



FEMA

REGION II DISCOVERY REPORT



SARANAC RIVER WATERSHED | HUC 04150406

CLINTON, ESSEX, AND FRANKLIN COUNTIES*

*These counties span more than one watershed; please see the following page for a list of communities fully or partially located in the watershed. This report covers only the Saranac River Watershed.

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STUDY INFORMATION

The Federal Emergency Management Agency's (FEMA's) Risk Mapping, Assessment, and Planning (Risk MAP) program helps communities identify and assess their flood risk. Through Risk MAP, FEMA provides information to enhance local Hazard Mitigation Plans (HMPs), improve community outreach, and increase local resilience to floods. Discovery is the process of gathering local knowledge and data for analysis with the goal of initiating a hazard risk assessment or promoting risk discussions within the watershed.

The Discovery process for the Saranac River Watershed began in June 2018 and data collection was completed in July 2018. The in-person Discovery meetings were held in July 2018. Additional details on meetings and stakeholder involvement can be found in the *Discovery Outreach and Engagement Strategy*, community input can be found in the *Summary of Community Risks Identified*, and outcomes can be found in the *Recommendations for Future Risk MAP Project Scope*.

Questions and comments about this report may be shared with Stephanie Gootman of FEMA Region II at stephanie.gootman@fema.dhs.gov.

PROJECT AREA COMMUNITY LIST

The Discovery project for the Saranac River Watershed includes 21 communities across Franklin, Clinton, and Essex Counties. While most of these communities are entirely within the Saranac River Watershed, those that overlap with the adjoining Ausable River and Upper Hudson Watersheds are also included in this project area. Communities denoted with an asterisk in the list below should review the other applicable Discovery report(s) and, if available, the section on Recommendations for Future Risk MAP Project Scope. While all communities may be under consideration for a revised FEMA Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM), not all communities will receive them.

Clinton County:

Town of Altona
Town of Beekmantown
Town of Black Brook*
Town of Dannemora
Village of Dannemora
Town of Peru*
City of Plattsburgh
Town of Plattsburgh
Town of Saranac
Town of Schuyler Falls

Essex County:

Town of North Elba*,§
Village of Saranac Lake
Town of St. Armand*
Town of Wilmington*

Franklin County:

Town of Bellmont
Town of Brighton
Town of Duane
Town of Franklin
Town of Harrietstown
Town of Santa Clara
Village of Saranac Lake
Town of Tupper Lake

* Also spans Ausable
River Watershed

§ Also spans Upper
Hudson Watershed



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TERMS AND ACRONYMS

APA: Adirondack Park Agency	NOAA: National Oceanic and Atmospheric Administration
CAC: Community Assistance Contact	NRCS: National Resources Conservation Service
CAV: Community Assistance Visit	NWS: National Weather Service
CFR: Code of Federal Regulations	NYSDEC: New York State Department of Environmental Conservation
CID: Community Identification Number	NYS DHSES: New York State Division of Homeland Security and Emergency Services
CIS: Community Information System	NYS DOT: New York State Department of Transportation
CLOMA: Conditional Letter of Map Amendment	PDM: Pre-Disaster Mitigation
CLOMR: Conditional Letter of Map Revision	Risk MAP: Risk Mapping, Assessment, and Planning
CNMS: Coordinated Needs Management Strategy	RL: Repetitive Loss
CRS: Community Rating System	SFHA: Special Flood Hazard Area
FEMA: Federal Emergency Management Agency	SRL: Severe Repetitive Loss
FIRM: Flood Insurance Rate Map	SWCD: Soil and Water Conservation District
FIS: Flood Insurance Study	USACE: United States Army Corps of Engineers
FMA: Flood Mitigation Assistance	USDA: United States Department of Agriculture
GIS: Geographic Information System	USGS: United States Geological Survey
HMA: Hazard Mitigation Assistance	
HMGP: Hazard Mitigation Grant Program	
HMP: Hazard Mitigation Plan	
HWM: High Water Mark	
HUC: Hydrologic Unit Code	
LiDAR: Light Detection and Ranging	
LOMA: Letter of Map Amendment	
LOMC: Letter of Map Change	
LOMR: Letter of Map Revision	
LOMR-F: Letter of Map Revision Based on Fill	
LOMR-VZ: Letter of Map Revision V Zone	
MIP: Mapping Information Platform	

GLOSSARY OF TERMS

Please note: The Federal Emergency Management Agency (FEMA) is the source for the following terms and definitions, unless cited otherwise.

1-Percent-Annual-Chance Flood: The flood that has a 1-percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the “100-year flood” or “base flood.” The base flood is the national standard used by the National Flood Insurance Program (NFIP) and all Federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development.

0.2-Percent-Annual-Chance Flood: A flood that has a 0.2-percent chance of being equaled or exceeded in any given year (also known as a 500-year flood).

Approximate Study: Areas subject to inundation by the 1-percent-annual-chance flood event, generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply. An approximate study is represented on a FIRM as a Zone A.

Community Assistance Contacts (CACs): A telephone call or brief visit to an NFIP community for the purpose of establishing or reestablishing contact to determine if any program-related problems exist and to offer assistance.

Community Assistance Visits (CAVs): A visit to a community by a FEMA staff member or staff of a State agency on behalf of FEMA that serves the dual purpose of providing technical assistance to the community and ensuring that the community is adequately enforcing its floodplain management regulations.

Community Rating System (CRS): A voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Flood insurance premium rates in participating communities are discounted to reflect the reduced flood risk resulting from the community actions.

Conditional Letter of Map Revision (CLOMR): A CLOMR is a letter from FEMA that comments on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective BFEs, or the Special Flood Hazard Area (SFHA). The letter does not revise an effective NFIP map; it indicates whether the project, if built as proposed, would be recognized by FEMA. FEMA charges a fee for processing a CLOMR to recover the costs associated with the review.

Conditional Letter of Map Revision Based on Fill (CLOMR-F): A CLOMR-F is FEMA's comment on a proposed project that will be elevated by fill. This process is not for submitting proposed development that would affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective BFEs, or the SFHA. The letter does not revise an effective NFIP map, but indicates whether the project, if built as proposed, would be recognized by FEMA.

Coordinated Needs Management Strategy (CNMS): The CNMS application is FEMA's inventory of flood hazard studies and flood hazard mapping needs for areas where a flood hazard study is needed. CNMS is beneficial for community officials and FEMA staff in analyzing and depicting flood hazards to enhance understanding of flood risk and make informed decisions on community planning and flood mitigation.

Dam: An artificial barrier that has the ability to impound water, wastewater, or any liquid-borne material, for the purpose of storage or control of water (Federal Energy Regulatory Commission). The New York State Department of Environmental Conservation (NYSDEC) uses a classification scale of A to D to assign hazard potential to each of the dam structures contained within the inventory, while dams without a hazard code assignment are considered Class 0 or unclassified hazard potential. The hazard classifications for dams are assigned based on the particular physical characteristics of a dam and its location, may be assigned irrespective of the size of the dam, as appropriate, and are as follows:

- Class A or low hazard dam. A dam failure is unlikely to result in damage to anything more than isolated or unoccupied buildings, undeveloped lands, minor roads such as town or county roads; is unlikely to result in the interruption of important utilities, including water supply, sewage treatment, fuel, power, cable, or telephone infrastructure; and/or is otherwise unlikely to pose the threat of personal injury, substantial economic loss, or substantial environmental damage.
- Class B or intermediate hazard dam. A dam failure may result in damage to isolated homes, main highways, and minor railroads; may result in the interruption of important utilities, including water supply, sewage treatment, fuel, power, cable, or telephone infrastructure; and/or is otherwise likely to pose the threat of personal injury and/or substantial economic loss or substantial environmental damage. Loss of human life is not expected.
- Class C or high hazard dam. A dam failure may result in widespread or serious damage to home(s); damage to main highways, industrial or commercial buildings, railroads, and/or important utilities, including water supply, sewage treatment, fuel, power, cable, or telephone infrastructure; or substantial environmental damage; such that the loss of human life or widespread substantial economic loss is likely.
- Class D or negligible or no hazard dam. A dam that has been breached or removed, or has failed or otherwise no longer materially impounds waters, or a dam that was planned but never constructed. Class D dams are considered to be defunct dams posing negligible or no hazard. The department may retain pertinent records regarding such dams.

Disaster Declaration: The President can declare a major disaster for any natural event that is determined to have caused damage of such severity that it is beyond the combined capabilities of State and local governments to respond. A Major Disaster Declaration provides a wide range of Federal assistance programs for individuals and public infrastructure, including funds for both emergency and permanent work.

Detailed Study: A flood hazard mapping study done using hydrologic and hydraulic methods that produce BFEs, floodways, and other pertinent flood data. Detailed study areas are shown on the FIRM as Zones AE, AH, AO, AR, A99, A1-A30, and in coastal areas as Zones V, VE, and V1-30.

Flood Insurance Rate Map (FIRM): The official map of a community on which FEMA has delineated both the SFHAs and the risk premium zones applicable to the community.

Flood Insurance Study (FIS): A compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community. When a flood study is completed for the NFIP, the information and maps are assembled into an FIS report. The FIS report contains detailed flood elevation data in flood profiles and data tables.

Flood Mitigation Assistance (FMA): The FMA program provides funds for projects to reduce or eliminate risk of flood damage to buildings that are insured under the NFIP on an annual basis. There are three types of FMA grants available, which include (1) planning grants, (2) project grants, and (3) management cost grants.

Hazard Mitigation Assistance (HMA): FEMA's HMA grant programs, which include the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), and FMA, provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages.

Hazard Mitigation Grant Program (HMGP): The HMGP provides grants to States or Tribes and local governments (as sub-grantees) to implement long-term hazard mitigation measures after a Major Disaster Declaration.

Hydrologic Unit Code (HUC): The U.S. Geological Survey (USGS) divides and subdivides the area of the United States into successively smaller hydrologic units that are classified into four levels: regions, sub-regions, accounting units, and cataloging units. The hydrologic units are arranged or nested within each other, from the largest geographic area (regions) to the smallest geographic area (cataloging units). Each hydrologic unit is identified by a unique HUC consisting of two to eight digits based on the four levels of classification in the hydrologic unit system. (USGS)

Ice Jams: An ice jam may be defined as an accumulation of ice in a river, stream, or other flooding source that reduces the cross-sectional area available to carry the flow and increases the water-surface elevation. Ice usually accumulates at a natural or manmade obstruction or a relatively sudden change in slope, alignment, or cross-section shape or depth. Ice jams are common in locations where the channel slope changes from relatively steep to mild and where a tributary stream enters a large river.

Light Detection and Ranging (LiDAR): LiDAR is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. These light pulses—combined with other data recorded by the airborne system—generate precise, three-dimensional information about the shape of the Earth and its surface characteristics. LiDAR systems allow scientists and mapping professionals to examine both natural and manmade environments with accuracy, precision, and flexibility. (NOAA)

Letter of Map Amendment (LOMA): A LOMA is an official amendment, by letter, to an effective NFIP map. A LOMA establishes a property's location in relation to the SFHA. LOMAs are usually issued because a property has been inadvertently identified as being in the floodplain but is actually on natural high ground above the BFE or out as shown on the FIRM. Because a LOMA officially amends the effective NFIP map, it is a public record that the community must maintain. Any LOMA should be noted on the community's master flood map and filed by panel number in an accessible location.

Letter of Map Change (LOMC): LOMC is a general term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter. They include LOMAs, Letters of Map Revision (LOMRs), and Letters of Map Revision Based on Fill (LOMR-Fs).

Letter of Map Revision (LOMR): A LOMR is FEMA's modification to an effective FIRM or portion of the FIRM. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and, thus, result in the modification of the existing regulatory floodway, the effective BFEs, or the SFHA. The LOMR officially revises the FIRM and sometimes the FIS report.

Letter of Map Revision Based on Fill (LOMR-F): A LOMR-F is a FEMA letter amending the effective FIRM for an existing structure or parcel of land that has been elevated by fill.

Levee/Floodwall: A manmade structure designed to contain or control the flow of water. Levees and floodwalls are constructed from earth, compacted soil, or artificial materials, such as concrete or steel. To protect against erosion and scouring, earthen levees can be covered with grass and gravel or hard surfaces like stone, asphalt, or concrete.

