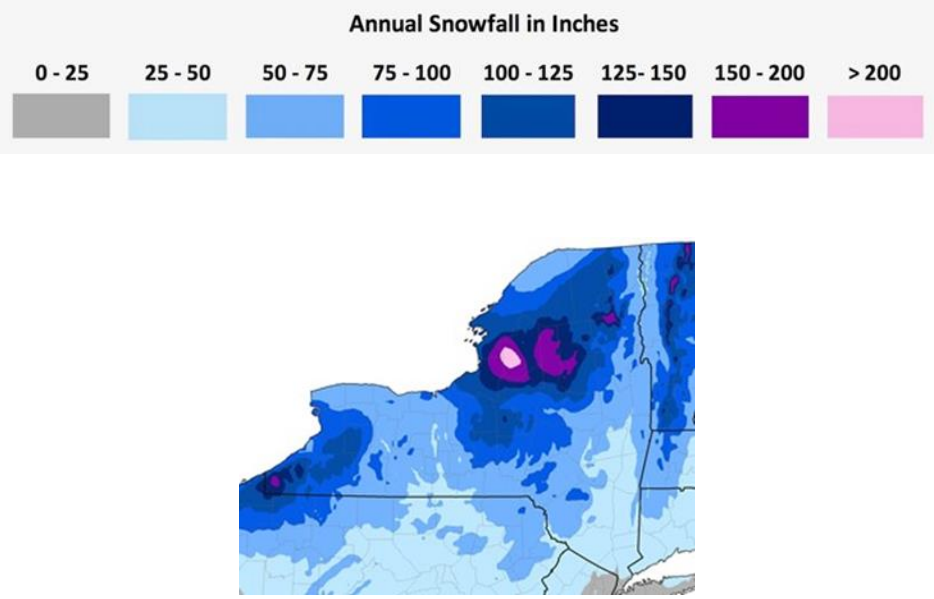
Probability of future events: Weather patterns are unlikely to change significantly regarding winter storm events. Franklin County will undoubtedly face regular winter storms in the future.

Potential impact: Heavy snows associated with winter storms can down trees, limbs, and utility lines and significantly disrupt traffic. Slippery roads and limited visibility are often implicated in traffic accidents during winter storms. Especially heavy snow loads can contribute to structural collapse of insufficient or improper construction technique and/or material or older buildings in need of repair.
Vulnerable areas: The entire county frequently experiences winter storms.

Estimate of potential losses: The largest expense to the County related to winter storms involves the clearing and maintenance of roadways. The cost of roadway maintenance is included in the annual budget. Property damage occurs with the heavy, wet snowfalls predominant in Franklin County. Every year lives are lost due to winter storm related traffic accidents and the inability of emergency vehicles to get through road blockages.

According to Mitigate NY Franklin County incurred a total of 3.21million dollars in snowstorm damage from 1996 until 2017 with approximately 134K annually. 388 storm events were recorded and the county averages 9 major winter storm events a year.

(Mitigate NY and NOAA 2017)



3. Earthquake:

Definition: *A sudden motion of the ground caused by release of subterranean strain energy, due to plate tectonics, resulting in surface faulting (ground rupture), ground shaking, or ground failure (collapse).*

Earthquake profile:
Location:

- Entire county/Saint Regis Mohawk Reservation

Extent/Magnitude:
- See narrative below.

Cascade effects:
- Highly likely to trigger another hazard.

Frequency:
- Rare event (occurs less than once every 50 years).

Potential impact:
- Serious injury or death is likely, but not in large numbers.
- Severe physical and/or economic damage to private property.
- Severe structural damage to community infrastructure.

Past hazard events: Recent earthquake events in Franklin County have been limited primarily to minor tremors. On March 1, 2005, an earthquake of a magnitude of 2.5 occurred in the Village of Malone and on November 6, 2000, an earthquake with a magnitude of 3.8 occurred in the Village of Chateaugay. While these quakes were minor, there are precedents to suggest that Franklin County is vulnerable to earthquakes of a larger magnitude. In March 1928, an earthquake with an epicenter in the Village of Saranac Lake was felt countywide and measured 4.5 on the Richter scale. More recently, an earthquake with a magnitude of 5.2 struck the neighboring community of Black Brook in Clinton County. Franklin County has had two slight earthquake events since 2015 as noted below. An earthquake with a magnitude of 2.5-3.0 is the smallest that can usually be felt by residents.

Table 12 Earthquake Events (1928-Current)

Description of Event	Epicenter (magnitude)	Date of Onset	S-of-E Declared	Property Damage in Dollars	Deaths	Injuries	Source of Info
Earthquake	Saranac Lake (4.5)	03/18/1928					NYSED
Earthquake	Chateaugay (3.8)	10/06/2000	N	0	0	0	Press-Republican
Earthquake	Black Brook (5.2)	04/27/2002	Y	9M est. (Clinton, Essex, Franklin Co.)	0	0	Press-Republican
Earthquake	Malone (2.5)	03/01/2005	N	0	0	0	Press-Republican
2020 Hazard Mitigation Updates							
Earthquake	Malone (2.6)	03/21/2018	N	0	0	0	Press Republican
Earthquake	Santa Clara (2.6)	07/27/2019	N	0	0	0	North Country Now

Probability of future events: The Peak Ground Acceleration for Franklin County's seismic zone is 10%.

Potential impact: In the event of a major earthquake, the county potentially faces extreme losses. Many of the homes in Franklin County are of older stock and therefore less likely to survive an earthquake without structural damage. The primary cascade effect of an earthquake is the loss of electricity. A severe quake also has the potential to cause dam failure.

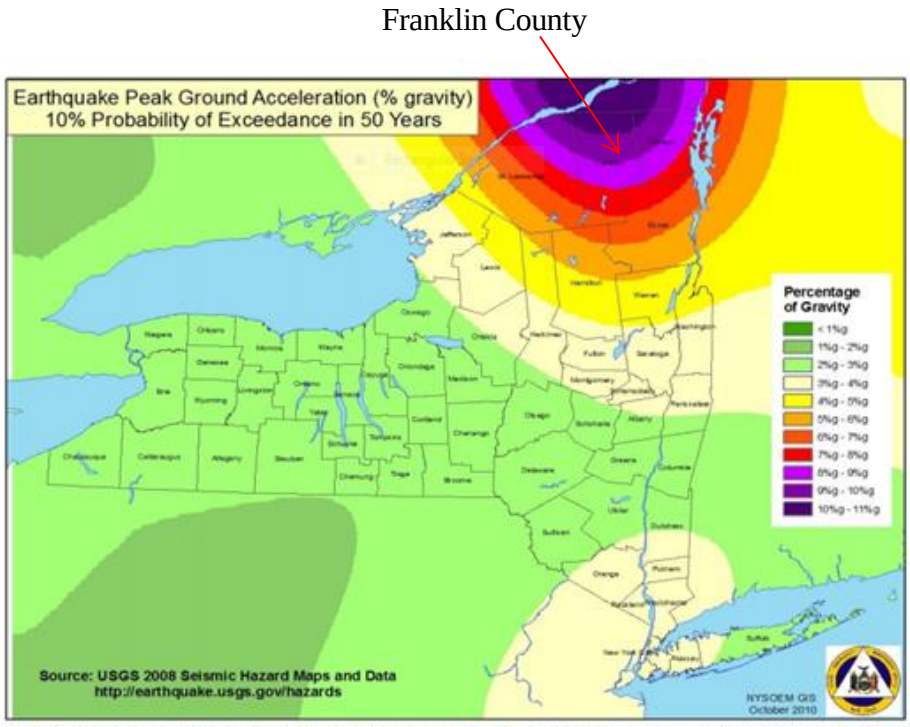
Vulnerable areas: The entire county is vulnerable to damage. However, most severe damage would most likely be in higher population areas that contain multistory structures and high building density. In the event of a dam failure, population centers and buildings along the rivers could face flooding.

Estimate of potential losses: The Earthquake Vulnerability Table below presents the results of the HAZUS-MH earthquake loss estimation run conducted by the New York State Emergency Management Office (below) Total Exposure includes the calculated potential total losses (Capital Stock + Income Losses) and dollar value of all general building stock for the 4 return periods of 2500, 1000, 500, & 250-years.

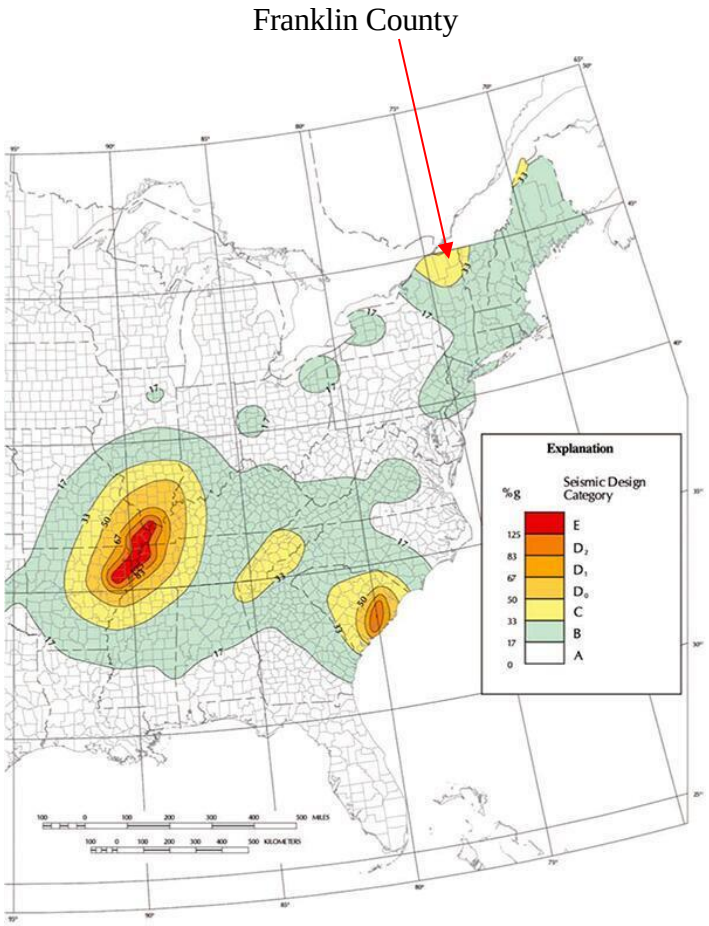
Table 13 Earthquake Vulnerability

		Total Loses [x $1,000]			
County	**Total Exposure**	**2500-year**	**1000-year**	**500-year**	**250-year**
Franklin	3,216,699	471,742	180,652	70,501	21,592

As illustrated on the map below, Northern Franklin County has a PGA of 10%-11%, the highest in the state.



Note: Figure 3.7a map is based on USGS 2008 seismic hazard values. The U.S. Geological Survey updated the National Seismic Hazard Maps by incorporating new seismic, geologic, and geodetic information on earthquake rates and associated ground shaking. These 2008 maps supersede versions released in 1996 and 2002.



C/Yellow	Could experience strong shaking	Strong Shaking- Damage negligible in buildings of good design and construction; slight to moderate in well-build ordinary structures; considerable damage in poorly build structures

2018 Long-term National Seismic Hazard Map. Earthquake hazard map showing peak ground accelerations having a 2 percent probability of being exceeded in 50 years, for a firm rock site. The map is based on the most recent USGS models for the conterminous U. S. (2018), Hawaii (1998), and Alaska (2007). The models are based on seismicity and fault-slip rates and consider the frequency of earthquakes of various magnitudes. Locally, the hazard may be greater than shown because site geology may amplify ground motions.

4. Severe Storms/Hail/High Winds:

Definition: *Severe storms include hail, wind, and severe thunderstorms.*
Thunderstorms are often accompanied by high winds, heavy rainfall and sometimes hail. Severe storms have a cascade effect, predominantly occurring with power outages.

Severe storm profile:
Location:
- Entire County/Saint Regis Mohawk Reservation

Extent:
- Winds gusting more than 57 mph, hail

Cascade effects:
- Highly likely to trigger another hazard

Frequency:
- Frequent event (occurs more than once a year)

Potential impact:
- Serious injury or death is unlikely
- Moderate physical/ economic damage to private property.
- Moderate structural damage to county infrastructure.

Past hazard events: Severe storms, often accompanied by high winds, lightning and/or hail, are typical events throughout Franklin County as evidenced in data from the NCDC. In the 2008 Plan approximately 56 thunderstorm wind events were noted by NOAA.

Below is a table of major events since 2008 with details drawn from area newspaper articles, town references and the NCDC.

Table 14 Wind Events (2008-Current)

Date	Type of Event	Area Affected	Amount of Damage	Anecdotal Information
1/9/2008	High Wind	Entire Franklin County	$250,000	Sustained winds of 30-40mph, gusts 60mph, downed trees, power lines, structural damage
6/10/2008	Thunderstorm/ High Wind	Franklin County	$75,000	Numerous trees down on power lines, vehicles, and houses
2015 Hazard Mitigation Updates				
7/21/2010	High Wind/Thunderstorm	Franklin County; Malone Brushton, Bangor	$200,000	Gusts as high as 85mph, golf-ball sized hail, Damage to trees, power poles and structures
12/1/2010	High Wind	Franklin County	$100,000	Persistent strong winds of 20-30mph with gusts of 51-52mph. Power outages, vehicular and structural damages
4/28/2011	High Wind	Northern Franklin County	$50,000	Gusts as high as 70mph, trees and power lines down along Route 37 and 11 from Malone west
6/1/2011	High Wind	Southern Franklin County	$25,000	Strong winds, roof damage and power lines down

6/8/2012	Thunderstorms/Hail	Malone, Brushton, Moira, Bombay	$45,000	Golf- ball sized hail, high winds
7/17/2012	Thunderstorm/Wind	Paul Smiths, Saranac Lake	$45,000	Thunderstorms and damaging winds
1/20/2013	High Wind	Franklin County, Malone area	$40,000	Trees and power lines down across the county
2020 Hazard Mitigation Updates				
06/09/2015	Thunderstorm Wind	Saranac Lake	$5,000	50 kts. EG
07/13/2015	Thunderstorm Wind	Malone	$15,000	50 kts. EG
06/20/2016	Thunderstorm Wind	Floodwood	$1,000	50 kts. EG
06/20/2016	Thunderstorm Wind	Paul Smiths	$10,000	50 kts. EG
07/09/2016	Thunderstorm Wind	Fort Covington Center	$1,000	50 kts. EG
07/18/2016	Hail	Vermontville	$	1.25 In.
07/22/2016	Thunderstorm Wind	Fort Covington	$5,000	50 kts. EG
07/23/2016	Thunderstorm Wind	Alburg	$5,000	50 kts. EG
05/01/2017	Thunderstorm Wind	Bombay	$10,000	50 kts. EG
05/01/2017	Thunderstorm Wind	Bangor	$10,000	50 kts. EG
05/01/2017	Thunderstorm Wind	Malone	$5,000	50 kts. EG
05/01/2017	Thunderstorm Wind	Westville Center	$10,000	50 kts. EG
05/01/2017	Thunderstorm Wind	Constable	$5,000	50 kts. EG
05/01/2017	Thunderstorm Wind	Burke	$10,000	50 kts. EG
07/08/2017	Thunderstorm Wind	Duane Center	$20,000	50 kts. EG
08/04/2017	Thunderstorm Wind	Burke	$5,000	50 kts. EG
08/22/2017	Thunderstorm Wind	Constable	$5,000	50 kts. EG
08/22/2017	Thunderstorm Wind	Floodwood	$5,000	50 kts. EG
05/04/2018	Thunderstorm Wind	Brushton	$20,000	50 kts. EG
05/04/2018	Thunderstorm Wind	Malone	$50,000	50 kts. EG
05/04/2018	Thunderstorm Wind	Faust	$1,000	50 kts. EG
05/04/2018	Thunderstorm Wind	Lake Clear	$20,000	50 kts. EG
05/04/2018	Thunderstorm Wind	Duane Center	$10,000	50 kts. EG
05/04/2018	Thunderstorm Wind	Vermontville	$20,000	50 kts. EG
06/18/2018	Thunderstorm Wind	Hogansburg	$10,000	50 kts. EG
06/18/2018	Thunderstorm Wind	Constable	$10,000	50 kts. EG
07/02/2018	Thunderstorm Wind	Santa Clara	$	50 kts. EG
07/02/2018	Thunderstorm Wind	Duane Center	$2,000	50 kts. EG
06/29/2019	Thunderstorm Wind	Fort Covington	$2,000	50 kts. EG
07/30/2019	Thunderstorm Wind	Lake Clear JCT.	$5,000	52 kts. MG
03/20/2020	Thunderstorm Wind	Fort Covington	$2,000	50 kts. EG
03/20/2020	Thunderstorm Wind	Duane Center	$5,000	50 kts. EG
03/20/2020	Thunderstorm Wind	Faust	$5,000	50 kts. EG
03/20/2020	Thunderstorm Wind	Moira	$5,000	50 kts. EG

From 2015 until October of 2020 Franklin County experienced thirty- four major thunderstorms with wind events including a 2016 hail event. Property damages over this period totaled 294.00K. Anecdotal information is found in the jurisdictional annex.

Table 15 summarizes high wind events, without accompanying thunderstorms. Additional information is in the jurisdictional annexes.

Table 15

Date	Type	Location	Property Damage	KTS
02/29/2016	Strong Wind	Southern Franklin Zone	$5,000	39 kts. EG
02/29/2016	Strong Wind	Northern Franklin Zone	$5,000	39 kts. EG
01/10/2017	Strong Wind	Northern Franklin Zone	$20,000	54 kts. MG
10/30/2017	High Wind	Northern Franklin Zone	$50,000	40 kts. MG

Probability of future events: Severe storm events are likely to continue to be frequent events within Franklin County.

Potential impact Severe thunderstorms, especially accompanied by high winds create road washouts, power failures, downed trees, and flash flooding causing temporary road closures, damage to homes and businesses. Lightning is a major source of wildfire ignition and has been implicated in the ignition of structural fires scattered throughout the county.

Estimate of potential losses: Road maintenance continues to be a major portion of town budgets. In a year when the number of severe storms increases, there may be budget shortfalls. Residential and commercial losses can range from relatively light to heavy losses due to property and crop damage.
Franklin County is in Zone II with the potential for wind speeds up to 160 mph. (US Wind Zones map)



5. Wildfire:

Definition: *An uncontrollable combustion of trees, brush, or grass involving a substantial area of land, with the potential for threatening human life and property.* Fire: *An uncontrolled burning in residential, commercial, industrial, institutional, or other structures in a developed area.* According to the NYS Haz-Mitigation Plan, *a shifting of housing from urban to rural areas has created a new type of environment – the Wildland/Urban Interface.*

Wildfire yielded the second highest score in the HAZNY process for the 2008 plan. While considering this hazard in the 2015 update, it was noted that Franklin County is a predominantly rural region with large tracts of open or forested lands, often with limited road access. Recent droughts and warming trends suggest that wildfires may pose an increased hazard. Rural residences are the primary properties at risk. However, some critical infrastructure, such as communication towers, utility lines and electrical substations are in forested regions that would be at risk when wildfires occur in those locations.

The Saint Regis Mohawk Tribe Fire Management Plan (2005) is a comprehensive plan that has been formulated to assign responsibilities and to provide guidance to the Hogansburg Akwesasne Volunteer Fire Department and other departments during a wildfire emergency and implementation of other fire management activities.

Wild/Forest Fire profile:
Location:
- Entire County/Saint Regis Mohawk Reservation

Extent:
- Refer to definition above

Cascade effects:
- Highly likely to result in other hazards

Frequency:
- Infrequent (occurs once between every 8 -50 years)

Potential impact:
- Serious injury or death is unlikely
- Severe physical and/or economic damage to private property
- Severe structural damage to community infrastructure

Past hazard events: Municipalities expressed concern about wildfires occurring following other events that produce downed trees which both increase the fire load and impede access. (See severe storms/high winds)

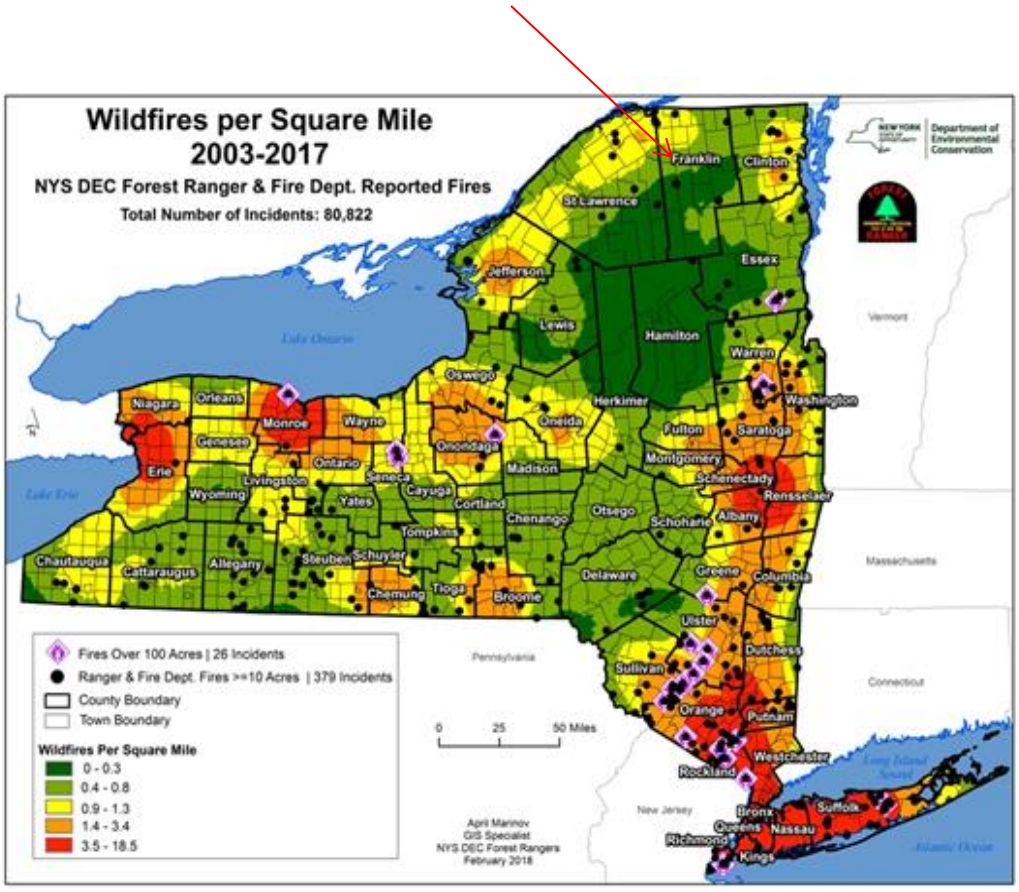
Probability of future events: The amount of grassland, wildland, and interface areas increases the probability future wildfires. The increased fire load created by the trees downed during the Ice Storm of 1998, moderate development at the interface, and restricted access for timber removal within the Adirondack Park all contribute to the likelihood of future wildfires. Other demographic trends also suggest an increased risk of wildfire. Active agricultural lands provide a firebreak that wild grasslands and encroaching woodlands do not. As formerly tilled and pasture areas return to woods and forest, these areas contribute to the potential for wildfires. The threat of a minor wildfire expanding into a major wildfire is increased by the inability to quickly contain it during the early stages due to limited road access, an inherent characteristic of many rural areas. APA legislative mandates designed to preserve the wild nature of the Adirondacks significantly restricts development of roads and restricts the placement of communication towers within the Adirondack Park. Furthermore, cellular phone service is unavailable in a majority of the less developed regions of southern Franklin County. Limited communications service makes rapid reporting of fires difficult, increasing the probability of minor wildfires escalating to a significant threat.

Potential impact: The interface in Franklin County can be classified as predominantly a mixed interface; structures are scattered throughout a large area of wildland and small areas of classic interface; a broad front of wildland bordered by many structures, generally on small lots.

Vulnerable areas: Large tracts of rural forest land, grassland, and the urban-wildland interface. Maps indicating the forested areas of each municipality are included in the Jurisdictional Annex. Those facilities located within, or surrounded by, areas designated as forested and heavily forested are at risk of damage or loss by wildfire in such an event.

Estimate of potential losses: Wildfire in remote areas can cause economic losses due to lost tourist traffic, as well as utility failure and damage to utility infrastructure, water contamination and environmental destruction. In the event of a wildfire in the interface, residents, business, and public property may be damaged or destroyed. Additionally, a major fire that does not damage public or residential property may still have a significant negative impact on Franklin County's economy. Franklin County has a significant investment in tourism. News of major wildfires has the potential to reduce tourist traffic to the County, particularly if tourists are interested in the recreational opportunities afforded by the Adirondacks.

Franklin County



Although NOAA data reflects no wildfire reports for Franklin County from 2015-2020, clearly information from NYS DEC and newspaper reports demonstrate a continued concern for the potential of wildfires in the County. Press Republican and the Adirondack Enterprise provide recent information (2020) while DEC lists towns of Franklin County as "fire towns" where "open burn" permits are not allowed as they are during specific times in the rest of the county.

6.Climate Change:

Definition: *any long-term significant change in the weather patterns of an area*

Recently released through Cornell University a survey of 2000 Americans across the United States discovered the following "Stop someone on the street in the storm-battered Northeast (or Northwest or just about anywhere in between) this winter. Ask about "global warming" and you'd better be prepared for a heated debate. Ask about "climate change" and cooler heads may prevail". "A key finding is that the public perceives more scientific agreement on the issue of 'climate change' than 'global warming,'" reports Cornell's Jonathon Schuldt, who led the study. "And more Americans report personally believing that 'climate change' is real, compared to 'global warming."

NYSERDA has issued a report; Responding to Climate Change in New York State addressing the issues facing New York related to climate change. Climate change is exceedingly likely to bring warmer temperatures to NYS, with extreme heat events increasing in number, intensity, and length. An escalation in total annual precipitation is likely with brief, intense rainstorms increasing. Rural areas, agriculture and natural resource dependent, riverine communities (Franklin County) face challenges in developing adaptation strategies focusing on responding to a changing climate.

Franklin County is addressing the issue of climate change in numerous ways. Paul Smiths College offers a degree in Sustainability and the campus has a Sustainability Coordinator tasked with the job to "help make campus and community more resilient by mitigating and adapting to effects of climate change." The College has endorsed Carbon Commitment and Smart Energy. Cornell Cooperative Extension of Franklin County provides an abundance of Fact Sheets on their website (Appendix B) starting with Climate Change Facts and the Earth's Changing Climate providing critical information on climate change issues impacting New Yorkers.

The Saint Regis Mohawk Tribe developed a Climate Change Adaptation Plan in 2013; the plan is a well-written and still pertinent treasure trove of information on the past, present, and potential future effects of climate change on the land, the people, and the infrastructure of the Tribe, (as well as all peoples of North America and the world). The SRMT Climate Adaptation Plan is one potential model for climate change planning and is recommended reading for all municipal leaders in Franklin County; the SRMT plan can be found at http://www.srmt-nsn.gov/_uploads/site_files/ClimateChange.pdf.

The 2020 update recognizes these issues in the Mitigation Strategies segment.

The following events occur infrequently in Franklin County; each is defined and addressed in general terms.

7. Tornadoes:

Definition: *An atmospheric storm formed by winds rotating at very high speeds, usually in a counterclockwise direction.* Historical records indicate that only one tornado has occurred in the recent history of Franklin County. According to NCDC data, trees were twisted and snapped, and power lines were down because of a tornado on June 1, 2004. This is the only recorded tornado event since 1950 in NCDC

data and was a category F0 on the Fujita wind scale. F0 (40-72 mph). The impact of high winds on the region has been addressed within other natural storm events rather than tornado events.

Tornado profile:

Location:
- Northern Franklin County

Extent:
- Winds gusting more than 57 mph

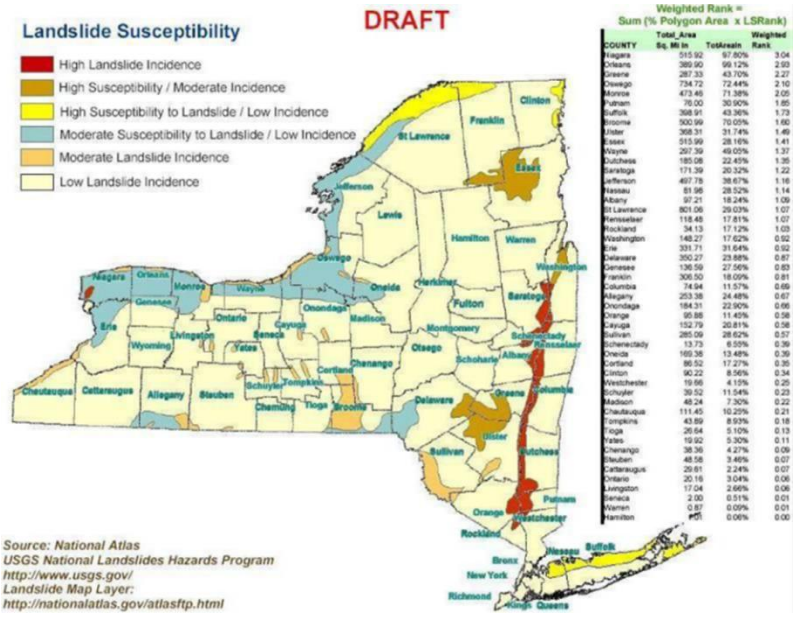
Cascade effects:
- Highly likely to trigger another hazard

Frequency:
- Infrequent event

Potential impact:
- Serious injury or death is unlikely
- Physical/economic damage to private property. Structural damage to county infrastructure.

8. Landslides:

Definition: *The downward and outward movement of slope-forming materials reacting to the force of gravity. Slides may be comprised of natural rock, soil, artificial fill or a combination of these materials*



According to the United States Geological Society (USGS Data Table 3.14a, Population at Risk in Landslide Incidence and Susceptibility Zones) 4,495 residents are in an area rated "high susceptibility/moderate incidence", and 8,991 residents live in an area of the county rated "High Susceptibility/Low Incidence" of landslides. None were found. Landslides have occurred in the Adirondack Park only in remote areas with no impact on lives or property.

9. Hurricanes:

Definition: *Tropical cyclones, formed in the atmosphere over warm ocean areas, in which wind speeds reach 74 miles per hour or more and blow in a large spiral around a relatively calm center or "eye" According* to the National Climatic Data Center Franklin County has not experienced a hurricane in the time 1950 – 2009 so this is of relatively minor concern to the County. However, the problems and costs associated with high wind events has been addressed in the severe storm profile section and mitigation activities.

10. Subsidence:

Definition: *Depressions, cracks and sinkholes in the earth's surface which can threaten people and property.* Land subsidence has been documented in other regions of NYS and the Haz-Mitigation Plan for NYS recognizes it is "difficult to predict probability of future occurrence, only that it is likely." As none have occurred within the county to date, none are expected.

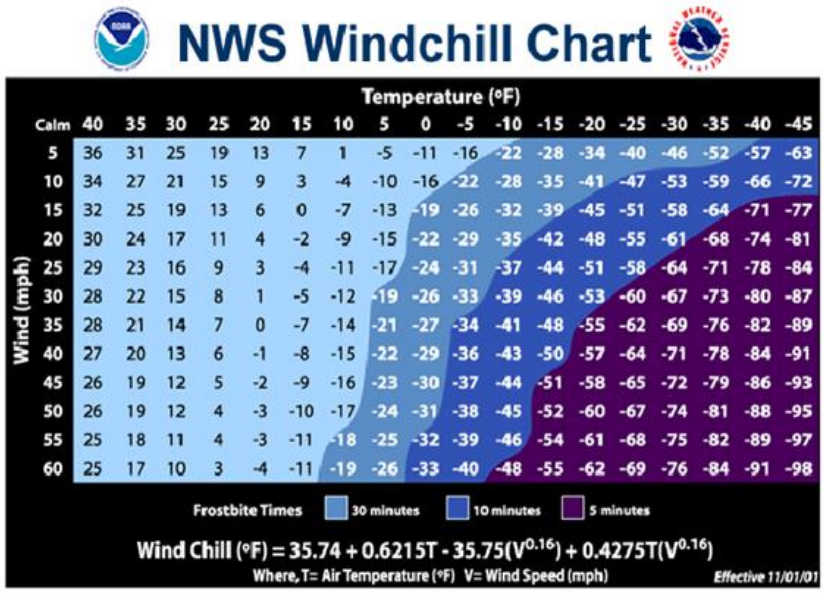
11. Drought:

Definition: *A prolonged period of limited precipitation affecting the supply and quality of water.* Franklin County has been an ancillary region in seven drought events in the Albany area (NCDC). April through August 1999 was the second driest period on record in Albany, resulting in a significant drought event for Franklin County as well. This noteworthy dry period resulted in serious risk for forest fire in Franklin County (see wild/forest fire risk)
Limited winter precipitation accompanied by moderately long periods during the spring and summer months can also lead to drought conditions.

When concern was expressed regarding drought during local meetings in Franklin County, it was in the context of dry summers causing increased fire danger, not as a stand-alone threat. The aspect of drought that poses the greatest threat to life and property is related to wildfire. Therefore, the threat posed by drought will be addressed in this plan through wildfire vulnerability reduction actions.

12.Extreme Temperatures: (Cold)

Definition: *Extended periods of excessive cold or hot weather with a serious impact on human and/or animal populations. (National Weather Service Wind Chill Chart, below)*



Extreme heat is not a hazard identified for Franklin County. Extreme cold temperatures are a condition and event that historically affect Franklin County and all the municipalities therein at least annually. Recently, in 2007 Saranac Lake and Tupper Lake recorded temperatures of -29 degrees with a wind chill of -30 degrees, and -35 two months later. In 2009, Brasher Falls recorded -27 and Saranac Lake recorded a low of -20 degrees. The extreme cold temperatures become a threat to the health and safety of residents primarily when they are combined with a utility failure of extensive length of time as happened during the ice storm of 1998. Therefore, mitigation strategies for extreme cold temperatures are dealt with in the context of mitigating the impact of other hazards (e.g., blizzards, severe storms/high winds, ice storms) that would have cascade effects that make residents vulnerable to the full brunt of winter's coldest temperatures.

Table 16 Federal Disaster and Emergency Declarations, Franklin County, NY (1954 – 2019)

Declaration Data Set

Disaster Number	IH Program Declared	IA Program Declared	PA Program Declared	HM Program Declared	State	Declaration Date	Disaster Type	Incident Type	Title	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared County/Area
4322	No	No	Yes	Yes	NY	7/12/17	DR	Snow	Severe Winter Storm	3/14/17	3/15/17		Franklin (County)
4129	No	No	Yes	Yes	NY	7/12/13	DR	Flood	Severe storms and flooding	6/26/13	7/10/13		Franklin (County)
3351	No	No	Yes	No	NY	10/28/12	EM	Hurricane	Hurricane Sandy	10/27/12	11/8/12		Franklin (County)
4020	Yes	No	Yes	Yes	NY	8/31/11	DR	Hurricane	Hurricane Irene	8/26/11	9/5/11		Franklin (County)
1993	No	No	Yes	Yes	NY	6/10/11	DR	Flood	Severe storm, flooding, tornadoes, and straight-line winds	4/26/11	5/8/11		Franklin (County)
3262	No	No	Yes	No	NY	9/30/05	EM	Hurricane	Hurricane Katrina evacuation	8/29/05	10/1/05	7/21/10	Franklin (County)
1534	No	No	Yes	Yes	NY	8/3/04	DR	Severe Storm(s)	Severe storms and flooding	5/13/04	6/17/04		Franklin (County)
3186	No	No	Yes	No	NY	8/23/03	EM	Other	Power outage	8/14/03	8/16/03	3/3/11	Franklin (County)
1415	No	Yes	No	Yes	NY	5/16/02	DR	Earthquake	Earthquake	4/20/02	4/20/02	12/21/10	Franklin (County)
1391	No	Yes	Yes	Yes	NY	9/11/01	DR	Fire	Fires and explosions	9/11/2001	9/11/2001		Franklin (County)

3155	No	No	Yes	No	NY	10/11/00	EM	Other	West Nile Virus	5/22/00	11/1/00	5/25/04	Franklin (County)
1233	No	Yes	Yes	No	NY	7/7/98	DR	Severe Storm(s)	Severe storms and flooding	6/25/98	7/10/98	12/8/04	Franklin (County)
1196	No	Yes	Yes	No	NY	1/6/98	DR	Snow	Severe storms and flooding	1/5/98	1/17/98	9/8/05	Franklin (County)
1148	No	Yes	Yes	Yes	NY	12/9/96	DR	Severe Storm(s)	Severe storms high winds, rain, and flooding	11/8/96	11/15/96	12/8/04	Franklin (County)
1095	No	Yes	Yes	Yes	NY	1/24/96	DR	Flood	Severe storms and flooding	1/19/96	1/30/96	10/25/10	Franklin (County)
3107	No	No	Yes	Yes	NY	3/17/93	EM	Snow	Severe blizzard	3/13/93	3/17/93	12/27/02	Franklin (County)

Assessing Vulnerability: Identification of Assets and Development Trends

To understand risk, community assets are evaluated based upon exposure to hazard events. The inventory of assets considers the population, structures, and lifelines that could be impacted by hazard events. The following narrative depicts inventory data used for this risk assessment and discusses development trends in interest. The consideration of development trends is important because areas of future development could increase the inventory that is exposed, and therefore at risk of damage or loss should a hazard event occur.

Inventory data enumerate the people, places, and things that could be injured, damaged, or destroyed during a particular hazard event. Once the general asset inventory has been established, the portion of the inventory that is at risk by the various hazards is identified. This "at-risk" division can be identified by overlaying the hazard area (for example, flood zones) with the asset data to estimate the assets at risk. Districts of residential development may be compared with flood zones to determine the locations and number of structures at risk of damage or destruction from flooding. Understanding vulnerable assets can help guide mitigation strategies and efforts. Hazard exposure and loss estimates use this approach. The chart below lists the number of individuals considered vulnerable, and the total housing units potentially at risk that are further referenced within each jurisdictional annex.

Table 17 Housing and Population Demographics (ACS 2018)

Jurisdiction Town/City/Village	Housing Units	Total population	Age 5 and under	Age 62 and older	Total vulnerable
Town of Bangor	982	2,160	121(5.6%)	414(19.2%)	535(24.8%)
Town of Bellmont	1,272	1395	42(3.0%)	376(27.0%)	418(30.0%)
Town of Bombay	550	1059	148(14.0%)	216(20.3%)	364(34.3%)
Town of Brandon	303	503	24(4.8%)	84(16.7%)	108(21.5%)
Town of Brighton	845	1406	29(2.1%)	188(13.4%)	217(15.5%)
Town of Burke	624	1389	75(5.4%)	278(20.0%)	353(25.4%)
Town of Chateaugay	965	1624	69(4.2%)	353(21.4%)	422(25.6%)
Town of Constable	768	1580	104(6.6%)	279(17.7%)	383(24.3%)
Town of Dickinson	482	1051	81(7.7%)	242(23.0%)	323(30.7%)
Town of Duane	193	183	8(4.4%)	64(35.0%)	72(39.4%)
Town of Ft. Covington	853	2153	176(8.2%)	307(14.3%)	483(22.5%)
Town of Franklin	1017	1174	26(2.2%)	338(28.2%)	364(30.4%)
Town of Harrietstown	3,494	5576	253(4.5%)	1300(23.3%)	1554(27.8%)
Town of Malone	4879	14354	688(4.8%)	2165(15.1%)	2853(19.9%)
Town of Moira	1373	2832	88(3.1%)	701(24.8%)	789(27.9%)
Town of Santa Clara	800	436	22(5.0%)	163(37.4%)	185(47.4%)
Town of Tupper Lake	3374	5826	240(4.1%)	1282(22.0%)	1522(26.1%)
Town of Waverly	877	942	75(8.0%)	201(21.3%)	276(29.3%)
Town of Westville	890	1747	62(3.5%)	471(27.0%)	533(30.5%)
Village of Brushton	238	456	31(6.8%)	66(14.5%)	97(21.3%)
Village of Burke	95	225	23(10.2%)	48(21.3%)	71(31.3%)
Village of Chateaugay	405	729	33(4.5%)	195(26.7%)	228(31.2%)
Village of Malone	2703	5694	424(7.4%)	1190(20.9%)	1614(28.3%)
Village of Saranac Lake	3186	5552	252(4.5%)	1334(24.0%)	1586(28.5%)
Village of Tupper Lake	1937	3710	163(4.4%)	635(17.1%)	798(21.5%)
Saint Regis Mohawk Reservation	1109	3302	132(4.0%)	905(27.4%)	1037(31.4%)
Franklin County	**25650**	**50692**	**2463(4.9%)**	**10326(20.4%)**	**12789(25.3%)**

4. MITIGATION STRATEGY

In the 2008 Franklin County Multi-Jurisdictional Hazard Mitigation Plan the County identified a comprehensive range of mitigation actions. The mitigation actions were identified with input from local government agencies, social service organizations, and residents. No reasonable natural hazard mitigation actions were dismissed. Instead, the Planning Committee considered STAPLE+E criteria, the community's level of vulnerability, and the cost of given actions in relation to the protection provided to prioritize specific objectives and strategies (see table for explanation of STAPLE+E criteria).

STAPLE+E Criteria Explanation

S - Social	Mitigation actions are acceptable to the community if they do not adversely affect a particular segment of the population, do not cause the relocation of lower income people, and if they are compatible with the community's social and cultural values.
T - Technical	Mitigation actions are technically most effective if they provide long-term reduction of losses and have minimal adverse impacts.
A - Administrative	Mitigation actions are easier to implement if the jurisdiction has the necessary staffing and funding.
P - Political	Mitigation actions can only be successful if all stakeholders have been offered an opportunity to participate in the planning process and if there is public support for the strategy.
L - Legal	The body implementing the action must have the legal authority to do so.
E - Economic	Budget constraints can significantly deter the implementation of mitigation action. Actions must be cost effective and be able to secure funding.
E - Environmental	Mitigation actions should not have adverse environmental impact and must comply with Federal, State, and local environmental regulations.

Mitigation actions for all hazards were placed into one of six categories: 1) public education; 2) code enforcement officer education/enforcement; 3) further investigation of specific mitigation actions; 4) infrastructure maintenance; 5) infrastructure improvements; and 6) building/residential relocation. Generally, actions that fell into the lowest numbered category are high priority because they are the least burdensome economically and therefore allow for quick implementation. Vulnerability and cost-benefit ratios were considered in the prioritization process. Mitigation activity priorities also are based on "the extent to which benefits are maximized according to a cost benefit review" (DMA 2000). For example, low-cost activities that support cross-jurisdiction and multi-hazard benefits are assigned a high priority in some cases, based on the cost/benefit review. The following paragraphs provide descriptions of how each category of mitigation actions was evaluated using STAPLE+E criteria.

Public education and code officer education/code enforcement were considered the most immediately feasible actions for hazards threatening Franklin County; these actions do not require additional staff, involve limited additional expenses and, importantly, engage the public in the mitigation process. Engaging the public has the immediate effect of protecting lives and property and building long-term political support for

continued mitigation initiatives. Additionally, these actions will have little if any adverse environmental impact.
Limited technical expertise at the local level regarding "on the ground" strategies for many hazard mitigation objectives called for further investigation. With technical assistance, further investigation into specific mitigation strategies can be done with existing staff and relatively little additional expense. Furthermore, the organization providing technical assistance will be cognizant of environmental concerns and legal constraints. (Army Corps of Engineers for bridge replacement)

The regular maintenance of infrastructure such as dams and storm water drains can contribute to reducing the severity and likelihood of a hazard event. All the infrastructure maintenance actions considered in this plan are technically, politically, and environmentally feasible. Additional staff might be required for various actions to be done on a routine basis. Budget constraints and legal authority limit some maintenance actions, such as dam maintenance, where property may be under private ownership or outside of local jurisdiction.
Infrastructure improvements can be among the costliest of all mitigation strategies, however, will often provide the largest gain in mitigating a particular hazard. Additionally, infrastructure improvements are generally socially and politically acceptable and are often popular. Cost never resulted in an action not being considered.

Relocation of buildings and people is the final category of mitigation actions considered. Relocation is an expensive option, as it often entails the purchase of threatened property from the owner. The turmoil associated with relocating people from their existing homes, and the lack of political support, also makes this option the least attractive, especially when the property can be protected through a new construction project or improvements in existing infrastructure. Despite these drawbacks relocation will remain a viable option if circumstances reduce the barriers or make relocation the only feasible choice to ensure the health and safety of residents.

It is important to stress that less favorable STAPLE+E criteria evaluation did not exclude the implementation of a mitigation objective or strategy. When a planning committee, local government, and residents reached a consensus that the community's vulnerability was sufficiently high and/or cost-benefit considerations were favorable, an action received higher priority.

Natural Hazards – Mitigation Goals, Objectives, Strategies

Franklin County jurisdictions identified a broad range of actions for mitigation planning to be included in 2015 and the 2020 update. Input from local government agencies, social service organizations, residents and others contributed to the development of the current list of mitigation actions. No reasonable natural hazard mitigation actions were dismissed.

Proposed mitigations actions in the following section and the Jurisdictional Annex have the support of all the jurisdictions. This is demonstrated by the approval of the Plan by each jurisdiction as well as the fact that the county form of government followed in Franklin County includes Town Supervisors as members of the County Legislature. All municipal activities will begin under the direction of the executive, i.e., town supervisor, mayor. Additionally, training of local code officials is planned to ensure that those building code elements related to minimizing earthquake damage are known, enforced, and disseminated to the public.

Mitigation projects were evaluated based on the costs, timeframe for implementation and ease of implementation. Based on their collective expertise in pertinent areas, the LEPC assigned time frames based on the categories of immediate (I), short-term (ST), and long term (LT). Immediate is within 6 months, short-term is within 1 year and long term is within 3 years. Priorities were determined by considering cost, staffing availability, and benefit to the jurisdiction, with high indicating a low cost, broad impact action, medium indicating a future project with potential funds available and low priority indicating a long-term endeavor, with an alternate funding source necessary. Franklin County recognizes that FEMA requires a formal benefit-cost analysis (BCA) of mitigation measures when requesting approval for HMGP funding. A formal BCA is not a requirement in the Hazard Mitigation Plan.

Stakeholders in the 2015 revised plan assessed their jurisdictions for additional specific actions and implementation strategies. These are found in the Jurisdictional Annex specifying all twenty-six entities, as well as the outcome of each action. The newly identified mitigation actions for the 2020 update are in the Jurisdictional Annex alphabetically by municipality. Franklin County 2015 actions and outcomes follow this overview along with updated actions based on discussions with County personnel including the Local Planning Committee, Franklin County Soil and Water Conservation Director Chastity Miller (fcswcd.org) and Franklin County economic Development Corp., now referred to as Adirondack Frontier Economic Development Director, Russ Kinyon (adirondackfrontier.com)

Mitigation Vision and Goals

"To create communities who daily activities reflect a comprehensive commitment by government, business, non-profit organizations and the public to eliminate or reduce risks and adverse impacts from natural, technological and human-caused hazards."

The Hazard Mitigation Vision Statement above was developed at the State Mitigation Summit of 2002 and 2008. Throughout the development of hazard mitigation strategies Franklin County and the jurisdictions therein endorses this vision for their communities.

The original plan did not reflect all-inclusive goals, however in 2015, Franklin County jurisdictions favored comprehensive, long term mitigation goals reflecting general guidelines for future hazard reduction. The goals are consistent with the concepts expressed in available planning documents and the NYS Hazard Mitigation Plan (2014). The specific objectives and strategies detailed within the Implementation Strategy Plan below reflect these all-encompassing goals.

1) Protect life and property.

2) Increase public awareness.

3) Provide for Emergency Services

Franklin County jurisdictions identified wide-ranging actions for mitigation planning. Input from local government agencies, social service organizations, residents and others contributed to the development of the current list of mitigation actions.

The updated mitigation goals, objectives and strategies developed through the hazard mitigation planning process for the entire county are summarized below in Table 18. Jurisdiction specific information is found in the Jurisdictional Annex. Stakeholders participating in the plan update assessed specific actions and implementation strategies for their jurisdictions.

Timelines for mitigation projects and planning actions that require additional staff and funding are largely dependent on funding from outside resources. The most likely funding sources for these actions are also listed in Table 18. Additional potential funding sources are included in Appendix G: Federal, State, and other funding sources. The County and participating municipalities have limited resources to take on new responsibilities or projects. The implementation of these mitigation activities is dependent on the approval of each local elected governing body and the ability of the communities to obtain funding from local or outside sources. The communities will work together and with the County, NYSOEM, and other agencies to secure funds. Potential appropriate funding sources are noted for specific mitigation actions, however until application(s) for funds is (are) made, no funding source is yet identified.

Below are the mitigation actions for the county-wide plan and the outcomes.

Table 18 Implementation Strategy Plan

* Refer to Appendix H – Funding Resources
Low - low cost – under $10,000
High – High cost – over $10,000, need alternative funding source

I = Immediate, - 6 months
LT = Long Term- within 3 years
ST = Short Term- within 1 year

Hazard/Risk	**Objective**	**Strategy**	**Lead Agency**	**Funding**	**Target Date/Time frame**	**Existing/New Buildings**	**Priority** **H**igh **M**edium **L**ow	**Outcome Of Activity**
Reduce the impact of severe snow/ ice storms	Improve public awareness of hazard Goal 2	Educate county residents with information regarding steps to be taken to decrease the impact of ice storms on property (Appendix G)	County Office of Emergency Services will provide information executives of each municipality will direct dissemination	Current funding Low	Winter 2013-2014 Ongoing I	y	H	*Information provided in 2015 Continuing education*
	Keep trees from threatening lives, property, and public infrastructure during storm events Goal 1	Cut forestation back from thoroughfares, critical facilities, and populated areas	DPW, (County, Towns, Villages)	Current funding Low	Spring 2014 Ongoing I	y	H	*Highway Association meets regularly and reviews*
	Ensure critical facilities have needed backup power Goal 3	Obtain funding to purchase generators for municipally owned critical facilities	Office of Emergency Services, executives of each municipality	TBD* High	Summer 2015 Ongoing LT	y	L	*Funding unavailable*

	Identify emergency concerns of specific needs populations Goal 3	Survey populations as to their requirements	County Office of Emergency Services, Social Services Department, County Public Health, Office of the Aging	Current funding Low	Ongoing ST	n/a	M	*Office of the Aging and DSS continue tracking clients with special needs*
	Ensure efficient use of resources, during and after storm events Goal 3	Coordinate emergency services, public works departments, and public utilities.	Executives of each municipality, County executives	Current funding Low	Ongoing I	n/a	H	*Completed Continue Coordination*
	Implement debris removal as soon as possible Goal 1	Develop plans for debris management after severe winter snow/ice events.	DPW (County and Towns, Villages)	Current funding Low	Winter 2013-2014 ongoing	n/a	H	*Debris Management Plan Complete 2019*
	Connect with elderly, handicapped, low-income, during major events. Goal 2	Design a network of citizens that will check in on individuals during major events	Department of Social Services, Office of the Aging, Municipal executives	TBD* High	Spring 2014 Ongoing I	n/a	L	*On-going through Office of the Aging*
Reduce the potential damage and threat to life and property from wild/forest fires	Improve public awareness of hazard prevention Goal 2	Educate county residents with information regarding steps to be taken to decrease the impact of wild/forest fires on property (Appendix G)	County Office of Emergency Services will provide information to municipal executives to distribute	Current funding Low	Spring 2014 Ongoing I	y	H	*Provided information to municipal leaders*
	Investigate County-wide needs for dry hydrants Goal 1	Plan for providing dry hydrants as needed	County Office of Emergency Services	Low	ST		H	*Decisions made at local level*
	Review zoning and guidelines for	County Office of Emergency Services will conduct a review	County Office of Emergency	TBD*	Fall 2015 through	y	L	*In progress*

	compliance with national "Firewise Communities" program (Appendix D) Goal 1	of "Firewise Communities" guidelines to develop a Best Practices summary. Each municipality will review the summary and make modifications to their zoning practices	Services, executives of each municipality	High	Fall 2016 LT			
Reduce the impact from severe storms/winds	Improve public awareness of impact of hazard Goal 2	Educate residents regarding steps to be taken to decrease damage from storms on property by providing brochures. (Appendix G)	County Office of Emergency Services will provide brochure, executives of each municipality will direct dissemination	Current funding Low	Fall 2014 Ongoing I	y	H	*Information provided by Emergency Services*
	Ensure existing storm related building codes are enforced per the current code. Goal 1	Municipal executive to require Code Enforcement Officer to present building guideline details in the jurisdiction relating to severe storms	Executives of each municipality,	Current funding Low	Winter 2013-2014 Ongoing I	y	H	*Local level decisions*
	Keep trees from threatening lives, property, and public infrastructure during storm events Goal 1	Monitor and remove trees/limbs in storm areas that present potential hazards	DPW, (County, Towns, Villages)	Current funding Low	Spring 2014 Ongoing I	y	H	*Part of daily operations*
	Ensure efficient use of resources, during and after storm events Goal 3	Coordinate emergency services, public works departments, and public utilities.	Municipal executives County Emergency Services	Current funding Low	Spring 2014 Ongoing I	n/a	H	*Normal operations CEMP updated 2020*
	Ensure for debris removal as soon as possible Goal 1	Implement plan for debris management after severe storm events.	DPW(County) and Highway Dept. (Towns, Villages)	Current funding Low	Spring 2014 Ongoing I	n/a	H	*Debris Plan completed 2020*
	Ensure critical facilities have needed backup power Goal 3	Obtain funding to purchase generators for critical facilities	County Office of Emergency Services,	TBD* High	Fall 2014 Ongoing I	y	L	*No current funding available*

			municipality Executives					
Reduce the impact from tornado	Improve county wide public awareness with information on steps to be taken to identify risk Goal 2	Educate residents to identify a tornado watch from a tornado warning and actions to take in each case; all municipalities will post information	County Office of Emergency Services will provide information, executives of each municipality will direct dissemination	Current funding Low	Fall 2015 Ongoing I	y	H	*Information provided to Municipal leaders*
Reduce the impact from earthquake	Ensure existing earthquake-related building codes are enforced. Goal 1	Municipal executive to require Code Enforcement Officer present earthquake-related building codes information in their jurisdiction Provide training for local code enforcement officials	Executives of each municipality	NYS Low	Fall 2014 through 2015 I	y	H	*Local level decisions*
	Improve county wide public awareness with information on steps to be taken to identify risk Goal 2	Educate residents relating to steps taken to alleviate potential earthquake damage by providing brochures/pamphlets (Appendix G)	County Office of Emergency Services will provide brochure/pamphlet, executives of each municipality will direct dissemination	Current funding Low	Spring 2015 I	y	H	*Information provided to Municipal leaders*

Reduce the impact from flooding	Improve county wide public awareness of hazard Goal 2	Provide residents with information listing steps taken to lessen potential flood damage (Appendix G) and encourage the purchase of NFIP insurance.	County Office of Emergency Services will provide pamphlets, executives of each municipality will direct dissemination	Current funding Low	Spring 2014 I	y	H	*Information provided to municipal leaders*
	Participation in the Community Rating System (CRS) by NFIP municipalities Goal 1	Communities will begin participation in CRS and inquire as to their points toward status (Appendix G)	Executives of individual municipalities	TBD* High	Spring 2014-2016 LT	y	L	*Local Level*
	Remove dwellings in "hot spot" area to mitigate flood damage	Franklin County applied for "buy out" funds from FEMA, 8-10 residences on Lower Park Street, Town of Malone.	County Manager, Office of Emergency Services, Town of Malone	High $785,000	Fall/ Winter 2013-2014	y	H	*Project completed 2016*
	Stabilize bank to mitigate flood damage	Stabilize bank along County Rte. 25, applied for through FEMA	Office of Emergency Services, County DPW	High $600,000	Fall/ Winter 2013-2014	n/a	H	*Funding unavailable*
	Install solar powered stream monitoring capabilities for early flood warning	Install stream monitoring equipment in Saranac Lake Chain and Salmon River, north and south of Malone, applied for through FEMA	Office of Emergency Services, DEC, Town of Malone, Town of Harrietstown	High $60,000	Fall/ Winter 2013-2014			*Funding unavailable*
	Eliminate obstructions to surface water drainage (Appendix E) Goal 1	Identify and examine culverts in affected areas regularly, remove obstructions as necessary	DPW (County and Towns, Villages),	Current funding/ DEC Low	Spring 2014 Ongoing I	n/a	H	*Process ongoing with County and Municipalities*

	Clean and maintain stormwater drains and catch basins Goal 1	Identify and examine stormwater drains and catch basins in affected areas, follow County DPW guidelines for maintenance (Appendix G)	DPW (County and Towns, Villages)	Current funding Low	Spring 2014 Ongoing I	n/a	H	*Process ongoing with County and Municipalities*
	Create effective flood mitigation activities for "hot spots" within the county Goal 1	Identify, evaluate, and implement activities in flood areas	DPW (County and Towns)	TBD* High	Fall 2014 Ongoing LT	y	L	*Process ongoing with County and Municipalities*
	Community outreach Goal 2	Educate the community on benefits of carrying NFIP policies	Town Floodplain Administrators**	Current funding Low	Fall 2013 ST	y		*Information provided*
	Ensure flood prone areas have updated information via County web site Goal 2	Identify new flood data and prioritize areas	Office of Emergency Services, FEMA mapping	Current funding Low	Spring 2014 I	y	H	*Process ongoing with County and Municipalities*
	Ensure all jurisdictions have flood damage prevention codes, identify flood hazard areas in Town codes Goal 1	Town zoning and emergency codes to be reviewed and updated	Executives of each municipality, Flood Plain Administrators** Town Floodplain Administrators	Current funding Low	Fall 2014 Ongoing I	y	H	*Local level decisions*
	Identify specific structures with recurring flood damages. Goal 1	Apply for funding to relocate residents, demolish structures, relocate structures, or elevate structures as appropriate.	Franklin County Office of Emergency Services, County Manager	TBA* High	2013-2014	y	H	*Completed Lower Park Street Malone*
	Reduce impact of flooding due to	Install check valves on storm drains to prevent backflows,	Town executive, county/local DPW	High	Fall 2014 Ongoing	y	M	*Working with DPW with*

	ineffective storm drains in county areas Goal 1	improve staffing to maintain these systems			during spring floods LT			*ongoing activity*
Reduce impact from climate change	Investigate joining Climate Smart Communities through DEC Goal 1	Adopt the Climate Smart Communities Pledge (Appendix G)	Town executives, DEC	Current funding Low	Summer 2014 Ongoing I	y	H	*Local level decisions*
	Coordinate and develop a Local Action Plan Goal 1,3	Create list of priorities, implementation plan, funding possibilities (Appendix G)	Town executives/DEC	Low	Fall 2014 Ongoing	y	H	*Local level decisions*
	Encourage public involvement and knowledge of issues Goal 2	Create link on County website to provide information		Low	Spring 2014 Ongoing	y	H	*Information is available*
Reduce the impact of multi-hazard events	Public awareness of hazard warning systems in county jurisdictions Goal 1, 2, 3	Disseminate via Franklin County web page of all warning systems in place and how the public should notify officials of a potential hazard	Developed by jurisdictional emergency services with the county Emergency Services Office,	Current funding Low	Winter 2013-14 I	n/a	H	*In Progress using Facebook and Website*
	Maintain a current inventory of at-risk buildings and infrastructure Goal 1, 3	Continually update inventory of at-risk structures in each jurisdiction	Executives of each municipality, Office of Emergency Services	Current funding Low	Fall 2013 Ongoing LT	y	M	*Ongoing*
	Maintain list of year built and level of protection for each critical facility relating to all applicable hazards Goal 1, 3	Conduct a study to determine year built, and level of vulnerability for each critical facility	Municipal Executives	Current funding Low	Fall 2014 LT	y	M	*Lack of funding at local level*

	Seek funding for mitigation projects needed to provide a level of protection for critical facilities Goal 1, 3	Apply for grants to assist with mitigation activities	Franklin County Emergency Services, Hazard Mitigation Coordinator, Municipal Executives	TBD* High	Spring 2014 LT	y	L	*Low Priority No staffing available*
	Foster involvement in communication/collaboration between the County and municipalities Goal 2	Develop and hold public hearings related to the inclusion of mitigation activities in local laws, encourage the public to add to the collaboration efforts	Franklin County, Executives of municipalities	Current funding Low	Winter 2013-2014 Ongoing I	n/a	M	*Complete On going*
	Maintain and expand emergency preparedness and response countywide Goal 3	Increase communication and cooperation between County/local DPW and County/local emergency services. Link emergency services with hazard mitigation programs	Municipal Executives, County/local DPW, emergency responders (County and local), Office of Emergency Services, County Public Health	Current funding Low	Fall 2014 Ongoing I	n/a	H	*Completed and maintained*
	Educate citizens, public agencies, private property owners, businesses, and schools on mitigating hazards and reducing risks Goal 2	Develop, enhance, and implement education programs, brochures, school presentations informing groups about ways to reduce risk	Executives of each municipality, Superintendent of area school districts, County Public Health, Red Cross	TBD* Low	Fall 2014 Ongoing I	n/a	H	*Information available*
	Encourage homeowners to buy hazard insurance, when possible, Goal 1	Develop an outreach program to inform public about options available	Executives of each municipality, Office of Emergency Services, Red Cross	TBD* Low	2014 ST	y	H	*Continue to encourage purchase of hazard insurance*

	Ensure code enforcement and inspection services Goal 1	Continue education, training, and updated information to Municipal Flood Plain Administrators	Executives of each municipality, Flood Plain Administrators**	NYS High	Fall 2013 Ongoing I	y	M	*Dependent on municipal*
	Protect property development from disaster prone areas county wide Goal 1	Implement zoning regulations to discourage building new structures in disaster prone areas	Executives of each jurisdiction Municipal Zoning and Flood Plain Administrators**	Current funding Low	Fall 2014 Ongoing ST	n/a	M	*Dependent on municipalities refer to land use table*
	Maintain documents used and required for the mitigation plan Goal 3	Create a centralized library of all documents used	County Mitigation Officer	Current funding Low	Fall 2013 Ongoing I	n/a	H	*In progress By incident*

2020 UPDATE

The 2020 Multi-Jurisdictional Hazard Mitigation Plan Update was prepared with the purpose of identifying, assessing, and reducing long-term risk to life and property from hazards events. Each jurisdiction including Franklin County, itemized mitigation action plans suitable for their region. The action plans were developed to help break the cycle of disaster damage, reconstruct, and end repeated damage.

The mitigation action plans follow the FEMA classifications of hazard mitigation strategies (below) that can minimize loss of life and property and ensure public health and safety during hazard events.

1. Prevention: Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and storm water management regulations.

2. Property Protection: Actions that involve the modification of existing buildings or structures to protect them from a hazard, or removal from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.

3. Public Education and Awareness: Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers and school-age and adult education programs.

4. Natural Resource Protection: Actions that, in addition to minimizing hazard losses, 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.

5. Emergency Services: Actions that protect people and property during and immediately after a disaster or hazard event. Services include warning systems, emergency response services, and protection of critical facilities.

6. Structural Projects: Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, levees, floodwalls, seawalls, retaining walls, and safe rooms.

Franklin County Mitigation Action Plans

The following list of mitigation activities are to be implemented with the assistance of county personnel/towns/villages over the course of the next five years. The list encompasses activities to meet the risks of multiple hazards.

For various reasons, predominantly financial some of the actions were included in previous plans/updates. Although the actions were not completed, they are still considered a continuing priority should funding becomes available.

Hazard/Risk	Objective	Strategy	Funding	Lead Agencies
Reduce impact of severe snow/ice storms/severe winds	Ensure critical facilities have back up power sources	Obtain funding for county buildings and municipalities	Budgets will reflect purchase of one generator a year. HMPG funds, DEC	Office of Emergency Services/Municipalities/County Budget Office
Reduce impact of wildfire potential	Plan with municipalities, APA and DEC need for dry hydrants in county	Work with local fire departments/municipalities to determine need and locations of hydrants.	Fire departments and Emergency Services will investigate funding opportunities	Office of Emergency Services, local fire departments/municipalities DEC/APA for Forest Preserve regions
	Municipalities will be encouraged to adopt Fire Wise Communities guidelines	Local Fire Departments and municipalities will look to begin process for becoming a Fire Wise Community	Cost is minimal	Office of Emergency Services/Local Fire Departments/Municipalities
Reduce impact from flooding	Stabilize bank to mitigate flood damage along County Rte. 25	Obtain funding to complete the bank stabilization of Rte. 25. Costly project for county	Applications will be made to FEMA/HMPG for funding	County Highway Department

Multi Hazard Actions/Long-Term Goals

Franklin County Highway Department will investigate further the utilization of roadway heating technology to lessen the impact of snow and ice buildup on portions of county roads that are subject to extreme weather conditions. Although this new heating technology is costly, the County may defer some cost through pilot testing.

Heating technology includes embedding metal ribbons and mesh into the surface of new pavement. While on older roadways the ribbons are inserted through openings made in the existing pavement. Heating technology uses data such as the temperature and weather to automatically power heat strips, using very little energy. This technique is currently being used throughout small locations in Canada.

The Highway Department will also consider utilizing Conductive Concrete and Solar Roadway Panels to reduce the use of road chemicals and freezing at intersections and bridges which are areas that are prone to freezing.

The County will encourage collaborative meetings amongst themselves, towns, and utility companies to encourage the use of power lines that are installed in smaller sections. Power lines installed in smaller sections alleviate large power outages and allow for faster restoration of power.

Emergency Services will encourage municipalities, county offices, and school systems to utilize NOAA radio systems for faster communication of potential severe weather situations. Use of NOAA radio systems will allow municipalities to better prepare road crews, emergency shelters and residents of extreme weather.

Emergency Services will work with the County to establish a Disaster Supply Kit that will be posted on the County website to provide residents with a list of necessary items to maintain in their home in case of severe weather.

The County will encourage jurisdictions and building code enforcement officers to meet regularly to discuss "snow load design standards" and provide homeowners with strategic ways to increase structural stability in homes and further encourage homeowners to elevate mechanical systems (furnaces, hot water heaters, electrical panels) in flood prone areas.

Emergency Services and area volunteer Fire Departments will be encouraged to provide educational safety programs to better prepare homeowners, businesses, and schools regarding disaster relief, overall safety, and preparedness.

Franklin County will establish a kiosk in a central location with brochures obtained from FEMA and NYS on area specific hazard mitigation, preparedness, actions homeowners may take and opportunities to apply for flood insurance.

Franklin County Emergency Services, volunteer fire departments and municipal officials will assess the need for dry hydrants in remote areas to mitigate fires from becoming wildfires. Funding options will be discussed and provided to municipalities.

Franklin County legislators with input from the APA, Adirondack Frontier and FC Soil and Water Conservation will revisit the creation of a Franklin County Planning Department to oversee growth and development in the County.

Franklin County Highway and municipal highway superintendents will assess areas for the need of snow fences and/or planting of native vegetation along stream beds and roadsides as a mitigation action. Potential grant opportunities will be reviewed and pursued.

Franklin County will encourage all jurisdictions to participate in the Franklin County Soil and Water Conservation District Road Stream Crossing Assessments as an opportunity for erosion and sediment control throughout the watershed.

Climate Mitigation Activities

The County will host a meeting of municipalities and county legislators bringing together the Towns/Villages that are in the process of obtaining certifications through NY DEC as Climate Smart Communities. In learning from the experiences of the Town of Tupper Lake and the Village of Saranac Lake, other jurisdictions may be inclined to register. Grant funding through Climate Smart Communities is often available for various mitigation strategies.

Franklin County participates in the NYSERDA Clean Energy Program with 4 high impact actions completed and will host a meeting of municipalities with NYSERDA featuring other communities in the county that are actively involved in the program. Currently the Towns of Franklin and Malone have 4 high impact actions accomplished, Town of Constable has 2 high impact actions accomplished, the Village of Malone has 1 high impact action accomplished and the Village of Saranac Lake has 7 high impact actions accomplished. The involved municipalities will provide valuable insight into the process and the benefits available for jurisdictions to participate.

Franklin County will pursue the option of a Smart Growth community as defined by NYS. Jurisdictions partially or completely within the Adirondack Park will be encouraged to pursue Smart Growth using guidelines developed by NYS DEC to "provide the right balance between development and preservation. The program supports projects that foster sustainable development, environmental protection and community livability." Grant funds are available for financial or technical assistance in working toward this goal.

Franklin County will include Climate Change on their website, providing easy access to education and opportunities including Cornell University Climate Change Fact Sheets, New York's Changing Climate, Climate Smart Farming that will include an online tool kit on ways to improve productivity and resiliency, access to the How Green Is My Town checklist (howgreenismytown.org), Climate Kids through NASA (http://climatekids.nasa.gov/offset) interactive, informative fun educating kids about climate change, and Teaching About Climate Change and Energy (cleanet.org) Climate Literacy and Energy Awareness Network providing information to educators.

5. MAINTENANCE

To foster hazard awareness and facilitate planning continuity, newly elected and appointed town, village, and county officials will be presented an opportunity to review the *Franklin County Multi-Jurisdictional Hazard Mitigation Plan*. Officials will be encouraged to incorporate the plan objectives in decision-making processes and development plans.

The Franklin County *Comprehensive Emergency Management Plan* developed a regular process through which risk assessment and mitigation projects are reviewed and updated. The Franklin County Local Emergency Planning Committee (LEPC) generally meets quarterly. During these meetings, the LEPC deliberates on specific hazard reduction actions that can be taken for those hazards determined to be most significant. Periodic review and assessment of the *Multi-Jurisdictional Hazard Mitigation Plan* will be incorporated into existing review process developed under the *Comprehensive Emergency Management Plan.* The Director of the Franklin County Office of Emergency Services functions as the Mitigation Officer for the county, with the Deputy Director serving as the Deputy Mitigation Officer. The Mitigation Officers provide oversight duties of the Local Emergency Planning Committee, for the purposes of development of the Hazard Mitigation Plan and for maintenance of the Plan for the foreseeable future. More specifically, as part of their regular meeting agenda, the LEPC will periodically: 1) assess the appropriateness of Mitigation Plan goals, objectives, and strategies, for current and future conditions; 2) reassess risk analysis and hazard prioritization; 3) assess outcomes; 4) determine roadblocks to effective plan implementation; and 5) review adequacy of resources.

According to the Franklin County Comprehensive Emergency Management Plan, the LEPC conducts review of hazard reduction actions that include:

1) a description of the action
2) a statement on the technical feasibility of the action
3) the estimated cost of the action
4) the expected benefits of the action and the estimated monetary value of each benefit
5) an estimate of the level of community support for the action.

The above information is consolidated into a Risk Reduction Report. Risk Reduction Reports are presented to the County Emergency Management Office (Franklin County Office of Emergency Services) for review, revision, and approval or disapproval. Upon approval, the report(s) may be presented to the County Executive (Manager) and the County Board of Legislators for consideration of funding.

On a yearly basis the County will use summer interns to assist in updating the Plan. Student interns will contact jurisdictions for updates on potential mitigation actions, additions to critical facilities or changes to local land use plans. A spreadsheet will be maintained over the term of the plan by jurisdictions to facilitate the 5-year update to the Plan.

A comprehensive update that includes LEPC assessment of the Plan will be conducted on a five-year cycle. The County Emergency Management Office will coordinate this review/revision process. Town, Village, and Tribal administrators, partner agencies including the NYS Department of Environmental Conservation, the

Adirondack Park Agency, and the county Soil and Water Conservation District, the LEPC, and public will be given notice that the Plan revisions are being made and their input is requested. As mitigation projects are completed and goals are being met jurisdictions will document the process for inclusion in the next update. Direct input will be solicited during two meetings, one at each end of the county. Town, Village, and Tribal administrators will be notified of the revision process via direct mailings and encouraged to attend at least one of the two meetings. These meetings will also be open to the public and will be advertised through a press release and flyers to be publicly posted. Community members will be encouraged to provide plan input through their municipality representative(s).

Once input is obtained, the Plan will be revised accordingly. Notice of the revised draft plan will be advertised through a press release with website URL for community members to provide plan input through their local representatives. The revised plan will also be available for review for one week at the Franklin County Office of Emergency Services. Upon NYS OEM/FEMA "Approval Pending Adoption", the updated plan will be presented to each municipality for formal adoption.

The following template will be copied and utilized for future review and maintenance.

PLAN REVIEW AND UPDATES

Plan Approval: _____

Plan Review: _____

Plan Review: _____

Plan Review: _____

Plan Review: _____

Updates:

Page: _____ Date: _____

Page: _____ Date: _____

Page: _____ Date: _____

Page: _____ Date: _____

Page: _____ Date: _____

APPENDIX A-

County/Municipality Resolution Sample

BOARD RESOLUTION

Franklin County Legislature, County of Franklin, New York

I hereby certify that, at a Regular Meeting of the Franklin County Legislature of the County of Franklin, a Municipality with offices at _____, Malone, New York, duly called (a quorum being present) and held at the _____ County Building, 355 West Main Street, Malone, County of Franklin and State of New York, on _____, 2013 the following Resolution was duly adopted and is now in full force and effect:

WHEREAS, as this County Legislature, authorized the County's participation in the planning process for the Franklin County Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan, now therefore be it

RESOLVED, that this County Legislature does hereby adopt the Franklin County Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan, and be it

RESOLVED, that a Certified copy of this Resolution be sent by the Franklin County Clerk to Friends of the North Country for inclusion in the Plan.

IN WITNESS WHEREOF, I have hereunto set my hand as County Clerk of the County of Franklin, on this _____ day of _____, 2013.

_____

Franklin County Clerk

(SEAL)

TOWN BOARD RESOLUTION

Town Council, Town of _____, Franklin County, NY

I hereby certify that, at a Regular Meeting of the Town of _____ in the County of Franklin, a Municipality with offices at _____, _____, New York, duly called (a quorum being present) and held at the _____ Town Offices in the Village of _____, County of Franklin and State of New York, on _____, 2013 the following Resolution was duly adopted and is now in full force and effect:

WHEREAS, as the County Legislature, authorized the County's participation in the planning process for the Franklin County Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan, now therefore be it

RESOLVED, that this Town Board does hereby adopt the Franklin County Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan, and be it

RESOLVED, that a Certified copy of this Resolution be sent by the _____ Town Clerk to Friends of the North Country for inclusion in the Plan.

IN WITNESS WHEREOF, I have hereunto set my hand as Town Clerk of the Town of _____, on this _____ day of _____, 2013.

_____

Town of _____, Clerk

(SEAL)

BOARD RESOLUTION

Village Board, Village of Brushton, Franklin County, New York

I hereby certify that, at a Regular Meeting of the Village of Brushton in the County of Franklin, a Municipality with offices at _____, Brushton, New York, duly called (a quorum being present) and held at the _____ Municipal Offices in the Village of Brushton, County of Franklin and State of New York, on _____, 2013 the following Resolution was duly adopted and is now in full force and effect:

WHEREAS, as the County Legislature, authorized the County's participation in the planning process for the Franklin County Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan, now therefore be it

RESOLVED, that this Village Board does hereby adopt the Franklin County Pre-Disaster Multi-Jurisdictional Hazard Mitigation Plan, and be it

RESOLVED, that a Certified copy of this Resolution be sent by the Brushton Village Clerk to Friends of the North Country for inclusion in the Plan.

IN WITNESS WHEREOF, I have hereunto set my hand as Village Clerk of the Village of Brushton, New York, on this _____ day of _____, 2013.

_____

Village of Brushton, Clerk

(SEAL)

APPENDIX B-

Climate Change

- NY Changing Climate
- Earths Changing Climate
- Farm Energy

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CLIMATE CHANGE FACTS

CORNELL COOPERATIVE EXTENSION

NEW YORK'S CHANGING CLIMATE

The Earth is warming and New York is too. Just as we are seeing unprecedented rates of change at the global level, we are also observing rapid change in New York, including rising temperatures and changing precipitation patterns, with effects on the natural world and human health. Intense rains and floods, summer droughts, and heat waves are more common than they were in our grandparents' time. New York's climate will continue to change over the next 10, 20, and 100 years as detailed below.



WHAT NEW YORKERS CAN EXPECT NOW AND IN THE FUTURE

Temperature

Average temperatures across the Northeastern United States have risen by over 2°F since 1970. Winter temperatures are 4°F warmer. The change in temperature is more noticeable at the extremes, however. Here in New York, we have seen an increase in the number of extremely hot summer days (above 90°F) and a decrease in the number of cold winter days (below 32°F). In the future, New Yorkers can expect:

- An increase in average temperature of 1.5 to 3°F by the 2020s; 3 to 5.5°F by the 2050s; and 4 to 9°F by 2080, depending on the amount of greenhouse gases humans continue to emit into the atmosphere.

Looks Like a Heat Wave!



Summers in New York will get increasingly uncomfortable as the number of extremely hot days increase. Heat waves – defined as three consecutive days with maximum temperatures above 90°F – are projected to occur more frequently and last longer. This will lead to an increase in heat-related illness and put stress on ecosystems and human infrastructure.

According to the Centers for Disease Control, heat waves are silent killers – extreme heat and humidity associated with heat waves kill more people in the United States on average than hurricanes, lightning, tornadoes, floods, and earthquakes combined. The adverse health impacts of extreme heat fall disproportionately on infants and children, people with chronic medical conditions, and the elderly, a sector of the population expected to double in size by 2030.

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Precipitation and Snowfall

Total precipitation amounts have increased slightly in the Northeast, by approximately 3.3 inches over the last 100 years. Even more dramatically, we have seen a 67% increase in the number of 2-inch rainfall events occurring over a 48-hour period since the 1950s. In the future, New Yorkers can expect:

- An increase in average annual precipitation of up to 5% by 2020; 10% by the 2050s; and 15% by the 2080s.
- Changing precipitation patterns, with increased precipitation in the winter, and decreased precipitation in late summer or fall.
- Lower rainfall amounts in the summer may increase the frequency of drought, and may negatively affect the ability of small drinking water supply systems to meet demand.
- Decreased snow cover, by as much as 25 to 50% by the end of the next century, jeopardizing opportunities for skiing, snowmobiling, and other forms of winter recreation; natural ecosystems will also be affected by the changing snow cover.

When it Rains...it Pours!



The number and intensity of extreme precipitation events are increasing in New York, and this trend is expected to continue. More rain, coming in sustained heavy downpours, heightens the danger of localized flash flooding, streambank erosion, and storm damage. While climatologists cannot determine if a specific rainfall event was caused by climate change, the extreme rainfall in August and September 2011 associated with Hurricane Irene and Tropical Storm Lee forced thousands of people to evacuate their homes when streams and rivers rose to record flood levels, washed out towns and farms, and caused billions of dollars of damage, particularly in the Catskill Mountains and Southern Tier.

Sea Level Rise and Impacts to Lakes



Sea levels have been rising globally because water expands as it warms, and there has been widespread melting of glaciers and ice sheets. In the future, New Yorkers can expect:

- Continued sea level rise of 2 to 5 inches by the 2020s; 7 to 12 inches by the 2050s; and 12 to 23 inches by the 2080s in the lower Hudson Valley, New York City, and Long Island.
- Potential salination along the Hudson River could affect drinking water supplies, since the river, a tidal estuary, is affected by sea level rise.
- Dangerous coastal storm surges, caused by high winds and high tides, will increase the risk of coastal flooding, beach erosion, and damage to infrastructure in low-lying areas.
- Changes in the timing of ice coverage and high flow on New York's inland lakes and rivers, along with potential change to the water level of the Great Lakes, will affect wildlife and economic and recreational activities.

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Ecosystems

Climate change will continue to affect New York's ecosystems and biodiversity, including shifts in species ranges and sharp declines in populations of certain species. In the future, New Yorkers can expect:

- Northward expansion of the range of some invasive species currently found in warmer climates, such as kudzu (an aggressive weed) or the hemlock woolly adelgid (an aphid-like pest of hemlock trees), threatening native species and ecosystems in New York.
- Increasing mosquito populations, along with the danger of mosquito-borne disease.
- Increasing populations of white-tailed deer as winters grow milder. Deer will survive more winters and become more of a problem for drivers on roadways, while doing more damage to the crops, plants, and suburban landscapes.

Gone Forever?



Species in isolated habitats or at the southern edge of their range are particularly vulnerable to climate change. By the end of the century, it is likely that New York State will completely lose its spruce-fir forests from the Catskills and Adirondack Mountains, changing the fabric of our natural landscapes forever. Cold water fish species like New York's state fish, the brook trout, and mammals like the fisher that are suited for deep winter snow cover are especially at risk. Widespread economic impacts to the tourism and recreation industries are also expected.

Agriculture Impacts

The agriculture sector is already feeling the effects of New York's changing climate. Warmer temperatures and changing precipitation patterns present both economic challenges and opportunities for agriculture. For example, farmers are already experiencing increased insect, disease, and weed pressure, but have also had success planting new longer-season varieties of corn. Since the 1960s, the growing season has lengthened by nearly a week, as evidenced by observations of earlier spring bloom dates for lilacs, apples, and grapes at agricultural research stations across the state.

Agriculture Challenges and Opportunities



New patterns of rainfall and temperature may alter the appearance of New York's agricultural landscape.

- Warmer temperatures and a longer growing season (by as much as a month by the end of the century) could create opportunities for farmers to produce warmer-temperature crops (e.g., peaches or watermelon). The dairy industry and many of the state's current high-value crops (e.g., apples, cabbage, and potatoes) will be vulnerable to heat-induced crop damage and losses.
- Rising energy costs for cooling may cut into farm operation profits.

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Human Health Effects



Climate change will have broad effects on human health. In the future, New Yorkers can expect:

- Increases in the severity of heat-related illness, including heat stroke and heart attacks. Adaptation to heat waves will place additional stress on energy infrastructure and local governments.
- Declining air quality, caused by the increase in formation of ground-level ozone, leading to increased cardiovascular illness and respiratory disease.
- An increase in the severity and incidence of asthma and seasonal allergies, as plants such as ragweed produce pollen earlier and longer.

Infrastructure, Energy, and Transportation Impacts



Local infrastructure, the energy grid, and institutions such as schools and hospitals are all susceptible to the climate impacts discussed above. Local and regional planners need to integrate climate change information into their comprehensive planning processes. For example:

- Infrastructure – such as subway systems, railways in low-lying coastal areas, water treatment plants, and bridges – may need to be relocated or rebuilt due to the changing climate.
- Certain water districts may not be able to meet water demands if there are prolonged summer droughts.
- Emergency plans will need to take into account scenarios such as increased incidences of localized flooding and road closures.

Planning for Climate Impacts



Many communities, municipalities, businesses, and households in New York have already begun to reduce their greenhouse gas emissions and prepare for the future. For example, nearly 100 communities have adopted the NYS Climate Smart Communities Pledge to start planning for change.

The Cornell University Climate Change Program Work Team (PWT) is developing new resources and tools. These will help stakeholders, such as farmers and communities, make more informed decisions to mitigate greenhouse gases and adapt to New York's changing climate.

Prepared by: Art DeGaetano, Allison Chatrchyan, David Wolfe, Jeff Beem-Miller, Lauren Chambliss, and Holly Menninger. Designed by DragonFishStudio.com

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CLIMATE CHANGE FACTS

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THE EARTH'S CHANGING CLIMATE

Have you noticed that trees are budding earlier in the spring, that summer heat waves are more common than they used to be, or that when it rains, it pours? What you are witnessing is part of a global change in the Earth's climate. Scientists once thought climate change would take many generations to be felt, but instead we are already experiencing its dramatic effects.

Historically, the Earth's climate has fluctuated, but natural factors alone cannot explain today's rapid pace of change. There is overwhelming evidence that an increase in gases like carbon dioxide (CO_2) in the atmosphere is causing this transformation.



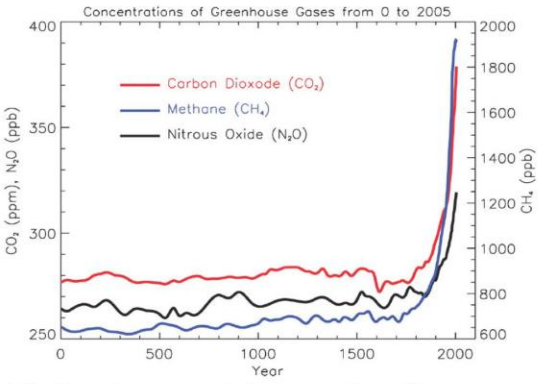
THE GREENHOUSE EFFECT

For decades scientists have known that without the so-called "greenhouse gases" the atmosphere of our planet would be a cold -4°F, rather than the average temperature of about 60°F that supports the abundant and diverse life with which we are familiar. Important greenhouse gases (GHGs) include carbon dioxide, water vapor, methane, and nitrous oxides. The sun's energy passes through these gases, like light passing through a window, but then they trap the heat that develops at the Earth's surface like a blanket laid end-to-end across the planet.

RISING GREENHOUSE GASES AND CLIMATE CHANGE

Since the Industrial Revolution of the 1800s, the amount of CO_2 in the atmosphere has risen by almost 40 percent. This is attributed primarily to the burning of fossil fuels (coal, oil, gasoline). Methane and nitrous oxides are also increasing rapidly, due in part to the expansion of agriculture and use of nitrogen fertilizers. These are present in only trace amounts, but are more potent greenhouse gases than CO_2.

The increases in these three greenhouse gases coincide with a worldwide increase in temperature. Since the 1800s, the Earth has warmed by more than 1.5°F. In New York, the average summer temperature is already 2°F warmer than in 1970, and winter temperature is 4°F warmer. The Earth is now warmer than it has been during the past several thousand years, and the climate models project a continuation of this trend. The water cycle is also being affected, with fewer snow cover days and heavier rainfall events in New York.



This figure shows atmospheric concentrations of important long-lived greenhouse gases over the last 2,000 years. – IPCC Fourth Assessment Report (2007).

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A WORLD OF CLIMATE OBSERVATIONS

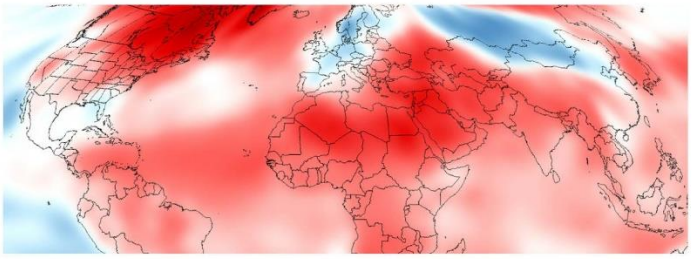
We know the climate is changing because we have a wealth of data from a worldwide network of weather stations, many of them with records going back more than 100 years. Weather balloons and satellites measure the temperature of the upper atmosphere. Paleoclimate data from ice cores and tree rings can be used to infer temperature and precipitation patterns over thousands of years. These data help us to better understand current changes in climate and place it into historical perspective. Sophisticated Global Climate Models (GCMs) replicate these past and current climate conditions and are able to make accurate predictions about the changes in climate we will see in the future.



Weather stations around the world have been collecting weather data for more than 100 years. These long-term weather records tell us our climate is changing. US Climate Reference Network stations like this one near Cornell University (Ithaca, NY) provide high quality temperature and rainfall observations.

BUT THIS YEAR WAS NOT AS WARM AS LAST YEAR

In the midst of the overall warming trend we are experiencing, individual years may be colder or warmer than other years due to diverse factors that affect weather, like jet stream patterns, volcanic eruptions, or natural conditions such as El Niño. Climate change refers to shifts that occur over long periods–decades or longer–while weather refers to the day-to-day and year-to-year variability that is familiar to us all. Just because one winter season is particularly cold does not mean that New York's climate is not changing, the long-term climate data show that it is.



According to the NOAA National Climatic Data Center, 2010 was tied for the hottest year on record. Red colors indicate areas that were warmer than the historical average; blue colors indicate areas cooler than the historical average (2011).

CLIMATE CHANGE RESEARCH, TEACHING AND EXTENSION OUTREACH AT CORNELL

Cornell University is one of the nation's leading institutions contributing to climate change research in many fields, such as atmospheric science and climate modeling, climate impacts on agriculture, horticulture and natural resources, and the economic, policy and societal implications of climate change. Cornell University faculty, staff and Cooperative Extension educators are working together through the Cornell Climate Change Program Work Team to develop materials such as this fact sheet. For more specific information on climate change impacts in New York, go to www.climatechange.cornell.edu.



Cornell University researchers and Cornell Cooperative Extension educators are working together to educate New Yorkers about energy and climate change issues.

Prepared by: Art DeGaetano, Allison Chatrchyan, David Wolfe, Jeff Beem-Miller, Lauren Chambliss, and Holly Menninger. Designed by DragonFishStudio.com

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CLIMATE CHANGE FACTS

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FARM ENERGY, CARBON, AND GREENHOUSE GASES

Farmers today face rising energy costs and uncertainty about future energy policies that affect agriculture. Many farmers are responding by improving the energy efficiency of their operations and exploring alternatives to traditional fossil fuels such as wind, solar, and biofuel crops. Improving nitrogen fertilizer use efficiency is another important strategy. Fertilizer cost is important because it is tightly linked to energy prices, and excessive applications increase the release of nitrous oxide (N_2O), a very potent greenhouse gas (GHG). More efficient fertilizer management is just one of many win-win strategies for farmers that make economic sense and also address concerns about GHG emissions and climate change.



ENERGY EFFICIENCY AND RENEWABLES

Farmers have always sought ways to improve energy efficiency and reduce input costs. For example, most farm vehicles run on diesel, which is a much more efficient fuel than gasoline. Perennial concerns about energy costs, combined with new concerns about GHGs, such as carbon dioxide (CO_2) emitted from the burning of fossil fuels, have created incentives to take more control of our energy future. Being "energy-smart" when it comes to farm design and management improves the bottom line, is good for crops and soils, and reduces emissions of GHGs to the atmosphere.

Energy Challenges:

- Fluctuating and rising energy costs reduce profits, making it hard to plan ahead.
- Dependence on foreign oil is a long-term risk.
- Nitrogen fertilizer input costs are linked to energy prices.
- Burning of fossil fuels contributes to climate change.