Mitigation: Any action taken to eliminate or reduce the long-term risk to life and property from natural and technological hazards, including, but not limited to, flooding. Flood mitigation measures include elevation, floodproofing, relocation, demolition, or any combination thereof.

Multi-Frequency Depth Grids: This Flood Risk Product helps communities better understand their flood hazard risk beyond the 1-percent-annual-chance floodplain and provides information useful for developing a Benefit-Cost Analysis by producing grids for the 10-percent (10-year depth), 4-percent (25-year depth), 2-percent (50-year depth), 1-percent (100-year depth), and 0.2-percent-annual-chance (500-year depth) flood events. These grids will be used to create additional analyses that depict the percent-annual chance of flooding and the percent chance of flooding over a 30-year span in the floodplain.

Pre-Disaster Mitigation (PDM): The PDM grant program provides funds for hazard mitigation planning and projects on an annual basis. The PDM program was enacted to reduce overall risk to people and structures, while simultaneously reducing reliance on Federal funding in the event of a disaster.

Repetitive Loss (RL) property: An RL property is any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978. An RL property may or may not be currently insured by the NFIP.

Risk Mapping, Assessment, and Planning (Risk MAP) program: The FEMA Risk MAP program provides communities with flood risk information and tools to support mitigation planning and risk reduction actions.

Severe Repetitive Loss (SRL) property: An SRL property is a single family property (consisting of one to four residences) covered by flood insurance underwritten by the NFIP and has incurred flood-related damage for which four or more separate claim payments have been paid with the amount of each claim payment exceeding \$5,000 and with a cumulative amount of such claim payments exceeding \$20,000; or for which at least two separate claim payments have been made with the cumulative amount of such claims exceeding the market value of the property.

Special Flood Hazard Area (SFHA): SFHAs are high-risk areas subject to inundation by the base (1-percent-annual-chance) flood; they are also referred to as 1-percent-annual-chance floodplains, base floodplains, or 100-year floodplains.

Water-Surface Elevation Grids: When appropriated, this non-regulatory Flood Risk Product is produced during the Flood Risk Review phase to complement the 1-percent-annual-chance floodplains designated on the FIRMs making the calculated WSEL results more readily available. The WSEL Grid is prepared for the 1-percent-annual-chance storm event and may be produced for a range of other flood events. Using a Geographic Information System (GIS), community officials can easily generate an estimated BFE for interested residents and land developers, and to make critical floodplain management and mitigation decisions.

EXECUTIVE SUMMARY

In 2018, FEMA implemented a Risk MAP Discovery project for the Saranac River Watershed, which consists of three counties and 21 communities. Discovery begins after a watershed has been prioritized based on flood risk, recent hazard events, and population density by FEMA. Through the Discovery process, FEMA was able to obtain key insights and data that will lead to greater community resiliency. Stakeholders within the watershed helped FEMA to determine what natural hazard information already exists and learn what natural hazard information is still needed to make mitigation decisions. Communities also helped to identify critical infrastructure and resources that could be impacted during a natural hazard event.

Comprising significant input from local stakeholders, the Saranac River Watershed Discovery Report describes historical flood risk, existing flood-related data, local needs concerning FEMA FIS reports and FIRMs, and current flood mitigation activities. During the outreach process—which involved individual phone calls and emails, informational webinars, and discussion-based meetings—emphasis was placed on opportunities for stakeholders to provide comments, concerns, input for future mapping projects, and ideas for mitigation activities. Through these efforts, FEMA found that many communities worked in partnership and relied on support from State agencies for their floodplain management activities and data.

The Discovery project for the Saranac River Watershed was informed by data and resources available at the watershed and county level, as well as local insights from stakeholders at the community level. Using community mapping needs and data collected through the engagement process, as well as additional detailed analysis, a recommended scope of work for the Saranac River Watershed was developed. Data collected from community stakeholders within the watershed can be found in the *Summary of Community Risks Identified* section, with additional information in the *Clinton, Essex, and Franklin County Overview* sections.

The recommended scope of work includes new detailed and approximate studies in Clinton, Essex, and Franklin Counties, as well as providing modernized flood maps in a digital format in Essex and Franklin Counties. It recommends a total of 202.12 miles for detailed stream studies, which includes 13 high priority stream study requests, and 1.01 miles for approximate stream studies. These study requests were prioritized based on community interest expressed during the Discovery process, the presence of existing data and flood maps, the proximity to recent or proposed development, and the status of the water body in the Coordinated Needs Management Strategy database. It does not include studies requested for flooding solely due to ice jams or beaver dams.

The new and updated studies can assist both the communities and counties in enforcing floodplain regulations and managing development. In addition to potentially providing modernized flood maps in a digital format, the scope of work may help to address any areas of flood risk, conduct studies, and inform communities of more precise flood risk data and information. Specific information on stream study requests and other community needs collected through the Discovery process can be found in the section on *Recommendations for Future Risk MAP Project Scope*.

Upon completion of the Risk MAP Discovery phase, FEMA will initiate further data development, prioritize areas for restudy, and begin the process to update maps within the watershed, pending available funding.

DISCOVERY OVERVIEW

The FEMA Risk MAP program is an interactive and collaborative process between local, State, and Federal agencies to develop quality natural hazard data that encourages local awareness of risk and supports mitigation actions that increase a community's resilience to natural hazards, with an emphasis on flood risk. For example, Risk MAP can help communities:

- Identify hazard mitigation projects to be incorporated into HMPs, Recovery Plans, and Response Plans;
- Identify gaps in current regulations or Comprehensive Plans and identify the need for new land use and development standards; and
- Support personal preparedness and outreach event planning and marketing.

Discovery is the first phase of Risk MAP and is initiated after a watershed has been prioritized based on flood risk and population density. The goals of Discovery are to:

- Gather information about local flood risk and flood hazards;
- Determine what natural hazard information already exists;
- Learn what natural hazard information is still needed to make mitigation decisions;
- Identify what critical infrastructure and resources could be affected during a natural hazard event; and
- Support relationship building and resource sharing between local communities, State, and Federal agencies.

Based on the findings of the Discovery process, FEMA will consider a potential flood risk mapping project within the Saranac River Watershed, culminating in studying the flood risk within the watershed and at the countywide level. While there is no exact timeline, a flood risk mapping project takes on average three to five years to complete. Upon completion, communities are provided with updated FIRMs, FIS reports, and FIRM databases, also known as Flood Hazard Products or regulatory products.

With Discovery as the Risk MAP starting point, FEMA gathers the necessary local knowledge that supports the entire multi-year Risk MAP flood risk mapping project, which is outlined below for the Saranac River Watershed.



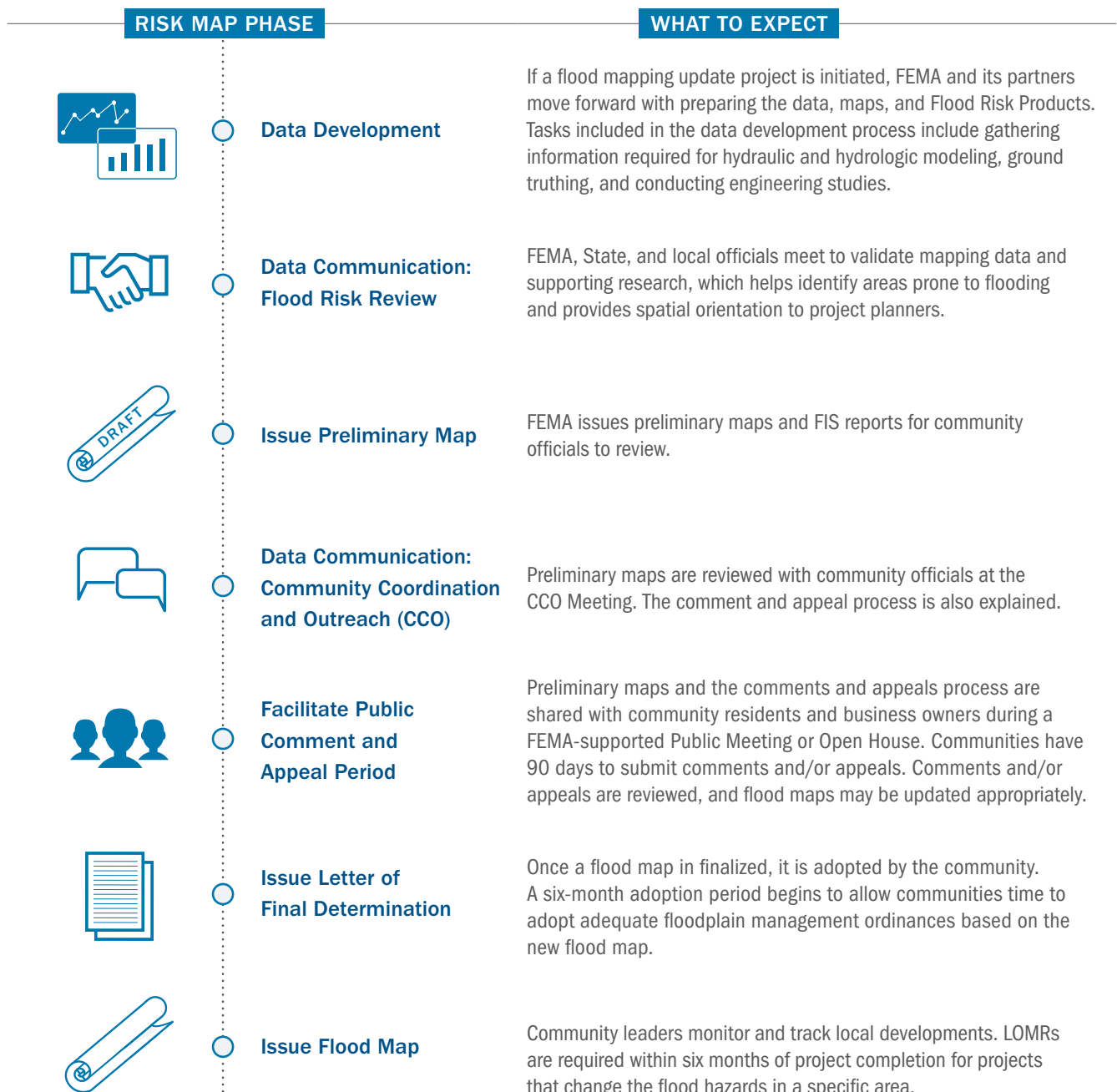
YOUR RISK MAP PROCESS



Discovery Meetings:
July 26, 2018 and
July 27, 2018

Completed and summarized in this Discovery Report.







If the data and research collected during the Discovery phase supports the need for a flood map update and regulatory products, a recommended scope of work is developed for stream reaches requiring new studies. The following timeline shows the steps of that process.



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Additionally, communities may receive a set of non-regulatory tools that they can use to better understand and make informed decisions to reduce risk. The following non-regulatory products may be delivered to the communities at the end of a project.

FLOOD RISK PRODUCT	WHAT IS IT?	HOW IS IT USED?
 FLOOD RISK MAP	<p>Illustrates overall flood risk within the project area by including the outcomes of assessments completed during the flood risk mapping project.</p>	<p>Can be used by communities as outreach tools to communicate risk to residents more clearly.</p>
 FLOOD RISK DATABASE	<p>Provides communities with geospatial information collected during the risk assessment process. Offers effective ways to visualize and communicate flood risk. Four datasets are included.</p>	
 1. Changes Since Last FIRM (CSLF)	<p>Highlights how the latest FIRMs differ from the previous maps to help communities understand the changes and prepare for adoption of new maps.</p>	<p>Communities can use this to engage residents and businesses about their changing risk and the implications for flood insurance.</p>
 2. Flood Risk Assessment	<p>Focuses on damage that results from floods of various magnitudes. Identifies flood-prone areas and vulnerable populations and properties, and provides an estimate of potential losses.</p>	<p>Can help guide community mitigation efforts by highlighting areas where risk reduction actions may produce the most effective results.</p>
 3. Flood Depth and Analysis Grid	<p>Communicates detailed information about the depth and velocity of floodwaters, as well as the probability of an area being flooded over time.</p>	<p>Officials can use depth grids to show individuals the depth of flooding their home might experience at different flood frequencies.</p>
 4. Areas of Mitigation Interest	<p>Explains how various physical factors affect the severity of flooding.</p>	<p>Information can be tied to the local HMP, which can help projects gain traction and help officials secure funding for those projects.</p>

The flood risk mapping products, both regulatory and non-regulatory, can inform and encourage local awareness of risk and support a community's resilience to flooding events. If flood mapping products are developed, at their completion, an optional Resilience Meeting can be supported by FEMA. The Resilience Meeting provides an opportunity for local, State, and Federal partners to come together to discuss local mitigation actions that can be supported and strengthened by the Flood Risk Products.