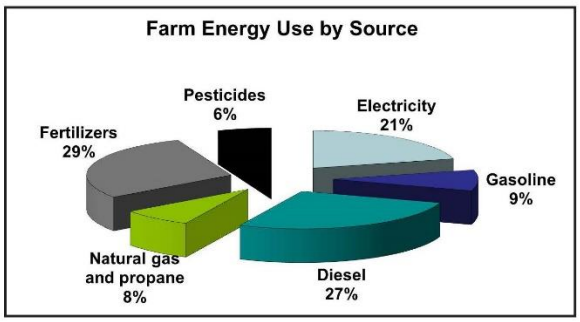
Energy Solutions:

- Optimize building insulation and ventilation; design landscapes for shade and evaporative cooling.
- Select site and building orientation to optimize summer cooling, winter warming, and natural lighting.
- Replace heating and cooling equipment to meet needs with maximum efficiency.
- Use energy-efficient appliances and keep them well-maintained.
- Periodically conduct a comprehensive whole-farm energy audit.

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Crop Production:

- Reduce fuel consumption, e.g., by reducing tillage frequency and intensity.
- Reduce transportation costs and fuel consumption by buying local inputs and exploring local market outlets.
- Purchase fuel-efficient vehicles and equipment and keep them well- maintained.
- Explore use of biodiesel and other renewable fuel alternatives for vehicles or greenhouse heating.
- Minimize use of energy-intensive products such as synthetic fertilizers, pesticides, and herbicides.



A large fraction of farm energy use is associated with the manufacture and transport of fertilizers and pesticides (USEPA 2008).

Renewable Energy

Traditional fossil fuels (e.g., oil, gas, and coal) bring up carbon-rich energy from deep in the earth and add new CO_2 to the atmosphere when burned. In contrast, renewables essentially recycle carbon and energy already at the surface, and so do not add to the CO_2 in the atmosphere. Many farmers are exploring renewable energy options such as "growing" their own fuel in the form of biofuel crops, using animal or other waste as an energy source, or investing in solar or wind energy systems.

- **Fuel crops** (e.g., corn, switchgrass, soybeans, and willow) produce abundant biomass, starch and sugars, or vegetable oils that can be used for energy, either directly or after various levels of processing.
- **Anaerobic digesters**, including covered lagoon systems, decompose manure or other farm waste to create "biogas" fuel. Currently economical for larger-scale operations (greater than 250 head), costs are expected to come down as demand increases and manufacturing becomes more efficient. In the meantime, farmers have found ways to defray some of the costs through grants, low-cost loans, or cost-sharing among several farms.



Anaerobic digesters turn animal wastes into valuable fuel.

- **Solar power systems** range from passive approaches that optimize the use of sunlight for heating or lighting, to the use of photovoltaic (PV) solar cells to generate electricity. Smaller PV systems (e.g., less than 1 kW) are economical for running electric fences, water pumps, and other farm equipment, especially in remote locations.
- **Small wind turbines** producing 75 kW or less are becoming increasingly popular to supplement electricity needs. Factors to consider before investment include adequate wind, local ordinances that restrict height of structures, and net metering/ billing laws that affect whether you can store or sell excess energy generated during peak periods.

Energy Conservation Financial Assistance and Incentive Programs

- The New York State Energy Research and Development Authority (NYSERDA) website describes programs that assist with farm energy audits, improve facility energy efficiency, and explore options with anaerobic digesters or solar and wind systems (www.nyserda.org/programs/agriculture).
- The USDA Natural Resources Conservation Service (NRCS) has an Environmental Quality Incentives Program that can be helpful in meeting energy-efficiency goals (www.nrcs.usda.gov).

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Carbon Sequestration: Capturing and Storing Carbon in Soils, Crops, and Trees

The energy solutions discussed above reduce CO_2 emissions on the farm, but farmers can do more than that. Trees, crops, and soils can capture atmospheric CO_2 and store (sequester) it in the form of carbon-rich living biomass and soil organic matter. Building up the organic carbon content in agricultural soils has the added benefit of helping crops thrive. Some best management practices are:

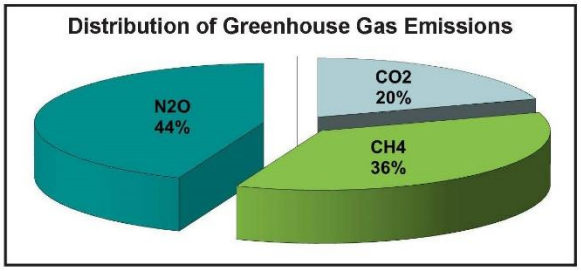


Soils store carbon in the upper organic layers.

- Reduce tillage to minimize soil aeration, which stimulates the breakdown of organic matter and releases CO_2.
- Use manure, composts, biochar, or other high-carbon soil amendments for improved crop productivity and carbon storage.
- Plant winter cover crops to increase annual carbon capture from the atmosphere.
- Manage woodlots to maximize long-term carbon uptake and storage in trees.

The Other GHGs: Nitrous Oxide (N_2O) and Methane (CH_4)

Nationally and globally, CO_2 is the biggest contributor to climate change, but for the agricultural sector, nitrous oxide (N_2O) and methane (CH_4) are of particular concern. They are such potent GHGs that on a CO_2 equivalent basis, their emissions from the agricultural sector contribute more to global warming potential than CO_2 emissions from the burning of fossil fuels.



GHG Emissions from U.S. Agriculture (CO_2 equivalent basis, 2007, USEPA).

Nitrous Oxide Challenges:

- The concentration of N_2O in the atmosphere has risen by about 20% since the pre-industrial era. It is a potent GHG with 310 times the global warming potential as CO_2. On a CO_2 equivalent basis, N_2O accounts for almost half of GHG emissions from U.S. agriculture.
- Over 70% of annual U.S. N_2O emissions can be attributed to agriculture cropping practices, in particular the use of nitrogen fertilizers.

Nitrous Oxide Solutions:



Legume Rotation Crop (Rye-Vetch Mix).

- Use green manure (legume) rotation crops that provide "free" nitrogen, reducing fertilizer requirements.
- Use manure and composts instead of synthetic nitrogen fertilizers.
- Split fertilizer applications, optimize timing and amount applied based on crop demand, soil tests, and new web tools such as Cornell's Adapt-N program (http://adapt-n.cals.cornell.edu/).
- Plant winter cover crops, such as winter rye, to help store soil nitrogen within the root zone, reducing nitrate leaching and leaving more nitrogen available for cash crops.

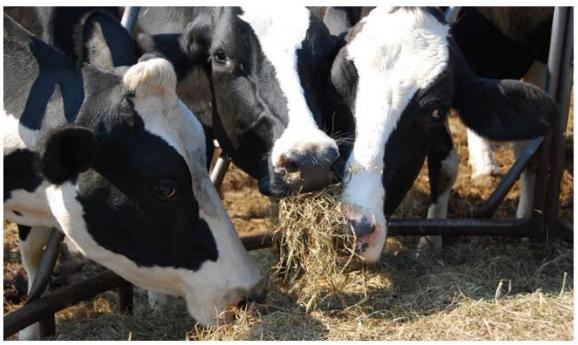
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Methane Challenges:

- The atmospheric concentration of CH_4 has more than doubled since the pre-industrial era. Methane has about 23 times the global warming potential as CO_2. On a CO_2 equivalent basis, CH_4 accounts for over a third of total GHG emissions from U.S. agriculture.
- On an annual basis, over 25% of U.S. CH_4 emissions can be attributed to agriculture.
- These emissions are largely linked to ruminant livestock (e.g., cattle, sheep) and the bacterial enteric fermentation process of their digestive system.
- To a lesser extent, methane emissions from decomposing manures on wet soils, uncovered lagoons, and from flooded rice fields play a role.

Methane Solutions:

- Utilize new feeding strategies and feed amendments to reduce dairy cow methane emissions and boost milk production efficiency.
- Use covered or tank storage of manure and store at low temperatures.
- Remove manure promptly from barn floors.
- Calibrate manure spreaders for crop fertilizer needs and incorporate manure into soils immediately.
- Create energy from manure waste with an anaerobic digester.



Summary of Best Management Practices

- Improve energy efficiency and minimize use of synthetic fertilizers and other energy-intensive inputs to lower costs and reduce carbon dioxide emissions.
- Explore renewable energy options, such as biofuel crops, biogas capture from manure waste, wind turbines, and solar systems.
- Enhance ruminant animal digestion efficiency to reduce methane emissions.
- Improve manure handling and storage to reduce methane and carbon dioxide emissions.
- Improve nitrogen fertilizer use efficiency to reduce nitrous oxide emissions, and use organic sources of nitrogen such as legume rotation crops and manure when possible.
- Build up soil organic matter to improve soil health, crop productivity and soil carbon sequestration by reducing tillage, planting winter cover crops, and applying organic matter amendments such as compost.

Prepared by: David Wolfe, Jeff Beem-Miller, Allison Chatrchyan, and Lauren Chambliss. Designed by DragonFishStudio.com

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APPENDIX C-

Funding Resources

Potential Alternate Funding Sources

Current and potential funding sources were discussed at the Mitigation Planning Meetings. All representatives were asked to develop a list of possible funding sources that could be accessed by Local governments as well as State Agencies. A summary of major programs is listed in **Table 5-1.**

Table 5-1
Funding Sources for Mitigation

Federal, State, and Other Funding Sources		
Program	**Description**	**Agency Contact**
Federal Funding Sources		
Hazard Reduction Program	Funding for research and related educational activities on hazards	National Science Foundation (NSF), Directorate for Engineering, Division of Civil and Mechanical Systems, Hazard Reduction Program: (703) 306-1360
Decision, Risk, and Management Science Program	Funding for research and related educational and activities on risk, perception, communication, and management (primarily, technological hazards)	NSF -Directorate for Social, Behavioral Economic Science, Division of Social Behavioral and Economic Research Decision, Risk, and Management Science Program (DRMS): (703) 306-1757 www.nsf.gov/sbe/drms/start.htm
Societal Dimensions of Engineering, Science, and Technology Program	Funding for research and related educational activities on topics such as ethics, values, and the assessment, communication, management and perception of risk	NSF -Directorate for Social, Behavioral and Economic Science, Division of Social, Behavioral and Economic Research, Societal Dimensions of Engineering, Science and Technology Program: (703) 306-1743
Disaster Mitigation Planning and Technical Assistance	Technical and planning assistance grants for capacity building and mitigation project activities focusing on creating disaster resistant jobs and workplaces.	Department of Commerce (DOC), Economic Development Administration (EDA): (800) 345-1222 EDA 's Disaster Recovery Coordinator: (202) 482-6225 -www.doc.gov/eda
Watershed Surveys and Planning	Surveys and Planning Studies for appraising water and related resources, and service formulating alternative plans for conservation use and development. Grants and advisory/counseling services to assist w/ planning and implementation improvement	US Department of Agriculture (USDA) - National Resources Conservation (NRCS) Watersheds and Wetlands Division: (202) 720-4527 Deputy Chief for Programs: (202) 690-0848 www.nrcs.usda.gov
National Flood Insurance Program	Formula grants to States to assist FEMA communities to comply with NFIP floodplain management requirements (Community Assistance Program).	FEMA
National Dam Safety Program	Technical assistance, training, and grants to help improve State dam safety programs.	FEMA
National Earthquake Hazards Reduction	Training, planning and technical Program assistance under grants to States or local jurisdictions	FEMA; DOI-USGS USGS Earthquake Program Coordinator: (703) 648-6785
Watershed Protection and Flood Prevention Program	Technical and financial assistance for installing works of improvement to protect, develop, and utilize land or water resources in small watersheds under 250,000 acres.	USDA-NRCS Director, Watersheds and Wetlands Division: I (202) 720-3042 (202) 690-4614 www.nrcs.usda.crov
Environmental Quality Incentives Program	Technical, educational, and limited financial	USDA-NRCS

Federal, State, and Other Funding Sources		
Program	**Description**	**Agency Contact**
(EQIP)	assistance to encourage environmental enhancement	NRCS County Offices Or .NRCS EQUIP Program Manager: (202) 720-1834 www .nrcs.usda.gov
Aquatic Ecosystem Restoration	Direct support for carrying out aquatic ecosystem restoration projects that will improve the quality of the environment.	DOD-USACE Chief of Planning @ appropriate USACE Regional Office North Atlantic: (212) 264-7111
Beneficial Uses of Dredged Materials	Direct assistance for projects that protect, restore, and create aquatic and ecologically-related habitats, including wetlands, in connection with dredging an authorized Federal navigation project	DOD-USACE Same as above
Wetlands Protection – Development Grants	Grants to support the development and enhancement of State and tribal wetlands protection programs	US Environmental Protection Agency (EPA) EPA Wetlands Hotline: (800) 832-7828 Or EPA Headquarters, Office of Water Chief, Wetlands Strategies and State Programs: (202) 260-6045
Clean Water Act Section 319 Grants	Grants to States to implement non-point source programs, including support for non- structural watershed resource restoration activities.	EPA Office of Water Chief, Non-Point Source Control Branch (202) 260-7088. 7100
Coastal Zone Management Program	Grants for planning and implementation of non-structural coastal flood and hurricane hazard mitigation projects and coastal wetlands restoration	Department of Commerce DOC National Oceanic and Atmospheric Administration (NOAA) National Ocean Service Office of Ocean and Coastal Resource Management , Chief, Coastal Programs Division: (301) 713-3102
Community Development Block Grant (CDBG) State Administered Program	Grants to States to develop viable Program communities (e.g., housing, a suitable living environment. expanded economic opportunities) in non-entitled areas, for low- and moderate-income persons.	US Department of Housing and Urban (CDBG) State Administered Development (HUD) State CDBG Program Manager Or State and Small Cities Division, Office of Block Grant Assistance, HUD , Headquarters: (202) 708-3587
Community Development Block Grant Entitlement Communities Program	Grants to entitled cities and urban counties to develop viable communities (e.g., decent housing, a suitable living environment, expanded economic opportunities), principally for low- and moderate-income persons	HUD Entitlement Communities Program City and county applicants should call the Community Planning and Development staff of their appropriate HUD field office. As an alternative, they may call the Entitlement, Communities Division, Office of Block Grant Assistance, HUD Headquarters: (202) 708-1577, 3587
Emergency Watershed Protection(EWP)	Provides technical and financial assistance Program for relief from imminent hazards in small watersheds, and to reduce vulnerability of life and property in small watershed areas damaged by severe natural hazard events.	USDA –NRCS National Office -(202) 690-0848 Watersheds and Wetlands Division: (202) 720-3042
Cooperative River Basin Program	Cooperative River Basin Studies are for appraising water and related land resources and formulating alternatives plans for conservation use and development	USDA – Natural Resources Conservation Service (NRCS) www.nrcs.usda.gov
Conservation Reserve Program	The program reduces soil erosion, improves water quality, and restores wildlife habitat as a result of idling cropland in exchange for compensation.	USDA – Natural Resources Conservation Service (NRCS) www.nrcs.usda.gov

Federal, State, and Other Funding Sources		
Program	**Description**	**Agency Contact**
Rural Development Assistance -Housing	Grants, loans, and technical assistance to address rehabilitation, health and safety needs in primarily low-income rural areas. Declaration of major disaster necessary.	USDA-Rural Housing Service (RHS) Community Programs: (202) 720-1502 Single Family Housing: (202) 720-3773. Multi-Family Housing: (202) 720-5177
Flood Mitigation Assistance(FMA)	Grants to States and communities for pre-disaster mitigation planning and projects to help reduce or eliminate the long-term risk of flood damage to structures insurable under the National Flood Insurance Program.	FEMA http://www.fema.gov/fima/mitgrant.shtm
Hazard Mitigation Grant Program (HMGP)	Grants to States and communities for planning and projects providing long-term hazard mitigation measures following a major disaster declaration.	FEMA http://www.fema.gov/fima/mitgrant.shtm
Pre-Disaster Mitigation Competitive (PDMC) Grant Program	Grants to States and communities for planning and projects that provide long-term hazard pre-disaster mitigation measures	FEMA http://www.fema.gov/fima/mitgrant.shtm
Pre-Disaster Mitigation Disaster Resistant University (PDM DRU) Grant Program	Planning and project Grants to Universities for implementing long-term pre-disaster hazard mitigation measures	FEMA http://www.fema.gov/fima/mitgrant.shtm
Disaster Housing Program	Emergency assistance for housing including; minor repair of home to establish livable conditions, mortgage and rental assistance. (MRA)	FEMA
Public Assistance Program (Infrastructure)	Grants to States and Communities to repair damaged infrastructure and public facilities and help restore government and government related services following disasters. Mitigation funding is available for work related to damaged components of the eligible building or structure.	FEMA via NY SEMO
HOME Investments Partnership Program	Grants to local and State government and consortia for permanent and transitional housing, (including financial support for property acquisition and rehabilitation for low income persons)	HUD Community Planning and Development Grant Programs, Office of Affordable Housing, HOME Investments Partnership Program 202-708-2685 202-708-0614 ext 4594 800-998-9999
Disaster Recovery Initiative	Grants to fund gaps in available recovery assistance after disasters (including mitigation)	HUD Community Planning and Development Grant Programs Divisions in their respective HUD field offices or HUD Community Planning and Development 202-708-2605
Non Structural Alternatives to Structural Rehabilitation of Damaged Flood Control Works	Direct Planning and construction grants for Non Structural Alternatives to the Structural Rehabilitation of Flood Control Works damaged in floods or coastal storms.	DOD-US Army Corps of Engineers (ACE) Emergency Management contact in respective USACE field office: North Atlantic: 718-491-8735
Section 108 Loan Guarantee	Enables states and local governments participating in the Community Development Block Grant (CDBG) Program to obtain federally guaranteed loans for disaster distressed areas.	HUD Community Planning and Development Grant Programs, Office of- 202-708-3587
Partners for Fish and Wildlife	Financial and technical assistance to private landowners interested in pursuing restoration projects affecting wetlands and riparian habitats	Department of Interior (DOI) Fish and Wildlife Service (FWS) National Coordinator, Ecological Services 703-358-2201 A list of state and regional contacts is available upon request.

Federal, State, and Other Funding Sources		
Program	**Description**	**Agency Contact**
Water Resources Development Act-1986, Section 1135, Project Modification for the Improvement of the Environment	Provides resources for ecosystem rehabilitation by modifying structures, operations, and waters resource projects constructed by USACE or restoring areas where a USACE project contributed to a degradation of an area	DOD-USACE Emergency Management contact in respective USACE field office: Chief of Planning, North Atlantic: 718-264-7411
Section 205 of the 1948 Flood Control Act	Resources for small flood damage reduction projects	DOD-USACE Emergency Management contact in respective USACE field office
Post Disaster Economic Recovery Grants and Assistance	Grant Funding to assist with the long-term economic recovery of communities, industries and firms adversely affected by disasters.	Department of Commerce (DOC) - Economic Development Administration (EDA), EDA Headquarters, Disaster Recovery Coordinator 202-482-6225
School Renovation, Idea and Technology Grant, and Emergency Response and Crisis Discretionary Grant	Grant funding for eligible school renovation and emergency response measures.	US Department of Education
Public Housing Modernization Reserve for Disasters and Emergencies	Funding to Public housing agencies for modernization needs resulting from natural disasters (including elevation, flood proofing and retrofits)	HUD Director, Office of Capital Improvements 202-708-1640
Indian Housing Assistance (Housing Improvements Program)	Project Grants and technical Assistance to substantially eliminate substandard Indian housing	Department of Interior (DIO) - Bureau of Indian Affairs (BIA) Division of Housing Assistance Office of Tribal Services 202-208-5427
North America Wetland Conservation Fund	Cost share grants to stimulate public/private partnerships for the protection, restoration and management of wetland habitats	Department of Interior (DOI) - USDA – Fish & Wildlife (FWS) North American Waterfowl and Wetlands Office 703-358-1784
Land Acquisition	Acquires or purchases easements on high quality land and waters for inclusion into the National Wildlife Refuge System	USDA – FWS Division of Realty National Coordinator 703-358-1713
Federal Land Transfer / Federal Land to Parks Program	Identifies federal real property available for open space transfer to states and local governments for development of parks and recreation.	DOI-NPS General Services Administration Offices Texas 817-334-2331 Boston 617-838-5700 Or Federal Lands to Park Leader NPS National Office 202-565-1184
Land and Water Conservation Fund (LWCF)	Funding to States for outdoor recreational development, renovation, land acquisition and planning.	Department of Interior (DOI) National Parks Service (NPS)
Urban Park and Recreation Recovery	Grants to economically distressed urban communities primarily for rehabilitation of critically needed recreation facilities. The program encourages systematic local planning and commitment to continuing operation and maintenance of recreation programs, sites, and facilities.	Federal program via NYS OPRHP
Transportation Equity Act	Funding from the Highway Trust Fund for enhancements such as acquisition, scenic easements, and conversion of abandoned railways to trails.	US DOT Federal Highway Administration Highway Trust Fund
Boating Infrastructure Grant (BIG) program	Funding to construct, renovate, or maintain transient tie-up facilities, activity includes replacement of bulkheads, one time dredging to maintain channels or open water for vessels.	US DOT Federal Highway Administration (FHWA) Transportation Equity Act-21
Recreational Trails Program (RTP)	Provides and maintains recreational trails for both motorized and non-motorized trail use. (NY Office of Parks, Recreation, and Historic Preservation (OPRHP) administers the program	US DOT FHWA in consult with Department of Interior (DOI)-National Parks Service (NPS) Bureau of Land Management and USDA – US Forest Service

Federal, State, and Other Funding Sources		
Program	**Description**	**Agency Contact**
	for NY state)	
National Highway System (NHS) and Interstate System/Interstate Maintenance (IM) programs	Funds provided to maintain/reconstruct existing portions of system.	US DOT Federal Highway Administration FHWA
Surface Transportation Program	Funding for activity including safety construction and transportation enhancements. Transportation enhancements encompass a broad range of safety education, environmental and historically related activities.	US DOT Federal Highway Administration FHWA
Bridge Replacement and Rehabilitation	Funding for eligible bridges on any public road.	US DOT Federal Highway Administration FHWA
Federal Lands Highways	Funding for Indian reservation roads, park roads and parkways and forest land highways.	US DOT Federal Highway Administration FHWA
Recreational Trails	Funding for trails used by motorized and non-motorized recreational vehicles.	US DOT Federal Highway Administration FHWA
Wetlands Reserve Program	Financial and technical assistance to protect and restore wetlands through easements and restoration agreement	USDA – NRCS National Policy Coordinator NCRS Watersheds and Wetlands Division 202-720-3042
Physical Disaster Loans and Economic Injury Disaster Loans	Disaster loans to non-farm, private sector owners of disaster damaged property for uninsured losses.	Small Business Administration (SBA) National Headquarters Associate Administrator for Disaster Assistance: (202 205-6734
Conservation Contracts	Debt reduction /cancellation for delinquent and non-delinquent borrowers in exchange for conservation contracts placed on environmentally sensitive real property that secures FSA loans.	USDA-FSA Farm Loan Programs FSA National Office (202) 720-3457, 1632 or local FSA office
Emergency Conservation Fund	Emergency funds for rehabilitating farmland damaged by natural hazards, such as erosion, wind and flood	USDA – Farm Service Agency (FSA)
Clean Water State Revolving Funds	Loans at actual or below market interest rates to help build, repair, relocate or replace waste water treatment plants.	NYS Environmental Facilities Corporation (518) 402-6924 www.nysefc.org
National Estuary Program Long Island Sound Preservation (LIS Stewardship Comm)	Established by Congress in 1987 to improve the quality of estuaries of national importance. The Clean Water Act Section 320 as associated with NEP directs EPA to develop plans for attaining or maintaining water quality in an estuary. For LIS, implementation priorities are habitat restoration, watershed management, disposal of dredged materials, and public education and involvement on Long Island Sound issues	Environmental Protection Agency (EPA) National Estuary Program
Section 504 Loans for Housing	Repair loans, grants and technical assistance to very low-income senior homeowners living in rural areas to repair their homes and remove health and safety hazards.	USDA US Department of Agriculture Rural Housing Service (RHS) Contact local RHS Field Office, or RHS Headquarters, Director, Single Family Housing Direct Loan Division (202 720-1474
Section 502 Loan and Guaranteed Loan Program	Provides loans, loan guarantees and technical assistance to very low and low-income applicants to purchase, build or rehabilitate a home in a rural area	USDA-RHS Contact the Local RHS Field Office, or the Director, Single Family Housing Guaranteed Loan Division, RHS: (202) 720-1452
Rural Development Assistance – Utilities	Direct and guaranteed rural economic loans and business enterprise grants to address utility issues and development needs.	USDA-Rural Utility Service (RUS) Contact Rural Development Field Offices or RHS, Deputy Administrator, Community Programs Division: (202) 720-1490
Farm Ownership Loans	Direct loans, guaranteed / insured loans, technical assistance to farmers so that they may develop, construct, improve, or repair farm homes, farms, and service buildings, and to make other necessary improvements.	USDA-FSA Director, Farm Programs Loan Making Division, FSA: (202) 720-1632

Federal, State, and Other Funding Sources		
Program	**Description**	**Agency Contact**
Forest Legacy Program	Funding to acquire land and conservation easements from willing sellers in cooperation with participating states to protect environmentally sensitive forests threatened with conversion to non-forest use.	USDA – US Forest Service
Farmland Protection Program, Section 388 Federal Agriculture Improvement and Reform Act of 1996	Cost share assistance for the acquisition of conservation easements or other interests in prime, unique, or other productive soil for the purpose of limiting non-agricultural use of that land.	Natural Resources Conservation Service NRCS – Commodity Credit Corporation CCC
Watershed Environmental Assistance Program	Funding for water quality improvement projects within the "NYC Watershed" that include water supply, storage, treatment, and distribution facilities and surface water resource protection and development	USACE
Severe Repetitive Loss Program (SRL)	The Severe Repetitive Loss (SRL) grant program was authorized by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, which amended the National Flood Insurance Act of 1968 to provide funding to reduce or eliminate the long-term risk of flood damage to severe repetitive loss (SRL) structures insured under the National Flood Insurance Program (NFIP).	FEMA www.fema.gov NYSEMO www.semo.state.ny.us
Repetitive Flood Claims Program (RFC)	The Repetitive Flood Claims (RFC) grant program was authorized by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 (P.L. 108–264), which amended the National Flood Insurance Act (NFIA) of 1968 (42 U.S.C. 4001, et al). Up to $10 million is available annually for FEMA to provide RFC funds to assist States and communities reduce flood damages to insured properties that have had one or more claims to the National Flood Insurance Program (NFIP).	FEMA www.fema.gov NYSEMO www.semo.state.ny.us
State Funding Sources		
Program	**Description**	**Agency Contact**
Appropriations through the Governor's Office	Funding for mitigation planning and project activity through special appropriations through the Governor's Office	New York State
NYS Building Aid, State Education Fund	Funding for eligible school facility construction via State Education Funds, NYS Building Aid	NY State Education SED
Environmental Protection Fund	Funding administered by NYS Department of State DOS, Department of Environmental Conservation DEC, and Office of Parks Recreation and Historic preservation OPRHP to support many of the State's environmental needs. Results include development and mitigation related planning initiatives and projects such as acquisition projects as identified in Conserving Open Space and other Plans.	New York State DOS, DEC, OPRHP
The Clean Water/Clean Air Bond Act	Provides significant resources for several open space and recreation programs including, open space conservation projects administered by DEC and OPRHP, farm land protection administered by NYS Dept. of Agriculture and Markets.	New York State DOS, DEC, OPRHP

APPENDIX D-

Shelters

Shelter Name	Address	City	State	County	Zip
Saranac Lake CSD - Petrova Ele/Middle School	141 Petrova Avenue	SARANAC LAKE	NY	FRANKLIN	12983
Saranac Lake Senior High School	79 Canaras Avenue	SARANAC	NY	FRANKLIN	12983
Saranac Lake CSD - High School	79 Canaras Avenue	SARANAC LAKE	NY	FRANKLIN	12983
Holy Ghost Parish Center	40 Marion Street	TUPPER LAKE	NY	FRANKLIN	12986
ADIRONDACK ADULT CENTER	179 Demars Boulevard	TUPPER LAKE	NY	FRANKLIN	12986
Saranac Lake Adult Center	136 BROADWAY	SARANAC LAKE	NY	FRANKLIN	12983
First United Methodist Church	19 Church Street	SARANAC LAKE	NY	FRANKLIN	12983
Fort Covington Adult Center	2526 Chateaugay Street	FORT COVINGTON	NY	FRANKLIN	12937
Bangor Community Center	2438 State Route 11	NORTH BANGOR	NY	FRANKLIN	12966
Chateaugay Central School	42 River Street	CHATEAUGAY	NY	FRANKLIN	12920
Franklin Academy High School	42 Huskie Lane	MALONE	NY	FRANKLIN	12953
Holy Family School	12 Homestead Park	MALONE	NY	FRANKLIN	12953
Hope Community Center	1277 Washington Street	BRUSHTON	NY	FRANKLIN	12916
Knights of Columbus #2177	36 High Street	TUPPER LAKE	NY	FRANKLIN	12986
Malone Middle School	15 Francis Street	MALONE	NY	FRANKLIN	12953
Saint Joseph's Parish Center	20 County Route 4	BOMBAY	NY	FRANKLIN	12914
Saint Mary's Parish Center	3 Burns - Holden Road	FORT COVINGTON	NY	FRANKLIN	12937
Brushton-Moira Central School	758 County Route 7	BRUSHTON	NY	FRANKLIN	12916
Saint Patrick's Church	132 W. Main St.	CHATEAUGAY	NY	FRANKLIN	12920
Salmon River CSD - Main Campus	637 County Route 1	FT COVINGTON	NY	FRANKLIN	12937
Tupper Lake Central School	25 Chaney Avenue	TUPPER LAKE	NY	FRANKLIN	12986
Brandon Town House	564 County Rte 12	NORTH BANGOR	NY	FRANKLIN	12920
American Legion Post #875	80 West Main St.	CHATEAUGAY		FRANKLIN	
Malone Adult Center	14906 State Rt. 30	MALONE	NY	FRANKLIN	12953
St. Regis Falls Adult Center	26 North River Rd	ST REGIS FALLS	NY	FRANKLIN	12980

APPENDIX E-

Climate Change Adaptation Plan for Akwesasne

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Key Terms

Adaptation (climate change): actions in response to actual or expected climate change and its effects, that lessen harm or exploit beneficial opportunities. It includes reducing the vulnerability of people, places, and ecosystems to the impacts of climate change.

Adaptive Capacity: the ability of a system to accommodate or respond to the changes in climate with minimum disruption or cost. Generally, systems that have high adaptive capacities are better able to deal with climate change.

Climate: the "average weather" generally over a period of three decades. Measures of climate include temperature, precipitation, and wind.

Climate Change: any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period of time (decades or longer). Climate change may result from natural factors and processes and from human activities that change the atmosphere's composition and land surface.

Global Warming: average increase in the temperature of the atmosphere, which can contribute to changes in global climate patterns. Global warming can occur from a variety of causes, both natural and human induced.

Greenhouse Gas (GHG): any gas that absorbs infrared radiation in the atmosphere; examples include carbon dioxide, methane, nitrous oxide, ozone, and water vapor.

Hazards are the direct effects of climate change, including changes in temperature, precipitation, extreme events, and water resource quality and availability.

Impacts are the effects on human and natural systems of these climate change hazards; more vulnerable communities will experience more pronounced impacts of climate change.

Mitigation (climate change): actions that reduce the levels of greenhouse gases in the atmosphere; includes reducing emissions of greenhouse gases and enhancing sinks (things that absorb more greenhouse gases than they emit). Examples include switching to renewable energy sources and implementing energy efficiency measures.

Planning Area: this is an area in which the tribal government manages, plans, or makes policy affecting the services and activities associated with built, human, and natural systems. For example, within the sector Utilities, you might have planning areas of Water and Electricity.

Preparedness Actions: actions or activities that the tribe could take to achieve its climate change preparedness goals.

Preparedness Goals: what the tribe wants to accomplish in the priority planning areas through preparedness actions.

Priority planning areas: planning areas of particular importance to the tribal government or communitywhich are vulnerable to climate change impacts.

Resilience: ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organization, and the capacity to absorb stress and change.

Risk: Risk= Consequence of an impact X Probability or likelihood that the impact will happen.

Sector: general grouping used to describe any resource, ecological system, species, management area, etc. that may be affected by climate change. For example, Transportation, Utilities, Water Resources, Forest Resources, Human Health, or Cultural Resources and Traditions.

Sensitivity: how much a system is directly or indirectly affected by changes in climate conditions (e.g., temperature and precipitation) or specific climate change impacts (e.g., sea level rise, increased water temperature). If a system is likely to be affected as a result of projected climate change, it should be considered sensitive to climate change.

Vulnerability: the susceptibility of a system to harm from climate change impacts. It's a function of how sensitive the system is to climate and the adaptive capacity of the system to respond to such changes. Generally, systems that are sensitive to climate and less able to adapt to changes are considered to be vulnerable to climate change impacts.

INTRODUCTION TO THE PLAN

The Saint Regis Mohawk Reservation is located in the St. Lawrence River Valley in upstate New York along the U.S. Canada border. The Mohawk Nation Territory (Akwesasne) straddles three borders – NewYork State; Ontario, Canada; and Quebec, Canada (see Exhibit 1). Most tribal members fish in the St. Lawrence River, and several other tributary rivers run through the community (including the St. Regis and Raquette Rivers). The St. Lawrence River has a strong current at Akwesasne, and two dams upstream from the reservation produce a significant amount of power. The territory has 3,000 acres of wetlands.

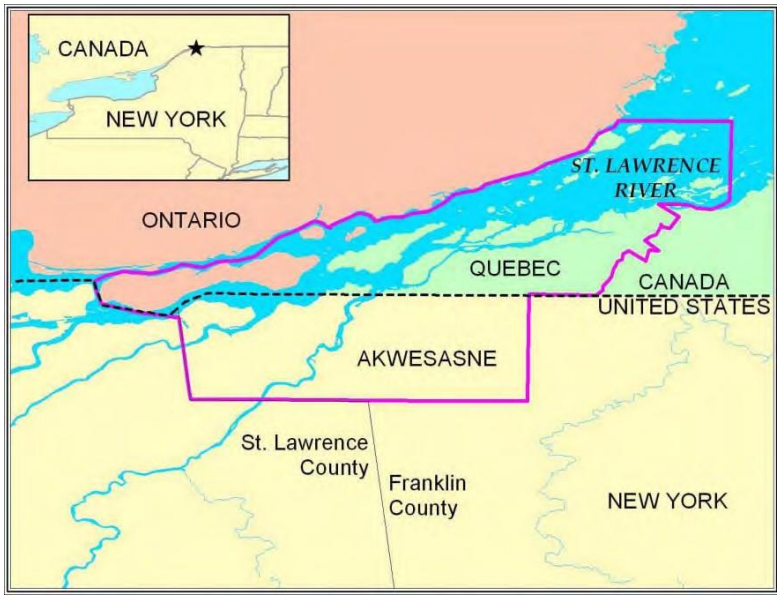
Before technology, families at Akwesasne used to fish, hunt, farm, harvest hay, plant large gardens, harvest food, and can food, among other activities, which meant that there was more physical activity indoing these seasonal activities and better overall public health. Every home had a wood stove for heat and cooking, and everyone had kerosene lamps. Doors were never locked because no one broke into homes. People were always welcome to rest and have a meal with the family anytime.

The people of Akwesasne in past decades have been influenced by non-traditional ways of life, resulting in traditional practices being lost. Our territory has contaminated rivers, fish and wildlife caused from industrial plants which have been located upstream from Akwesasne for many decades. Today, we buy food from the grocery stores and it is not organic. Many fruits and vegetables have been grown using pesticides. Animals are raised for income and are therefore confined in small spaces with limited movement, injected with growth hormones, and injected with antibiotics. Consuming these chemicals has altered our overall health. Akwesasne Mohawk youth have been shown to contain higher-than-normal levels of toxic PCBs (Schell et al. 2003), and many young pre-teen girls' bodies are developing early, some of them starting their cycles as early as 10 years old (Schell and Gallo 2010).

Climate change, long-term changes in weather patterns caused by anthropogenic emissions, poses an additional threat to the Saint Regis Mohawk Tribe. The phenomenon is projected to bring a number of changes to Akwesasne, including an increase in the frequency of extreme weather events such as the Ice Storm of 1998, a severe storm that caused many trees and utility poles to fall and produced widespread blackouts. Akwesasne is planning for climate change not because the climate is changing but becausethe climate is changing at a faster rate than ever before. Climate change has begun, and adaptation needs to be vigorous. It is no longer possible to not do something about climate change.

The Saint Regis Mohawk Tribe's (SRMT) Environment Division is investigating the impacts of climate change on the resources, assets, and community of Akwesasne and is developing recommendations for actions to adapt to projected climate change impacts. This plan is a first step in an effort to develop practical actions that the Tribe can take in order to adapt to ongoing and expected climate changes.

Exhibit 1: Map of Current Akwesasne Boundary



INTRODUCTION TO CLIMATE CHANGE

Climate change is leading to global temperature increases, changes in precipitation, and an increased frequency and severity of extreme weather events. These changes are already being observed in northern and western New York, as temperatures have increased and snowfall has declined. Many activities that are traditionally practiced by Tribal communities and which continue to be important culturally and economically to these communities, such as fishing, medicinal plant harvest, and care of natural ecosystem health, are tied directly to climate. Because of their close ties to the land, these communities are more sensitive to shifts in climate than other non-Tribal communities in the same general geographic area. As a result, in the Tribal lands of Northern and Western New York, climate change is a particularly important problem, one that threatens not only local plant and animal species but also tribal sovereignty, economy, and culture. For this reason, we have chosen to use the Mohawk

Thanksgiving Address as the structure for this plan.

Planned and ongoing U.S. and international efforts to limit greenhouse gases and to mitigate climate change now and in the future are unlikely to be sufficient to prevent the harmful effects of climate change. Harmful effects that are relevant to Tribal communities may include decreased fish populations associated with higher air and water temperatures, reduced abundance of certain medicinal plant species, shifts in tree species to higher elevations and more northern latitudes, and shifts in the ranges of other plant and animal species. At the same time, climate change does have the potential to create beneficial opportunities. For example, increased air temperatures have the potential to lengthen the growing seasons of medicinal plants, higher carbon dioxide concentrations in the air can enhance plant growth, and in some areas, the availability of water resources may increase as rainfall patterns shift as a result of climate change. Taking advantage of these opportunities, however, will require advance planning.

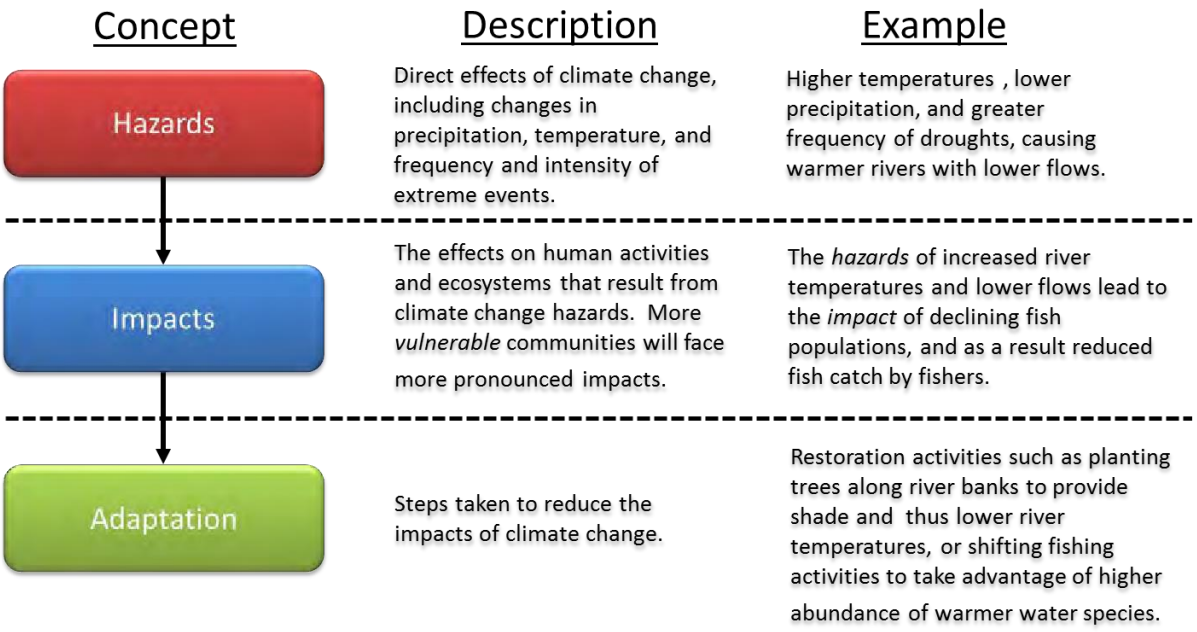
The risks of climate change to the SRMT cannot be effectively dealt with and the opportunities cannot be effectively exploited without a clear plan for adaptation. This includes steps for aligning Tribal government policies with climate change, for developing key institutional capabilities, and for making needed infrastructure investments. Developing such a plan should involve a combination of high-quality quantitative analysis and consultation of Tribal experts and community members.

BACKGROUND ON CLIMATE CHANGE TERMINOLOGY

The *climate* of a region refers to the long term average weather conditions in that area. *Climate change* is thus any significant change in climate conditions—such as temperature, precipitation, wind speed, or drought frequency—that occurs over an extended period of decades or longer (USEPA 2012). In this report, we focus on three broad topics related to climate change on Tribal community lands: the hazards posed by climate change, the impacts to human activities and ecosystems that could result, and the adaptation options that may be available to reduce those impacts on tribal communities, or to take advantage of opportunities provided by climate change. Exhibit 2 describes each of these concepts. **Hazards** are the direct effects of climate change, including changes in temperature, precipitation, extreme events, and water resource quality and availability. **Impacts** are the effects on human and natural systems of these climate change hazards; more vulnerable communities will experience more pronounced impacts of climate change. **Adaptation** refers to actions in response to actual or expected climate change and its effects that lessen harm or exploit beneficial opportunities. It includes reducing the vulnerability of people, places, and ecosystems to the impacts of climate change. Using fishing as an example, increasing drought frequency and temperatures coupled with decreasing precipitation (the *hazards*), may cause fish populations to decline (*impacts to ecosystems*). This would in turn affect the number of fish caught by tribal members (*impacts to Tribal activities*). Possible *adaptation* options to reduce these impacts may include restoration of the natural ecosystem, such as tree planting along river banks to increase shading and reduce river temperatures, or adjustments in human behavior, such as shifting fishing to warmer water fish species that may be more abundant due to changes in climate. This

latter example represents one of the *opportunities* that may be provided by climate change.





THE PEOPLE

"Today we have gathered and we see that the cycles of life continue. We have been given theduty to live in balance and harmony with each other and all living things. So now, we bring our minds together as one as we give greetings and thanks to each other as People.
Now our minds are one."



Our original instructions from the Creator are that it is our duty on Mother Earth to give thanks to all creation and to never take it for granted. We are to give thanks by offering sacred tobacco to all of creation and give thanks to the Creator. We are responsible to the Creator for maintaining balance with all of creation.

HISTORY

CULTURAL PRESERVATION

The Kanienkehaka, or Mohawks as they are known in English, have managed to preserve, maintain and foster a unique culture for thousands of years. This dynamic culture has survived, despite the oppressive odds brought about with the arrival of Europeans in what is now known as North America. In America, noted author John Steinbeck wrote, "The Indians survived our open intention of wiping them out, and since the tide turned they have even weathered our good intentions toward them, which can be much more deadly."

Generic terms like Indian, American Indian, Native American or Aboriginal people are used today. The Iroquois people prefer to be known by their specific nation names, thus Mohawks should be referred to as Mohawks or Kanienkehake People of the Flint.

The Kanienkehaka/Mohawks constitute one of six nations within the Iroquois Confederacy. The others are the Oneidas, Senecas, Cayugas, Onondagas and the Tuscaroras. Scholars and historians credit the Iroquois Confederacy as being the model upon which of the Constitution of the United States is based.

Archaeological findings at Garoga in Fulton County have confirmed that Mohawks have occupied lands, now known as New York State, since at least 1600 A.D.

The contributions of these Iroquoian people to European survival on this continent is significant. Research shows the Mohawks were experts in the fields of hunting, trapping, fishing and agriculture, contributing many, many different species of fruits, vegetables, spices and herbs to today's menu. Without these contributions, it is safe to say the lifestyle of the Europeans in North America would not have developed as rapidly as it did.

Mohawk people of today have combined centuries-old ways of living into 20th century everyday life.

The values of their historical culture still remain present in their daily life. Their distinctive heritage, language, ceremonies and traditional beliefs are still revered and maintained. The code of everyday living, "The Great Law," has been kept alive by verbal teachings and continued practices for hundreds of years. People still honor the traditional system of Chieftainship, Clan Mothers and Faith keepers.

The system of clans, or family lineage, is still kept intact. Among the Iroquois, descent and consequently clan membership are traced through the mother's family line only.

The Mohawk people strongly believe in perpetuating their language, songs, dances and special ceremonies in the old way within traditional Longhouses. Failure to keep sacred this tradition would be in violation of the teachings passed on to them by the Creator.

Mohawk people recognize that they belong to a very distinct society, and as unconquered people living in a nation within a nation will continue to exist and hold steadfast to their culture and traditions within today's modern society.

CULTURE AND HISTORY

The Mohawk are traditionally the keepers of the Eastern Door of the Iroquois Confederacy, also known as the Six Nations Confederacy or the *Haudenosaunee* Confederacy. Our original homeland is the north eastern region of New York State extending into southern Canada and Vermont. Prior to contact with Europeans, the Mohawk settlements populated the Mohawk Valley of New York State. Through the centuries Mohawk influence extended far beyond their territory and was felt by the Dutch who settled on the Hudson River and in Manhattan. The Mohawks' location as the Iroquois nation closest to Albany and Montreal, and the fur traders there, gave them considerable influence among the other Tribes. This location has also contributed directly to a long and beautifully complicated history.

In the 1750s, to relieve crowding at *Kahnawake* and to move closer to the Iroquois homeland, the French Jesuits established a mission at the present site on the St. Regis River. The Mohawk people had continually used this site at the confluence of the St. Lawrence River Valley as part of our fishing and hunting grounds prior to the building of the first church. "Akwesasne" as it is known today, translating roughly to "Land where the partridge drums," has always been a prime location due to the confluence ofseveral small rivers and the St. Lawrence River. The Catholic Church records date back to the late 1600's.Oral history states the church was built on traditional ceremonial grounds.

The community became more populated as Mohawks left the Mohawk Valley under distressed conditions in the mid 1700's. In 1759 a band of Abenakis sought refuge with the Mohawk people during the French and Indian War, with some remaining behind after their party returned to their own village. In addition, also as a result of the dislocation caused by the war, a number of refugees from the Oswegatchie Mission (near present day Ogdensburg, NY) settled at Saint Regis. After this immigration, the culture at Saint Regis stayed predominately Mohawk. In 1796 the Seven Nations of Canada, which included Christian Mohawks living in St. Regis, asserted rights to their lands and were eventually confined to a small parcel of land through a treaty signed by representatives of the Seven Nations of Canada and the State of New York. Today the Mohawk people of Akwesasne still rightfully claim

territory outside the confines of the current boundaries of the reservation and exercise guardianship over these lands through Section 106 of the National Historic Preservation Act and Environmental Protection Act processes. In 1888, at a Grand Council of the Six Nations Iroquois Confederacy (*Haudenosaunee* Confederacy), the Mohawk Nation formally rekindled their fire and responsibilities to the Confederacy as the successor of the descendants of Mohawks who had left the Mohawk Valley a hundred years earlier. The Mohawk people who had maintained their traditional customs and ceremonies restored their place as an "Elder Brother" of the *Haudenosaunee*. The Confederacy felt it was beneficial to all to remain united, therefore strengthening its position when fighting for Indian rights under treaties previously negotiated with the United States.

After the American War of Independence, the Mohawk people found it necessary to deal with the government of the State of New York. In order to protect themselves and their best interests, the Mohawks decided to select representatives to interact with New York. In the 1930s, the Federal Government proposed the Indian Reorganization Act (IRA). Each Tribe was given the opportunity to reject the IRA and the Saint Regis Mohawks did reject the Act of 1935. In 1953, a Federal task force arrived at Saint Regis to prepare termination legislation, but the chiefs and Saint Regis people rejected the termination. Despite this, the Bureau of Indian Affairs' proposed bill was presented to Congress where it died in committee without serious consideration.

Administrative termination of Tribes continued throughout the 1950s. In the mid-1960s, however, the Federal Government was reminded that there had been no official termination of the Federal relationship with the New York State Iroquois. The acknowledgment of the Federal relationship was slow to manifest itself. Following preliminary findings, the leaders of the Iroquois Tribes, including those of the Saint Regis, were invited to Washington to explore the establishment of a viable relationship.

THE HISTORY OF TRIBAL GOVERNMENT

In 1802, the Saint Regis Mohawk selected trustees and a clerk at a community meeting held on the reservation. The New York State legislature passed a law recognizing three trustees and a clerk as the Mohawk people's chosen representatives. The trustees' primary purpose was to give a voice to the Saint Regis Mohawks who lived on the American side of the Mohawk territory in New York and to oversee certain aspects of the relationship with non-Native governments. It is not believed the trustees initially usurped the role of life chiefs (who were chosen in a more traditional manner and held their positions for life) who continued to control the internal affairs of the Tribe. However, two of the original trustees were also life chiefs.

By 1818, two of the original trustees had passed away and two new trustees were chosen, both of whom were also life chiefs. This unique mixture of tradition and adaptability coupled with strong non-Native influences, brought about a new form of government. The present Saint Regis Mohawk Tribal Council has emerged from those changes.

Throughout the 19th century, the Saint Regis Mohawk Tribal Council Government evolved to a point

where the trustees were called Tribal Chiefs, formalized elections are now scheduled each year and definite terms of office were established. The Tribal Council is comprised of three Chiefs, three Sub-Chiefs and a Tribal Clerk. The Saint Regis Mohawk Tribal Council Chiefs are responsible for setting policy and making major decisions on behalf of the tribe. They oversee the operation of the Saint Regis Mohawk Tribal government and assure that quality programs and services are made available to the Mohawk people. The Tribal Clerk maintains the official records of Council. New York State and the United States Federal Government deal with the Saint Regis Mohawk Tribal Council on a government-to-government level.The Tribal Council has received Federal and State funds for a variety of tribally administered programs since 1973, all of which primarily employ Mohawk people.

Today, the Saint Regis Mohawk Tribe administers its own environmental, social, policing, economic, health and educational programs, policies, laws and regulations. The Tribal Council consists of three Chiefs and three Sub-Chiefs who are elected officials. They each serve three-year staggered terms.

CURRENT PUBLIC HEALTH CONDITIONS

Prior to the 1950's, we had rare occurrences of diabetes in our community. Today in Akwesasne, there isa high level of cancer, diabetes, thyroid disease, obesity, and other health related diseases. There is a high rate of respiratory and coronary problems. There is easy access to fast foods throughout the reservation. Our youth are less active. Changes in our diet and lifestyles are also a source of our health problems.

FUTURE WITH CLIMATE CHANGE

Climate change has the potential to have adverse effects on human health. Rising temperatures will increase occurrences of heat-related illness and death. Intense precipitation and flooding may result in stress and mental health impacts, reduced ability to provide public health and medical services, increased respiratory disease such as asthma, and more gastrointestinal diseases. Worsening air quality will lead to cardiovascular and respiratory-related issues, and the range of vector-borne diseases will expand or change. Water supply, recreational water quality, and food production may be impacted due to changes in temperature and precipitation patterns, which will have direct effects on human health. Water- and food-borne diseases are expected to increase if adaptation does not occur (Rosenzweig 2010).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

The Seniors Center provides congregate lunches Monday to Friday which is portion controlled and healthy. They provide this service to *Akwesashró:non* for an affordable fee. They provide seniors with accessible transportation to and from their facility. They provide many services as in physical activities, grief counseling, legal aid, weekly shopping, transportation to medical appointments, and assist in many other capacities. They also use the center as a heating/cooling center in times of extreme cold and heat. The center can be run by generator in time of power outages.

Strong rains for example, birth numerous stagnant pools, which are prime breeding spots for

mosquitoes. Identifying practical solutions to these problems – like ridding homes of anything which can gather standing water and keeping our surroundings clean – is a high priority.

MOTHER EARTH

"We are all thankful to our Mother, the Earth, for she gives us all that we need for life. She supports our feet as we walk about upon her. It gives us joy that she continues to care for usas we walk about upon her. It gives us joy that she continues to care for us as she has from the beginning of time. To our Mother, we send greetings and thanks.
Now our minds are one."



Mother Earth continues to provide us with sustenance as she has always done since the beginning of time as she was originally instructed by the Creator.

The Land, and a defined land base are essential for the survival of our culture, our life-ways and our People. We are not the owners of the soil or the Earth, but we are dependent upon the Earth for our survival. It is our responsibility for its protection so that successive generations of our people and the other Nations of Creation will continue to receive sustenance from the Earth in the same way that we have.

CURRENT CONDITIONS

Akwesasne is part of the St. Lawrence-Champlain Lowlands Physiographic Province. The underlying bedrock is Ogdensburg dolostone, which is for the most part deeply buried under glacial drift, though itis exposed in a few places, such as in the channels of large streams. The area was completely covered by ice during the Pleistocene Epoch, and its topography demonstrates this glacial past. When the glaciers melted, ocean water created the ancient Champlain Sea, and the soils of Akwesasne reflect this saltwater intrusion. Most soils are laminated to massive marine and lacustrine silts and clays, and were deposited in a brackish to salt water environment. The other major deposit in addition to the marine soils is glacial till deposited beneath glacial ice. Ridges of this till material can be found running east to west across Akwesasne. The remaining soils are made up of recent deposits of fine sand and gravel (alluvium and outwash) associated with the St. Regis and Raquette Rivers (USDA 2005). Exhibit 3 provides an illustration of some of the typical soil formations found in Akwesasne, including glacial till knolls and ridges of Hogansburg and Malone soils as well as more clay-like and nearly level Adjidaumo and Muskellunge soils. The latter are fairly fertile and more beneficial for agricultural use, while the till soils tend to be stonier and more desirable for use as building sites.

Some of Akwesasne's soils have been affected by industrial contamination. The natural resource damage assessment associated with the General Motors and Alcoa Inc. case found that average PCB concentrations in soil adjacent to General Motors property exceeded the Soil Quality Guideline for agricultural soil in 1985 and 2001, though concentrations did not exceed the lowest ecological threshold for effects on terrestrial plants or oldfield mice (RDCP 2013). An analysis of soil samples collected from the private gardens of members of the Saint Regis Mohawk tribe determined that PCB levels were belowthe Tribe's action level of one part per million (Lewis and DelVecchio 2007).

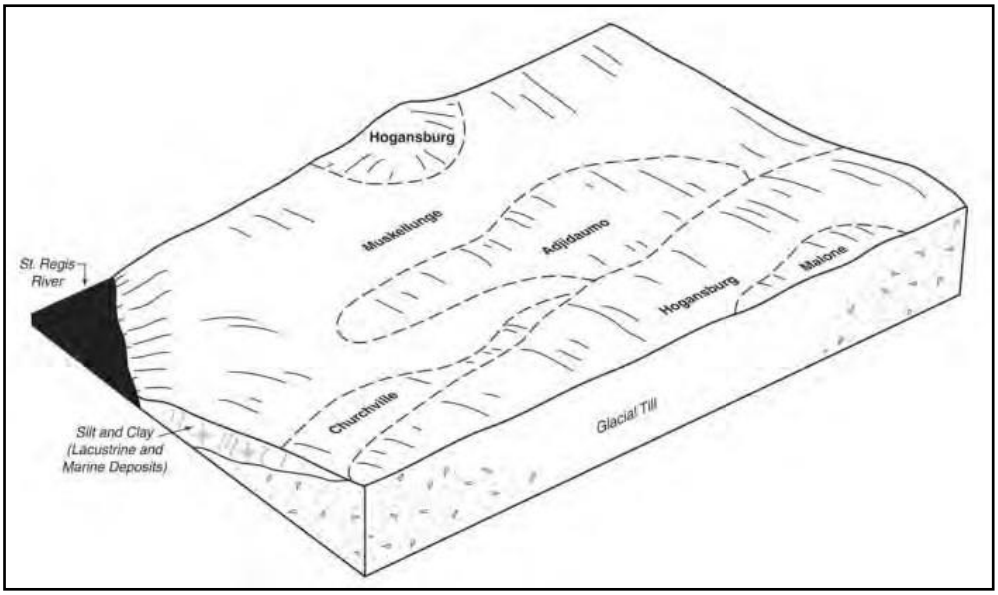


Exhibit 3: Soils of Akwesasne
Source: USDA 2005.

At Akwesasne, the drought of summer 2012 affected many of nature's cycles on all of creation. The changes came about in the way of hot and humid temperatures, high winds, heavy rainfall, hail, and low water levels. As a result of the dry conditions, residents who planted gardens needed to work extra hard to keep gardens from drying up. The heat waves during the summer of 2012 caused the ground to be very dry.

FUTURE WITH CLIMATE CHANGE

As was observed during the summer of 2012, New York State is predicted to experience increased temperatures and a greater frequency of droughts and heavy rainfall events in the future due to climate change (Rosenzweig 2011). Akwesasne's soils may as a result become drier during summer months and drought times, impacting natural ecosystems, landscaping, and farms and gardens. Soils may also become waterlogged as well during times of heavy rainfall, leading to lower oxygen levels in the soil and increasing soil compaction (USGCP 2009). This is a particular concern for Akwesasne, since poor drainage is already a major limitation of soils used for agricultural production and excessive soil wetness is a major management concern for about 90 percent of Akwesasne's cropland and pasture acres (USDA 2005). Soil erosion rates may also increase due to climate change (Nearing et al. 2004).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are several adaptation measures that are ongoing or that could be adopted to help maintain and restore the Tribe's soils under future climatic conditions.

WASTE MANAGEMENT. The Saint Regis Mohawk Tribe has a number of ongoing efforts designed tokeep its soil clean. The Tribe issues burn permits, and recently removed a tire dump near the local raceway. The Tribe hosts annual events including Roadside Cleanups throughout Akwesasne, and a National Recycle Day event which includes disposal of electronics (e-waste) for recycling. Akwesasne hasa Solid Waste Transfer Station with weekly collection of trash on a rotating schedule, and a recycle depot for residents in the southern portion of Akwesasne. The Saint Regis Mohawk Tribe also has a Brownfields Program, issues Burn Bans, samples river water, and has an Environmental Response Team (ERT) to stop contamination of any toxic spills on land and water.

INSTALLATION OF DRAINAGE AND IRRIGATION SYSTEMS. Poor drainage of soils is already a major limitation for agriculture in Akwesasne. Climate change may worsen this limitation by increasing the frequency of heavy rain events. Well-designed and maintained drainage systems can offer many benefits, by allowing for timelier field management and reducing soil compaction, excess water stress, and denitrification losses. Improved soil drainage can also improve crop quality and quantity (USDA 2005). Irrigation systems also have the potential to help Akwesasne better manage its soils under drought conditions.

SOIL MONITORING. A soil survey of Akwesasne was conducted in 1994 by the Natural Resources Conservation Service of the United States Department of Agriculture. This document and the associated maps provide a resource for better managing Akwesasne's soils by identifying their capacity for

agriculture and other uses, and by determining which areas most need drainage improvements or additional irrigation to be effectively used for agriculture.

SOIL IMPROVEMENT. Akwesasne's soils could be improved through composting and other methods. Improved irrigation and drainage systems could be used to help moisten soils that are too dry and drain soils that are waterlogged. Planting trees and shrubs may also help to combat soil erosion.

THE WATERS

"We give thanks to all the Waters of the world for quenching our thirst and providing us with strength. Water is life. We know its power in many forms—waterfalls and rain, mists and streams, rivers and oceans. With one mind, we send greetings and thanks to the spirit of Water. Now our minds are one."

The Waters are the veins and blood to our Mother Earth. The waters were given instructions by the Creator to supply Mother Earth with water to be used by the people for healing, making medicines, cleansing our bodies, and supporting aquatic life forms, and to quench our thirst and to provide sustenance to all of creation.



We remember in the 1960's how our snowbanks were about seven feet high and our roadways were very narrow in the winter. There were many days off from school because our buses would get stuck in the snow somewhere or couldn't leave the driver's home, and it would take a few days for our roads to be drivable again. The snow was so high that some kids would go on the roof tops with their sleds and slide off the roof. We used to build tunnels through snowbanks. Snowbanks were higher than the school buses. The temperatures were colder, and vehicles wouldn't start. Tractors and heavy machinery were the only vehicles that would start, and tractors were the only vehicles that had snow plows. It was rare that a tractor had a snowplow. They were in high demand back in the day. Now almost every truck has a snowplow for the winter.

Before the power dams were built in Akwesasne, our grandparents who lived on Cornwall Island, Ontario (northern portion), used row boats to get off the Island. There weren't any swift currents and there weren't any bridges or electricity. The bridges were built in the late 1950's and electricity wasn't available until the 1950's.

CURRENT CONDITIONS

Many ships pass through our territory and cause erosion along our shores.

In the waterways in the territory of Akwesasne we have two power dams. Two industrial aluminum plants (there were three in previous years) upstream of our land have for many years contaminated our land, water, fish, and wildlife. Today, our community drinks from bottled water and water from the waterline. Many wells have been contaminated with excessive salt and other minerals, making the water unfit for drinking, and others contain hydrogen sulfide, a naturally occurring gas that gives water an unpleasant smell and taste. Homes installed water softening systems before waterlines were available. Some areas on the northern portion of Akwesasne still don't have waterlines.

Historically, there have been no clear trends in annual precipitation patterns over the last century; however, intense precipitation events have increased (Rosenzweig 2011). If we look at broader geographic areas, however, some trends do emerge. Exhibit 4 shows the percentage increase in the number of days with very heavy precipitation between 1958 and 2007. Note the clear trend in increased precipitation in the Northeast. Over the past 50 years, the fraction of precipitation that fell as rain versus snow has increased. In the past century, average precipitation in the United States increased by seven percent, and the heaviest one percent of rain events increased by 20 percent (Gutowski et al. 2008).

In Akwesasne, we experienced a hail storm in July 2012, as well as heavy rainfall that downed corn stalks and tall plants. The southern portion of Akwesasne had salt contamination in wells before the waterline system wasavailable, and *E. coli* contamination was found in well water in the northern portion of Akwesasne. This prompted the Mohawk Council of Akwesasne to get funding for waterlines and a water treatment plant for all three districts, though some homes are still on well water as the last phase of the waterline hasn't been started yet.

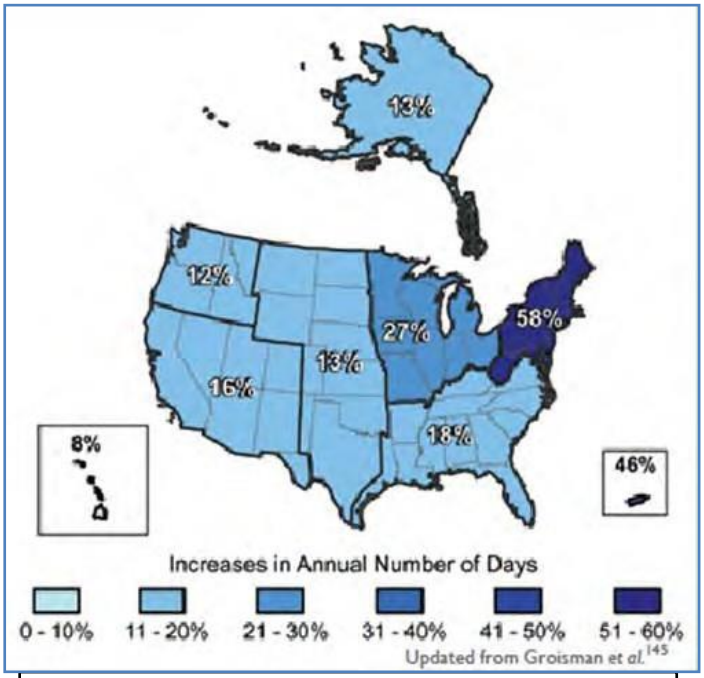


Exhibit 4: Changes in Precipitation across the U.S.

Source: U.S. Global Change Research, 2009

In the past, river ice used to be thick enough to form an ice bridge between the islands. Elders knew how to determine the trails. Now, temperatures haven't been cold enough for ice thick enough to cross the river in the past two years, and many travel frozen portions along the islands without heeding the warnings given by authorities because of unsafe conditions due to warm temperatures. Before the arena was built the river used to be thick enough for skating and to have ski doo races on it. These activities no longer take place, and ice fishing isn't common anymore in

Akwesasne either. Snowmobiles, four wheelers, and vehicles have taken over the river when there is ice.

Numerous marinas have been built along the St. Lawrence River as well, disturbing fish habitats and vegetation when concrete is poured during construction. Shipping seasons are now longer becausethere isn't thick ice on the surface and it thaws out quickly because of the high temperatures.

There was drought in Akwesasne during the summer of 2012, with lower water levels in the St. Lawrence River and other rivers, creeks, and ponds. Some streams ran dry. Holding tanks and rain barrels were required for watering gardens in order to collect water during extreme rain events since there was not a nice even stream of rain over the summer months.

FUTURE WITH CLIMATE CHANGE

Globally, the IPCC expects negative future impacts on water resources and freshwater ecosystems dueto climate change. Specifically in the Northeast, the IPCC expects to see reduced snow cover in quantity and duration, decreased streamflow, changes in size and timing of ice freeze and thaw which may affect spring flooding, disappearance of bog ecosystems, and shifts in fish species distributions and migration patterns (IPCC 2007).

Water quality also has the potential to deteriorate. Higher temperatures, longer periods of summer stratification, and less dissolved oxygen, which is needed by aquatic animals and for self-purification, can cause water quality to decline (Bates et al. 2008). The negative effects of water pollution are intensified with increased precipitation intensity and longer episodes of low streamflow (USEPA 2008). Heavy rainfall can also lead to greater sediment in runoff and outbreaks of waterborne disease (Ebi et al.2008; Field et al. 2007).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

The Saint Regis Mohawk Tribe has undertaken several programs to help protect its waters and ensure clean water availability to its members in the face of climate change, and the Water Resource Program of the Tribe's Environment Division is actively working to protect, preserve and enhance the water resources of Akwesasne. These projects are summarized below, along with additional adaptation measures that could be adopted.

INSTALLATION OF WATERLINE AND WATER TREATMENT SYSTEMS. The Saint Regis Mohawk Tribe has
completed waterline, water treatment plant, and sewer line systems throughout the southern portion of Akwesasne. The Northern portion has one more phase to complete the waterline system. Only one district in the Northern portion has a sewer line system.

WATER QUALITY MONITORING. The Saint Regis Mohawk Tribe has implemented EPA-approved water quality standards under the Clean Water Act since 2007, and currently manages ambient water quality, non-point source pollutants, and direct discharges to the waters of Akwesasne. The Tribe's Water Resources Program also monitors swimming safety in the Raquette, St. Regis and St.

Lawrence Rivers by measuring E. coli levels. Water quality could be improved through the protection and enhancement of wetlands and forests, which help to purify groundwater and reduce erosion. Funds from two settlements (with Alcoa Inc. and Reynolds Metals Company) associated with St. Lawrence River natural resource damages could also be used to improve water quality in the rivers and streams of Akwesasne.

WATER STORAGE. Holding tanks, rain barrels and other technologies could be used to store water for irrigation during droughts, as in the summer of 2012, when Akwesasne experienced drought punctuatedby periods of sporadic downpours of rain.

ADVISORIES. Swimming advisories were issued in recent years for public and family swimming areas. These were never issued until recent years. Public notices communicating when it is unsafe to swim, useiced-over areas in the winter and eat fish from various locations can help reduce the risk associated withwater-related activities.

THE FISH

"We turn our minds to all the Fish life in the water. They were instructed to cleanse and purifythe water. They also give themselves to us as food. We are grateful that we can still find purewater. So, we turn now to the Fish and send our greetings and thanks.
Now our minds are one."

The fish continue to carry on their original instructions from the Creator and cleanse and purify the waterand give themselves as sustenance to the people, bird life, and wildlife.



It was a traditional lifestyle for Akwesasronon to fish from the St. Lawrence. Our river once had many species of fish and many have disappeared. When the dam was built, many fishing holes were filled in with dredged material disposed of from the project. Industrial structures were built and contaminated our fish that remain. In 1986, the Tribe issued an advisory not to eat fish that were contaminated from the St. Lawrence River because of the PCBs, mercury, heavy metals and other toxins that the industrial plants have been polluting into the air and water. Fish as a food source to our people has impacted our diet and health through these pollutants.

Today our children no longer have the knowledge of our ancient ways in spearing, netting, and harvesting fish forfood. Many fish for sport and for fishing derbies.

Fish spawned in March 2012 due to warm temperatures which went to 80 degrees for a short time and then went back to freezing. The drought hindered the fish

from spawning because of the river's water temperatures being too hot. Habitat for fish in Akwesasne is also decreasing from the construction along shores by marinas using cement and dredging shores to make marinas accessible for larger recreational boats and expanding property along shorelines.

CURRENT CONDITIONS

Fishing has become a sport and not a way of life. Memorial Derbies are held annually for money prizes. Many fishermen/women used to fish to provide for their families throughout the year. Today the community sometimes sells fish for fundraisers.

Many non-natives have fished and continue to do so in our waters and have overfished to sell to restaurants for profit. The St. Regis Mohawk Tribe's Compliance Office has made it mandatory for non- natives to apply for fishing permits. Our people fish in/or purchase fish from Tyendinaga Mohawk Territory. Some fishermen sell to local restaurants and sell to those who have fish dinners as fundraisers which are big sellers.

Fish species found in the area's rivers (such as the Saint Regis River and the Raquette River) include the native American eel, lake sturgeon, pug-nosed shiner, eastern sand darter, walleye, muskellunge, white sucker, and shorthead redhorse, as well as other non-native species. Both lake sturgeon and the eastern sand darter are listed as threatened species in the State of New York.

FUTURE WITH CLIMATE CHANGE

The likely impacts of climate change on fish populations are complex. Many fish species will migrate northward as river temperatures increase, and suitable habitat for certain cold water fish species such as brook trout could be reduced by 50 percent. On the other hand, the ranges of warmer water species are likely to expand (Eaton and Scheller 1996; Shuter and Post 1990). One example of declines in cold water fish is the salmon; precipitation as rain rather than snow can feed floods that wash away salmon eggs in streambeds, and warmer water leads eggs to hatch earlier. The young fish are small and more vulnerable to predators, and warmth increases fish's metabolism, taking energy from growth and necessitating more food. Earlier hatching can also put fish out of sync with the lifecycles of their sources of food, such as insects. Additionally, warmer, shallower rivers and streams during the summer and fall will allow diseases and parasites to thrive (Battin et al. 2007).

Potential declines in fish populations due to climate change can have negative effects on tribes who have traditionally depended upon fish species for their livelihood, subsistence, and ceremonial purposes.For example, Dittmer (2013) models potential climate change impacts on salmon and other fish species in the Columbia River Basin and describes how such impacts can disrupt tribal religious services, cultural identity, sense of traditional place, traditional nutritional health, transferal of traditional values to the next generation, and livelihood. By threatening the fisheries of Akwesasne, climate change also threatens the Tribe's traditional fishing practices and way of life. For example, warmer temperatures have begun to interfere with the practice of ice fishing on the St. Lawrence River. In January 2013, for instance, ice fishermen were forbidden from using part of the river due to the possibility of unstable ice cover.

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

The Saint Regis Mohawk Tribe's Environment Division has undertaken several programs to help protect its fisheries and traditional fishing practices in the face of climate change. These projects are summarized below, along with additional adaptation measures that could be adopted to help maintain and restore the Tribe's fish populations.

LAKE STURGEON AND ATLANTIC SALMON RESTORATION. The Saint Regis Mohawk Tribe has been working with the New York State Department of Environmental Conservation (NYSDEC) and USGS onlake sturgeon restoration in the St. Lawrence and tributaries including the St. Regis River. Eggs and sperm of these fish have been collected and hatchery reared sturgeon are stocked to reestablish populations in historic sturgeon waters. The survival and habitat use by the stocked fish is being assessed.

On November 6th, 2012, the SRMT's Environmental Division released sturgeon fingerlings near River Bend Farms on State Rte. 37, and half were released at Pine Ridge Park campsite as part of the SRMT Environmental Division's Lake Sturgeon restoration project. The shrinking population of sturgeon is due to over-fishing and habitat changes brought about by the construction of dams.

Since 1997, the Water Resources Program of the Tribe's Environment Division has also been working with USGS to reintroduce the locally extirpated Atlantic Salmon to tributaries and sections of the St. Regis River. Each year, about 12,000 – 14,000 salmon fry are released with the goal of reestablishing a permanent, self-sustaining population of these fish. The results of the project show that some of the tributaries of the St. Regis can sustain Atlantic salmon, one of the many fish that the Mohawk traditionally caught to sustain their families.

RESEARCH. The Water Resources Program of the Saint Regis Mohawk Tribe's Environment Division was awarded a $278,315 contract by the U.S. Fish and Wildlife Service to conduct research on threatenedand endangered species of fish in two tributaries of the St. Lawrence River, the Salmon and St. Regis Rivers. The work began in June 2012 and will run through June 2014. Other funding for a similar project running from 2009 to 2012 came from the Fisheries Enhancement Mitigation Research Fund (FEMRF). Information on the distribution of uncommon species generated by such activities can help to inform and prioritize protection and restoration efforts that will help to maintain Akwesasne's fisheries under climate change.

STREAM, RIVER, AND WETLAND RESTORATION. A number of restoration projects have been proposed through the Alcoa and General Motors natural resource damage assessments, including the constructionof fish passage, restoration of fish habitat and spawning beds, culvert improvements, and streambank restoration. Planting trees and other vegetation along streams and riverbanks can help to increase waterquality and decrease water temperatures that may increase as a result of climate change. The removalof dams such as the Hogansburg Dam on the St. Regis River also has the potential to reconnect fragmented river habitat, increase the availability and quality of fish habitat and spawning grounds, increase water quality and decrease water temperatures.

FISH MONITORING. Fish showing signs of external anomalies such as tumors, lesions, and ulcers are being collected by the Tribe's Environment Division. The Division also works to publicize fish advisories and provide information on how to clean and cook fish to reduce the amount of contaminants consumed.

EDUCATION. Local Pro Fishermen Champions have an annual Kids 4 Fishing event to teach young kids fishing techniques and boat safety that always has a good turnout.

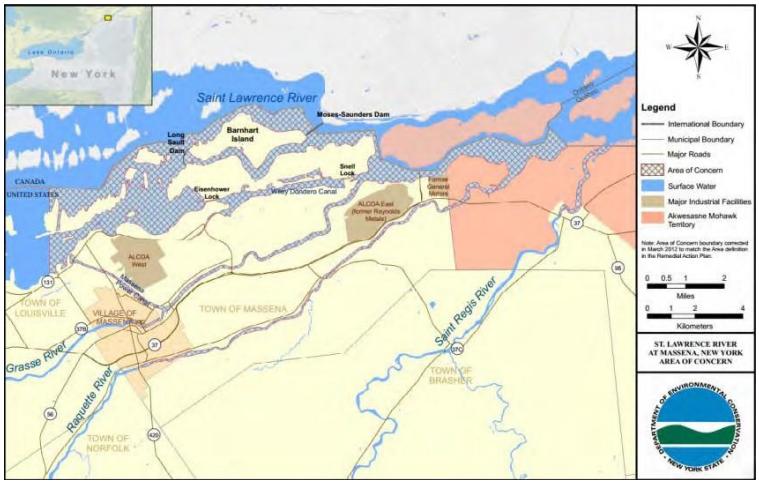


Exhibit 5: Areas with Contaminated River Water

http://www.srmtenv.org/web_docs/stlawrenceriver_aoc/St_LawrenceRiver_atMassenaAOC_2012.pdf

COLLABORATION. The Saint Regis Mohawk Tribe has built partnerships with a number of groups in its efforts to restore its fisheries, such as the U.S. Geological Survey and the U.S. Fish and Wildlife Service. Such collaborative efforts have great potential to effectively restore the Tribe's fish populations and render them more resilient to the impacts of climate change. The Tribe could attempt to identify other governmental, tribal and non-profit organizations with which to work. Another framework that could prove useful to the Tribe in its efforts to protect its fisheries in the face of climate change is provided by the Columbia River Inter-Tribal Fish Commission (CRITFC), which has worked to halt and reverse the decline of Pacific Northwest salmon, steelhead, Pacific lamprey and sturgeon populations for 36 years inthe Northwest region of the United States (Dittmer 2013).

SMALL PLANTS AND GRASSES

"With one mind, we turn to honor and thank all the Small Plants and Grasses we harvest fromthe garden and fields. Since the beginning of time, the grains and grasses have helped the people to survive. Many other living things draw strength from them too. We gather all the Small Plants and



Grasses together as one and send them greetings and thanks. Now our minds are one."

The small plants and grasses were given original instructions to provide us with food to eat to sustain life. This is where we get our sacred tobacco, food, medicines to sustain and heal people, and the rest of creation. Without water we would not have our small plants and grasses, and the grasses provide oxygen, food, and shelter for thewater beings. Plants grow in water and purify water and feed aquatic mammals and fish. Flowers provide nectar for bees to produce honey.

CURRENT CONDITIONS

The culture of the Saint Regis Mohawk Tribe includes basket-making, and sweetgrass is picked in July for making baskets, braiding and use as incense. Other important small plants and grasses for the Tribe include wild rice and dandelions.

Many families stopped gardening in Akwesasne because of the high emissions of metal and other contaminants in the air and land from the nearby industrial plants. Many families rely on grocery stores that have food with pesticide residue, and canned foods. More health problems have arisen with the pollution and eating of canned food. There is a high rate of chronic diseases including respiratory problems, coronary problems, dementia, stroke, and thyroid diseases. Very few families plant or can food anymore.

In the summer of 2012, farmers didn't get their second cut of hay for the winter season. Residents who planted gardens worked extra hard to keep gardens from drying up. Sweetgrass used for smudging and to make baskets wasn't tall and had a short season.

FUTURE WITH CLIMATE CHANGE

Small plants and grasses in Akwesasne may be negatively affected by the predicted changes in climate for New York State, including temperature increases, a greater frequency of heavy precipitation and drought events, a greater prevalence of pests and pathogens, and a heightened risk of wildfires (Rosenzweig 2011). More specific risks exist as well. For example, plants may be at increased risk of frostdamage with premature development and blooming, which allows vulnerable young plants and plant tissue to be exposed to the cold. A greater frequency of heavy rainfall events may also lead to increased soil compaction and exacerbate susceptibility to root diseases (USGCP 2009). Increases in temperature and changes in precipitation patterns are also likely to lead to changes in the spatial distribution and

phenology (the timing of seed emergence, flowering and other key biological events) of small plant and grass species.

However, many small plants and grasses are weedy and may benefit more from higher temperatures and carbon dioxide levels than other plants (Hyman et al. 2008). Climate change may thus benefit some of the native plants and grasses of Akwesasne, while also allowing invasive plant species and weeds to move into the area as well. Other native plant species may be at risk from the predicted climatic changes listed above.

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are several adaptation measures that are ongoing or that could be adopted to help maintain and restore the Tribe's populations of small plant and grass species under future climatic conditions.

CONSERVATION AND RESTORATION. The conservation and restoration of small plant and grass species that are native to Akwesasne could be included in ongoing Tribal efforts to manage its forests and wetlands, with a focus on species that are uncommon, at particular risk due to climate change, and that have traditional tribal uses (such as sweetgrass).

EDUCATION. Funds provided to the Mohawk Council of Akwesasne (MCA) by the National Child Benefit Reinvestment Fund (NCBR) are used to teach teenagers in the community how to make traditional cornbread, moccasins, feather fans, gustowehs, rattles, washing Indian corn, water drums, and other handmade/homemade food and things that were commonly made decades ago. Other classes held at the Akwesasne Cultural Museum educate participants on beadwork, ribbon shirt and ribbon dress making, basket making classes, how to make corn husk dolls, and other relevant subjects. These educational programs help to pass down knowledge of the Tribe's traditional uses of Akwesasne's small plants and grasses.

WEED AND INVASIVE PLANT MANAGEMENT. Climate change may lead to an increased prevalence of weeds and invasive plants in Akwesasne, creating a greater need for effective weed and invasive plant management. Invasive species such as purple loosestrife (*Lythrum salicaria*) and the Common reed (*Phragmites australis*) are already present in the area. Both species have the ability to outcompetenative plants. Some beetle species are an effective form of biological control for reducing populations of purple loosestrife, while *Phragmites* is more difficult to remove. The Saint Regis Mohawk Tribe has undertaken weed eradication efforts under its Wetlands Protection Program by partnering with the Bureau of Indian Affairs' Noxious Weed Eradication Program and released *Galerucella* beetles in 2005 incollaboration with Cornell University, leading to a 90% reduction of purple loosestrife in the area. Adding to these already existing efforts could help manage a potential increase in the populations of weeds and invasive plants resulting from climatic changes.

THE BERRIES

"With one mind, we turn to honor and thank all the berries. Since the beginning of time theberries have helped the people survive. Many other living things draw strength from them too. We gather all the berries together as one and send them greetings and thanks.
Now our minds are one."

The berries continue to carry out their instructions. They provide food for wildlife and people. The roots and leaves are used as medicine for children and women. The strawberry is the leader of the berries and is used in ceremonies with food and drink.

Recently, farmers that are located away from water resources and have large farmland were worried about getting fruit from their plants. The leaves were dry and birds were eating the leaves. This was a farm an hour away from Akwesasne where they had less rainfall. Squirrels were damaging water tubes for the strawberries to get water.



CURRENT CONDITIONS

Berries, including strawberry, red raspberry, currant, elderberry, juniper berry, cranberry, blackberry, blueberry, and others, are both grown and gathered in the wild in Akwesasne for their nutritional and medicinal value. Wild berries are rich in vitamin C, and recent investigations have identified diverse phytochemicals in berries that act to prevent a wide range of metabolic syndromes and chronic disease outcomes and help to improve cardiovascular protection (Seeram 2008; Basu et al. 2010). Given their cultural and nutritional importance, it is useful to evaluate the potential impacts of climate change on the species varieties and survival of berry plants at Akwesasne.

FUTURE WITH CLIMATE CHANGE

Climate change is expected to influence future precipitation patterns. In particular, climate change may lead to an increased frequency of late-summer drought as well as increased summer high temperatures in New York State. This may in turn lead to reduced harvests of both wild and farmed berry plants in this area (Rosenzweig 2010). Already, climate change and other environmental impacts have begun to affect the range, quality and quantity of berry resources in the Northeast (Michelle 2012).

As stated in Lynn et al. (2013), "the indigenous relationship between food and people is intimately tied to the cultural, physical, emotional, psychological and spiritual health of tribal communities." The impact of climate change on food species and ecological processes thus has a multifaceted impact on tribal culture and life, and the threat climate change poses to traditional food use can worsen already existing declines in health due to issues like obesity, diabetes and cancer. Reductions in the availability of traditional food due to climate change thus results in what Lynn et al. (2013) call "a denial of [tribal] rights to have access to a steady supply of nutritionally balanced, culturally relevant foods," and can also erode traditional practices and knowledge associated with these activities.

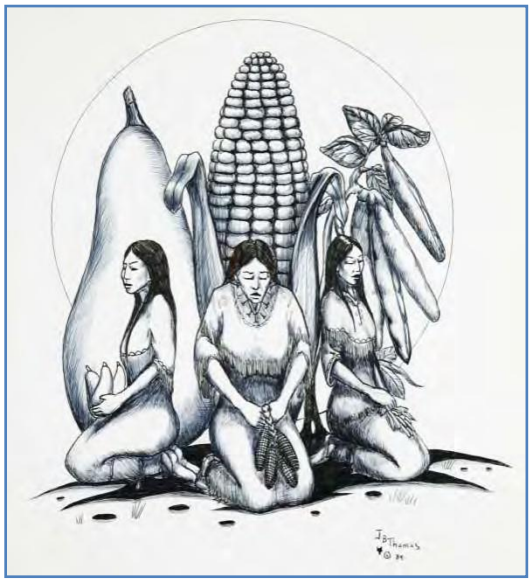
ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Broadly, Lynn et al. (2013) suggests that "traditional ecological knowledge may guide the myriad of social,political, ecological and cultural adaptation strategies that Tribes may pursue" to address impacts of climate change on Native food sources. Such strategies may include clarifying legal obligations of federal agencies, exchanging information, and identifying different technologies to access and store foods, making agreements with other tribes to grant or request access to traditional foods, or the diversification of food-based resources to other species. Adaptation efforts should also include collaboration between Western scientists and managers and Tribal scientists, managers, harvesters, and communities to explore innovative approaches to addressing climate change impacts, they argue (Lynn et al., 2013).

Climate change adaptation measures that could be adopted for berry resources include:

- Rain barrels and cisterns can help to store water for use in irrigation of berries when water resources are scarce.
- Wild berry species could be included in the Tribe's Forest Management Plan and the wild berry resources could be augmented through seeding and planting efforts.
- The seeds of wild berry plants in Akwesasne could be collected as has been done with Black Ash seeds to ensure that the historic wild berries of the Tribe survive even if wild populations of these species disappear from the area due to climate change.
- Tribal members could be provided with berry seed and encouraged to grow berries on their land.

A framework that could prove useful to the Saint Regis Mohawk Tribe in its efforts to protect its berry resources (and other wild foods) in the face of climate change is provided by the Confederated Tribes of the Umatilla Indian Reservation's (CTUIR) "First Foods" program. The CTUIR Department of Natural Resources has partnered with local, state and federal entities to restore ecosystems that support culturally important foods (Lynn et al. 2013).



THREE SISTERS

"With one mind, we turn to honor and thank the Food Plants we harvest from the garden. Since the beginning of time, the Plant Foods, especially the Three Sisters, the corn, beans andsquash have helped the people survive. They sustain life. With our minds gathered together; we give thanks and look forward to seeing the Three Sisters for many generations to come. Now our minds are one."

The Three Sisters, Corn, Beans, and Squash continue tofollow their original instructions and continue to provide food to the people for survival. The Three Sisters are the foundation of the Haudenosaunee culture. Ceremonies are to be concluded with the Three Sisters as an offering to thespirit beings.

CURRENT CONDITIONS

Agricultural production was once one of the main economic activities of the Iroquois in New York State. However, farming began to decline in the latter half of the 20th century in Akwesasne as well as in other communities across upstate New York as agricultural practices began to modernize. For example, a team from Cornell University found a total of only nine full or part-time farming families in Akwesasne in 1989. At the same time, they found that between 30 and 35 percent of the area's households had family gardens. There is a strong tradition of maintaining small gardens for personal consumption in Akwesasne, and traditional varieties of the Three Sisters are used in Longhouseceremonies and for other special occasions (Hoover 2010).

Pollution from the General Motors and Alcoa facilities near Akwesasne has also impacted agriculture in the area. Today, some plants grown in gardens in Akwesasne are still contaminated from pollution by industrial plants upwind and upriver from the territory.

Climate change also poses a threat to farming in Akwesasne. The Three Sisters didn't grow well after recent hailstorms. Some squash plants were damaged and those that grew were small due to high temperatures and lack of rainfall. Corn growers have experienced reduced yields and have had less to provide for their cows over the winter.

FUTURE WITH CLIMATE CHANGE

The State of New York is expected to experience increased temperature and precipitation due to climate change, though precipitation is predicted to decline in the late summer and early fall. Droughts are expected to become more frequent, as are extreme rainfall events, and pests, weeds, and diseases are expected to spread due to increased temperatures (Rosenzweig 2011). All of these factors have the potential to negatively affect the cultivation of the Three Sisters and other food plants in Akwesasne. Increased heavy rainfall events can delay spring planting and flood fields during the growing season, sometimes leading to crop loss through decreased oxygen levels and root disease (USGCP 2009), and corn has been shown to be particularly vulnerable to increased soil moisture due to heavy precipitation events (Rosenzweig et al. 2002). Increased drought frequency and severity can be harmful to all crops (Wolfe et al. 2007). Overall, agricultural production of many crops in the Northeast is expected to decrease (USGCP 2009). Climate change may also provide benefits to agricultural production, however, through warmer temperatures, a longer growing season, and increased atmospheric carbon dioxide (Rosenzweig 2011).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are adaptation measures that could be adopted in addition to current efforts of the Tribe to help maintain and expand the Saint Regis Mohawk Tribe's agricultural practices under future climatic

conditions.

SEED STORAGE AND EXCHANGE. The Saint Regis Mohawk Tribe could begin to store the seeds of crop varieties grown on the reservation in a community seed bank and procure seeds from other tribes and seed collections through purchase or exchange. For example, members of the Tribe participated in a recent Haudenosaunee seed exchange workshop, and the Akwesasne Task Force on the Environment holds an annual seed giveaway. Further resources and historic Iroquois crop varieties may be found through collaboration with the U.S. Department of Agriculture. Traditional Iroquois White Flour corn seed may also be available through Cornell University's American Indian Agriculture Project, designed to support and expand indigenous agriculture in New York. Some of these varieties may be hardier and more adaptive under the climatic conditions of the future. As Hoover (2010) notes, crop varieties used by Haudenosaunee farmers in the past may be more suited to local climate and soil conditions, have stronger resistance to local pests and diseases, and provide more nutrition than modern varieties.

EXPANDED IRRIGATION AND DRAINAGE SYSTEMS. Water could be collected and stored in rain barrels, cisterns and other storage facilities so that crops can be irrigated during times of drought, while more efficient irrigation technology could be used to conserve water. At the same time, improved drainage systems could help prevent waterlogging from extreme precipitation events.

SHIFTING PLANTING DATES. Changing the dates crops are planted and harvested is an effective and inexpensive way to take advantage of longer growing seasons.