DISCOVERY OUTREACH AND ENGAGEMENT STRATEGY

In the Saranac River Watershed, the Discovery phase of Risk MAP had four major components: (1) identify stakeholders, (2) gather information from each participating community through pre-Discovery Information Exchange webinars and a voluntary online questionnaire, (3) support in-person Discovery meetings to continue to build upon the information gathered ahead of the meeting, and (4) conduct post-meeting follow-up and engagement. Together, the strategy will help FEMA to work with communities to confirm natural hazard information and assess the need for more data on natural hazards and their impact on critical facilities.



1. IDENTIFICATION OF STAKEHOLDERS

The first step in this engagement process was to identify stakeholders. As part of this Discovery process for the Saranac River Watershed, as well as for the Ausable River, Upper Hudson, and Sacandaga Watersheds, FEMA developed an extensive list of contact information in consultation with NYSDEC of community officials and other stakeholders within the watersheds. These included floodplain administrators, emergency managers, planners, public works officials, GIS staff, community development officials, building officials, parks and recreation staff, transportation staff, and contract support staff. Community officials were also encouraged to invite other officials as they deemed appropriate.

Across all four watersheds, over 485 stakeholders—including local community officials, county officials, representatives from Federal and State agencies, Federal and State elected representatives, non-governmental organizations, and other local groups—were contacted and invited to one of seven Discovery meetings. In instances where communities were near or within two watersheds, stakeholders were invited to choose between the two closest meeting locations regardless of their primary watershed location to ensure that information was shared at both the county and community level.

Invitations were sent out via email (at least one per pre-Discovery webinar, and at least two per in-person meeting). Two rounds of calls were made to stakeholders who did not respond via email invitations.

Within the Saranac River Watershed, approximately 130 stakeholders were contacted by email or phone, including the following:

- Ninety-nine community officials representing all municipalities within the watershed (see Project Area Community List)
- Thirty-five county and State officials from:
 - NYS Department of Environmental Conservation (NYSDEC)
 - NYS Department of Homeland Security and Emergency Services (NYSDHSES)
 - New York State Office of Emergency Management
 - Clinton County
 - Essex County
 - Franklin County

In addition to municipal officials and planning and emergency response staff, other stakeholders offered valuable information to help develop pre-mapping data and final mapping products. Local organizations and non-profits invited to participate in the Saranac River Watershed Discovery process included the following:

- Adirondack Council, Inc.
- Adirondack North Country Association
- Adirondack Park Agency (APA)
- Friends of the North Country, Inc.
- Natural History Museum of the Adirondacks
- Paul Smiths College
- SUNY Plattsburgh
- Upper Saranac Foundation

2. PRE-MEETING ENGAGEMENT AND INFORMATION EXCHANGE

Summaries of the pre-Discovery webinars and the voluntary online questionnaire responses were captured in the Profiles for Clinton, Essex, and Franklin Counties.

Pre-Discovery Information Exchange Webinars

The Saranac River Watershed Discovery phase began with a series of Information Exchange Webinars that were held with each community from June 11 to 19, 2018. These webinars served as an opportunity to gain information from each local community. The webinars explored natural hazard risks with an emphasis on flood impacts, community development efforts, and HMPs. Furthermore, information from these webinars was recorded both as written notes and included in community-scaled maps to visually display areas of concern identified during these pre-Discovery conversations. Questions asked during the webinars included the following:

1. Are there areas in your community affected by flooding? If so, are you in need of more accurate flood mapping information?
2. While our efforts primarily focus on flooding, are there other natural hazards that impact your community?
3. Are there areas of population growth or development that may be impacted by known flooding or other natural hazards?
4. Are there any environmentally sensitive areas identified in your community?
5. Can you share one example of a mitigation activity/project that your community has prioritized and one example of how you have helped your community to be more prepared?

Additionally, during the Information Exchange Webinars, FEMA provided an update for the Lake Champlain Discovery project, which was completed in 2016, because the study area also encompasses parts of Clinton and Essex Counties. Outcomes from the Lake Champlain Discovery project are described in the *Saranac River Watershed Characteristics and Geography* section of this report.

Voluntary Online Questionnaire

To help stakeholders who were unable to attend the webinars and to gain knowledge from webinar participants, FEMA distributed a questionnaire that asked local community officials for information regarding local risks. The questionnaire was not mandatory, but it allowed FEMA and its contractors to confirm and obtain the following information from key community stakeholders:

- Areas that need a flood restudy
- Areas affected by flooding
- Areas that have flooded more than once
- Verifiable high water marks
- Recent/ongoing/proposed mitigation actions
- Areas undergoing growth
- Hazards that are not flood-related
- Additional community contacts that should be invited to the in-person meetings

3. DISCOVERY MEETINGS

Following the webinars, FEMA hosted two in-person Discovery meetings for the Saranac River Watershed on Tuesday, July 24, 2018, in the Town of Plattsburgh and on Wednesday, July 25, 2018, in the Town of Santa Clara to discuss and explore the opportunities for a Risk MAP project. The goals of the meeting were multifaceted:

- Continue the discussion of natural hazard risks and ways to mitigate those risks;
- Discuss and connect to various risk assessment tools available from FEMA to support and enhance resilience efforts; and
- Prioritize areas of potential studies and projects that will be considered for scoping a Risk MAP project.

Following an introductory presentation of Risk MAP and the Discovery process, FEMA and community participants reviewed and validated flood and other hazard data, event history, mapping needs, local risk concerns, and development plans. Using community-scaled maps, participants identified locations prone to flooding and other natural hazards or where data is needed. Where possible, participants identified locations of mitigation projects that could reduce risk and categorized the projects on a timeline (1 to 3 years [short-term], 3 to 7 years [mid-term], and 7 to 15 years [long-term]) and noted which projects were the highest priority. Communities were also asked to identify training needs and other necessities, which included, but were not limited to, funding support, floodplain management training, and hazard preparedness brochures. Mapping and hazard needs, recent and potential mitigation projects, and other resource needs identified during the Discovery process are detailed in the *Summary of Community Risks Identified* section.

The following materials were used at the meeting:

- Meeting agenda
- Meeting sign-in sheets
- Meeting presentation
- Clinton County: Profile
- Essex County: Profile
- Franklin County: Profile
- Breakout session guide
- Notetaking guide

4. POST-DISCOVERY ENGAGEMENT

Following the Saranac River Watershed Discovery meeting, FEMA sent participants a follow-up email, which included a link to download copies of the Discovery presentation, county profiles, contact information, and additional resources on grants.

Additional outreach to communities in the Saranac River Watershed was conducted by FEMA in September. FEMA sent follow-up emails to communities that had not participated in the Discovery process to date (i.e., did not participate in the pre-Discovery Information Exchange Webinars, complete the voluntary questionnaire, and/or attend one of the Discovery meetings), and again requested their input on the process.

Continued engagement with communities will include the delivery of the draft Discovery Report, a commenting period on the report, the delivery of the final Discovery Report, and future coordination with communities as mapping projects are discussed. In addition, FEMA is available to support calls, events, and other outreach opportunities as communities participate in flood mitigation efforts.



SARANAC RIVER WATERSHED CHARACTERISTICS AND GEOGRAPHY

The Saranac River Watershed is in northeastern New York State, just west of Lake Champlain, and occupies 612 square miles. Portions of Clinton, Essex, and Franklin Counties lie within the watershed, and the Adirondack Park covers nearly the entire watershed. The watershed ranges in elevation from 95 to 4,848 feet above sea level, with the highest elevations found on the periphery of the watershed (U.S. Department of Agriculture 2011).

The watershed is primarily rural. According to the 2011 National Land Cover Database, only 2 percent of the Saranac River Watershed is developed with open space and low-intensity uses, while 0.1 percent is developed with medium- and high-intensity uses. The City of Plattsburgh, Village of Saranac Lake, Village of Dannemora, and a small sliver of Lake Placid are the only areas considered urban. The limited agricultural areas tend to be clustered in the northern area of the watershed. Forests comprise the majority of the watershed at 87.6 percent, followed by wetlands at 4.8 percent, open water at 4.0 percent, and shrub at 1.1 percent, with grassland, crops, and barren land at less than 0.2 percent each (National Land Cover Database 2011).

There are 24 dams in the Saranac River Watershed, including nine dams that, if they were to fail, could cause substantial economic loss or the loss of lives (NYSDEC 2018).

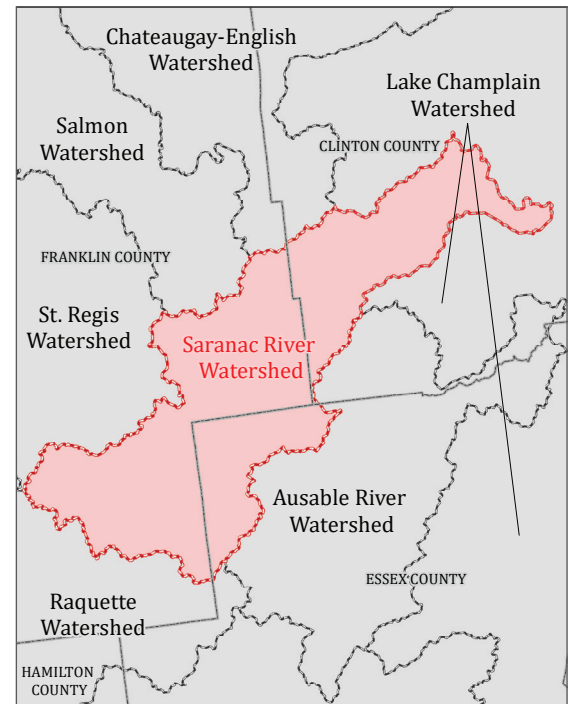


FIGURE 1: Saranac River Watershed

◆	Unclassified Potential	0
◆	No/Negligible Potential	2
◆	Low Potential	13
◆	Intermediate Potential	4
◆	High Potential	5
TOTAL		24

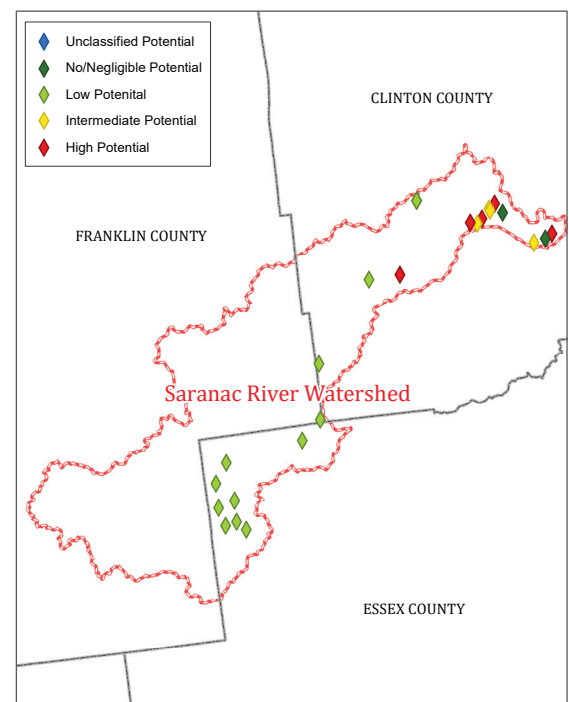


FIGURE 2: Dams within the Saranac River Watershed

Watershed boundaries are classified based on hydrologic units following a numerical classification system. The Saranac River Watershed boundary is represented by the HUC-8 code of 04150406. The numbers are arranged by scale, with the first two numbers representing the region, and the following two numbers each representing the sub-regions, accounting units, and cataloging units, respectively. The Saranac River Watershed shares boundaries with:

- Ausable River Watershed (04150404)
- Chateaugay-English Watershed (04150308)
- Lake Champlain Watershed (04150408)
- Raquette Watershed (04150305)
- Salmon Watershed (04150307)
- St. Regis Watershed (04150306)

The Discovery process for the Ausable River Watershed is currently underway, and a recommended scope of work will be summarized in a final report in early 2019. The Discovery process for the Lake Champlain Watershed was completed in 2016 and multiple streams were identified for detailed and approximate studies. In addition to upgrading existing mapping in Essex and Warren Counties to a digital format, 13 high priority new or revised detailed riverine and lake studies, 15 medium priority detailed studies, 10 lower priority detailed studies, and six updated approximate studies were recommended for inclusion in a future Risk MAP project scope (FEMA 2016). In Fiscal Year 2016, FEMA Region II funded flood hazard analyses for several of the recommended studies. Work maps and Flood Risk Products (FRPs) will be issued in advance of preliminary FIRMs. These FRPs are tools to inform decision making and include a Flood Risk Report, Water-Surface Elevation (WSEL) Grids, and Multi-Frequency Depth Grids. More information about the project can be found in the *Lake Champlain Watershed Discovery Report*, which is available for download at <https://data.femadata.com/Region2/Discovery>.