EDUCATION. The Akwesasne Task Force on the Environment (ATFE) has supported a number of agricultural projects, including a community garden created in conjunction with the Longhouse, and a greenhouse project on Cornwall Island. The project was later discontinued due to lack of funding, butthe greenhouse was donated to the Akwesasne Freedom School, where it is now used by teachers and students. A community garden has also been established at the Akwesasne Freedom School (AFS) with student involvement. A newer organization at Akwesasne is Kanenhi:io Ionkwaienthon:hakie, a group dedicated to helping families with agricultural projects that is funded by Heifer International (Hoover 2010). These programs could be expanded and publicized to increase awareness of opportunities to get involved with agriculture in Akwesasne. Another resource could be provided by Cornell University's American Indian Agriculture Project, which conducts research on indigenous cropping systems and supports creative marketing outlets for Tribe-grown products, and further funding for agricultural education activities may also be available through recent settlements. Educational efforts could focus on"climate-smart" agricultural practices that make Akwesasne's farms and gardens more resilient in the face of climate change.

SUBSIDIES. Agricultural activities and climate change adaptation measures on farms in Akwesasne could also be subsidized through the formation of a Tribal Conservation District or through settlement funds.

CANNING. Learn the art of canning to preserve food for the future. This helps with food security and well-being because when you can your product you know what's going in there – your food is not processed commercially.

COMMUNITY PROGRAMS. Akwesasne has several community programs designed to enhance food security. For example, the Mohawk Council of Akwesasne's Community Health Program within the Department of Health has developed a very successful Green Food Box program, which provides a non- profit system for distributing and selling fresh seasonal fruit and vegetables that are grown in local gardens and farms. The program sells $10 bags containing fruits and vegetables including bananas, potatoes, zucchinis, apples, pears, carrots, and pomegranates, and any Tribal member can purchase them regardless of residency. The Community Health Program has also worked to develop a Community Kitchen project, which aims to help working families, single home elders and other demographic groups collectively cook large meals that can be portioned off appropriately. These programs both help to support local agriculture and strengthen food security and health in the community.

MEDICINE HERBS

"Now we turn to all the Medicine Herbs of the world. From the beginning, they were instructed to take away sickness. They are always waiting and ready to heal us. We are happythey are still among us, those special few who remember how to use these plants for healing.
With one mind, we send greetings and thanks to the Medicines and to the keepers of theMedicines. Now our minds are one."



The Medicine Plants were instructed to take away sickness and to heal us. They have carried on their original instructions to this day. The medicines help animals, birds and people to heal and stay healthy.

Medicines grow all over. They can be found in the forest. They are in the meadows, in water, on the shore. Learning the right ways of gathering and caring for medicine plants is a lesson in an entire way of living.

Tobacco, sage, sweetgrass and cedar are four very sacred and important medicine plants for the people of this continent. Each has medicinal properties. Each of these plants represents a particular direction, and the peoples of that direction.

The blood that flows through our medicines is the same water that runs through our mother and the flesh that builds the medicines is also that of our mother. The medicine plants are constantly grateful to our Mother Earth, so they can continue their original instructions.

CURRENT CONDITIONS

Elders in Akwesasne have knowledge about medicine plants, and still harvest these medicines. Medicine plants historically gathered in Akwesasne include sweetflag, golden thread, willow tree bark, cherry branches, turtle socks and ginseng, and over 120 species of wetland plants have been identified

that are still in use for medicinal purposes (RCDP 2013). Today, many people who do not know the medicines go to the health food store in Massena and buy from an herbalist who also sells bottled remedies. The herbs are shipped in from elsewhere and are not locally grown.

There is a natural smoothie business in Akwesasne that makes smoothies from natural foods that are either shipped in or purchased at the grocery store. They are washed in a special natural solution before being made into a smoothie. The smoothies have to be pre-ordered and must be drunk within a couple of hours. The business has delivery service to local businesses with multiple orders. There are varieties of drinks for various ailments and for cleanses. It works well if the customer has a proper diet.

Medicine plants in Akwesasne have also been negatively affected by contaminants released by industrialfacilities in Massena, New York (including Alcoa Inc. and the Reynolds Metals Corporation). In some cases, the pollution led to the disappearance of medicine plants, and in others changed the appearance or taste of the plants, alarming healers and disrupting traditional healing practices (RCDP 2013).

FUTURE WITH CLIMATE CHANGE

Not much research has been conducted on the effects of climate change on medicinal plants, but the existing literature suggests that these species may be increasingly threatened by the phenomenon, particularly those in high-altitude environments (Cavaliere 2009). Climate change may negatively affect medicinal plants through heat stress, a higher frequency of drought and heavy rainfall events, shifts in species composition and forest type, and an increased number of invasive species and pests (Rosenzweig 2011). The abundance of certain medicinal plant species may decrease due to these changes, and temperature stress may also affect the secondary metabolites and other compounds that these plants produce (Cavaliere 2009). Climate change may also have the potential to lengthen the growing seasons of medicinal plants and enhance plant growth through higher carbon dioxide concentrations in the air as well.

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Summarized below are adaptation measures that could be adopted to help maintain and restore the Tribe's medicinal plant populations and traditional medicinal practices in the face of climate change.

CONSERVATION, MANAGEMENT AND RESTORATION. Medicinal plant species could be grown in greenhouses and planted in suitable areas to bolster populations, particularly for medicinal plants like ginseng that have become uncommon. Funds from recent settlements with Alcoa Inc. and other companies may also be used to launch a "medicine plant restoration program," including the development of a medicine garden (RCDP 2013). Conservation, management, and restoration of medicinal plants could take place as part of already existing efforts to restore and manage Akwesasne's forests and wetlands. Further resources may be available through United Plant Savers, an organization dedicated to protecting the native medicinal plants of the United States and Canada and their native habitat.

MONITORING. The spatial distributions and extent of medicinal plants may shift under climate change. The locations of medicinal plant populations could be monitored to enable the Saint Regis Mohawk Tribe to adjust their harvesting locations and practices to these changes.

EDUCATION. In addition to conserving and restoring medicinal plant populations, educating community members about the traditional medicinal ways of the Saint Regis Mohawk Tribe is also essential to ensure that these practices survive climate change. Such activities could take place through already existing groups such as the Akwesasne Task Force on the Environment, and could potentially be funded through recent settlements, for example through the proposed Community Environmental Education Project Fund.

ANIMALS

"We gather our minds together to send greetings and thanks to all the Animal life in the world. They have many things to teach us as people. We see them near our homes and in thedeep forests. We are glad they are still here and we hope that it will always be so. Now our minds are one."



The animals from the largest moose to the smallest insect play a role in creation and still follow their original instructions as given by the Creator. They provide food, clothing, shelter and medicines to people, and insects spread pollen from plant to plant to help with food production. Bees create honey from the nectar from flowers.

We have learned how to hunt, store food, and survive from the animals. We also rely on them for our emotional and spiritual strength. In many ways, animals remind us of our humanity, and teach us to share, to take care of our children, to protect our land, to look out for others, and to love our families. Our traditions require that we work to maintain good relationships with animals.

CURRENT CONDITIONS

Akwesasne is home to many animals including freshwater mussels, turtles, frogs, salamanders, deer, mice, and bats.

Deer have been overharvested in Akwesasne. There used to be eight deer per square mile and now there is only one deer per square mile. Outside of the Akwesasne Territory, the Amish were given hunting licenses by the state to hunt deer and they killed many. They claimed that the deer were a nuisance. Tribal hunters were given hunting licenses where they had to hunt in other parts of the state. Our tribal members now hunt for deer away from our territory because of Department of Environmental Conservation Regulations which reports low numbers in this area. Hunting licenses are issued for other zones.

Some wildlife habitats have become uninhabitable. For example, beaver habitats have been exposed. They need to be under water because beavers are aquatic mammals. Wildlife reproductive cycles have also begun to be irregular due to droughts. Dairy cows haven't been producing the normal amount of milk. Rabbits have been eating from unprotected gardens.

FUTURE WITH CLIMATE CHANGE

Climate change is likely to have a number of effects on ecosystems and animals, benefiting some speciesand leading to declines for others. Temperature changes are likely to lead to range shifts of wildlife species, the success of which will depend on migration ability, the existence of migration corridors, suitable new habitats, and food resources (Rosenzweig 2011). Snow-dependent animal species and theirwinter predators, moose, and wetland species may be under particular threat from climate change, while generalists such as the white-tailed deer that do well in many habitats and are able to eat many foods are likely to do better (Rosenzweig 2011).

Amphibians are also likely to be negatively affected by the increased frequency of summer drought predicted for New York State, since they are dependent on wetland and seasonal pool habitats for part or all of their life cycles. Climate change may thus increase competition for resources among amphibian young, decrease their size, and strand young amphibians that have not yet metamorphosed (Rodenhouse et al., 2009). Increased winter and early spring temperatures may, on the other hand, lead to increased foraging opportunities for salamanders and other amphibians earlier in the year, providinga benefit to these species (Rosenzweig 2011).

Reptiles are likely to be greatly influenced by climate change due to their sensitivity to temperature. For example, painted turtles grow and reach sexual maturity more quickly during warmer years (Frazer et al., 1993), and temperature can also determine hatchling sex ratio of some reptile species. Increased temperatures could thus result in a higher rate of reproduction, but also skew the ratio of female to male reptiles in certain instances and also lower overwinter survival of turtle hatchlings due to decreased snow cover (Rosenzweig 2011). Turtle species in particular may be particularly vulnerable to climate change due to their limited dispersal abilities and small, isolated populations.

Lastly, climate change is likely to lead to increased levels of pests (such as insects), pathogens, and invasive species, as longer growing seasons and warmer winters increase insect populations and increasing temperatures shift the habitat ranges of many species northward, potentially leading to detrimental effects on Akwesasne's native animal species (Rosenzweig 2011).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are several ongoing and proposed adaptation measures that could be adopted to help maintain and restore the Tribe's wildlife under future climatic conditions.

RESTORATION AND CONSERVATION. Many of the Tribe's ongoing projects to restore and conserve the streams, forests, wetlands and other wild lands of Akwesasne have the potential to increase and improve habitat for the area's wildlife. For example, the U.S. Fish and Wildlife Service awarded the Tribe more than $190,000 for hardwood wetlands habitat restoration and management to help

enhance and restore black ash resources for the benefit of wildlife. A number of the proposed ecological restoration projects from the Alcoa Inc. and General Motors settlement-associated natural resource damage assessment – including stream and wetland restoration, acquisition of land, amphibian and reptile enhancement and restoration projects, and freshwater mussel restoration projects – may also have the potential to help conserve the wildlife species that live in or pass through Akwesasne in the face of climate change. The protection of riparian zones and migration corridors may also help to facilitate natural adaptive behaviors among Akwesasne's wildlife species.

COLLABORATION WITH STATE, FEDERAL AND NON-PROFIT ORGANIZATIONS. Collaboration with a number of organizations such as the U.S. Fish and Wildlife Service, the New York State Department of Environmental Conservation, the New York State Division of Fish, Wildlife and Marine Resources, and non-governmental organizations such as the World Wildlife Fund and The Nature Conservancy may provide valuable benefits to the Tribe's efforts to conserve its wildlife. These groups can provide information and resources and may be able to help the Tribe identify key wildlife areas in Akwesasne as well as determine useful and effective restoration actions for wildlife in the area.

MONITORING. Monitoring of at-risk species can help to track the status of vulnerable animals and target conservation effort. The Saint Regis Mohawk Tribe Environment Division and community members currently monitor female snapping turtle nesting.

INVASIVE SPECIES MANAGEMENT. The Saint Regis Mohawk Tribe could work with other organizations such as the New York Invasive Species Research Institute (nyisri.org) to manage and mitigate the spread of pests, diseases and invasive species into Akwesasne.

TREES

"We now turn our thoughts to the Trees. The Earth has many families of Trees who have their own instructions and uses. Some provide us with shelter and shade, others with fruit, beauty, and other useful things. Many peoples of the world use a Tree as a symbol of peace and strength. With one mind, we greet and thank the Tree life.
Now our minds are one."

The trees carry on their original instructions by continuing to provide maple syrup, wood for heat and shelter, the bark is used for medicines, leaves shelter people and wildlife from heat and certain medicines grow in the shade of trees.



The leader of all the trees is the Maple, it provides us with the first medicine food of the Spring which helps renew our strength and reminds us of our continual responsibility. The Maple syrup is used in every longhouse ceremony. It is used as a medicine, drink and added in our food.

At Akwesasne in the Spring of 2012, those who tap the Maple trees for syrup did not get any syrup at all due to the warm temperatures through the winter months that set in quickly in early spring. The nights were not getting cold enough to get the syrup to flow. People also observed that trees dried out early, and the color of leaves started changing early, in August 2012.

CURRENT CONDITIONS

Of the Saint Regis Mohawk Tribe's approximately 12,100 acres of land, the majority (6,860 acres, or 56 percent) are forested. Akwesasne's forests are well stocked with good quality hardwood trees, including quaking aspen (17% of basal area), basswood (13%), red and silver maples (8%) and many other northern hardwood and bottomland hardwood species such as black ash. A small number of softwood species are also present, including white pine, northern white-cedar, and balsam fir, though these species are not numerous. Exhibit 6 presents the distribution of eight forest cover types across Akwesasne (Bridgen et al. 2004).

As described above, the tree species that currently inhabit these Tribal lands have important cultural values and uses. As such, it is useful to examine potential changes that climate change could have on tree species composition and survival on Saint Regis Mohawk Tribe lands, as well as potential actions that can be taken to adapt to these impacts.

FUTURE WITH CLIMATE CHANGE

Scientists expect that forests and other natural areas are likely to transform as a result of climate change. These climate change impacts threaten access to valued resources that tribes depend upon to perpetuate their cultures and livelihood, and that have contributed to cultural, economic, medicinal and community health for centuries (Voggesser et al., 2013).

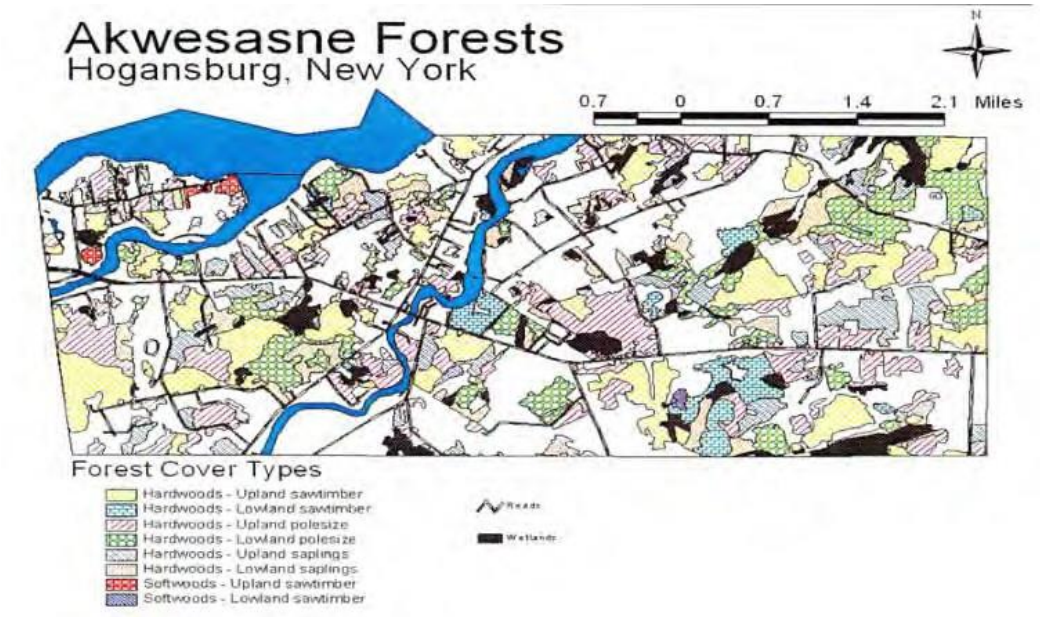


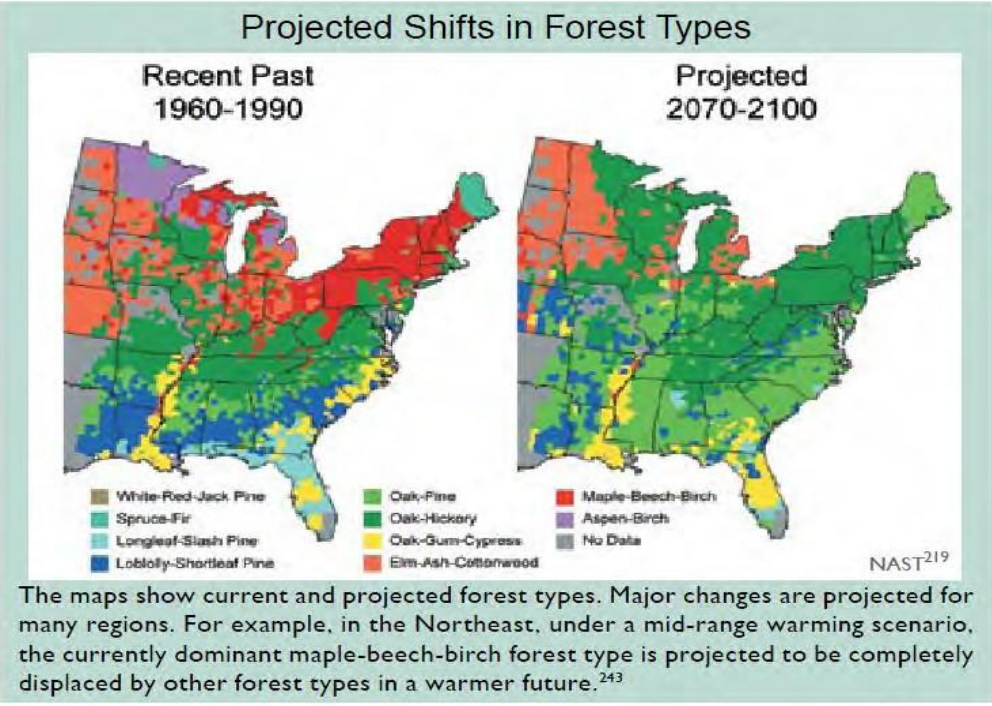
Exhibit 6: Distribution of eight forest cover types across the St. Regis Mohawk Reservation forest
Source: Bridgen 2009

Scientists expect that climate change impacts to forests will include species loss, shifts in species range (such as northward or elevational migration of some temperate forest species), contraction or expansion of plant species, increases in the range of invasive species and pathogens, and changes in the distribution and population density of wildlife species (Voggesser et al., 2013). Wildfires and droughts are also expected to increase. Forests can also, however, play a role in mitigating local climate responses to climate change (Voggesser et al., 2013).

Climate change is expected to cause shifts in species composition, including loss of spruce-fir forests, alpine tundra and boreal plant communities at high altitudes and latitudes. The forest type and composition shifts expected for the northeastern U.S. are shown in Exhibit 7. As shown, the currently dominant maple-beech-birch forest type is projected to be displaced by the oak-hickory forest type in most of the Northeast by 2100. A prolonged growing season and a "fertilization effect" of increased

carbon dioxide levels could increase productivity in some hardwood trees, if they are not limited by other factors. However, the fertilization effect can also preferentially increase the growth rate of fast growing species, which are frequently weeds and other invasive species (USGCP 2009).

The U.S. Global Climate Research Program predicts that maple syrup production will decrease in the Northeast, as part of an overall decline in agricultural production (USGCP 2009). The 2012 experience at Akwesasne where maple production was reduced may be an indication of potential future reductions in the production of this important tribal resource.



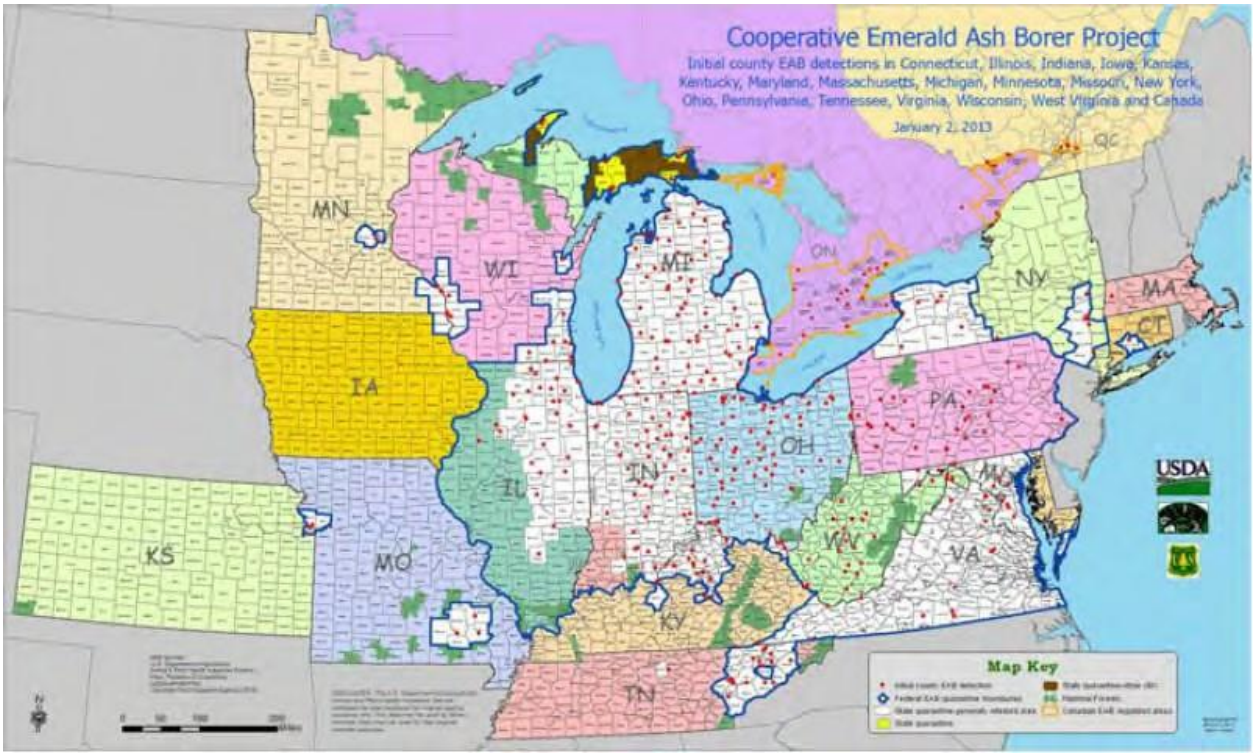
The maps show current and projected forest types. Major changes are projected for many regions. For example, in the Northeast, under a mid-range warming scenario, the currently dominant maple-beech-birch forest type is projected to be completely displaced by other forest types in a warmer future.[243]

Exhibit 7: Projected Shifts in Forest Types
Source: U.S. Global Change Research, 2009

Invasive species, including animal and plant pests, pathogens, and diseases, can increase forest mortalityand reduce the quality and quantity of woodland products used by the Saint Regis Mohawk Tribe (Voggesser et al., 2013). An important example of an invasive species that may directly affect the Saint Regis Mohawk Tribe is the emerald ash borer (EAB), which is creating landscape-level change in the eastern U.S. in areas where black ash (*Fraxinus nigra*) occurs (see Exhibit 7). The EAB has not yet reached the Saint Regis Mohawk Tribe Reservation, but it has reached nearby Toronto, Ontario and certain locations in New York State. Black ash is widely used in basket-making, and plays an important role in the functioning and resilience of Kanienkehaka/Mohawk culture. The economic impact of EAB-related street tree removal and replacement in 25 states has been estimated at $10.7 billion (Kovacs et al. 2010).

Exhibit 8: Map of Emerald Ash Borer (EAB) Beetle Detections

Source: http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/index.shtml



ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

The Forestry Resources program of the Saint Regis Mohawk Tribe's Environment Division has already undertaken several programs that will help the Tribe's forest lands to adapt to climate change. These current adaptation actions for the Tribe's forest resources are summarized below, along with additional adaptation measures that could be adopted.

FOREST INVENTORY. The Saint Regis Mohawk Tribe conducted a forest inventory in 2003 using aerial photography, Geographic Information System (GIS) technology and direct field surveys to measure the Reservation's 6,860 acres of forest land, resulting in the publication of a forest inventory analysis report (Bridgen et al. 2004). A supplemental report in 2006 modeled forest stand growth and provided information such as indicated annual cut (which approximates what level of timber harvest will be balanced out by new growth) useful for establishing sustainable long-term harvesting and management plans. The Forestry Resources program has begun **inventorying forest resources** on the Tribe's lands again as an update to the earlier effort. The Forestry Resources program's Forest Inventory and Planninggroup is also working on the development of a **Forest Management Plan** to help the

community achieveits forestland use goals (to produce firewood, timber, provide habitat, etc.). Further monitoring of tribal forests has the potential to help manage weeds, invasive pest species, better meet the needs of wildlife,

increase the populations of rare, edible and medicinal plants, and help manage the Tribe's forests to maximize resilience to the impacts of climate change.

HARVEST OF ASH SEEDS. The Saint Regis Mohawk Tribe Environment Division has harvested Black, Green, and White Ash Tree seeds annually in recent years in collaboration with the US Forest Serviceand other partners for use in restoration in case the Emerald Ash Borer invades the Akwesasne territory.The Tribe's Forestry Resources Program is also working on a collaborative, 3-year effort with the SUNY Ranger School and others to manage Black Ash to increase forest health and production. The findings of this program should aid in future management of this tree species. Proactive forestry management of this and other tree species has the potential to increase the resilience of the Saint Regis Mohawk Tribe Reservation's forests in the face of climate change.

INVASIVE SPECIES PREVENTION. **EAB** poses a significant threat to the Tribe's ash trees. Thus far, the Tribe has worked with the USDA to conduct **monitoring surveys** in Akwesasne to determine whether theEAB is present by setting monitoring traps in ash trees that attract the pest. Perhaps the best measure for controlling the spread of this and other pests into Tribal lands is to strictly **enforce New York's firewood ban**, which prohibits transportation of firewood of any kind. Keeping non-reservation firewoodout has the potential to prevent the spread of this species. The Forestry Resources Program couldlaunch a **Tribal public education effort** to explain why keeping firewood (and seeds) local is important. The Saint Regis Mohawk Tribe could also **work together with the local St. Lawrence – Eastern Lake Ontario Partnership for Regional Invasive Species Management** (convened by New York State's Invasive Species Task Force) to reduce the negative impacts associated with the spread of invasive species due to climate change (Rosenzweig et al. 2011; Voggesser et al. 2013).

Further resources for invasive species management include the New York Invasive Species Research Institute (nyisri.org), which promotes information-sharing regarding the management of invasive species; the iMapInvasives mapping tool (imapinvasives.org); and the Cooperative Emerald Ash Borer Project.

FIRE MANAGEMENT PLANNING. The Forestry Resources program of the Saint Regis Mohawk Tribe's Environment Division has launched a Fire Management Planning project in conjunction with Emergency Planning and the Hogansburg Akwesasne Volunteer Fire Department to determine goals, objectives, andstrategies for reducing and preventing fires. This effort has resulted in a strategic **Fire Management Plan**giving programmatic direction for the safe, effective management of wildland fires in Akwesasne. The program also provides mechanisms for fire department cost reimbursement from fighting brush fires, and provides access to firefighting training. The Tribe's Forest Management Plan currently allows for suppression of wildfires, emergency fire stabilization and rehabilitation activities, but prescribed fire is not permitted. The **Wildland Urban Interface project**, another activity of the

Forestry Resources program of the Tribe, has a mechanism to achieve reduced fire hazard through the removal of brush and woody debris near and around homes, critical infrastructure, and government facilities. Services are provided by the project's five-man crew that undertakes these activities throughout the summer months. These efforts should be strengthened in coming years to reduce the increased threat of wildfire under climate change.

MAPLE SYRUP PRODUCTION. Climate change is likely to impact maple syrup production by leading to earlier and shorter sap flow seasons due to warmer temperatures, as has already been observed at Akwesasne in the Spring of 2012 (Rosenzweig et al. 2011). These effects may have negative impacts on the Tribe's production and use of maple syrup as food, drink, and medicine in the longhouse ceremony. Adaptation measures that could help mitigate these negative impacts include:

- Forest management to reduce competition from other tree species and pests;
- Tapping trees earlier in the year;
- Increasing the sap yield from trees by using new spout technology;
- Bringing more sugar maple trees into production; and
- Experimenting with tapping red and silver maples in addition to sugar maples. Though red and silver maples have lower sugar concentrations in their sap, using reverse osmosis before boiling can make it easier to process maple syrup from these two species (Rosenzweig et al. 2011).

THE BIRDS

"We put our minds together as one and thank all the Birds who move and fly about over our heads. The Creator gave them beautiful songs. Each day they remind us to enjoy and appreciate life. The Eagle was chosen to be their leader. To all the Birds—from the smallest to the largest—we send our joyful greetings and thanks.
Now our minds are one."



The birds spread seeds as they travel, they give us their beautiful songs to keep us wanting to stay here on earth. The eagle is the leader of the bird life as the eagle can fly the closest to the Creator.

CURRENT CONDITIONS

The lower St. Lawrence River has been identified as an Important Bird Area by the

National Audubon Society, and Akwesasne is located within a region that provides habitat to a number of endangered, threatened and "bird species of special concern" including the black tern, common tern, wood thrush, vesper sparrow, short-eared owl, northern harrier, pied-billed grebe, bald eagle and least bittern (RCDP 2013). Akwesasne is utilized by both resident and migratory bird species for breeding, feeding and roosting. These birds include waterfowl, waterbird, raptor and songbird species.

Climatic changes have begun to affect the birds of Akwesasne. Geese aren't travelling too far to the south anymore. Wild turkeys are abundant because of milder weather, and robins are returning earlier in the year. In the past few years there have been more black crows in the territory of Akwesasne. They destroy robin nests and eat the eggs. More eagles are back in the territory to nest. Many have been sighted along the river on remote islands. Invasive cormorants have been sighted on rivers. They eat game fish and have moved into the territory of Akwesasne.

The bird life of Akwesasne has also been impacted by industrial contamination. Facility-related contaminants are estimated to have destroyed or impaired local bird habitat, and PCBs have been found in the eggs and blood of great blue herons in the area (RCDP 2013).

FUTURE WITH CLIMATE CHANGE

Climate change is predicted to have a number of impacts on ecological processes and habitat quality, many of which may affect the behavior and population levels of bird species. Such effects may include changes in the timing of migration and nesting (Crick 2004), as observed above for geese and robins, as well as geographic shifts in migration patterns (Rosenzweig 2011). Some bird species may benefit from climate change, while others may suffer, and changing climates may shift the range of certain species, leading to the spread of invasive and alien species (Crick 2004). For example, the ranges of 12 bird

species in Britain have been observed to have shifted on average 18.9 km northwards over a 20-year period due to increased winter temperatures (Thomas and Lennon 1999). In New York, 27 out of 34 Northeast bird species for which range shifts have been documented in recent decades show a northward shift in range (Rosenzweig 2011). Bird species that are habitat generalists able to thrive in a number of habitat conditions are likely to do well under climate change, while habitat specialists are likely to suffer (Rosenzweig 2011). Extreme weather events such as droughts and heavy rainfall events, both predicted to increase in frequency for the State of New York in the 21st century (Rosenzweig 2011), can have significant negative impacts on bird populations (Stenseth et al. 2002).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are several ongoing and proposed adaptation measures that could be adopted to help maintain and restore the Tribe's bird life under future climatic conditions.

WETLAND PROTECTION. The Saint Regis Mohawk Tribe currently regulates and protects the area's wetland resources through its Wetlands Protection Plan and the Akwesasne Wetlands

Conservation Act, and the Tribe's Environment Division has a Wetlands Protection Program. These programs include policy, wetland mapping, public notice, permitting and enforcement elements, and help to protect the wetlands and water quality of Akwesasne from encroachment and development. Such activities help to create and enhance foraging and nesting habitat for a number of wetland birds. A number of wetland bird species, such as the American bittern, common loon and sora, are projected to decline as a result ofclimate-driven changes (Rosenzweig 2011).

RESTORATION AND CONSERVATION. Many of the Tribe's other ongoing projects to restore and conserve the streams, forests, wildlife and other wild lands of Akwesasne have the potential to increase and improve habitat for the area's bird life. A number of the proposed ecological restoration projects from the Alcoa Inc. and General Motors settlement-associated natural resource damage assessment – including stream and wetland restoration, acquisition of land, upland restoration, and the construction of osprey and bald eagle nesting platforms – all have the potential to help conserve the birds that live or pass through Akwesasne in the face of climate change. The proposed Murphy Island restoration project would likely provide benefits to the state threatened common tern. On a smaller scale, households could put up nesting boxes and birdfeeders to help provide habitat and food to birds.

COLLABORATION WITH STATE, FEDERAL AND NON-PROFIT ORGANIZATIONS. Collaboration with a number of organizations such as the U.S. Fish and Wildlife Service, the New York State Department of Environmental Conservation, the New York State Division of Fish, Wildlife and Marine Resources, and non-governmental organizations such as the National Audubon Society, the Nature Conservancy, andthe Native American Fish and Wildlife Society may provide valuable benefits to the Tribe's efforts to conserve its bird life. These groups can provide information and resources and may be able to help the Tribe identify key bird areas for conservation in Akwesasne as well as determine useful and effective restoration actions for native bird species in the area.

THE FOUR WINDS

"We are all thankful to the powers we know as the Four Winds. We hear their voices in the moving air as they refresh us and purify the air we breathe. They help to bring the change ofseasons. From the four directions they come, bringing up messages and giving us strength.
With one mind, we send our greetings and thanks to the Four Winds.
Now our minds are one."

The four winds bring the change of the four seasons. The winds carry pollen and seeds and are dispersed to be reproduced.The winds carry vapor in the form of water, snow, rain, hail, and ice. The four winds carry the smoke from tobacco burnings with the messages that are directed upward to the medicine spirits and the Creator.



CURRENT CONDITIONS

Air quality in Akwesasne is being monitored by the Tribe. There are two industrial plants located upwind from the territory which pollute the air. Decades ago in Akwesasne, before stricter regulations were imposed on industry for air emissions, the cattle were losing their teeth and were found to be contaminated with fluoride. Studies were conducted by the Mohawk Council's Environment Division. This caused many farmers to stop farming and many families stopped gardening. This led to families purchasing canned food from grocery stores.

Before garbage disposal was available in Akwesasne, many families had burn barrels and family dumps. Many homes are still heated with wood stoves in Akwesasne. Many houses in the area also have mold problems due to poor air circulation and damp basements due to the high water table, in many areas only about three feet below the surface. The Saint Regis Mohawk Tribe's Environment Division conducts Indoor Air Quality Tests for those who request it.

FUTURE WITH CLIMATE CHANGE

Climate variables such as temperature, humidity, and wind speed and direction all contribute to air quality patterns across space and time. Changes in these climate variables, such as temperature increases due to climate change, can thus be expected to influence air quality (Rosenzweig 2011). Climate change may worsen air quality; for example, the formation of ozone (which can cause inflammation in the deep lung and short-term decreases in lung function) increases with greater sunlightand higher temperatures (Rosenzweig 2011). Heightened ozone levels due to increased temperatures may also increase the risk of asthma (Rosenzweig 2011). Levels of $PM_{2.5}$ (a complex mixture of solid and liquid particles of less than 2.5 millionths of a meter in diameter) are also likely to increase with climate change as well (Hogrefe et al., 2006). High concentrations of ambient $PM_{2.5}$ can lead to a number of adverse health outcomes, including heart and lung disease (Rosenzweig 2011). An increased frequencyof wildfires may also contribute to diminished air quality through increases in fine particulate air pollution, and

increased summer temperatures have been shown to increase emissions from power plants due to increased air conditioning use (Drechsler et al., 2006). Lastly, climate change may increase pollen levels through an earlier onset of the pollen season, enhanced seasonal pollen loads in response to higher temperatures and longer growing seasons, and increased CO_2 concentrations, which have been shown to stimulate pollen production and allergen potency in ragweed. This predicted increase in pollen levels under climate change may lead to an increase in allergic diseases including allergic asthma, hay fever, and atopic dermatitis (Rosenzweig 2011).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are several ongoing and proposed adaptation measures that could be adopted to help improve Akwesasne's air quality under future climatic conditions.

AIR QUALITY MONITORING. The Saint Regis Mohawk Tribe's Air Quality Program currently monitors ambient levels of ozone, SO_2, NO_2, $PM_{2.5}$, PM_{10}, polycyclic aromatic hydrocarbons (PAH), benzene, and metals such as nickel, cadmium, and lead in Akwesasne. The Tribe also collaborates with the National Atmospheric Deposition Program to monitor acid rain in the area, and samples fluoride levels in vegetation in conjunction with the Alcoa. The Air Quality Program monitors indoor air quality as a free service to Akwesasne residents who call in with indoor air concerns as well, and levels of carbon monoxide, carbon dioxide, hydrogen sulfide, petroleum products, humidity, and temperature are measured and recorded during home visits. The air quality monitoring efforts described above will help to determine how air quality is changing in Akwesasne as the climate changes.

EMISSIONS REDUCTION. Air quality in Akwesasne could be improved through increased use of renewable energy, and a reduction in the amount of fossil fuels burned in the area. The Saint Regis Mohawk Tribe's Environment Division has launched a green building project to design a green building that will use less energy, and the Tribe and community members are looking at bringing electric utilities to Akwesasne in the way of solar energy, potentially entailing a solar farm or solar barn concept to provide low-cost, low-carbon energy with a potential to become self-sufficient and off the main grid. The Tribe could also recommend the use of clean-burning stoves to help improve indoor air quality.

COLLABORATION. The Saint Regis Mohawk Tribe currently collaborates with the National Atmospheric Deposition Program to monitor acid rain, and assesses the impact of benzene and other air toxics in Akwesasne in conjunction with the Center for Air Resources Engineering and Science at Clarkson University through a grant from the U.S. Environmental Protection Agency. Further collaboration with other governmental and non-governmental organizations may be useful for ongoing Tribal efforts to monitor and improve Akwesasne's air quality. For example, the Institute for Tribal Environmental Professionals (ITEP) provides training for tribal air monitoring programs at its Tribal Air Monitoring Support Center, created through a partnership between tribes, ITEP, and the United States Environmental Protection Agency (USEPA).

THE THUNDERERS

"Now we turn to the west where our Grandfathers, the Thunder Beings, live. With lightning and thundering voices, they bring with them the water that renews life. We bring our minds together as one to send greetings and thanks to our Grandfathers, the Thunderers. Now our minds are one."



The Thunder Beings, known as the Grandfathers, carry out their original instructions and continue to bring lightning and water to replenish and renew our water supply. They water our plants and Mother Earth. They strike the ground to keep the creatures beneath the ground from coming to the surface. They were placed there by the Creator. Today, we must respect the Thunderers as they continue to perform their duties that have been bestowed upon them.

CURRENT CONDITIONS

Akwesasne, in the Northern New York region, has a relatively wet climate; the average annual precipitation for the region between 1971 and 2000 was 39 inches, while Indian Lake (in the nearby northern Adirondacks region) has historically received 15 inches of total precipitation over the summer months of June through September. Northern New York is also prone to more frequent and severe ice and snowstorms than the coastal areas of the state, with Akwesasne receiving an average of 65 inches of annual snowfall between 1971 and 2000. The major extreme climate events in New York include extreme hot days and heat waves, extreme cold days, large precipitation events and flooding, lake-enhanced snow events, severe thunderstorms, tropical cyclones, and nor'easters (Rosenzweig 2011).

Observed climate trends over the past few decades indicate a changing climate. Since 1970, trends that have been observed include rising temperatures, more frequent hot days, longer growing seasons, less snowfall and more winter rain, reduced snowpack, and earlier ice and snowmelt resulting in earlier peak river flows.

At Akwesasne, the drought of summer 2012 affected many of nature's cycles on all of creation. The changes came about in the way of hot and humid temperatures, high winds, heavy rainfall, hail, low water levels, and fish and wildlife reproductive cycles were out of sync. The downpour of rainfall, hail, and strong high winds destroyed gardens at a time when it was late to restart gardens to get a good crop. Some areas had 6 inches of hail in July. Thunderstorm warnings were also issued. As a result of the dry conditions, residents who planted gardens needed to work extra hard to keep gardens from drying up. Heavy rainfall has been more frequent, downing corn stalks and other tall plants, and heavy cloud cover and cloud formations with high winds have been observed to have become more frequent as well. A

tornado hit in Summerstown in summer 2012, just miles from Akwesasne. Akwesasne had high winds on that day.

On December 27th, 2012, there was a winter storm warning in Akwesasne and many businesses and offices were closed. Schools were out on Christmas vacation. Thirteen to 17 inches of snow fell within 24hours.

FUTURE WITH CLIMATE CHANGE

Winters in northeastern North America are expected to have greater increases in precipitation volume than the U.S. average. In New York, average precipitation volume is predicted to rise by as much as 5 percent by the 2020s, 10 percent by the 2050s, and 15 percent by the 2080s. Most of this increase is expected during winter months, with decreased precipitation in the late summer and early fall (Rosenzweig 2011). The length of the winter snow season is expected to decrease by 50 percent in New York State.

In general, precipitation events are expected to increase in intensity, with an increased frequency of heavy downpours (IPCC 2007; USGCP 2009). At the same time, one to three month droughts are expected to occur as frequently as once each summer in the Catskill and Adirondack Mountains, and across New England (USGCP 2009).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are several ongoing and proposed adaptation measures that could be adopted to help Akwesasne become readier for changes in storm and precipitation events under future climatic conditions.

STORM READINESS. The Mohawk Council of Akwesasne has a team of workers who trim branches and cut trees that are too close to power lines and homes to prevent damage in case of high winds, as wellas a free Hazard Tree Program available to assist the elderly and disabled with the removal of hazardous trees. The Saint Regis Mohawk Tribe also has an Emergency Planning Coordinator.

STORM RESPONSE. During Hurricane Sandy, the Tribe activated Emergency Operations Command Centers to monitor the storm, and the combined efforts of these centers helped ensure a coordinated response of the community. Community members were advised on the storm's progress. This system could be continued and improved to better manage an increased number of storm events in the future due to climate change. There also are many gas stations throughout the Akwesasne territory, and it would be hazardous if there were to be a tornado, earthquake, or other catastrophe since oil could contaminate ground water and wetlands. The Saint Regis Mohawk Tribe's Environment Division Environmental Response Team (ERT) has been responding to accidental spills of hazardous materials in Akwesasne since 1993, and could help respond to any storm-related spills. Evacuation plans could also be put in place for major storm events.

EVACUATION PLANNING. The Saint Regis Mohawk Tribe has an Emergency Response Plan that

includesguidance for evacuations if this is determined to be the most effective course of action for protecting people from the effects of a disaster such as a major storm. The evacuation plan divides the territory ofAkwesasne into eight zones with associated assembly areas, and provides an Emergency Operations Control Group plan that outlines the responsibilities of each section, department and agency of the Tribe.

GRAND MOTHER MOON

"We put our minds together and give thanks to our oldest Grandmother, the Moon, who lights the nighttime sky. She is the leader of women all over the world, and she governs the movement of the ocean tides. By her changing face we measure time, and it is the Moon whowatches over the arrival of children here on Earth. With one mind, we send greetings and thanks to our Grandmother, the Moon. Now our minds are one."



The moon provides special powers at night to ensure the plants grow and reproduce until the next sunrise. She guides us when to have ceremonies, when to pick medicines, when to plant and harvest.

Grandmother Moon is the leader of the females. She controls the ocean tides, women and animal life cycles, gravity, and the conception and birth of babies.

CURRENT CONDITIONS

The Haudenosaunee Longhouse ceremonies are set by the traditional/ceremonial moon calendar which follows the 13 full moons in every year. Ceremonies are carried out throughout the year by following themoon cycles.

In the past few decades, many women have been forced to have their babies on the doctor's schedule so that the doctor may collect the money for delivering babies, forcing women to have cesareans rather than delivering naturally. Women use contraceptives that stop them from having cycles to avoid

pregnancy, and many women cannot conceive.

In the winter of 2012, in February, temperatures went up into the 80s and caused fish to spawn early, but several days later the cold temperatures set back in. In May 2012, there was a Super Moon during which the moon came very close to the earth. In the summer of 2012, some wells went dry and water levels were low for the entire summer. There were low water levels in rivers in the Akwesasne Territory, and beavers and muskrats did not reproduce their second litters.

FUTURE WITH CLIMATE CHANGE

Many of the patterns and reproductive cycles of nature have been disrupted or altered in the modern world by contaminants such as PCBs, dioxins and DDT and other impacts of industrialization and urbanization. Climate change has begun to further effect a number of nature's cycles. Some fish species have started to spawn earlier in relation to changing temperatures, birds have begun breeding and migrating earlier in the year, and plants have begun to flower at different times of year, among other effects (Rosenzweig 2011). In general, the timing of seasonal spring activities of animals and plants have occurred progressively earlier since the 1960s, and datasets exist to document this shift for birds, butterflies and wild plants (Walther et al. 2002).

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Climate change has already and will continue to affect the cycles of life, and there is little that can be done to change this. However, monitoring these trends can provide information on how the lifecycles of various organisms are changing, and potentially inform adaptive actions. For example, sugar maples could be tapped earlier, and it may be beneficial to plant some crops earlier in the year.

THE SUN



"We now send greetings and thanks to our eldest Brother, the Sun. Each day without fail hetravels the sky from east to west, bringing the light of a new day. He is the source of all the fires of life. With one mind, we send greetings and thanks to our Brother, the Sun. Now our minds are one."

The Sun produces rays that give strength and warmth to people and that help to grow and reproduce plants with the help of water. The Sun is the elder brother of the Earth and is recognized as one of the many forces ofCreation that sustain life.

In bringing greetings to the forces of Creation, the Sun is recognized for continually carrying out its responsibilities each and every day without fail. The example set by the sun is a reminder to the people to be vigilant in following the instructions given by the Creator at the beginning of time.

CURRENT CONDITIONS

In general, New York has a humid continental climate, similar to the rest of the northeastern United States, with hot summers and cold winters. The Northern New York area is on average colder than the more southerly parts of the state, with an average air temperature of 42F between 1971 and 2000 (as opposed to 53˚F over the same period in the New York City area) . The annual average temperature in New York increased by 0.6°F per decade since 1970, and winter temperatures rose 1.1°F per decade (Rosenzweig 2011).

The extreme variations in temperature experienced in recent years are an observable consequence of the effects of existing industrial behavior. Atmospheric dumping of chemicals has created holes in the atmosphere which let through many wavelengths of the Sun's energy. Temperature fluctuations cause vegetation, crops and animals to suffer. Very high temperatures led to a drought in the summer of 2012, and the ground was very dry with the windy conditions.

UV rays are at higher levels, leading to a higher risk of skin cancer and creating hazardous issues for people with sun sensitivities, making them spend more time indoors. Increased temperatures have also led to a greater risk of heat deaths.

FUTURE WITH CLIMATE CHANGE

Observed climate trends over the past few decades indicate a changing climate, and temperatures in

Akwesasne are predicted to continue to increase in the 21st century (Rosenzweig 2011). The Intergovernmental Panel on Climate Change (IPCC) projects that in New York, temperatures will rise by
1.5 to 3.0°F by the 2020s, 3.0 to 5.5°F by the 2050s, and 4.0 to 9.0°F by the 2080s (Rosenzweig 2011). Exhibit 8 illustrates these temperature changes, and Exhibit 9 shows how the number of extreme heat days in New York in future years will compare to the number of extreme heat days under the current climate at various locations along the East Coast. By the 2070 to 2090 period, New York is predicted to have as many extreme heat days each year as Georgia does currently, likely leading to increased heat illness and mortality.

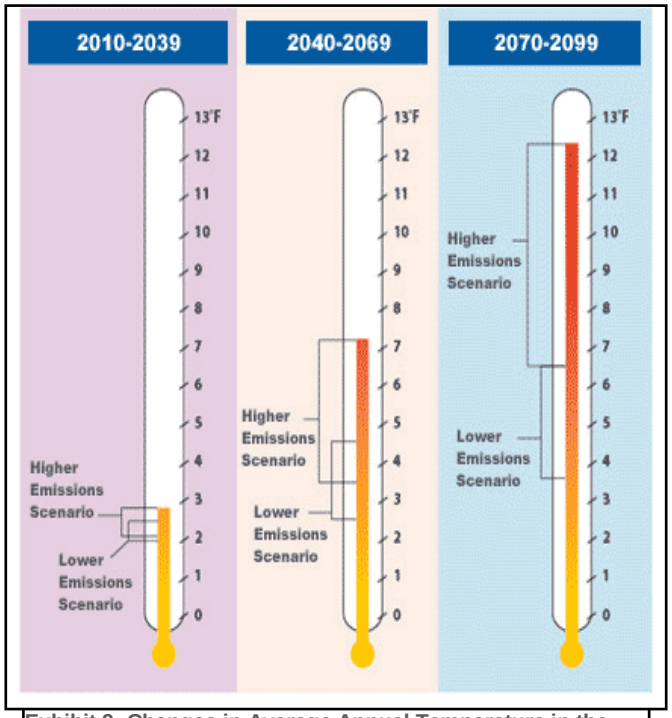


Exhibit 9: Changes in Average Annual Temperature in the Northeast.

Source: Climate Choices, 2010

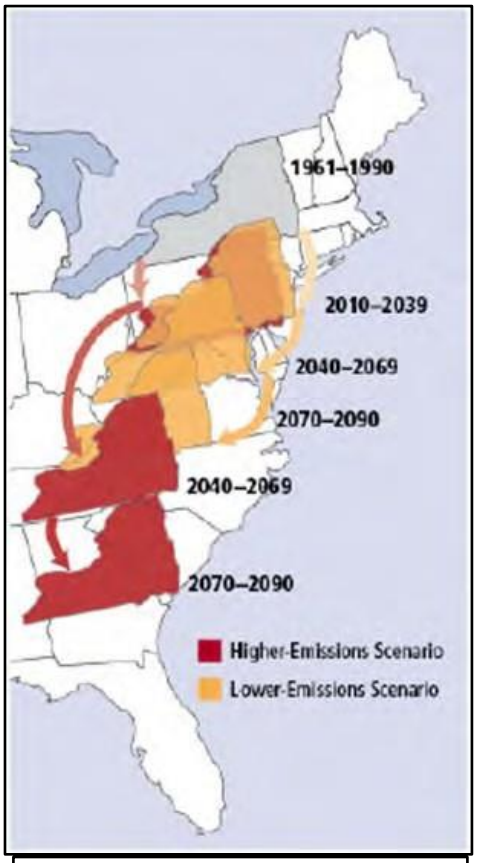


Exhibit 10: Summer in Upstate New York
Source: Climate Choices, 2010
http://www.climatechoices.org/ne/impacts_ne/clim

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are several ongoing and proposed adaptation measures that could be adopted to help members of the Saint Regis Mohawk Tribe adapt to increased temperatures and levels of UV rays under future

climatic conditions.

PREVENTION OF TEMPERATURE-RELATED MORTALITY AND ILLNESS. Climate change is likely to lead to increased temperatures and an increased frequency of extreme heat events in Akwesasne. Proactive efforts such as ensuring access to working air conditioning may help prevent heat-related illness and deaths, particularly among vulnerable populations such as the elderly, young children, and those suffering from cardiovascular or respiratory conditions.

EDUCATION AND OUTREACH. The Saint Regis Mohawk Tribe sometimes includes heat safety information in the Tribe's newsletter. For example, June 2011 was named "National Safety Month" in Akwesasne to raise public awareness of safety in the community, and the Tribe's newsletter for that month included information on how to avert and treat heat stroke, heat exhaustion, heat cramps and heat rash during the heat of summer. The Mohawk Council of Akwesasne's Community Health Program also issues notices when the area becomes overly hot and humid advising community members to stay indoors and out of the sun. Providing information on how to mitigate the effects of increased temperatures and UV rays can help prevent and lessen heat-related illness.

THE STARS

"We give thanks to the Stars who are spread across the sky like jewelry. We see them in thenight, helping the Moon to light the darkness and bringing dew to the gardens and growingthings. When we travel at night, they guide us home. With our minds gathered together as one, we send greetings and thanks to all the Stars. Now our minds are one."



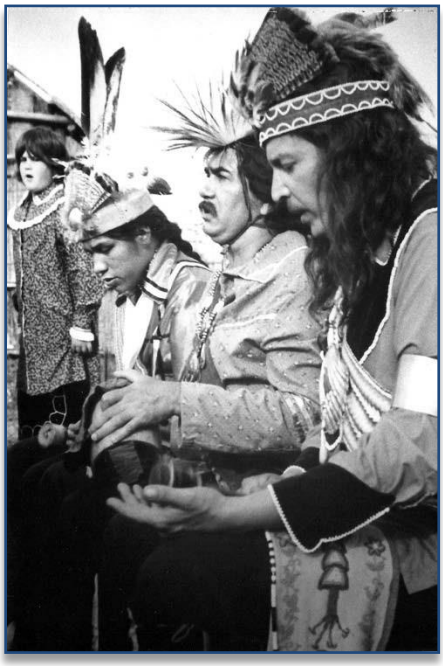
The stars spread the dew at night, which cools the plants and quenches their thirst when the Thunderers

are not around. Knowledge of the stars was eroded and hasn't been passed on. Today some navigate through the night by the stars. Our belief is that the vast canopy of the Milky Way is a path to the Creator, and each separate star represents the spirit of a single person, making their way homeward. Today it is known that when a star is near the moon, there will be a death in the community.

Far away from the effects of climate change on Earth, the stars provide perspective on the environmental change caused by humans.

THE FOUR BEINGS

"We gather our minds to greet and thank the enlightened Teachers who have come to help throughout the ages. When we forget how to live in harmony, they remind us of the way wewere instructed to live as people. With one mind, we send greetings and thanks to these caring Teachers. Now our minds are one."



The Four Beings continue to carry out their original instructions by watching and caring for humankind as long as the people lie in harmony, and continue our original instructions. There will be signs of creation when we lose that protection by not carrying on our teachings. There will be diseases appearing that were not known before, and many will die.

The Creator will remove our life sustainers because we will fail to give thanks. The corn will not be plentiful. Insects will destroy many crops. The Strawberries will fail to bear fruit. Partridges will not land on the ground, which will become too hot with sin. Trees will die. They will rot from the tops down. Rivers and streams will become polluted. Weeds and shrubs will not grow. They will not be able to use the water. Nature will stop.

CURRENT CONDITIONS

There was a shortage of corn in the United States because of the drought in 2012, and grass used for haying was short in the summer of 2012 and didn't get a second cut. Insects are moving north with the warmer temperatures, causing invasive species to destroy trees and plants. Deer ticks arrived in Akwesasne at an alarming rate in 2012 because of higher temperatures. This may be the cause of the low numbers of deer. More people have contracted Lyme disease. Mosquitoes transmitted West Nile Virus in Ontario in 2012.

FUTURE WITH CLIMATE CHANGE

In addition to an increased frequency of extreme heat and drought events, particularly in the summer, climate change is predicted to lead to new challenges with insect and disease management as longer growing seasons and warmer winters benefit insect populations and invasive species (Rosenzweig 2011). Plants (including crops) and wildlife may become more vulnerable to insect pests and disease. Vector species such as mosquitoes, ticks, midges, and other biting insects respond considerably to small changes in temperature, and tick-borne diseases such as Lyme disease and ehrlichiosis are spreading and moving northward as temperatures increase (Rosenzweig 2011). Epizootic hemorrhagic disease, a viral disease of white-tailed deer transmitted by the bites of infected midges, spread to New York State in 2007 (Rosenzweig 2011). West Nile virus, transmitted by mosquitoes, is another disease of concern that may affect Akwesasne in the future.

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

Below are several ongoing and proposed adaptation measures that could be adopted to help reduce the risks insect-borne diseases pose to Akwesasne under climate change.

EDUCATION AND OUTREACH. Community Health Services distributed information about preventing deer ticks from latching on to skin, as well as instructions on how to remove deer ticks if they latched on to the skin of community members. The community was informed about how to dress when in tall grass and in the forest, and about using insect repellent. In the summer of 2012, when there was an increase in the number of deer ticks in Akwesasne, many warnings and preventative measures were broadcast to the Tribe through local media by Community Health Services.

EPIDEMIC PLANNING. The St. Regis Mohawk Tribe has a proactive pandemic flu response plan. Emergency plans developed to plan for potential epidemics caused by virulent flu outbreaks such as swine flu or avian flu can help reduce the risks of such disruptions.

PREVENTION. The Saint Regis Mohawk Tribe has removed tire piles near the raceway to keep the soil clean and stop mosquito reproduction. Similarly, any other stagnant pools identified after rain should bedrained, and homes should be ridded of anything that could gather standing water. Practical solutions tothe problem of insects and the diseases they carry should be identified and put into practice.

THE CREATOR

"Now we turn our thoughts to the Creator, or Great Spirit, and send greetings and thanks forall the gifts of Creation. Everything we need to live a good life is here on this Mother Earth. For all the love that is still around us, we gather our minds together as one and send our choicest words of greetings and thanks to the Creator. Now our minds are one."



The Creator has given us everything we need to survive here on Mother Earth. He created everything with love. He asked that we fulfill our responsibilities to the Earth, Creation, and give thanks. The Haudenosaunee are to live in peace, harmony, and in balance with Creation.

The concept of responsibility is central to the beliefs of the Haudenosaunee. The Creator assigned to allof the creatures of Creation the responsibilities to protect and keep the universe. We keep faith with the instructions of the Creator by fulfilling our responsibilities to the Earth, Creation, and all things named.

CURRENT CONDITIONS

The Saint Regis Mohawk Tribe has a number of active, ongoing educational programs related to the environment and traditional Mohawk ways. The Environment Division submits articles to the Saint Regis Mohawk Tribe's *Kawennì:ios* newsletter, and has an educational outreach instructor. The Akwesasne Freedom School (AFS), founded in 1979, is an independent elementary school in the area that teaches its students in the Mohawk language and focuses on Mohawk language and culture. The *Iohahi:io* Akwesasne Adult Education Center offers a number of educational programs, and the Tribe also has a cultural center and museum containing over 3,000 artifacts. The Akwesasne Task Force on the Environment organizes environmental education and agricultural programs as well.

FUTURE WITH CLIMATE CHANGE

Through its effects on Akwesasne's forests, plants, rivers, streams, wetlands and wildlife, climate change has the potential to impact a number of the Saint Regis Mohawk Tribe's traditional ways, including hunting, fishing, and plant-gathering. These changes will require adaptive approaches to resource management to ensure that the Tribe's traditional cultural practices can continue into the future. The Saint Regis Mohawk Tribe already possesses significant adaptive capacity in the form of its environmental and educational programs, institutions, partnerships, community members, and commitment to its culture and environment.

ONGOING AND PLANNED CLIMATE CHANGE ADAPTATION ACTIONS

In addition to the educational activities that are currently taking place, the Saint Regis Mohawk Tribe could hold a number of Adaptation Planning classes to teach community members how to prepare for climate change now and uphold the traditional culture of the Tribe under the changed climatic conditions of the future. These classes could also be incorporated into already-existing programs and projects as well.

EDUCATION. In the future, the Saint Regis Mohawk Tribe could have Adaptation Planning classes on how to prepare for climate change by teaching a number of traditional skills such as hunting, fishing and harvesting techniques; how to cure and smoke fish; how to garden, weed, harvest, and can; make clothes/pouches out of hide; make baskets; prepare and dry corn, beans and squash and other root vegetables; identify, prepare, and harvest medicine plants; prepare Indian Corn for drying, braiding, grinding, and making into mush; prepare cornbread; make drums and rattles; carve wood; and use cow horns. These classes would help to pass down the traditional practices of the Tribe in the face of the changes that climate change will bring.

CLOSING WORDS

"We have now arrived at the place where we end our words. Of all the things we have named, it was not our intention to leave anything out. If something was forgotten, we leave itto each individual to send such greetings and thanks in their own way. And now our minds are one."

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APPENDIX F-

Resources

Disaster/Recovery Grant Possibilities

All jurisdictions with a current hazard mitigation plan are eligible for federal mitigation grant funding. Many grants require a "local share" commonly in the range of 10-25% of the total budget. Details about this program and a further description of these opportunities can be found at: https://www.fema.gov/hazard-mitigation-assistance.

Below is a chart of potential grant resources and corresponding websites.

Program/Action/ Measure Name	Description	Agency (acronym)	Project URL
Local Waterfront Revitalization Program (LWRP)	The Waterfront Revitalization of Coastal Areas and Inland Waterways Act offers local governments the opportunity to participate in the State's Coastal Management Program (CMP) (pdf) on a voluntary basis by preparing and adopting a Local Waterfront Revitalization Program (LWRP), providing more detailed implementation of the State's CMP through use of such existing broad powers as zoning and site plan review. When an LWRP is approved by the New York State Secretary of State, State agency actions are required to be consistent with the approved LWRP to the maximum extent practicable. When the federal government concurs with the incorporation of an LWRP into the CMP, federal agency actions must be consistent with the approved addition to the CMP. Title 19 of NYCRR Part 600, 601, 602, and 603 provide the rules and regulations that implement each of the provisions of the Waterfront Revitalization of Coastal Areas and Inland Waterways Act including but not limited to the required content of an LWRP, the processes of review and approval of an LWRP, and LWRP amendments.	NYSDOS	https://www.dos.ny.gov/opd/programs/lwrp.html
Local Government Efficiency (LGE) Program	The Local Government Efficiency (LGe) Grant Program provides technical assistance and competitive grants to local governments for the development of projects that will achieve savings and improve municipal efficiency through shared services, cooperative agreements, mergers, consolidations, and dissolutions. With the creation of the LGe program, New York State is committed to working with local governments to control costs while maintaining the quality service delivery provided by New York's local governments. The Department of State continues to be well positioned to coordinate the joint provision of state services, promote state and local cost efficiencies.	NYSDOS	http://www.dos.ny.gov/LG/lge-grant.html.
Environmental Research Program-Climate Adaptation Program	Environmental Research Program Topic: (1) Climate Adaptation Program - looks at the impacts of energy use on humans and the environment. (2) Air Quality and Health, (3) Ecosystems	NYSERDA	https://www.nyserda.ny.gov/All-Programs/Programs/Environmental-Research https://www.nyserda.ny.gov
NYWorks	$90M agency capital program, NYWorks, administered by 11 regions with regional manager and engineering staff	NYSOPRHP	
Federal Grant and Assistance Programs for Governments	Catalog of federal disaster assistance and hazard-related grants and assistance	FEMA	https://www.cfda.gov/index?s=program&mode=list&tab=list
Grants.gov	Searchable catalog of federal grant opportunities in health and human services	HHS	http://www.grants.gov/web/grants/home.html
Aquatic Ecosystem Restoration	Direct support for carrying out aquatic ecosystem restoration projects, such as wetlands, repairing and other floodplain and aquatic systems, that will improve the quality of the environment; Regulatory and adaptation planning initiatives for Climate Change	USACE	http://www.nae.usace.army.mil/Missions/Public-Services/Ecosystem-Restoration-Authorities/
Beneficial Uses of Dredged Materials	Direct assistance for projects that protect, restore, and create aquatic and ecological habitats, including connection with dredging an authorized Federal wetland, in navigation projects	EPA	https://www.epa.gov/cwa-404/beneficial-use-dredged-material
Water Grants	A variety of grants related to water and wastewater infrastructure projects, including a catalog of federal funding for watershed protection projects	EPA	https://www.epa.gov/nps/watershed-funding https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/
Storm Mitigation and Resilience Office (SMRO)	Port Authority is developing strategies to reduce the risks, such as increased flooding and storm surges, more frequent storms and heat waves, and sea level rise, posed by climate change to Port Authority facilities and regional transportation infrastructure. Following Superstorm Sandy, the Port Authority created a Storm Mitigation and Resilience Office to	PANYNJ	http://www.panynj.gov/about/climate-resiliency.html

	coordinate both short-term storm recovery projects as well as long-term climate resiliency planning efforts across the PA. Resilience projects include backflow prevention and drainage infrastructure at airports designed to accommodate future sea level rise, climate-informed flood protection measures across the PATH rail system, and an integrated, campus-wide flood protection system for the World Trade Center. A cross-departmental resiliency working group is working to integrate resilience strategies and risk assessment into all aspects of capital planning and facility operations.		
Storm Mitigation and Resiliency Projects	The Port Authority of New York and New Jersey has invested nearly $1 billion in storm mitigation and resiliency projects in the five years since Hurricane Sandy with another $1.8 billion in the pipeline 404 and 406 mitigation related to Sandy Recovery (Public Assistance)	PANYNJ	https://www.bondbuyer.com/news/port-authority-reports-post-hurricane-sandy-resilience-investments
Urban Waters Small Grants Program	Protect and restore urban waters by improving water quality through activities that also support community revitalization and other local priorities	EPA	http://www2.epa.gov/urbanwaters
Community Development Block Grant (CDBG)	Grants to states and local governments to develop viable communities (e.g., housing, suitable living environment, expanded economic opportunities) and recover from federally declared disasters; principally for low- and moderate-income areas	HUD	http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs https://www.hudexchange.info/programs/cdbgentitlement/
Disaster Housing Assistance Program	Emergency assistance for housing, including minor repair of home to establish livable conditions, mortgage, and rental assistance	HUD	https://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/publications/dhap
HOME Investment Partnerships Program	Grants to state and local government and consortia for permanent and transitional housing (including financial support for property acquisition and rehabilitation for low-income persons)	HUD	https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/programs/home/
HUD Disaster Resources	Grants and a variety of disaster assistance related to housing, including mortgage assistance	HUD	https://portal.hud.gov/hudportal/HUD?src=/info/disasterresources
Section 108 Loan Guarantee	Offers states and local governments a source of financing for certain community development activities, such as housing rehabilitation, economic development, and large-scale physical development projects.	HUD	https://portal.hud.gov/hudportal/HUD?src=/hudprograms/section108
Hazard Mitigation Assistance (HMA)	Grants to provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages [includes FMA, HMGP, PDM, below]	FEMA	http://www.fema.gov/hazard-mitigation-assistance
Flood Mitigation Assistance (FMA) Program	Grants to states and communities for pre-disaster mitigation planning and projects to help reduce or eliminate the long-term risk of flood damage to structures insurable under the National Flood Insurance Program	FEMA	http://www.fema.gov/flood-mitigation-assistance-program
Hazard Mitigation Grant Program (HMGP)	Grants to states and communities for planning and projects providing long-term hazard mitigation measures following a major disaster declaration	FEMA	http://www.fema.gov/hazard-mitigation-grant-program
Pre-Disaster Mitigation (PDM) Competitive Grant Program	Grants to states and communities for planning and projects that provide long-term hazard pre-disaster mitigation measures	FEMA	http://www.fema.gov/pre-disaster-mitigation-grant-program https://www.fema.gov/pre-disastermitigation-grant-program
Public Assistance: Hazard Mitigation Funding under Section 406	Hazard mitigation discretionary funding available under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act following a federally declared disaster	FEMA	https://www.fema.gov/95261-hazard-mitigation-funding-under-section-406-stafford-act
Assistance to Firefighters Grant Program	Assists in local funding for fire equipment, staffing, facility construction and emergency response costs	FEMA	https://www.fema.gov/welcome-assistance-firefighters-grant-program

Partners for Fish and Wildlife	Financial and technical assistance to private landowners interested in pursuing restoration projects affecting wetlands and riparian habitats	USFWS	http://www.fws.gov/partners
National Trust Preservation Funds (NTPF)	Funding awarded to nonprofit organizations and public agencies for planning and education projects	NTHP	http://forum.savingplaces.org/build/find-funding/grant-seekers/preservation-funds
Historic Preservation Financial Assistance - General	Federal financial assistance specifically for historic preservation	USACHP	http://www.achp.gov/funding-general.html
FHWA Emergency Relief Program	Funding for the repair or reconstruction of Federal-aid highways that have suffered serious damage because of (1) natural disasters, or (2) catastrophic failures from an external cause	USDOT	http://www.fhwa.dot.gov/programadmin/erelief.cfm
Transportation Investment Generating Economic Recovery (TIGER)	Investing in critical road, rail, transit, and port projects across the nation	USDOT	https://www.transportation.gov/tiger
Emergency Loan Program	USDA's Farm Service Agency (FSA) provides emergency loans to help producers recovery from production and physical losses due to drought, flooding, other natural disasters, or quarantine	USDA	https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/emergency-farm-loans/
Financial Assistance	Financial assistance to help plan and implement conservation practices that address natural resource concerns or opportunities to help save energy, improve soil, water, plant, air, animal and related resources on agricultural lands and non-industrial private forest land	NRCS	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/
Homeland Security Grant Program	Supports efforts to build and sustain core capabilities across the five mission areas of Prevention, Protection, Mitigation, Response, and Recovery based on allowable costs.	DHS	https://www.fema.gov/homeland-security-grant-program
Emergency Management Performance Grant (EMPG) Program	Assists local, tribal, territorial, and state governments in enhancing and sustaining all-hazards emergency management capabilities	DHS	https://www.fema.gov/emergency-management-performance-grant-program
Land & Water Conservation Fund	Funding allows 4 federal agencies to acquire and develop private lands for public outdoor recreation areas and facilities: and congressional appropriate for matching funds for state and local government land acquisition projects	USDOI	http://www.lwcfcoalition.org/
Missions and Appropriations	Federal budget and funding to support missions including research, feasibility studies, construction, and disaster relief	USACE	http://www.usace.army.mil/Missions/Emergency-Operations/
Economic Injury Disaster Loans	Low-interest disaster loans to businesses of all sizes, private non-profit organizations, homeowners, and renters. SBA disaster loans can be used to repair or replace the following damaged property, equipment, inventory, or other business assets.	SBA	https://www.sba.gov/loans-grants/see-what-sba-offers/sba-loan-programs/disaster-loans https://www.sba.gov/managing-business/running-business/emergency-preparedness/disaster-assistance
New York State Grant Opportunities	Centralized listing of funding programs & grant opportunities	NYSGG	https://grantsgateway.ny.gov/IntelliGrants_NYSGG/module/nysgg/goportal.aspx
DHSES Grant Programs	Centralized listing of various Homeland Security grants	DHSES	http://www.dhses.ny.gov/grants
Grant & Bid Opportunities	Grant, bid, and funding opportunities including Local Waterfront Revitalization Program, and Watershed Protection	NYSDOS	http://www.dos.ny.gov/funding

Local Government Records Management Improvement Fund (LGRMIF) Disaster Recovery Grant	Grants for disaster recovery projects related to damage caused by a sudden, unexpected event involving fire, water, man-made or natural phenomena where a timely response is necessary to prevent loss of vital or archival records, or to ensure timely access to vital records	NYSED	http://www.archives.nysed.gov/grants/grants_lgrmif.shtml
The New York State Emergency Services Revolving Loan	Repair of firefighting apparatus, ambulances, or rescue vehicles; renovation, rehabilitation, or repair of facilities that house firefighting equipment, ambulances, rescue vehicles, and related equipment	NYSDHSES	http://www.dhses.ny.gov/ofpc/services/loan/
NY Rising Community Reconstruction Program	Provides additional rebuilding and revitalization assistance to communities several damaged by Hurricanes Sand and Irene and Tropical Storm Lee. [Projects funded through DASNY]	NYSHCR	https://stormrecovery.ny.gov/sites/default/files/crp/community/documents/herkimer_county_resiliency_plan_final.pdf
Environmental Protection Fund (EPF)	Matching grants for the acquisition, planning, development and improvement of parks, historic properties	NYSOPRHP	http://www.nysparks.com/grants
Recreational Trails Program (RTP)	Matching grants for the acquisition, development, rehabilitation and maintenance of trails and trail-related projects	NYSOPRHP	http://www.nysparks.com/grants
Main Street Program	Financial resources and technical assistance to communities to strengthen the economic vitality of the traditional Main Streets and neighborhoods. Funds support revitalizing historic downtowns, mixed-use neighborhood commercial districts and village centers	NYSHCR	http://www.nyshcr.org/programs/nymainstreet/
Energy-Related Funding Opportunities	Funding available to private or institutional entities submitting project plans to address NYSERDA's broad energy and environmental challenges	NYSERDA	http://www.nyserda.ny.gov/Funding-Opportunities.aspx
Environmental Protection and Improvement Grants	Technical assistance grants to community groups with significant threat sites of environmental concern; available for community organizations, not-for-profit organizations, and others	NYSDEC	http://www.dec.ny.gov/regulations/2590.html
Green Innovation Grant Program (GIGP)	Competitive grant program supports projects that utilize unique stormwater infrastructure design and create cutting-edge green technologies, innovative stormwater management in such areas as preserving and restoration natural landscape features such as floodplains and wetlands for flood protection	NYSDEC	https://www.efc.ny.gov/Default.aspx?tabid=461
NYS Environmental Protection Fund; Water Resources Board	This is a source of funding for capital projects that protect the environment and enhance communities. Capital projects are usually large projects that purchase land or construct facilities. Most projects that receive grants of EPF money combine it with other funding sources that require matching funds.	NYSDEC	http://www.dec.ny.gov/about/92815.html
Strategic Development Plans and Feasibility Studies	Grant funding of up to $100,000 to support strategic development plans for city, county or municipality, and feasibility studies for sites or facilities assessment and planning for economic development purposes. Preference is given to highly distressed communities, especially those supporting NY Rising Community Recover Plans	NYSESD	https://esd.ny.gov/strategic-planning-and-feasibility-studies-program
ARC Herkimer County	Support services for vulnerable populations - assistance with transportation, family support and clinical services	ARC Herkimer County	
Foundation Center	Online tool to assist in finding funders, help with proposal writing, and information on private philanthropy in the United States	Foundation Center	http://foundationcenter.org
American Red Cross	Shelter, food, support, supplies, and direct assistance to populations impacted by disaster	Red Cross	http://redcross.org

Rockefeller Foundation	Grants to support initiatives that meet their goals of revaluing ecosystems, advancing health, securing livelihoods, and transforming cities (includes resiliency)	Rockefeller Foundation	https://www.rockefellerfoundation.org/our-work/grants/
The Nature Conservancy	Conservation organization partnering with communities, business, government, and other non-profits to protect ecologically important lands and waters for nature and people	Nature Conservancy	http://www.nature.org
The Trust for Public Land	Assistance to state and local governments including land conservation transactions, conservation finance, park design & development	Trust for Public Land	http://www.tpl.org/services/conservation-finance
New York Land Protection Program & Conservation Finance Program	Direct acquisition and conservation easements; grants and short-term, low-cost bridge loans for land transactions in selected landscapes in the eastern United States	OSI	http://www.osiny.org/site/PageServer?pagename=Program_NYLand
Public Health Programs	Provides funding, expertise, information, leadership and/or connections to specific groups of people for projects addressing priority public health challenges	CDC Foundation	http://www.cdcfoundation.org
United States Army Corps of Engineers (USACE) Civil Works Program - Riverine Projects	DEC works with USACE to study coastal erosion problems along NYS coastlines and to develop coastal erosion solutions.	NYSDEC	https://www.dec.ny.gov/chemical/92064.html
Flood Protection Program	DEC works with communities throughout the state to find ways to reduce or protect against loss of life and property damage caused by flooding. DEC has a flood protection program that focuses on structural and nonstructural flood damage reduction methods in coordination with the Army Corp of Engineers	NYSDEC	https://www.dec.ny.gov/chemical/92064.html
Watershed Management Programs	Mohawk River Watershed Program	NYSDEC	https://www.dec.ny.gov/lands/58571.html
Watershed Management Programs	New York/New Jersey Harbor Estuary Program (NYSDEC is not a lead on this)	HRF	http://www.harborestuary.org/
Water Quality Programs	NYSDEC conducts various programs aimed at measuring and reporting on the quality of waters in New York State. These programs involve collecting monitoring data on rivers, streams, lakes, estuaries and coastal waters, evaluating these results, and reporting the water quality information to the public. In addition to the routine monitoring and assessment of New York's waters, NYSDEC also conducts targeted research projects focusing on specific waterbodies, contaminants, pollution sources or water quality trends.	NYSDEC	https://www.dec.ny.gov/chemical/8459.html
Municipal Separate Storm Sewer System (MS4) Program	Small municipal stormwater sewer systems (MS4s) that are located within the boundaries of a Census Bureau defined urbanized area" are regulated under EPA's Phase II Stormwater Rule. This requires MS4s to develop a stormwater management program that will reduce the number of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways.		
MS4 stormwater programs have six elements called minimum control measures (MCM) that when implemented together	are expected to result in a reduction of pollutants discharged into waterbodies."	NYSDEC	https://www.dec.ny.gov/chemical/93615.html
Climate Smart Communities	State Support for Local Climate Action Climate Smart Communities (CSC) is a New York State program that helps local governments take action to reduce greenhouse gas emissions and adapt to a changing climate. Registered communities have	NYSDEC	https://climatesmart.ny.gov/

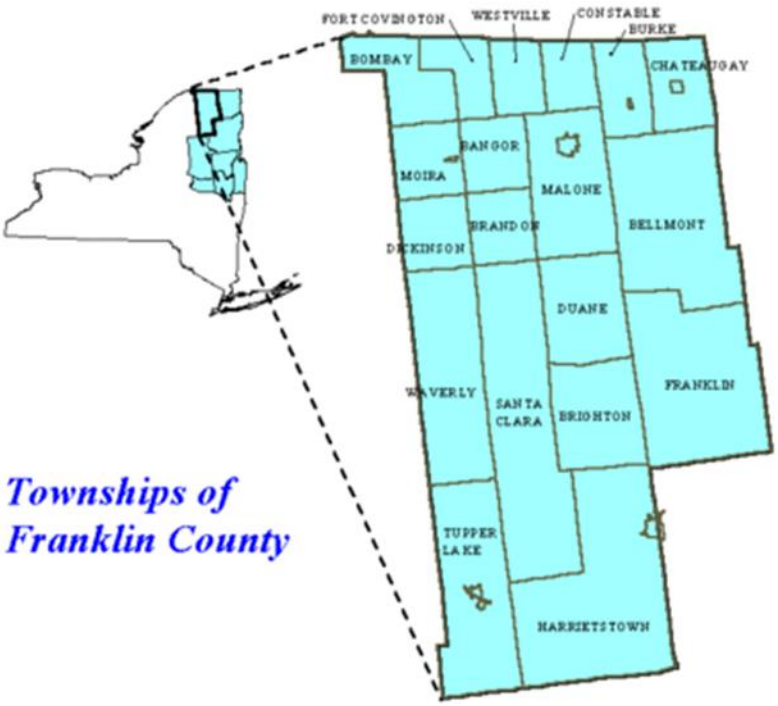
	made a commitment to act by passing the CSC pledge. Certified communities are the foremost leaders in the state; they have gone beyond the CSC pledge by completing and documenting a suite of actions that mitigate and adapt to climate change at the local level. Program includes competitive grants program for which all NYS local governments are eligible.		
DEC Grants	Competitive grants for environmental protection and improvement are available for municipalities, community organizations, not-for-profit organizations, and others.	NYSDEC	https://www.dec.ny.gov/pubs/grants.html
New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG) Program	The New York State Department of Environmental Conservation (DEC), in conjunction with the New York State Environmental Facilities Corporation (EFC), will offer grants to municipalities to help pay for the initial planning of eligible Clean Water State Revolving Fund (CWSRF) water quality projects. Up to $3 million has been made available for this round of the Wastewater Infrastructure Engineering Planning Grant (EPG) program. The goal of the EPG program is to advance water quality projects to construction so successful applicants can use the engineering report funded by the grant to seek financing through the CWSRF program, Water Quality Improvement Project program, or other funding entities to further pursue the identified solution.	NYSDEC	https://www.dec.ny.gov/pubs/81196.html
Emergency Watershed Protection (WP) Program	Aids relieve imminent hazards to life and property caused by floods, fires, drought, windstorms, and other natural occurrences	NRCS	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/ewp/
Statewide Mass Transportation Operating Assistance (STOA)	The New York State Department of Transportation distributes about $3.0 billion annually in Statewide Mass Transportation Operating Assistance (STOA), and other transportation assistance, to approximately 130 transit operators. New York State transit systems carry nearly one-third of the nation's transit riders and provide nearly one-quarter of transit services nationwide. Over the past five years statewide ridership has increased by about 13%; it is estimated that more than 70% of these trips are work related.	NYSDOT	https://www.dot.ny.gov/divisions/policy-and-strategy/public-transportation/funding-sources/STOA https://www.dot.ny.gov
Accelerated Transit Capital Program	Administered by the New York State Department of Transportation (NYSDOT), the Accelerated Transit Capital (ATC) program provides $20 million in State capital funding for upstate public transportation sponsors to rehabilitate, restore and modernize public transit assets. Program sponsors may submit a program of eligible capital projects that, in combination, have a minimum service life of no less than ten (10) years. Eligible projects include Federal Transit Administration (FTA) activities, meeting the minimum service life threshold, including vehicle rehabilitation and/or replacement, fleet enhancement, deployment of new technologies, passenger amenities and maintenance facilities.	NYSDOT	https://www.dot.ny.gov/divisions/policy-and-strategy/public-transportation/funding-sources/accelerated-transit
Transportation Enhancement Program (TEP)	The Transportation Enhancement Program (TEP) is a federal reimbursement program under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), administered by the New York Department of Transportation (NYSDOT). On January 15, 2014, Governor Andrew M. Cuomo announced the award of approximately $67 million in funding for 63 Transportation Enhancement Program (TEP) projects. These funds are made available to New York State through the Federal Highway Administration (FHWA) and are administered by NYSDOT. The funds cover up to 80 percent of the cost of a project, with the remaining 20 percent or more coming from the project sponsor. The funds are dedicated for strategic investments in non-motorized transportation alternatives. With the 20% local match, these projects will support a total investment of $96.5 million.		https://www.dot.ny.gov/programs/tep https://www.fhwa.dot.gov/programadmin/erelief.cfm
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Funding distributed based on each state's share of the population of air quality non-attainment areas weighed by severity of air pollution; with each state guaranteed a one-half percent minimum apportionment; Funding may be used for all projects eligible under FTA programs including operating assistance for up to three years; CMAQ projects can generally be classified in one of the following categories:	NYSDOT	https://www.dot.ny.gov/divisions/policy-and-strategy/public-transportation/funding-sources/cmaq

	Transit Improvements Shared-Ride Services Traffic Flow Improvements (non-SOV construction) Demand Management Strategies Pedestrian and Bicycle Programs Inspection and Maintenance Programs; Requires non-federal share of 20%; State provides 50% of the non-federal share of capital projects (up to 10% of project cost) through the Omnibus and Transit Purposes appropriation in the State Transportation budget.		
Accelerated Transit Capital Program	Administered by the New York State Department of Transportation (NYSDOT), the Accelerated Transit Capital (ATC) program provides $20 million in State capital funding for upstate public transportation sponsors to rehabilitate, restore and modernize public transit assets. Program sponsors may submit a program of eligible capital projects that, in combination, have a minimum service life of no less than ten (10) years. Eligible projects include Federal Transit Administration (FTA) activities, meeting the minimum service life threshold, including vehicle rehabilitation and/or replacement, fleet enhancement, deployment of new technologies, passenger amenities and maintenance facilities.	NYSDOT	https://www.dot.ny.gov/divisions/policy-and-strategy/public-transportation/funding-sources/accelerated-transit
Modernization and Enhancement Program	Administered by the New York State Department of Transportation (NYSDOT), the Public Transportation Modernization and Enhancement Program apportions $61.4 million in State funding to counties, cities, and regional authorities to upgrade and enhance public transportation services. Program sponsors may submit a program of eligible capital projects that in combination, have a minimum service of no less than ten (10) years. Eligible activities include any Federal Transit Administration (FTA) activity, meeting the minimum service life threshold, including vehicle rehabilitation and/or replacement, fleet enhancement, deployment of new technologies and passenger amenities and maintenance facilities.	NYSDOT	https://www.dot.ny.gov/divisions/policy-and-strategy/public-transportation/funding-sources/modernization-enhancement
Emergency Transportation Operations (ETO)	NYSDOT formally adopted an Emergency Transportation Operations (ETO) process in 2006 to provide an overall hazards approach to emergency response that is supported by all Department program areas. ETO is a comprehensive, coordinated, performance-oriented approach among the transportation, public safety, and emergency management communities to prepare for, respond to and recover from natural or man-made events. This helps ensure critical functions of the Department's mission are maintained and has also enhanced the Department's ability to assist with emergencies outside the state-owned transportation system, when called upon by SOEM. The Department's ETO Playbook illustrates the comprehensive, coordinated, performance-oriented approach in preparing for, responding to, and recovering from natural or man-made events. This playbook is for internal Department use only and is not distributed to others outside of the Department. Playbook covers multiple topics including: Organizational structure; Preparedness training and drill; Interagency coordination; Field Operations; Snow and Ice events - including routine, winter events; Flooding, Wind and Ice Storms; Special events; Contracts; Event preparation; Situational awareness including; Roadway Damage and Status Assessment (RSDA); Mission Tracking (NY Responds); Resource Tracking (SEERT); Reporting (Regions, OEM); Public Information and messaging; Highway restrictions; Local assistance; Commercial vehicles; Demobilization; Reimbursement and After action reviews	NYSDOT	
Individual Assistance		IA	https://www.fema.gov/individual-disaster-assistance
Public Assistance		PA	https://www.fema.gov/public-assistance-local-state-tribal-and-non-profit

Social Services Block Grant Program		SSBG	https://www.acf.hhs.gov/ocs/programs/ssbg
U.S, Economic Development Administration		USEDA	https://www.eda.gov/
Empire State Development			https://esd.ny.gov/
New York Silver Jackets	Develop and implement solutions to flood hazards by identifying the appropriate agency resources, funding programs and technical expertise		Newyork.silverjackets@usace.army.mil
Storm Ready	Helps countries and communities take a proactive approach to the kinds of severe weather that affect their area by improving local hazardous weather operations and heightening public awareness. NOAA Nations Weather Service.		https://www.weather.gov
Smart Growth Communities	Small towns and rural communities		https://www.epa.gov/smartgrowth

FRANKLIN COUNTY ANNEX

Details of each jurisdiction in Franklin County and Saint Regis Mohawk Reservation/Akwesasne are found in the following Annex to the Plan. A brief description of the jurisdiction, maps demonstrating hazards/vulnerability, land management plans available, notable "jurisdiction specific" natural hazards, and specific mitigation actions each jurisdiction desires to undertake in the future are included. The 2020 update information was gathered over a period of months, emails, conversations, and virtual meeting sessions with municipal personnel, provided critical data during the COVID 19 Pandemic. For safety reasons all town/village offices were essentially closed from March 2020 until March of 2021 with only business considered essential completed. This coupled with as Mitigate NY aptly observed "Towns and villages have limited staff, with as few as one or two persons serving on a part-time basis and covering all administrative and service needs. This makes it difficult for the planning committee to secure input to jurisdictional annexes, particularly the identification of the two mitigation action items required from a community for it to be covered by the plan." (Mitigate NY)



Mitigation projects were evaluated based on the necessity, costs, timeframe for implementation and ease of implementation. The jurisdictions followed closely the instructions and samples provided by DHSES for completion of their individual Mitigation Action Plans. Mitigation actions have the support of each jurisdiction as demonstrated by the approval of the Plan by the jurisdiction as well as by the Franklin County Board of Legislators. All municipal activities will take place under the direction of the executive, i.e., town supervisor, mayor, tribal council.

Franklin County

Action Worksheet			
Project Name:	Clean Energy Communities		
Project Number:	Franklin County #3		
Risk / Vulnerability			
Hazard of Concern:	Climate Change		
Description of the Problem:	Clean energy is a critical part of reducing climate issues in Franklin County.		
Description of the Solution:	Franklin County will hold informational meetings for residents and jurisdictional leaders featuring Franklin County jurisdictions that are already Clean Energy Communites to encourage more participation.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 years	**Estimated Benefits (losses avoided):**	Residents/jurisdictions will be informed of benefits of becoming a Clean Energy Community and may work toward that goal.
Useful Life:	20 years		
Estimated Cost:	low		
Plan for Implementation			
Prioritization:	Medium	**Desired Timeframe for Implementation:**	2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	County budget
Responsible Organization:	Franklin County	**Local Planning Mechanisms to be Used in Implementation, if any:**	Village of Tupper Lake, Village of Saranac Lake, Town of Malone, Town of Franklin, NYSERDA
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	People remain uninformed of advantages of Clean Energy
	Hold meetings individually with each jurisdiction	$500	Time consuming for all involved, ineffective
	Pass county legislation requiring Clean Energy communities	$500	Jurisdictions will balk, no longer spreading information now an unattainable mandate.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Franklin County

Action Worksheet			
Project Name:	Climate Smart Communities		
Project Number:	Franklin County #2		
Risk / Vulnerability			
Hazard of Concern:	Climate Change		
Description of the Problem:	Climate change is a critical concern for the region. Knowledge and suggested actions to mitigate climate concerns is needed.		
Description of the Solution:	Franklin County will hold informational meetings for residents and jurisdictional leaders featuring Franklin County jurisdictions that are already Climate Smart Communites to encourage more participation.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 years	**Estimated Benefits (losses avoided):**	Residents/jurisdictions will be informed of benefits of becoming a Climate Smart Community and may work toward that goal.
Useful Life:	20 years		
Estimated Cost:	low		
Plan for Implementation			
Prioritization:	Medium	**Desired Timeframe for Implementation:**	2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	County budget
Responsible Organization:	Franklin County	**Local Planning Mechanisms to be Used in Implementation, if any:**	Village of Tupper Lake, Village of Saranac Lake
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	People remain uninformed of advantages of becoming a Climate Smart Community
	Hold meetings individually with each jurisdiction	$500	Time consuming for all involved, ineffective
	Pass county legislation requiring Climate Smart Communities	$500	Jurisdictions will balk, no longer spreading information now an unattainable mandate.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Franklin County

Action Worksheet			
Project Name:	Climate Smart Communities		
Project Number:	Franklin County #1		
Risk / Vulnerability			
Hazard of Concern:	Climate Change		
Description of the Problem:	Climate change is a critical concern for the region. Knowledge and suggested actions to mitigate climate concerns is needed.		
Description of the Solution:	Franklin County will hold informational meetings for residents and jurisdictional leaders featuring Franklin County jurisdictions that are already Climate Smart Communites to encourage more participation.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 years	**Estimated Benefits (losses avoided):**	Residents/jurisdictions will be informed of benefits of becoming a Climate Smart Community and may work toward that goal.
Useful Life:	20 years		
Estimated Cost:	low		
Plan for Implementation			
Prioritization:	Medium	**Desired Timeframe for Implementation:**	2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	County budget
Responsible Organization:	Franklin County	**Local Planning Mechanisms to be Used in Implementation, if any:**	Village of Tupper Lake, Village of Saranac Lake
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	People remain uninformed of advantages of becoming a Climate Smart Community
	Hold meetings individually with each jurisdiction	$500	Time consuming for all involved, ineffective
	Pass county legislation requiring Climate Smart Communities	$500	Jurisdictions will balk, no longer spreading information now an unattainable mandate.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

JURISDICTIONAL ANNEX (ALPHABETICAL)



TOWN OF BANGOR

Located in the northwest region of Franklin County, the Town of Bangor is bordered by the towns of Fort Covington and Westville on the north, Malone on the east, the Town of Brandon is the southern border with the Town of Moira as a western border.

Town/Village	Town of Bangor
Land Area	43.12 square miles (27,596.8 acres)
Hamlets	Bangor, Cooks Corners, North Bangor, West Bangor
Population (ACS 2018)	2,241
Population Density	51.58 people/square mile
Governance	Town Supervisor and Board
Total Assessed Value	93,619,217
Elevation	571 feet
Bridges	12
Interstate Highway	11
State Routes	11B
Fire & Rescue	Bangor Volunteer Fire Department
Schools	Brushton-Moira School District, Malone School District, Salmon River School District
Law Enforcement	Franklin County Sheriff, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$23,281
Unemployment	8.4%
% Below Poverty	18.20%

Watershed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Bangor; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Town officials consider severe winter storms a high hazard risk for residents. Ice storms present another significant hazard. Snow melt from winter storms contributes to the moderate risk of flood and flash flood hazards.

The Town of Bangor elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. NYS building codes are followed, however at present the town does not have a Zoning Plan or a Comprehensive Plan.

Critical facilities with assessed values are below.

Town Hall	2438 US Rte. 11 North Bangor, NY	$189,873
Town Garage	2548 US Rte. 11B North Bangor, NY	$126,582
Fire Dept	2265 Rte. 11 North Bangor, NY	$559,494

Future development includes Solar Farms locating within the town.

According to the Community Status Book, the Town of Bangor participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator in the Town of Bangor is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas. In Mitigate NY, NFIP 2019 data indicates since the 2015 plan, 1 loss and 1 Closed Without Payment (CWOP)
Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Bangor has no repetitive loss properties.

The chart below represents parcels located in the Town of Bangor substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
BANGOR	**10**	**$516,700**
Residential	9	$516,700
Agricultural	1	$0

The chart below indicates a property damage event specific to the Town of Bangor occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
5/1/2017	Thunderstorm/Wind	10K	N/A

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). One mitigation action the town has identified is the purchase and installation of a generator for the Community Center to serve as an emergency shelter in any hazardous situation. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Bangor major roadways are US Route 11 and State Route 11B.

The Town of Bangor approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices.

Specific Mitigation Actions: Following pages

Town of Bangor

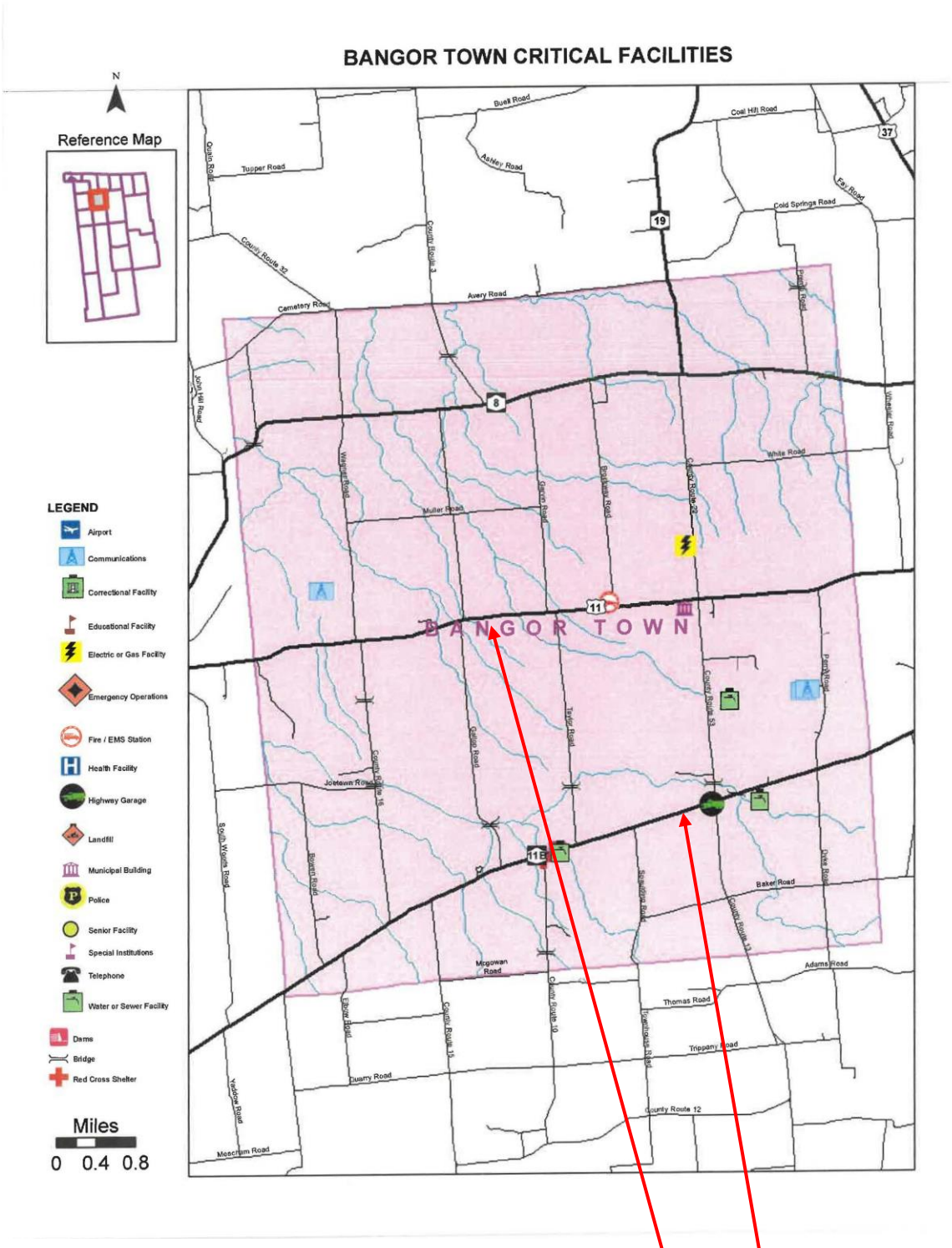
Action Worksheet			
Project Name:	Emergency Generator		
Project Number:	Town of Bangor #1		
Risk / Vulnerability			
Hazard of Concern:	Multi-Hazards		
Description of the Problem:	The Town does not have back-up power in the Bangor Community Center. The Center would not be able to function as a temporary shelter for residents in time of a severe, lengthy power outage.		
Description of the Solution:	The Town will purchase and install one 30KW standby generator, for use in the Bangor Community Center. Creates a temporary shelter for residents.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 Years	**Estimated Benefits (losses avoided):**	Residents will remain safe, secure, and healthy in case of a disaster.
Useful Life:	20 Years		
Estimated Cost:	$18,200		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021
Estimated Time Required for Project Implementation:	6 Months	**Potential Funding Sources:**	Town Funds
Responsible Organization:	Town of Bangor	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	No power in Community Center. Town does not have accessible temporary shelter for residents.
	Purchase power packs for use	Medium	Life of "power pack" is limited. Ineffective.
	Solar panel installed to power center in time of need	High	Impractical. Expensive.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

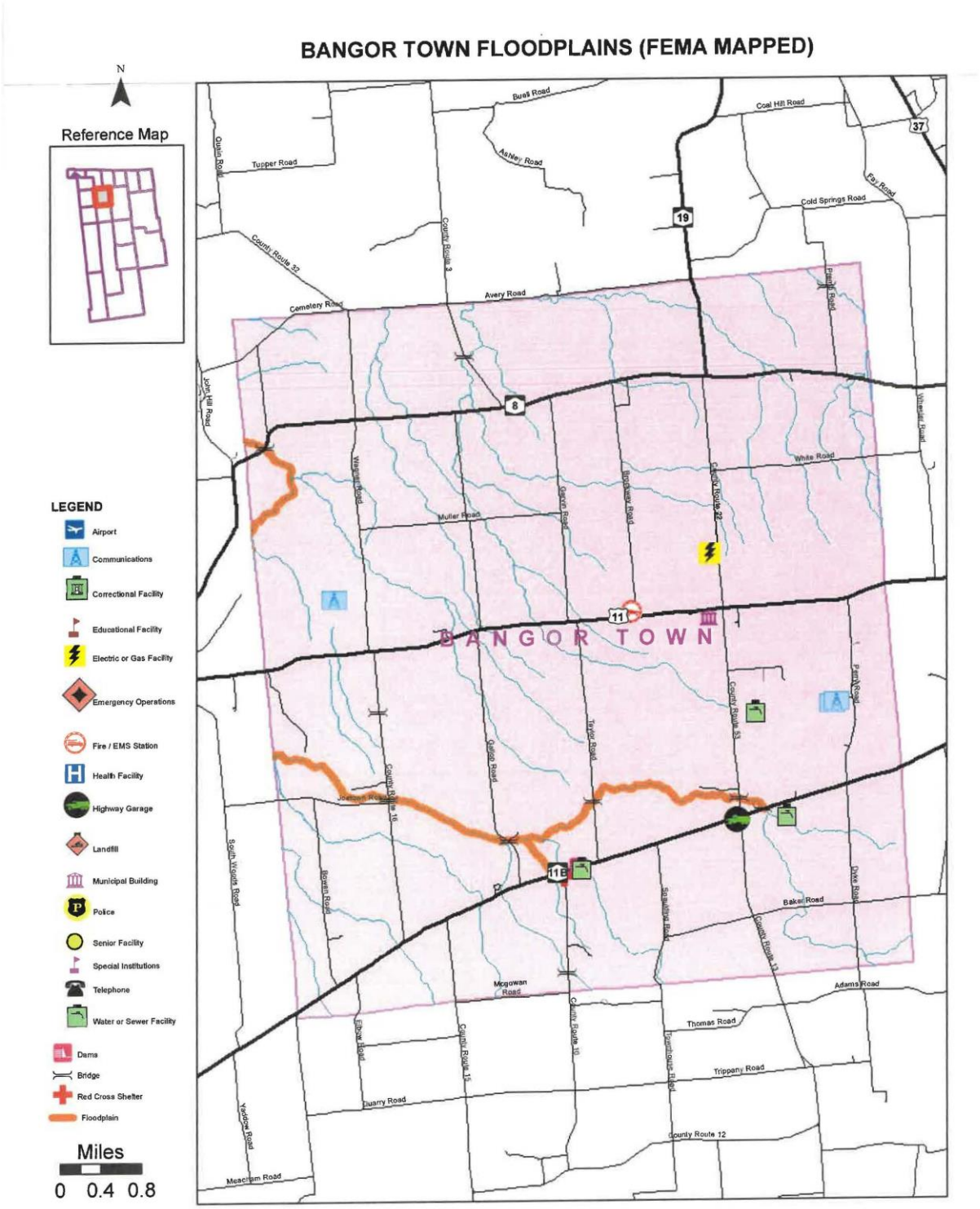
Town of Bangor

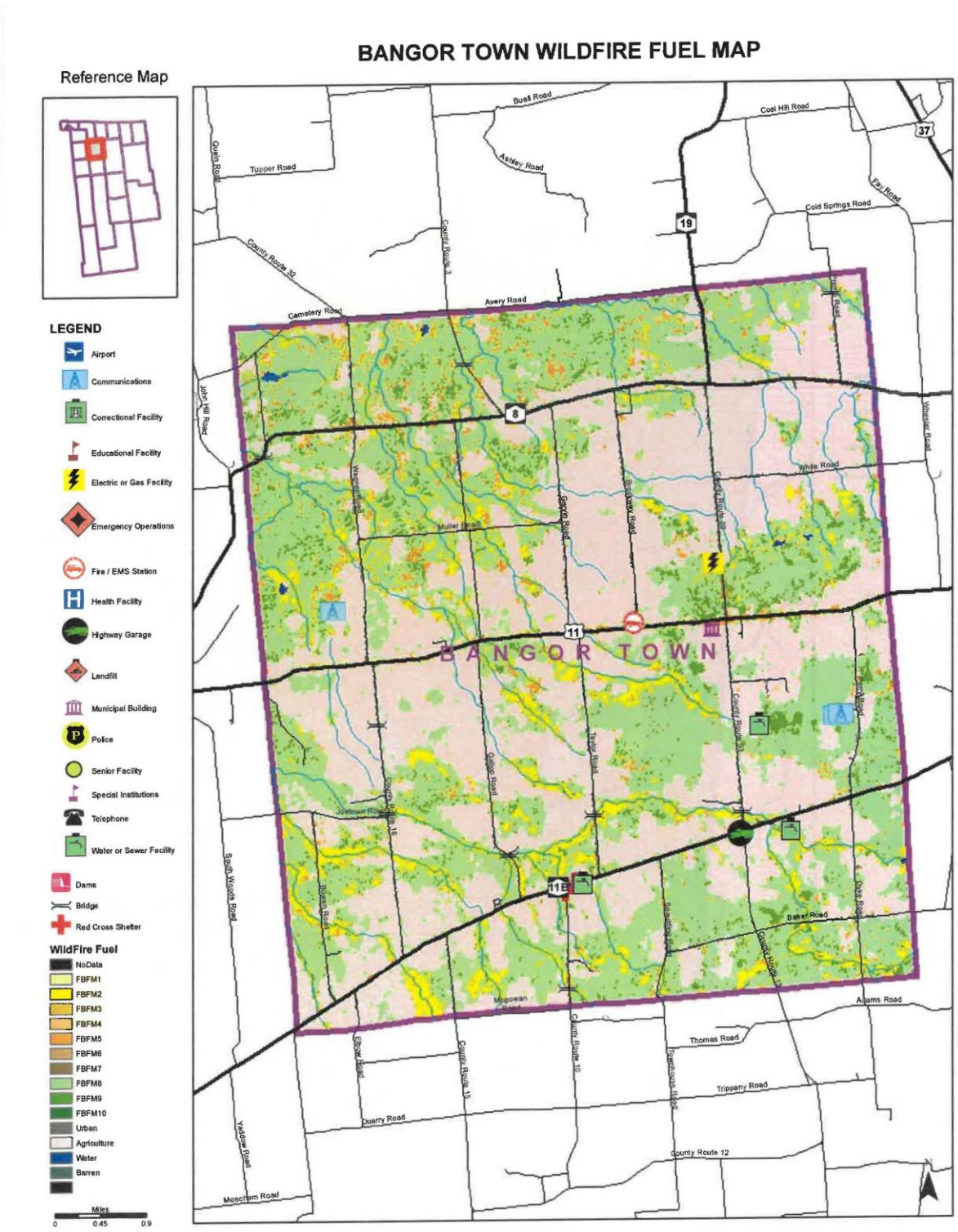
Action Worksheet			
Project Name:	Crowley Road Elevation		
Project Number:	Town of Bangor #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Crowley Road consistently washes out with severe flooding and ice/snow melt in the area of the Little Salmon River.		
Description of the Solution:	The Town proposes to elevate the area of the road 12-18 inches, install proper tiles and ditch the road, as well as stabilizing the river bank with similar materials/natural vegetation. DEC recommendations will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Crowley Road will remain passable for residents and emergency vehicles.
Useful Life:	20 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Town, County, HMPG Funding
Responsible Organization:	Town of Bangor	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC /Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Crowley Road will continue to washout leaving residents and emergency vehicles at risk.
	Apply to BridgeNY for funding to put a new bridge in this location	High	Costly for Town to even apply, applications rarely funded in Franklin County.
	Install new larger culvert	High	Costly and will not effectively end the problem.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

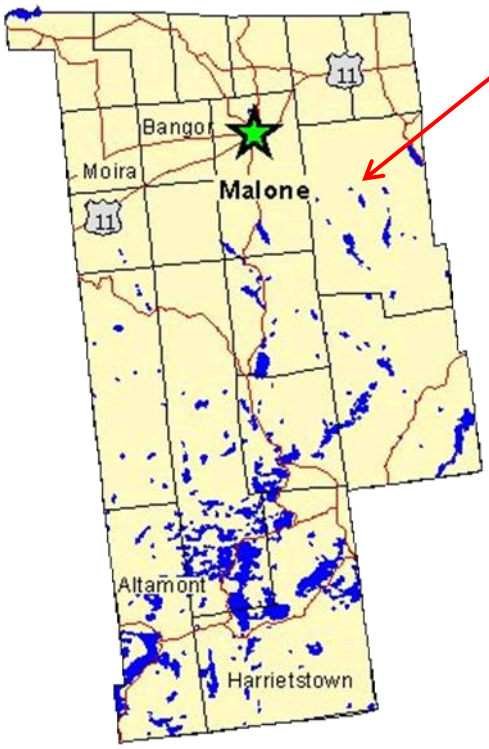
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Evacuation Routes – State Route 11 and 11B


BANGOR TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.4 0.8
BANGOR TOWN
Buell Road
Coal Hill Road
Tupper Road
AsNeir Road
Cold Springs Road
Fay Road
County Route 32
Cemetery Road
Avery Road
John Hill Road
White Road
Muller Road
Gorge Road
Broadway Road
Taylor Road
Gallop Road
Powers Road
South Woods Road
Elbow Road
Quarry Road
Yaddow Road
Meacham Road
Mcgowan Road
Baker Road
Adams Road
Thomas Road
Trippany Road
County Route 12
Dunsmore Road
Sweetwine Road
Dyke Road
Perry Road
Wheeler Road
Warren Road
19
37
8
11
11B


BANGOR TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.45
0.9
BANGOR TOWN
Buell Road
Coal Hill Road
Tupper Road
Ashley Road
Cold Springs Road
Fay Road
County Route 32
Avery Road
Cemetery Road
White Road
Muller Road
Taylor Road
Gallop Road
Baker Road
Adams Road
Thomas Road
Trippany Road
Quarry Road
County Route 12
Meacham Road
Yaldow Road
South Moiuts Road
Elbow Road
Duane Road
Dale Road
John Hill Road
Winslow Road
37
19
8
11
11E



Town of Bellmont

Located in the eastern edge of Franklin County, the Town of Bellmont is bordered by the towns of Burke and Chateaugay on the north, Malone on the west; the Town of Franklin is the southern border with the Town of Ellenburg in Clinton County as an eastern border. Most of the Town of Bellmont is located within the Adirondack Park.

Town/Village	Town of Bellmont
Land Area	167.1 square miles (106,944 acres) - 3.0 square miles (1,920 acres) water
Hamlets	Bellmont Center, Brainardsville, Bryants Mill, Mountain View, Owls Head,
Population (ACS 2018)	1,434
Population Density	8.58 people per square mile
Governance	Supervisor and Town Board
Total Assessed Value	220,363,368
Elevation	1,657 feet
Largest Lakes	Mountain View Lake & Indian Lake
Rivers	East Branch Trout River, West Branch Trout River, Chateaugay River
Dams	Forge Dam & Mountain View Lake Dam
Bridges	12
State Routes	190, 374
Fire & Rescue	Owls Head-Mountain View Fire Dept., Chateaugay-Brainardsville Fire Dept.,
Schools	Northern Adirondack Central School District, Chateaugay Central School District, Malone Central School District
Law Enforcement	Franklin County Sheriff's Department & NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$28,154
Unemployment	8.6%
% Below Poverty	3.30%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Town officials consider severe winter storms a high hazard risk for residents. Snow melt from winter storms contributes to the moderate risk of flood and flash flood hazards. High wind is also considered a moderate risk for the Town of Bellmont.

The Town of Bellmont elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Fire and Building Code Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The southern portion of the town is within the Adirondack Park and follows Park guidelines. The Town of Bellmont has a Zoning Plan in place.

Critical Facilities with assessed values.

Brainardsville Water District	Reynolds Rd. Brainardsville, NY	$250,000
Brainardsville Sewer District	9 Hill Rd. Brainardsville, NY	$500,000
Forge Dam/Control House	Daris Rd. Chateaugay, NY	$1,000,000
Town Offices/Court	9 Hill Rd. Brainardsville, NY	$400,000
Town Garage/Bellmont Center	1368 County Rte. 24 Malone, NY	$500,000
Town Garage/Owls Head	25 Brown Benoit Rd. Owls Head, NY	$250,000
Mt. View Dam/Mt. View	Mt. View Lake Mt. View, NY	$3,000,000

Future Development

The Towns of Bellmont, Burke and Chateaugay have formed an Ambulance District to better serve residents and are researching funding options for a central building and for a full-time driver and equipment.

A Solar Energy company is interested in locating within the town.

NFIP

According to the Community Status Book, the Town of Bellmont participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator in the Town of Bellmont is the Fire and Building Code Enforcement Officer. The town continues to regulate development, including within floodplain areas. NFIP data (2019) indicates 2 losses, 1 closed and 1 CWOP in the amount of $2,945.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Bellmont has no repetitive loss properties.

The chart below represents parcels located in the Town of Bellmont substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
BELLMONT	**172**	**$14,009,200**
Commercial	2	$253,100
Community Services	1	$46,600
Public Services	1	$0
Residential	155	$13,691,800
Vacant	13	$17,700

Past Events

No property damage events specific to the Town of Bellmont have occurred since the 2015 plan. However countywide events must be considered.

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Bellmont utilizes the Fire Department in town and the 4H Club building on Indian Lake as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Bellmont major roadways are State Route 374 and County Routes 27 and 24.

The Town of Bellmont approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. Located within the Adirondack Park, land use in the town of Bellmont is determined by Park regulations. The town will continue to incorporate their mitigation activities into land use plans in accordance with Adirondack Park Agency regulations. The Town of Bellmont will post the Franklin County Hazard Mitigation Plan 2020 on their website www.townofbellmontny.org.

Specific Mitigation Actions: Following pages

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Bellmont

Project Name:	Wolf Pond Rd. Culvert		
Project Number:	Town of Bellmont #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Wolf Pond Road is a heavily traveled seasonal road and portions of the road often are severely flooded. Culverts are in need of replacement including beaver barriers.		
Description of the Solution:	The Town intends to install large open bottom box culverts and to add beaver gates to prevent beavers from building. These will be removable for cleaning. DEC recommendations will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Wolf Pond Road will remain accessible for residents and tourists.
Useful Life:	40 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	Medium	**Desired Timeframe for Implementation:**	2022-2023
Estimated Time Required for Project Implementation:	10 months	**Potential Funding Sources:**	Town, County, HMPG
Responsible Organization:	Town of Bellmont	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC, NYSDOT
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Washouts will continue and road wil be impassable for residents and emergency vehicles.
	Elevate the road in all the lower elevation areas	High	Too costly, however it would solve the problem.
	Detention ponds	High	Town does not own land to create detention ponds.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

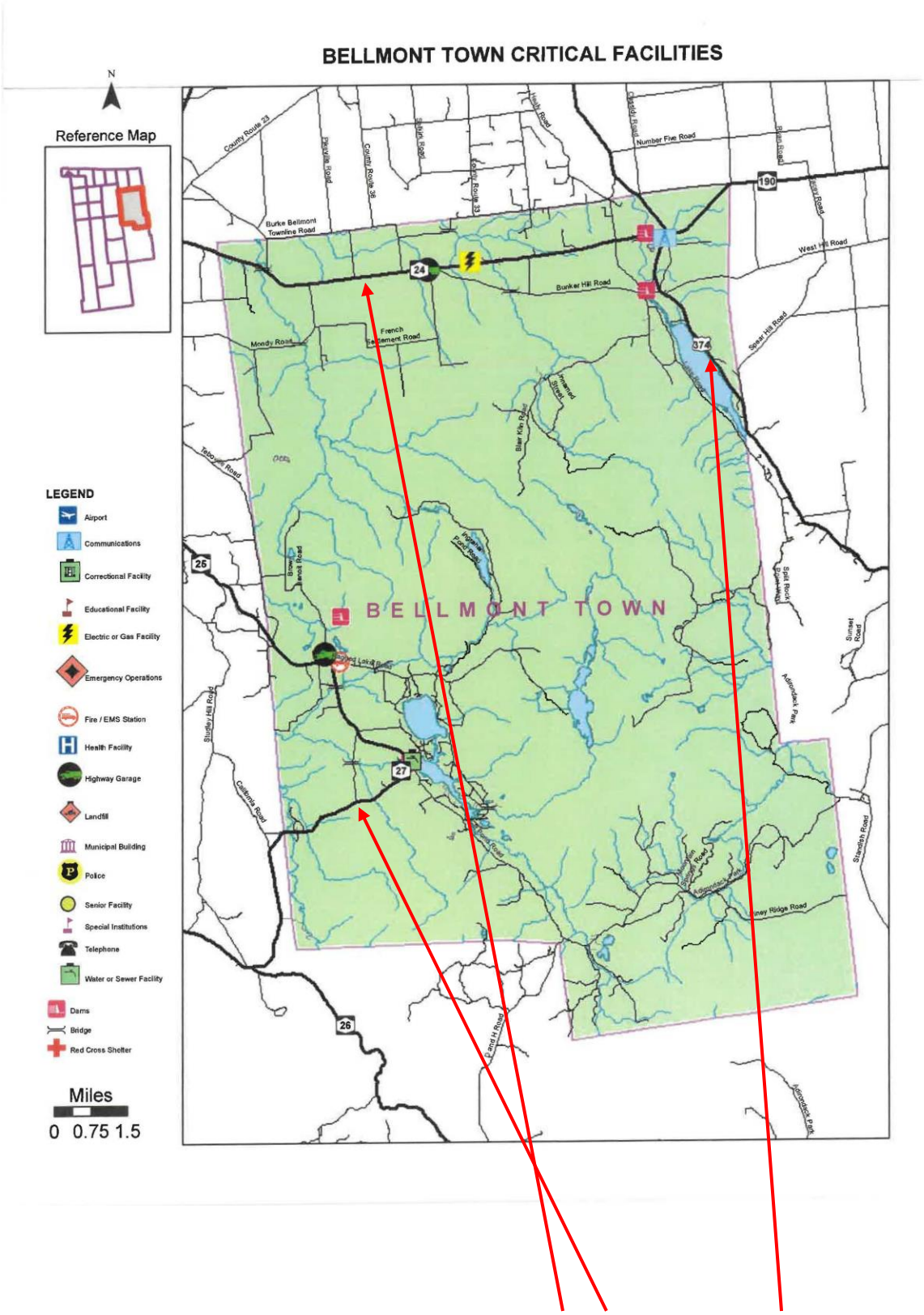
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Franklin County Multi-Jurisdictional Hazard Mitigation Plan

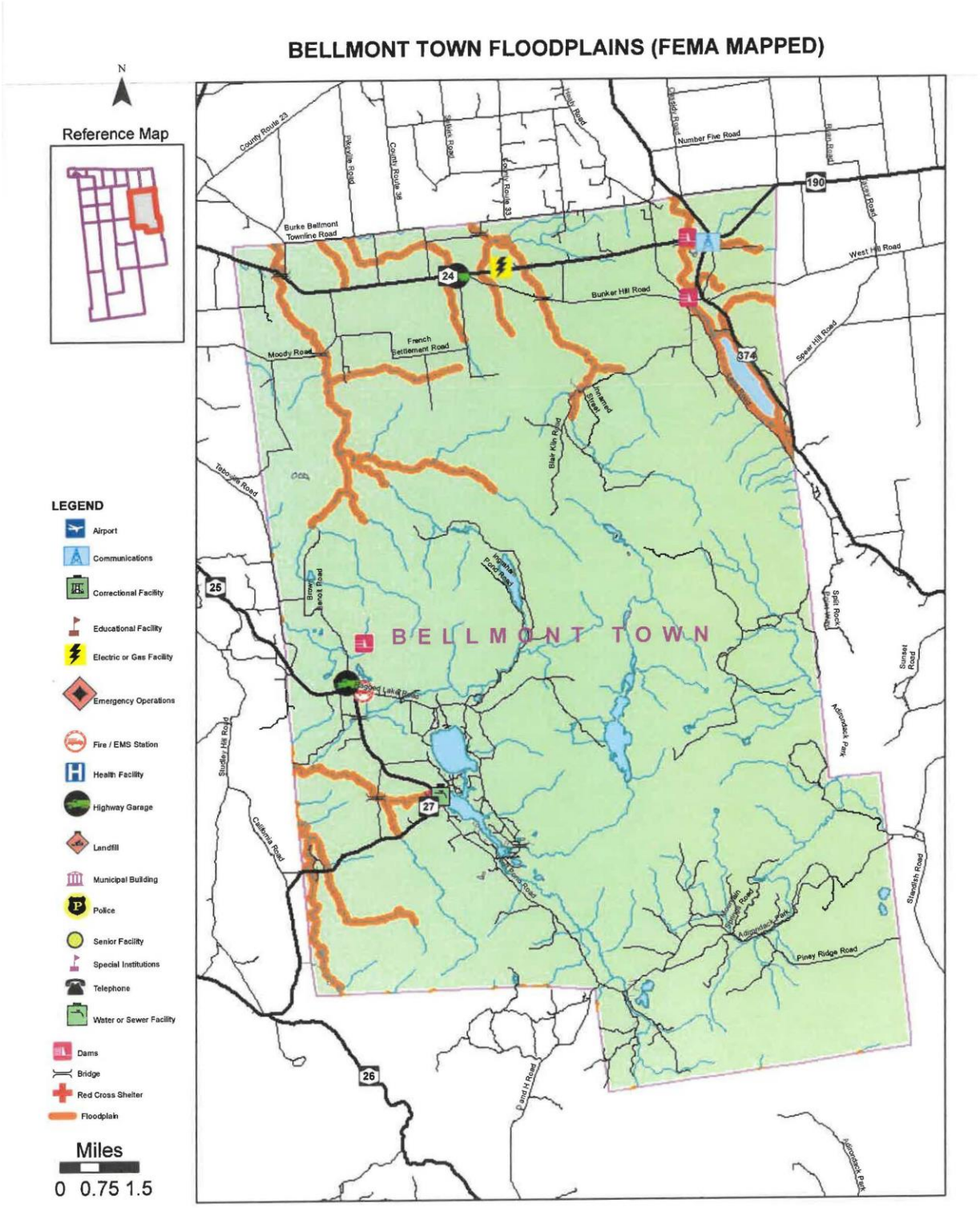
Town of Bellmont

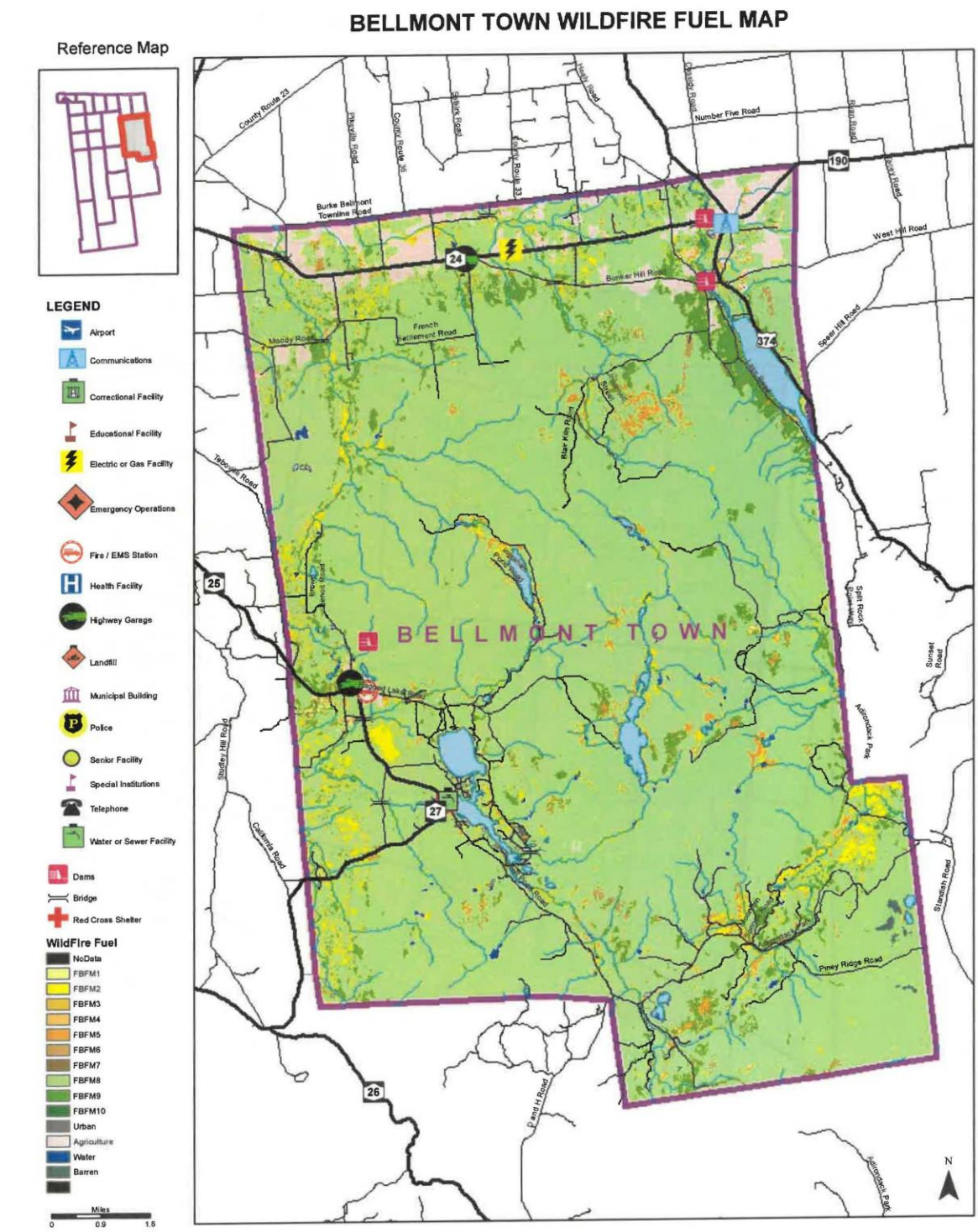
Project Name:	Emergency Notification		
Project Number:	Town of Bellmont #2		
Risk / Vulnerability			
Hazard of Concern:	Multi Hazard		
Description of the Problem:	The Town of Bellmont residents should be alerted to the supplies they need on hand in an emergency weather events and/or power outages. This includes notifications for seasonal residents and tourists to the area.		
Description of the Solution:	The Town will prepare a list of emergency information including contacts, shelter locations, provisions/supplies and warnning signs for various hazarous situations. Updated regularly. Available on the website and mailed to residents.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents will be aware of warnings, emergency supplies needed, shelter and contact information.
Useful Life:	5 years		
Estimated Cost:	Low		
Plan for Implementation			
Prioritization:	Medium	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Town
Responsible Organization:	Town of Bellmont	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Locals and tourists may be unpreapred in an emergency situation.
	Listing information only on website	Low	Internet connection is spotty in the town and many won't receive the information.
	Providing information at the town hall.	Low	People may not be able to travel to the town hall, unable to access the information.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

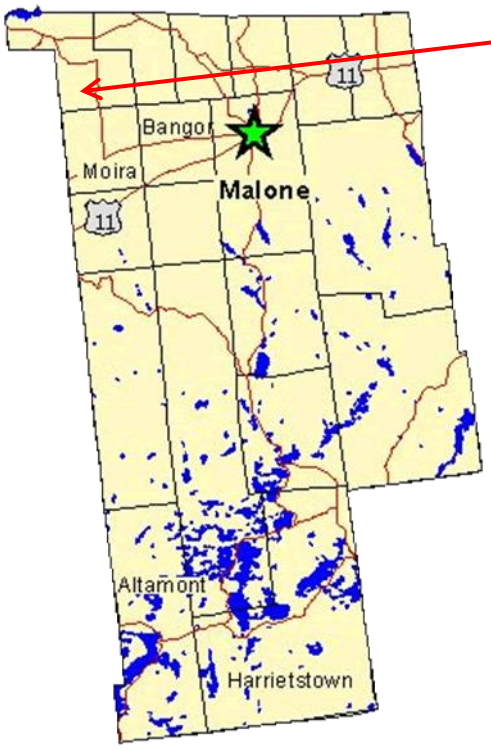
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Evacuation Routes – County Route 24, 27, State Route 374


BELLMONT TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
BELLMONT TOWN
Burke Bellmont Townline Road
Bunker Hill Road
West Hill Road
Number Five Road
Moody Road
French Settlement Road
Spear Hill Road
Blair Kiln Road
Tobogan Road
Brow Benoit Road
Studley Hill Road
California Road
Sunset Road
Sheridan Road
Piney Ridge Road
Adirondack Park
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.75 1.5


BELLMONT TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.9
1.8
BELLMONT TOWN
County Route 23
Burke Belmont Townline Road
County Route 33
Number Five Road
West Hill Road
Bunker Hill Road
French Settlement Road
Moody Road
Spear Hill Road
Tabor Hill Road
Sunset Road
Adirondack Park
Studley Hill Road
California Road
Piney Ridge Road
Standish Road
Paul H Road
24
25
26
27
190
374
N



Town of Bombay

Located on the western border of Franklin County, the Town of Bombay is bordered by the towns of Fort Covington on the north and east, with the Saint Regis Mohawk Reservation also on the north. Moira forms the southern border with the Town of Brasher Falls in St. Lawrence County as a western border.

Town/Village	Town of Bombay
Land Area	35.9 square miles (22,976 acres) - 35.8 square miles (22,912 acres) land & 0.12 square miles (76.8 acres) water
Hamlets	Bombay, Hogansburg, South Bombay
Population (ACS 2018)	1,295
Population Density	37.8 people per square mile
Governance	Supervisor and Town Board
Total Assessed Value	141,418,856
Elevation	207 feet
Rivers	Little Salmon River
Bridges	8
Interstate Highway	11
State Routes	95, 37, 37C
Fire & Rescue	Bombay Fire Dept.
Schools	Salmon River Central School & St. Lawrence Central School
Railroads	1
Law Enforcement	Franklin County Sheriff's Department & NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private wells
Population Median Income	$25,036
Unemployment	10.5%
% Below Poverty	20.9%

Water Shed Data
A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Town officials consider severe winter storms a high hazard risk for residents. Snow melt from winter storms contributes to a high risk of flood and flash flood hazards as well.

The Town of Bombay elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The town does not have a Zoning Plan in place.

Critical Facilities with assessed values.

Town Hall/Offices	379 Lantry Rd. Bombay, NY	$600,000
Park Pavillion	25 Ball Park Rd. Bombay, NY	$300,000
Community Building/Food Pantry, Shelter	24 County Rte. 4 Bombay, NY	$400,000
Town Highway Garage	50 County Rte. 4 Bombay, NY	$600,000
Bombay Fire Department	State Rte. 95 Bombay, NY	$250,000

Future Development
The town does not anticipate any development in the near future.

NFIP

According to the Community Status Book, the Town of Bombay participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator in the Town of Bombay is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas. NFIP data 2019 indicates four losses totaling $24,000.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Bombay has no repetitive loss properties.

The chart below represents parcels located in the Town of Bombay substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
BOMBAY	**11**	**445,548**
Agricultural	3	$71,241
Residential	7	$372,665
Vacant	1	$1,642

Past Events

The chart below indicates property damage events specific to the Town of Dickinson occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
5/1/2017	Thunderstorm/Winds	5K	Trees and Power Lines Down
7/7/2017	Flash Flood	5K	Flooding Closed Rte. 8

In case of a natural hazard emergency a list of Emergency Shelters for the town is located in Appendix D (also found in the Franklin County CEMP). The Town of Bombay utilizes the Community Building as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Bombay major roadways are State Route 95 and County Route 4.

The Town of Bombay approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. Bombay will post the Franklin County Hazard Mitigation Plan 2020 on their website www.bombayny.us.

Specific Mitigation Actions: Following pages

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Bombay

Project Name:	Rec Park/Ball Fields		
Project Number:	Town of Bombay#1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	The Town of Bombay Rec Park.Pavillion is located off Route 95 near the Little Salmon River. Each spring the river floods and erodes the property moving closer and closer to damaging/destroying the Pavillion. The Pavillion/Park serves the public and is the location for many town gatherings.		
Description of the Solution:	The Town intends to create a 30 foot natural buffer along the river using natural local vegetation, Buffer in a Bag(DEC) and Trees for Tribs(DEC)		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	A facility that is critical for the town and provides for town gatherings/events willl avoid destruction from erosion.
Useful Life:	30 years		
Estimated Cost:	Low		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Town, DEC grants,
Responsible Organization:	Town of Bombay	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC will be consulted
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Over time the pavillion wil be lost or need major repairs.
	Building a concrete wall	High	Too expensive and will eventually be compromised.
	Anchor logs along streambank.	Medium	Not practical and property will continue to erode around the logs.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Bombay

Project Name:	Salt Storage Enclosed Shed		
Project Number:	Town of Bombay#2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	The Town of Bombay stores salt for winter roads at a site near the Little Salmon River and near residents homes. The residents depend on wells for their water and there is concern the salt is leaching into the ground water and may contaminate the wells and the river.		
Description of the Solution:	Being proactive, the town would like to build an enclosed storage shed on their property on Lantry Road (53 acres) away from homes and the river. DEC regulations would be followed and Franklin County Soil and Water Conservation would be involved.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents in the area will not worry about well contamination, the river will remain clear. The town is being proactive.
Useful Life:	40 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Town, DEC grants, FC Soil and Water Conservation
Responsible Organization:	Town of Bombay	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC will be consulted
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Residential well water may be contaminated, as well as the river.
	Cover the present location and put on a foundation	High	Costly, still have potential for contamination.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Bombay

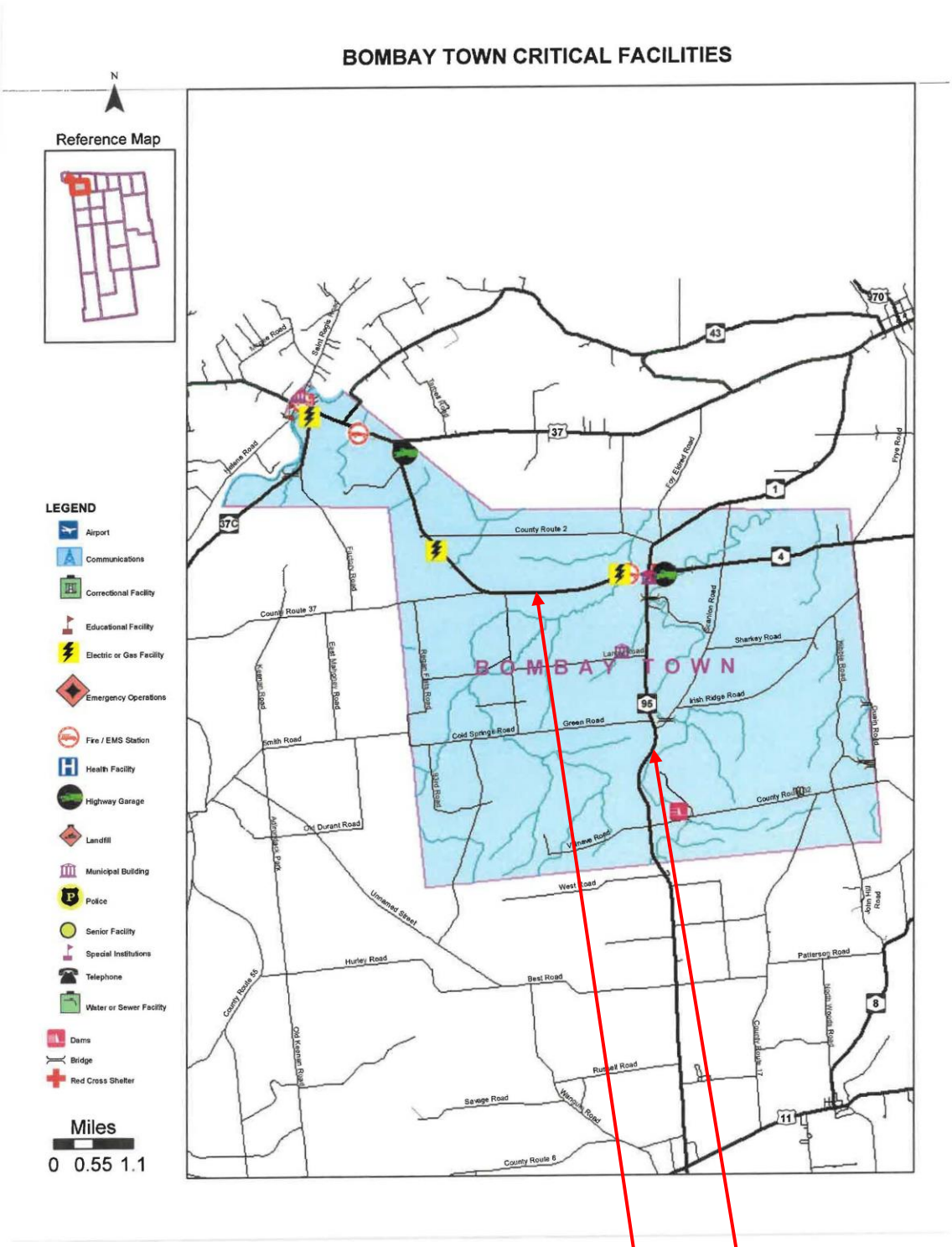
Project Name:	Cotter Road Repair		
Project Number:	Town of Bombay#3		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Cotter Road is a dirt road and since a family lives on the road now year-round parts of the road need to be elevates, ditched and new culverts since the road washes out due to Pike's Creek every spring, often remaining closed for over a week.		
Description of the Solution:	Bombay intends to widen the ditching along Cotter Road and elevate the road where necessary. Replacement culverts will be large open box culverts to allow the creek to flow smoothly.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents and emergency vehicles will travel freely on the road regardless of the time of year and conditions.
Useful Life:	40 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2023
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Town, County, HMPG
Responsible Organization:	Town of Bombay	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC and the Army Corps of engineers will be consulted

Three Alternatives Considered (including No Action)

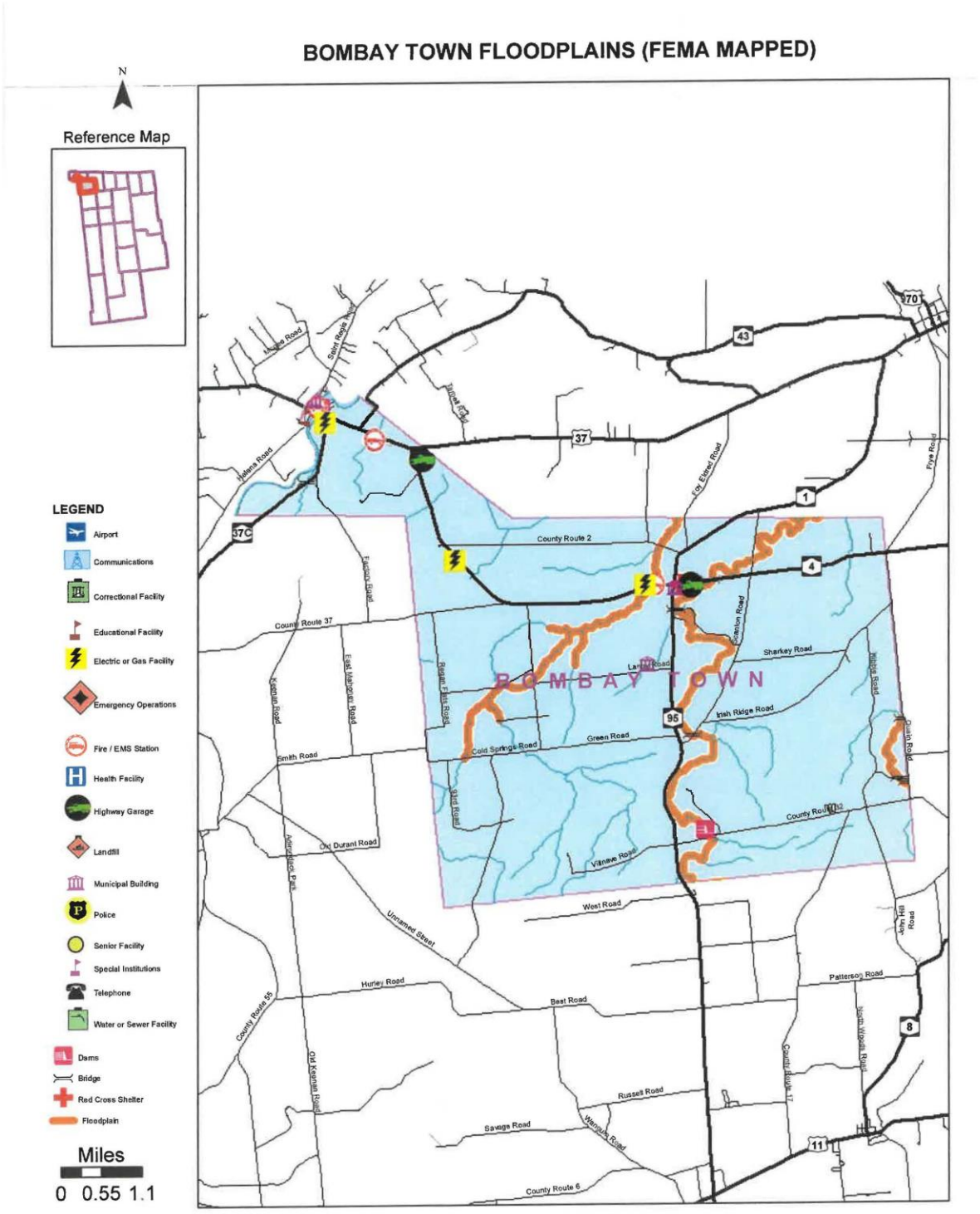
	Action	Estimated Cost	Evaluation
Alternatives:	No Action	$0	Cotter Road will be closed due to flooding with residents and emergency vehicles unable to pass.
	Elevate road, depending on Army Corps	High	Costly to the town and only step one.
	Deepen, widen ditches	Low	This will help, however the problem will still exist.

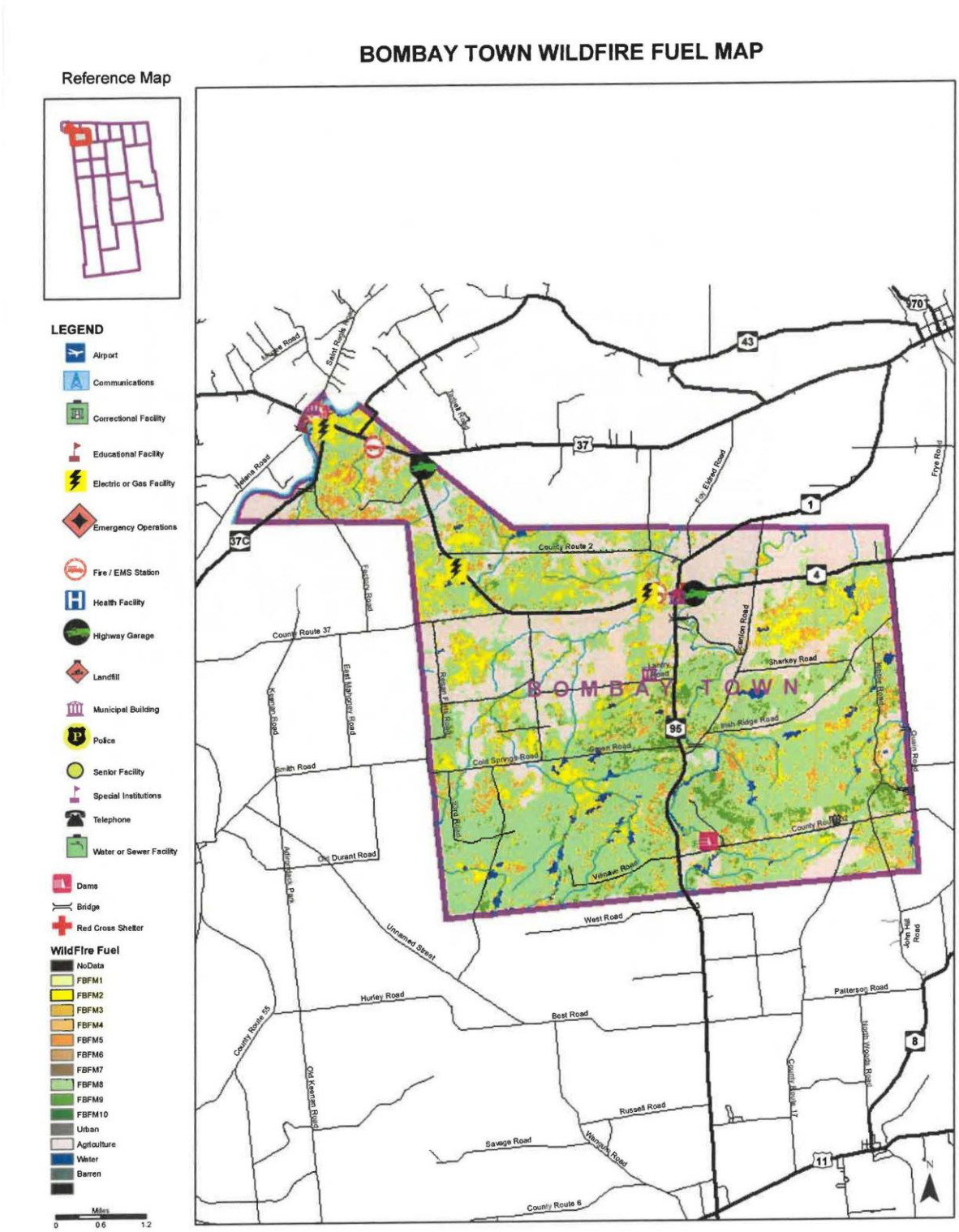
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

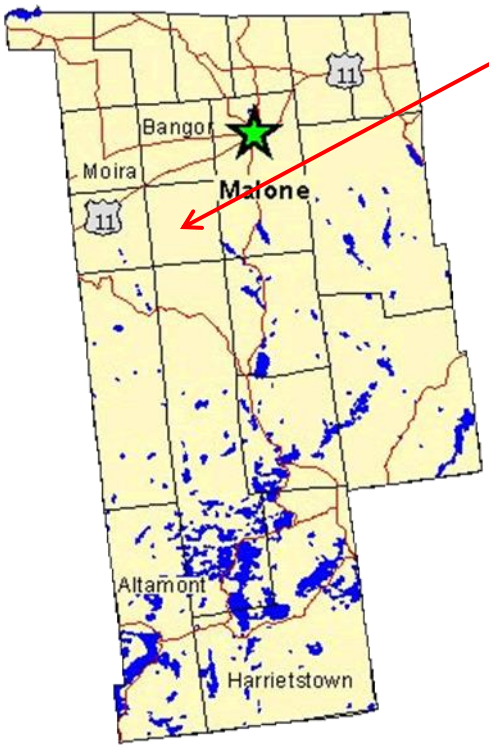
[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.



Evacuation Routes – County Route 4, State 95


BOMBAY TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.55 1.1
BOMBAY TOWN
County Route 2
County Route 37
Sharkey Road
Irish Ridge Road
Green Road
Cold Springs Road
Smith Road
Old Durant Road
West Road
Hurley Road
Best Road
Russel Road
Savage Road
County Route 6
Patterson Road
Fire Road
Factory Road
East Main Street Road
Ridge Road
Duane Road
John Hill Road
Old Kennet Road
Unnamed Street
Village Road
Cold Springs Road
Cox Ellsted Road
Kenton Road
Ridge Road
Duane Road
Smith Woods Road
County Route 55
County Route 17
37
37C
43
1
4
95
11
8
370


BOMBAY TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.6
1.2
BOMBAY TOWN
County Route 2
County Route 37
Sharkey Road
Cornish Ridge Road
Cold Springs Road
Green Road
Smith Road
Old Durant Road
Villeneuve Road
West Road
Unnamed Street
Hurley Road
Best Road
Russell Road
Savage Road
Patterson Road
County Route 6
37
37C
43
970
1
4
95
8
11



Town of Brandon

Located in central Franklin County, the Town of Brandon is bordered by the towns of Fort Covington and Westville on the north. Moira forms the western border with the Town of Malone as the eastern border. The town of Santa Clara is the southern edge of Brandon.

Town/Village	Town of Brandon
Land Area	41.32 square miles (26,444.8 acres) - 41.26 square miles (26,406.4 acres) land & 0.066 square miles (42.24 acres) water
Hamlets	Brandon Center, Reynoldston, Skerry
Population (ACS 2018)	566
Population Density	13.96 people per square mile
Governance	Supervisor and Town Board
Total Assessed Value	28,983,370
Elevation	1,368 feet
Bridges	4
Fire & Rescue	Brandon Fire Department
Schools	Malone Central School & Brushton-Moira Central School
Law Enforcement	Franklin County Sheriff's Department & NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$23,254
Unemployment	15.6%
% Below Poverty	22.7%

Water Shed Data
A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Town officials consider severe winter storms to be the highest priority and highest hazard risk for the residents of the Town of Brandon. Flooding and flash flooding are moderate concerns with spring thaws and heavy rainfall.

The Town of Brandon elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The town does not have a Zoning Plan at the present time.

Critical Facilities with assessed values.

Town Hall/Offices/Garage	568 County Rte. 12 North Bangor, NY $410,200	$410,200

Future Development
The town does not anticipate development in the near future.

NFIP
According to the Community Status Book, the Town of Brandon participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator in the Town of Brandon is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Brandon has no repetitive loss properties.

The Town of Brandon has no properties located substantially within the 100-year floodplain.

Past Events

No property damage events specific to the Town of Brandon have occurred since the 2015 plan. However countywide events must be considered.

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Brandon major roadways are County Routes 15, 10, 12, and 13.

The Town of Brandon approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices.

Specific Mitigation Actions: Following pages

Town of Brandon

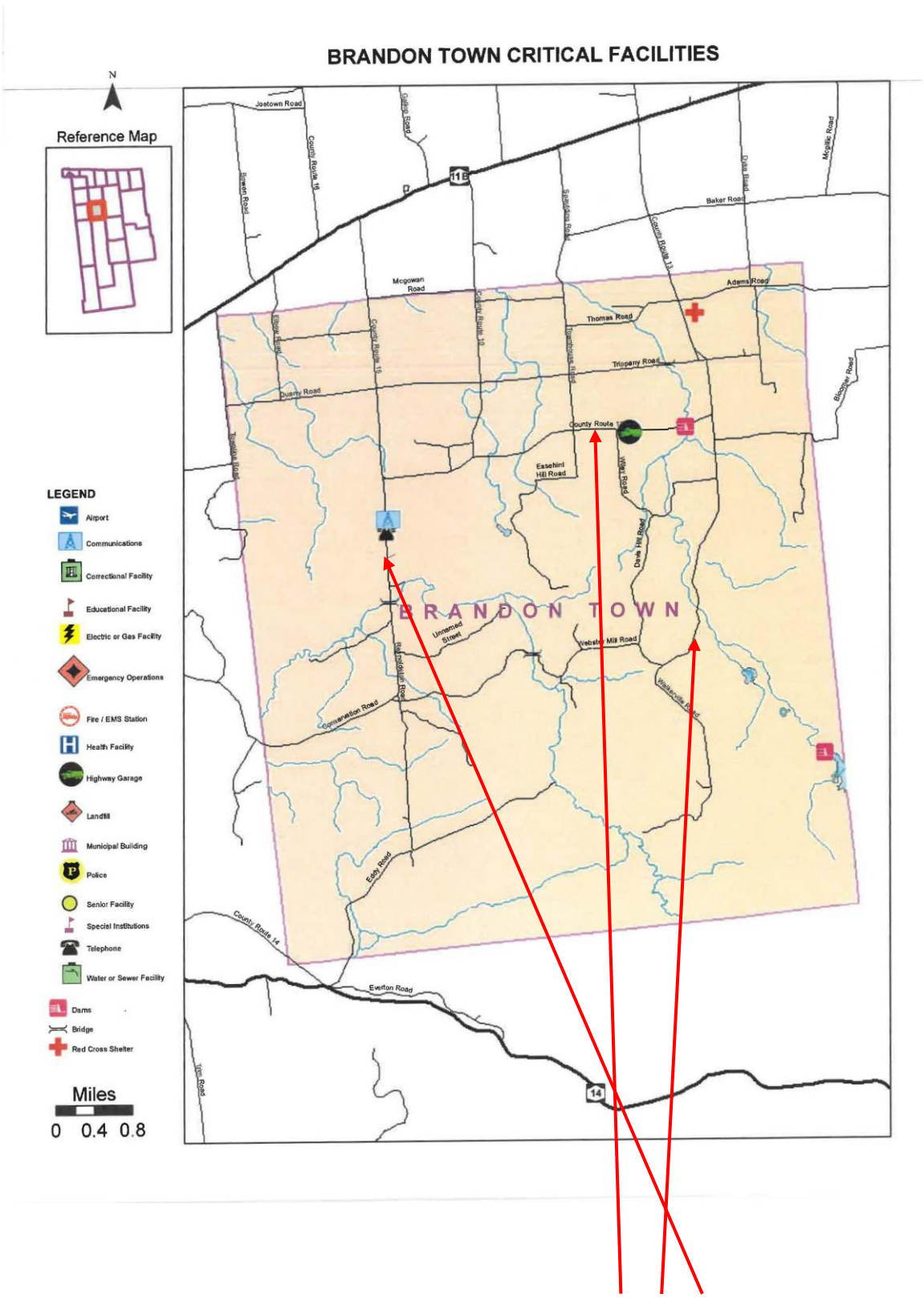
Action Worksheet			
Project Name:	LaFlesh Road Repair		
Project Number:	Town of Brandon #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	A 1000ft. Section of LaFlesh Road floods and washes out annually, leaving residents and emergency vehicles without access.		
Description of the Solution:	The Town intends to to replace 2 eroded culverts with one large aluminum open bottom box culvert along with elevating the road 18 inches at the lowest point. DEC regulations will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents and emergency vehicles will have steady access to LaFlesh Road.
Useful Life:	40 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Town, County, HMP funds
Responsible Organization:	Town of Brandon	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC, Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Road will continue to erode, eventually creating a large washout.
	Replace culverts with bridges	High	Costly and road would be closed during construction.
	Town will plant native vegetation along the stream bed to absorb the water.		May temporarily help the problem.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

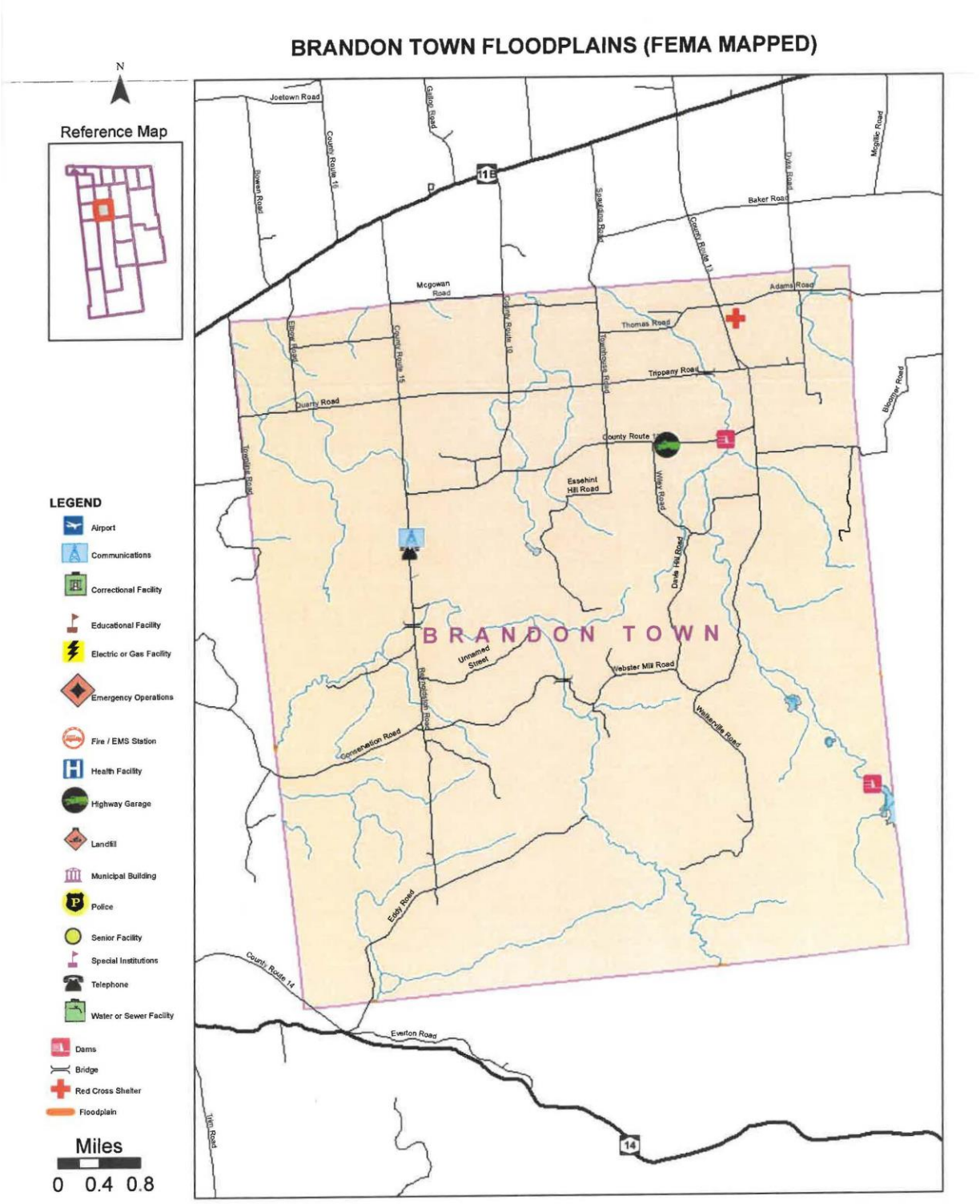
Town of Brandon

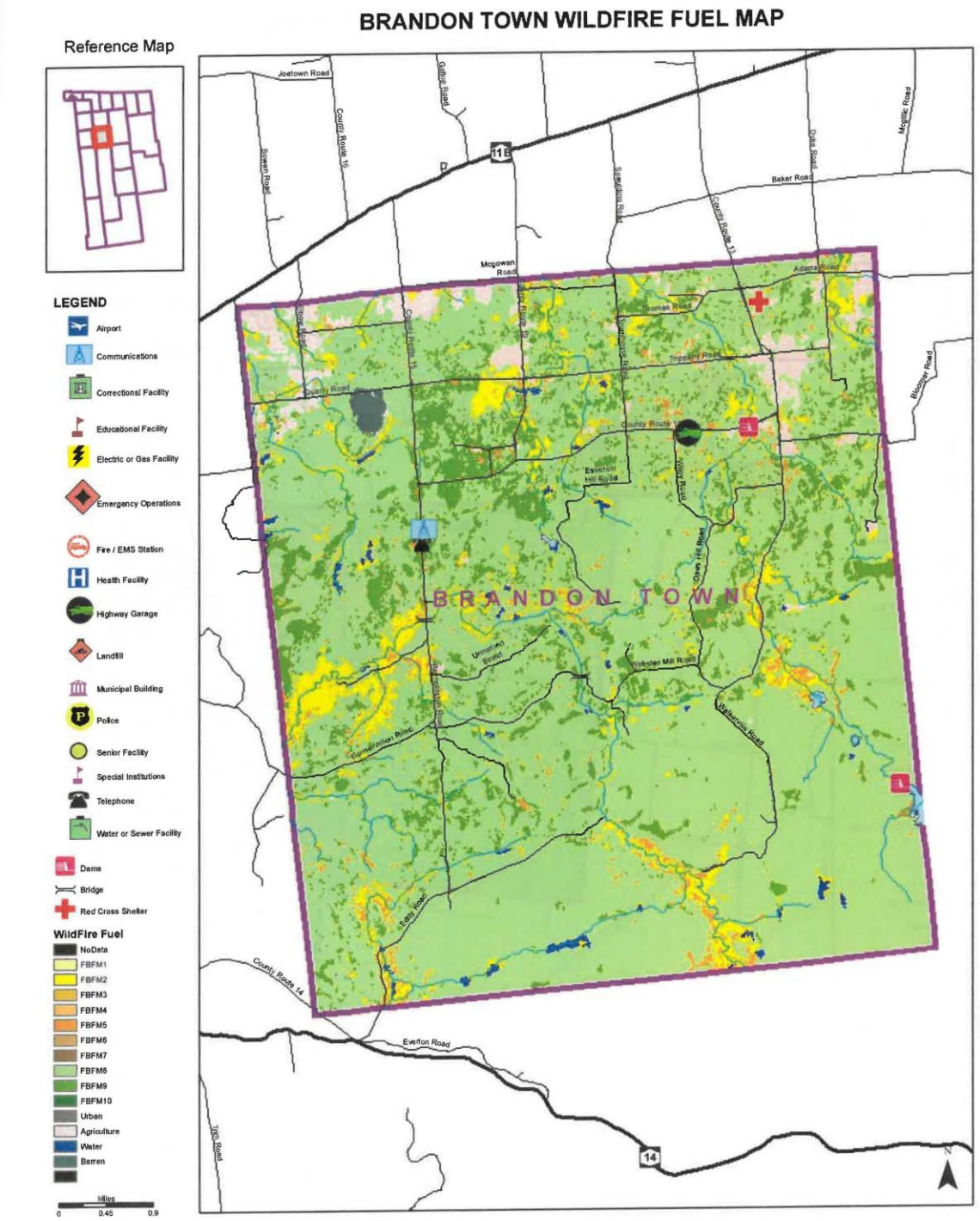
Action Worksheet			
Project Name:	Weller Road Repair		
Project Number:	Town of Brandon #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	A 1000ft. section of Weller Road floods and washes out annually, leaving residents and emergency vehicles without access.		
Description of the Solution:	The Town intends to to replace two eroded culverts with one large aluminum open bottom box culvert along with elevating the road 18 inches at the lowest point. DEC regulations will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents and emergency vehicles will have steady access to Weller Road.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Town, County, HMP Funds
Responsible Organization:	Town of Brandon	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Road will continue to erode, eventually creating a large washout.
	Replace culverts with bridges	High	Costly and road would be closed during construction.
	Town will plant native vegetation along the stream bed to absorb the water	Medium	May temporarily help the problem.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.



Evacuation Routes- County Route 12, 13, 15


BRANDON TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.4 0.8
BRANDON TOWN
Joetown Road
Gallop Road
County Route 15
Bowen Road
Baker Road
Mcgowan Road
Adams Road
Thomas Road
Trippany Road
Quarry Road
Elbow Road
Sandborn Road
Dyke Road
Mcgillic Road
Bloomer Road
Esselstyn Road
Wilkes Road
Davis Hill Road
Unnamed Street
Webster Mill Road
Conservation Road
Wellsville Road
Eddy Road
County Route 14
Everton Road
16th Road
11B
14


BRANDON TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.45
0.9
BRANDON TOWN
Joetown Road
Gates Road
Bowen Road
County Route 16
11B
Baker Road
Duke Road
Mogilic Road
Mcgowen Road
Adams Road
Thomas Road
Trapper Road
County Route 13
Bloomer Road
County Route 1
Essex Hill Road
Valley Road
Owen Hill Road
Unnamed Street
Webster Mill Road
Rattlesnake Road
Conservation Road
Valleyview Road
Eddy Road
County Route 14
Everton Road
14
Ten Road



Town of Brighton

Located in central Franklin County, the Town of Brighton is bordered by the town of Duane on the north. Santa Clara forms the western border with the towns of Bellmont and Franklin as the eastern border. The town of Harrietstown is on the southern border of Brighton. The Town of Brighton is in the Adirondack Park.

Town/Village	Town of Brighton
Land Area	83 square miles (53,120 acres) - 77.9 square miles (49,856 acres) land & 5.1 square miles (3,264 acres) water
Hamlets	Easy Street, Gabriels, Keese Mills, McCollums, Paul Smiths, Rainbow Lake, Onchiota
Population (ACS 2018)	1,435
Population Density	17.29 people per square mile
Governance	Supervisor and Town Board
Total Assessed Value	248,215,882
Elevation	1,880 feet
Largest Lakes	Upper & Lower St. Regis Lake, Meacham Lake, Spitfire Lake, Rainbow Lake
Dams	3 (Lake Kushaqua Dam, Keese Mill Damn, St, Regis Dam)
State Routes	30, 86
Fire & Rescue	Brighton Fire Department
Schools	Saranac Lake Central School
Law Enforcement	Franklin County Sheriff's Department, NYS Policy, NYS DEC
Power Utility Provider	National Grid
Water Supply Sources	Private wells
Population Median Income	$11,995
Unemployment	3.2%
% Below Poverty	6.2%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in the Town of Brighton consider severe winter storms, extreme cold and ice storms to be a high hazard risk for the residents of the town. Flooding, especially following spring thaws and heavy rains become another hazard concern.

The Town of Brighton elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization.

Critical Facilities with assessed values.

Town Hall/Offices	12 County Rd. 31 Paul Smiths, NY	$398,000
Field House, Garage, Canopy	15 County Rd. 60 Gabriels, NY	$150,000
Highway Garage, Fuel Shelter, Salt Shed	17 County Rd. 31 Paul Smiths, NY	$852,000
Storage Building	Rte. 86 Paul Smiths, NY	$5,000

Future Development

At present, the Town of Brighton has no major development in the planning stage, however town officials are increasingly aware of the need for a Zoning Plan and a Comprehensive Plan for future growth and intend to pursue the plans. Brighton developed a Smart Growth Plan (2008) "…intended to inform decision-making in the Town of Brighton with respect to economically and environmentally sustainable growth practices. It is not a town governing document, but rather serves as a springboard for future planning efforts in the town." **(www.townofbrighton.net)** Located within the Adirondack Park, land use in the Town of Brighton is governed by Park regulations. The town will continue to incorporate their mitigation activities into land use plans in accordance with Adirondack Park Agency regulations.

NFIP

According to the Community Status Book, the Town of Brighton participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator in the Town of Brighton is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Brighton has no repetitive loss properties.

The chart below represents parcels located in the Town of Brighton substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
BRIGHTON	**94**	**$18,830,500**
Residential	82	$18,742,400
Vacant	10	$88,100
Wild, Forested, Conservation Lands & Public Parks	2	$0

Past Events

The chart below indicates property damage events specific to the Town of Brighton occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
6/20/2016	Thunderstorm/Winds	10K	Rte. 60 & 31/Paul Smiths/Barnum Pond/ Keeseville Mills Road
3/14/2017	Winter Storm	N/A	34" of snow/ 30MPH Winds/White Outs/Drifting

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). One mitigation action the town has identified is the development of a mutual aid agreement with Paul Smiths College as a location for a town emergency shelter, including a temporary

use generator. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Brighton major roadways are State Routes 30 and 86.

The Town of Brighton approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. NYS building codes are followed, however at present the town does not have a Zoning Plan or a Comprehensive Plan. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices.

The town intends to post the Franklin County Hazard Mitigation Plan 2020 on their website. www.townofbrighton.net.

Specific Mitigation Actions: Following pages

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Brighton

Action Worksheet			
Project Name:	Keese Mills Road		
Project Number:	Town of Brighton #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	There is annual flooding in three locations on Keese Mills Road. Culverts are unable to handle heavy rains and snow melt.		
Description of the Solution:	The Town intends to resubmit an application to BridgeNY for repalcement of three culverts. Previous application prepared by Barton & Loguuidice was denied funding.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Keese Mills Road will be passable for residents and emergency vehicles.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022
Estimated Time Required for Project Implementation:	6 Months	**Potential Funding Sources:**	BridgeNY Grant
Responsible Organization:	Town of Brighton	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC/Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Keese Mills Road will be impassable for residents and emergency vehicles.
	Detention Pond	High	Land is not owned by the Town to create a pond.
	Replace culverts with precast prestressed concrete slabs on driven piles.	High	Investigation of using this type of bridge instead of culverts, costly.
Culvert replacement with precast/prestressed concrete slab on piles.			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Brighton

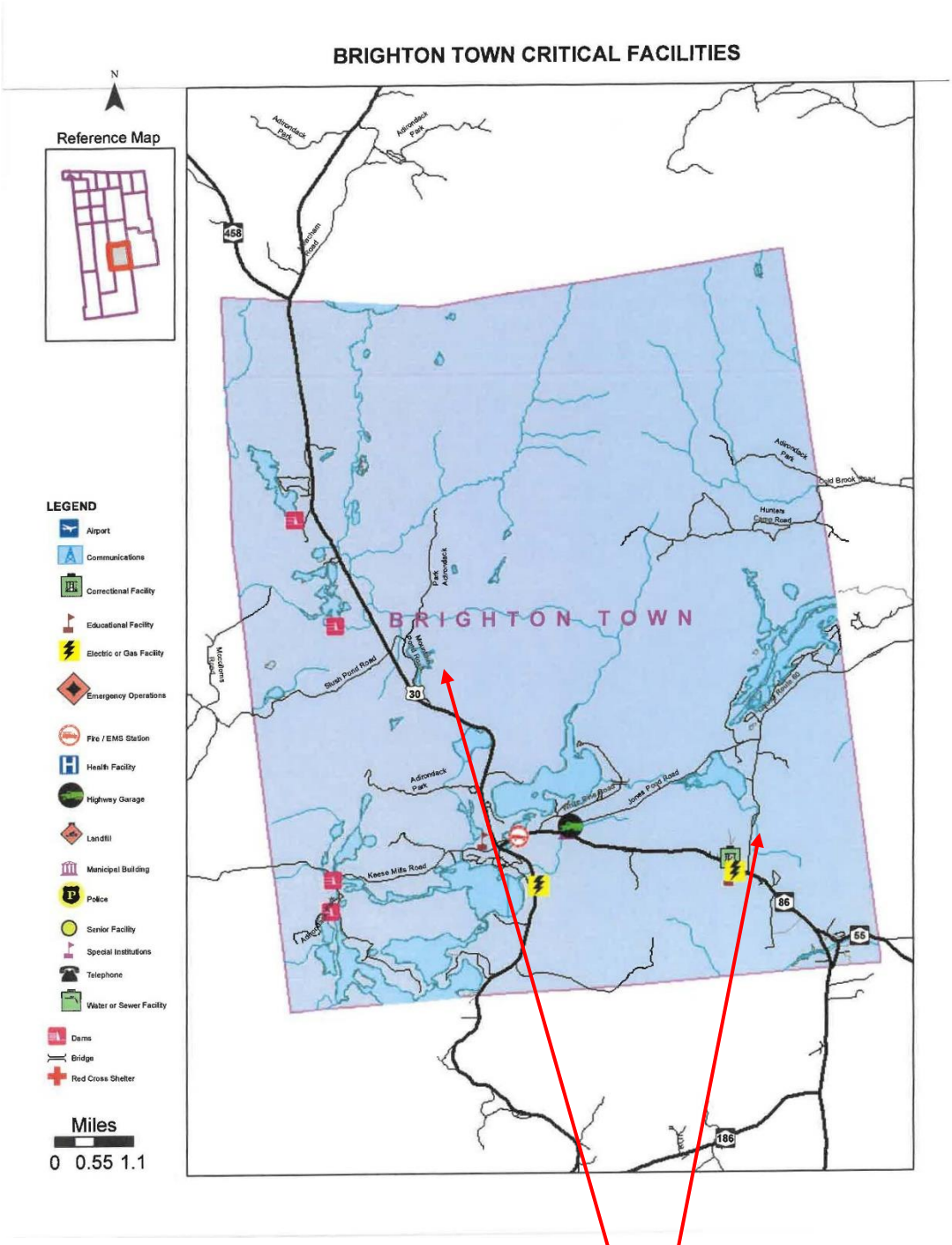
Action Worksheet			
Project Name:	Wardner Road		
Project Number:	Town of Brighton #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	There is annual flooding on Wardner Road. According to FEMA RiskMap(2018), culvert is too small, old and eroded. Road washout is probable.		
Description of the Solution:	The Town intends to replace existing culvert with a larger, open bottom box culvert, including similar substrate. DEC recommendations will be followed		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Wardner Road will not washout and require more extensive repair.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022
Estimated Time Required for Project Implementation:	6 Months	**Potential Funding Sources:**	Town, County, HMPG Funds
Responsible Organization:	Town of Brighton	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Wardner Road may washout through constant erosion.
	Detention Pond	High	Land is not owned by Town to create a pond.
	DEC Trees for Tribs Program	Low	Natural vegetation/trees may help with runoff, and might be used in addtion to replacing the culvert.
Culvert replacement with precast/prestressed concrete slab on piles.			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

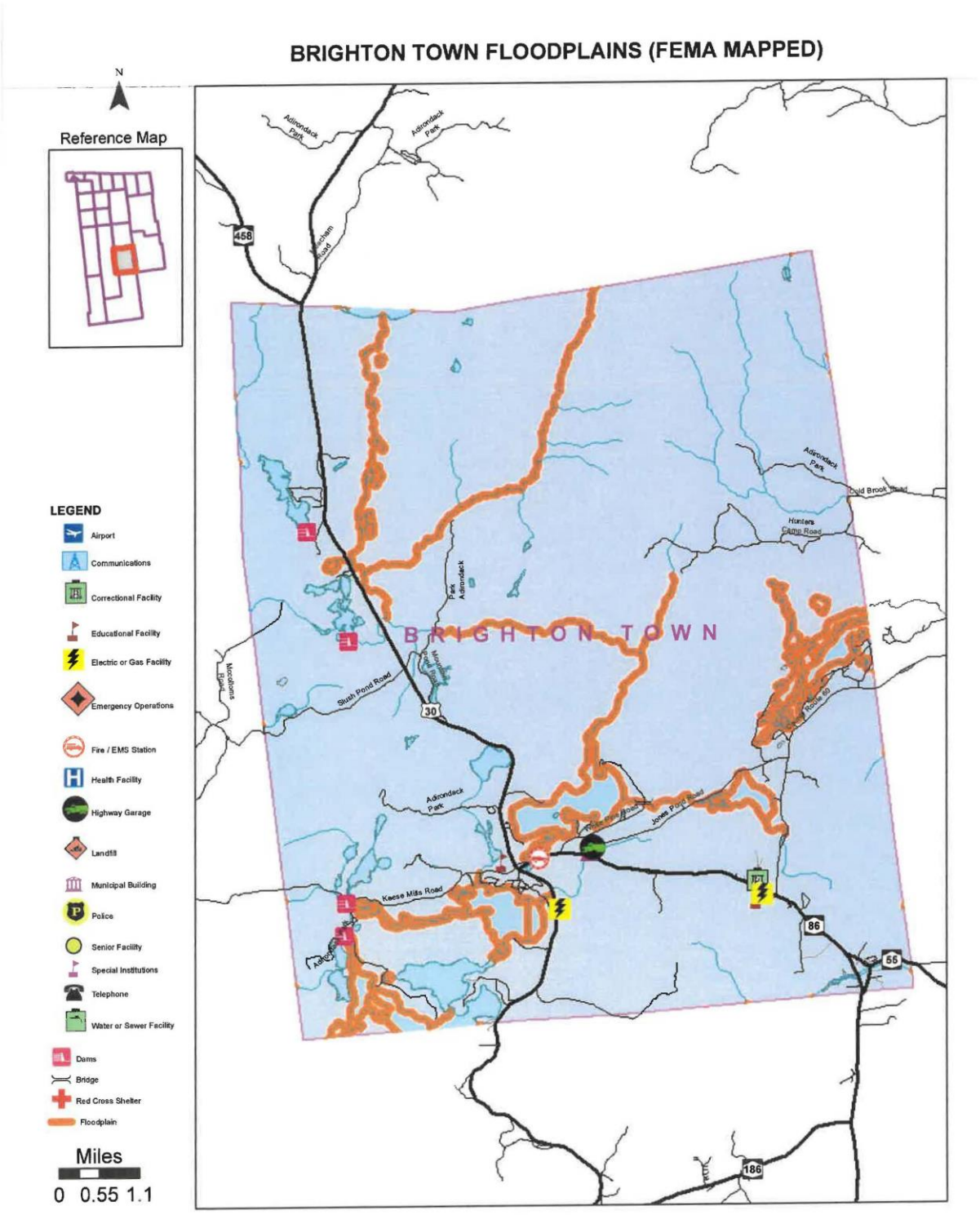
Town of Brighton

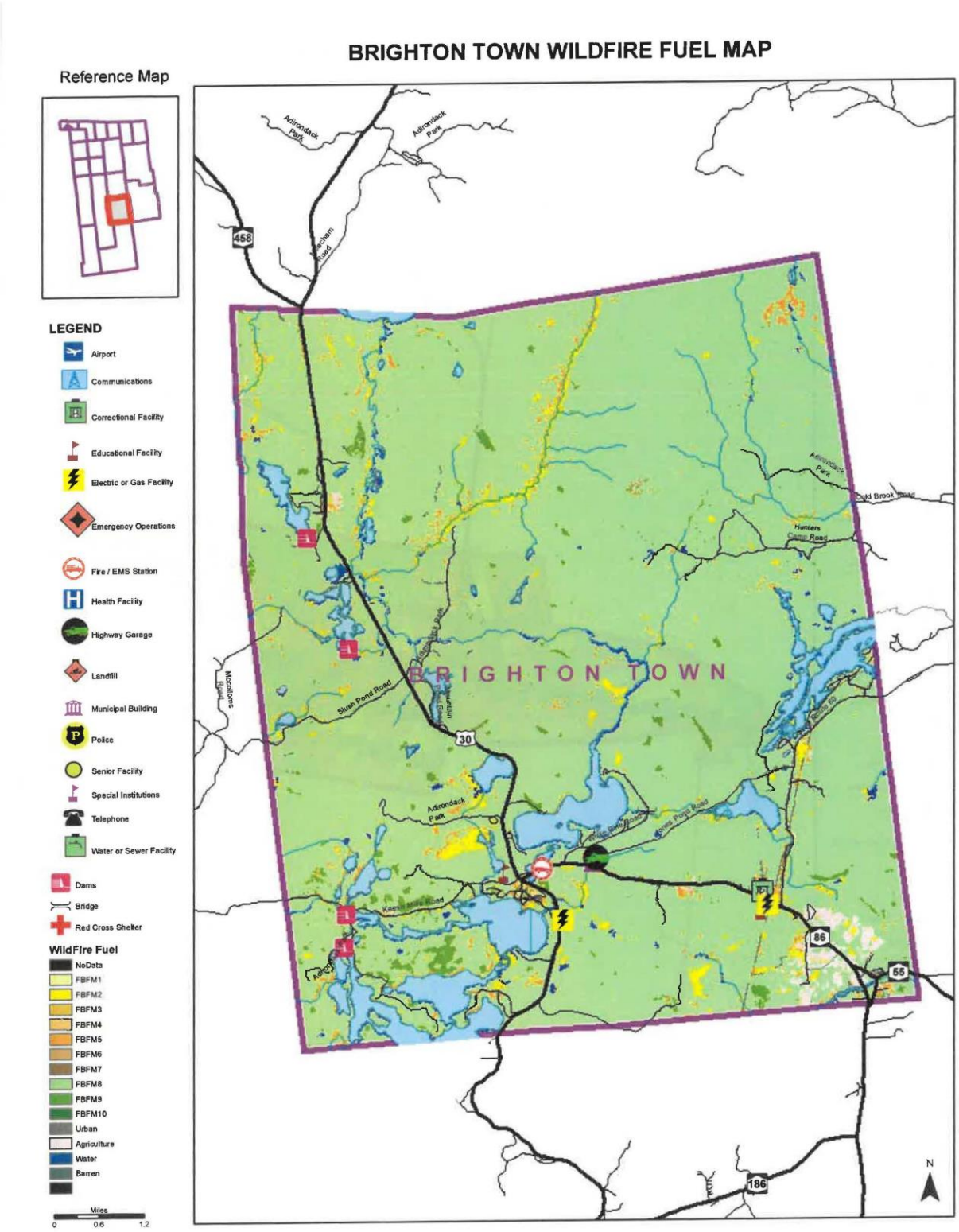
Action Worksheet			
Project Name:	Generator/Temporary Shelter		
Project Number:	Town of Brighton #3		
Risk / Vulnerability			
Hazard of Concern:	Multihazard		
Description of the Problem:	The Town of Brighton does not have a large enough facility for use as a temporary shelter and any location would require generator back-up.		
Description of the Solution:	The town will pursue a MOU with Paul Smiths College for use of their facilities as temporary shelter, with collaboration on a back-up generator for extended power outages. Cost of generator is approximately $25,000		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Citizens of Brighton and visitors will have temporary shelter in time of emergency and extended power outages.
Useful Life:	40 years		
Estimated Cost:	Medium		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Town/Paul Smiths College
Responsible Organization:	Town of Brighton	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Residents have no safe location for temporary shelter with power.
	Build addition to the Town Hall to accommodate residents as shelter.	High	Cost is prohibitive and Town doesn't own enough adjacent land.
	Purchase a building and rehab as a temporary shelter	High	Cost is prohibitive.
Culvert replacement with precast/prestressed concrete slab on piles.			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

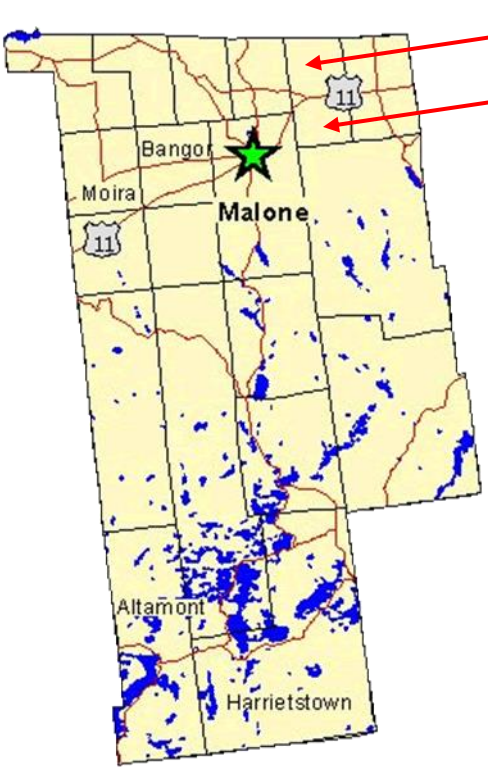
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Evacuation Routes – State 30, 86


BRIGHTON TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.55 1.1
BRIGHTON TOWN
Adirondack Park
458
Meacham Road
Stush Pond Road
30
Moodians Road
Hunters Camp Road
Jones Pond Road
Keese Mills Road
86
55
186


BRIGHTON TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.6
1.2
BRIGHTON TOWN
Adirondack Park
Stum Pond Road
Hunters Camp Road
Keese Mills Road
Bowes Pond Road
Macomb's Road
458
30
86
55
186
N



The Town of Burke, in northern Franklin County has as its northern border the province of Quebec, Canada. The Town of Constable and Malone form the western border with the Town of Chateaugay on the east. The Town of Bellmont is the southern border of Burke.