WATERSHED DISASTER DECLARATIONS








2017	DR-4322/SNOW Severe Winter Storm and Snowstorm Clinton County, Essex County & Franklin County
2013	DR-4129/FLOOD Severe Storm and Flooding Clinton County, Essex County & Franklin County
2012	EM-3351/HURRICANE Hurricane Sandy Clinton County, Essex County & Franklin County
2011	DR-4020/HURRICANE Hurricane Irene Clinton County, Essex County & Franklin County
2011	DR-1993/FLOOD Severe Storms, Flooding, Tornadoes and Straight-Line Wind Clinton County, Essex County & Franklin County
2007	DR-1692/SEVERE STORM(S) Severe Storms and Inland and Coastal Flooding Essex County
2004	DR-1534/SEVERE STORM(S) Severe Storms and Flooding Clinton County, Essex County & Franklin County
2003	EM-3186/OTHER Power Outage Statewide, Clinton County, Essex County & Franklin County
2002	DR-1415/EARTHQUAKE Earthquake Clinton County, Essex County & Franklin County

In response to disasters, FEMA can issue disaster declarations for Major Disasters (DRs) and Emergency Declarations (EMs).

The President can declare a DR in New York after the Governor submits a request for any natural event, fire, flood, or explosion in which the severity of damage is determined to exceed the combined response capabilities of State and local governments. A wide range of Federal assistance programs for individual and public infrastructure can be provided after such a declaration is made, including funds for both emergency and permanent work.

EMs can be declared by the President after the Governor submits a request for any occasion or instance when the President determines Federal assistance is needed to supplement State and local government efforts in providing emergency services, up to \$5 million dollars.

As of October 2018, there have been a total of 19 FEMA disaster declarations in the Saranac River Watershed dating back to 1993. The number of declarations informed the need for this Discovery effort within the Saranac River Watershed. The timeline shows the 10 most recent declarations in more detail, while the table summarizes all declarations within the watershed (FEMA 2018, Disaster Declarations Summary).

Incident Type	Declared County/Area	# of Disaster Declarations	Declaration Date
 EARTHQUAKE	Clinton County, Essex County & Franklin County	1	(DR): 2002
 FIRE	Clinton County, Essex County & Franklin County	1	(DR): 2001
 FLOOD	Clinton County, Essex County & Franklin County	3	(DR): 2013, 2011, 1996
 HURRICANE	Clinton County, Essex County & Franklin County	4	(DR): 2011, 1999, (EM): 2012, 2005
 SEVERE STORM(S)	Clinton County, Essex County & Franklin County	5	(DR): 2007, 2004, 2000, 1998, 1996
 SNOW	Clinton County, Essex County & Franklin County	3	(DR): 2017, 1998 (EM): 1993
 OTHER (Power Outage & West Nile Virus)	Statewide, Clinton County, Essex County & Franklin County	2	(EM): 2003, 2000



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CLINTON COUNTY | OVERVIEW

82K
COUNTY
POPULATION



(U.S. CENSUS BUREAU 2010)

79

PERSONS
PER SQUARE MILE



(U.S. CENSUS BUREAU 2010)

5

SQUARE MILES
OF FARMLAND

(U.S. DEPARTMENT OF AGRICULTURE 2012)



100



ESTIMATED FARMS
IN WATERSHED

(U.S. DEPARTMENT OF AGRICULTURE 2011)

TOP INDUSTRIES
IN COUNTY:

HEALTH CARE &
SOCIAL ASSISTANCE,
EDUCATIONAL SERVICES,
RETAIL TRADE

(U.S. CENSUS BUREAU 2015)



PRESIDENTIALLY
DECLARED DISASTERS
SINCE 1953

(FEMA 2018, DATA VISUALIZATION:
DISASTER DECLARATIONS)

HMP STATUS

APA DATE: 8/13/2014

PLAN APPROVAL: 10/15/2014

ADOPTION DATE: 10/15/2014

EXPIRATION DATE: 10/14/2019

PLAN STATUS: APPROVED

(CLINTON COUNTY NY 2014)

HAZARD PROFILE

(CLINTON COUNTY NY 2014)



FLOOD



WINTER
STORM



SEVERE
STORMS



WILDFIRE



TORNADO



EARTHQUAKE



LANDSLIDE



EXTREME
TEMPERATURE



SUBSIDENCE



HURRICANES



DROUGHT

Overview

Clinton County is bordered by Canada, Lake Champlain, Franklin, and Essex Counties. The county has a total area of 1,037 square miles, 78.7 square miles of which are water (FEMA 2016). The estimated population of Clinton County within the Saranac River Watershed is 69,486. The estimate was derived by combining total populations for all towns in Clinton County that are partially or fully within the watershed. The main population center and county seat is the City of Plattsburgh with 19,696 residents (U.S. Census Bureau 2010). Additionally, 189.5 square miles of land are in the Saranac River Watershed study area (U.S. Department of Agriculture 2011). Major Disaster declarations for Clinton County occurred most recently following two events on March 14, 2017, when the county experienced a severe winter storm and snow, and on June 26, 2013, when severe storms and flooding occurred for several days. Following the declarations, the county received support through FEMA Public Assistance and Hazard Mitigation Assistance (FEMA 2018, Disaster Declarations Summary). While portions of Clinton County are in the Saranac River Watershed, additional areas in the county are also in the Ausable River Watershed, for which the Discovery process is expected to be completed in early 2019, and the Lake Champlain Watershed, for which the Discovery process was completed in 2016. In Fiscal Year 2017, FEMA Region II funded flood hazard analyses for the entirety of Clinton County. Data development and work maps are expected to be completed in 2019 and a Changes Since Last FIRM dataset will be issued prior to the preliminary FIRMs, which are estimated for 2020. Other areas of the county are in the Chateaugay-English and Richelieu River Watersheds.



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Planning

According to the 2008 *Land Use Planning & Regulations: A Survey of New York State Municipalities*, Clinton County has the following resources to assist with planning and greater resiliency: *A Guide to Planning and Zoning Laws of New York State*, the Clinton County Planning Board, a Comprehensive Plan, the Clinton County Agricultural District, and a Farmland Protection Plan (NY Department of State 2011). Clinton County falls under the jurisdiction of the Adirondack Park Agency (APA), which was created in 1971 by the State Legislature to develop long-range public and private land use plans. In Clinton County, the Towns of Ausable, Black Brook, Dannemora, and Saranac are completely within the Adirondack Park and are subject to land use regulations of the APA. The portions of the Towns of Peru, Ellenburg, and Altona within the park are also subject to APA land use regulations (Clinton County NY 2014). APA land use documents include the *Adirondack Park State Land Master Plan* and the *Citizen's Guide to Adirondack Park Agency Land Use Regulations* (Adirondack Park Agency).

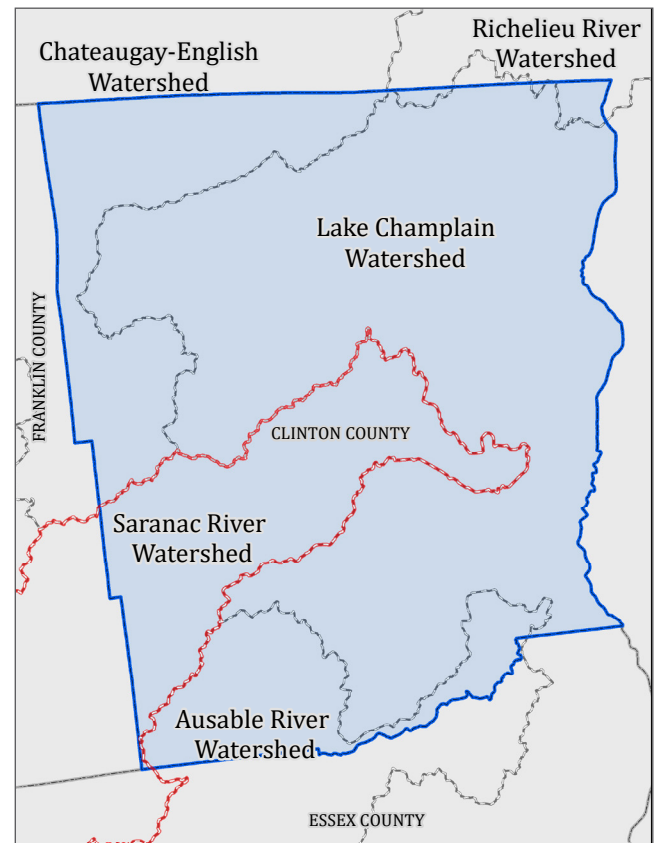


FIGURE 3: The Saranac River Watershed within Clinton County

Common Flooding Concerns

Across Clinton County, within the Saranac River Watershed, flooding impacts vary based on local geography and assets. Ice jams were among the most common flooding concerns shared in the discovery process. Ice jam occurrences have been noted on the Saranac River near the hamlets of Morrisonville and Redford. In the City of Plattsburgh, local officials described repeated flooding of homes on Bushey Street and at the Water Resource Recovery Facility. Communities in Clinton County shared concerns of incorrect Special Flood Hazard Areas on existing maps and requested updated FIRMs.

In addition to notes taken by the project team during the Discovery meetings, the County's Hazard Mitigation Plan (HMP) identifies the estimated total building asset value at risk in the County as \$311,852,627. The County did not identify any critical facilities within the floodplain (Clinton County NY 2014).

Common Mitigation Concerns

Reviewing the 2014 Clinton County HMP and feedback from the Discovery meetings in Clinton County revealed several themes. Measurement of water passage through culverts could be used to assess whether enlargement is necessary; specific locations that would benefit include culverts on Forestdale and Nelson Roads in the Town of Black Brook and throughout the Town of Beekmantown. The HMP and participants at the Discovery meetings raised a need to address dams at risk of overtopping, including the Mead and Patterson Dams. Associated ideas included installing remote level monitoring equipment and developing a contact list for residents living within the dam floodway in case of an emergency. Buyouts were discussed as a strategy to alleviate flood risk on River Street in the Town of Schuyler Falls and on Bushey Street in the City of Plattsburgh.

More detailed information on the flooding and mitigation concerns described here can be found within the *Summary of Community Risks Identified* section.