Town/Village	Town of Burke
Land Area	44.4 square miles (28,416 acres) - all land
Incorporated Villages	Village of Burke
Hamlets	Burke Center, Cooks Mill, North Burke, Sun, Thayer Corners
Population (ACS-2018)	1,465
Population Density	33 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	98,596,812
Elevation	726 feet
Rivers	Little Trout River
Bridges	6
Interstate Highway	11
Fire & Rescue	Burke Fire Department
Schools	Malone Central School, Chateaugay Central School
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$22,851
Unemployment	7.8%
% Below Poverty	27.5%

Town/Village	Village of Burke
Land Area	0.29 square miles (185.6 acres) - all land
Population (ACS 2018)	212
Population Density	727.59 people/square mile
Governance	Mayor and Village Board of Trustees
Total Assessed Value	7,740,967
Elevation	863 feet
Rivers	Little Trout River
Bridges	6
Interstate Highway	11
Fire & Rescue	Burke Fire Dept.
Schools	Malone School District
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Community/Public
Population Median Income	$22,881
Unemployment	7.8%
% Below Poverty	27.5%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Burke; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in the Town and Village of Burke consider severe winter storms and extreme cold to be high hazard risks for the residents. Flooding, especially following spring thaws and heavy rains, becomes another hazard concern.
The Town of Burke elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The Village of Burke elects a mayor and two trustees and has a Code Enforcement Officer enforcing NYS Building Codes.

Critical Facilities with assessed values.

Town Garage	5337 US Rte. 11 Burke, NY	$146,000
Town Hall/Offices	5165 Rte. 11 Burke, NY	$200,000

Future Development
The Towns of Bellmont, Burke and Chateaugay have formed an Ambulance District to better serve residents and are researching funding options for a central building and for a full-time driver and equipment. At present, the Town of Burke has no other major developments in the planning stage. Solar and Wind Energy are being utilized in areas of the town.

NFIP

According to the Community Status Book, the Town of Burke participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator in the Town of Burke is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Burke has no repetitive loss properties.

The chart below represents parcels located in the Town of Burke substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
BURKE	**4**	**$239,700**
Residential	2	$232,000
Vacant	2	$7,700

Past Events
The chart below indicates property damage events specific to the Town and Village of Burke occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
5/1/2017	Thunderstorm/Wind	10K	N/A
8/22/2017	Thunderstorm/Wind	5K	N/A

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Burke major roadways are US Route 11 and County Route 29.

The Town and Village of Burke approved the original Plan in 2008 and the update in 2015. The Town and Village will endeavor to incorporate the Mitigation Goals in the updated plan into future plans.

The town has a Comprehensive Plan, Zoning Plan, and a Planning Board. (www.burkeny.org) Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. During the annual budget process the Town will strive to plan for potential mitigation actions. The town intends to post the Franklin County Hazard Mitigation Plan 2020 on their website.

Specific Mitigation Actions: Following pages

Town of Burke

Action Worksheet			
Project Name:	Generators		
Project Number:	Burke #1		
Risk / Vulnerability			
Hazard of Concern:	Multi-Hazard Power Outage		
Description of the Problem:	The Town does not have back-up power in the Town Garage or the Town Hall. Both buildings would not be able to function in time of a severe, lengthy power outage. These buildings would serve as temporary shelter for residents.		
Description of the Solution:	The Town will purchase and install two 30KW standby generators, one for the Town Hall and the second for the Town Garage. Creates a temporary shelter for residents.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 Years	**Estimated Benefits (losses avoided):**	Residents will remain safe, secure, and healthy in case of a disaster. Town vehicles will be operational.
Useful Life:	20 Years		
Estimated Cost:	$18,200 Per Generator		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	6 Months	**Potential Funding Sources:**	HMGP, Town Budget
Responsible Organization:	Town of Burke	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	No power in Town Center and Town Garage.
	Purchase "power packs" for use	High	Cost is similar and life of power packs is limited. Ineffective.
	Solar panel powered back-up for Town Hall/Garage	High	Expensive and undependable/ineffective.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Town of Burke

Action Worksheet			
Project Name:	Constable Burke Town Line Road		
Project Number:	Town of Burke #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Constable Burke Town Line Road floods in the spring due to rains and snow melt. The present 30 inch culvert does not handle the water flow successfully, leaving the road impassable.		
Description of the Solution:	The Town of Burke intends to install a second culvert, this one 36 inches X 40 feet at an angle to provide adequate run off of heavy rains and spring thaw. Gravel will be utilized similar to the product already in place. DEC recommendations will be followed.		
Is this project related to a Critical Facility?	**Yes** ☐	**No** ☑	
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Town Line Road will remain passable for residents and emergency vehicles.
Useful Life:	20 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	6 Months	**Potential Funding Sources:**	Town, County Funds, HMPG Funding
Responsible Organization:	Town of Burke	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Town Line Road will continue to washout leaving residents and emergency vehicles at risk.
	Apply to BridgeNY for funding to put a new bridge in this location	High	Costly for Town to even apply. Applications rarely funded in Franklin County.
	Keep original culvert clear for water flow	Low	Will not effectively end the problem.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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Village of Burke

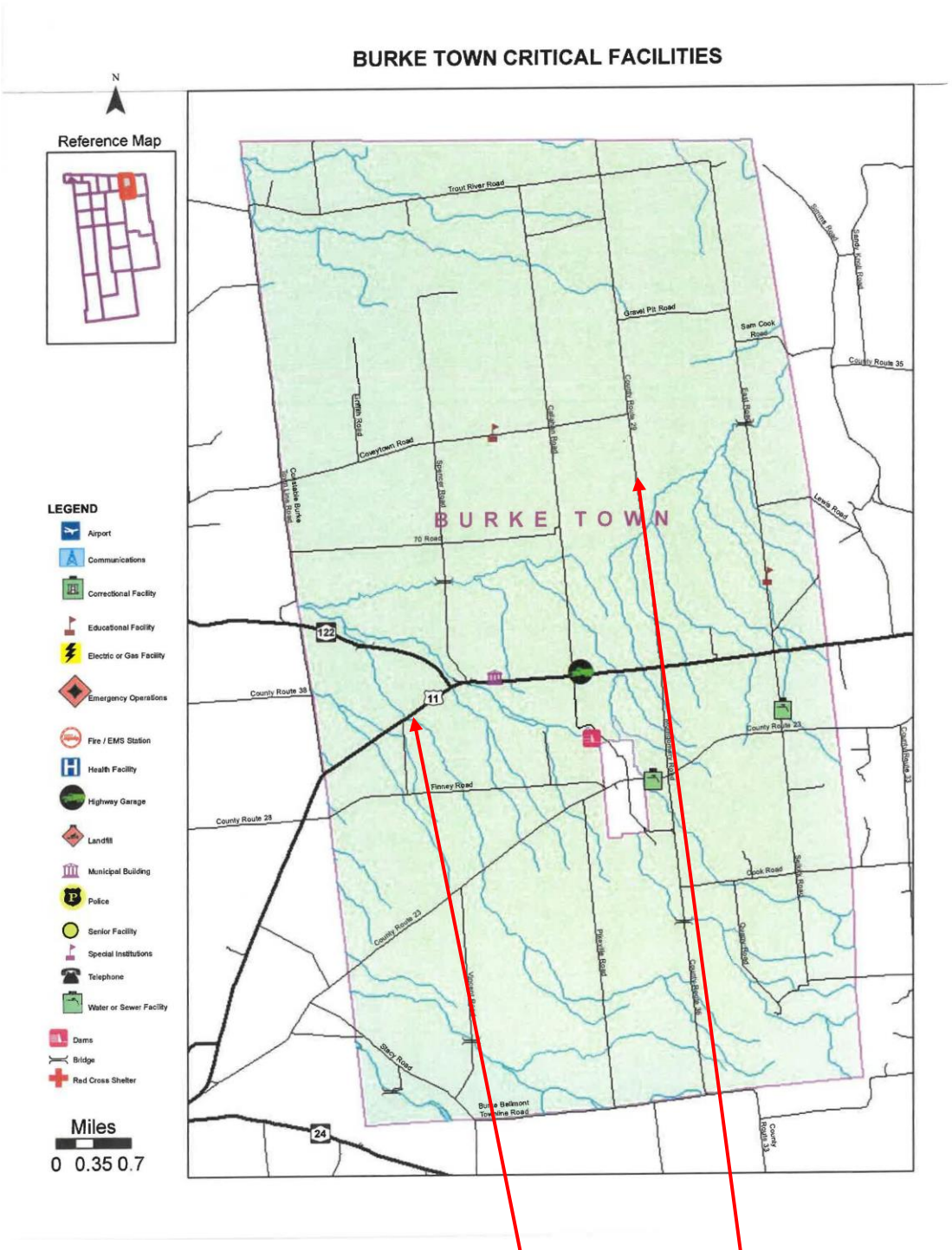
Action Worksheet			
Project Name:	Emergency Preparedness		
Project Number:	Village of Burke #1		
Risk / Vulnerability			
Hazard of Concern:	Multi-Hazard		
Description of the Problem:	The Village believes residents and tourists need to be aware of potential natural hazards and how best to prepare for emergency situations.		
Three Alternatives Considered (including No Action)			
Description of the Solution:	**The village will work with the local fire department to deveop and mail to each resident and business a packet containing emergency preparedness basics and items specific to the hazards the town experiences most often.**		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents will have knowledge of potential natual hazardous situations, supplies to have on hand in case of an emergency, and potential emergency shelters.
Useful Life:	40 years		
Estimated Cost:	Medium		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Village funds
Responsible Organization:	Village of Burke	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Residents may be unaware of how best to prepare for emergency situations.
	Post information on Village Office Board	Low	May not reach everyone.
	Hold a series of informational meetings	Low	This should perhaps be done in conjunction with the mailing on at least an annual basis.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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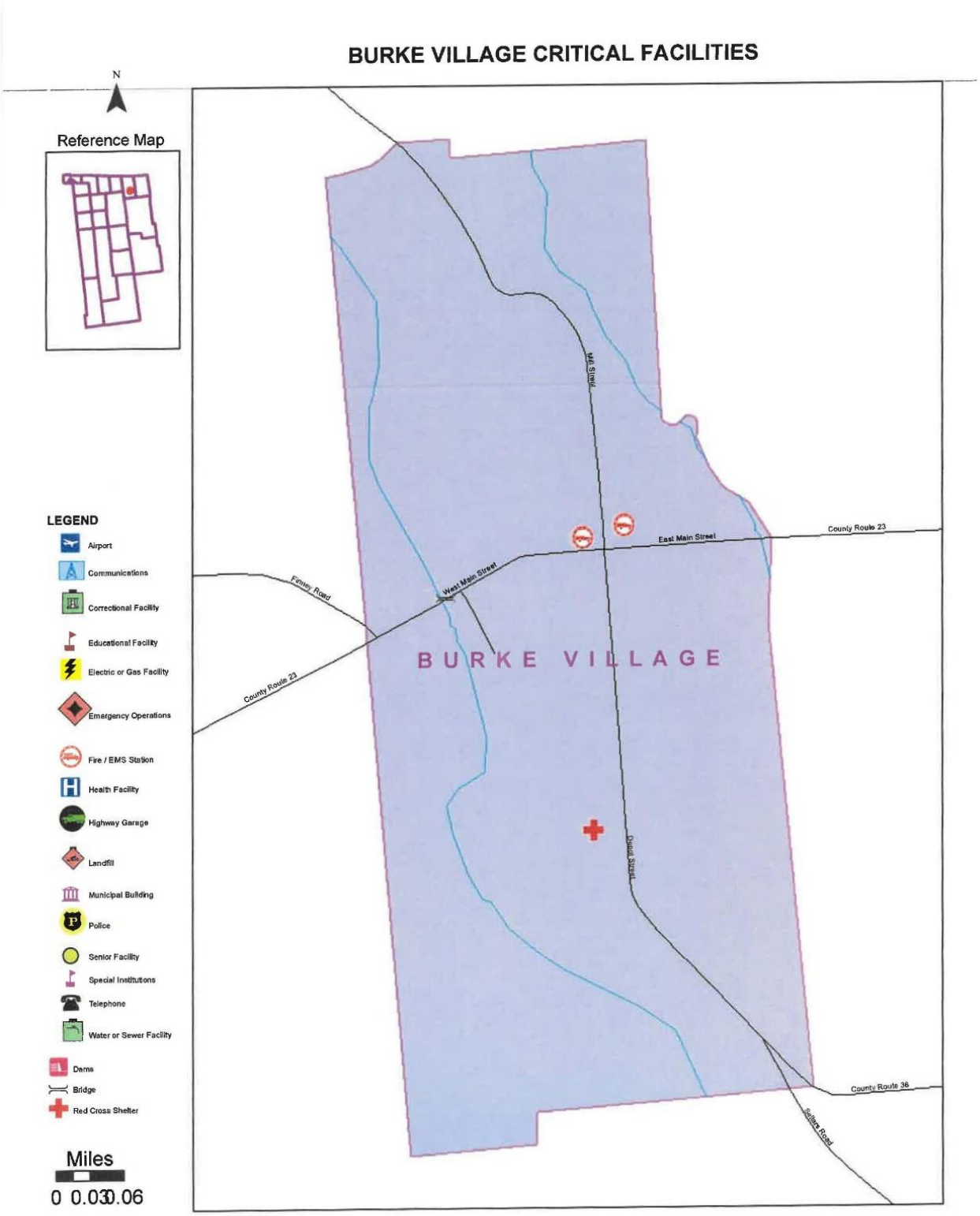
Village of Burke

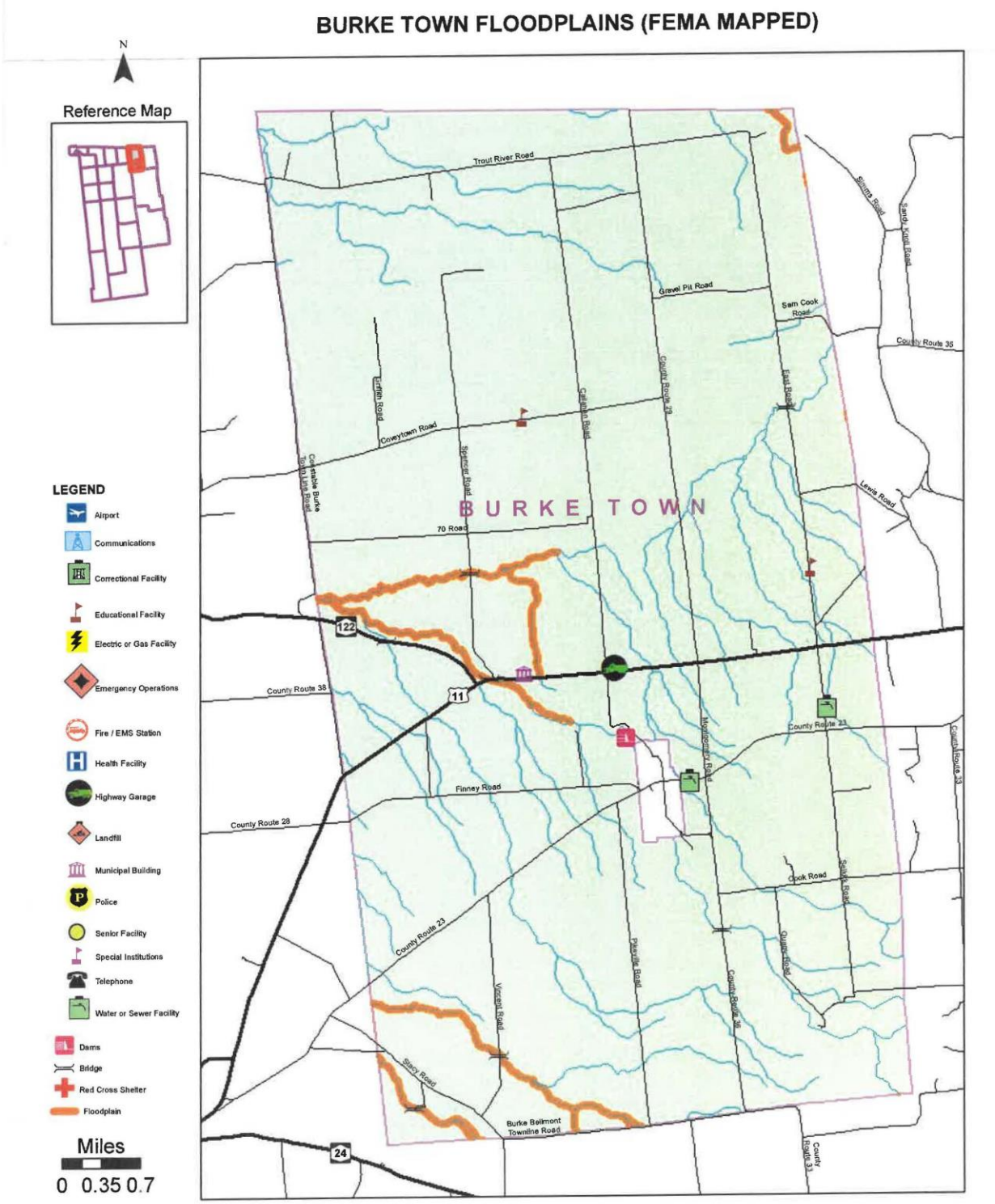
Action Worksheet			
Project Name:	Community Outreach		
Project Number:	V. Burke #2		
Risk / Vulnerability			
Hazard of Concern:	Muti-hazard		
Description of the Problem:	The Village needs a specific way to contact residents in the village in time of an emrgency natural disaster.		
Description of the Solution:	The Village of Burke will set up and maintain, on a quarterly basis, an emergency contact list for village residents generating with the Village Office. Designating those with special needs -ex. resident uses oxygen.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 years	**Estimated Benefits (losses avoided):**	Residents will receive warning of impending disaster situation and be advised of how to proceed so injuries/deaths are avoided.
Useful Life:	20 years		
Estimated Cost:	low		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2012-2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Village Budget
Responsible Organization:	Village of Burke	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	residents may not be aware of impending dangerous situation
	Cell/Computer notification through the county	low	internet and cell service is poor in remote areas
	Televison notification through the county	low	Some residents may miss the notice and not be prepared.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

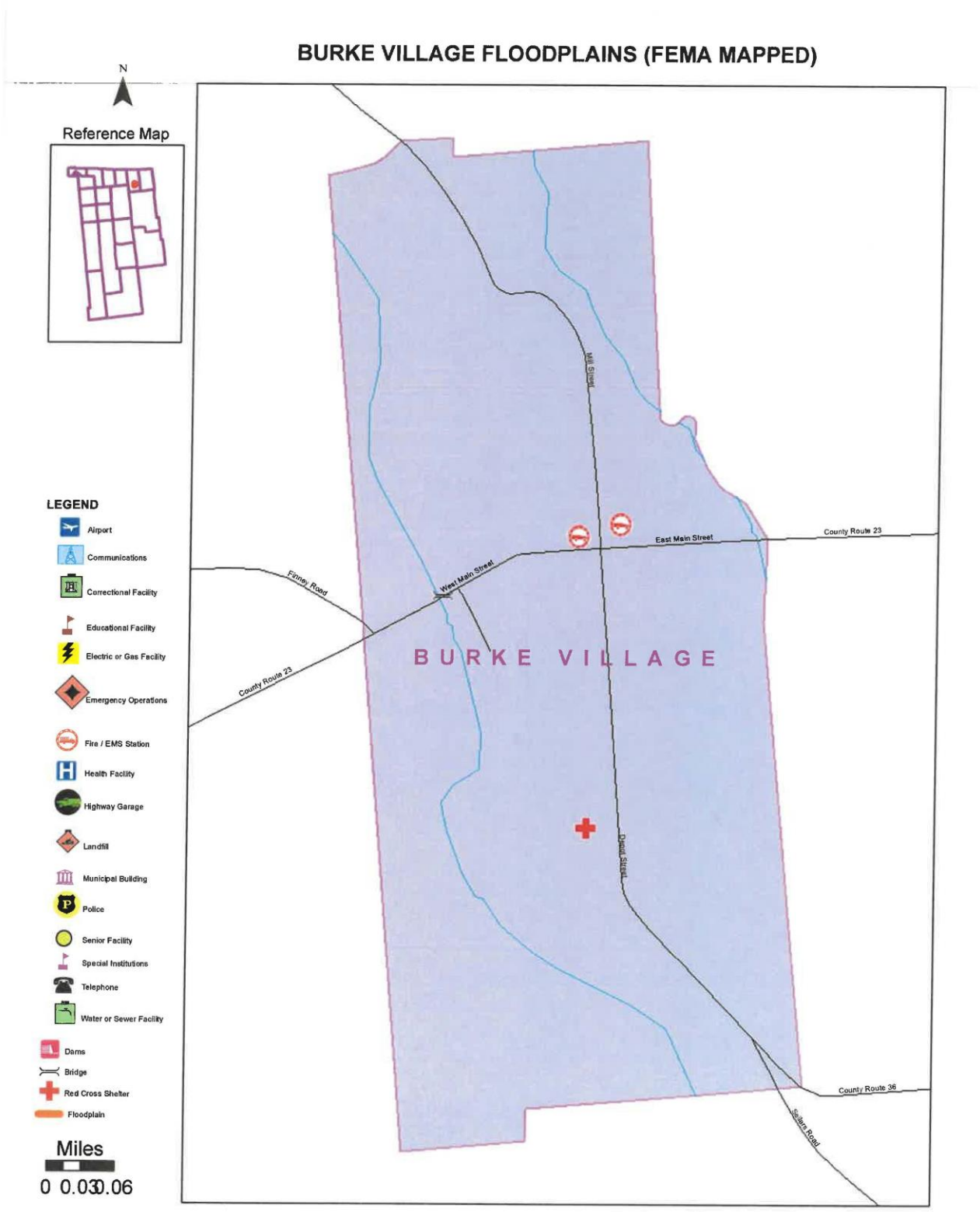
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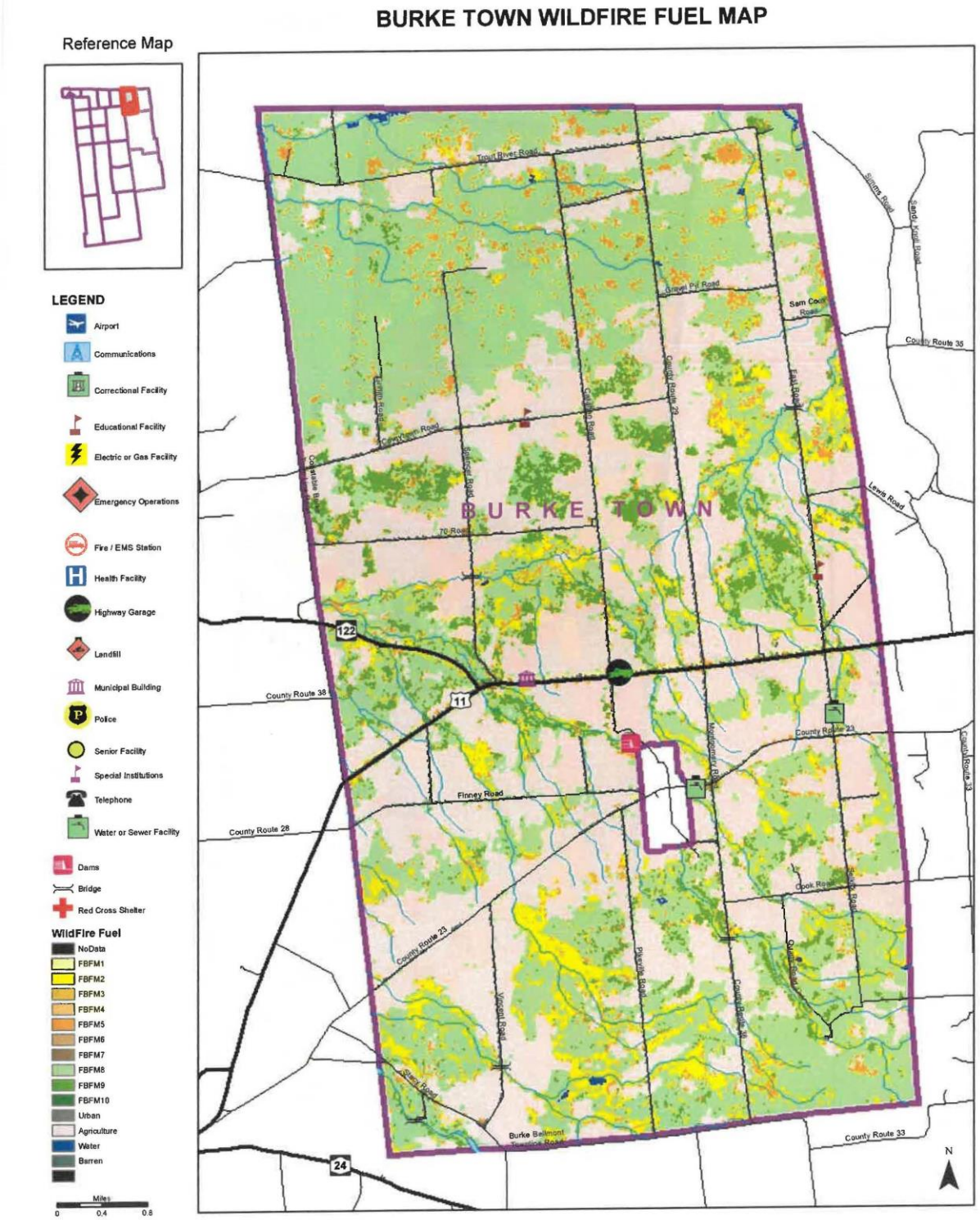


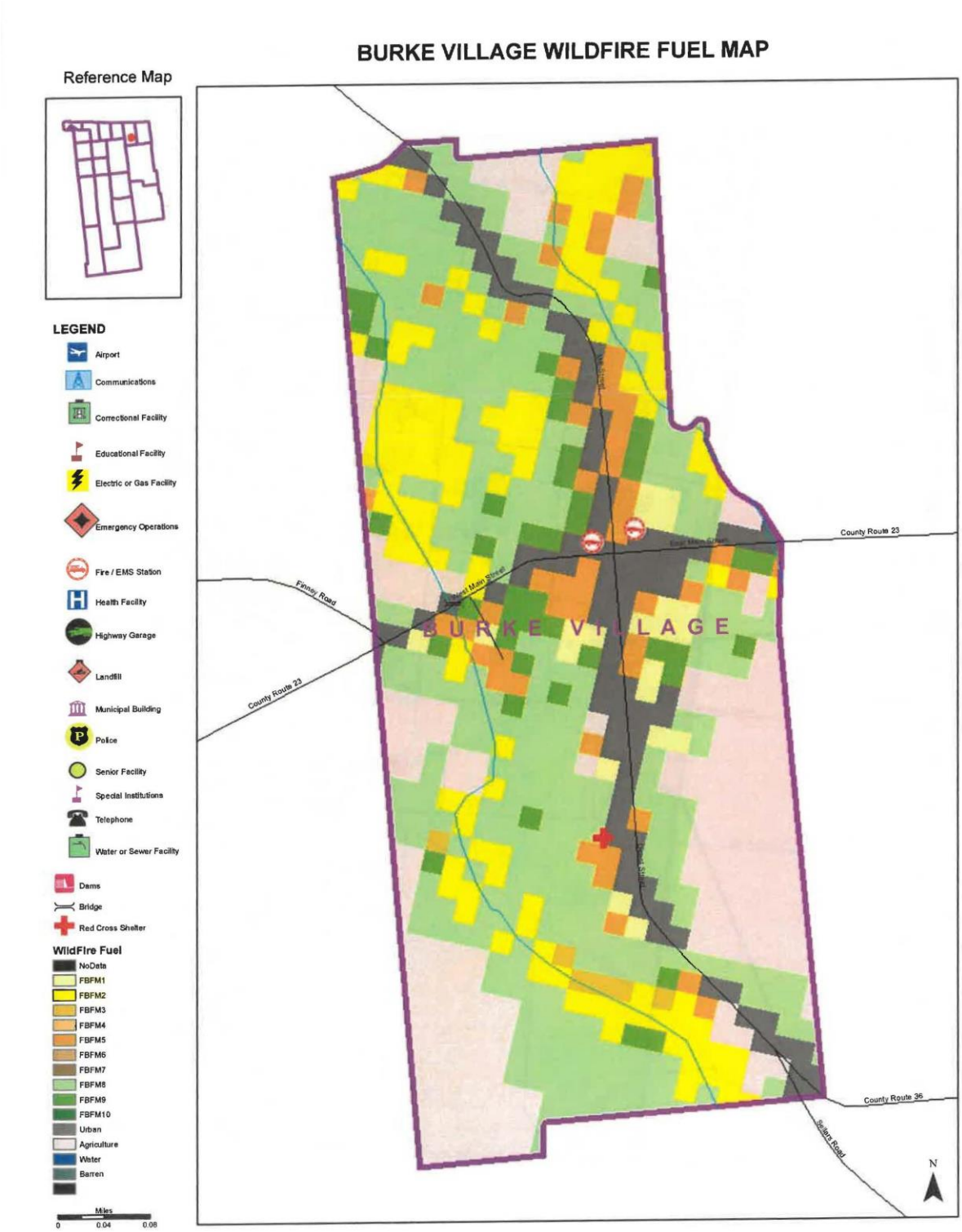
Evacuation Routes – State 11, County Route 29

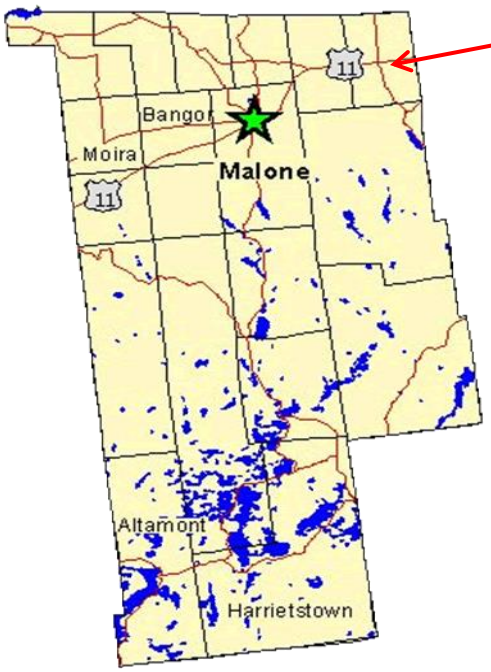

BURKE VILLAGE CRITICAL FACILITIES
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Miles
0 0.03 0.06
BURKE VILLAGE
East Main Street
West Main Street
County Route 23
Finney Road
Duane Street
County Route 36
Sellers Road


BURKE TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.35 0.7
BURKE TOWN
Trout River Road
Gravel Pit Road
Sam Cook Road
County Route 35
Griffith Road
Conwytown Road
Spencer Road
Carleton Road
County Route 29
East Road
Lewis Road
70 Road
122
11
County Route 38
County Route 23
Finney Road
County Route 28
Cook Road
County Route 33
Pleasant Road
Vincent Road
Story Road
Burke Belmont Townline Road
24


BURKE VILLAGE FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.03 0.06
BURKE VILLAGE
East Main Street
West Main Street
County Route 23
Finney Road
Mill Street
Depot Street
County Route 36
Sellars Road


BURKE TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
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WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.4
0.8
BURKE TOWN
Trout River Road
Gravel Pit Road
Sam Cook Road
County Route 35
Lewis Road
County Route 38
County Route 28
Finney Road
County Route 23
County Route 33
Burke Belmont Tunnicliffe Roads
122
11
24
N


BURKE VILLAGE WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
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NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.04
0.08
BURKE VILLAGE
County Route 23
Finney Road
County Route 23
County Route 36
Seigus Road
N



Town of Chateaugay

Village of Chateaugay

The Town of Chateaugay in northern Franklin County has as its northern border the province of Quebec, Canada. The Town of Burke is the western border of the town, with the Town of Clinton in Clinton County on the east. The town of Bellmont is the southern border of Chateaugay.

Town/Village	Town of Chateaugay
Land Area	49.8 square miles (31,872 acres) - 49.79 square miles (31,865.6 acres) land & 0.01 square miles (6.4 acres) water
Incorporated Villages	Village of Chateaugay
Hamlets	Brayton Hollow, Earlville
Population (ACS 2018)	2,253
Population Density	43.27 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	301,986,524
Elevation	972 feet
Rivers	Chateaugay River
Bridges	11
Interstate Highway	11
State Routes	374
Fire & Rescue	Chateaugay Fire Dept.
Schools	Chateaugay Central Schools
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells & Community/Public
Population Median Income	$24,131
Unemployment	5.0%
% Below Poverty	29.3%

Town/Village	Village of Chateaugay
Land Area	1.1 square miles (704 acres) - all land
Population (ACS 2018)	858
Population Density	757.27 people/square mile
Governance	Mayor and Village Board of Trustees
Total Assessed Value	28,235,898
Elevation	945 feet
Bridges	11
Interstate Highway	11, 87
State Routes	374
Fire & Rescue	Chateaugay Fire Dept.
Schools	Chateaugay Central School Distrct
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Community/Public
Population Median Income	$24,131
Unemployment	9.8%
% Below Poverty	29.3%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials consider severe winter storms, ice storms and extreme temperatures high hazard risks for residents. Snow melt from winter storms contributes to the high hazard risk of floods and flash floods.

The Town of Chateaugay elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town and village. The local fire department is a volunteer organization. The Village of Chateaugay elects a mayor and four trustees to oversee Village operations. Neither the town nor the village have a Zoning Plan in place currently.

Critical Facilities with assessed values.

Town

Town Offices/Court	191 East Main St. Chateaugay, NY	
Town Garage	7354 NY Rte. 374 Chateaugay, NY	$133,333

Village

Wastewater Treatment	161 County Rte. 35 Chateaugay, NY	$2,310,000
Water Filtration Plant	36 French Settlement Rd. Chateaugay, NY	$5,310,000

Future Development

The Town of Chateaugay does not anticipate development in the near future.

NFIP

According to the Community Status Book, the Town of Chateaugay does not participate in the National Flood Insurance Program. The governmental leaders decided not to participate at this time. The Village of Chateaugay does participate in NFIP. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator for the town is the Code Enforcement Officer.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Chateaugay, Town and Village, have no repetitive loss properties.

The chart below represents parcels located in the Town and Village of Chateaugay substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
CHATEAUGAY Town	**7**	**$262,630**
Residential	6	$262,630
Vacant	1	$0
CHATEAUGAY Village	**40**	**$2,107,670**
Commercial	3	$545,200
Residential	33	$1,557,270
Vacant	4	$5,200

Past Events

There were no property damage events specific to the Town and Village of Chateaugay occurring since the 2015 plan. However countywide events must also be considered.

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). The Village of Chateaugay utilizes the Village Hall and the Town of

Chateaugay uses the Town Hall as emergency shelters for residents. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Chateaugay major roadways are US Route 11 and State Route 374.

The Town and Village of Chateaugay approved the original Plan in 2008 and the update in 2015. The Town and Village will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. Chateaugay will post the Franklin County Hazard Mitigation Plan 2020 on their website https://www.townofchateaugay.org.

Specific Mitigation Actions: Following pages

Town of Chateaugay

Action Worksheet			
Project Name:	Town Generators		
Project Number:	Chateaugay #1		
Risk / Vulnerability			
Hazard of Concern:	Winter Storm/Wind Power Outages		
Description of the Problem:	1) The Town Hall is the center for town government and communications. In the event of an extended power outage there is no back-up power for the Town Center. 2) The Chateaugay Central School Bus Garage Fuel Station provides gasoline and diesel fuel for the school, Town, Village, fire department and emergency services. With a loss of power there is no way to fuel vehicles.		
Description of the Solution:	Purchasing and installing two 45KW standby generators, one for the Town Hall and one for the Bus Garage, connecting to the natural gas supply.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	30 Years	**Estimated Benefits (losses avoided):**	Benefits include fueling all emergency vehicles and maintaining the Town Hall as the center of operations for residents.
Useful Life:	20 Years		
Estimated Cost:	$25,000 Per Generator		
Plan for Implementation			
Prioritization:	High/Critical	**Desired Timeframe for Implementation:**	2021
Estimated Time Required for Project Implementation:	One Month	**Potential Funding Sources:**	Town Budget and HMPG Funding
Responsible Organization:	1) Town of Chateaugay 2) Town and Chateaugay Central School, Village of Chateaugay	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Vehicles will not be able to fuel during a power outage. Town government and communication will be difficult.
	Install Solar Panels for back-up power	High	Costly and unreliable.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Town of Chateaugay

Action Worksheet			
Project Name:	Rhinehart Road		
Project Number:	Town of Chateaugay #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Rhinehart Road Bridge is a 8 ft. wide, 14 ft. long concrete bridge. The concrete has deteriorated and is missing a concrete rail on the north side. The bridge is prone to flooding and is becoming unsafe for traffic.		
Description of the Solution:	The Town intends to install two 6 ft. steel open bottom box culverts to replace the deteriorating concrete bridge. DEC determinations and regulations will be followed. Sand, gravel, and shot rock will be utilized to maintain the streambed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents and emergency vehicles will have safe access.
Useful Life:	40 Years		
Estimated Cost:	$40,000		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Town Budget, HMGP
Responsible Organization:	Town of Chateaugay	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Bridge will continue to deteriorate and perhaps road will have to be closed.
	Phase 1 - Hire an engineer to provide specs and alternatives for the crossing	High	Bridge is in dire need of major repair or replacement.
	Replace bridge - Apply for a BridgeNY Grant	High	Chances of receiving funding is slim. Again bridge should be mitigated soon.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Village of Chateaugay

Project Name:	Emergency Preparedness		
Project Number:	Village of Chateaugay #1		
Risk / Vulnerability			
Hazard of Concern:	Multi-Hazard		
Description of the Problem:	Village residents should be made aware of how to prepare for a natural emergency; what to have on hand, area shelter, generator safety and more.		
Description of the Solution:	The Village of Chateaugay will organize an emergency preparedness packet to mail to residents including items mentioned above. The village will develop a plan for contacting those isolated, vulnerable residents and those with special needs, updated annually.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents will be educated on the safety measures to take to be prepared for an emergency situation.
Useful Life:	40 years		
Estimated Cost:	Low		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Village
N/A	Village of Chateaugay	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	All residents including the more vulnerable population will be at risk in emergency situations
	Post the information on facebook/website	Low	Internet access is poor and many people wil not be reached.
	Provide information for pick up at the Village office. Low	Low	Vulnerable, isolated individuals may not receive the information.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

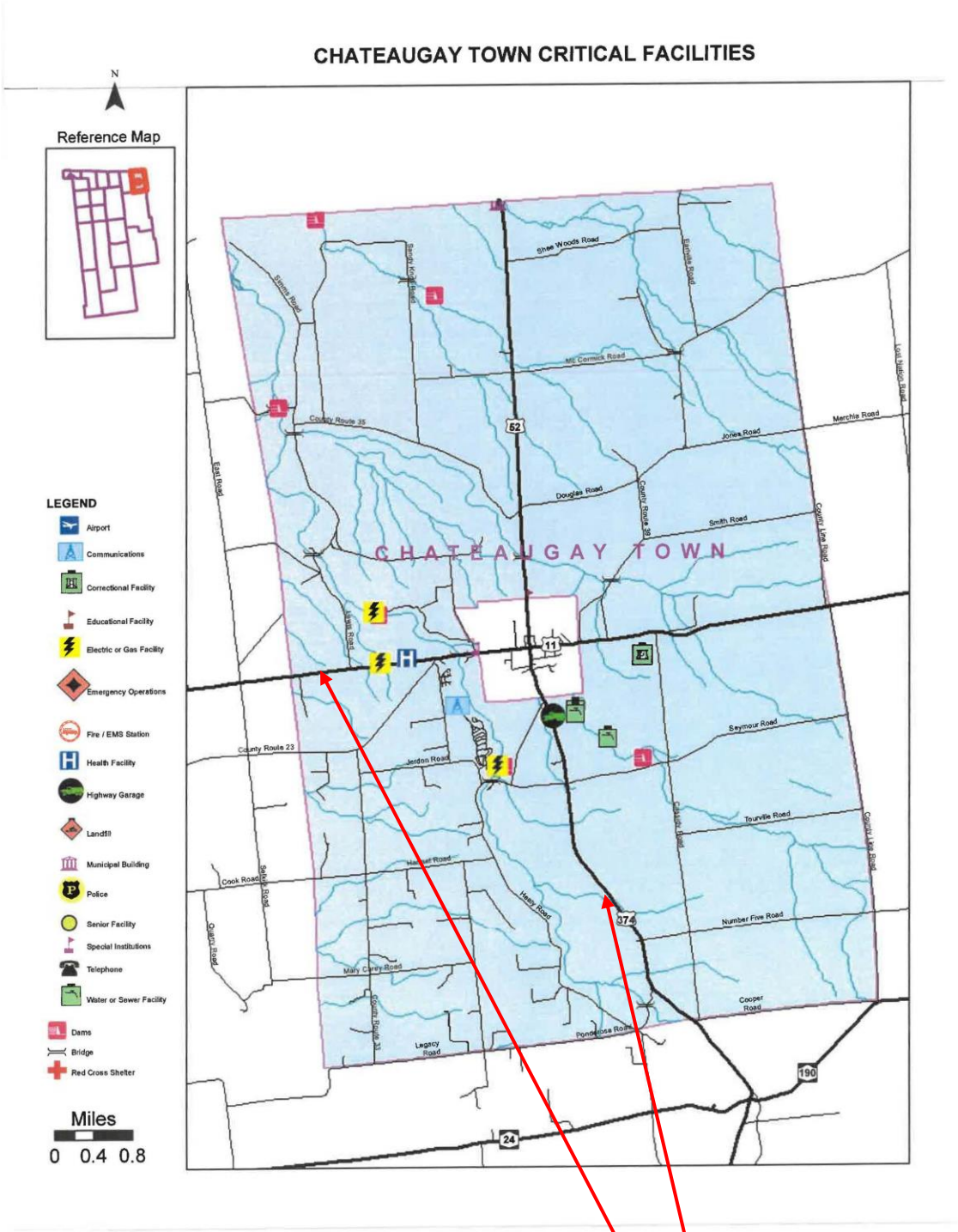
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Franklin County Multi-Jurisdictional Hazard Mitigation Plan

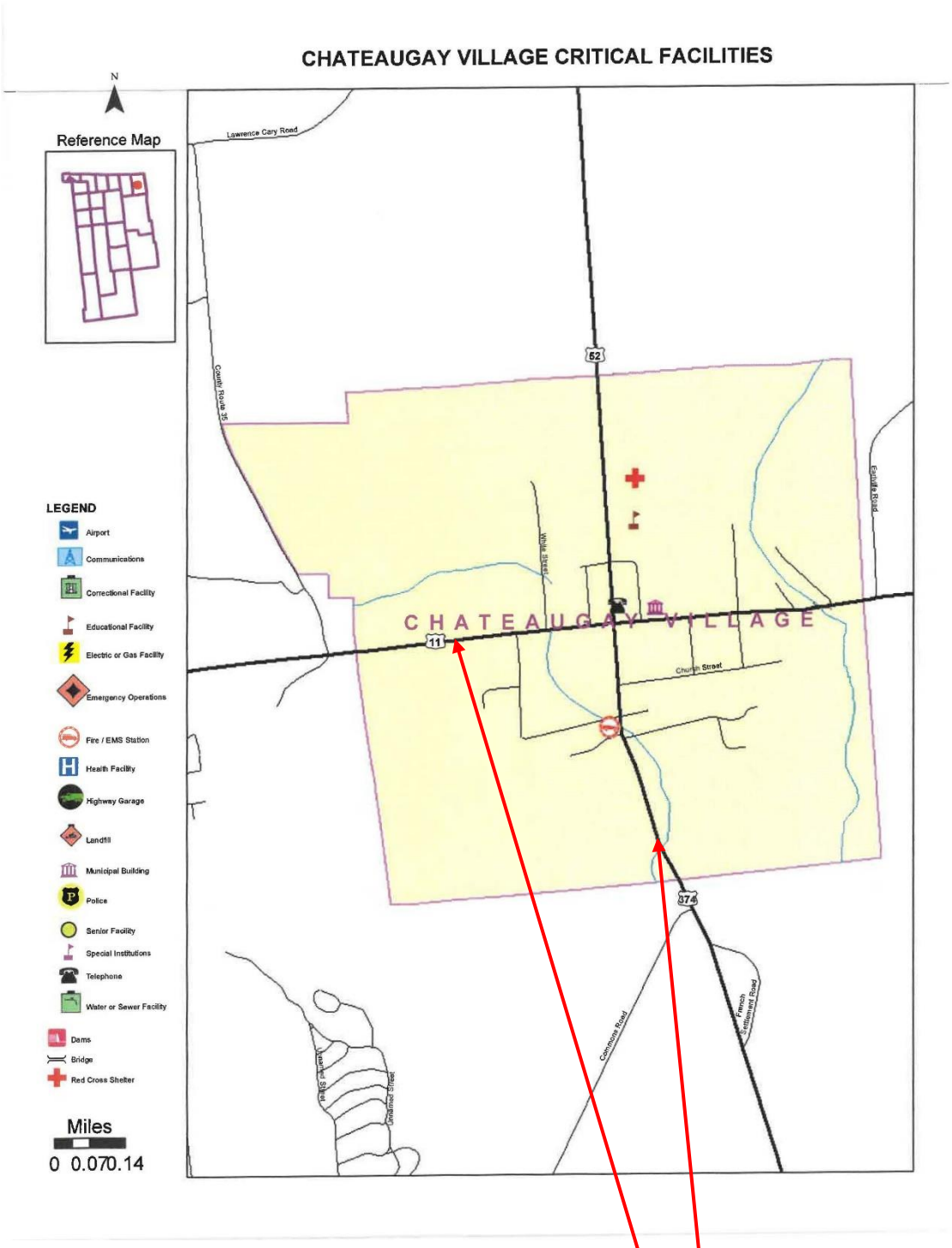
Village of Chateaugay

Project Name:	Village Garage Power		
Project Number:	Village of Chateaugay #2		
Risk / Vulnerability			
Hazard of Concern:	Multi-hazard		
Description of the Problem:	At the present time the Village Garage has heavy power operated main doors. In the event of a power outage, Village equuipment would be inaccessible until power is restored.		
Description of the Solution:	The Village will extend power from the Village Hall, equipped with a large capacilty generator, for backup power. NYSEG and NYDOT will be involved. If this not an option the Village will purchase a generator for the Garage.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Village equipment will be available in a power outage for snow removal, etc. and residents will be safe.
Useful Life:	40 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022-2023
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Village, HMPG, NYSDOT
N/A	Village of Chateaugay	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Village Garage and equipment wil be inaccessible in a power outage.
	Village will contact NYSEG for emergency power	Low	Equipment wil be available if NYSEG will provide temporary power.
	Replace the Main Doors	High	Costly and inefficient. Large doors are needed for access.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

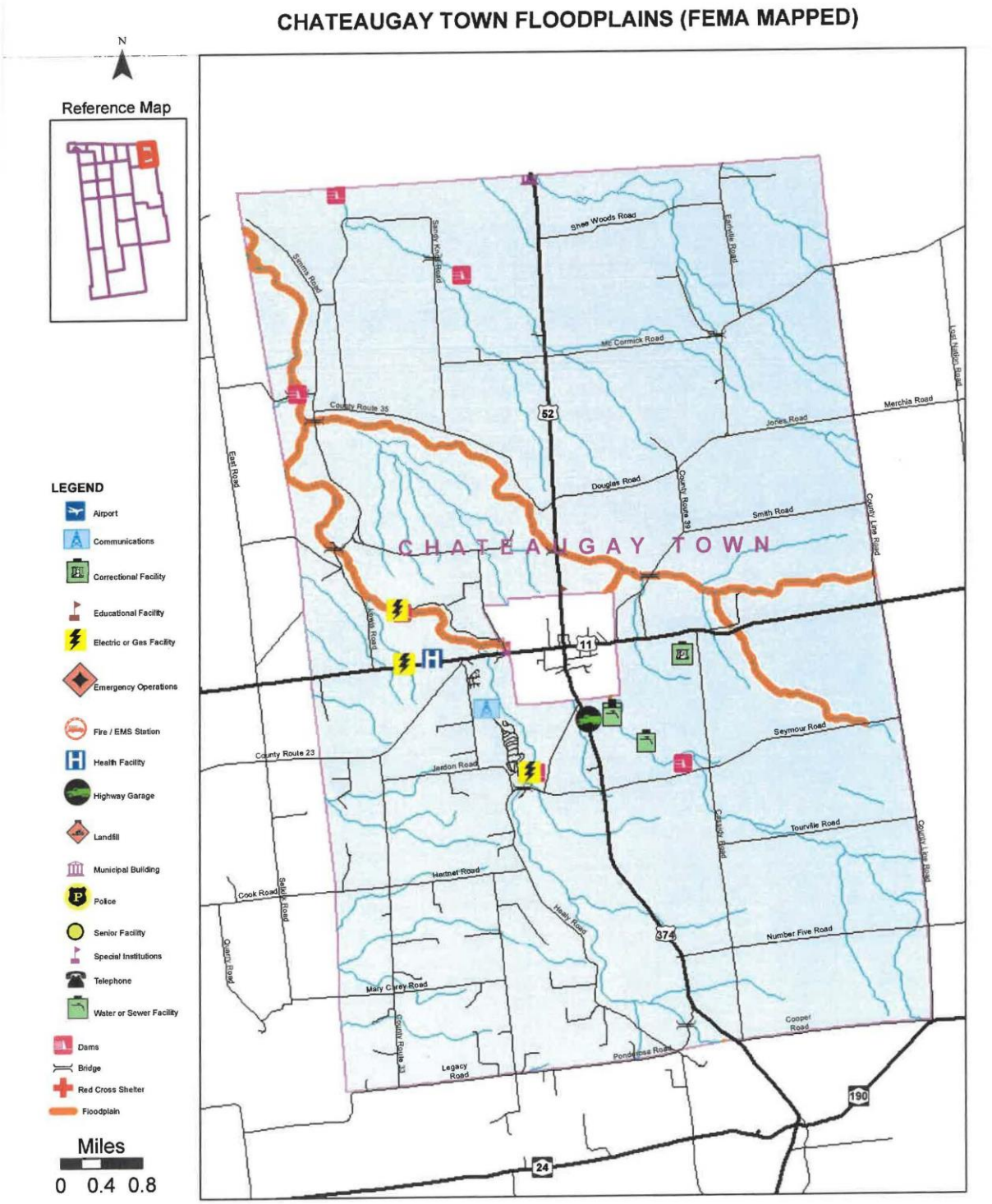
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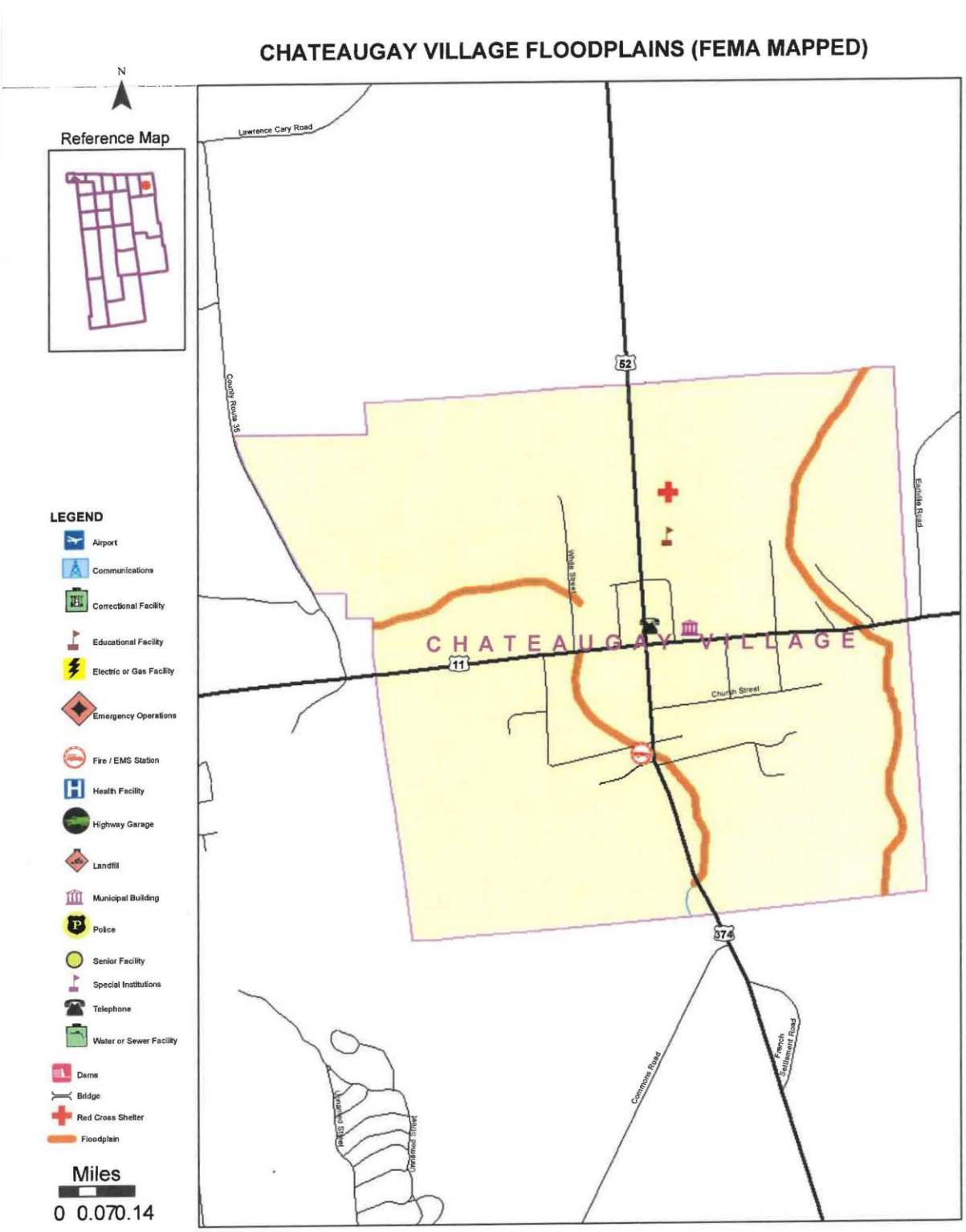


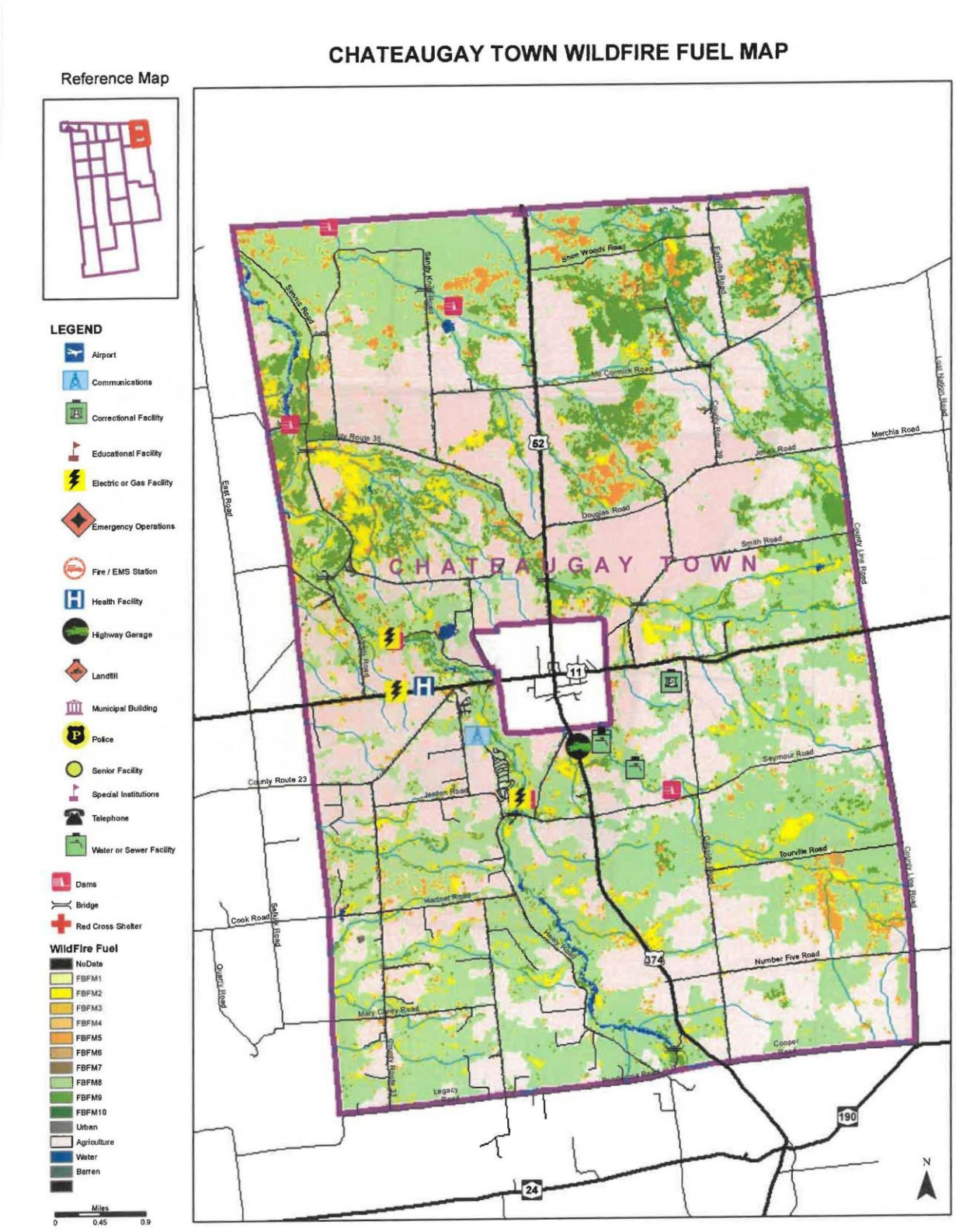
Evacuation Routes – State Route 11, 374

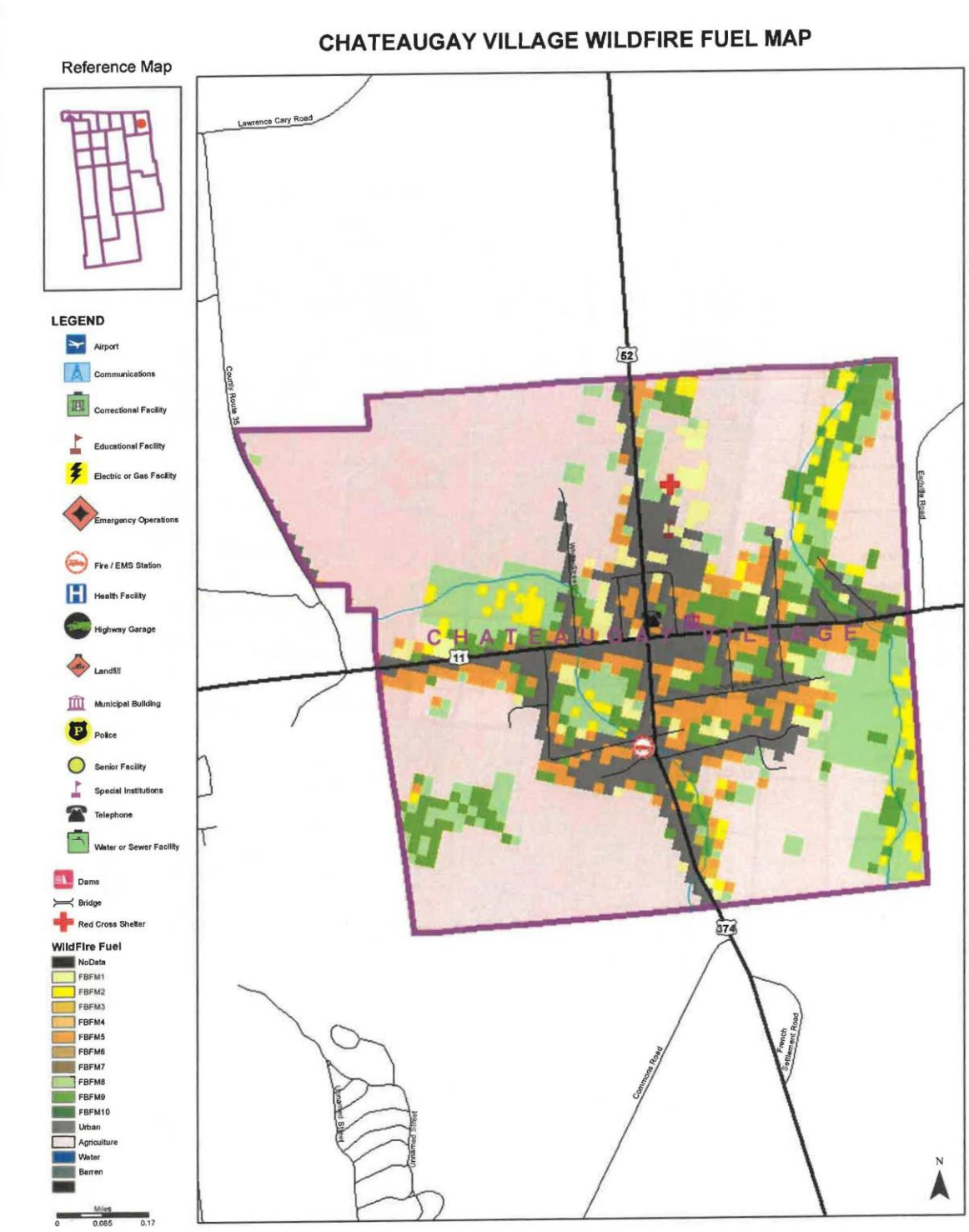


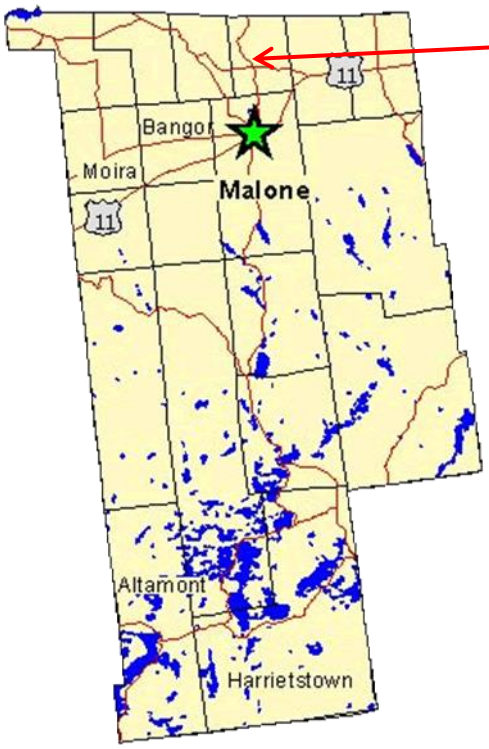
Evacuation Routes – State Route 11, 374


CHATEAUGAY TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.4 0.8
CHATEAUGAY TOWN
Shaw Woods Road
Sandy Knoll Road
Emmons Road
Mc Cormick Road
County Route 35
East Road
52
Douglas Road
County Route 39
Jones Road
Merchia Road
Smith Road
County Line Road
Lost Nation Road
Jones Road
11
County Route 23
Jerdon Road
Seymour Road
Tourville Road
Cadieux Road
Hartnet Road
Cook Road
Sabula Road
Quarry Road
Healy Road
374
Number Five Road
Mary Carey Road
County Route 33
Legacy Road
Cooper Road
Ponderosa Road
190
24


CHATEAUGAY VILLAGE FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.070.14
Lawrence Cary Road
County Route 35
52
11
374
White Street
Church Street
Eastside Road
Commons Road
French Settlement Road
Unnamed Stream
CHATEAUGAY VILLAGE


CHATEAUGAY TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.45
0.9
CHATEAUGAY TOWN
Shaw Woods Road
Sandy Knoll Road
Simons Road
McCormick Road
County Route 35
County Route 32
Jones Road
Merchia Road
East Road
Douglas Road
Smith Road
County Line Road
Seymour Road
County Route 23
Jordon Road
Tourville Road
Cook Road
Sabula Road
Quarry Road
Hartnet Road
Number Five Road
Mary Carey Road
County Route 33
Legacy Road
Cooper Road
52
11
374
190
24
N


CHATEAUGAY VILLAGE WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.085
0.17
Lawrence Cary Road
County Route 35
52
11
374
Ellenville Road
Commons Road
French Settlement Road
Unnamed Street
N



Town of Constable

The Town of Constable in northern Franklin County has as its northern border the province of Quebec, Canada. The Town of Westville is the western border of the town, with the Town of Burke on the east. The Town of Malone is the southern border of Constable.

Town/Village	Town of Constable
Land Area	32.8 square miles (20,992 acres) - 32.79 square miles (20,985.6 acres) land & 0.01 square miles (6.4 acres) water
Hamlets	Constable, Trout River
Population (ACS 2018)	1,578
Population Density	47.74 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	7,682,952
Elevation	305 feet
Rivers	Little Trout River
Bridges	12
State Routes	122, 30
Fire & Rescue	Constable Fire Dept.
Schools	Malone Central School
Law Enforcement	Franklin County Sheriff's Department & NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$24,081
Unemployment	5.9%
% Below Poverty	16.4%

Water Shed Data
A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in the Town of Constable consider winter storms, and ice of to be a high hazard risk for the residents of the town. Flooding, especially followed by spring thaws, becomes another hazard concern.

The Town of Constable elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The Town of Constable does not have a Zoning Plan or Comprehensive Plan currently.

Critical Facilities with assessed values.

Town Hall	15964 State Rte. 30 Constable, NY	$578,000
Town Garage	1292 State Rte. 122 Constable, NY	$603,134
Salt Shed	1292 State Rte. 122 Constable, NY	$194,275
Garage Vehicles/Equipment	1292 State Rte. 122 Constable, NY	$1,079,054

Future Development
A Solar Energy company is expected to locate in the town as well as possibly a Dollar General and an ARC facility.

NFIP

According to the Community Status Book, the Town of Constable participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The town continues to regulate development, including within floodplain areas. The floodplain administrator for the town is the Code Enforcement Officer.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Constable has no repetitive loss properties.

The chart below represents parcels located in the Town of Constable substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
CONSTABLE	**17**	**$136,160**
Commercial	1	$1,760
Residential	15	$134,200
Vacant	1	$200

Past Events

The chart below indicates property damage events specific to the Town of Constable occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
5/1/2017	Thunderstorm/Wind	5K	N/A
8/22/2017	Thunderstorm/Wind	5K	N/A
6/18/20118	Thunderstorm/Wind	10K	N/A

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Constable utilizes the Fire Department in town as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Constable major roadways are State Routes 30 and 122.

The Town of Constable approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. Constable will post the Franklin County Hazard Mitigation Plan 2020 on their website www.townofconstable.com.

Specific Mitigation Actions: Following pages

Town of Constable

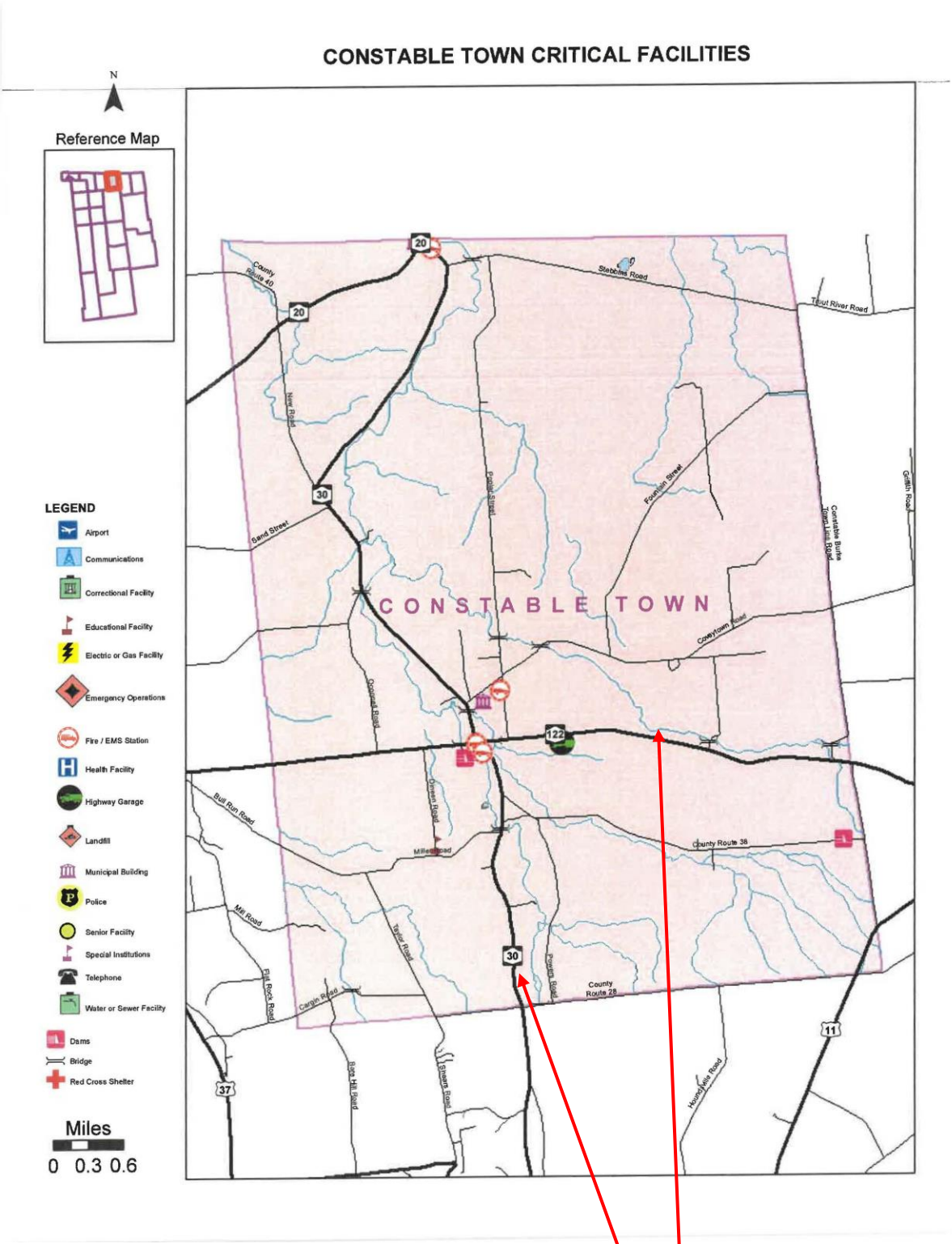
Action Worksheet			
Project Name:	Stebbins Road Reconstruction		
Project Number:	Constable #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding Washout		
Description of the Problem:	The Stebbins Road project has been a four year project. A grant from NYS was used to reconstruct a portion of the road/shoulders. Reconstruction of the last 3/4 mile stretch would complete the project. Stebbins Road was seasonal until recent years when businesses and residents moved on this sand/dirt road. The Town is required to maintain the road keeping it free from flooding, serious washouts, and possible closure.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town intends to add 6 to 12 inches of gravel to crown the road for water run-off. Shoulders will be created and major ditching will be done on both sides of the road for this last 3/4 mile. DEC will be consulted.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	30 Years	**Estimated Benefits (losses avoided):**	Traffic will not get stuck in the mud created by snow/ice melt. Emergency vehicles will get through. Residents will be safe.
Useful Life:	20 Years		
Estimated Cost:	$60,000		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Summer/Fall 2021
Estimated Time Required for Project Implementation:	2 Months	**Potential Funding Sources:**	Town Budget, CHIPS, HMGP Funding
Responsible Organization:	Town of Constable	**Local Planning Mechanisms to be Used in Implementation, if any:**	NYS DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Loss of road access.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

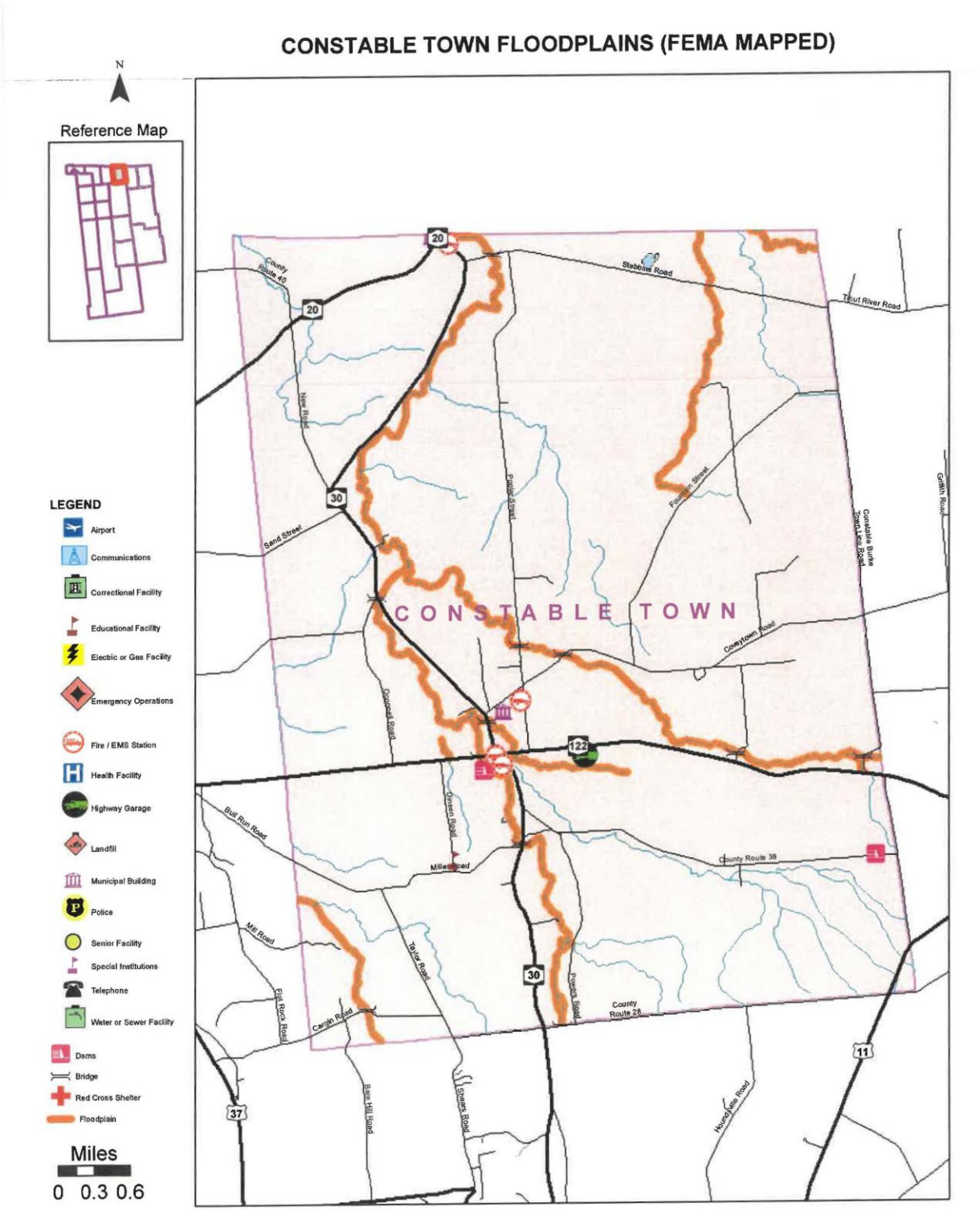
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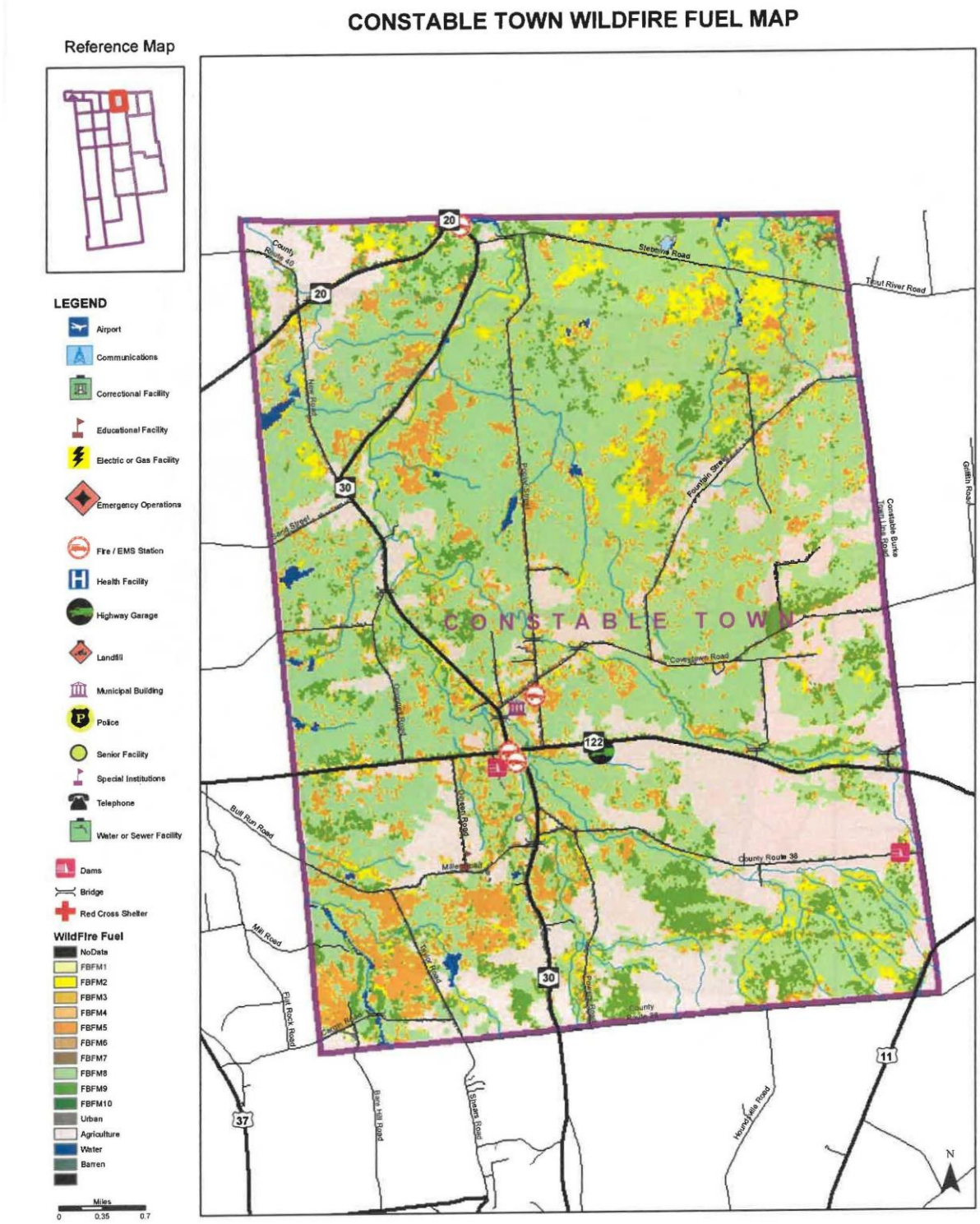
Town of Constable

Action Worksheet			
Project Name:	Poplar Road Rebuild		
Project Number:	Constable #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding/Washout		
Description of the Problem:	The Little Salmon River overflows its banks due to ice/snow melt in the spring, along with heavy spring rains causing low-lying areas of Poplar Road to flood, becoming dangerous and impassable.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town would like to elevate the road about 4 ft., install larger culverts and ditching. Guard rails would be installed for safety. Phase one would involve consulting with the DEC and having an engineering study of the situation.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 Years	**Estimated Benefits (losses avoided):**	Low lying portions of Poplar Road will not flood and will be accessible throughout the spring.
Useful Life:	30 Years		
Estimated Cost:	$60,000		
Plan for Implementation			
Prioritization:	Low	**Desired Timeframe for Implementation:**	2-5 Years
Estimated Time Required for Project Implementation:	2 Months	**Potential Funding Sources:**	FEMA / HMGP
Responsible Organization:	Town of Constable	**Local Planning Mechanisms to be Used in Implementation, if any:**	NYS DEC / Engineering Firm
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Loss of road access .
	Install multiple culverts	$30,000	Drainage would be inadequate for road flooding.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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CONSTABLE TOWN CRITICAL FACILITIES
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Miles
0 0.3 0.6
CONSTABLE TOWN
20
30
122
37
11
Stebbins Road
Trout River Road
Sand Street
Fountain Street
Griffin Road
Cowleytown Road
Bull Run Road
County Route 38
Mill Road
County Route 28
Hogansville Road
Evacuation Routes – State Route 30, 122


CONSTABLE TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.3 0.6
CONSTABLE TOWN
20
30
122
37
11
Stebbins Road
Trout River Road
Sand Street
Bull Run Road
Mill Road
Flat Rock Road
Taylor Road
Powers Road
County Route 28
County Route 38
Hounsfield Road
Griffith Road


CONSTABLE TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.35
0.7
CONSTABLE TOWN
20
30
122
37
11
Stebbins Road
Trout River Road
Griffin Road
Constable Burke Town Line Road
Fountain Street
Covestown Road
Bull Run Road
County Route 38
Mill Road
Fish Rock Road
Bare Hill Road
Houndsville Road
N



Town of Dickinson

The Town of Dickinson in western Franklin County has as its western border St. Lawrence County. The Town of Waverly is the southern border of the town, with the Town of Brandon on the east. The town of Moira is the northern border of the Town of Dickinson.

Town/Village	Town of Dickinson
Land Area	44.3 square miles (28,352 acres) - 44.2 square miles (28,288 acres) land & 0.1 square miles (64 acres) water
Hamlets	Alburg, Dickinson, Dickinson Center, East Dickinson, Irish Corners
Population (ACS 2018)	823
Population Density	18.58 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	52,910,686
Elevation	700-1,300 feet
Rivers	Deer River
State Routes	11B
Fire & Rescue	Dickinson Fire Department
Schools	Brushton-Moira Central Schools, St. Regis Falls Central Schools, St. Lawrence Central Schools
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$15,701
Unemployment	5.6%
% Below Poverty	16.5%

Water Shed Data
A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Town officials in Dickinson consider the following hazards to be a high risk level, winter storms, high winds and extreme cold.

The Town of Dickinson elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The southern portion of the town is within the Adirondack Park and follows Park guidelines. The Town of Dickinson has a Zoning Plan in place.

Critical Facilities with assessed values.

Fire Station	7 Church Street St. Regis Falls, NY	$181,300
Highway Department/Garage	339 Aiken Rd. St. Regis Falls, NY	$357,500

Future Development
A Solar Energy company is interested in locating within the town.

NFIP
According to the Community Status Book, the Town of Dickinson participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The town continues to regulate development, including within floodplain areas. The floodplain administrator for the town is the Code Enforcement Officer.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Dickinson has no repetitive loss properties.

The chart below represents parcels located substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
DICKINSON	**17**	**$699,560**
Residential	14	$687,560
Vacant	3	$12,000

Past Events

The chart below indicates property damage events specific to the Town of Dickinson occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
3/14/2017	Winter Storm	N/A	25" of Snow/30MPH Winds/Drifting/White Outs
3/13-3/14/2018	Winter Storm	10K	25" of Snow/ Drifting/White Outs

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Dickinson utilizes the Fire Department in town as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Dickinson major roadways are State Routes 11B and County Route 5.

The Town of Dickinson approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices.

Specific Mitigation Actions: Following pages

Town of Dickinson

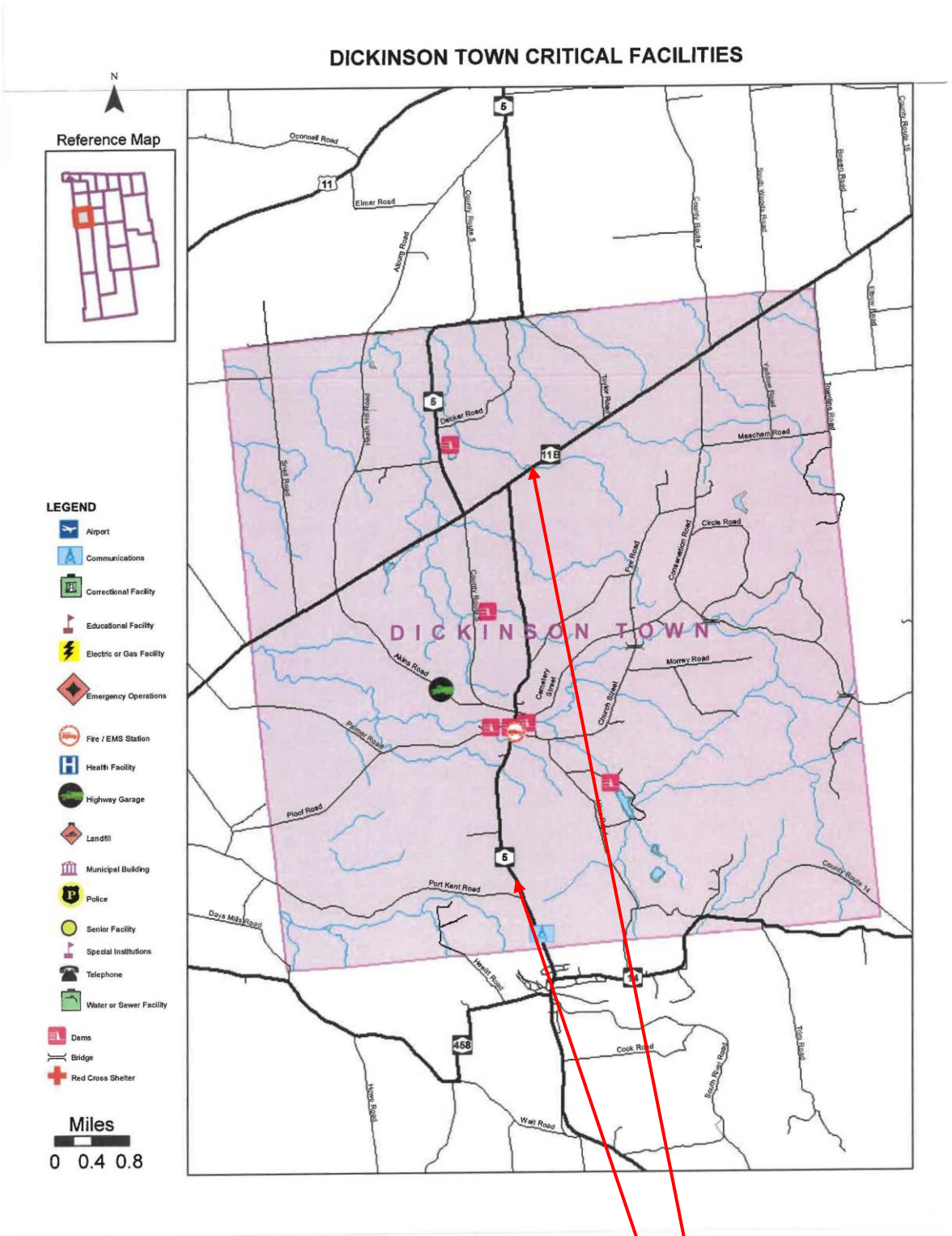
Action Worksheet			
Project Name:	Hewitt Road		
Project Number:	Dickinson #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding/Ice		
Description of the Problem:	Hewitt Road is a dead end road and until recently was a seasonal road. Year round residents have built on the road and in order for emergency vehicles to access the road, it requires improvements, primarily to prevent washouts making the road impassable. Upgrade of this road is a Town responsibility.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town intends to distribute 30 loads of gravel to improve and raise the roadbed. At the same time major ditching must be done to divert water; ice and snow melt as it is a mountain road. In order to achieve the ditching required, large boulders on the roadside will need to be removed so ditching can be completed. The Town doesn't have the equipment for such a job, however the County often allows for use of their equipment. Erosion will be controlled by planting native vegetation along the ditching creating a buffer. DEC consultation and permitting will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	100 Years	**Estimated Benefits (losses avoided):**	Hewitt Road would be passable and open for residents year round.
Useful Life:	50 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 Year
Estimated Time Required for Project Implementation:	6 Months	**Potential Funding Sources:**	Town Budget, CHIPS, HMGP Funding
Responsible Organization:	Town of Dickinson	**Local Planning Mechanisms to be Used in Implementation, if any:**	NYS DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Loss of road access.
	Pave the entire road	High	Funding not ever going to be available for such a project.
	Elevate entire road	High	Entire road would need to be elevated making road inaccessible for too long.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

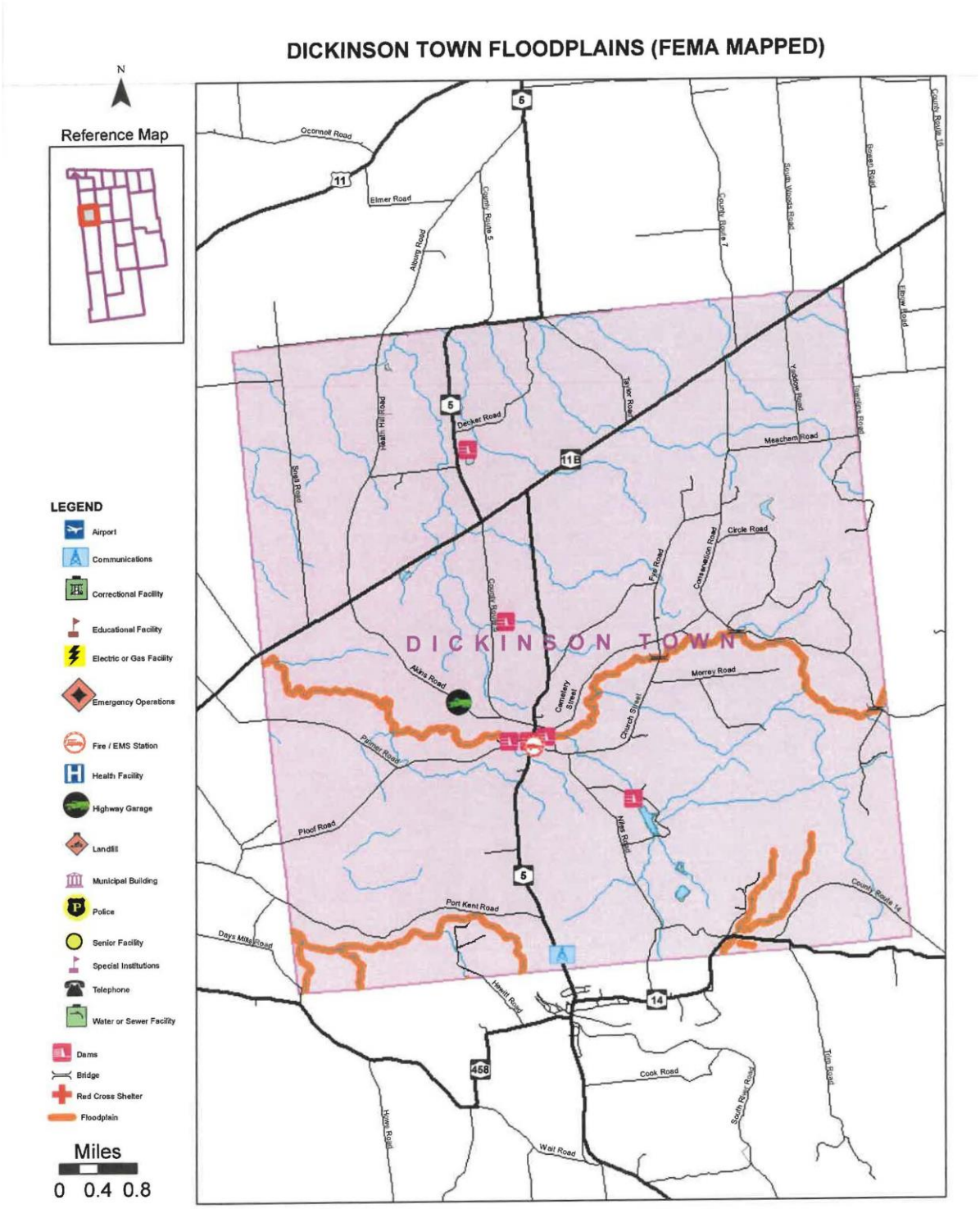
Town of Dickinson

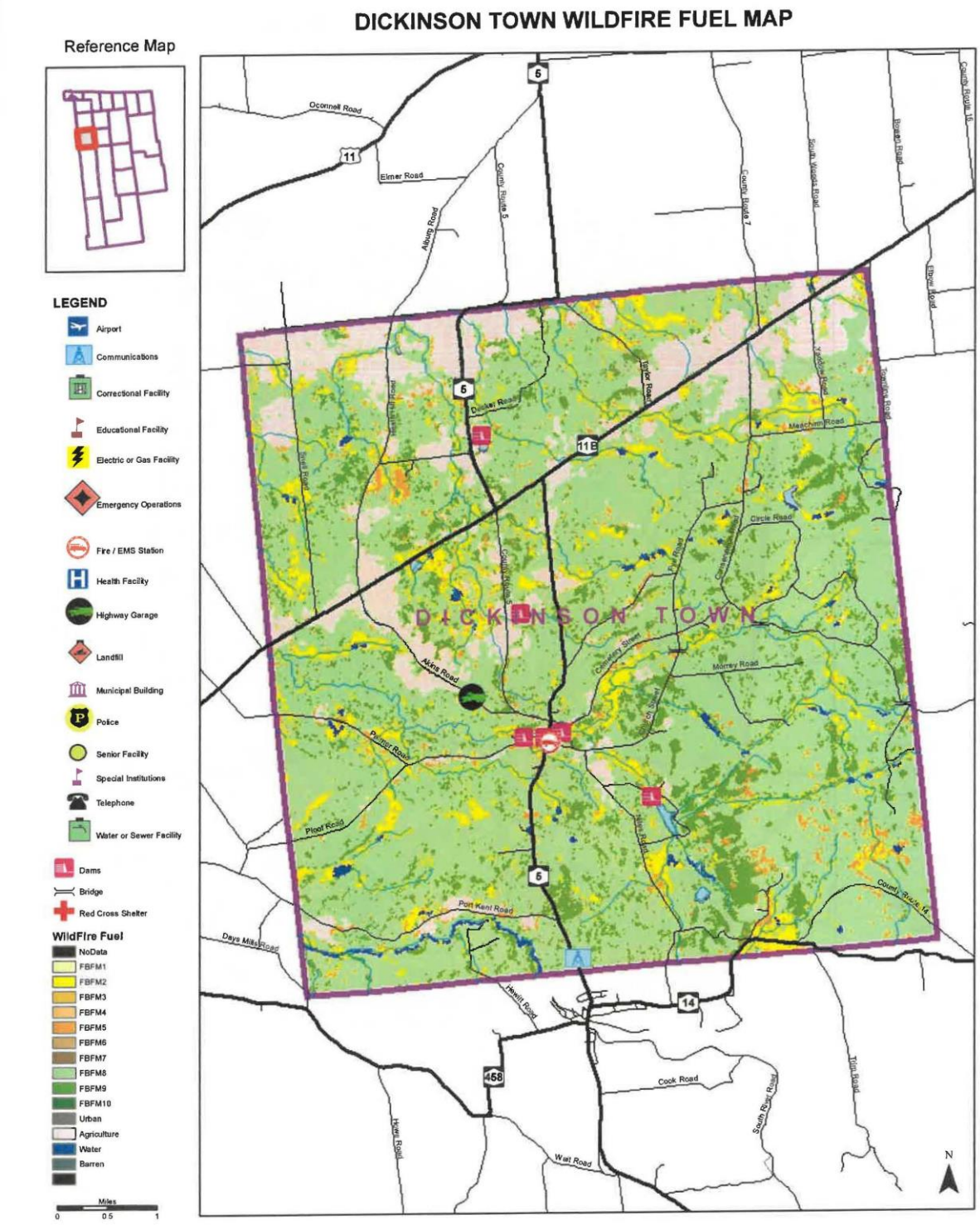
Action Worksheet			
Project Name:	Church Street Bridge		
Project Number:	Dickinson#2 Church Street		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Church Street has a one lane bridge that does not allow for large Fire/Rescue vehicles and congestion of road is a problem. The wing wall of the bridge broke away from the side of the bridge and there are barriers obstructing traffic flow.		
Action or Project Intended for Implementation			
Description of the Solution:	The wing wall of the bridge on Church Street will be rebuilt with cement and handrails will be added for safety. Rip rap will be put in place to maintain the structure. Jersey barriers will be removed. DEC permitting and guidance will be acquired.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:		**Estimated Benefits (losses avoided):**	Emergency Vehicles will be able to access Church Street Bridge, there will be safer traffic flow in the area.
Useful Life:	30 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	Immediate	**Desired Timeframe for Implementation:**	1 year
Estimated Time Required for Project Implementation:	6 months based on funding	**Potential Funding Sources:**	Town Budget, HMPG Funding
Responsible Organization:	Town of Dickinson	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Road will continue with oneway traffice, impeding resident and emergency vehicles.
	Apply for BridgeNY funds to replace bridge	High	Town does not have funds to hire an engineer for such project. Costly
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

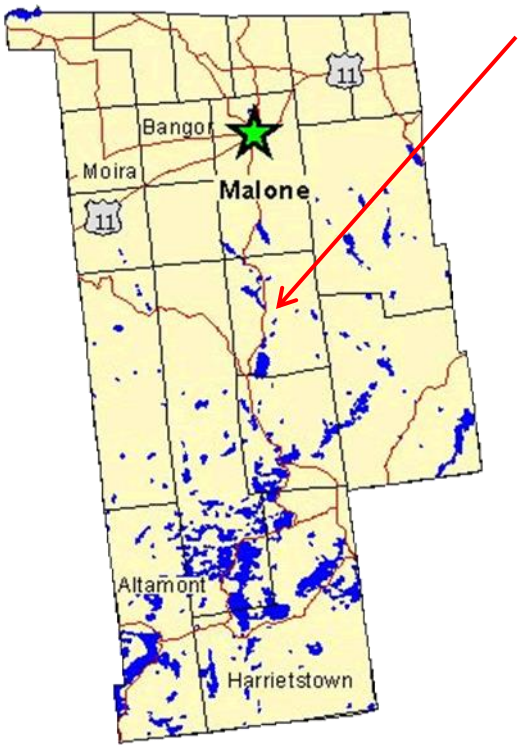
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Evacuation Routes – State Route 5, 11B


DICKINSON TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.4 0.8
DICKINSON TOWN
Oconnell Road
Elmer Road
Decker Road
Meacham Road
Circle Road
Morrey Road
Akins Road
Cemetery Street
Church Street
Palmer Road
Ploof Road
Port Kent Road
Days Mills Road
Hewitt Road
Cook Road
Wall Road
Scott Road
Fire Road
Conservation Road
Mills Road
Taylor Road
Yaddow Road
Elbow Road
South Woods Road
Allsop Road
County Route 5
County Route 7
County Route 14
Hyzen Road
South River Road
Trio Road
11
11B
5
14
458


DICKINSON TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
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FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
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1
DICKINSON TOWN
Oconnell Road
Elmer Road
Akins Road
Dunkel Road
Meachem Road
Circle Road
Cemetery Street
Morey Road
Pioneer Road
Ploof Road
Port Kent Road
Days Mills Road
Hewitt Road
Cook Road
West Road
Hoyt Road
South River Road
Tripp Road
County Route 5
County Route 7
County Route 16
Route 5
Route 11
Route 11B
Route 14
Route 458
N



Town of Duane

Located in central Franklin County, the Town of Duane has the Town of Santa Clara as a western border. The Town of Brighton is the southern border of the town, with the towns of Bellmont and Franklin on the east. The town of Malone is the northern boundary of the Town of Duane. The Town of Duane is within the Adirondack Park.

Town/Village	Town of Duane
Land Area	78.0 square miles (49,920 acres) - 74.9 square miles (47,936 acres) land & 3.1 square miles (1,984 acres) water
Hamlets	Duane Center
Population (ACS 2018)	175
Population Density	2.23 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	52,795,297
Elevation	1,480 feet
Largest Lakes	Lake Florence, Meacham Lake, Clear Pond
Rivers	Crandall Brook, Cove Brook
Bridges	5
State Routes	30,458
Fire & Rescue	Duane Fire Dept.
Schools	Malone Central School
Railroads	0
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$32,559
Unemployment	8.7%
% Below Poverty	14.5%

Water Shed Data
A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in the Town of Duane consider winter storms, extreme cold and high winds to be a high hazard risk for the residents of the town. Drought and wildfire are risks noted by town officials.

The Town of Duane elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The Town of Duane does not have a Zoning Plan or Comprehensive Plan. Located entirely in the Adirondack Park, with 80% of the land owned by NYS, land use is managed by the APA.

Critical Facilities with assessed values.

Town Garage	72 Ladd Rd. Duane, NY	
Duane Fire Station	172 County Rte. 26, Duane, NY	$90,357

Future Development
None is anticipated.

NFIP

According to the Community Status Book, the Town of Duane participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator for the town is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Duane has no repetitive loss properties.
The chart below represents parcels located substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
DUANE	**28**	**$1,357,500**
Residential	24	$1,333,700
Vacant	3	$23,800
Wild, Forested, Conservation Lands & Public Parks	1	$0

Past Events
The chart below indicates property damage events specific to the Town of Duane occurring since the 2015 plan. However countywide events must also be considered.

Date	*Type*	*Property Damage*	*Details*
3/14/2017	Winter Storm/Winds	N/A	White Outs/Drifted Roads/33" of Snow/ 30MPH Winds
7/8/2017	Thunderstorms/High Winds	20K	Power Outages/Trees Downed
2/17/2018	Winter Storm	N/A	10" of Snow
3/13/2018-3/14/2018	Winter Storm/Winds	10K	White Outs/Drifted Roads/Power Outages, 20" of Snow
5/4/2018	Thunderstorms/High Winds	10K	Wind 50 knots/Power Outages/Trees Downed
6/30/2018-7/5/2018	Extreme Heat/Isolated Thunderstorms	2K	Above 90 Degrees for 5 Days/Humidity felt like 100-110 Degrees/ Power Outages/Trees Downed
11/15/2018	Winter Storm	15K	10" of Snow in Area
3/20/2020	Thunderstorm/High Winds	12K	Wind 52 Knots/Power Outages/Trees Downed

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Duane utilizes the Fire Department in town as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Duane major roadways are State Routes 30 and 26.

The Town of Duane approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. The town will continue to incorporate their

mitigation activities into land use plans in accordance with Adirondack Park Agency regulations. Duane intends to post the Franklin County Hazard Mitigation Plan 2020 on their web site https://duaneny.com.

Specific Mitigation Actions: Following pages

Town of Duane

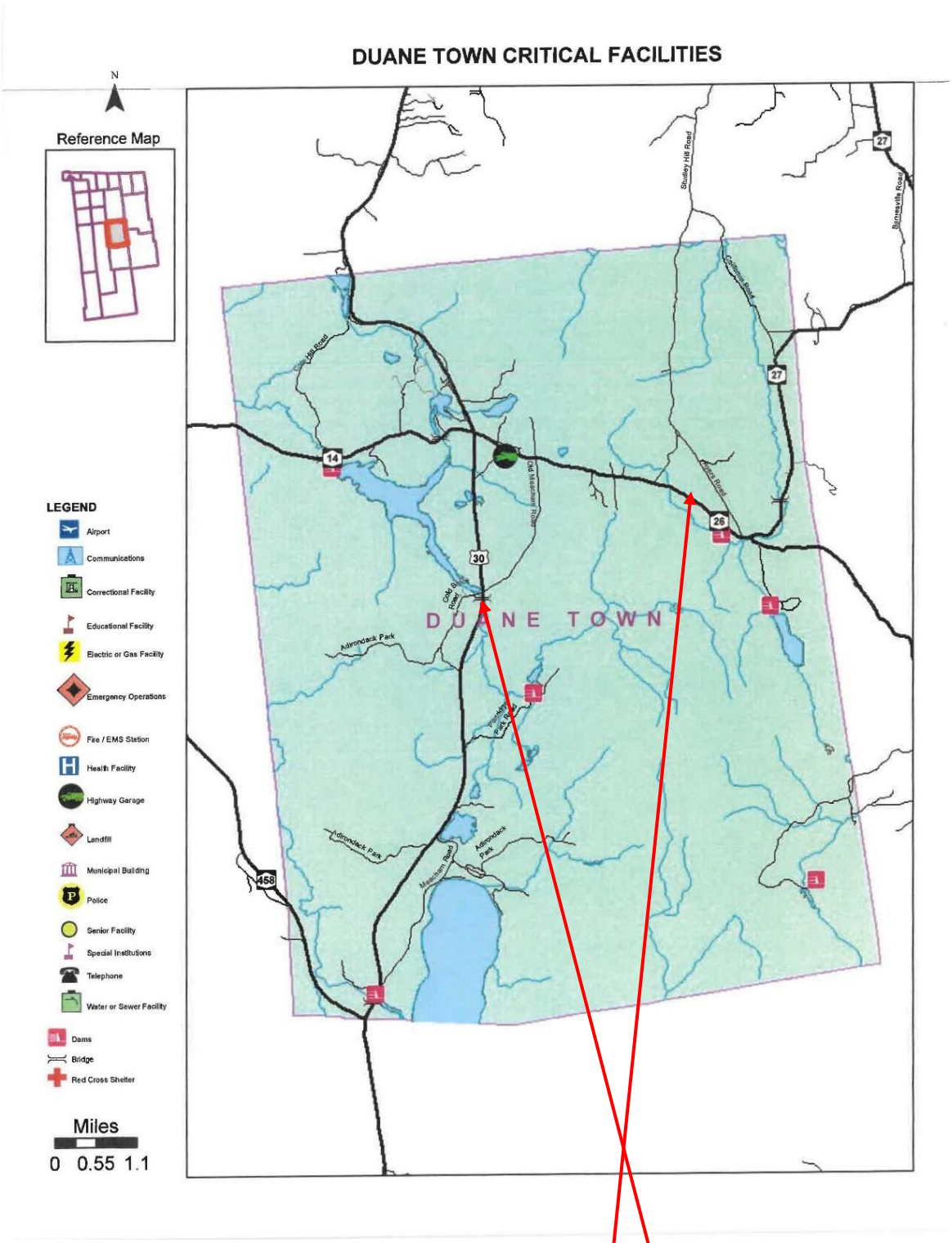
Action Worksheet			
Project Name:	Culvert Replacement California Road		
Project Number:	California #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Periodic heavy rain storms and snow melt wash out the road and culverts.		
Action or Project Intended for Implementation			
Description of the Solution:	Replace existing sixty year old concrete box culverts with squashed (oval) galvanized culverts, and crushed stone, 18 ft. in length. DEC recommendations will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	The road remains passable for residents and emergency vehicles during weather events and the public is safe.
Useful Life:	50 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021- 2022
Estimated Time Required for Project Implementation:	6 Months	**Potential Funding Sources:**	CHIPS/Town Budget/HMPG Funding
Responsible Organization:	Town of Duane Highway Dept.	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Washouts continue, road deteriorates.
	Implement one project per year over a four year timespan	Average estimate of $187,500 per project	Funding might be possible, one area of road would improve.
	Implement two projects per year over a two year timespan	Average estimate of $375,000 per project	Financially almost impossible for a Town of 200 residents. With a grant, road would then become passable.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

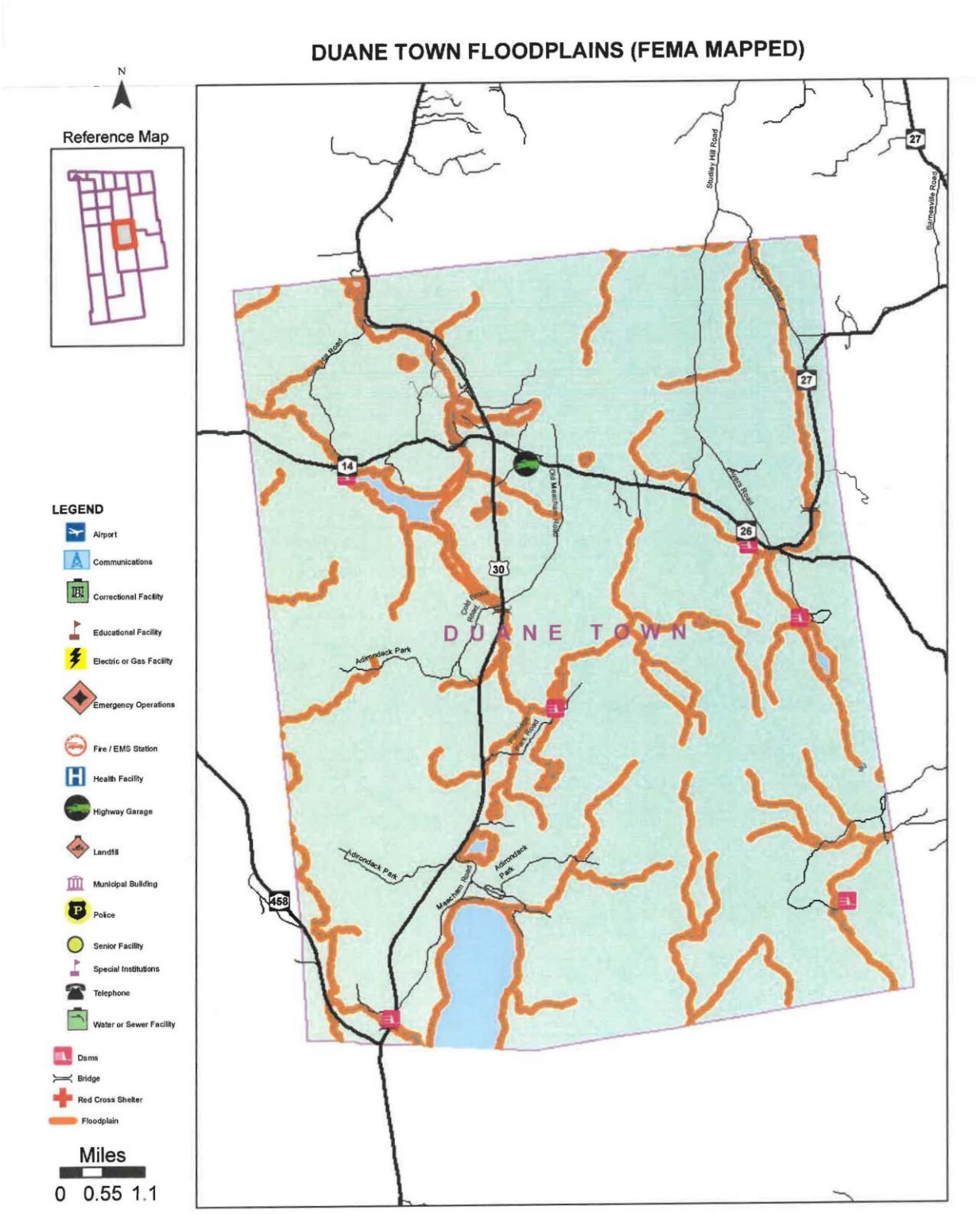
Town of Duane

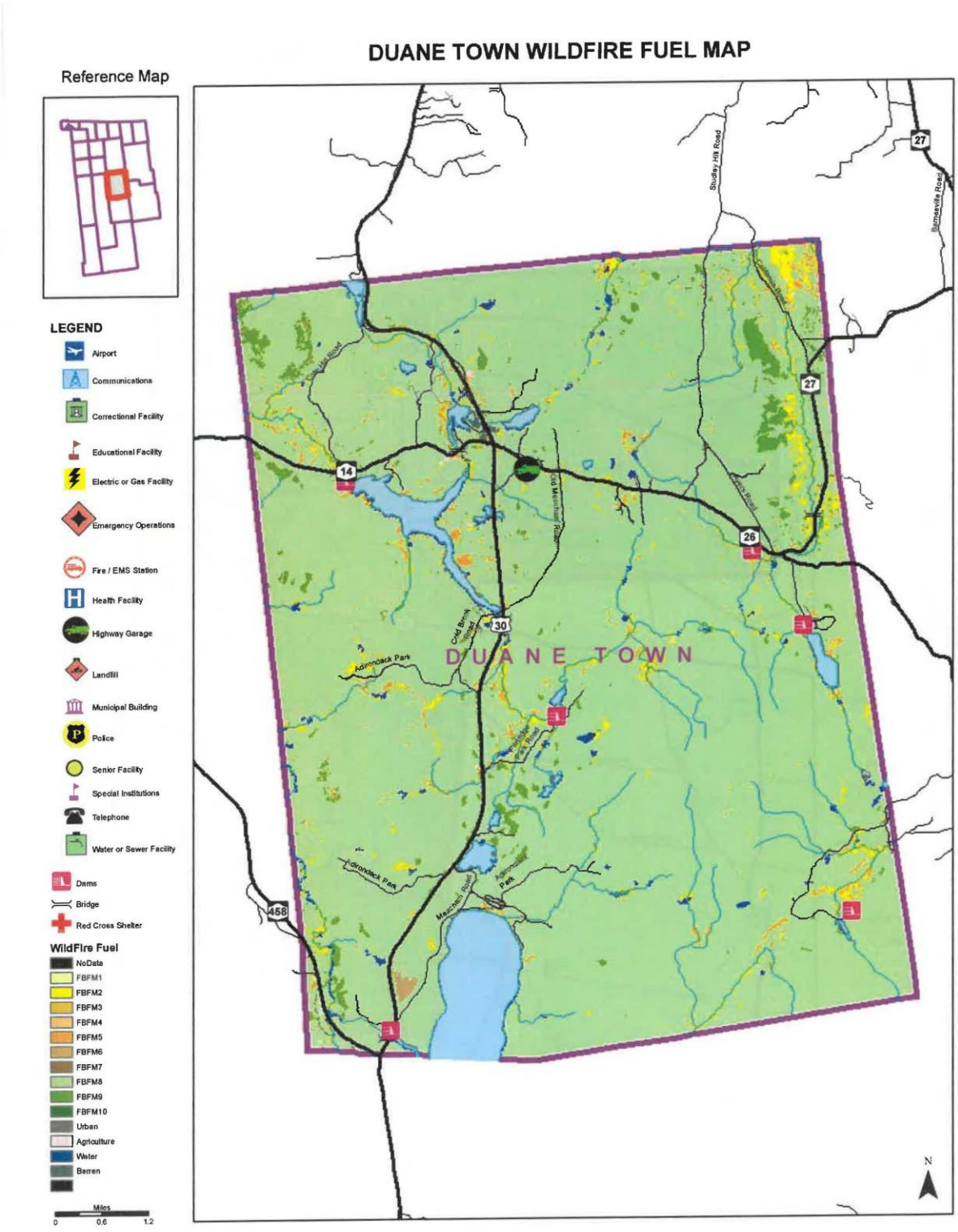
Action Worksheet			
Project Name:	Culvert Replacement Studley Road		
Project Number:	Duane #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Periodic heavy rain storms and snow melt wash out the road and culverts. Impassable for residents and emergency vehicles.		
Action or Project Intended for Implementation			
Description of the Solution:	Elevate roadbed and replace existing hundred year old concrete box culverts with smooth bore corrugated plastic pipe. DEC and Army Corps of Engineers recommendations will be followed.		
Is this project related to a Critical Facility?	**Yes** ☐	**No** ☑	
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	The roads remain passable for the public and emergency vehicles during weather events.
Useful Life:	50 Years		
Estimated Cost:	$180,000		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022-2023
Estimated Time Required for Project Implementation:	14 Days	**Potential Funding Sources:**	CHIPS/Grants/BridgeNY/Town/ HMPG Funding
Responsible Organization:	Town of Duane Highway Dept.	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC /Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Road will deteriorate, constant washouts.
	Implement one project per year over timespan	High	Only one piece of the problem will be addressed, so washouts will continue.
	Implement two projects per year over timespan	High	Very expensive, will need grants. If funded, this would alleviate the problem.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

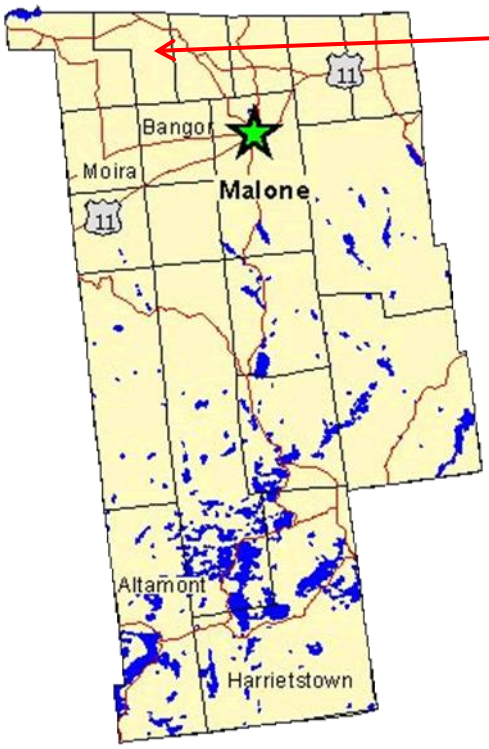
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Evacuation Routes – State 26, 30


DUANE TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
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Floodplain
Miles
0 0.55 1.1
DUANE TOWN
Adirondack Park
Meacham Road
Old Military Road
Cole Road
Stutley Hill Road
Burnesville Road
14
30
26
27
458


DUANE TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
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Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
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FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
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1.2
DUANE TOWN
Adirondack Park
Old Bombay Road
Old Meacham Road
Meacham Road
Studley Hill Road
Barnesville Road
14
26
27
30
458
N



Town of Fort Covington

Located in northern Franklin County, the Town of Fort Covington has the province of Quebec, Canada as a northern border. The Town of Bangor is the southern border of the town, with the towns of Bombay and Westville on the west and east respectively.

Town/Village	Town of Fort Covington
Land Area	36.7 square miles (23,488 acres) - all land
Hamlets	Cooks Corner, Fort Covington, Fort Covington Center
Population (ACS 2018)	1,604
Population Density	45.67 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	82,878,592
Elevation	187 feet
Rivers	Little Salmon River, Deer Creek
Bridges	17
State Routes	37
Fire & Rescue	Fort Covington Fire Department
Schools	Salmon River Central Schools
Railroads	1
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$25,414
Unemployment	8.1%
% Below Poverty	14.7%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in the Town of Ft. Covington consider flooding and flash flooding to be a high hazard risk for the residents of the town. Winter storms, especially followed by spring thaws, become another hazard concern.

The Town of Fort Covington elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization.

Critical Facilities with assessed values.

Garage	564 County Rte. 42 Ft. Covington, NY	$75,765
Town Hall	2510 Chateaugay St. Ft. Covington, NY	$10,000

Future Development

At present, the Town of Ft. Covington has two solar companies potentially developing in the town.

NFIP

According to the Community Status Book, the Town of Ft. Covington participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator in the Town of Ft. Covington is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas. NFIP data in 2019 indicates one loss at $3,893.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, Ft. Covington has no repetitive loss properties.

The chart below represents parcels located in the Town of Ft. Covington substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
FORT COVINGTON	**41**	**$1,948,600**
Commercial	3	$150,800
Community Services	2	$0
Recreation & Entertainment	1	$43,500
Residential	29	$1,710,500
Vacant	6	$43,800

Past Events

The chart below indicates property damage events specific to the Town of Ft. Covington occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
7/9/2016	Thunderstorms/High Winds	1K	Power Outages/Trees Downed
7/22/2016	Thunderstorms/High Winds/Hail	5K	Power Outages/Trees Downed
1/12/2018	Flood/Ice Jam	150K	10” of Snow/Sleet/ Little Salmon River - Evacuations of 17 Homes - 37 Residents
2/21/2018	Flash Flood/Ice Jam	100K	Little Salmon River - Evacuations of Residents
3/20/2020	Thunderstorm/High Winds	12K	Wind 52 Knots/Power Outages/Trees Downed

Ft. Covington has been designated by DEC as part of the Resilient NY program, primarily due to the flooding/ice jams in 2018. According to Tom Snell at DEC, Resilient NY has four stages and Ft. Covington will be in the Outreach/Data Collection phase by late summer 2021. As of this time the town was unaware of this effort by NYS, however welcomes NYS analyzing and assisting in the efforts to alleviate the Salmon River flooding in the town.

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Ft. Covington utilizes the Adult Center in town as an emergency shelter. It is used 2 or 3 times a year and is equipped with emergency supplies. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Fort Covington major roadways are State Route 37 and County Routes 4 and 3.

The Town of Ft. Covington approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans, including their Zoning Plan, and Subdivision regulations. Town leaders including Supervisor, Highway, and Code

Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices.

Specific Mitigation Actions: Following pages

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Ft. Covington

Action Worksheet			
Project Name:	Avery Road Rebuild		
Project Number:	Ft. Covington #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Avery Road presently has double pipes to carry flow of spring melt and run off. These are inadequate and are in danger of washing out. Should this happen the road would wash out and there would be no access to people living on the road.		
Description of the Solution:	Replace pipes with one 12 ft. galvanized steel pipe arch culvert, durable and reliable. Riprap will be used where needed and natural vegetation planted to limit erosion. DEC determinations and permitting will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 Years	**Estimated Benefits (losses avoided):**	Severe washout of Avery Road will be avoided. Residents will be safe and have access to emergency assistance.
Useful Life:	30 Years		
Estimated Cost:	$40,000		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021
Estimated Time Required for Project Implementation:	2 Months	**Potential Funding Sources:**	Town Budget and HMPG Funding
Responsible Organization:	Town of Ft. Covington	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Washouts will continue. Road will deteriorate.
	Replace with bridge	$75,000	Extensive project, road would be closed for work and residents would be stranded.
	Detention Pond	$15,000 - $20,000	There is not enough room to build this on land owned by the Town.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Ft. Covington

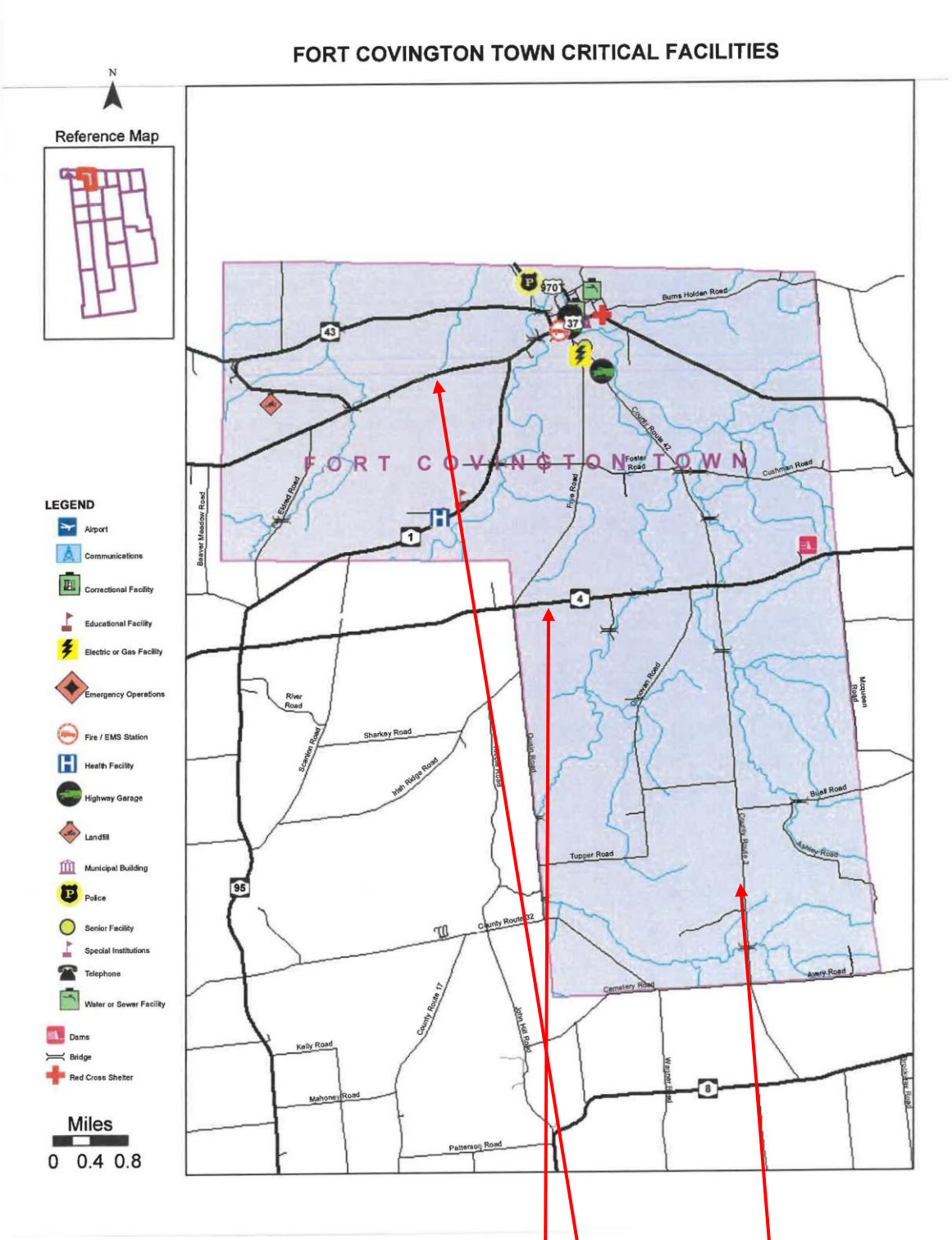
Action Worksheet			
Project Name:	Water/Sewer Plant Generator Back-Up		
Project Number:	Ft. Covington #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding/Wind/Winter Storm Power Outage		
Description of the Problem:	The Ft. Covington Sewer Plant, located on 44 High Street, serves the 1,604 residents of Ft. Covington. Presently if there were to be a winter storm, ice storm, high winds, or other event knocking out power, the Town does not have a back-up generator for the sewer plant. A situation such as this would create a serious health and safety problem for residents.		
Description of the Solution:	The Town needs a 45KW standby generator to supply electricity to the sewer plant in the event of a power shut down.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 Years	**Estimated Benefits (losses avoided):**	Activities at the sewer plant would continue uninterrupted by a power outage.
Useful Life:	20 Years		
Estimated Cost:	$30,000		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021
Estimated Time Required for Project Implementation:	2 Months	**Potential Funding Sources:**	Town Budget and HMPG Funding
Responsible Organization:	Town of Ft. Covington	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Sewer plant would fail creating health and safety concerns.
	Solar panel powered sewer plant	High	Impractical and too costly.
	Purchase "power packs" for use	High	Cost is similar and life of power packs is limited. Ineffective.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

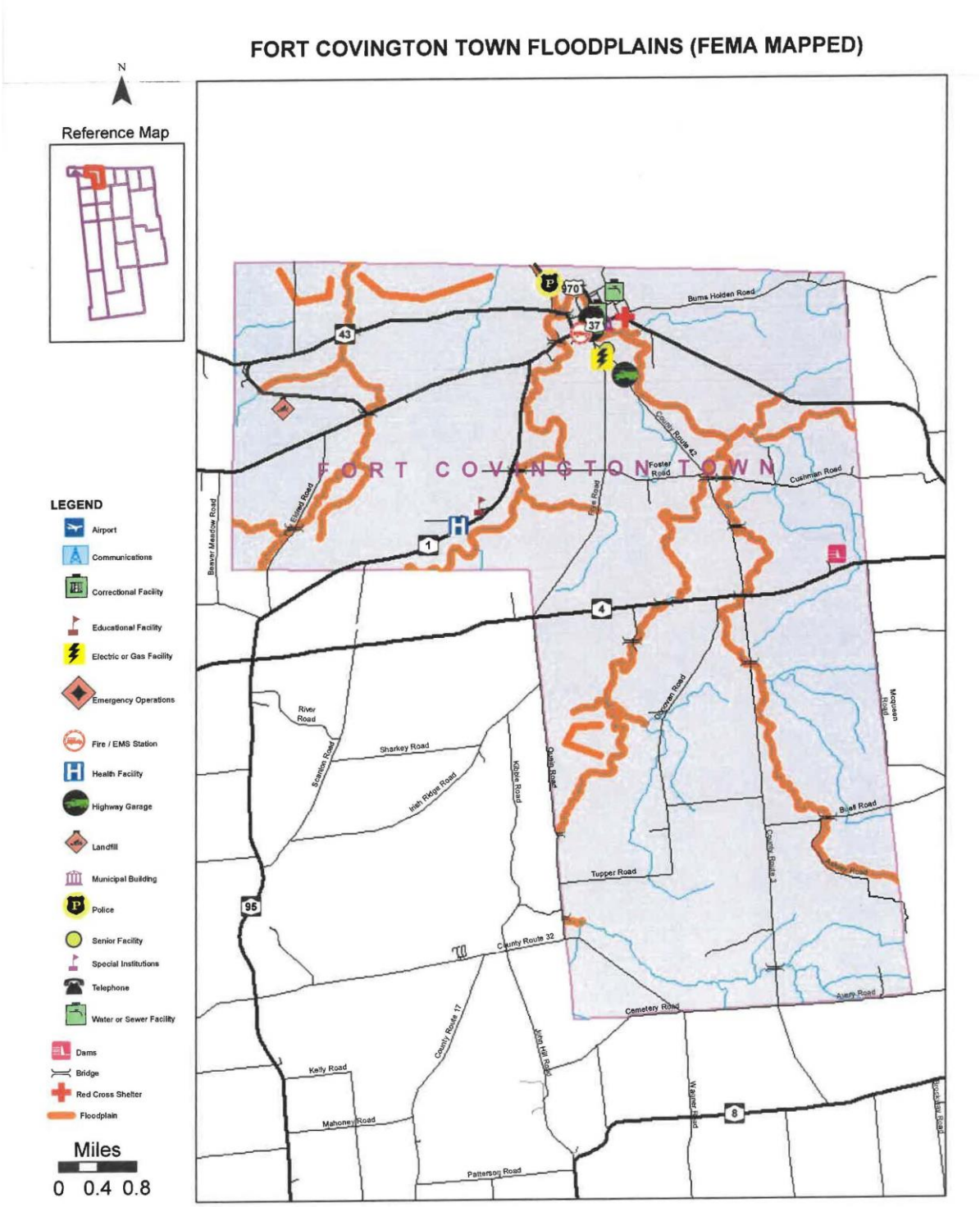
Town of Ft. Covington

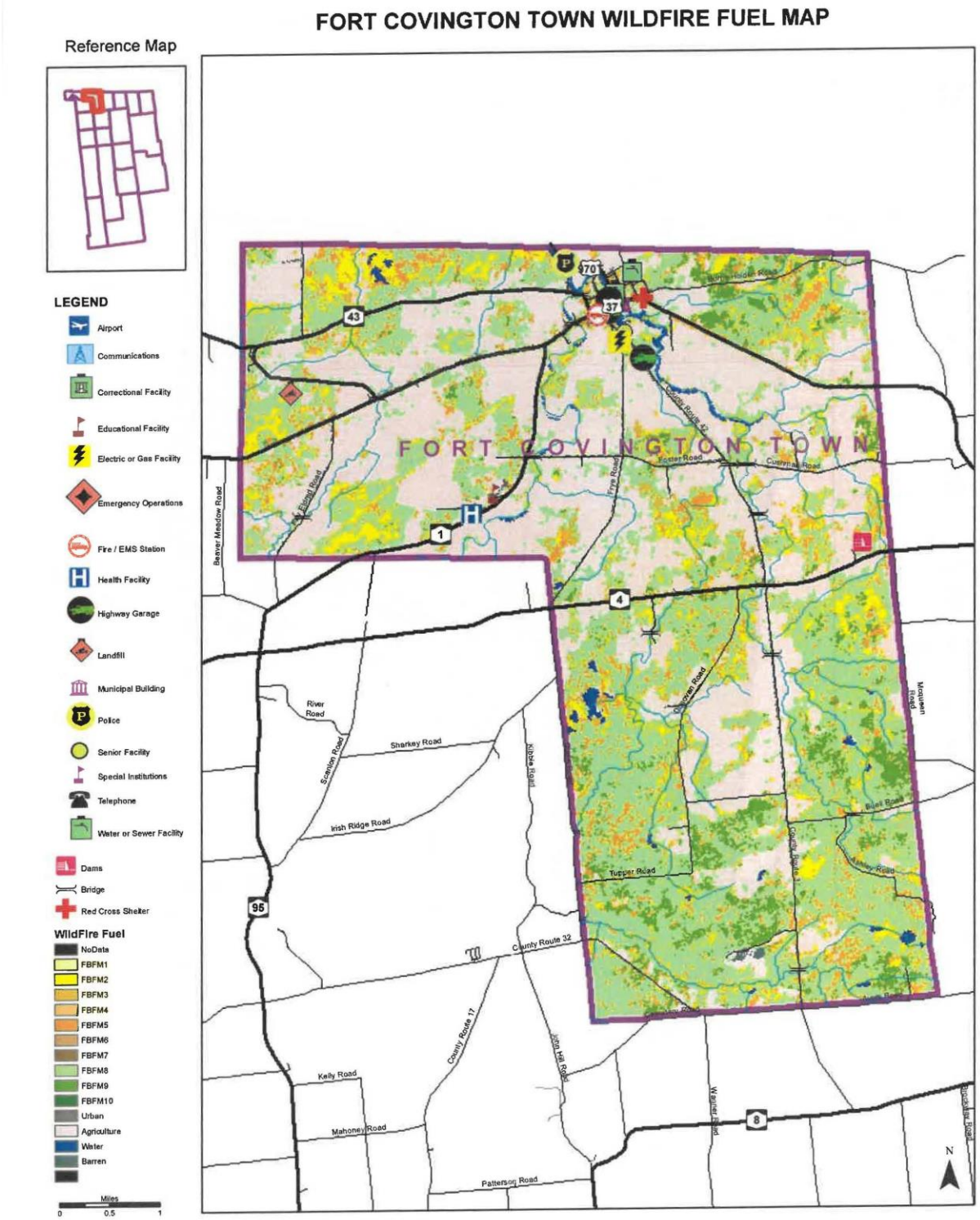
Action Worksheet			
Project Name:	Pike Street Rebuild		
Project Number:	Ft. Covington #3		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Due to the Salmon River flooding of Pike Street, usually two or three times a year, often with 6-8 inches of water the Town is forced to close the road and limits emergency vehicle access for residents.		
Description of the Solution:	The Town would like to start with bank restoration in an effort to limit flooding using native vegetation and grass swale. At the same time, an engineer would be hired to develop the best plan to elevate the road to eliminate flooding as a concern. DEC determinations and permitting would be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 Years	**Estimated Benefits (losses avoided):**	Pike Street flooding would be eased in the short term and a long term solution would be developed.
Useful Life:	20 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Town Budget and HMPG Funding, FEMA
Responsible Organization:	Town of Ft. Covington	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Pike Street will deteriorate and flooding/road closures will continue.
	Detention Ponds	High	Town doesn't own enough land to permit this option.
	Trees for Tributaries/Buffer in a Bag	Low	May be utilized for the short term, but not a long term solution.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

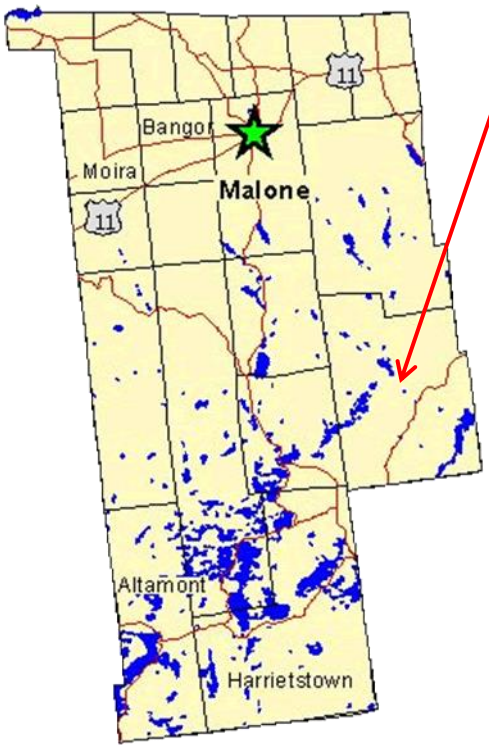
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Evacuation Routes – State Route 4, 37, County Route 3


FORT COVINGTON TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
FORT COVINGTON TOWN
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.4 0.8
Burns Holden Road
County Route 43
Foster Road
Cushman Road
Beaver Meadow Road
Elliott Road
Rice Road
River Road
Scanlon Road
Sharkey Road
Irish Ridge Road
Kibbie Road
Quinn Road
Donovan Road
Mequeen Road
Buell Road
Tupper Road
County Route 2
County Route 32
Cemetery Road
Avery Road
County Route 17
John Hill Road
Warner Road
Kelly Road
Mahoney Road
Patterson Road
Scenic Hill Road
970
37
43
1
4
95
8


FORT COVINGTON TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.5
1
FORT COVINGTON TOWN
Beaver Meadow Road
Foster Road
Cunningham Road
River Road
Sharkey Road
Scanlon Road
Irish Ridge Road
Tupper Road
County Route 32
County Route 17
Kelly Road
Mahoney Road
Patterson Road
Bliss Road
Mountain Road
Warner Road
Rockabie Road
N



Town of Franklin

The Town of Franklin is in the eastern region of Franklin County. The town has Clinton County on the eastern boundary and Essex County on its southern border. The Town of Bellmont is on the northern border of the town, with the towns of Duane and Brighton on the west. The Town of Franklin is in the Adirondack Park.

Town/Village	Town of Franklin
Land Area	175.2 square miles (112,128 acres) - 169.8 square miles (108,672 acres) land & 5.4 square miles (3,456 acres) water
Hamlets	Alder Brook, Franklin Falls, Forestdale, Goldsmith, Loon Lake, Merrillsville, Onchiota, Sugarbush, Two Brooks, Union Falls, Vermontville
Population (ACS 2018)	1,140
Population Density	6.51 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	286,504,973
Elevation	1,693 feet
Largest Lakes	Lake Kushaqua, Loon Lake, Rainbow Lake, Union Falls Pond
State Routes	3
Fire & Rescue	Franklin Fire Dept.
Schools	Ausable Central Schools, Saranac Lake Central Schools, Malone Central Schools
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$17,955
Unemployment	2.8%
% Below Poverty	9.2%

Water Shed Data
A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Town of Franklin officials consider the following hazards to be a high-risk level, severe winter storm, and extreme cold temperatures. Flooding, especially following spring thaws and heavy rains, are another concern.

The Town of Franklin elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. Franklin has a Zoning Plan and is in the Adirondack Park the town follows land use regulations of the APA.

Critical Facilities with assessed values.

Town Hall	7 Cold Brook Rd. Vermontville, NY	$519,000
Highway Garage	8134 State Rte. 3 Vermontville, NY	$1,715,500
Other Buildings	8134 State Rte. 3 Vermontville, NY	$500,000
Trucks/Plow/Machinery	8134 State Rte. 3 Vermontville, NY	$1,386,000

Future Development
The town does not anticipate any development in the near future.

NFIP
According to the Community Status Book, the Town of Franklin participates in the National Flood Insurance Program. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain

coordinator/administrator. The floodplain administrator for the town is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas.
Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, the Town of Franklin has no repetitive loss properties.

The chart below represents parcels located in the Town of Franklin substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
FRANKLIN	**76**	**$13,364,900**
Community Services	1	$86,700
Public Services	1	$1,297,800
Residential	69	$11,928,900
Vacant	2	$12,000
Wild, Forested, Conservation Lands & Public Parks	3	$39,500

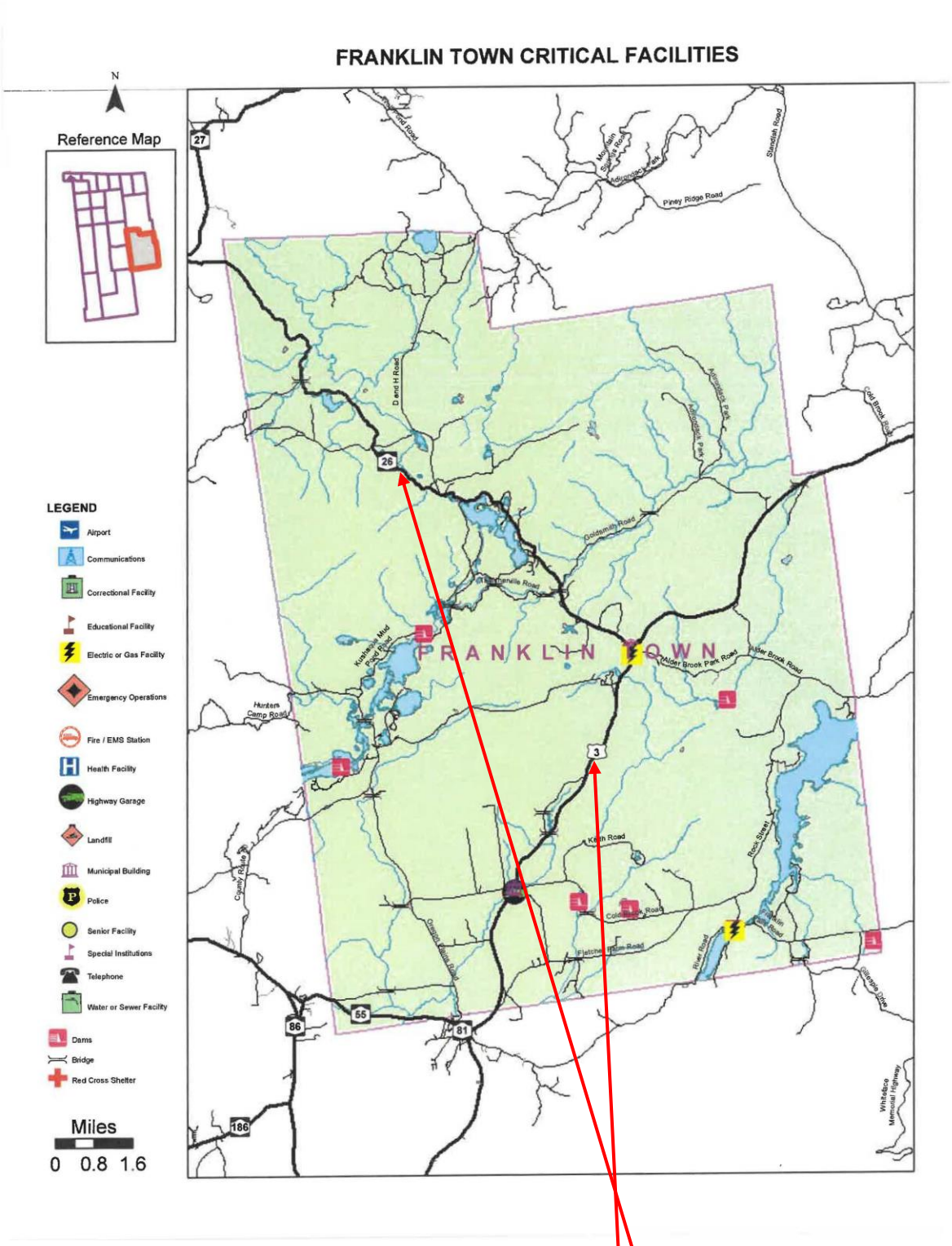
Past Events
The chart below indicates property damage events specific to the Town of Dickinson occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
5/29/2016	Flash Flood	10K	Rte. 26 Partial Washout/4" of Rain/ Loon Lake Area
7/18/2016	Hail	N/A	Quarter Sized Hail/1.2"/Vermontville Area
5/4/2018	Thunderstorms/High Winds	20K	Power Outages/Trees Downed

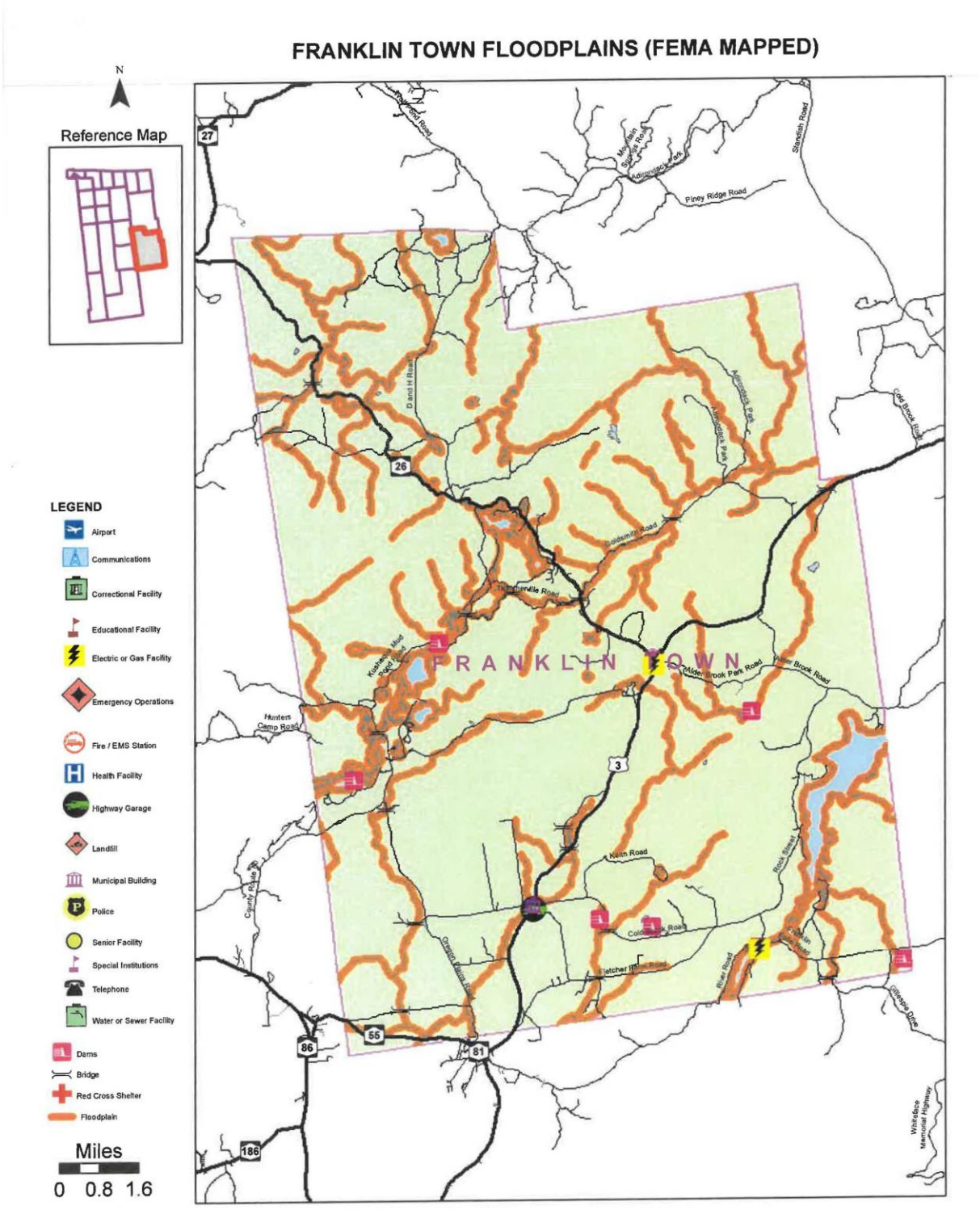
In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). The Town Highway Department and the Town Hall will provide temporary shelter for residents. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Franklin, major roadways are State Route 3 and County Route 26.

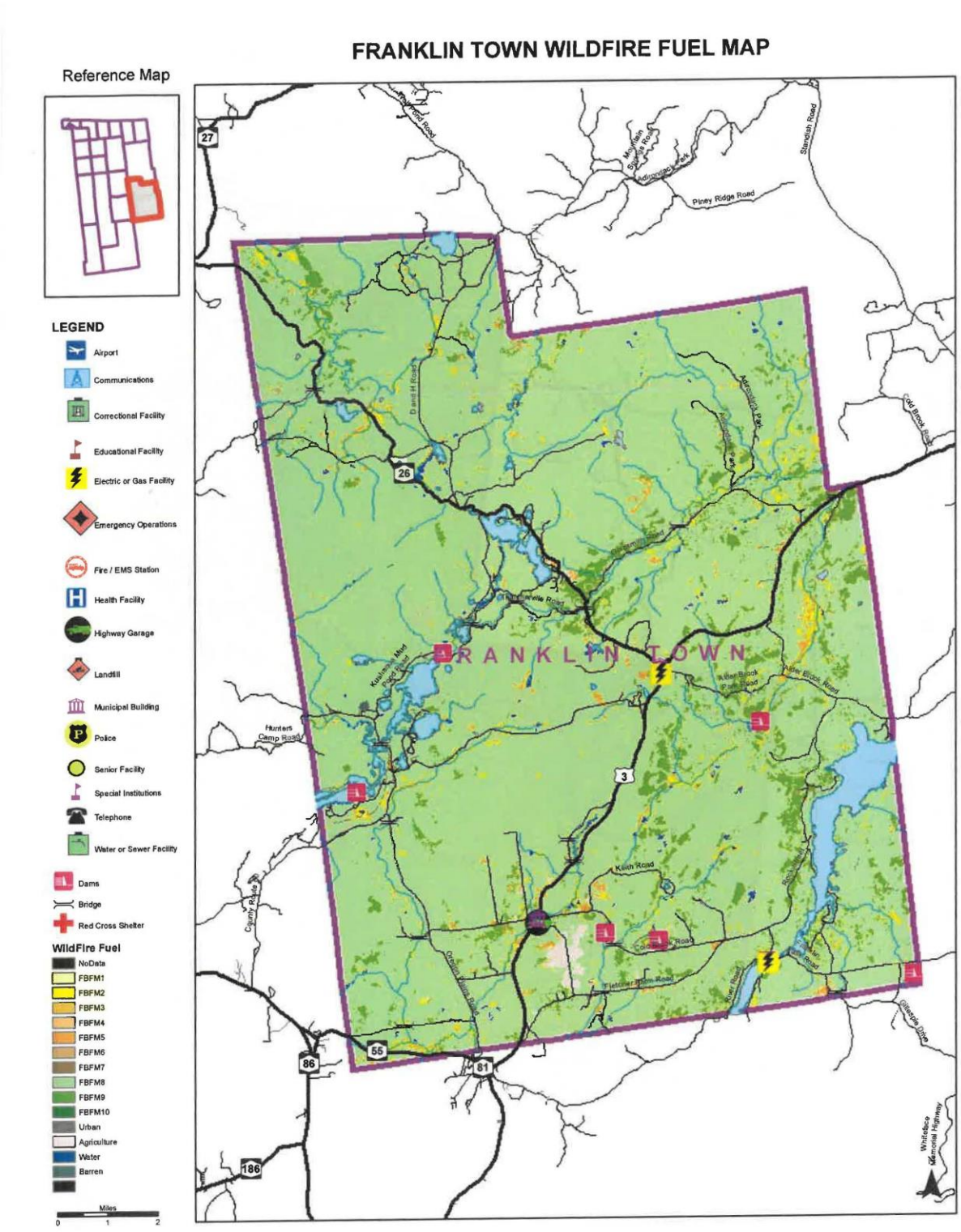
The Town of Franklin approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. Located within the Adirondack Park, land use in the town of Franklin is determined by Park regulations. The town will continue to incorporate their mitigation activities into land use plans in accordance with Adirondack Park Agency regulations. The Town of Franklin will post the Franklin County Hazard Mitigation Plan 2020 on their website https://www.townoffranklin.com.

Specific Mitigation Actions: Following pages



Evacuation Routes – State Route 3, 26


FRANKLIN TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.8 1.6
FRANKLIN TOWN
Piney Ridge Road
Standish Road
Cold Brook Road
Alder Brook Park Road
Alder Brook Road
Hunters Camp Road
Keith Road
Rock Street
Gillespie Drive
Whiteface Memorial Highway
27
26
3
86
55
81
186


FRANKLIN TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
1
2
FRANKLIN TOWN
Piney Ridge Road
Standish Road
Old Brook Road
Hunters Camp Road
Keith Road
Whitefield Memorial Highway
27
26
3
86
55
81
186



Town of Harrietstown
Village of Saranac Lake

The Town of Harrietstown is in the southeastern region of Franklin County. The town has Essex County on the eastern boundary and Essex and Hamilton County on its southern border. The towns of Brighton and Santa Clara are the northern border of the town, with the Town of Tupper Lake on the west. The Town of Harrietstown is in the Adirondack Park. The Village of Saranac Lake is in the east, divided between Franklin and Essex County.

Town/Village	Town of Harrietstown
Land Area	213.7 square miles (136,768 acres) - 196.9 square miles (126,016 acres) land & 16.8 square miles (10,752 acres) water
Incorporated Villages	Village of Saranac Lake
Hamlets	Axton Landing, Harrietstown, Lake Clear, Lake Clear Junction, Lake Colby, McMasters Crossing, Wawbeek
Population (ACS 2018)	5,507
Population Density	26.72 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	736,275,174
Elevation	1,568 feet
Largest Lakes	Kiwassa Lake, Lower Saranac Lake
Bridges	5
State Routes	3, 30, 86, 186
Fire & Rescue	Harrietstown Fire Dept.
Schools	Saranac Lake Central Schools
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$31,536
Unemployment	3.3%
% Below Poverty	12.6%

Town/Village	Village of Saranac Lake
Land Area	3.0 square miles (1,920 acres) - 2.8 square miles (1,792 acres) land & 0.23 square miles (147.2 acres) water
Population (ACS 2018)	5,242
Population Density	1,802 people/square mile
Governance	Mayor and Village Board of Trustees
Total Assessed Value	277,406,451
Elevation	1,545 feet
Bridges	7
State Routes	3, 86
Fire & Rescue	Harrietstown Fire Department
Schools	Saranac Lake Central School District
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Community/Public
Population Median Income	$30,170
Unemployment	4.6%
% Below Poverty	22.1%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Town of Harrietstown/Saranac Lake officials consider the following hazards to be a high-risk level; severe winter storm, extreme cold and flood/flash floods often resulting from spring thaw and heavy rains.

The Town of Harrietstown elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The Village of Saranac Lake elects a mayor and four trustees and employs a Village Manager to oversee operations. Harrietstown has a Zoning Plan, and the village of Saranac Lake has a Zoning Plan, as well as a Comprehensive Plan, Waterfront Revitalization Plan, and a Smart Growth Plan. Located within the Adirondack Park, land use in the town of Harrietstown and Village of Saranac Lake is determined by Park regulations.

Critical Facilities with assessed values.

Town of Harrietstown

Adirondack Regional Airport	Rte. 186 Lake Clear, NY	$4,000,000
Adirondack Medical Center	Rte. 86 Saranac Lake, NY	$25,000,000
Franklin County highway Garage	Rte. 186 Lake Clear, NY	$500,000
Adirondack ARC	Trudeau Rd. Saranac Lake, NY	$417,000

Village of Saranac Lake

Wastewater Treatment Plant	690 Bloomingdale Ave. Saranac Lake, NY	$75,000,000
Water Treatment Plant	690 Bloomingdale Ave. Saranac Lake, NY	$4,500,000
Pisgah Water Tank	Pisgah Dr. Saranac Lake, NY	$2,000,000
View St. Water Tank	View St. Saranac Lake, NY	$4,000,000
Bloomingdale Lift Station	Bloomingdale Ave. Saranac Lake, NY	$3,000,000
Turtle Pond Lift Station	Turtle Pond Saranac Lake, NY	$150,000
Lake Flower Lift Station	Lake Flower, NY	$2,500,000
NiMo Lift Station	Rte. 86 Saranac Lake, NY	$2,000,000
Pisgah Communication Tower	Mt. Pisgah Saranac Lake, NY	$300,000

Future Development

The Town and the Village anticipate future development will include the refurbishing of the Children's Museum and of the Auditorium.

NFIP

According to the Community Status Book, the Town of Harrietstown and the Village of Saranac Lake participate in NFIP. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator for the town and the village is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, both the Town and Village, have no repetitive loss properties.

The chart below represents parcels located in the Town of Harrietstown and the Village of Saranac Lake substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
HARRIETSTOWN	**214**	**$53,464,400**
Recreation & Entertainment	1	$63,800
Residential	204	$53,256,400
Vacant	7	$144,200
Wild, Forested, Conservation Land & Public Parks	2	$0
SARANAC LAKE (HARRIETSTOWN)	**65**	**$12,493,700**
Commercial	29	$6,761,500
Community Services	1	$230,000
Industrial	1	$259,200
Residential	28	$5,229,000
Vacant	6	$14,000

Past Events

The chart below indicates property damage events specific to the Town of Harrietstown/Village of Saranac Lake occurring since the 2015 plan. However countywide events must also be considered.

Date	*Type*	*Property Damage*	*Details*
6/9/2015	Thunderstorm/Wind/Hail	5K	Saranac Lake Area
6/28/2016	Flash Flood Heavy rain	50K	Rte. 86 Washout Saranac Lake to Lake Colby
3/13/2018-3/14/2018	Winter Storm	N/A	12” of Snow
5/4/2018	Thunderstorm/High Winds	20K	Lake Clear Area - Power Outages/Trees Downed 50 Knots
11/15/2018	Winter Storm	15K	Countywide - Saranac Lake Received 12” of Snow
7/30/2020	Thunderstorm/High Winds	5K	Lake Clear/Saranac Lake 52 Knots

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Harrietstown/Saranac Lake will utilize the Town Hall and the Auditorium as emergency shelters. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Harrietstown major roadways are State Routes 3, 186 and 86.

The Town of Harrietstown and the Village of Saranac Lake approved the original Plan in 2008 and the update in 2015. The Town and Village will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan,

including specific town mitigation actions into their budget planning, training, and building/construction practices. Located within the Adirondack Park, land use in the town of Harrietstown and Village of Saranac Lake is determined by Park regulations. The town will continue to incorporate their mitigation activities into land use plans in accordance with Adirondack Park Agency regulations. Harrietstown and Saranac Lake will post the Franklin County Hazard Mitigation Plan 2020 on their websites. https://www.harrietstown.org and https://www.saranaclakeny.gov.

Specific Mitigation Actions: Following pages

Town of Harrietstown

Action Worksheet			
Project Name:	Donaldson Road		
Project Number:	Town of Harrietstown #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Culvert on Donaldson Road is a deteriorating forty year old cement culvert. This culvert does not handle the flow and as a result flooding occurs due to the size of the culvert and condition of the culvert. The flooding means residents and emergency vehicles have problems getting to the area.		
Description of the Solution:	The Town intends to replace deteriorating, cement culvert with open bottom box culvert. Included will be substrate similar to upstream and downstream, with natural vegetation on the streambanks to slow erosion. DEC will be consulted and their recommendations followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	Estimated Benefits (losses avoided):	Residents and emergency vehicles will have safe access. With DEC consult, fisheries will be protected.
Useful Life:	50 Years		
Estimated Cost:	Medium		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2021 -2022
Estimated Time Required for Project Implementation:	1 Year	Potential Funding Sources:	Town Budget, HMGP, Franklin County
Responsible Organization:	Town of Harrietstown	Local Planning Mechanisms to be Used in Implementation, if any:	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Deterioration will continue and flooding will limit access for residents and emergency vehicles.
	Detention Pond	High	Town does not own enough property along the stream to provide for this option.
	Elevate road bed	High	Elevating the road bed requires additional funding, and time before the problem is solved. Extensive stretch of road would require elevation.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Town of Harrietstown

Action Worksheet			
Project Name:	Ampersand Road		
Project Number:	Town of Harrietstown #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Culvert on Ampersand Road is a deteriorating sixty year old cement box culvert. This size culvert is unable to handle the flow, and as a result, flooding occurs. After sixty years, the cement of the culvert is deteriorating. The flooding leaves residents and emergency vehicles having problems getting to the area.		
Description of the Solution:	The Town intends to replace deteriorating, cement culvert with open bottom box culvert. Included will be substrate similar to upstream and downstream, with natural vegetation on the streambanks to slow erosion. DEC will be consulted and their recommendations followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	Estimated Benefits (losses avoided):	Residents and emergency vehicles will have safe access.
Useful Life:	50 Years		
Estimated Cost:	Medium		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2021 -2022
Estimated Time Required for Project Implementation:	1 Year	Potential Funding Sources:	Town Budget, HMGP, Franklin County
Responsible Organization:	Town of Harrietstown	Local Planning Mechanisms to be Used in Implementation, if any:	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Deterioration will continue and flooding will limit access for residents and emergency vehicles.
	Detention Pond	High	Town does not own enough property along the stream to provide for this option.
	Elevate road bed	High	Elevating the road bed requires additional funding, and time before the problem is solved. Extensive stretch of road would require elevation.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Village of Saranac Lake

Action Worksheet			
Project Name:	Waste Water Treatment Plant Upgrade		
Project Number:	Village of Saranac Lake #1		
Risk / Vulnerability			
Hazard of Concern:	Village Waste Water Treatment Plant is located at 690 Bloomingdale Ave., Village of Saranac Lake.		
Description of the Problem:	In 2011, during a five-hundred year flood occurrence, severe flooding occurred at the Waste Water Treatment Plant with contaminates flowing into the Saranac River.		
Action or Project Intended for Implementation			
Description of the Solution:	The upgrade has started however the Village must continue to monitor the waste water treatment and follow through with the upgrades to the facility.		
Is this project related to a Critical Facility?		**Yes** ☑	**No** ☐
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Contamination of the Saranc River will end.
Useful Life:	50 Years		
Estimated Cost:	$30,000,000		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Immediate
Estimated Time Required for Project Implementation:	Time frame is dependent on funding and project will be done in stages.	**Potential Funding Sources:**	EFC Funding/Grants
Responsible Organization:	Village of Saranac Lake	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Waste water will continue to contaminate the Saranac River.
	Apply for funding to cover total cost	$30,000,000	Project upgrades will be completed providing flood protection.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

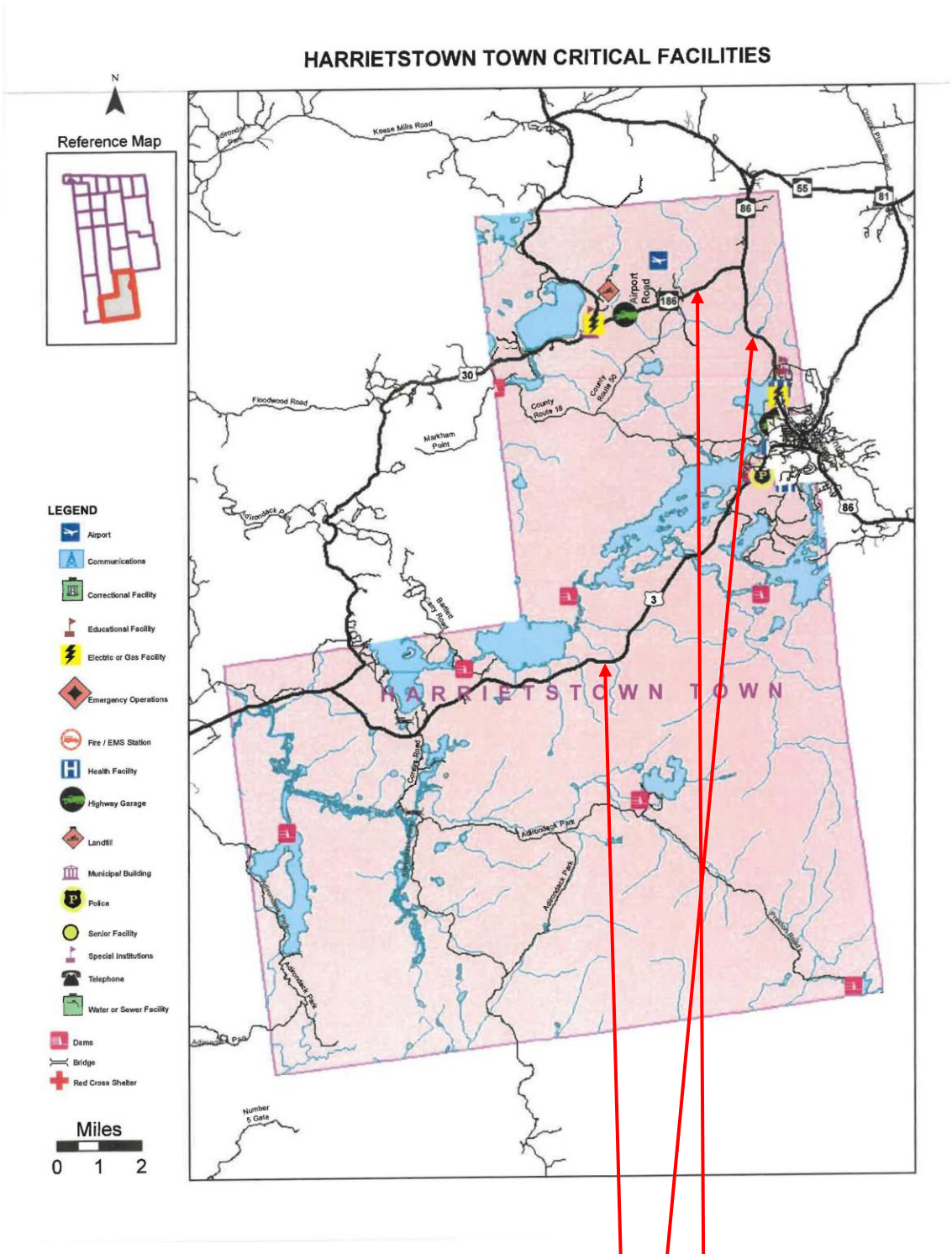
Village of Saranac Lake

Action Worksheet			
Project Name:	Bartlett Carry Dam		
Project Number:	Village of Saranac Lake #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	The Bartlett Carry Dam is privately owned and in need of major repair and regular maintenance. If the dam were to fail, residents in the Village of Saranac Lake would be severely impacted.		
Description of the Solution:	Village of Saranac Lake and the Town of Santa Clara will approach the Upper Saranac Foundation to research a joint solution to the problem of regular maintenance, consulting with DEC and the APA.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Bartlett Carry Dam would be inspected yearly and repairs would be made as needed so there would not be a dam failure.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	2 Years	**Potential Funding Sources:**	Village, Town, County, HMP Funds, Private
Responsible Organization:	Town of Santa Clara, Village of Saranac Lake, Upper Saranac Foundation	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers

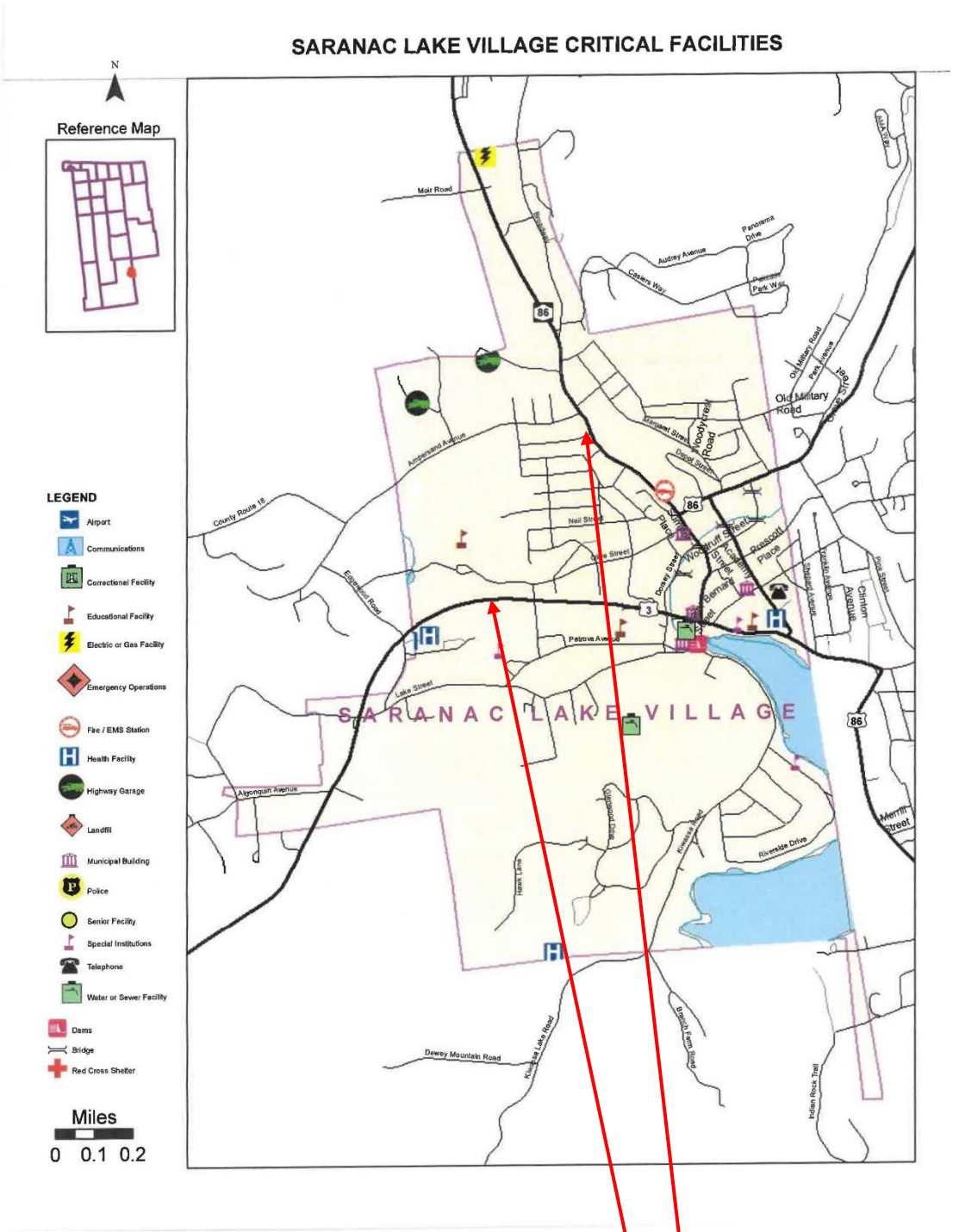
Three Alternatives Considered (including No Action)			
	Action	**Estimated Cost**	**Evaluation**
Alternatives:	No Action	$0	The dam will continue to deteriorate without a plan for maintainence.
	Encourage NYS DEC to take over ownership of the dam	High	Cost and getting an agreement with the Upper Saranac Foundation is prohibitive.