ESSEX COUNTY | OVERVIEW

39K
COUNTY
POPULATION



(U.S. CENSUS BUREAU 2010)

22

PERSONS
PER SQUARE MILE



(U.S. CENSUS BUREAU 2010)

6

SQUARE MILES
OF FARMLAND

(U.S. DEPARTMENT OF AGRICULTURE 2012)



12



ESTIMATED FARMS
IN WATERSHED

(U.S. DEPARTMENT OF AGRICULTURE 2011)

TOP INDUSTRIES
IN COUNTY:

HEALTH CARE &
SOCIAL ASSISTANCE,
ACCOMMODATION &
FOOD SERVICE, PUBLIC
ADMINISTRATION

(U.S. CENSUS BUREAU 2015)



PRESIDENTIALLY
DECLARED DISASTERS
SINCE 1953

(FEMA 2018, DATA VISUALIZATION:
DISASTER DECLARATIONS)

HMP STATUS

APA DATE: 6/29/2011

PLAN APPROVAL: 9/28/2011

ADOPTION DATE: 9/28/2011

EXPIRATION DATE: 9/27/2016

PLAN STATUS: EXPIRED/PLAN IN
PROGRESS (ESSEX COUNTY NY 2011)

HAZARD PROFILE

(ESSEX COUNTY NY 2011)



FLOOD



SEVERE
WINTER
STORM



WINDSTORM



WILDFIRE



DROUGHT



ICE STORM



DAM FAILURE

Overview

Essex County is bordered by Lake Champlain and Clinton, Franklin, Hamilton, Warren, and Washington Counties and has a total area of 1,794.23 square miles. The estimated population of Essex County within the Saranac River Watershed is 16,233. The estimate was derived by combining total populations for all towns in Essex County that are partially or fully within the watershed (U.S. Census Bureau 2010). The county seat is Elizabethtown. Additionally, 95.1 square miles of Essex County land are in the Saranac River Watershed study area (U.S. Department of Agriculture 2011). Major Disaster declarations for Essex County occurred most recently following two events on March 14, 2017, when the county experienced a severe winter storm and snow, and on June 26, 2013, when severe storms and flooding occurred for several days. Following the declarations, the county received support through FEMA Public Assistance and Hazard Mitigation Assistance (FEMA 2018, Disaster Declarations Summary). While portions of Essex County are in the Saranac River Watershed, additional areas in the county are also in the Ausable River and Upper Hudson Watersheds, for which the Discovery processes are expected to be completed in early 2019, as well as the Lake Champlain Watershed, for which the Discovery process was completed in 2016. Other areas of Essex County are in the Raquette Watershed.



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Planning

According to the 2008 *Land Use Planning & Regulations: A Survey of New York State Municipalities*, Essex County has the following resources to assist with planning and greater resiliency: *A Guide to Planning and Zoning Laws of New York State*, the Essex County Planning Board, *Essex County New York Destination Master Plan*, the Essex County Agricultural District, *Essex County Strategic Farmland Protection Plan*, and a Right-to-Farm law (NY Department of State 2011). In addition, 100 percent of Essex County falls under the jurisdiction of the Adirondack Park Agency (APA), which was created in 1971 by the State Legislature to develop long-range public and private land use plans. The Towns of Chesterfield, Newcomb, and Willsboro have Agency-approved Local Land Use Plans. APA land use documents include the *Adirondack Park State Land Master Plan* and the *Citizen's Guide to Adirondack Park Agency Land Use Regulations* (Adirondack Park Agency).

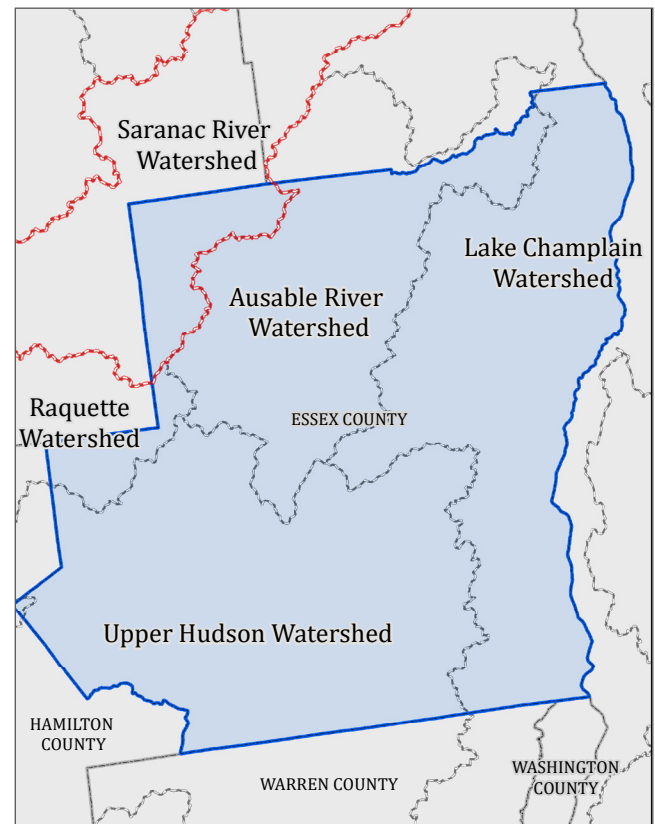


FIGURE 4: The Saranac River Watershed within Essex County

Common Flooding Concerns

In Essex County, communities that participated in the Discovery process for the Saranac River Watershed shared a variety of flooding concerns and mapping needs. One common issue is that flooding occurs throughout the county, with specific areas of concern including Moose Pond Bridge in the Town of St. Armand and River Road in the Town of North Elba. The wastewater treatment plant in the Town of St. Armand was cited as a locally important facility currently at risk. In addition to notes taken by the project team during the Discovery meetings, the county's Hazard Mitigation Plan (HMP) estimated the total structure value at risk in the County as \$766,411,503. Essex County additionally identified 15 critical facilities within the floodplain (Essex County NY 2011).

Common Mitigation Concerns

Communities in Essex County share several similar mitigation concerns that were raised during the Discovery meetings and described in the expired 2011 Essex County HMP. These include the Village of Saranac Lake on addressing bridges that experience flooding and the Town of St. Armand on the need to relocate important waste water treatment facilities to mitigate flooding. Representatives of the Village of Saranac Lake also discussed a potential action to improve Dam Emergency Action Plans during the Discovery meetings.

More detailed information on the flooding and mitigation concerns described here can be found within the *Summary of Community Risks Identified* section.

FRANKLIN COUNTY | OVERVIEW

51.6K

COUNTY
POPULATION



(U.S. CENSUS BUREAU 2010)

32

PERSONS
PER SQUARE MILE



(U.S. CENSUS BUREAU 2010)

10

SQUARE MILES
OF FARMLAND

(U.S. DEPARTMENT OF AGRICULTURE 2012)



115



ESTIMATED FARMS
IN WATERSHED

(U.S. DEPARTMENT OF AGRICULTURE 2011)

TOP INDUSTRIES
IN COUNTY:

HEALTH CARE &
SOCIAL ASSISTANCE,
PUBLIC ADMINISTRATION,
EDUCATIONAL SERVICES

(U.S. CENSUS BUREAU 2015)



PRESIDENTIALLY
DECLARED DISASTERS
SINCE 1953

(FEMA 2018, DATA VISUALIZATION:
DISASTER DECLARATIONS)

HMP STATUS

APA DATE: 12/28/2015

PLAN APPROVAL: 1/19/2016

ADOPTION DATE: 1/25/2016

EXPIRATION DATE: 1/18/2021

PLAN STATUS: APPROVED

(FRANKLIN COUNTY NY 2015)

HAZARD PROFILE

(FRANKLIN COUNTY NY 2015)



FLOOD/FLASH
FLOOD/ICE
JAMS



EARTHQUAKE



SEVERE
STORMS/HAIL/
HIGH WINDS



TORNADO



WINTER
STORM



HURRICANES



LANDSLIDE



WILDFIRE



EXTREME
TEMPERATURE



SUBSIDENCE



CLIMATE
CHANGE



DROUGHT

Overview

Franklin County is bordered by Canada and Clinton, Essex, St Lawrence, and Hamilton Counties, and has a total area of 1,629 square miles. The estimated population of Franklin County within the Saranac River Watershed is 16,520. The estimate was derived by combining total populations for all towns in Essex County that are partially or fully within the watershed (U.S. Census Bureau 2010). The Town of Malone functions as the county seat. Additionally, 328.2 square miles of land are in the Saranac River Watershed study area (U.S. Department of Agriculture 2011). Major Disaster declarations for Franklin County occurred most recently following two events on March 14, 2017, when the county experienced a severe winter storm and snow, and on June 26, 2013, when severe storms and flooding were experienced for several days. Following the declarations, the county received support through FEMA Public Assistance and Hazard Mitigation Assistance (FEMA 2018, Disaster Declarations Summary). Only a portion of Franklin County is in the Saranac River Watershed. Other portions of the county overlap with the Chateaugay-English, Raisin River-St. Lawrence River, Salmon, St. Regis, and Raquette Watersheds. There are no other current FEMA studies in Franklin County.

Planning

According to the 2008 *Land Use Planning & Regulations: A Survey of New York State Municipalities*, Franklin County has the following resources to assist with planning and greater resiliency: *A Guide to Planning and Zoning Laws of New York State*, the Franklin County Agriculture & Farmland Protection Board, Franklin County Agriculture & Farmland Protection Plan, and a Right-to-Farm law (NY Department of State 2011). In addition, approximately two-thirds of Franklin County falls under the jurisdiction of the Adirondack Park Agency (APA) (Franklin County NY 2015), which was created in 1971 by the State Legislature to develop long-range public and private land use plans. APA land use documents include the *Adirondack Park State Land Master Plan* and the *Citizen's Guide to Adirondack Park Agency Land Use Regulations* (Adirondack Park Agency).



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Common Flooding Concerns

Franklin County communities shared several similar experiences and concerns regarding flooding. Near the Saranac Lakes Chain, development adjacent to water is important for tourism and of high value. However, this development is vulnerable, especially in the Village of Saranac Lake and Town of Harrietstown. Frequent sources of flooding include river pinch points near populated town areas. The Bartlett Carry Dam, a private earthen dam that forms the Upper Saranac Lake, was mentioned by multiple communities as a high-risk dam and potential source for major flooding downstream if breached. Both the Village of Saranac Lake and the Town of Tupper Lake cited wastewater treatment facilities vulnerable to flooding. Many bridges and roads throughout the county experience flooding and occasional washouts. In regard to FIRMs, the Town of Franklin requested BFEs and associated cross-section information for specific streams within the community and the Town of Harrietstown requested an updated hydrology and hydraulic study for the Saranac River, for its entire length within the community.

The county estimated the sum of building values at risk as \$147,935,190. The Franklin County Hazard Mitigation Plan (HMP) did not identify critical facilities within the floodplain (Franklin County NY 2015).

Common Mitigation Concerns

Many communities in Franklin County share common mitigation concerns as observed during Discovery and as described in the 2015 Franklin County HMP. In relation to the Saranac Lakes Chain dam breach concerns, the Village of Saranac Lake and Town of Harrietstown cited the need to undertake in comprehensive engineering and dam breach studies to better understand their risk, draft an emergency action plan, and identify future mitigation opportunities relating to dam failure. Road washout issues were commonly raised in the HMP. Suggested mitigation solutions ranged from culvert replacements in the Towns of Brighton, Harrietstown, and Santa Clara, to bridge replacement or installation in the Towns of Bellmont, Franklin, and Tupper Lake, to road elevation on Studley Hill Road in the Town of Duane. The Village of Saranac Lake shared potential mitigation actions to relocate village offices, elevate the Dewdrop Inn, and buy out two repetitive loss properties in the downtown to reduce flood prone buildings.

More detailed information on the flooding and mitigation concerns described here can be found within the *Summary of Community Risks Identified* section.

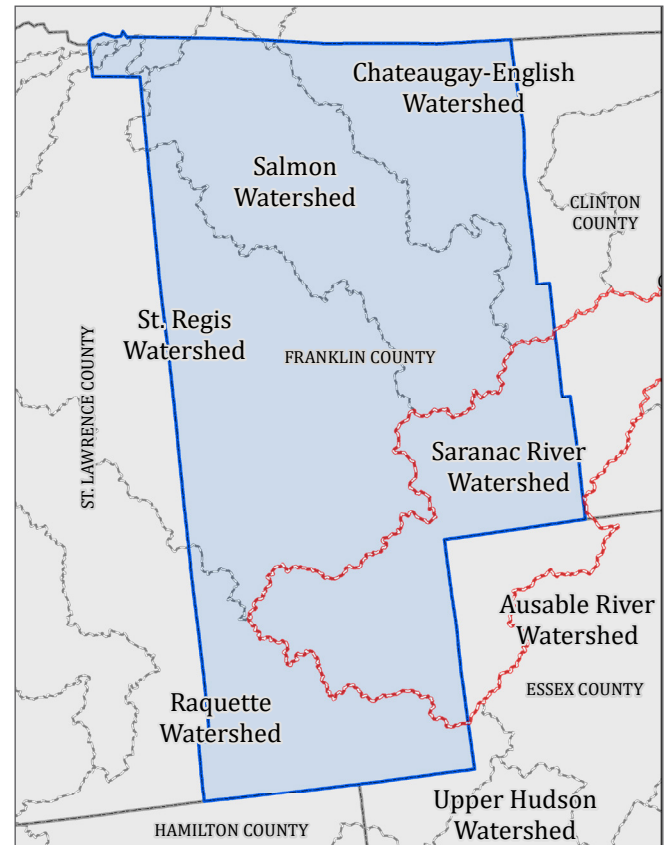


FIGURE 5: The Saranac River Watershed within Franklin County

SUMMARY OF COMMUNITY RISKS IDENTIFIED

The Discovery process—including webinars, a questionnaire, in-person consultations, and follow-up correspondence—generated numerous identified needs related to flood mapping, mitigation, and training. Although Discovery occurs at the watershed level, the following pages summarize information at the community level from local officials and other stakeholders. In some instances, specific geographic information is provided; otherwise this information was not collected. The Resources section of this report provides information on mitigation grant opportunities, trainings, and other resources to help address the needs identified during the Discovery process.