Culvert replacement with precast/prestressed concrete slab on piles.	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

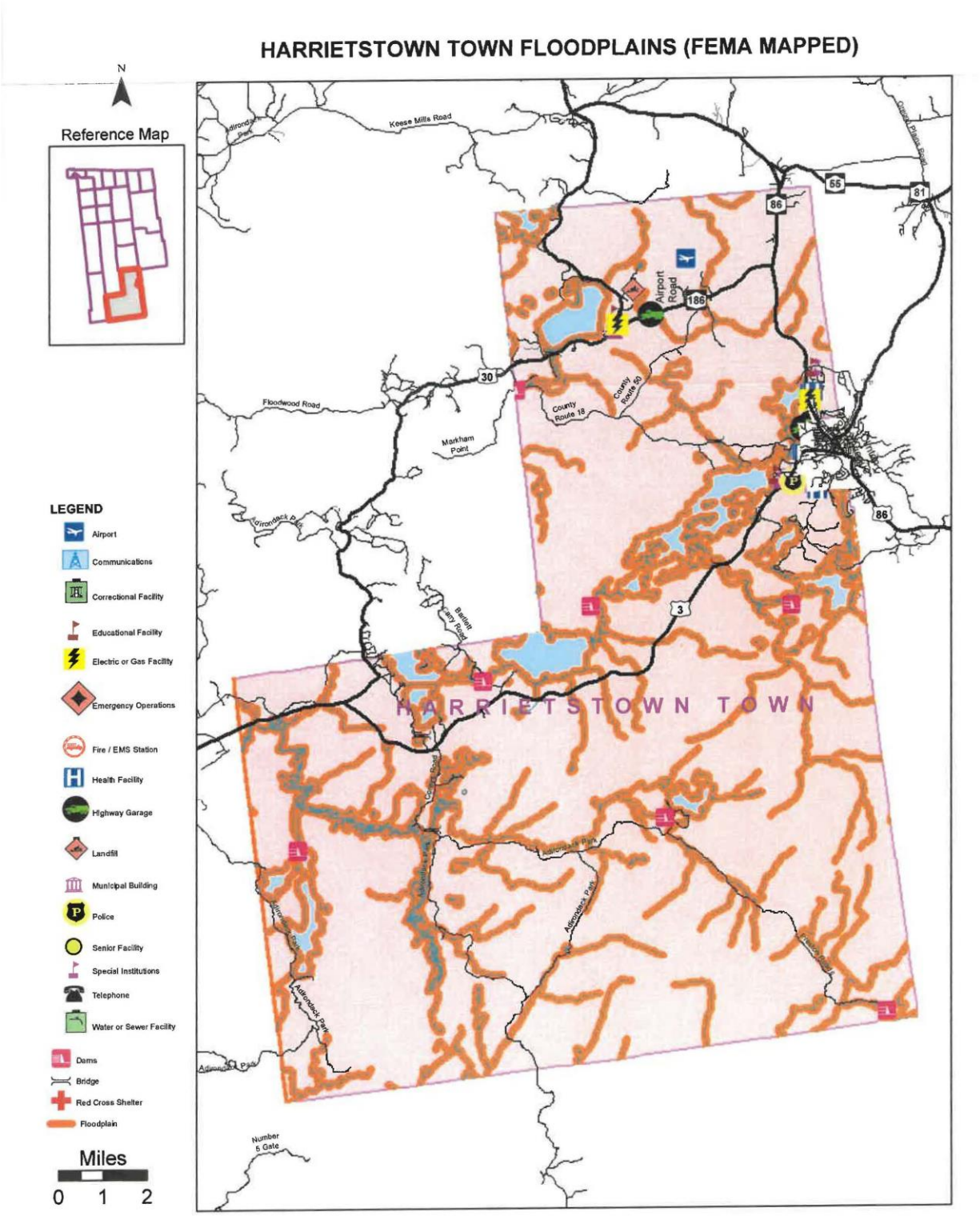
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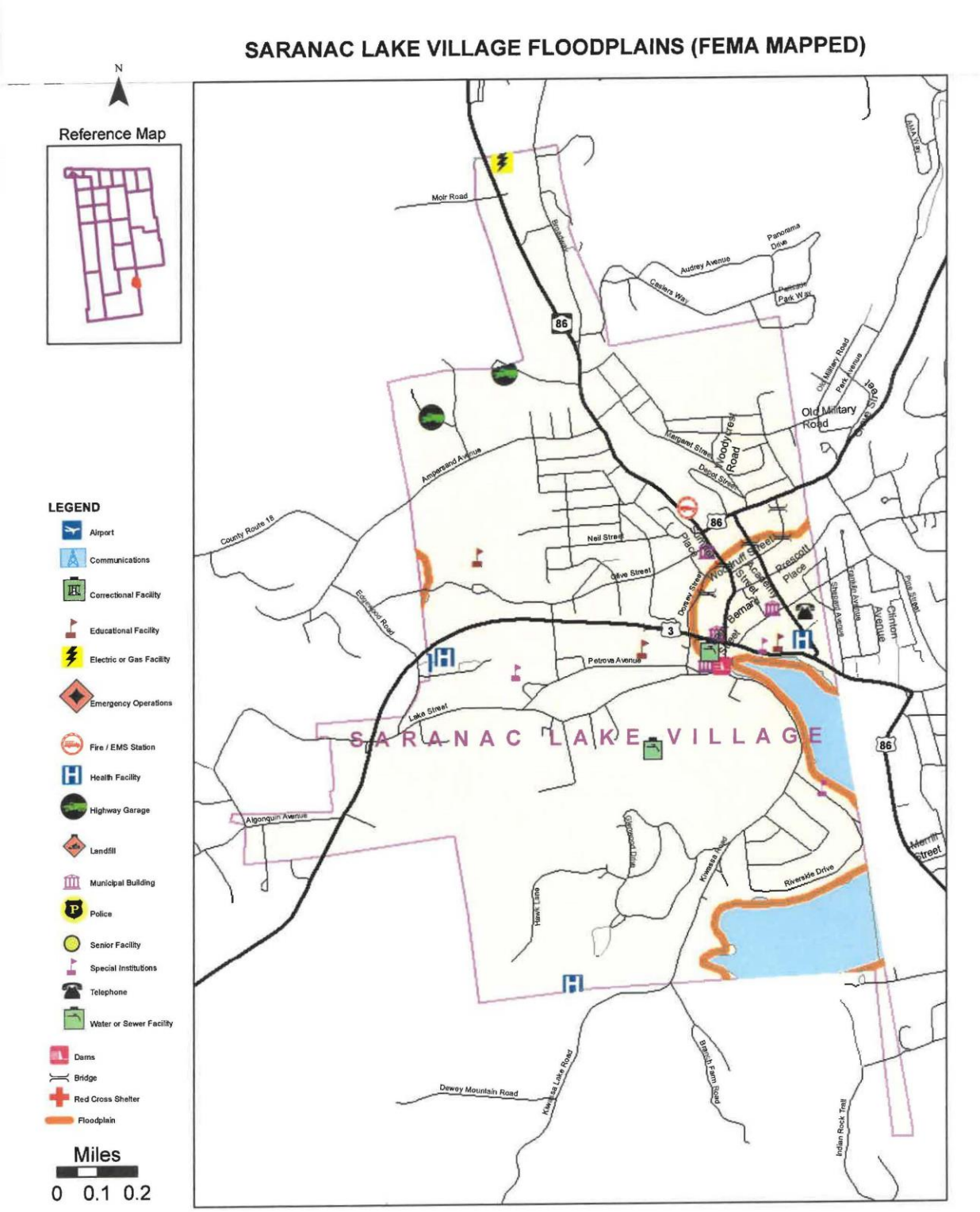


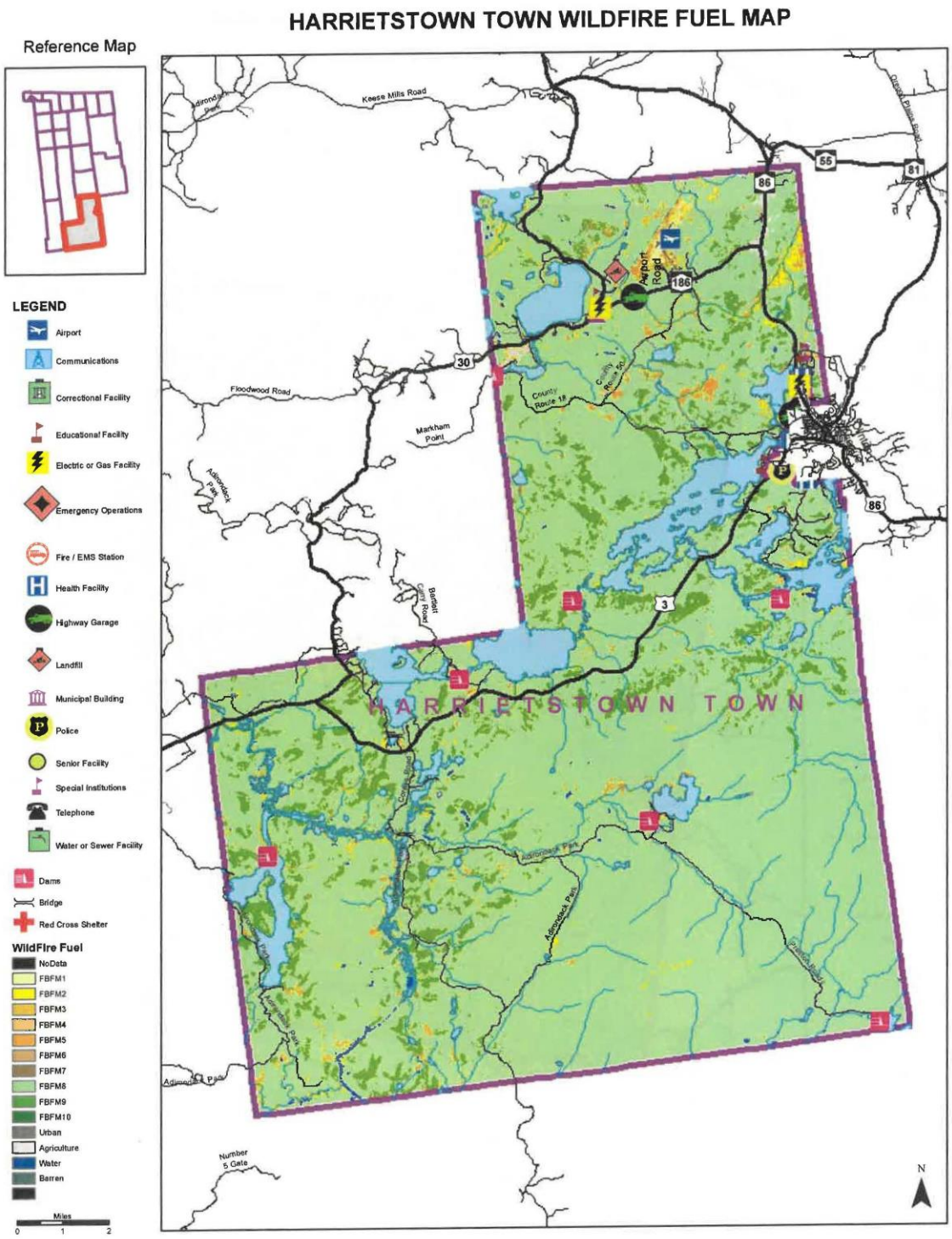
Evacuation Routes – State Route 3, 86, 186

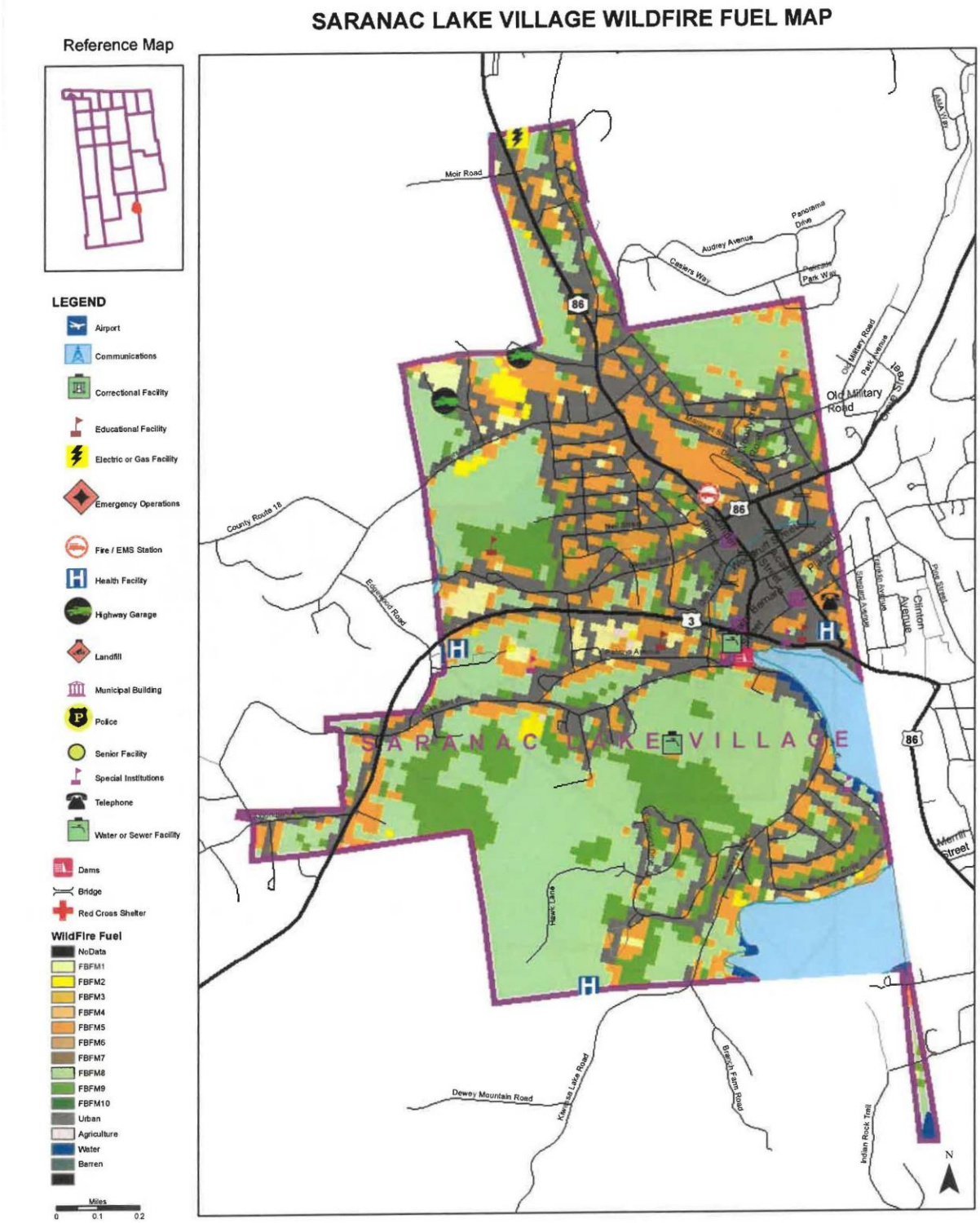


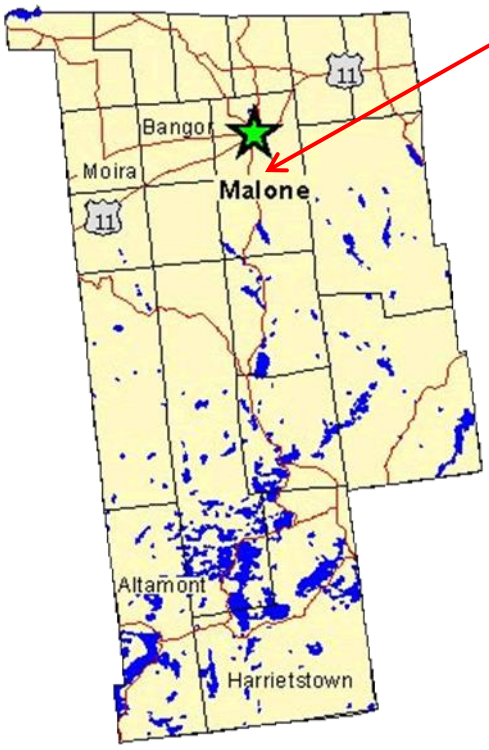
Evacuation Routes – State Route 3, 86


HARRIETSTOWN TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 1 2
HARRIETSTOWN TOWN
Keese Mills Road
Floodwood Road
Markham Point
Airport Road
County Route 18
County Route 50
Bellant Valley Road
George Road
Adirondack Park
86
55
81
30
186
3


SARANAC LAKE VILLAGE FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.1 0.2
SARANAC LAKE VILLAGE
Moir Road
Audrey Avenue
Panorama Drive
Park Way
Old Military Road
Margaret Street
Woodyatt Road
Depot Street
Ampersand Avenue
County Route 18
Edgewood Road
Nail Street
Dive Street
Petrova Avenue
Lake Street
Algonquin Avenue
Dorsey Street
Woodruff Street
Academy Street
Bernard Street
Prescott Place
Shepard Avenue
Pine Street
Clinton Avenue
Merrill Street
Riverside Drive
Kiwassa Road
Hawk Lane
Dewey Mountain Road
Kiwassa Lake Road
Bloomingdale Avenue
Indian Rock Trail
86
3


HARRIETSTOWN TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
1
2
HARRIETSTOWN TOWN
Keese Mills Road
Floodwood Road
Markham Point
Bartlett Point Road
Adirondack Park
Airport Road
County Route 18
County Route 30
Number 5 Gate
86
55
81
186
30
3
N


SARANAC LAKE VILLAGE WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.1
0.2
SARANAC LAKE VILLAGE
Moir Road
Audrey Avenue
Caslers Way
Panorama Drive
Old Military Road
Park Avenue
Park Way
County Route 18
Edgewood Road
Clinton Avenue
Pine Street
Merrill Street
Hawk Lane
Dewey Mountain Road
Kiwassa Lake Road
Branch Farm Road
Indian Rock Trail
86
3
N



Town of Malone

Village of Malone

The Town of Malone is in the north central region of Franklin County. The towns of Bellmont and Burke are on the eastern boundary and the Town of Duane on its southern border. The towns of Westville and Constable are the northern border of the town, with the towns of Bangor and Brandon on the west.

Town/Village	Town of Malone
Land Area	102.8 square miles (65,792 acres) - 101.5 square miles (64,960 acres) land & 1.3 square miles (832 acres) water
Incorporated Villages	Village of Malone
Hamlets	Chasm Falls, Fay, Malone Junction, Teboville, Whippleville
Population (ACS 2018)	14,139
Population Density	141.5 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	652,656,779
Elevation	790 feet
Rivers	Salmon River, Trout River
Bridges	19
Interstate Highway	11
State Routes	11B, 30, 37
Hospital/Medical Facility	Alice Hyde Medical Center, Franklin County Nursing Home, Franklin County Public Health Services
Fire & Rescue	Malone Fire Department
Schools	Malone Central School District (Public), Holy Family School (Private)
Law Enforcement	Franklin County Sheriff's Department, NYS Police, Malone Police Department
Correctional Facility	Bare Hill Correctional Facility, Franklin Correctional Facility, Upstate Correctional Facility
Power Utility Provider	National Grid
Water Supply Sources	Private wells & Community/Public
Population Median Income	$25,718
Unemployment	5.0%
% Below Poverty	32.0%

Town/Village	Village of Malone
Land Area	3.18 square miles (2,035.2 acres) - 3.11 square miles (1,990.4 acres) land & 0.066 square miles (42.24 acres) water
Population (ACS 2018)	5,735
Population Density	1,858.81 people/square mile
Governance	Mayor and Village Board of Trustees
Total Assessed Value	255,116,012
Elevation	712 feet
Interstate Highway	11
State Routes	11B, 30, 37
Fire & Rescue	Malone Fire Department
Schools	Malone Central School District (Public), Holy Family School (Private)
Law Enforcement	Franklin County Sheriff's Department, NYS Police, Malone Police Department
Power Utility Provider	National Grid
Water Supply Sources	Community/Public
Population Median Income	$15,960
% Below Poverty	16.4%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in Malone - town and village, consider severe winter storms and extreme cold to be high risk hazards for their community. Earthquake is a moderate risk.

The Town of Malone elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town as well as the Village. The local fire department is a volunteer organization. The Village elects a mayor and four trustees to oversee operations. The Town and village, Zoning Plan and Waterfront Revitalization Plan. The Town is presently working on a Comprehensive Plan and the Village has a completed plan.

Critical Facilities with assessed values.

Town

Bare Hill Correctional Facility	181 Brand Rd. Malone, NY	$21,827,534
Upstate Correctional Facility	309 Bare Hill Rd. Malone, NY	$60,537,260
Franklin Correctional Facility	62 Bare Hill Rd. Malone, NY	$21,823,425
Franklin County Jail	45 Bare Hill Rd. Malone, NY	$4,467,945
Village Wastewater Treatment	Lane Street Malone, NY	$2,181,644
Village Water Treatment Plant	192-200 County Rte. 25 Malone, NY	$458,630
The Alice Center	6th Street Malone, NY	$36,445,205

Village

Municipal Park	State St, Malone, NY	$20,548
Sewage Plant	Lane Street, Malone, NY	$2,181,644

Future Development

The Town and Village anticipate minor development within their borders, a Stewart's Superstore, and a larger Dunkin Donuts production center.

NFIP

According to the Community Status Book, the Town of Malone and the Village participate in NFIP. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator for the town and the village is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas. NFIP data 2019 indicates 8 losses, 6 closed and 2 closed without payment, totaling $79,000.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan both the Town and Village, have no repetitive loss properties.

The chart below represents parcels located in the Town/Village of Malone substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
MALONE	**64**	**$3,765,300**
Community Services	1	$150,100
Recreation & Entertainment	1	$16,700
Residential	59	$3,598,400
Vacant	3	$100

Municipality	Number of Parcels	Value
MALONE Village	**61**	**$4,445,400**
Commercial	17	$1,935,900
Community Services	1	$1,222,000
Public Services	2	$134,600
Residential	39	$1,152,900
Vacant	2	$0

Past Events

The chart below indicates property damage events specific to the Town of Dickinson occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
7/13/2015	Thunderstorms/High Winds	15K	Power Outages/Trees Downed
1/10/2017	High Winds	20K	Power Outages/Trees Downed 54 Knots/ Gusts of 62MPH/ Thousands Without Power
2/13/2017	Winter Storm/Winds	N/A	White Outs/Drifted Roads/15” of Snow
3/14/2017	Winter Storm/Winds	N/A	White Outs/Drifted Roads/34” of Snow/ 30MPH Winds
5/1/2017	Thunderstorms/High Winds	5K	Power Outages/Trees Downed
6/29/2017	Flash Flood	N/A	Flooded Roads - 3” Deep
3/13/2018-3/14/2018	Winter Storm/Winds	N/A	White Outs/Drifted Roads/Power Outages/16” of Snow
5/4/2018	Thunderstorms/High Winds	50K	Wind 50 Knots/Power Outages/Trees Downed
6/18/2018	Flash Flood	25K	Whippleville Area - 1 Resident Evacuated
1/8/2019	Winter Storm	10K	10” of Snow in Area
1/19/2019-1/20/2019	Winter Storm/Extreme Cold	10K	Power Outages/Trees Downed/Road Clearing Chemicals Not Successful/12” of Snow/ Night Temps. -10 to -25 with Wind Chill of 40 Below Zero. Countywide Effects

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). The Town and the Village of Malone will utilize the Fire Department, the YMCA, and the Adult Center as emergency shelters. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Malone major roadways are State Routes 11B, 30 and 25, as well as US Route 11.

The Town of and Village of Malone approved the original Plan in 2008 and the update in 2015. The Town and Village will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. The Town of Malone and the Village of Malone will post the Franklin County Hazard Mitigation Plan 2020 on their websites https://www.malonetown.com and https://www.villageofmalone-ny.com.

Specific Mitigation Actions: Following pages

Town of Malone

Action Worksheet			
Project Name:	Salmon River Dredging		
Project Number:	Town of Malone #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding/Ice Jams		
Description of the Problem:	The Salmon River has islands of sediment built up that cause ice jams and then flooding impacting the Town. Ongoing discussions with Erie Blvd. Power (property owner), Army Corps of Engineers, and Ramboll Engineering have resulted in a targeted study. Additional studies need to be done - soil samples, hydrology, etc. The Town of Malone does not have the available resources to proceed.		
Description of the Solution:	The Town will continue to pursue funding opportunities and follow the process in the hope that if islands can not be removed then deep channels can be engineered upstream to redirect river flow.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Ice build up and flooding of resident homes, Village of Malone Sewer Plant will stop being an annual occurance.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022-2023
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Village, Town, County, HMP Funds
Responsible Organization:	Town of Malone	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Town will continue to suffer flooding damage due to ice jams in Salmon River.
	Buy-out properties along the river and create a buffer	High	Costly and extremely lengthy process. Does not alleviate the problem.
	Install early warning systems in Salmon River High	High	Costly and does not alleviate the problem.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Town of Malone

Action Worksheet			
Project Name:	Warner Road Bridge		
Project Number:	Town of Malone #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	The Warner Road Bridge is deteriorating and requires replacement. There is no other access for residents on this road.		
Description of the Solution:	The Town is pursuing funding for the replacement through BridgeNY. In the event of no funding the Town will inspect and repair struts and plant natural vegetation to ease erosion around the bridge. DEC recommendations will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Maintaining the bridge for resident and emergency vehicle access until replacement can be funded.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022-2023
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Town, County, HMPG Funds
Responsible Organization:	Town of Malone	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Bridge will deteriorate and eventually will be closed.
	Look for alternate funding through FEMA, HMPG	Low	This is a possible alternate way to pay for the bridge replacement.
	Remove bridge, elevate road and install two large culverts		Costly and may not alleviate the problem.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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Village of Malone

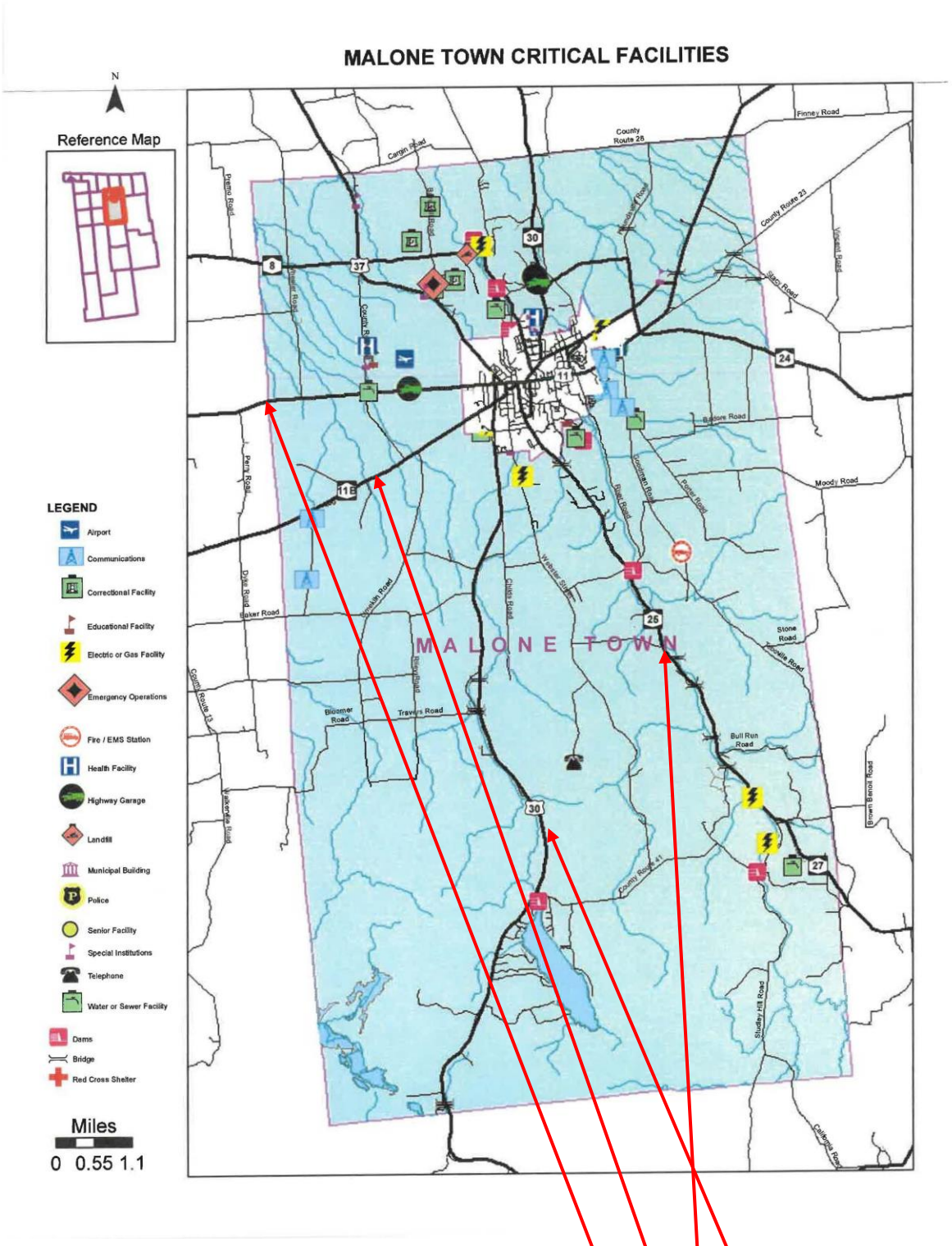
Action Worksheet			
Project Name:	Horton Mill Property		
Project Number:	Village of Malone #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	The Horton Mill property has deteriorated to the extent the Village fears it will end up in the Salmon River, blocking the river and creating an environmental problem.		
Description of the Solution:	The Village owns this property on Mill Street and would like to demolish and remove it before it crumbles into the Salmon River, creating a hazard.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Environmental concerns will be avoided and the Salmon River will flow freely without the building in its midst.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Village, Town, County, HMP Funds
Responsible Organization:	Village of Malone	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	The Horton Mill property will fall into the Salmon River creating an environmental problem.
	Restore the Horton Mill	High	Costly and the Village should not own properties.
	Sell the property to a builder	High	The building will never meet code regulations in order to sell the property.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

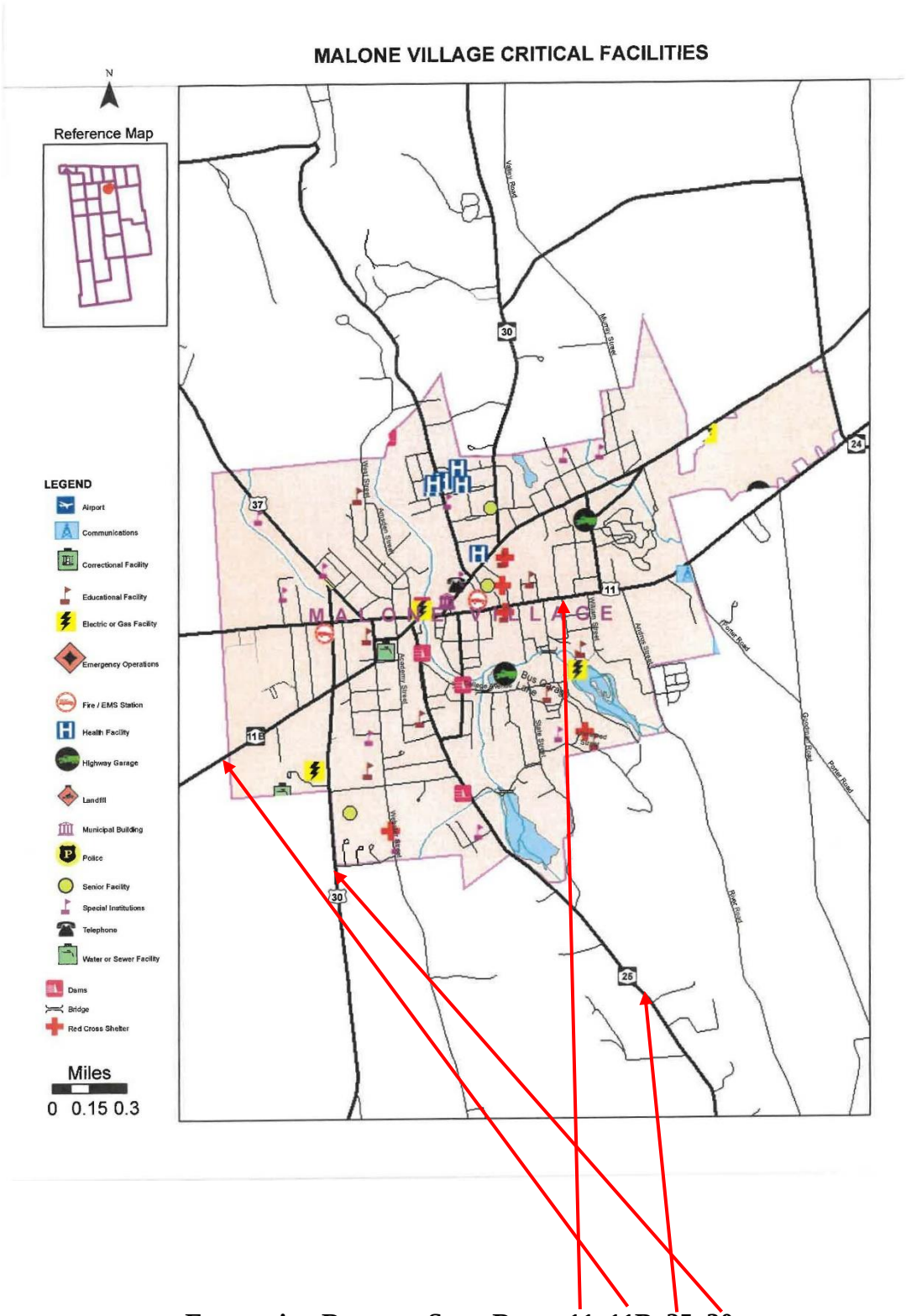
Village of Malone

Action Worksheet			
Project Name:	Salmon River Dredging		
Project Number:	Village of Malone #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	The Salmon River backs up due to rain and snow melt and threatens public safety, property, and the Village of Malone Sewer Plant.		
Description of the Solution:	The Village will investigate options with DEC and the Army Corps of Engineers to devise an acceptable method for dredging the Salmon River.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents will be safe and property will not be lost. The Sewer Plant will continue to operate.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022-2023
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Village, Town, County, HMP Funds
Responsible Organization:	Village of Malone	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	The Salmon River will flood and the Sewer Plant will be compromised.
	Locate the Sewer Plant elsewhere	High	Costly and the Village does not have that capability.
	Build up the river banks with permanent constructed flood barriers	High	Village does not own property along the Salmon River in the Village.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

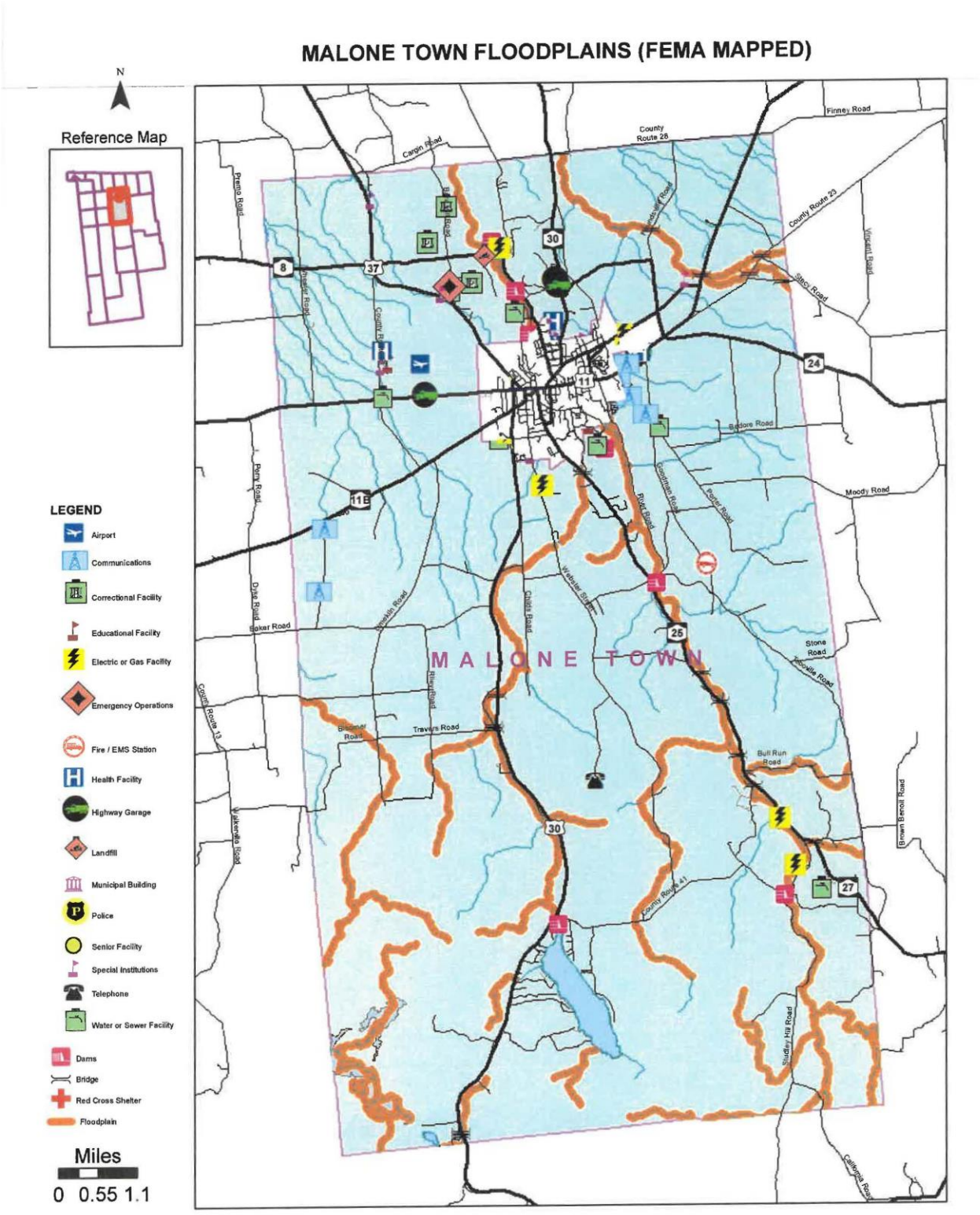
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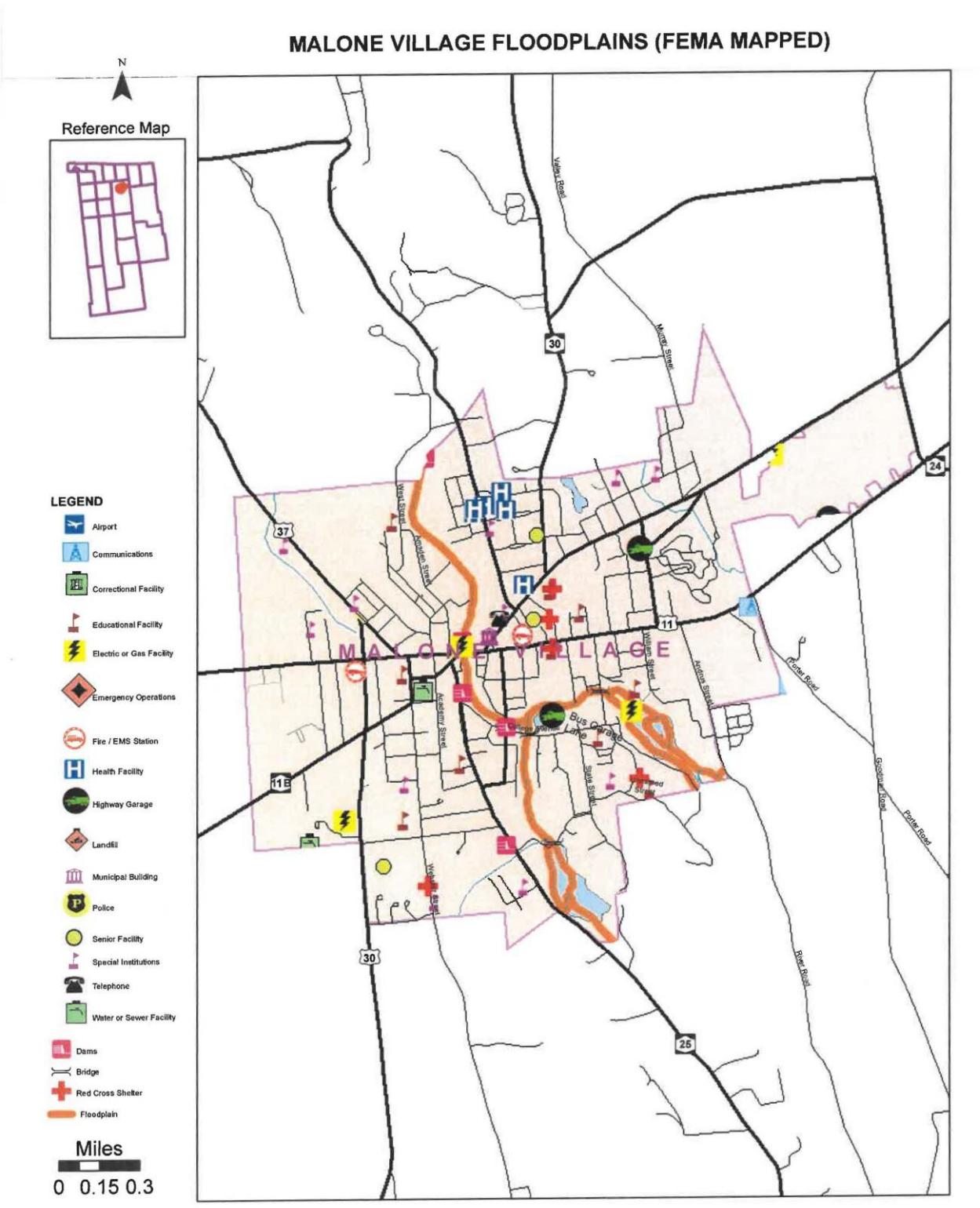


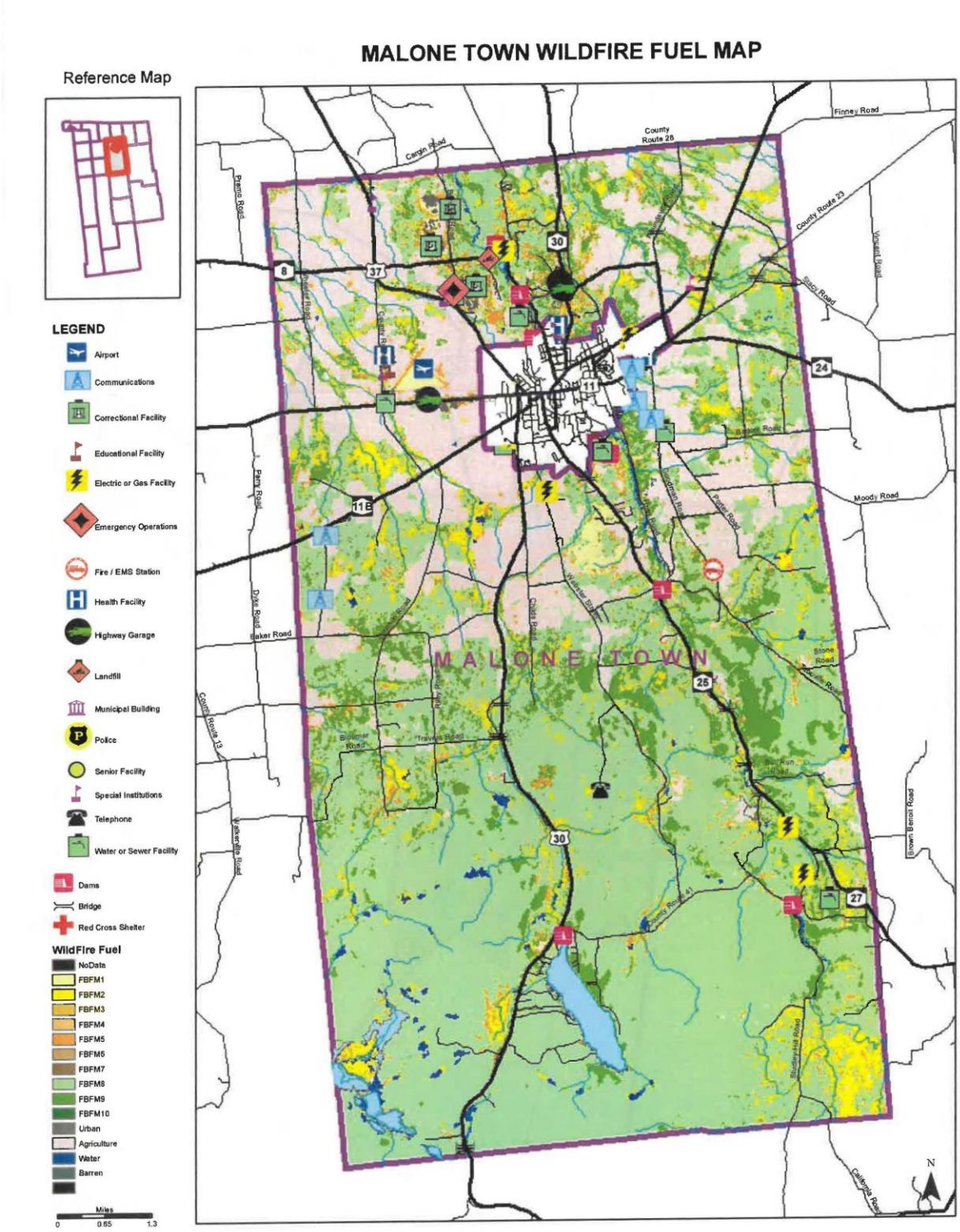
Evacuation Routes – State Route 11, 11B, 25, 30

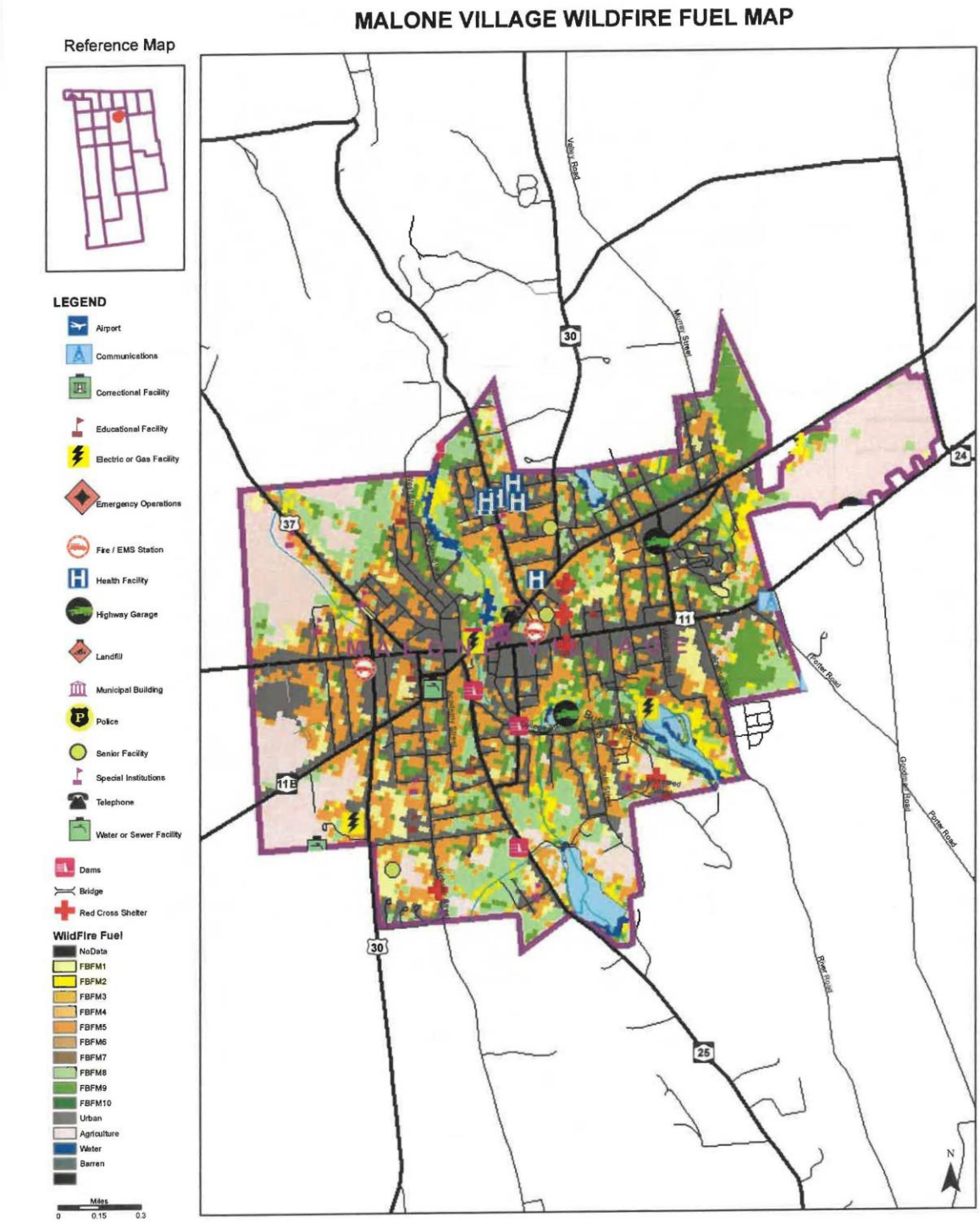


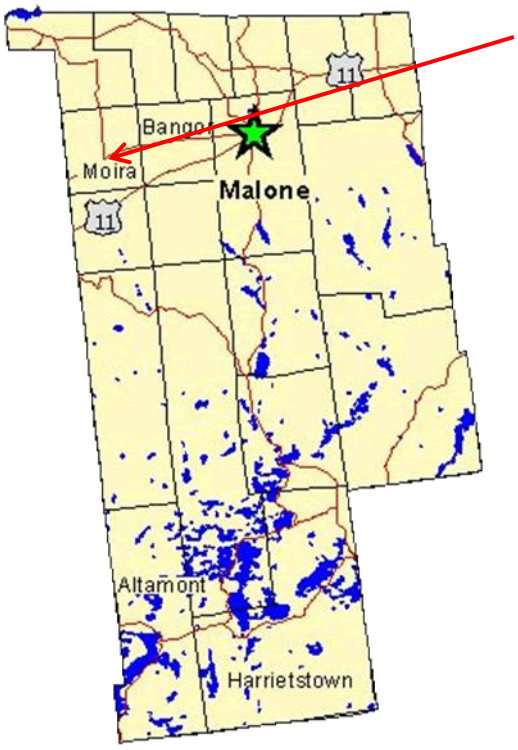
Evacuation Routes – State Route 11, 11B, 25, 30


MALONE TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.55 1.1
MALONE TOWN
Finney Road
County Route 28
Cargin Road
Prentiss Road
Bare Road
Bradley Road
County Route 23
Vincent Road
Stacy Road
Frasier Road
County Rt 8
Badore Road
Moody Road
Perry Road
Dyke Road
Baker Road
Webster Road
Chubb Road
Webster Street
Rugg Road
Cummins Road
Porter Road
Stone Road
Titusville Road
Bigelow Road
Travers Road
Bull Run Road
Brown Benoit Road
Lakeville Road
County Route 13
County Route 41
Studley Hill Road
California Road
8
37
30
11
11B
24
25
27


MALONE VILLAGE FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.15 0.3
MALONE VILLAGE
Valley Road
Munger Street
West Street
Academy Street
Webster Street
Bus Garage
Porter Road
Gookin Road
River Road
30
37
11
11B
24
25


MALONE TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.65
1.3
MALONE TOWN
Finney Road
County Route 26
Cargin Road
Premo Road
County Route 23
Vincent Road
Bigelow Road
Moody Road
Perry Road
Baker Road
Dyke Road
Stone Road
Brown Benoit Road
California Road
Duntonville Road
Blueberry Hill Road
Bear Run Road
Bloomer Road
Travers Road
N


MALONE VILLAGE WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.15
0.3
Valley Road
Munsil Street
Porter Road
Gordon Road
River Road
30
37
11
11B
25
24
N



Town of Moira
Village of Brushton

The Town of Moira is in the northwest region of Franklin County. The Town of Bangor forms the eastern boundary and the Town of Dickinson its southern border. The town of Bombay is the northern border of the town, with the St. Lawrence County on the west. The Village of Brushton is on the eastern edge of the town.

Town/Village	Town of Moira
Land Area	45.2 square miles (28,928 acres) - all land
Incorporated Villages	Village of Brushton
Hamlets	Alburg, Irish Corners, Moira
Population (ACS 2018)	2,811
Population Density	64.91 people/square mile
Governance	Supervisor and Town Board
Total Assessed Value	118,931,684
Elevation	377 feet
Bridges	21
State Routes	95
Fire & Rescue	Brushton-Moira Fire Department
Schools	Brushton-Moira School District
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$22,585
Unemployment	12.4%
% Below Poverty	18.4%

Town/Village	Village of Brushton
Land Area	0.28 square miles (179.2 acres) - all land
Population (ACS 2018)	486
Population Density	1,692.86 people/square mile
Governance	Mayor
Total Assessed Value	15,451,724
Elevation	420 feet
Rivers	Little Salmon River
Bridges	1
Interstate Highway	11
Fire & Rescue	Moira Fire Dept.
Schools	Brushton-Moira Central Schools
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$28,294
Unemployment	10.9%
% Below Poverty	9.7%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in Moira and Brushton consider severe winter storms, high winds and extreme cold to be high risk hazards for their community. Snow melt and spring rains contribute to their concerns of flooding.

The Town of Moira elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town as well as the Village. The local fire department is a volunteer organization. The Village elects a mayor and trustees to oversee operations. The Town or Village does not have a Zoning Plan in place at this time.

Critical Facilities with assessed values.

Brushton-Moira CSD	776 County Rte. 7 Brushton, NY	$30,000,000
Moira Municipal Building	522 County Rte. 6 Moira, NY	$2,500,000

Future Development

Moira anticipates applying for funds to develop and complete a water project for residents. Solar energy companies are also looking to locate in the town.

NFIP

According to the Community Status Book, the Town of Moira and the Village of Brushton participate in NFIP. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator for the town and the village is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, both the Town and Village, have no repetitive loss properties.

The charts below represent parcels located in the Town/Village of Moira and Village of Brushton substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
MOIRA	**7**	**$237,900**
Agricultural	1	$36,000
Residential	5	$201,900
Vacant	1	$0
BRUSHTON (MOIRA)	**9**	**$293,000**
Commercial	1	$33,600
Community Services	2	$72,300
Residential	6	$187,100

Past Events

There were no property damage events specific to the Town of Moira and Village of Brushton occurring since the 2015 plan. However countywide events must also be considered.

In case of a natural hazard emergency a list of Emergency Shelters for the town is located in Appendix D (also found in the Franklin County CEMP). Moira utilizes the school and the Adult Center in town as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Moira major roadways are State Routes 11 and 95.

The Town of Moira and the Village of Brushton approved the original Plan in 2008 and the update in 2015. The Town and Village will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town/Village leaders including Supervisor/Mayor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. Moira will post the Franklin County Hazard Mitigation Plan 2020 on their web site https://www.moirany.com .

Specific Mitigation Actions: Following pages

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Moira

Action Worksheet			
Project Name:	Mill Street Bridge Replacement		
Project Number:	Town of Moira #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Mill Street has a one lane bridge over Lawrence Brook that has deteriorated and doesn't allow for enough stream flow so it regularly floods. This creates problems for local residents and emergency vehicle access.		
Description of the Solution:	The Town applied for BridgeNY funding in 2018 unsuccessfully. They will revise the application and resubmit in hopes of being awarded funding to replace with a two lane bridge and extend the bridge span to increase stream flow capacity.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents and emergency vehicles will have year round safe access.
Useful Life:	60 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022-2023
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	BridgeNY, STIP
Responsible Organization:	Town of Moira	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC, NYSDOT, Army Coprs of engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Deterioration will continue and flooding will limit access for residents and emergency vehicles.
	Replace bridge with a large culvert and rebuuild road around that stretch of road.	High	This might work as a temporay solution, however for the expense the stream flow may not increase sufficiently.
	Elevate road bed	High	Elevating the road bed reqiures additional funding, and time before the problem is solved. Extensive stretch of road would require elevation.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Moira

Action Worksheet			
Project Name:	Emergency Preparedness		
Project Number:	Town of Moira #2		
Risk / Vulnerability			
Hazard of Concern:	Multi-Hazard		
Description of the Problem:	The Town believes residents and tourists need to be aware of potential natural hazards and how best to prepare for emergency situations.		
Description of the Solution:	The town will work with the local fire department to develop and mail to each resident a packet containing emergency preparedness basics and items specific to the hazards the town experiences most often.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents will have knowledge of potential natual hazardous situations, supplies to have on hand in case of an emergency, and potential emergency shelters.
Useful Life:	40 years		
Estimated Cost:	Medium		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Town funds
Responsible Organization:	Town of Moira	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Residents may be unaware of how best to prepare for emergency situations.
	Post information on town web site	Low	May not reach everyone due to poor internet access.
	Hold a series of informational meetings	Low	This should perhaps be done in conjunction with the mailing on at least an annual basis.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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Village of Brushton

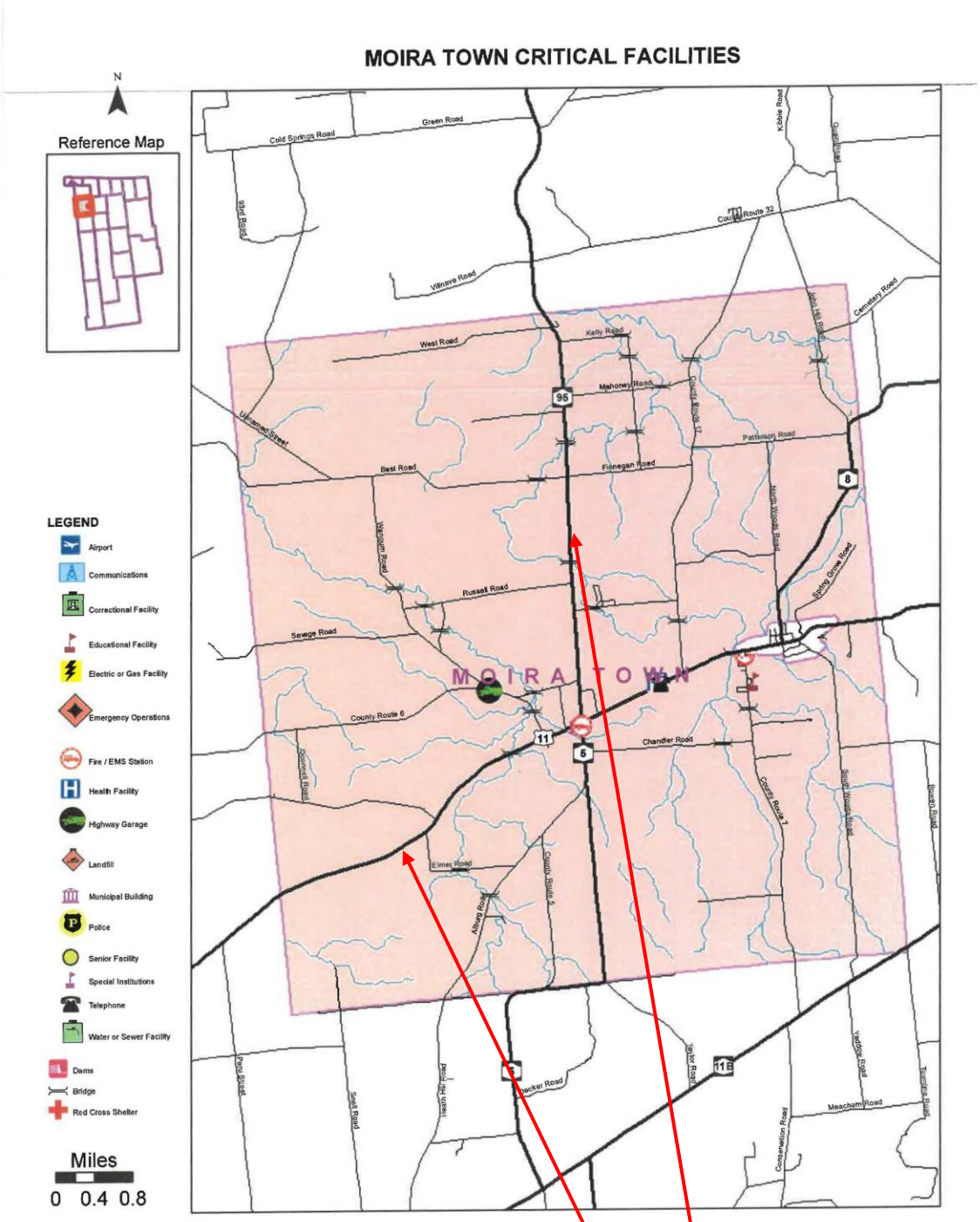
Action Worksheet			
Project Name:	Factory Street		
Project Number:	Village of Brushton #1		
Risk / Vulnerability			
Hazard of Concern:	Floooding		
Description of the Problem:	Factory Street in the Village of Brushton floods and washes out due to heavy rains and snow melt.		
Description of the Solution:	**The Village will determine areas where culverts should be installed and will install open bottom box culverts to alleviate the risk of flooding and washouts. DEC recommendations will be followed.**		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents and emergency vehicles will have safe access on Factory Street.
Useful Life:	40 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022-2023
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Village, Town, County, HMP funds
Responsible Organization:	Village of Brushton	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC, Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Factory Street will continue to flood and erode the area.
	Elevate the street 18 inches.	High	Costly and the Village does not have that capability.
	Detention Ponds	Low	Village does not own property in the low areas. This would be a temporary measure.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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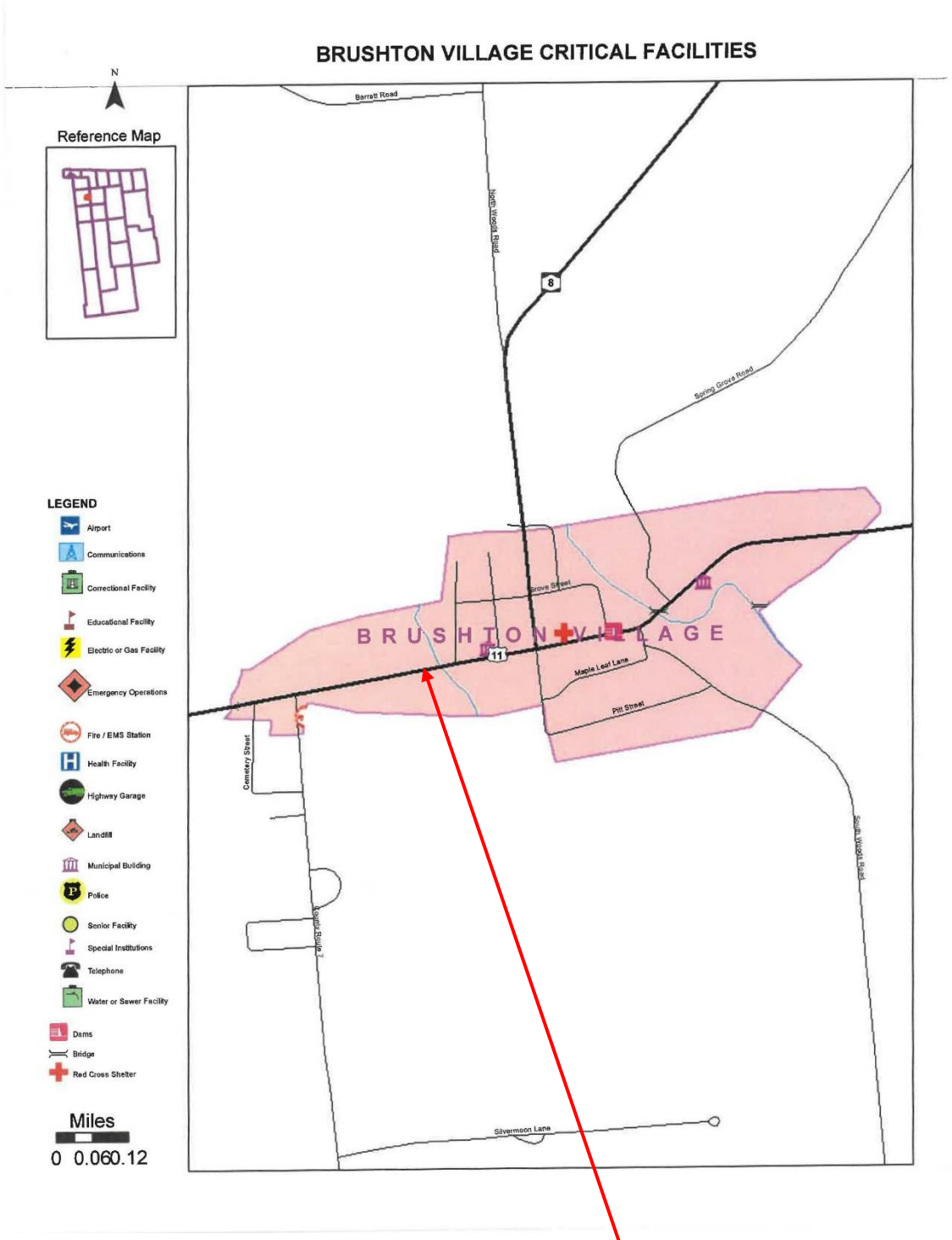
Village of Brushton

Action Worksheet			
Project Name:	Community Outreach		
Project Number:	V. Brushton #2		
Risk / Vulnerability			
Hazard of Concern:	Muti-hazard		
Description of the Problem:	The Village needs a specific way to contact residents in the village in time of an emergency natural disaster.		
Description of the Solution:	The Village of Brushton will set up and maintain, on a quarterly basis, an emergency contact list for village residents generating with the Village Office. Designating those with special needs -ex. resident uses oxygen.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	50 years	**Estimated Benefits (losses avoided):**	Residents will receive warning of impending disaster situation and be advised of how to proceed so injuries/deaths are avoided.
Useful Life:	20 years		
Estimated Cost:	Low		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2012-2022
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Village Budget
Responsible Organization:	Village of Brushton	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	residents may not be aware of impending dangerous situation
	Cell/Computer notification through the county	Low	internet and cell service is poor in remote areas
	Televison notification through the county	Low	Some residents may miss the notice and not be prepared.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

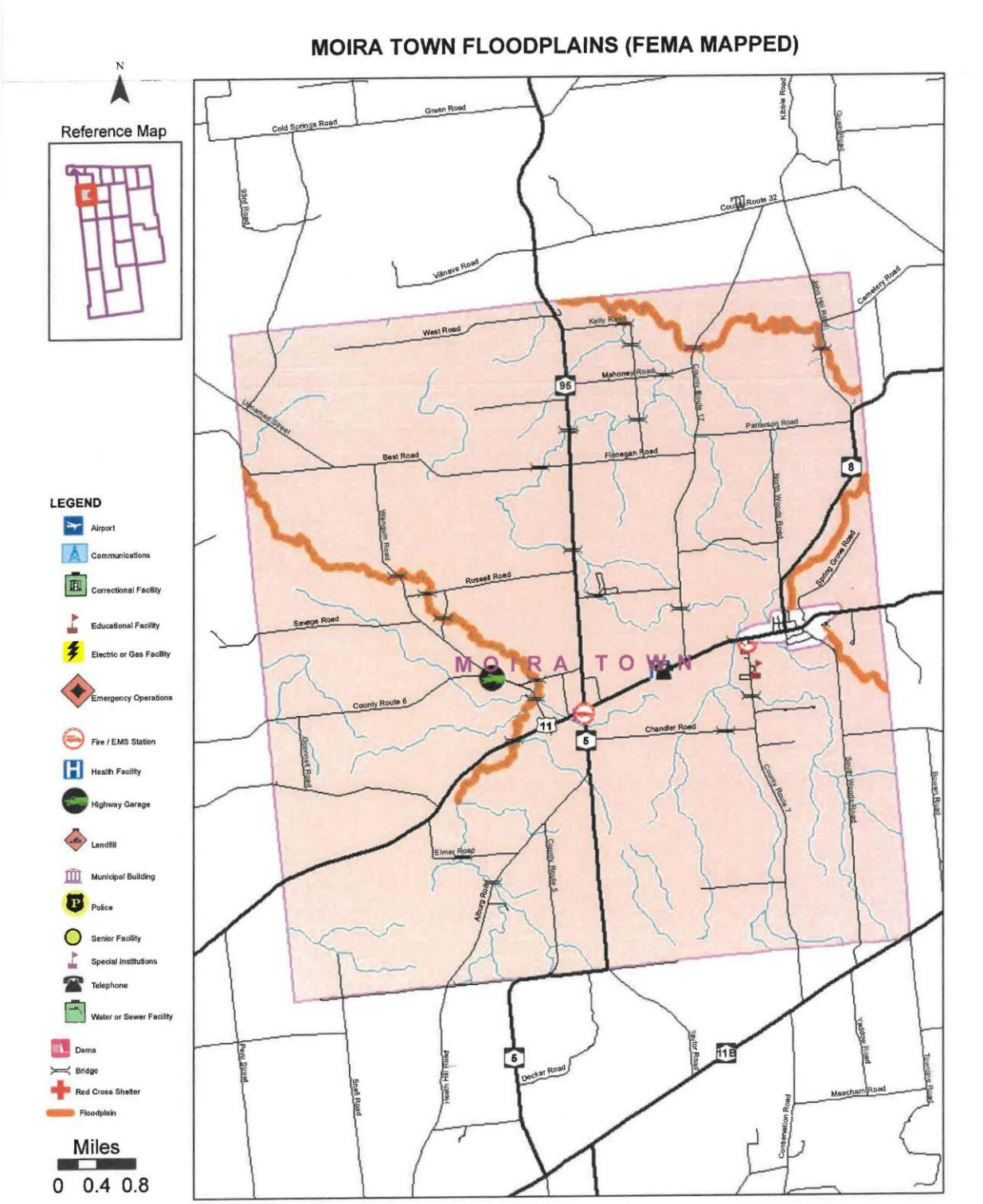
[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

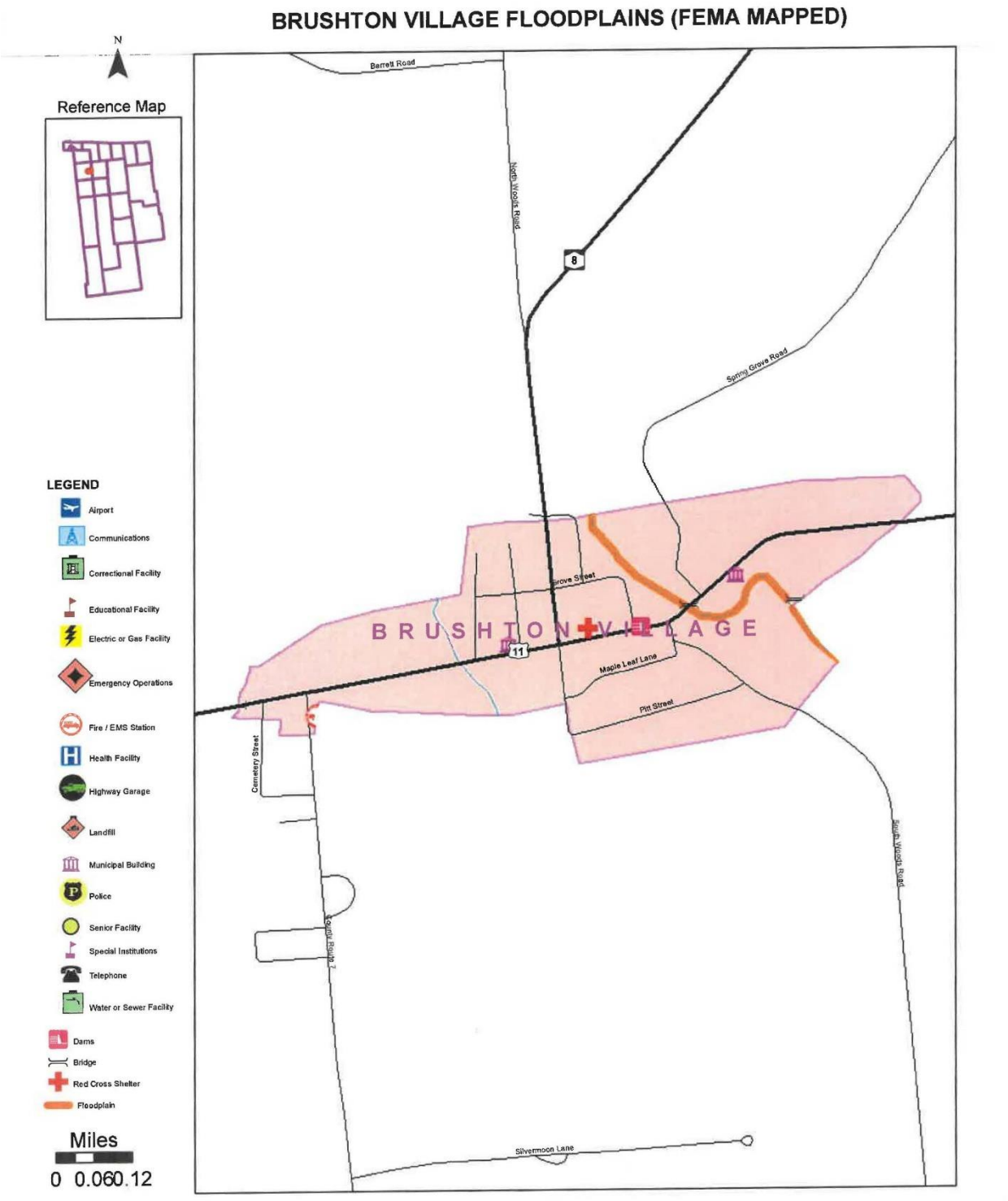


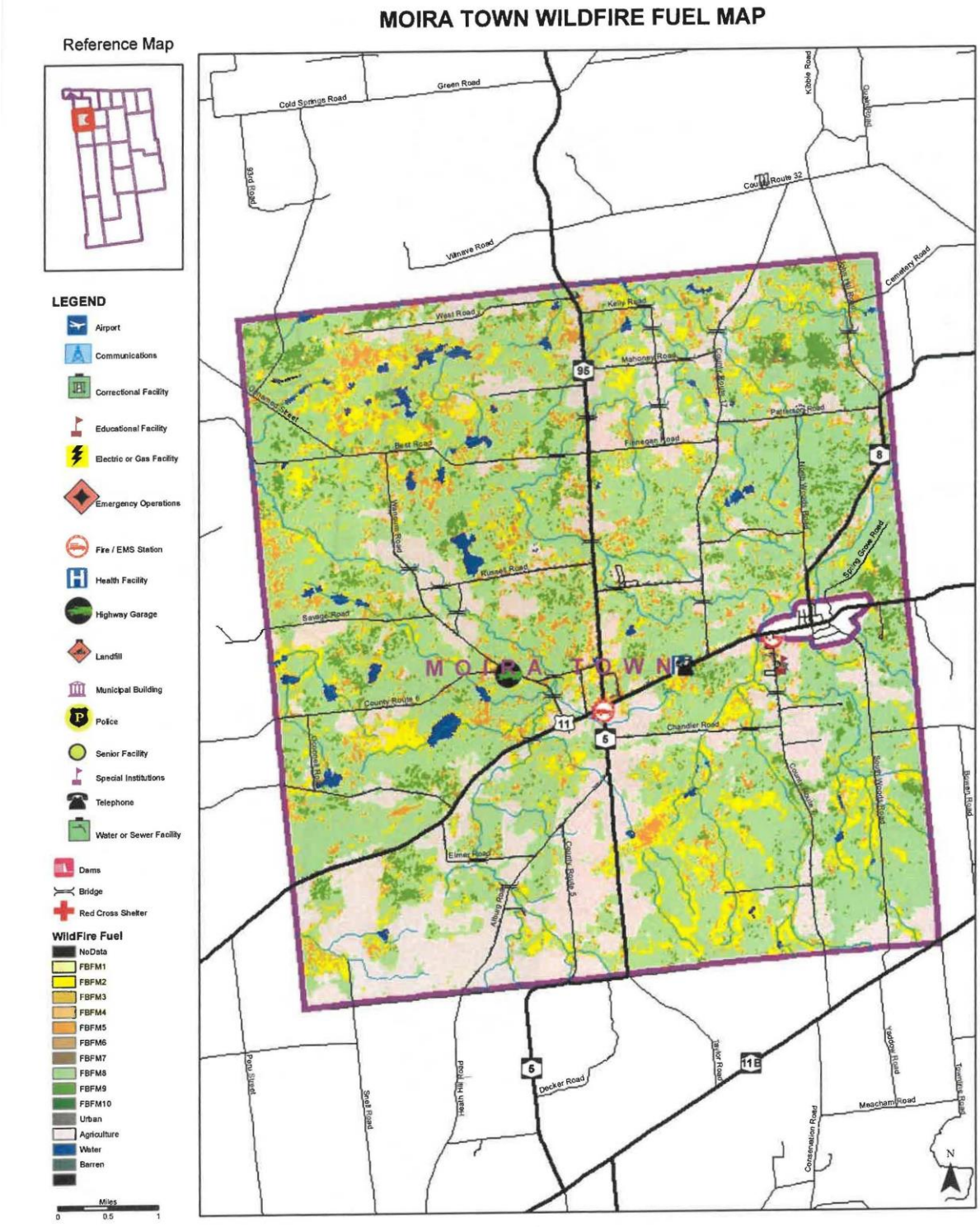
Evacuation Routes – State Route 11, 95

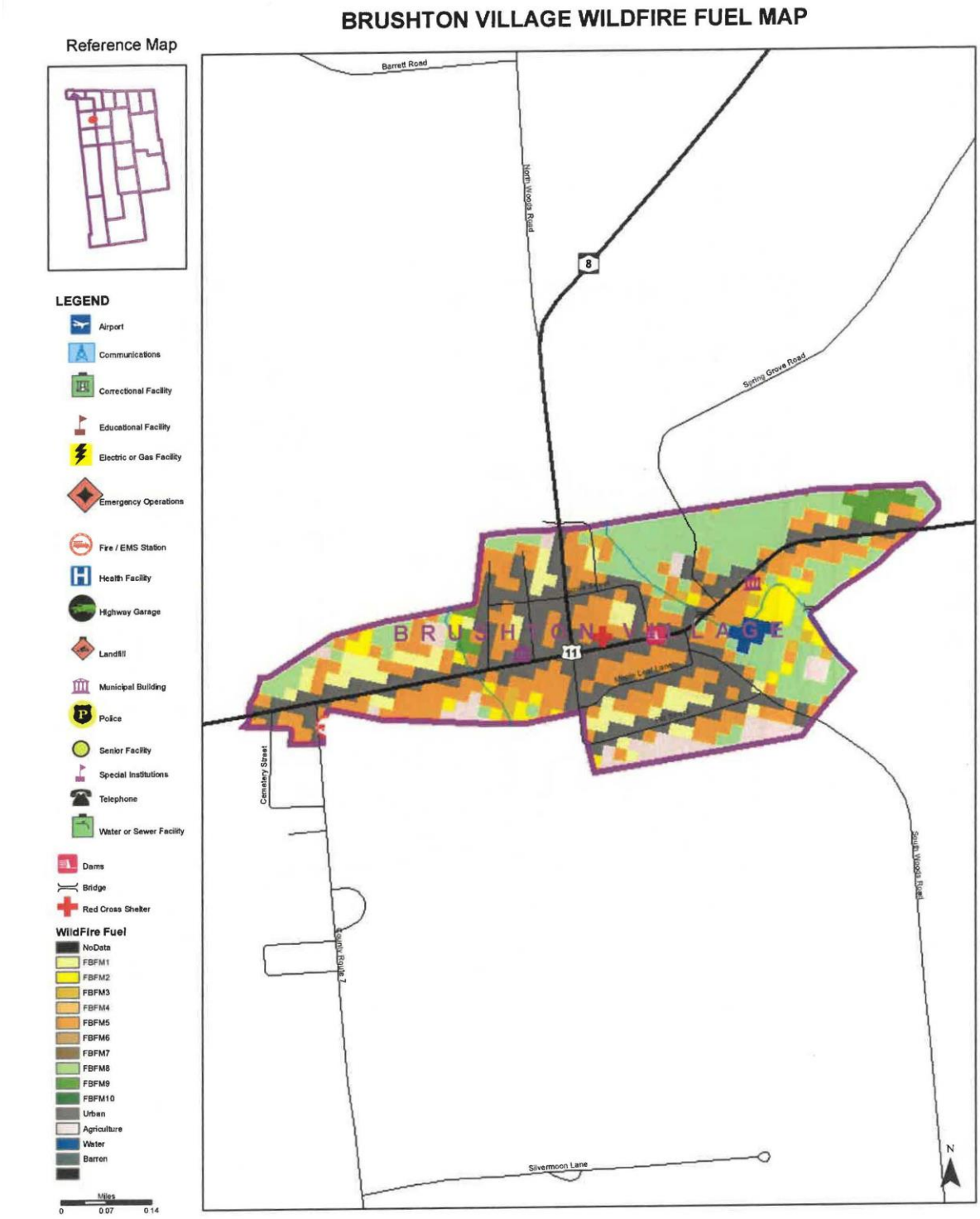


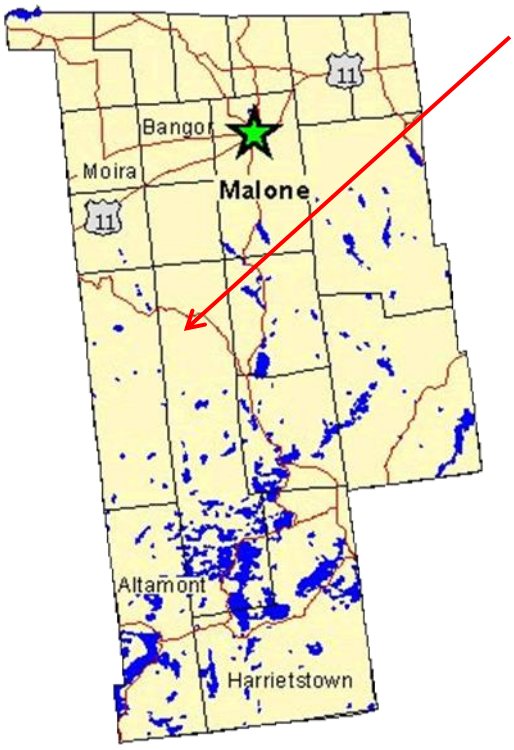
Evacuation Routes – State Route 11


MOIRA TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.4 0.8
MOIRA TOWN
Cold Springs Road
Green Road
93rd Road
Villneve Road
County Route 32
Kelly Road
West Road
Mahoney Road
Patterson Road
Best Road
Finnegan Road
Russell Road
Savage Road
County Route 6
Chandler Road
Elmer Road
Decker Road
Meacham Road
Cemetery Road
Spring Grove Road
North Woods Road
Bowen Road
Yaddow Road
Taylor Road
Contemeion Road
Heath Hill Road
Stout Road
Perry Street
Albury Road
Sprout Road
Unnamed Street
95
8
11
5
11B


BRUSHTON VILLAGE FLOODPLAINS (FEMA MAPPED)
N
Reference Map
Barrett Road
North Woods Road
8
Spring Grove Road
Grove Street
BRUSHTON VILLAGE
11
Maple Leaf Lane
Pitt Street
Cemetery Street
South Woods Road
South Route 7
Silvermoon Lane
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.060.12


MOIRA TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.5
1
MOIRA TOWN
Cold Springs Road
Green Road
Kibbie Road
93rd Road
County Route 32
Winnie Road
Cemetery Road
West Road
Kelly Road
Mahoney Road
Patterson Road
Finnegan Road
Best Road
Russell Road
Savage Road
Spring Grove Road
County Route 6
Chandler Road
Elmer Road
Decker Road
Meacham Road
Conservation Road
Yaqdon Road
Tromble Road
Bowen Road
Seal Road
Pond Street
Taylor Road
N


BRUSHTON VILLAGE WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.07
0.14
Barrett Road
North Woods Road
8
Spring Grove Road
11
Cemetery Street
South Route 7
South Woods Road
Silvermoon Lane
N



Town of Santa Clara

The Town of Santa Clara is centrally located in Franklin County. The Towns of Duane and Brighton form the eastern boundary and the Town of Harrietstown its southern border. The Town of Brandon is the northern border of Santa Clara, with the Town of Waverly on the west. Santa Clara is located within the Adirondack Park boundaries.

Town/Village	Town of Santa Clara
Land Area	191.7 square miles (122,688 acres) - 174.4 square miles (111,616 acres) land & 17.3 square miles (11,072 acres) water
Hamlets	Bay Pond, Derrick, Floodwood, Kildare, Madawaska, Santa Clara, Saranac Inn, Spring Cove
Population (ACS 2018)	339
Population Density	1.8 people/square mile
Governance	Supervior and Town Board
Total Assessed Value	467,278,915
Elevation	1,588 feet
Largest Lakes	Madawaska Pond, Middle Saranac Lake, Upper Saranac Lake, Weller Pond
Rivers	St. Regis River, St. Lawrence River
Bridges	7
State Routes	458, 30
Fire & Rescue	Santa Clara Fire Department
Schools	Saranac Lake School District, St. Regis Falls School District
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$33,500
Unemployment	5.1%
% Below Poverty	7.4%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Town officials in Santa Clara consider severe winter storms and extreme cold to be high risk hazards for their community. Snow melt and spring rains contribute to their concerns of flooding.

The Town of Santa Clara elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. Santa Clara is in the process of completing a Comprehensive Plan. The Town has zoning regulations and continues to be guided by the Adirondack Park Agency land use regulations.

Critical Facilities with assessed values.

Highway Department	5356 State Rte. 30 Saranac Lake, NY	$2,000,000
Community Center	5367 State Rte. 30 Saranac Lake, NY	$3,500,000

Future Development

A marina already located in the town is considering expansion.

NFIP

According to the Community Status Book, the Town of Santa Clara participates in NFIP. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The town continues to regulate development, including within floodplain areas. The floodplain administrator for the town is the Code Enforcement Officer.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, the Town has no repetitive loss properties.

The chart below represents parcels located in the Town of Santa Clara substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
SANTA CLARA	**149**	**$40,527,800**
Community Services	1	$9,500
Residential	136	$40,480,100
Vacant	10	$38,200
Wild, Forested, Conservation Lands & Public Parks	2	$0

Past Events

The chart below indicates property damage events specific to the Town of Santa Clara occurring since the 2015 plan. However countywide events must also be considered.

Date	***Type***	***Property Damage***	***Details***
6/20/2016	Thunderstorms/High Winds	1K	Floodwood/Keeseville Mills Road Area Power Outages/Trees Downed
8/22/2017	Thunderstorms/High Winds	5K	Floodwood Area/ Power Outages/Trees Downed
6/30/2018-7/5/2018	Extreme Heat/Isolated Thunderstorms	2K	Above 90 Degrees for 5 Days/Humidity felt like 100-110 Degrees/ Power Outages/Trees Downed

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Santa Clara utilizes the Town Hall as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes.
In the Town of Santa Clara major roadways are State Routes 458 and 186.

The Town of Santa Clara approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. As the Town completes the Comprehensive Plan officials will incorporate the Franklin County Multi-Jurisdictional Plan in the Plan Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. APA regulations for land use will be adhered to. Santa Clara will post the Franklin County Hazard Mitigation Plan 2020 on their website www.townofsantaclara.com.

Specific Mitigation Actions: Following pages

Town of Santa Clara

Action Worksheet

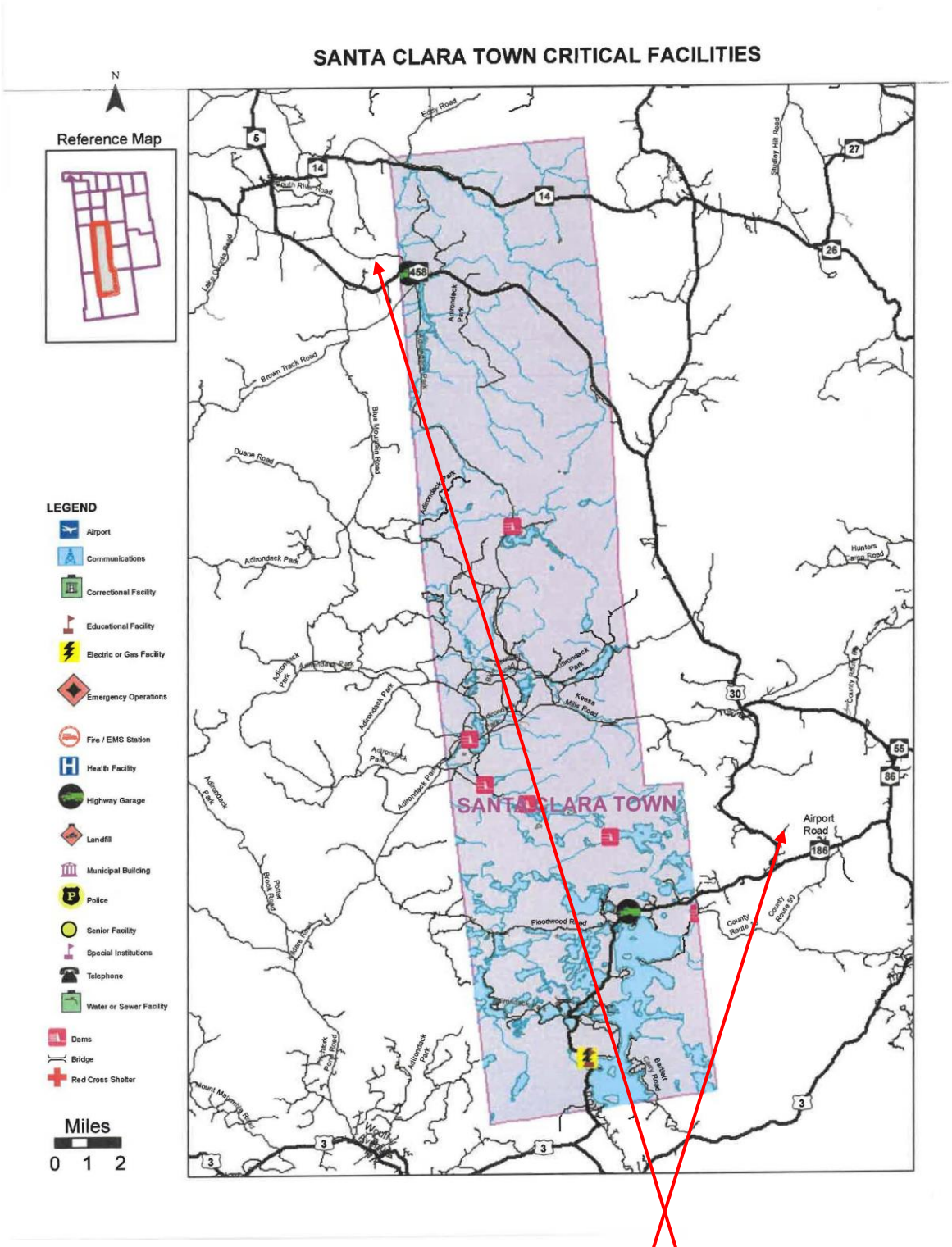
Project Name:	Bartlett Carry Dam		
Project Number:	Town of Santa Clara #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	The Bartlett Carry Dam is privately owned and in need of major repair and regular maintenance. If the dam were to fail, Santa Clara residents would be severely impacted.		
Description of the Solution:	Santa Clara along with the Village of Saranac Lake will approach the Upper Saranac Foundation to research a joint solution to the problem of regular maintenance, consulting with DEC and the APA.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Keese Mill Road will be open for residents and emergency vehicles
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	2 Years	**Potential Funding Sources:**	Town, County, HMP Funds, Private
Responsible Organization:	Town of Santa Clara, Village of Saranac Lake, Upper Saranac Foundation	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	The dam will continue to deteriorate without a plan for maintainence.
	Encourage NYS DEC to take over ownership of the dam	High	Cost and getting an agreement with the Upper Saranac Foundation is prohibitive.
Culvert replacement with precast/prestressed concrete slab on piles.			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

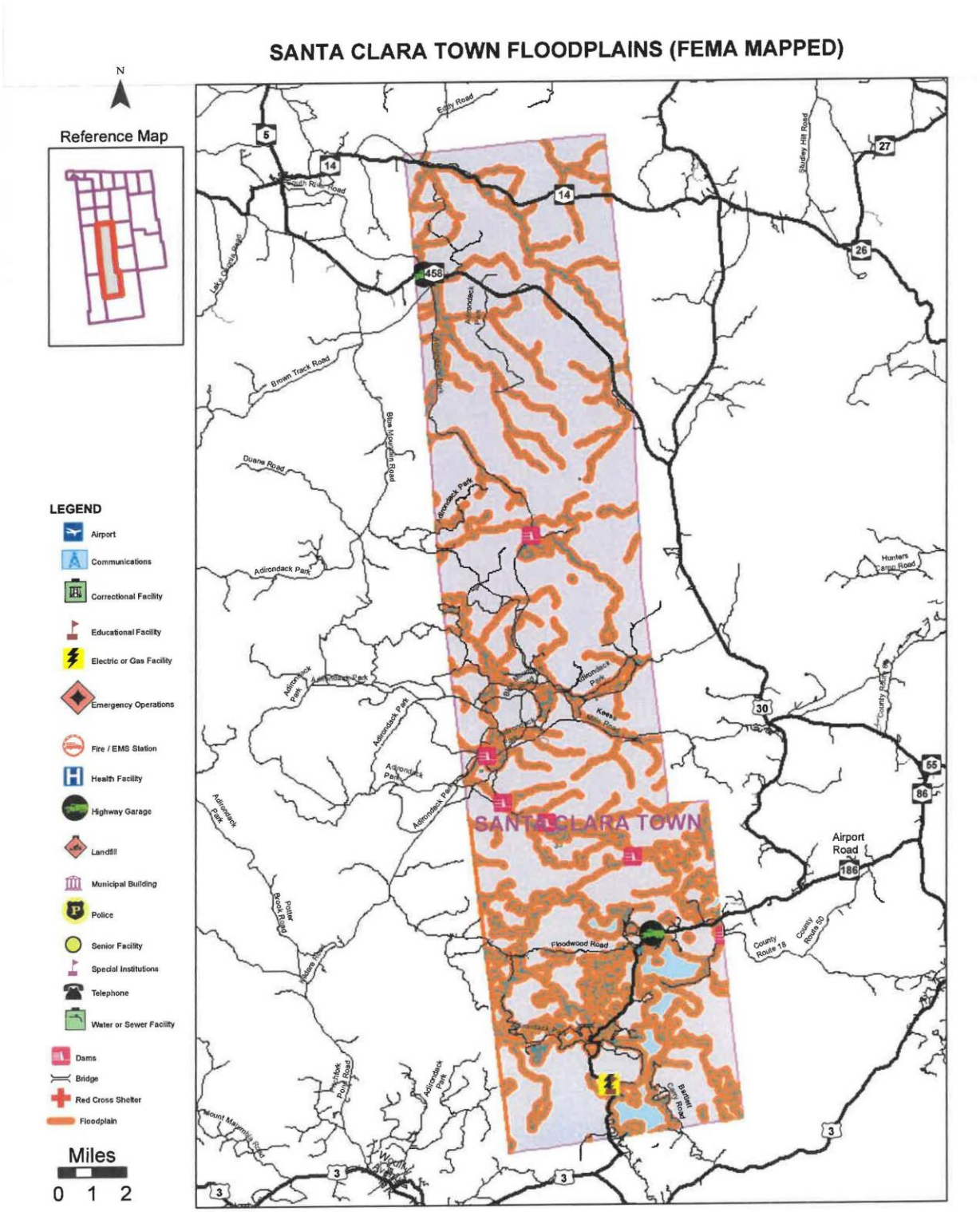
Town of Santa Clara

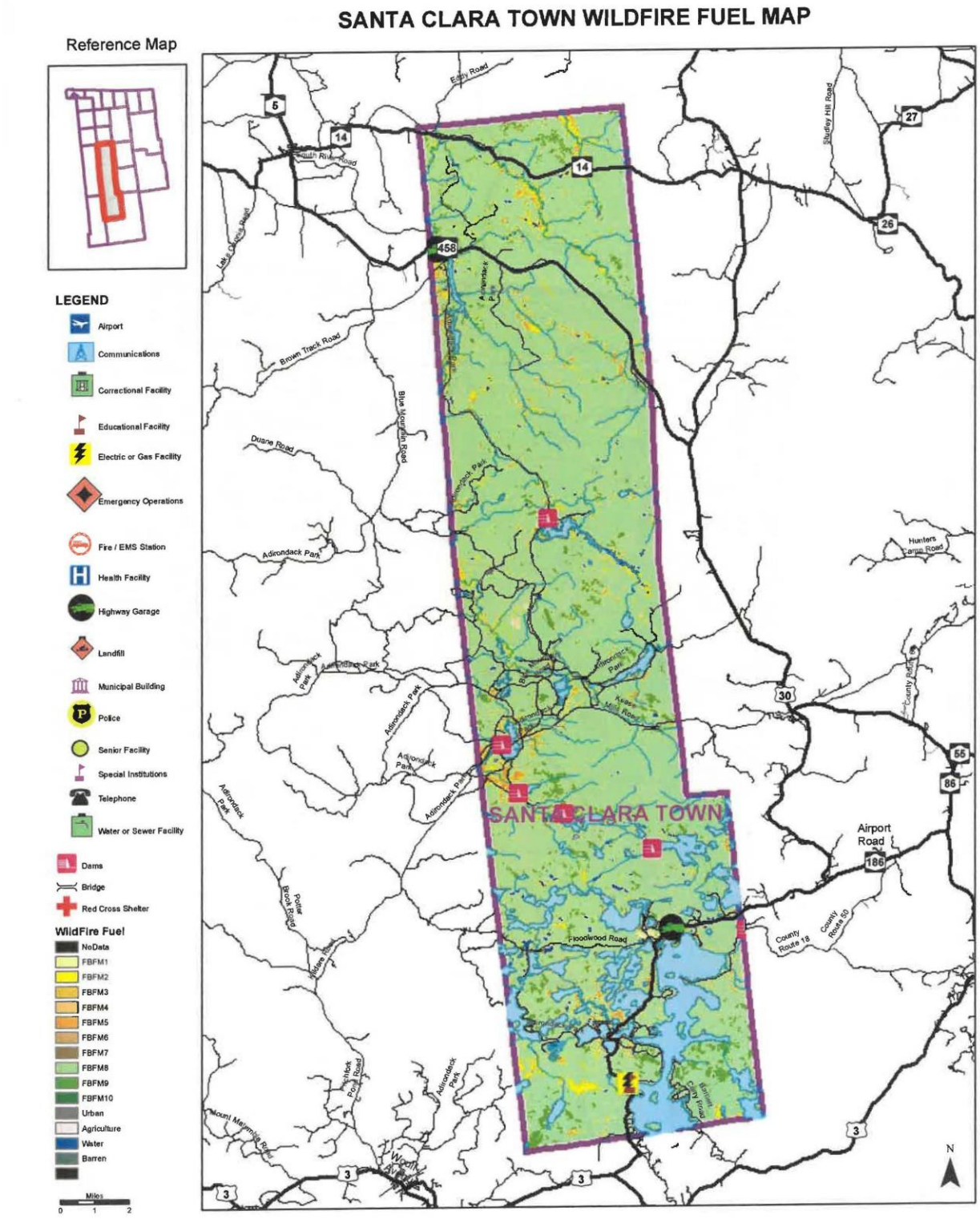
Action Worksheet			
Project Name:	Keese Mill Road Project		
Project Number:	Town of Santa Clara #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	The Town needs to replace six culverts on the Keese Mill Road. Some ditching of the road and attempts to reroute the stream by a landowner has helped, but because of the road location (rock ledge), larger and stronger culverts would improve the situation.		
Description of the Solution:	Santa Clara will replace the six culverts with larger, concrete box, open bottom type culverts, maintaining the substrate. Natural vegetation on streambanks will be added to slow the overflow.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Keese Mill Road will be open for residents and emergency vehicles
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2023
Estimated Time Required for Project Implementation:	2 Years	**Potential Funding Sources:**	Town, County, HMPG Funds
Responsible Organization:	Town of Santa Clara	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Road will continue to deteriorate and be impassable at times due to snow melt and heavy rains.
	Replace the culverts with bridges	High	Cost and length of time to implement is prohibitive.
	Major ditching along entire length of road	High	This would require removal of huge boulders, rock ledges, and trees. An outside firm with large equipment would be needed. Permitting would be problematic.
Culvert replacement with precast/prestressed concrete slab on piles.			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

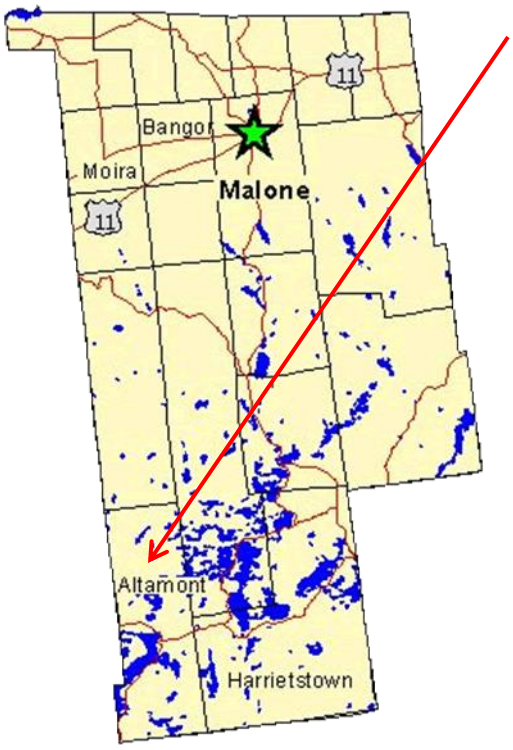
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Evacuation Routes – State Route 186, 458


SANTA CLARA TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 1 2
SANTA CLARA TOWN
Floodwood Road
Airport Road
Brown Tract Road
Duane Road
Adirondack Park
Potter Brook Road
Hunters Range Road
Study Hill Road
Barnett Corners Road
County Route 18
County Route 50
Mount Majestic Road
Lake Clear Road
Blue Mountain Road
Keese Mills Road
Eddy Road
5
14
26
27
30
55
86
186
458
3


SANTA CLARA TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
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Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0 1 2
SANTA CLARA TOWN
Floodwood Road
Airport Road
Brown Tract Road
Duane Road
Blue Mountain Road
Adirondack Park
Hunters Camp Road
Shirley Hill Road
Eddy Road
Lake Clear Road
Potter Brook Road
Mount Morrison Road
County Route 18
County Route 50
N



Town of Tupper Lake
Village of Tupper Lake

The Town of Tupper Lake is in the southwest region of Franklin County. The towns of Harrietstown and Santa Clara form the eastern boundary and Hamilton County is its southern border. The town of Waverly is the northern border of the town, with St. Lawrence County on the west. The Village of Tupper Lake is centrally located in the town.