In the Saranac River Watershed, communities have a mix of updated digital countywide FIRMs and older, community-based paper FIRMs developed between 1984 and 2007. Specific FIRM and Letter of Map Change (LOMC) data for each community provide an understanding of the existing hazard information available. The NFIP status, number of active policies, and ordinance level and effective date show the community's overall preparedness for a flood event, while the Community Rating System (CRS) status indicates whether the community has made additional steps toward reducing risk. A description of the data source is provided in the table, and definitions for terms used are provided in the *Glossary of Terms*.

A combination of the information shared by local officials and relevant available data was used to develop a recommended scope of work for consideration of future Risk MAP projects, if available funding permits. Specific stream study priorities were identified based on the data gathered and stakeholder input provided during this Discovery project. A total of 22 separate detailed stream study mapping needs and one approximate study were identified by stakeholders. There were also five stream study requests for flooding sources outside of the project area. Complete details on priority mapping projects can be found in the *Recommendations for Future Risk MAP Project Scope* section of this report.

DATA	SOURCE
POPULATION	U.S. Census Bureau 2010. Numbers are rounded
FIRM DATE	Effective date of the current FIRM per FEMA Community Information System (CIS) as of May 23, 2018
NFIP STATUS	Status of participation in the NFIP per CIS as of May 23, 2018
FIRM STATUS	Never Mapped – FEMA has not published FIRMs for the area in question Original – the current effective FIRMs are the initial FIRMs produced for the community Revised – the current effective FIRMs were revised through the Risk MAP process and updated since the initial FIRM date per CIS as of May 23, 2018
LOMC(S)	Number of completed LOMCs per FEMA Mapping Information Platform (MIP) as of August 2018
POLICIES	Number of all active NFIP policies in all zones per CIS as of May 23, 2018
INSURANCE IN FORCE	Total insurance amount from all active NFIP policies in all zones per CIS as of May 23, 2018
# PAID LOSSES	Number of NFIP claims paid for all active policies in all zones per CIS as of May 23, 2018
TOTAL LOSSES PAID	Total amount of NFIP claims paid for all active policies in all zones per CIS as of May 23, 2018
CAV	Date of most recent CAV by FEMA as of May 23, 2018
CAC	Date of most recent CAC by FEMA as of May 23, 2018
ORDINANCE LEVEL	A – when the 1-percent-annual-chance floodplain has not been identified D – when the 1-percent-annual-chance floodplain has been identified, but not including Coastal High-Hazard Areas Information current as of September 2018, per CIS and the NY Department of State, Division of State Records
ORDINANCE EFFECTIVE DATE	Date that minimum NFIP requirements for the ordinance level went into effect, as of September 2018, per CIS and the NY Department of State, Division of State Records
CRS RATING	Rating level if the community is enrolled in the CRS per FEMA NFIP Flood Insurance Manual as of May 1, 2018

TOWN OF ALTONA | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Clinton County officials noted the Rainbow Banquet Hall should not be in the Witherspoon Brook Tributary 2 floodplain and requested new flood maps with elevation data. The Town of Altona has been trying to obtain an Elevation Certificate to submit a Letter of Map Change for this property, which is outside the watershed
- Within the watershed, the town requested an updated study for one unnamed tributary to Sandburn Brook
- Duquette Road and the Military Turnpike often flood due to beaver dams on Ray Brook
- General Leroy Manor Road is known to experience flooding from Sandburn Brook

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Working to mitigate salt contamination as a result of treating roadway surfaces for winter weather travel
- The 2014 Clinton County Hazard Mitigation Plan describes an action to dredge the Great Chazy River and channel

Mitigation and Risk Reduction Needs:

- In the next three years, beaver trappers should be used to control the population and avoid beaver dam-induced flooding, as has occurred on Ray Brook

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Building footprint data would be helpful for the town
- A webinar is requested for code enforcement and highway staff that were unable to attend in-person meetings
- Clinton County noted that distribution of homeowner and renter preparedness materials could be beneficial to the community

COMMUNITY	TOWN OF ALTONA
POPULATION	2,890
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	All Zone A, C, and X - No Elevations Determined
LOMC(S)	0
POLICIES	7
INSURANCE IN FORCE	\$911,000
# PAID LOSSES	4
TOTAL LOSSES PAID	\$60,732
CAV	N/A
CAC	3/25/2016
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	7/9/2007
CRS RATING	N/A



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TOWN OF BEEKMANTOWN | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Military Turnpike is a densely developed area that experiences high-velocity water and scouring from Kennon Brook; further study of the area is needed
- Updated FIRM panels are requested to incorporate flood hazard data, since the current FIRM panels for the town are nearly devoid of any flood hazards
- Greenbriar Way at an unnamed flooding source and Sandburn Brook at General Leroy Manor Road are both subject to scouring from high-velocity stormwater, which can affect nearby residents; Clinton County noted the need for a prioritized study of the unnamed flooding source at Greenbriar Way
- Ice jams occur along the Saranac River around Morrisonville, Main Street, and the surrounding areas
- West Brook – Mead Reservoir and the dam inundation area in the southern portion of town could use further analysis
- In the next three to seven years, new detailed floodway studies (for all major streams in the town can be used to curb development and enforce better building practices on Greenbriar Way, General Leroy Manor Road, and Military Turnpike

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Ongoing hydroseeding for erosion control and groundwater concerns
- The 2014 Clinton County Hazard Mitigation Plan calls for increasing the size of culverts to 36 inches, adding outflow pipes every 150 feet, and excavating an additional ditch along Jersey Swamp Road from Agnew Road

Mitigation and Risk Reduction Needs:

- Water passage through culverts should be measured and assessed in residential and rural areas
- In the next three years, beaver population controls should be implemented at Douglas Road Turnpike
- Within the next seven years, the Sandburn Brook culvert at General Leroy Manor Road should be enlarged due to scour from high-velocity stormwater

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Building footprint data would help the town
- The town would like FEMA to provide a pre-recorded webinar for staff unable to attend the in-person meeting, particularly Town Code Enforcement and highway staff
- Clinton County noted that distribution of homeowner and renter preparedness materials could be beneficial to the community

COMMUNITY	TOWN OF BEEKMANTOWN
POPULATION	5,545
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	9
POLICIES	17
INSURANCE IN FORCE	\$4,145,000
# PAID LOSSES	10
TOTAL LOSSES PAID	\$174,912
CAV	8/1/2014
CAC	7/19/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	8/23/2007
CRS RATING	N/A

TOWN OF BLACK BROOK | CLINTON COUNTY

The Town of Black Brook should also consult the Ausable River Watershed Discovery report to review the Recommendations for Future Risk MAP Project Scope, if available.

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Changes Since Last FIRM maps are requested on any updated stream studies
- Ice jams and erosion are a concern along a portion of the Ausable River in the southern part of town where the East and West branches of the Ausable River meet
- There is significant flooding from Allegany Brook, where there is an upstream privately owned dam in Clinton County, which is requested for a restudy
- A restudy of the Ausable River is requested near French Village Road and extending westward from State Route 9, where there is recent development and potential growth
- A detailed flood study is requested for Palmer Brook and the Ausable River. Flooding impacts homes near the confluence of these two water bodies.

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Some undersized culverts have been replaced
- Repetitive Loss buyouts have been completed in the past
- A gas station that experienced flooding due to old rip rap on the northern bank of the West Branch Ausable River is being rebuilt as a credit union to a higher elevation
- The 2014 Clinton County Hazard Mitigation Plan describes an action to place rip rap along Palmer Brook and the Ausable River and to monitor water levels regularly

Mitigation and Risk Reduction Needs:

- Culverts on Forestdale Road and Nelson Road adjacent to Little Black Brook need to be replaced, as they have experienced issues with stormwater
- Within the next one to three years, in coordination with the Town of Jay, assess the confluence of Palmer Brook and the Ausable River to remove rip rap and change the channel to allow water to flow
- In the next three years, the town plans to construct a new well storage tank outside the flood zone on upland areas downstream of Rome Dam on the Ausable River to increase community resilience
- In the next three to seven years, a redevelopment of the Emergency Management Plan should be completed
- Within the next seven years, some undersized culverts along Little Black Brook can be replaced to mitigate stormwater issues and flooding concerns at Forestdale Road and Nelson Road

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Training on floodplain management, facilitation, outreach, and conducting public opinion research could aid in Emergency Management Plan redevelopment
- Clinton County noted that distribution of homeowner and renter preparedness materials could be beneficial to the community

COMMUNITY	TOWN OF BLACK BROOK
POPULATION	1,505
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	14
POLICIES	11
INSURANCE IN FORCE	\$2,582,200
# PAID LOSSES	18
TOTAL LOSSES PAID	\$480,149
CAV	10/28/2013
CAC	9/28/2015
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	9/4/2007
CRS RATING	N/A



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TOWN OF DANNEMORA | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- High winds and snow are considerable hazards

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Ongoing maintenance efforts occur on town roads and highways
- The 2014 Clinton County Hazard Mitigation Plan describes one effort to continue developing the action plan for the Chazy Lake Dam, and another to develop a plan for the Hamlet of Lyon Mountain, since there are mines beneath the hamlet

Mitigation and Risk Reduction Needs:

- Further culvert replacements and repairs are needed

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Clinton County noted that distribution of homeowner and renter preparedness materials could be beneficial to the community

COMMUNITY	TOWN OF DANNEMORA
POPULATION	4,900
FIRM DATE	9/28/2007
NFIP STATUS	Not Participating
FIRM STATUS	All Zone C and X – Published FIRM
LOMC(S)	0
POLICIES	N/A
INSURANCE IN FORCE	N/A
# PAID LOSSES	N/A
TOTAL LOSSES PAID	N/A
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	N/A
ORDINANCE EFFECTIVE DATE	Not Participating
CRS RATING	N/A

VILLAGE OF DANNEMORA | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- No needs identified

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2014 Clinton County Hazard Mitigation Plan describes an action to monitor and clear roads for the public and emergency vehicles, and to maintain village infrastructure for emergency situations

Mitigation and Risk Reduction Needs:

- No needs identified

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Distribution of countywide homeowner and renter preparedness materials could be beneficial to the community

COMMUNITY	VILLAGE OF DANNEMORA
POPULATION	3,935
FIRM DATE	9/28/2007
NFIP STATUS	Not Participating
FIRM STATUS	All Zone C and X Published
LOMC(S)	0
POLICIES	N/A
INSURANCE IN FORCE	N/A
# PAID LOSSES	N/A
TOTAL LOSSES PAID	N/A
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	N/A
ORDINANCE EFFECTIVE DATE	Not Participating
CRS RATING	N/A

Note: The Village of Dannemora did not provide input during the Discovery process. Clinton County and neighboring town representatives shared the community's information.

TOWN OF PERU | CLINTON COUNTY

The Town of Peru should also consult the Ausable River Watershed Discovery report to review the Recommendations for Future Risk MAP Project Scope, if available.