Town/Village	Town of Tupper Lake
Land Area	130.1 square miles (83,264 acres) - 117.3 square miles (75,072 acres) land & 12.7 square miles (8,128 acres) water
Incorporated Villages	Village of Tupper Lake
Hamlets	Derrick, Kildare, Moody
Population (ACS 2018)	5,826
Population Density	45.90 people/square mile
Governance	Supervior and Town Board
Total Assessed Value	599,659,142
Elevation	1,696 feet
Largest Lakes	Duck Lake, Lake Madeleine, Wolf Pond
Bridges	5
State Routes	3, 30
Fire & Rescue	Altamont/Tupper Lake Fire Department
Schools	Tupper Lake School District
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells & Community/Public
Population Median Income	$32,333
Unemployment	6.7%
% Below Poverty	10.9%

Town/Village	Village of Tupper Lake
Land Area	2.1 square miles (1,344 acres) - 2.06 square miles (1,318.4 acres) land & 0.04 square miles (25.6 acres) water
Population (ACS 2018)	3,710
Population Density	1,746.19 people/square mile
Governance	Mayor and Village Board of Trustees
Total Assessed Value	174,777,537
Elevation	1,545
Bridges	5
State Routes	3, 30
Fire & Rescue	Altamont/Tupper Lake Fire Department
Schools	Tupper Lake Central School District
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Community/Public
Population Median Income	$32,333
Unemployment	6.7%
% Below Poverty	10.9%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in Tupper Lake, town, and village, consider ice storms, severe winter storms and extreme cold to be high risk hazards for their community. Contributing to their concerns is annual snow melt and spring rains bring flooding.

The Town of Tupper Lake elects a supervisor and three councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the roads and a Code Enforcement Officer enforces the NYS Building Codes within the town as well as the Village. The local fire department is a volunteer organization. The Village elects a mayor and four trustees to oversee operations. The Town and Village have Zoning Plans, Waterfront Revitalization Plans, and Smart Growth Plans. Located within the Adirondack Park, land use in the Town and Village of Tupper Lake is determined by Park regulations.

Critical Facilities with assessed values.

Town

Mercy Living Center	114 Wawbeek Rd. Tupper Lake, NY	$3,500,000
Adirondack Health Center	7 Stetson Rd. Tupper Lake, NY	$1,900,000
Town Highway Garage	3 Pine Street Tupper Lake, NY	$250,000
Tupper Lake Middle/High School	25 Chaney Ave. Tupper Lake, NY	$7,200,000
Tupper Lake Emergency Services	21 Santa Clara Ave. Tupper Lake, NY	$2,200,000
Tupper Lake Elementary School	294 Hosley Ave. Tupper Lake, NY	$5,500,000
Tupper Lake Municipal Electric Dept	195 MaLaughlin Ave. Tupper Lake, NY	$2,200,000

Village

Sand Mine	Washington St, Tupper Lake, NY	$3,000
Highway Garage	195 McLaughlin Ave. Tupper Lake, NY	$3,200,000
Wastewater Treatment Plant	4 Water St. Tupper Lake, NY	$1,087,100
Police/Fire Station	21 Santa Clara Ave. Tupper Lake, NY	$2,128,400
Water Choline Station	20 Santa Clara Ave. Tupper Lake, NY	$451,100
Waterfront Park/Ball Park	17-19 Demars Ave. Tupper Lake, NY	$465,200
Sewer Lift Station	13 Wawbeek Ave. Tupper Lake, NY	$14,900
Bandshell	Cliff Ave. Tupper Lake, NY	$559,400
Municipal Offices	53 Park St. Tupper Lake, NY	$268,300
Water Treatment Plant	45 Maddox Lane Tupper Lake, NY	$304,800
Water Delivery System	Tupper Lake, NY	$1,264,865
Municipal Electric	Substation Tupper Lake, NY	$1,589,372
Water Storage Tank	28 Fuller Ave. Tupper Lake, NY	$325,200
Water Storage Tank	274 Park St. Tupper Lake, NY	$325,200
Sand mine	54 Wolf Rd. Tupper Lake, NY	$37,200

Water Treatment Plant	194 Lake Simond Rd. Tupper Lake, NY	$135,300
Garage	56 Park St. Tupper Lake, NY	$6,500
Sewer Lift Station	62 High St. Tupper Lake, NY	$3,300
Water Treatment Supply	77 Well Rd, Tupper Lake, NY	$1,309,000

Future Development
Tupper Lake anticipates the development of a new hotel in the near future.

NFIP
According to the Community Status Book, the Town and the Village of Tupper Lake participate in NFIP. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator for the town and the village is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas.
NFIP data 2019 indicates 6 losses, 2 closed, 4 closed without payment, totaling $4,274.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, both the Town and Village, have no repetitive loss properties.

The chart below represents parcels located in the Town and Village of Tupper Lake substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
TUPPER LAKE	**209**	**$31,634,790**
Commercial	1	$221,800
Public Services	1	$141,500
Residential	196	$30,746,190
Vacant	8	$50,300
Wild, Forested, Conservation Lands & Public Parks	3	$475,000
TUPPER LAKE Village	**23**	**$2,964,200**
Commercial	4	1,894,000
Residential	18	$1,070,200
Vacant	1	$0

Past Events

The chart below indicates property damage events specific to the Town of Dickinson occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
5/4/2018	Thunderstorm/High Winds	1K	Wind 50 Knots/Faust Area
11/15/2018	Winter Storm	15K	Countywide Storm 15" of Snow
3/20/2020	Thunderstorm/High Winds	12K	Wind 52 Knots/Duane and Fort Covington Areas also impacted

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Tupper Lake utilizes the Fire Department in town as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Tupper Lake major roadways are State Routes 3 and 30.

The Town and Village of Tupper Lake approved the original Plan in 2008 and the update in 2015. The Town/Village will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. Located within the Adirondack Park, land use in the Town and Village of Tupper Lake is determined by Park regulations. The town will continue to incorporate their mitigation activities into land use plans in accordance with Adirondack Park Agency regulations. Tupper Lake will post the Franklin County Hazard Mitigation Plan 2020 on their combined town/village website https://www.tupperlakeny.gov.

Specific Mitigation Actions: Following pages

Town of Tupper Lake

Action Worksheet			
Project Name:	Flood Protection		
Project Number:	Town of Tupper Lake #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Townspeople, seasonal residents and business owners need to be aware of methods they should use to avoid flood damage to property and homes and acquire flood insurance.		
Description of the Solution:	The town will make FEMA and NYS DHSES brochures and information available to residents and property owners with steps they can take to avoid flood damage- elevating mechanical systems such as furnaces, hot water heaters, electrical panels and obtaining flood insurance.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents will benefit from being aware of ways to limit flood damage to homes and property.
Useful Life:	40 years		
Estimated Cost:	Medium		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	10 months	**Potential Funding Sources:**	Town
Responsible Organization:	Town of Tupper Lake	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Residents will not benefit from ways to limit flood damage to homes and property.
	Town will place information on website	Low	Due to poor internet connections, many people will not receive the information. This could be done in conjunction with town mailings.
	Town will post information in Town Hall	Low	Many townspeople and especially seasonal residents would not be gvien the information.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Town of Tupper Lake

Action Worksheet			
Project Name:	Railroad Bridge Culvert		
Project Number:	Town of Tupper Lake #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	When there is high water from heavy rains and snow melt, Underwood Railroad Bridge is in danger of washout from the Raquette River.		
Description of the Solution:	The Town will install a large, open bottom box culvert so the Raquette River will not overflow, potentially washing out the bridge.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	The portion of the road near the causeway will not flood and access will remain open.
Useful Life:	40 years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	10 months	**Potential Funding Sources:**	Town, County, HMPG
Responsible Organization:	Town of Tupper Lake	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC, Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Concern of an Underwood RR Bridge washout will continue
	Elevate roadway so Underwood Railroad Bridge is not in danger of washout	High	Costly and will require lengthy permitting process and study.
	Detention ponds	High	Town does not own enough property to install ponds.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Village of Tupper Lake

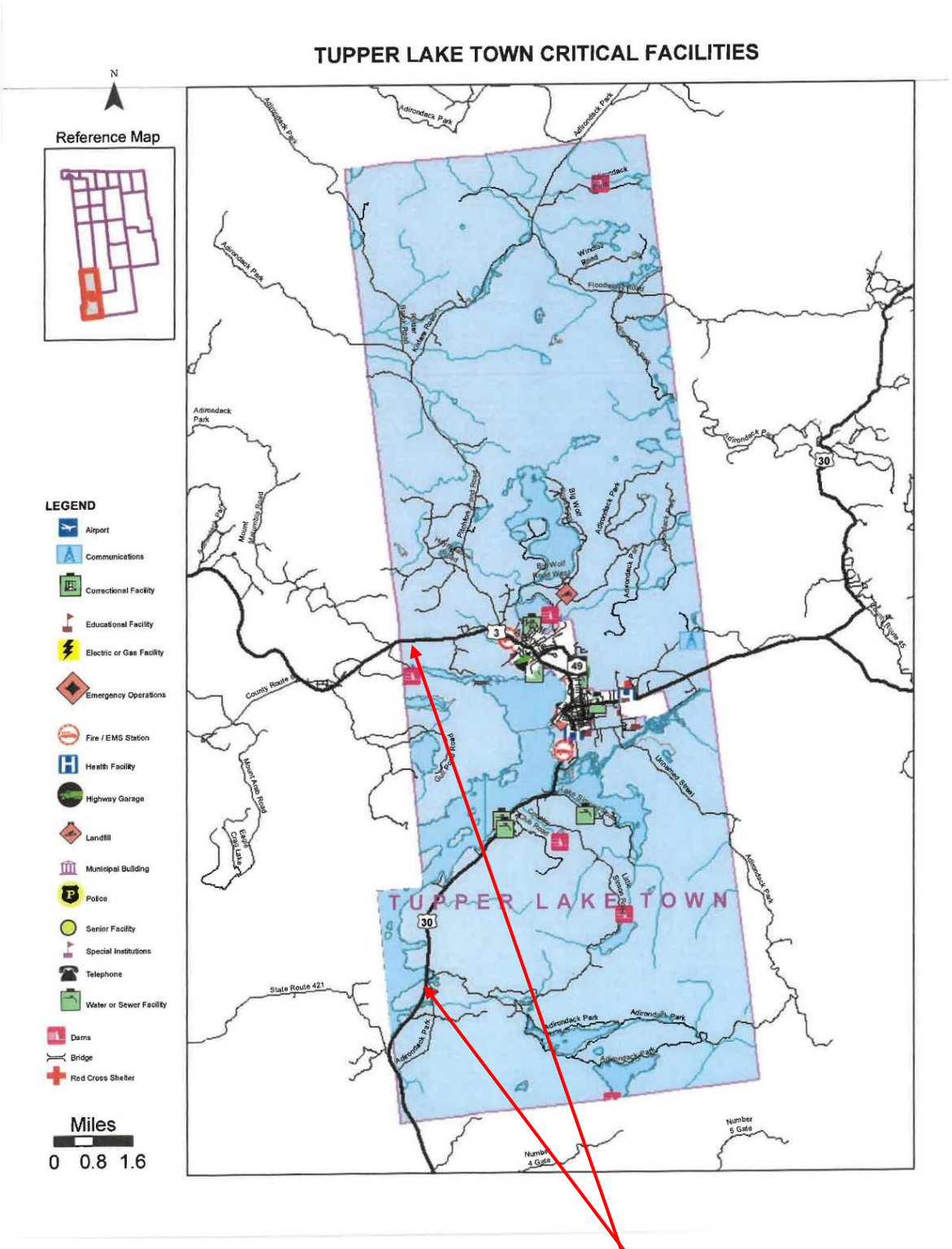
Action Worksheet			
Project Name:	Demars Blvd.		
Project Number:	Village of Tupper Lake #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Demars Blvd. is major roadway into the Village and floods regularly.		
Description of the Solution:	The Village has started working with ELAN Consulting on a Waterfront Master Plan which will address this issue. The Village would like to install a 3rd pump/lift station on the Blvd.		
Is this project related to a Critical Facility?	**Yes** ☐	**No** ☑	
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents and emergency vehicles will have continuous access to Demars Blvd.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Village, Town, County, HMPG
Responsible Organization:	Village of Tupper Lake	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Demars Blvd. will continue to flood creating problems for residents and emergency personnel.
	Create detention ponds to absorb the flooding conditions	High	Village does not own adjacent land for this project.
	Elevate Demars Blvd .	High	Costly and won't completely solve the problem.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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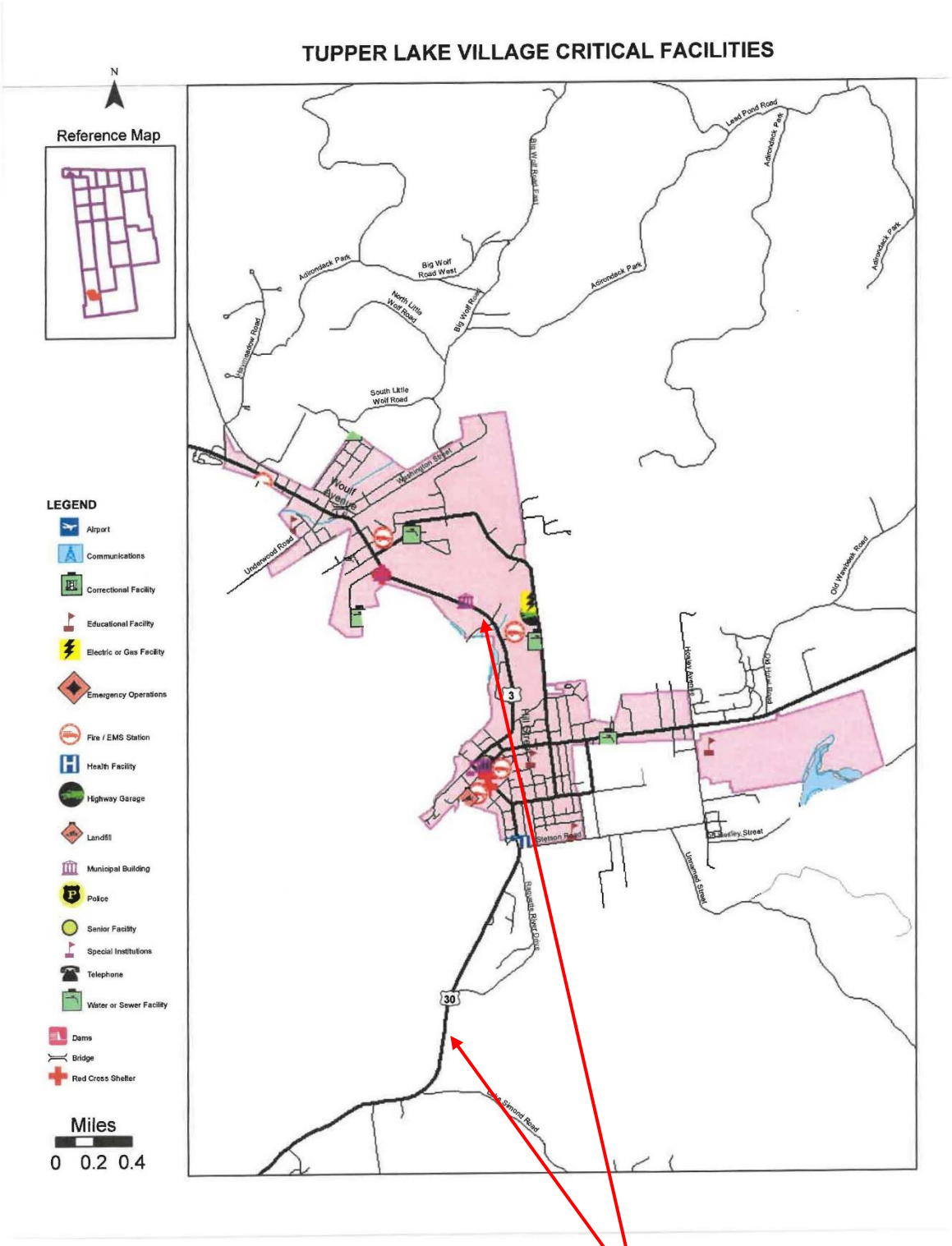
Village of Tupper Lake

Action Worksheet			
Project Name:	McCarthy Street Reopen		
Project Number:	Village of Tupper Lake #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Residents of the Village and emergency vehicles must re-route around McCarthy Street due to the closure.		
Description of the Solution:	Signage is needed where McCarthy Street meets the Railroad Crossing. NYS Rail/Trail is assisting with the problem and providing some funding. Anticipated 2024.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents and emergency vehicles will have steady access to McCarthy Street.
Useful Life:	40 Years		
Estimated Cost:	High		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2023-2024
Estimated Time Required for Project Implementation:	1 Year	**Potential Funding Sources:**	Town, County, NYS Rail/Trails
Responsible Organization:	Village of Tupper Lake	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC / Army Corps of Engineers
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	McCarthy Street will remain closed for residents and emergency vehicles.
	Complete a study to analyze the necessity of opening the street.	High	Village does not have the funds or manpower for this project.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

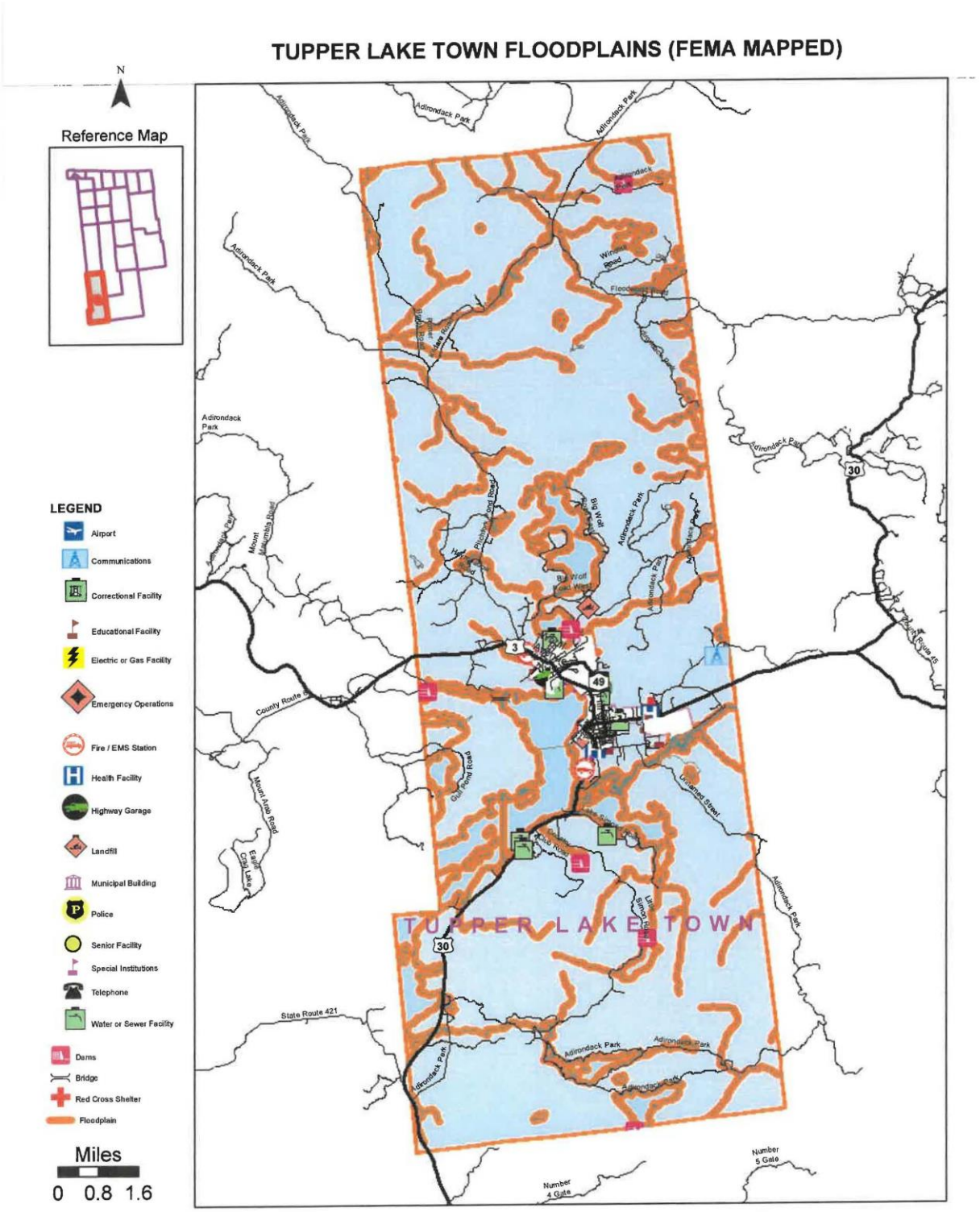
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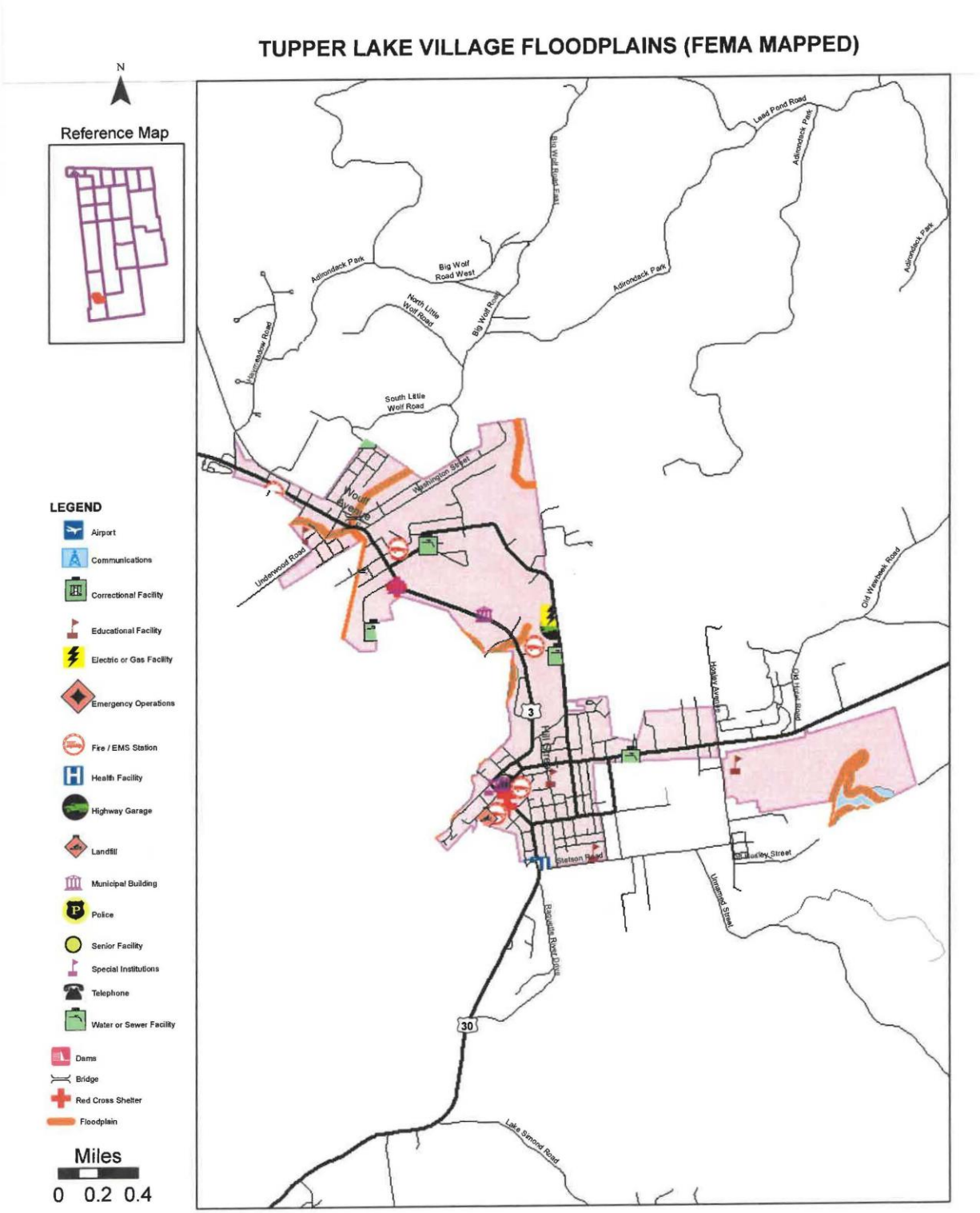


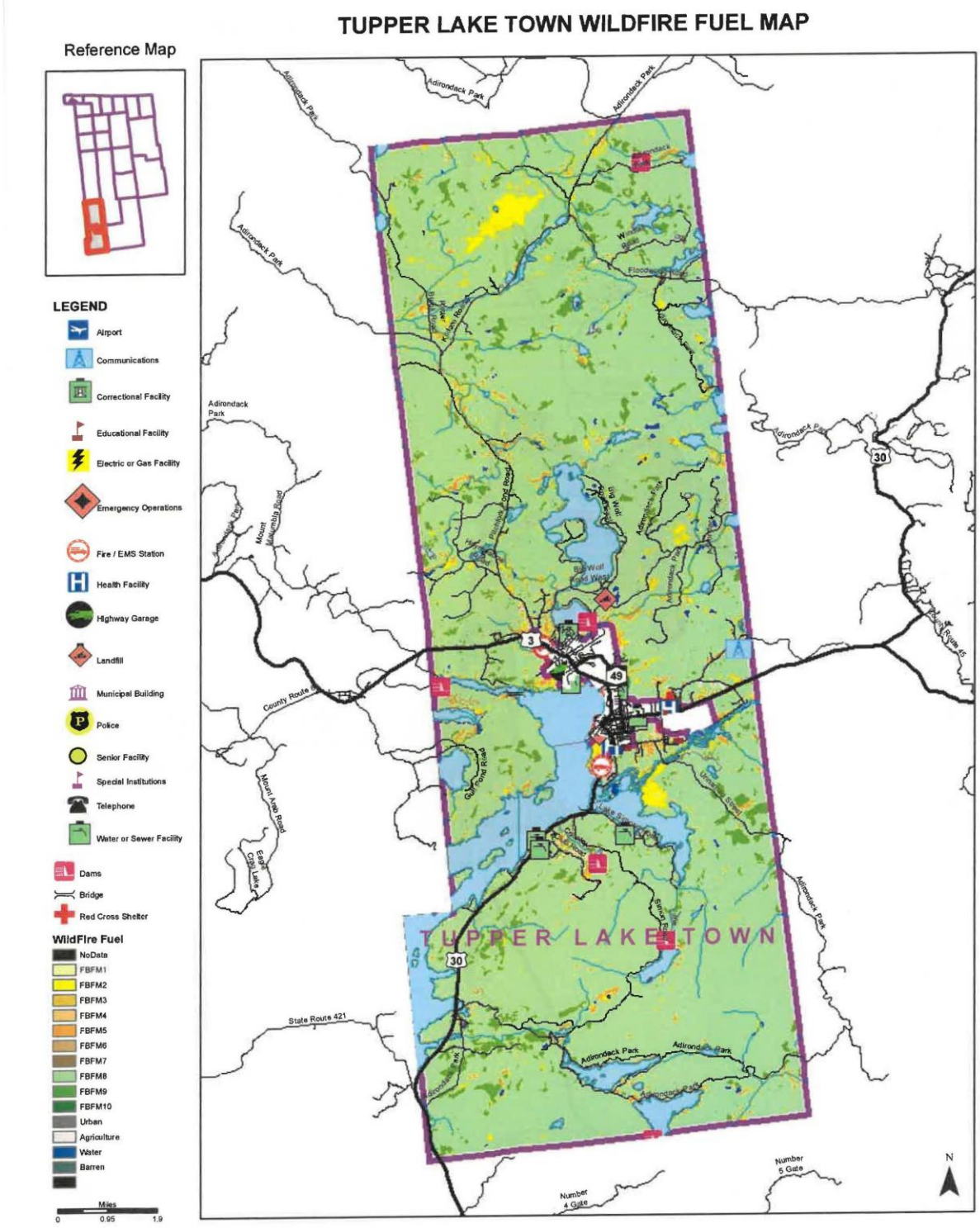
Evacuation Routes – State Route 3, 30

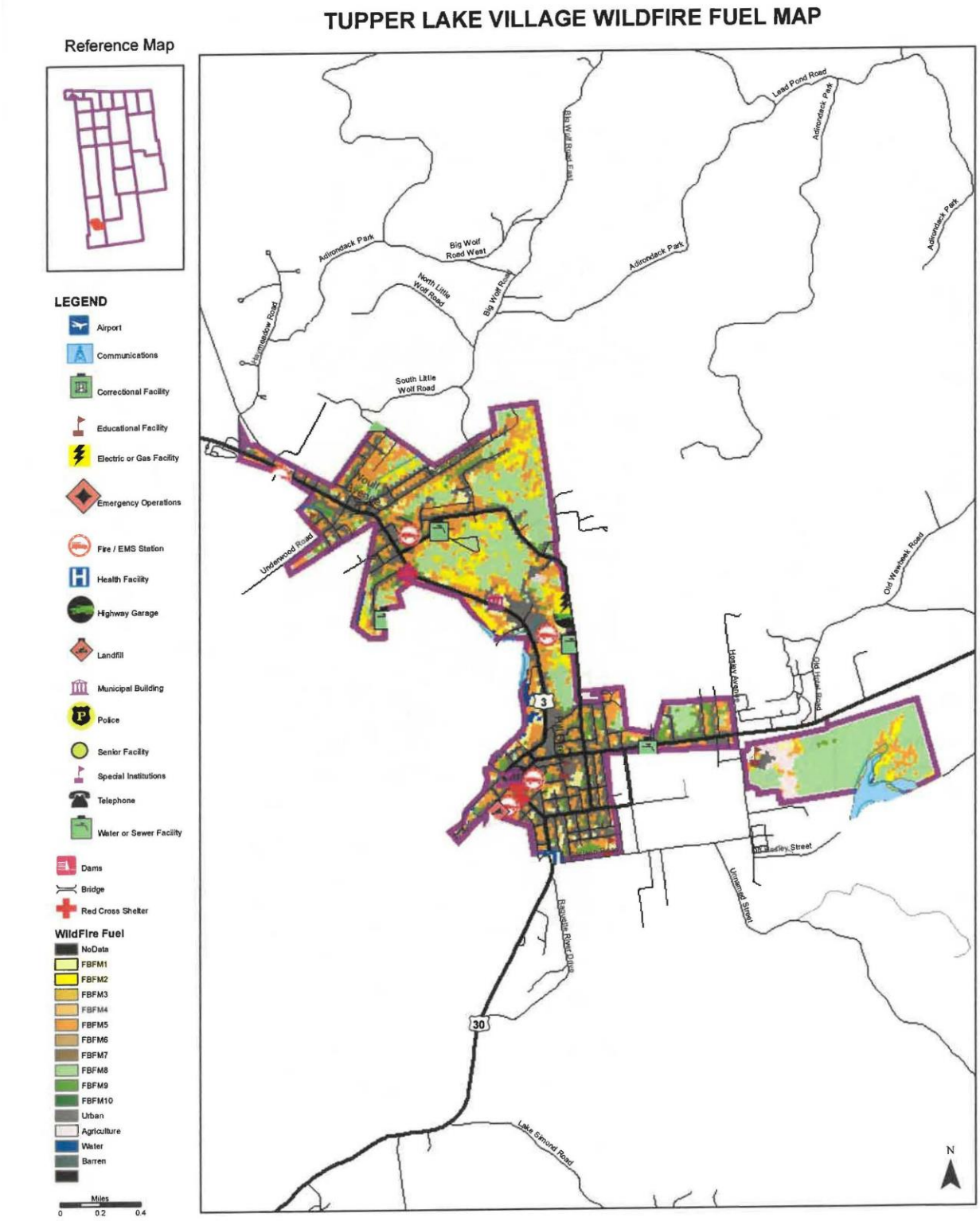


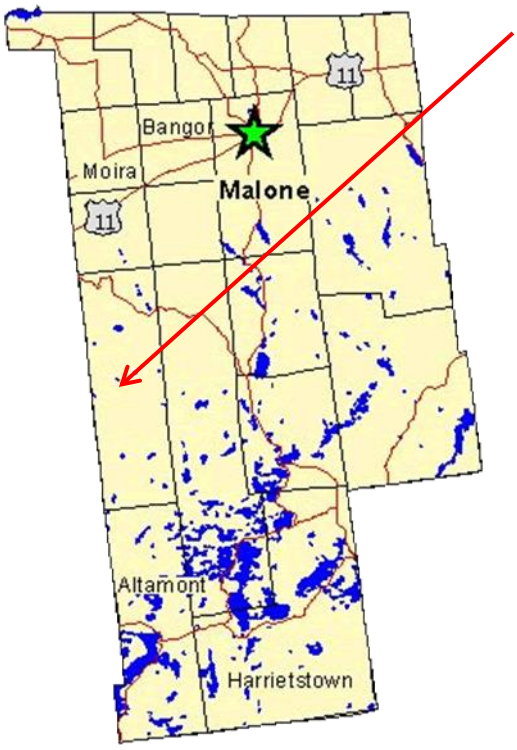
Evacuation Routes – State Route 3, 30


TUPPER LAKE TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.8 1.6
TUPPER LAKE TOWN
Adirondack Park
Big Wolf Road
Gulf Pond Road
Mount Arab Road
Eagle Crag Lake
State Route 421
Number 4 Gate
Number 5 Gate
30
49
3


TUPPER LAKE VILLAGE FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.2 0.4
Lead Pond Road
Adirondack Park
Big Wolf Road East
Big Wolf Road West
North Little Wolf Road
South Little Wolf Road
Washington Street
Underwood Road
Old Wanakena Road
Hall Street
Stetson Road
Unnamed Street
Raquette River Drive
Lake Simond Road
3
30


TUPPER LAKE TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.95
1.9
TUPPER LAKE TOWN
Adirondack Park
State Route 421
Number 4 Gate
Number 5 Gate
N


TUPPER LAKE VILLAGE WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
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Emergency Operations
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NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.2
0.4
Lead Pond Road
Adirondack Park
Big Wolf Road East
Big Wolf Road West
North Little Wolf Road
Big Wolf Road
Hummingbird Road
South Little Wolf Road
Underwood Road
Old Wawbeek Road
Horsey Avenue
Bradley Street
Unnamed Street
Raquette River Drive
Lake Simond Road
3
30
N



Town of Waverly

The Town of Santa Clara forms the eastern boundary of the Town of Waverly and the Town of Tupper Lake its southern border. The Town of Dickinson is the northern border of Waverly, with St. Lawrence County on the west.

Town/Village	Town of Waverly
Land Area	126.4 square miles (80,896 acres) - 125.1 square miles (80,064 acres) land & 1.3 square miles (832 acres) water
Hamlets	St. Regis Falls
Population (ACS 2018)	1,022
Population Density	8.09 people/square mile
Governance	Supervior and Town Board
Total Assessed Value	88,677,639
Elevation	1,429 feet
Largest Lakes	Dexter Lake
Rivers	St. Regis River
State Routes	458
Fire & Rescue	Waverly Fire Dept.
Schools	St. Regis Falls School District
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells & Community/Public
Population Median Income	$14,023
% Below Poverty	15.6%

Water Shed Data

A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in the Town of Waverly consider severe winter storms to be a high-risk hazard for their community. Contributing to their concerns is annual snow melt and spring rains that bring flooding, and flash floods.

The Town of Waverly elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and the Flood Control/ Code Enforcement Officer enforces NYS Building Codes within the town. The local fire department is a volunteer organization. The town of Waverly has a Zoning Plan and is located completely within the Adirondack Park and is guided by APA land use regulations.

Critical Facilities with assessed values.

Water Supply	River Rd. St Regis Falls, NY	$371,364
Town Hall/Garage	6 N. Main Street St. Regis Falls, NY	$246,818

Future Development

The town does not anticipate development in the near future.

NFIP

According to the Community Status Book, the Town of Waverly participates in NFIP. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The floodplain administrator for the town is the Code Enforcement Officer. The town continues to regulate development, including within floodplain areas. NFIP data 2019 indicates four losses and four closed totaling $113,004.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, the Town has no repetitive loss properties.

The chart below represents parcels located in the Town of Waverly substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
WAVERLY	**28**	**$1,803,300**
Commercial	2	$412,800
Public Services	1	$364,700
Residential	19	$925,800
Vacant	3	$0
Wild, Forested, Conservation Lands & Public Parks	3	$100,000

Past Events

No property damage events specific to the Town of Waverly have occurred since the 2015 plan. However countywide events must be considered.

In case of a natural hazard emergency a list of Emergency Shelters for the town is in Appendix D (also found in the Franklin County CEMP). Waverly utilizes the Fire Department in town as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Waverly major roadway is State Route 458.

The Town of Waverly approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices.
Located within the Adirondack Park, land use in the Town of Waverly is determined by Park regulations. The town will continue to incorporate their mitigation activities into land use plans in accordance with Adirondack Park Agency regulations.

Specific Mitigation Actions: Following pages

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Waverly

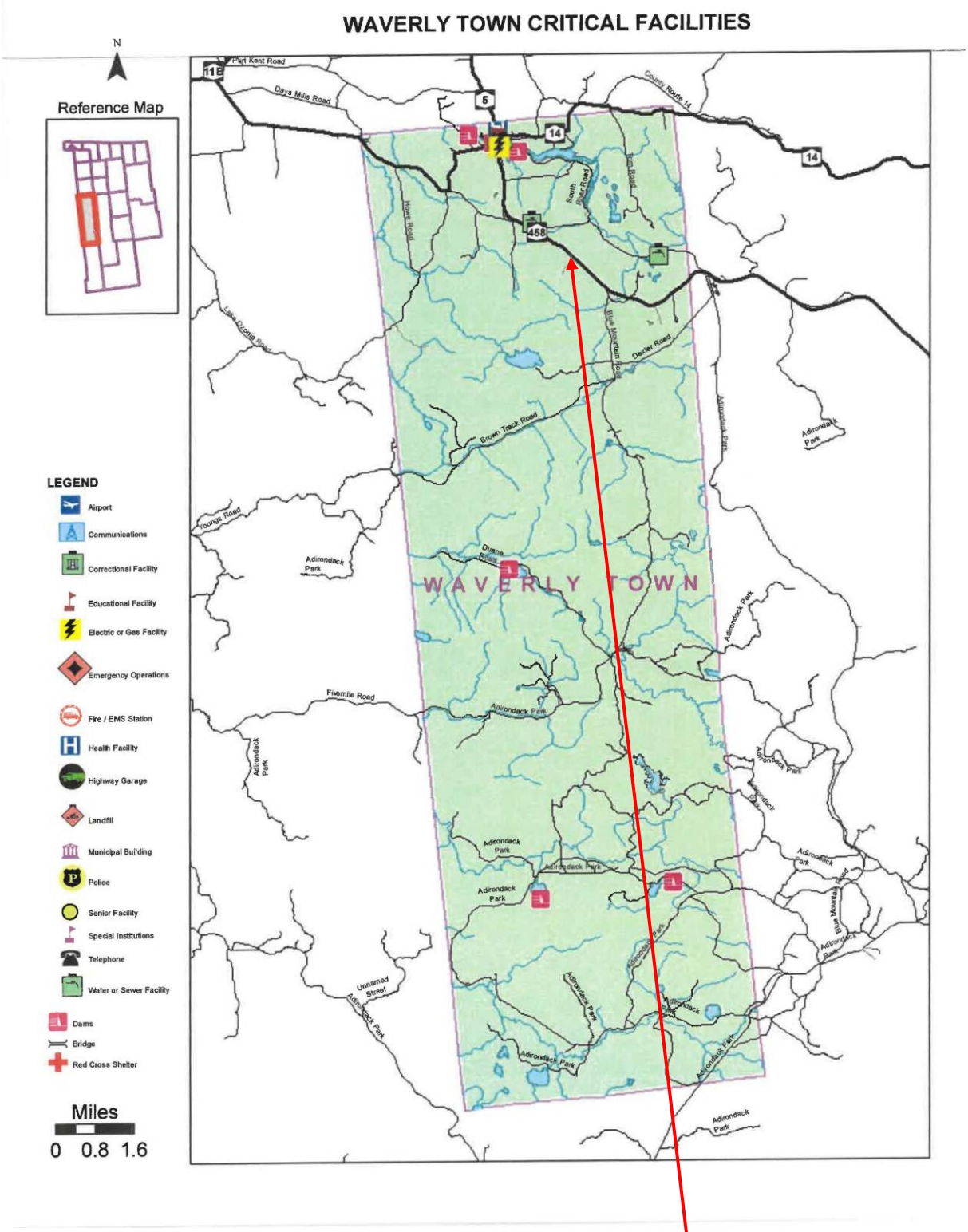
Action Worksheet			
Project Name:	Blue Mtn Road		
Project Number:	Town of Waverly #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Three culverts need to be replaced with larger, more effective culverts to avoid flooding and washouts on Blue Mountain Road.		
Description of the Solution:	The town will replace 3 culverts with large open bottom box culverts to allow better flow of heavy rain and snow melt, avoiding washouts.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents, tourists, and emergency vehicles will have continuous access to Blue Mountain Road.
Useful Life:	40 years		
Estimated Cost:	Medium		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2022-2024
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	Town, County and HMPG funding, BridgeNY grant funds
Responsible Organization:	Town of Waverly	**Local Planning Mechanisms to be Used in Implementation, if any:**	DEC, Army Corps of Engineers, APA
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Washouts, and road closures will continue.
	Replace one culvert a year	High	Financially this might be a more practical approach.
	Place detention ponds strategically on road	High	Costly and the town does not own enough property along the road to accomplish this.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

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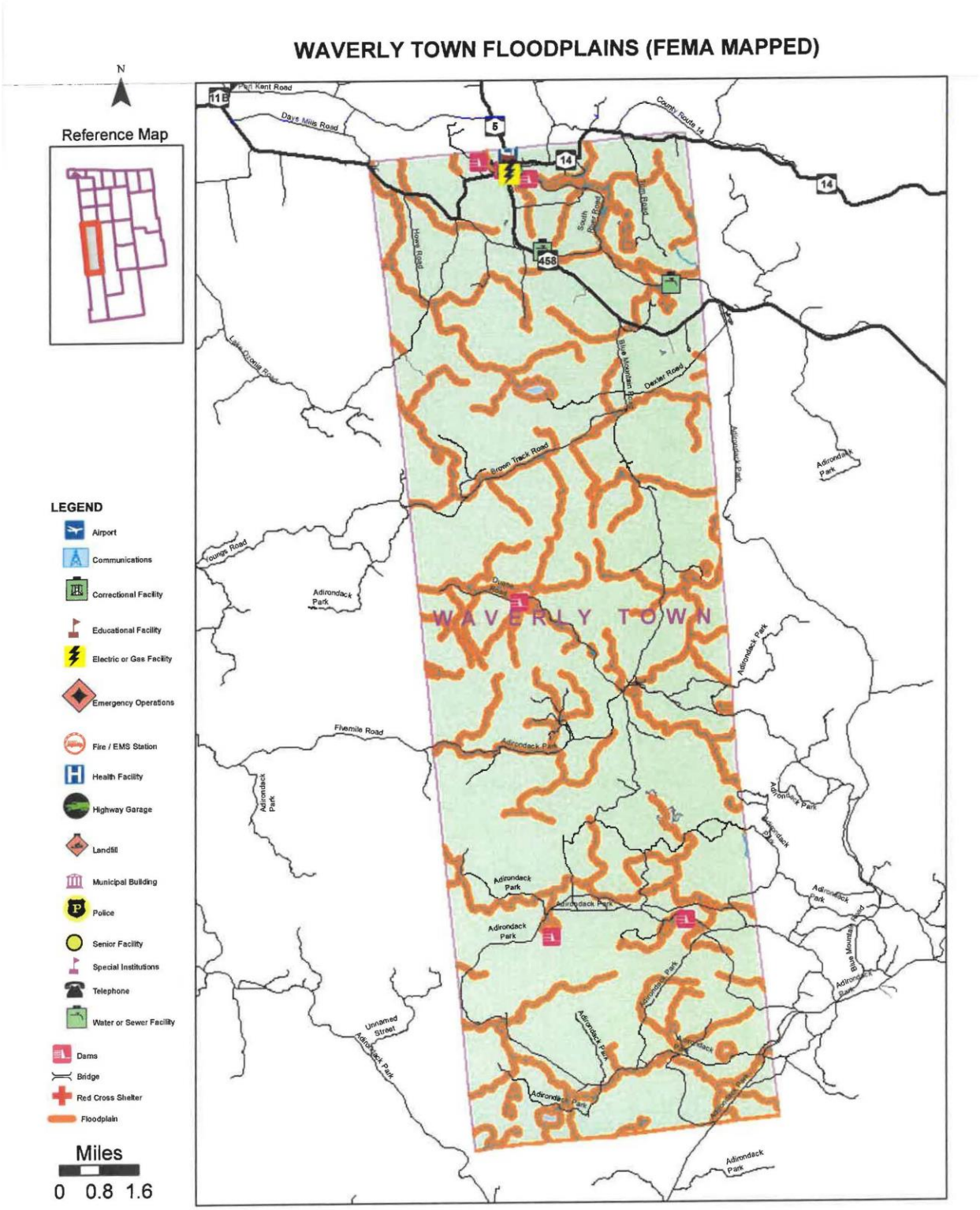
Town of Waverly

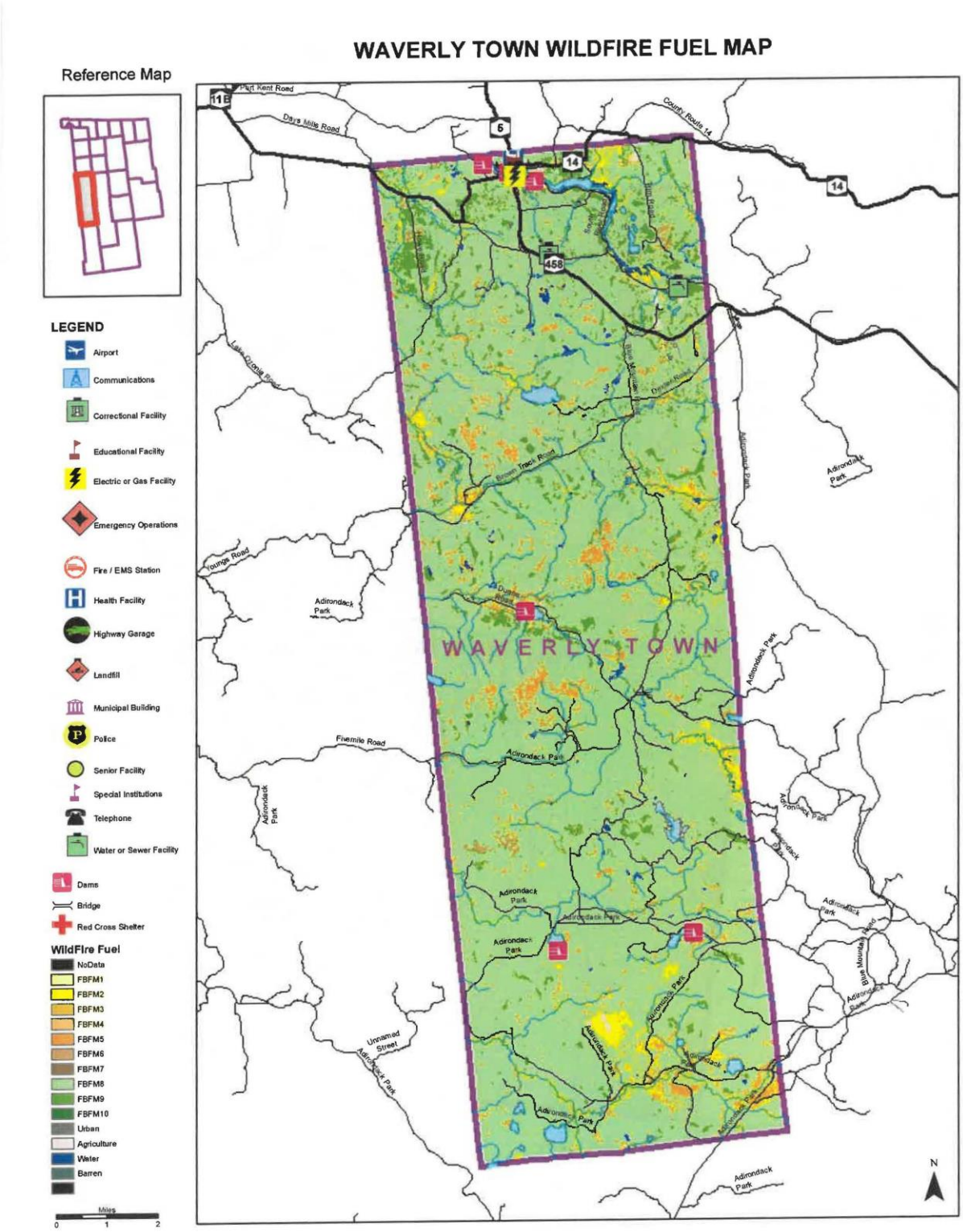
Action Worksheet			
Project Name:	Emergency Preparedness		
Project Number:	Waverly #2		
Risk / Vulnerability			
Hazard of Concern:	Multi-Hazard		
Description of the Problem:	The Town believes residents and tourists need to be aware of potential natural hazards and how best to prepare for emergency situations.		
Three Alternatives Considered (including No Action)			
Description of the Solution:	The town will work with the local fire department to deveop and mail to each resident and business a packet containing emergency preparedness basics and items specific to the hazards the town experiences most often.		
Is this project related to a Critical Facility?		Yes ☐	No ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	High	**Estimated Benefits (losses avoided):**	Residents will have knowledge of potential natual hazardous situations, supplies to have on hand in case of an emergency, and potential emergency shelters.
Useful Life:	40 years		
Estimated Cost:	Medium		
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2021-2022
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Town funds
Responsible Organization:	Town of Waverly	**Local Planning Mechanisms to be Used in Implementation, if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Residents may be unaware of how best to prepare for emergency situations.
	Post information on Town Office Board	Low	May not reach everyone.
	Hold a series of informational meetings	Low	This should perhaps be done in conjunction with the mailing on at least an annual basis.
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

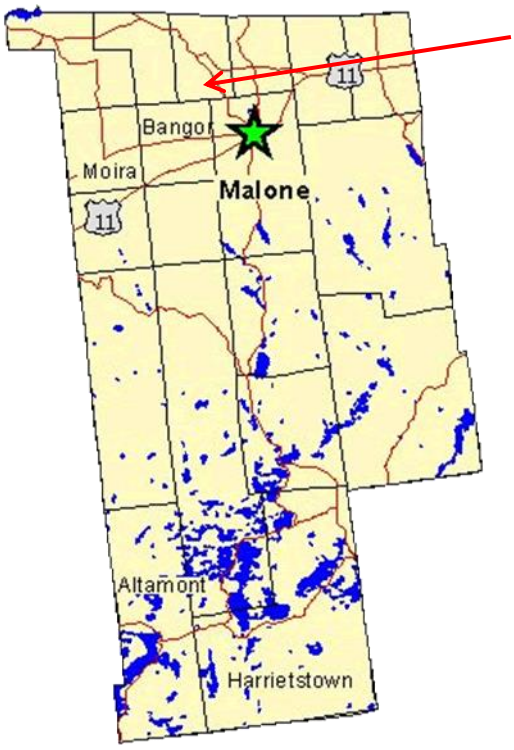
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Evacuation Routes – State Route 458


WAVERLY TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
WAVERLY TOWN
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.8 1.6
Adirondack Park
Brown Tract Road
Fivemile Road
Unnamed Street
Days Mills Road
County Route 14
Dexter Road
Hoyt Road
South River Road
Blue Mountain Road
Young Road


WAVERLY TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
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Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
1
2
WAVERLY TOWN
Adirondack Park
Fivemile Road
Youngs Road
Unnamed Street
Brown Tract Road
Blue Mountain
N



Town of Westville

The Town of Westville is in northern Franklin County. The northern border of the town is the province of Quebec in Canada. The Town of Fort Covington is on the western border and the Town of Constable is on the east. The Towns of Bangor and Malone border the Town of Westville on the south.

Town/Village	Town of Westville
Land Area	34.8 square miles (22,272 acres) - 34.72 square miles (22,259.2 acres) land & 0.02 square miles (12.8 acres) water
Hamlets	Westville, Westville Center
Population (ACS 2018)	1,812
Population Density	52.27 people/square mile
Governance	Supervior and Town Board
Total Assessed Value	99,400,495
Elevation	249 feet
Rivers	Salmon River
Bridges	8
State Routes	37, 122
Fire & Rescue	Westville Fire Dept.
Schools	Salmon River School District, Malone School District
Law Enforcement	Franklin County Sheriff's Department, NYS Police
Power Utility Provider	National Grid
Water Supply Sources	Private Wells
Population Median Income	$26,907
Unemployment	8.1%
% Below Poverty	12.8%

Water Shed Data
A watershed is the land that drains, or sheds, its water to a defined receiving water, such as a wetland, river, lake, coastal embayment, or ocean.

St. Lawrence River Watershed

River	Town (S)	Sq. Miles
Raquette River	Tupper Lake; Harrietstown	1259.6
St. Regis River	Santa Clara; Waverly; Brandon; Brighton; Duane; Dickinson; Moira; St. Regis Mohawk	863.2
Salmon River	Franklin; Malone; Brighton; Bombay; Moira; Ft. Covington; Westville; Dickinson; Bellmont; Brighton; Constable	405.6
Chateaugay-English River	Chateaugay; Burke; Bellmont; Constable	411.6

Lake Champlain Watershed

River	Town (S)	Sq. Miles
Saranac River	Brighton; Bellmont; Duane; Santa Clara; Harrietstown; Tupper Lake; Franklin	608.1

Officials in the Town of Westville consider high winds and drought to be high risk hazards for their community. Of moderate concern are flash floods and severe winter storms with extreme temperatures.

The Town of Westville elects a supervisor and four councilors to manage town developments including hazard mitigation, budget decisions and expansion. The town Highway Department maintains the town roads and a Code Enforcement Officer enforces the NYS Building Codes within the town. The local fire department is a volunteer organization. The Town of Westville does not have a Zoning Plan or Comprehensive Plan currently.

Critical Facilities with assessed values.

Westville Fire Dept/EMT	3791 State Rte. 37 Constable, NY	$1,000,000
Town Hall/Garage	936 County Rte. 19 Constable, NY	$750,000
FRACO Training Area	3891 Rte. 37 Constable, NY	$250,000

Future Development
NYS Power is upgrading the power transmissions in the town.

NFIP
According to the Community Status Book, the Town of Westville participates in NFIP. Participation in NFIP requires a community to adopt and enforce a floodplain management ordinance to regulate development in floodplains and designate a local floodplain coordinator/administrator. The town

continues to regulate development, including within floodplain areas. The floodplain administrator for the town is the Code Enforcement Officer. NFIP data from 2019 indicates one loss of $2,992.

Repetitive Loss Data – According to the NYS Hazard-Mitigation Plan, the Town has no repetitive loss properties.

The chart below represents parcels located in the Town of Westville substantially within the 100-year floodplain.

Municipality	Number of Parcels	Value
WESTVILLE	**5**	**$350,100**
Residential	5	$350,100

Past Events

The chart below indicates property damage events specific to the Town of Constable occurring since the 2015 plan. However countywide events must also be considered.

Date	Type	Property Damage	Details
3/14/2017	Winter Storm/High Winds	N/A	White Outs/Drifting/ 31" of Snow/30MPH Winds
5/1/2017	Thunderstorms/High Winds	10K	Power Outages/Trees Downed
1/19/2019-1/20/2019	Winter Storm/Extreme Cold	N/A	Power Outages/Trees Downed/Road Clearing Chemicals Not Successful/15" of Snow/Night Temps. -10 to -25 with Wind Chill of 40 Below Zero. Countywide Effects

In case of a natural hazard emergency a list of Emergency Shelters for the town is located in Appendix D (also found in the Franklin County CEMP). The Town Hall will be utilized as an emergency shelter. Franklin County Emergency Services has identified major roadways to serve as evacuation routes. In the Town of Westville major roadways are State Routes 37, 20, and 122.

The Town of Westville approved the original Plan in 2008 and the update in 2015. The Town will endeavor to incorporate the Mitigation Goals in the updated plan into future plans. Town leaders including Supervisor, Highway, and Code Enforcement/Floodplain Administrator along with volunteer fire/emergency personnel will incorporate the Franklin County Mitigation Plan, including specific town mitigation actions into their budget planning, training, and building/construction practices. Westville does have a Zoning Plan in place. The Town of Westville will post the Franklin County Hazard Mitigation Plan 2020 on the town web site, www.townofwestville.org.

Specific Mitigation Actions: Following pages

Franklin County Multi-Jurisdictional Hazard Mitigation Plan

Town of Westville

Action Worksheet			
Project Name:	Freeman Road Culvert Replacement		
Project Number:	Westville #1		
Risk / Vulnerability			
Hazard of Concern:	Flooding on Freeman Road		
Description of the Problem:	Freeman Road crosses Plum Brook and is used by residents, often with heavy equipment. Should the fifty year old deteriorating cement culvert wash out, lives would be seriously impacted. With a washout, the road would be closed indefinitely. Rather than wait for this to happen the Town chooses to be proactive.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town intends to replace the deteriorating cement culvert with a steel open bottom box culvert, maintaining the same length and slope of the present culvert. The culvert will be 1.25 times the normal width of the streambed. Riprap will be utilized to prevent scouring around the outlet and inlet of the culvert. Erosion will be controlled by planting native vegetation along the stream bank. DEC permitting and determinations will be adhered to.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	100 Years	Estimated Benefits (losses avoided):	Freeman Road would be passable and open for residents year round.
Useful Life:	50 Years		
Estimated Cost:			
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 Year
Estimated Time Required for Project Implementation:	6 Months	Potential Funding Sources:	Town Budget, CHIPS, HMGP Funding
Responsible Organization:	Town of Westville	Local Planning Mechanisms to be Used in Implementation, if any:	NYS DEC
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Loss of road access.
	Replace with a bridge	$1,000,000	Funding not ever going to be available for such a project.
	Elevate road over Plum Brook.	$1,000,000	Entire road would need to be elevated making road inaccessible for too long.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

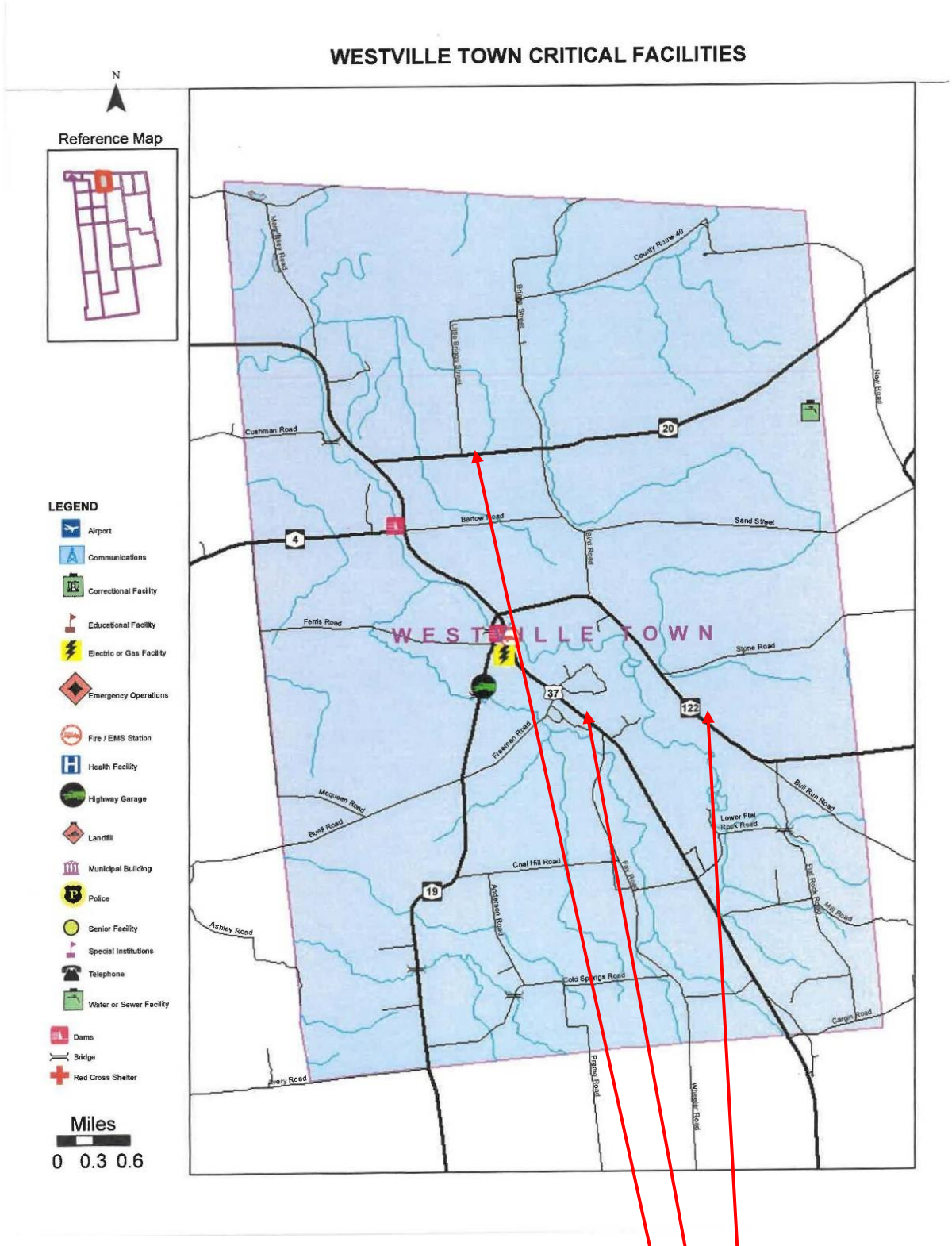
Town of Westville

Action Worksheet			
Project Name:	Bruso Road Culvert Replacement		
Project Number:	Westville #2		
Risk / Vulnerability			
Hazard of Concern:	Flooding on Bruso Road		
Description of the Problem:	Bruso Road is well used by residents and in particular the farming community with heavy farm equipment. Should the sixty year old deteriorating cement culvert wash out, livlihoods of area farmers would be seriously impacted. Rather than wait for this to happen the Town chooses to be proactive.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town intends to replace the deteriorating cement culvert with a steel open bottom box culvert, maintaining the same length and slope of the present culvert. The culvert will be 1.25 times the normal width of the streambed. Riprap will be utilized to prevent scouring around the outlet and inlet of the culvert. Substrate will match upstream and downstream substrate. Erosion control will be established planting native vegetation along the stream bank. DEC permitting and determinations will be followed.		
Is this project related to a Critical Facility?		**Yes** ☐	**No** ☑
(If yes, this project must intend to protect the Critical Facility to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	100 Years	Estimated Benefits (losses avoided):	Complete washout of Bruso Road making it impassable for residents and agri-business.
Useful Life:	50 Years		
Estimated Cost:			
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 Year
Estimated Time Required for Project Implementation:	6 Months	Potential Funding Sources:	Town Budget, CHIPS, HMGP Funding
Responsible Organization:	Town of Westville	Local Planning Mechanisms to be Used in Implementation, if any:	NYS DEC

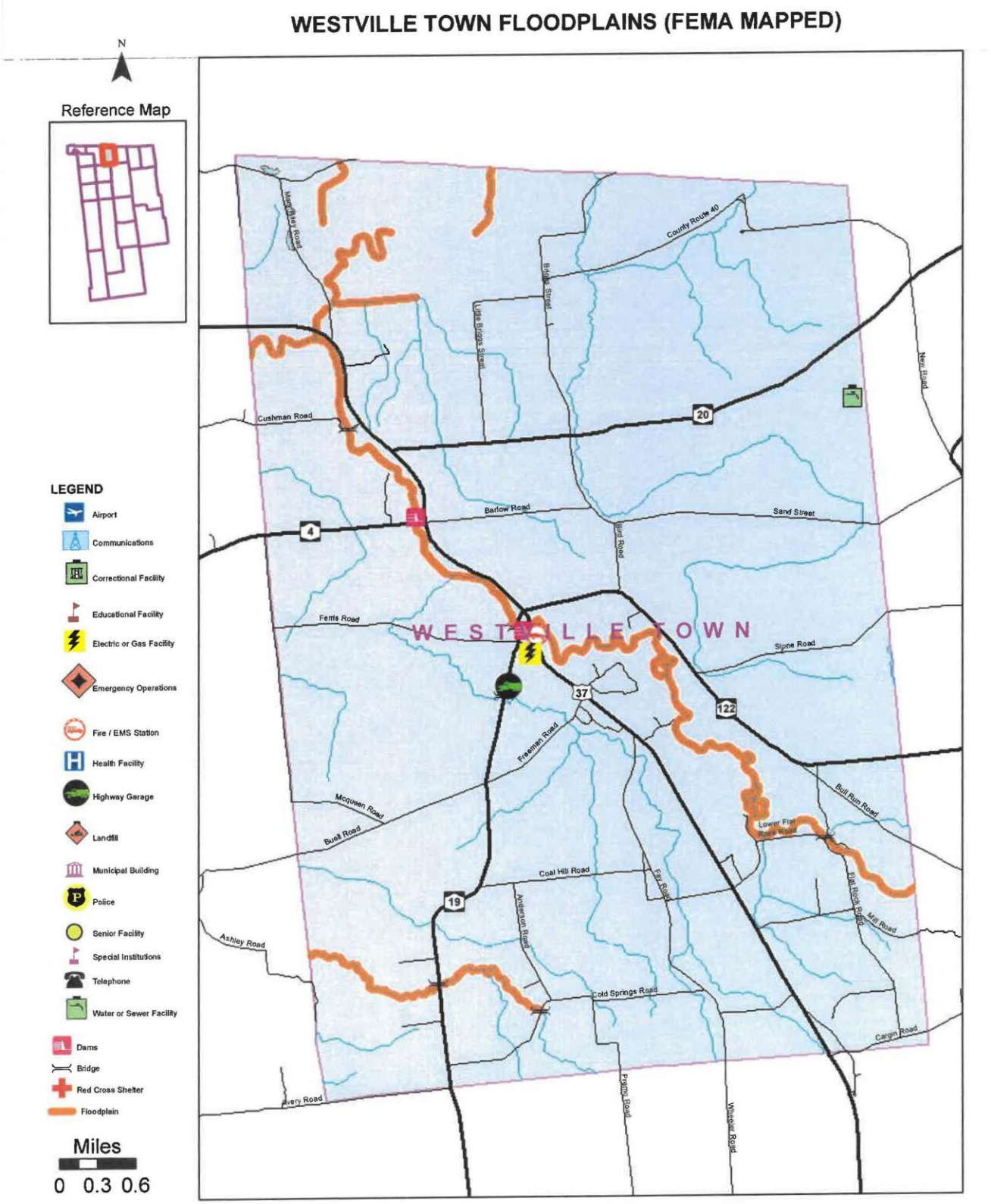
Three Alternatives Considered (including No Action)			
	Action	**Estimated Cost**	**Evaluation**
Alternatives:	No Action	$0	Loss of road access.
	Replace with a bridge	$1,000,000	Funding not ever going to be available for such a project.
	Elevate road over the Brook	$1,000,000	Entire road would need to be elevated making road inaccessible for too long. Expense will be unmanageable for the Town.

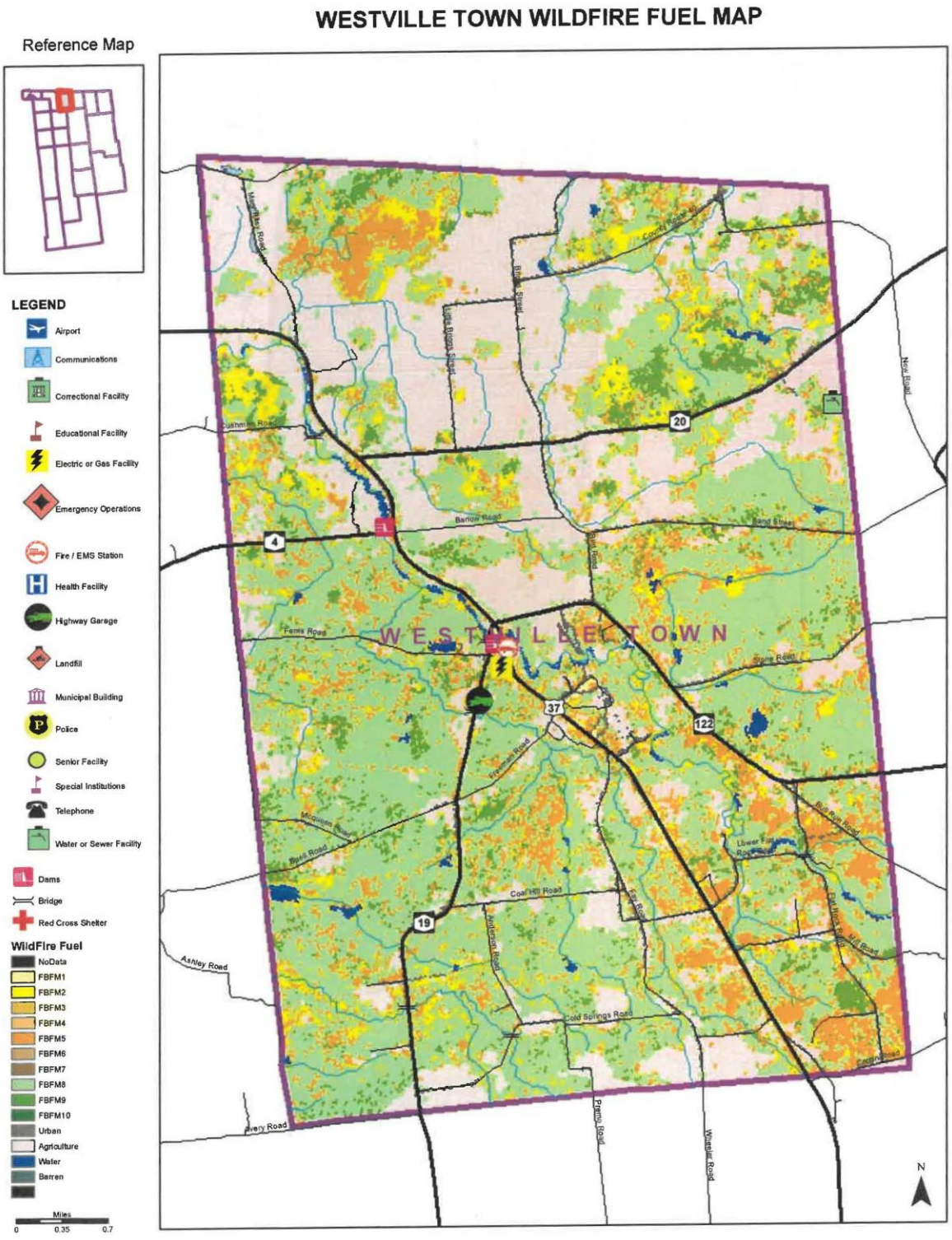
Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.



Evacuation Routes – State Route 20, 37, 122


WESTVILLE TOWN FLOODPLAINS (FEMA MAPPED)
N
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
Floodplain
Miles
0 0.3 0.6
WESTVILLE TOWN
Cushman Road
Barlow Road
Sand Street
Ferris Road
Stone Road
Freeman Road
Mcqueen Road
Buell Road
Coal Hill Road
Ashley Road
Cold Springs Road
Bull Run Road
Mill Road
Cargin Road
Whitaker Road
Pretty Road
Anderson Road
Fay Road
Burd Road
New Road
County Route 40
Little Bridges Street
Bridge Street
Murphy Hill Road
20
4
37
122
19


WESTVILLE TOWN WILDFIRE FUEL MAP
Reference Map
LEGEND
Airport
Communications
Correctional Facility
Educational Facility
Electric or Gas Facility
Emergency Operations
Fire / EMS Station
Health Facility
Highway Garage
Landfill
Municipal Building
Police
Senior Facility
Special Institutions
Telephone
Water or Sewer Facility
Dams
Bridge
Red Cross Shelter
WildFire Fuel
NoData
FBFM1
FBFM2
FBFM3
FBFM4
FBFM5
FBFM6
FBFM7
FBFM8
FBFM9
FBFM10
Urban
Agriculture
Water
Barren
Miles
0
0.35
0.7
WESTVILLE TOWN
20
4
37
122
19
Barlow Road
Ferris Road
Coal Hill Road
Cold Springs Road
Ashley Road
Perry Road
Wrangle Road
N

Saint Regis Mohawk Reservation

Population: 3,288
Area: 22 sq. miles
Population density: 161/sq. mile
Median income: $30,424
Unemployment: 24.3%
Below Poverty level: 37.9%



The Saint Regis Mohawk Reservation (known locally as "Akwesasne") has 14,640 acres of treaty land in the northwest corner of Franklin County on the St. Lawrence River. It is situated approximately eighty miles northeast of Lake Ontario and sixty miles southwest of Montreal, and is bounded on the east by the Town of Fort Covington, on the south by the Town of Bombay, and on the west by the Town of Massena in St. Lawrence County. The reservation extends to the north across the international border.

The entire reservation lies within the Saint Lawrence Valley, and is characterized by gently rolling to hilly topography with some large areas of swamp on the eastern extremities of the mainland portion. Soils throughout the reservation are composed predominantly of glacial till and clay deposits.

The Tribal Council is comprised of three Chiefs, three Sub-Chiefs (who are similar in function to vice-presidents) and a Tribal Clerk. Tribal elections are held each year on the first Saturday of June to choose one Chief and one Sub-Chief for a three-year term. The Tribal Clerk is chosen every third year. The Tribal Council Chiefs are responsible for setting policy and making major decisions on behalf of the Tribe. They oversee the operation of the tribal government and assure that quality programs and services are made available to the Mohawk people. The Sub-Chiefs receive their authority from the Chiefs.

It provides through the United States federal government and the Bureau of Indian Affairs, various public and civil services. Such services are: Education, Health, Land & Estates, and Membership. The Saint Regis Mohawk Tribal Council is recognized by the American government as having special rights and privileges according to the Clean Water Act, Clean Air Act and various other acts and laws. The Construction Services department is responsible for road maintenance, water and sewer services and building construction within the reservation.

The mission of the Emergency Planning office *is to create a safe, secure and "disaster-resilient" Akwesasne through prevention, preparedness, response and recovery.* The Emergency Planning Office goal is to prepare Akwesasne to respond to, recover from and mitigate against natural and man-made emergencies and disasters. With that goal in mind representatives from the reservation serve on the Franklin County LEPC.

The Fire Management Plan for the Tribe was developed as a collaborative effort within the Emergency Planning Office to develop goals, objectives and strategies for reducing and preventing fires from wild land areas. The plan describes activities to mitigate wild land fires which occur frequently in the region. The goals and activities of the Franklin County Plan will be incorporated in this document where compatible. A Comprehensive Community Development Plan was approved in 2009, complementing the Comprehensive Land Use and Transportation Plan developed in 2003. Both plans include infrastructure, land use and economic development for residents. The updated Franklin County Hazard Mitigation Plan will be incorporated by the Office of Economic Development and the Office of Emergency Planning into these existing documents to best meet the needs of the residents. Akwesasne has an Integrated Resource Management Plan that complies with federal the NEPA and provides an Environmental Review process for potential developers. The Climate Change Adaptation Plan for Akwesasne (August 2013) is a comprehensive climate change document which the County proposes to use as a guide for climate change issues in the entire county. (Appendix N)

Areas of concern for the residents of Akwesasne include flooding and severe storms. High winds accompanied by mini-bursts also occur with some frequency. The Fire Management Plan considers specifically wild land fires and strategies to mitigate this potential threat; the Fire Management Plan is available upon request from the Saint Regis Mohawk Tribe, and/or fire department.

Below is NFIP data specific to Hogansburg, part of Saint Regis.

City	St Cd	Zip Code	Comm Nbr	Pol Eff Dt	Pol Exp Dt	Dt of Loss	Cmpy Nbr	*Total Prem/Total Paid*
BOMBAY	NY	13655	360269	02/15/1984	02/15/1985	12/31/1984	99999	*719*
BOMBAY	NY	13655	360269	02/15/1989	02/15/1990	03/29/1989	99999	*1212*

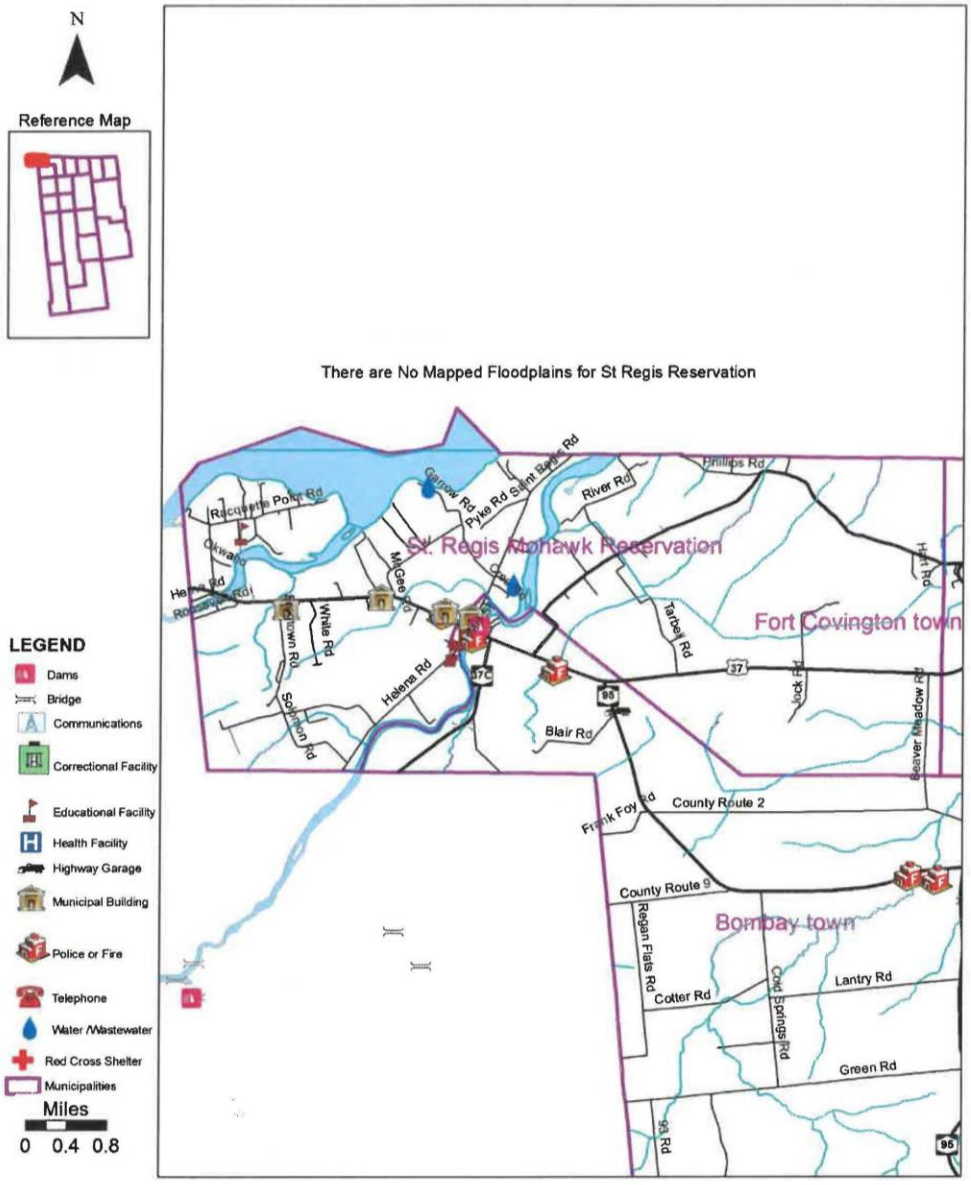
In case of a natural hazard emergency a list of Emergency Shelters for the reservation is located in Appendix K (also found in the Franklin County CEMP). The Saint Regis Mohawk Tribe-Emergency Planning Office and the Mohawk Council of Akwesasne

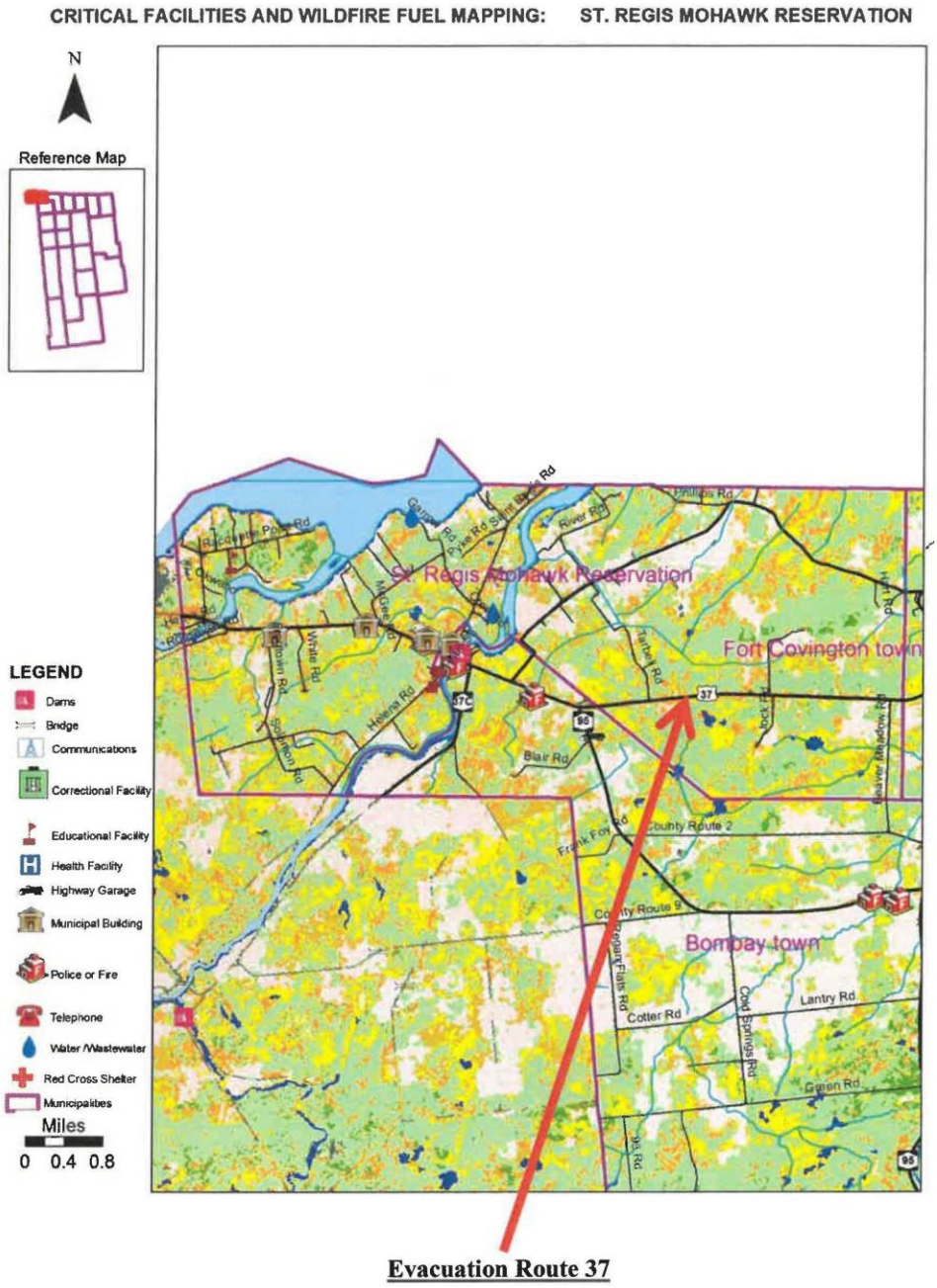
(MCA)-Emergency Measures work jointly on preparedness, mitigation, and exercises/drills for the Territory of Akwesasne. In the event of a community wide evacuation, the MCA Emergency Measures will implement their MOA with NAVCAN for the use of their campus for sheltering needs. Franklin County Emergency Services and Saint Regis Mohawk Emergency Services have identified major roadways to serve as evacuation routes. The major road is Route 37 which bisects the region and serves as an evacuation route.

Saint Regis Mohawk Tribe is reluctant to list or locate sacred sites on tribal lands due to the sensitive nature of the sites. Cataloging and preserving the sites is managed by the Tribal Historic Preservation Office. "The department is responsible for the identification, evaluation, protection, interpretation and historic preservation planning of our Mohawk Heritage."

Specific Mitigation Actions: Saint Regis Mohawk Reservation will be addressing annual flooding and the wildfire hazards with mitigation activities. Action Implementation Worksheets 6.2 are located alphabetically by jurisdiction for quick reference in Appendix IIA,(pg.76M -77M.)

CRITICAL FACILITIES MAPPING: ST. REGIS MOHAWK RESERVATION




CRITICAL FACILITIES AND WILDFIRE FUEL MAPPING: ST. REGIS MOHAWK RESERVATION
N
Reference Map
LEGEND
Dams
Bridge
Communications
Correctional Facility
Educational Facility
Health Facility
Highway Garage
Municipal Building
Police or Fire
Telephone
Water /Wastewater
Red Cross Shelter
Municipalities
Miles
0 0.4 0.8
St. Regis Mohawk Reservation
Fort Covington town
Bombay town
Blair Rd
Cotter Rd
Lantry Rd
Green Rd
County Route 2
Evacuation Route 37

CRITICAL FACILITIES AND FLOODPLAIN MAPPING: ST. REGIS MOHAWK RESERVATION