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- The main trunk of the sewer line, which runs along either side of the Little Ausable River, could be impacted by floodwaters, but it is not currently mapped in the Special Flood Hazard Area. A new flood study was requested to assist with upgrading the sewer system. The sewage plant receiving the sewer line is near 22 North Bend Road and Sunrise Drive. Special attention should be paid to the large slope across the river
- In spring 2018, an ice jam on the Ausable River at the Carpenter Flats Bridge caused the bridge to be closed temporarily
- Ice jams are considerable hazards during the winter
- Wetlands within the town are considered environmentally sensitive areas that are prioritized for protection
- Some residences shown in the Special Flood Hazard Area should not be, such as near the Salmon River (west of Peasleeville Road at the Town of Peru jurisdictional boundary and left of Strackville Road at the west boundary) and Blake Brook (near Willis Camp Road, Blake Brook Road, and the Adirondack Road)

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2014 Clinton County Hazard Mitigation Plan describes an action to monitor and clear roads for use by the public and emergency vehicles, and to maintain town infrastructure for emergency situations

Mitigation and Risk Reduction Needs:

- Seeking funding to move the sewer line out of the Special Flood Hazard Area
- Clinton County would like to acquire structures in and around Heyworth Mason Park due to flooding from the Little Ausable River
- Culvert and sewage pipe upgrades are needed near State Route 22, between the Little Ausable River and Spaulding Brook
- Elevate the Route 9 bridge deck over the Ausable River and assess the restoration potential of the stream bed underneath to improve water flow
- A retaining wall along the Little Ausable River, adjacent to the Little Ausable River Trail, near Mason Hill Road and Heyworth Mason Park, could be increased in height to provide additional flood protection
- In the next seven to 15 years, mitigate flood hazards at the Peru Water Resource Recovery Facility

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- No needs identified

COMMUNITY	TOWN OF PERU
POPULATION	7,000
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	13
POLICIES	9
INSURANCE IN FORCE	\$2,233,000
# PAID LOSSES	15
TOTAL LOSSES PAID	\$424,454
CAV	9/13/1991
CAC	7/21/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	9/25/2007
CRS RATING	N/A



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CITY OF PLATTSBURGH | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- The Water Resource Recovery Facility has experienced intense flooding from the Saranac River and Lake Champlain
- Bushey Street, east of Route 22 and the Saranac River, experiences flooding due to sediment buildup in the river
- Prioritized study areas for the city are the Saranac River within the city limits, and Scotion Creek; the creek is in the Great Chazy watershed, north of the Saranac River watershed
- Underwood Avenue and Dock Street, along Route 9 North, experience major flooding from Lake Champlain
- Clinton County noted the need for a prioritized study of the Saranac River for the entire length within the city
- Other hazards impacting the city include high winds, snow, and ice jams

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- New York State Electric and Gas Corporation has cleaned up the site near the Saranac River, which extends from a location approximately 300 feet upstream of the Wood Deck Bridge to the Kennedy Bridge
- Structure buyouts along floodprone areas of the Saranac River have been completed in the past near Schuyler Terrace
- The 2014 Clinton County Hazard Mitigation Plan describes an action to provide advance notice of dams overtopping through the installation of remote level-monitoring equipment

Mitigation and Risk Reduction Needs:

- Flood hazard cleanup is ongoing at the New York State Electric and Gas Corporation Saranac site, which contributes to mitigation action on behalf of the city
- Within the next three years, the city would like to further develop a dam safety public notification program and list contact information for people living in the flood hazard areas downstream of the Mead and Patterson Dams, which are downstream of West Brook and Patterson Brooks
- Within the next seven years, the North Margaret Street sewage plant pump station, on Route 9 North by the Avete Center, could achieve high lake-level protection with mitigation (this location is in the Great Chazy watershed, north of the Saranac River watershed)
- In the next few years, the Water Resource Recovery Facility could achieve more protection with construction of a new berm
- Within the next 15 years, additional buyouts may be made on Bushey Street, east of Route 22 and the Saranac River

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Clinton County noted that distribution of homeowner and renter preparedness materials could be beneficial to the community

COMMUNITY	CITY OF PLATTSBURGH
POPULATION	19,990
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	20
POLICIES	36
INSURANCE IN FORCE	\$7,951,600
# PAID LOSSES	17
TOTAL LOSSES PAID	\$1,280,088
CAV	9/27/2006
CAC	7/20/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	8/2/2007
CRS RATING	N/A

TOWN OF PLATTSBURGH | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Representatives from the Town of Beekmantown identified ice jam flood risk along the Saranac River around Morrisonville, Main Street, and surrounding areas in the Town of Plattsburgh
- Clinton County noted the need for a prioritized study of the Saranac River for its entire length within the town
- Clinton County noted ice jams and sediment buildup occurred on the Saranac River in the Hamlet of Redwood affecting approximately eight structures in the town
- County representatives noted that homes on Bushey Street, east of Route 22 and the Saranac River, flood due to sediment buildup
- County representatives explained that the Patterson Reservoir System and the Mead Reservoir System experience flooding; these reservoir systems have dams built in 1910 which require mitigation, and the reservoir system is tied to Sandburn Brook, West Brook, and Mead Brook

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2014 Clinton County Hazard Mitigation Plan describes an action to elevate infrastructure and a retaining wall to reduce flood risk near Route 9 and the Lake Champlain beach adjacent to the wastewater lift station, next to the North Country Chamber of Commerce (this location is in the Great Chazy watershed and north of the Saranac River watershed)
- Provide notice in advance of dam overtopping by installation of remote level monitoring equipment

Mitigation and Risk Reduction Needs:

- No needs identified

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Distribution of countywide homeowner and renter preparedness materials could be beneficial to the community

COMMUNITY	TOWN OF PLATTSBURGH
POPULATION	11,870
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	37
POLICIES	41
INSURANCE IN FORCE	\$11,736,200
# PAID LOSSES	24
TOTAL LOSSES PAID	\$565,905
CAV	9/27/2006
CAC	7/20/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	9/10/2007
CRS RATING	N/A

Note: The Town of Plattsburgh did not provide input during the Discovery process. Clinton County and neighboring town representatives shared the community's information.



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TOWN OF SARANAC | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Clinton County noted the need for a prioritized study of the Saranac River for the entire length within the community and for Cold Brook from the confluence with North Branch Saranac River to the headwaters of Cold Brook
- Franklin County noted the need for a study of True Brook from the confluence with the Saranac River to the headwaters of True Brook
- Flooding on Bowen Road near the Saranac River could affect fire department response time, potentially adding four miles to driving routes
- Beaver dams are located along True Brook and True Brook Road, near Fall and Smithkill Brooks
- Ice jams on the Saranac River, between Cane Road and Ore Bed Road (Hamlet of Redford), affect eight structures
- Spring flooding occurs along the Saranac River from State Route 3 to the Cold Brook Road crossing
- Flooding occurs along Cold Brook at the Cold Brook Road crossing
- There is a landslide risk upstream of Hardscrabble Road, on the Saranac River
- The Lake Champlain shoreline is considered a critical area, and record lake levels were documented along Lake Champlain in 2011
- Fire is also a known hazard in the area

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2014 Clinton County Hazard Mitigation Plan describes an action for elevating 1/4 mile of Bowen Road to prevent street flooding
- The town was engaged in buyouts along the Saranac River floodplain in 2015

Mitigation and Risk Reduction Needs:

- Repair Standish Road bridge at Cold Brook, due to flood damage
- In general, increase culvert sizes in the town at unspecified locations
- Formulating an emergency response plan in the 11-dam corridor
- In the next one to three years, store and house sand and salt for snowstorms
- In the next one to three years, develop an inventory of culverts, with locations and sizes
- In the next three to seven years, construct a roadway to connect the Standish Road campsite and bar to Cold Brook Road; the campsite and bar are accessible only by a three-mile temporary detour road

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- The county has suggested that countywide homeowner and renter preparedness material could be beneficial

COMMUNITY	TOWN OF SARANAC
POPULATION	4,005
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	11
POLICIES	7
INSURANCE IN FORCE	\$703,300
# PAID LOSSES	7
TOTAL LOSSES PAID	\$34,102
CAV	8/26/2014
CAC	2/14/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	5/21/2007
CRS RATING	N/A



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TOWN OF SCHUYLER FALLS | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Clinton County noted the need for a prioritized study of the Saranac River for its entire length within the town
- The town is requesting a restudy of the Saranac River due to flooding issues along the entire length within the community
- Ice jam flooding occurs along the Saranac River in the Morrisonville area (a populated area), along Main Street, and in the surrounding areas
- There is a landfill south of the Saranac River on Sand Road
- Snow is a hazard concern
- Clinton County noted the presence of sensitive wetland areas along the Saranac River near Ladue Street

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The fire department building along the Saranac River was rebuilt following flooding from an unspecified event
- A large buyout program was completed in 1996 to remove structures from the Saranac River flood hazard area, which included 19 residences and three vacant lots along the Saranac River in the Hamlet of Morrisonville
- Clinton County noted that wetland design is occurring in an area where previous buyouts occurred
- A comprehensive community plan is underway

Mitigation and Risk Reduction Needs:

- According to Clinton County, the hydroelectric dam on the Saranac River at Goddeau Road has been compromised by flood damage
- The town is interested in a buyout of over 38 acres, which includes 10 properties, at the end of River Street near the Saranac River, to convert the area to a wetland or park
- Need a power station with a flood notification and alert system near Harney Bridge Road and Kent Falls Road
- Box culvert work should be completed at the Mark Road stream crossing south of Irish Settlement Road, for an unnamed flooding source

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Distribution of countywide homeowner and renter preparedness materials could be beneficial for communities

COMMUNITY	TOWN OF SCHUYLER FALLS
POPULATION	5,180
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	10
POLICIES	14
INSURANCE IN FORCE	\$3,128,600
# PAID LOSSES	22
TOTAL LOSSES PAID	\$232,595
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	6/26/2007
CRS RATING	N/A



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TOWN OF NORTH ELBA | ESSEX COUNTY

The Town of North Elba should also consult the Ausable River and Upper Hudson Watershed Discovery reports to review the Recommendations for Future Risk MAP Project Scope, if available.

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Drainage issues exist between Echo Lake and Mirror Lake
- Undersized culverts exist near the Echo Pond outlet
- River Road is often closed due to ice jam flooding along the West Branch Ausable River, especially near its intersection with Deerwood Trail, which requires rerouting of traffic and emergency services

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Many culverts were replaced after Hurricane Irene
- Drainage work is being done on side roads of the Echo Pond outlet
- The 2011 Essex County Hazard Mitigation Plan describes an action to perform stream clearing and replace of the Alcohol Brook Bridge and culvert on Adirondack Loj Road

Mitigation and Risk Reduction Needs:

- A new salt and sand shed is needed to prevent runoff contamination

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Essex County officials requested training from the Adirondack Park Agency, NYSDEC, and the U.S. Army Corps of Engineers (USACE) on permitting, regulations (including NFIP), and enforcement for all communities

COMMUNITY	TOWN OF NORTH ELBA
POPULATION	8,955
FIRM DATE	8/23/2001
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	0
POLICIES	9
INSURANCE IN FORCE	\$2,658,300
# PAID LOSSES	12
TOTAL LOSSES PAID	\$205,800
CAV	6/30/2014
CAC	9/28/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	7/20/1979
CRS RATING	N/A



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VILLAGE OF SARANAC LAKE | ESSEX & FRANKLIN

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Structures adjacent to the Saranac River in the village are vulnerable to and often damaged by flooding, including a warehouse building and Scotts Florist and Greenhouse
- There are pinch-points in the Saranac River through the Village of Saranac Lake, from the Lake Flower Dam downstream to Pine Street
- The Best Western and Gauthier's Saranac Lake Inn along Duprey Street flood from Lake Flower/Saranac River
- In the northeast area of the village, the wastewater treatment plant on the Saranac River flooded in 2011 and needs to be elevated to reduce flood risk
- Erosion occurring at the Franklin Falls Pond Dam on the Saranac River in the Town of Franklin may lead to potential failure, which would affect recreation in the area and create flood risk downstream
- Church Street and Woodruff Street crossings on the Saranac River and Corey's Road experience flooding
- The Main Street hydroelectric dam on Lake Flower: the reach downstream is narrow along Dorsey Street and would likely become inundated and cause backwater flooding; there are also four bridges in this reach that become pinch points for flooding; the village is aiming to replace the dam in 2040; affected areas include Dorsey Street and Woodruff Street
- Steep development has occurred along the hillside
- Snowstorms, ice storms, windstorms, and forest fires are also concerns

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The village built a new retaining wall in 2014 to reduce the risk to the Harrietstown Town Hall, located near the Saranac River, from the 0.2-percent-annual-chance flood; the original retaining wall was damaged by flooding in 2011 and two well heads were elevated to the 0.2-percent-annual-chance flood level in 2011
- Dewdrop Inn at 27 Broadway is abandoning its lower floors with redevelopment funds; the building is typically the first local riverside building to flood along the Saranac River
- The 2015 Franklin County Hazard Mitigation Plan (HMP) describes an effort to stabilize Route 3 from Denny Park to 334 Bloomingdale Avenue to reduce yearly flooding and erosion along the Saranac River
- The 2011 Essex County HMP and 2015 Franklin County HMP include actions for the village to review the summary and modifications to be made to zoning and permitting plans to participate in the FireWise Communities program

COMMUNITY	VILLAGE OF SARANAC LAKE
POPULATION	5,405
FIRM DATE	1/2/1992
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	25
POLICIES	19
INSURANCE IN FORCE	\$4,962,700
# PAID LOSSES	4
TOTAL LOSSES PAID	\$10,248
CAV	9/29/2016
CAC	N/A
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	11/28/2016
CRS RATING	N/A

Mitigation and Risk Reduction Needs:

- In the next one to three years, improve Dam Emergency Action Plans
- In the next one to three years, coordinate with the NYS Department of Environmental Conservation (NYSDEC) for communication on water release expected from dams, or create an alert system on volume expected
- In the next one to three years, relocate village offices to less floodprone areas
- In the next one to three years, purchase generators for village offices
- In the next three to seven years, a comprehensive engineering and dam plan and dam breach study are needed along the Saranac Lakes Chain
- In the next three to seven years, additional riverine flooding protection on the Saranac River is needed for two well heads, the Waste Water Treatment Plant, and the Water Treatment Plant
- In the next three to seven years, rebuild Moose Pond Bridge over the Saranac River
- In the next three to seven years, increase the river's hydraulic capacity through Saranac Lake through dredging and/or building floodwalls, in particular the Dorsey Street reach (downstream of the Main Street Dam/Lake Flower Dam)
- In the next seven to 15 years, elevate the bridge near the wastewater treatment plant to reduce the risk of flooding from the Saranac River
- In the next seven to 15 years, buy out the two eligible Repetitive Loss properties (warehouse building and Scotts Florist and Greenhouse) along the Saranac River
- Bartlett Carry Dam (Upper Saranac Lake) needs a dam breach study to determine hazard areas
- Create an assessment district to raise funds for maintenance and operation of the Bartlett Carry Dam, which is currently funded on a voluntary basis by adjacent property owners
- Obtain funding for emergency action plans in Saranac Lakes Chain communities
- Discussed bringing all dams along the Saranac Lakes Chain under a State authority for better control/coordination of water levels and flood releases
- Elevate the Dewdrop Inn along the Saranac River
- Undergrounding of utilities is needed in the business area north of Lake Flower

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Essex County officials requested training from the Adirondack Park Agency, NYSDEC, and the U.S. Army Corps of Engineers (USACE) on permitting, regulations (including NFIP), and enforcement for all communities

TOWN OF ST. ARMAND | ESSEX COUNTY

The Town of St. Armand should also consult the Ausable River Watershed Discovery report to review the Recommendations for Future Risk MAP Project Scope, if available.

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Essex County noted the need for a prioritized study of the Saranac River for the entire length within the town
- The wastewater treatment plant could be vulnerable to flooding. It flooded previously when the adjacent Saranac River overflowed its banks in late April 2011; a study of the river was requested
- Moose Pond Bridge, which crosses the Saranac River, floods
- If the Main Street Dam in the Village of Saranac Lake failed, it would cause backwater flooding downstream along the Saranac River

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2011 Essex County Hazard Mitigation Plan describes an action for a road improvement project for Moose Pond Road to mitigate flooding from the Saranac River

Mitigation and Risk Reduction Needs:

- In the next seven to 15 years, the town should consider relocation of the wastewater treatment plant

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Essex County officials requested training from the Adirondack Park Agency, NYSDEC, and the U.S. Army Corps of Engineers (USACE) on permitting, regulations (including NFIP), and enforcement for all communities

COMMUNITY	TOWN OF ST. ARMAND
POPULATION	1,550
FIRM DATE	2/5/1986
NFIP STATUS	Participating
FIRM STATUS	Original
LOMC(S)	3
POLICIES	3
INSURANCE IN FORCE	\$783,000
# PAID LOSSES	0
TOTAL LOSSES PAID	\$0
CAV	N/A
CAC	04/12/2016
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	3/22/1996
CRS RATING	N/A

Note: The Town of St. Armand did not provide input during the Discovery process. Essex County and neighboring town representatives shared the community's information.

TOWN OF WILMINGTON | ESSEX COUNTY

The Town of Wilmington should also consult the Ausable River Watershed Discovery report to review the Recommendations for Future Risk MAP Project Scope, if available.

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- No needs identified

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2011 Essex County Hazard Mitigation Plan describes an action for the town to enforce new International Building Center seismic ratings and to educate contractors

Mitigation and Risk Reduction Needs:

- Undersized culverts need to be replaced

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Essex County officials requested training from the Adirondack Park Agency, NYSDEC, and the U.S. Army Corps of Engineers (USACE) on permitting, regulations (including NFIP), and enforcement for all communities

COMMUNITY	TOWN OF WILMINGTON
POPULATION	1,255
FIRM DATE	11/16/1995
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	4
POLICIES	9
INSURANCE IN FORCE	\$2,421,300
# PAID LOSSES	3
TOTAL LOSSES PAID	\$17,137
CAV	10/28/2013
CAC	9/28/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	7/3/1985
CRS RATING	N/A

Note: The Town of Wilmington did not provide input during the Discovery process. Essex County and neighboring town representatives shared the community's information.

TOWN OF BELLMONT | FRANKLIN COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- No needs identified

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2015 Franklin County Hazard Mitigation Plan describes an action to reduce flooding along Ingraham Stream, that previously resulted in road washouts on Ragged Lake Road, and recommends replacing Twin Bridges with a two-lane, 40-foot-long bridge

Mitigation and Risk Reduction Needs:

- No needs identified

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- No needs identified

COMMUNITY	TOWN OF BELLMONT
POPULATION	1,435
FIRM DATE	8/5/1985
NFIP STATUS	Participating
FIRM STATUS	All Zone A, C, and X - No Elevations Determined
LOMC(S)	80
POLICIES	22
INSURANCE IN FORCE	\$3,556,400
# PAID LOSSES	1
TOTAL LOSSES PAID	\$2,945.00
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	3/23/1987
CRS RATING	N/A

Note: The Town of Bellmont did not provide input during the Discovery process. Franklin County and neighboring town representatives shared the community's information.



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TOWN OF BRIGHTON | FRANKLIN COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Slush Pond Road and Mountain Pond Road experience flooding from Jenkins Brook and Mountain Pond

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- A new development code will be created to protect environmentally sensitive areas
- The 2015 Franklin County Hazard Mitigation Plan describes an action to control annual flood damage and washouts on Keese Mill Road by replacing three large culverts

Mitigation and Risk Reduction Needs:

- Dams and power lines at unspecified locations in the town need additional maintenance
- Remove beaver dam activity on Rickerson Brook to prevent water backup and erosion
- Replace an old, small, and eroded culvert on Wardner Road

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- No needs identified

COMMUNITY	TOWN OF BRIGHTON
POPULATION	1,435
FIRM DATE	N/A Rescinded
NFIP STATUS	Participating
FIRM STATUS	All Zone C and X - No Published FIRM
LOMC(S)	0
POLICIES	2
INSURANCE IN FORCE	\$700,000
# PAID LOSSES	0
TOTAL LOSSES PAID	\$0
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	7/23/2008
CRS RATING	N/A



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TOWN OF DUANE | FRANKLIN COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- No needs identified

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2015 Franklin County Hazard Mitigation Plan describes an action to reduce annual flooding and washouts on Studley Hill Road along Salmon River by raising the road bed, installing a larger culvert, and adjusting the road's shoulders

Mitigation and Risk Reduction Needs:

- No needs identified

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- No needs identified

COMMUNITY	TOWN OF DUANE
POPULATION	175
FIRM DATE	N/A
NFIP STATUS	Participating
FIRM STATUS	All zone C and X - No Published FIRM
LOMC(S)	0
POLICIES	N/A
INSURANCE IN FORCE	N/A
# PAID LOSSES	N/A
TOTAL LOSSES PAID	N/A
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	12/5/2013
CRS RATING	N/A

Note: The Town of Duane did not provide input during the Discovery process. Franklin County and neighboring town representatives shared the community's information.

TOWN OF FRANKLIN | FRANKLIN COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Base Flood Elevations and cross-section data for the Saranac River are requested for flooding sources throughout the town, especially for the Saranac River for its entire length within the town
- Loon Lake will likely experience development in the future, which will necessitate flood risk identification
- Plank Road has had arch plates and culverts washed out at both Lincoln Brook and Frenchs Brook
- The Goldsmith Road bridge over the Saranac River experiences high sedimentation and a revised analysis is needed to reflect the flood risk
- County Route 55 on Rickerson Brook has been washed out during storms, presenting emergency response concerns as there are wildfires in this area, and revised analyses would better reflect this hazard
- The Bigelow Road bridge, east of County Route 55, over Negro Brook is no longer passable; it is a metal skeleton. Concerns were raised regarding emergency vehicle access as only ATVs can currently cross the brook
- An updated hydrology and hydraulic study is requested for Alder Brook along State Route 3, where two culverts must handle increasing water runoff from Alder Brook Mountain into the Saranac River, with higher impacts on the west side
- Franklin Falls Road, Franklin Falls Pond/Dam, and Union Falls Pond/Dam on the Saranac River may have flood risk

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- A road that experienced a washout was paved at an unspecified location near the Roslyn Lake area
- Bridges for County Road 45 were replaced with bigger bridges after the washout
- The 2015 Franklin County Hazard Mitigation Plan describes an action to reduce annual flooding and washouts on Plank Road by installing a bridge over Frenchs Brook

COMMUNITY	TOWN OF FRANKLIN
POPULATION	1,140
FIRM DATE	9/24/1984
NFIP STATUS	Participating
FIRM STATUS	All Zone A, C, and X - No Elevations Determined
LOMC(S)	13
POLICIES	8
INSURANCE IN FORCE	\$1,492,800
# PAID LOSSES	0
TOTAL LOSSES PAID	\$0
CAV	9/23/2015
CAC	3/3/2004
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	5/3/2016
CRS RATING	N/A



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Mitigation and Risk Reduction Needs:

- Constructing a new bridge crossing to replace the Bigelow Road bridge would help ensure emergency vehicles can cross Negro Brook
- Plank Road arch plates and culverts at the Lincoln Brook and Frenchs Brook crossings need repairs or replacement with larger culverts
- Wetland maps and land inventory with land use categories should be acquired
- The access road network should be expanded
- A concrete span would mitigate future heavy flow events across Alder Brook along State Route 3 (off Alder Brook Mountain)
- The town noted some culverts should be replaced with bridges
- Within the next seven years, Split Rock Road culvert maintenance and updates can be performed at Rickerson Brook. Near the impoundment area at Split Rock Road, there is a sizable body of water that funnels through a small corrugated metal pipe under the road.
- Within the next 15 years, two bridges on County Route 55 need prioritized repairs; they are at the Rickerson Brook and Twobridge Brook crossings

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Fire risk assessments and outdoor recreation safety support would benefit forest areas

TOWN OF HARRIETSTOWN | FRANKLIN COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- An updated hydrology and hydraulic study is needed for the Saranac River, for its entire length within the community, to address rainfall/snowmelt increase and the impacts of dam and earth dam flooding
- The Church Street bridge, located over the Saranac River, floods often
- Bottlenecking occurs near Dorsey Street along the west side of the Saranac River during times of heavy flow; this results in frequent flooding. Ice jams, debris, and numerous road crossings also contribute to the problem
- Dewdrop Inn at 27 Broadway experiences flooding at the structure's lowest levels; it is typically the first riverside building to flood along the Saranac River in Saranac Lake
- Lake Flower Dam and the four bridges immediately downstream on the Saranac River are vulnerable to flooding
- Moose Pond Bridge experiences flooding from the Saranac River, which strands nearby residents
- Bartlett Carry Dam, a privately owned dam on the Upper Saranac Lake, experiences flooding but the needed maintenance is outside of shareholder funding ability. In addition, downstream of the dam, Bartlett Carry Road experiences flooding. The dam is the downstream extent of Upper Saranac Lake, an eight-mile-long lake stretch that should be restudied
- If the Bartlett Carry Dam were breached, it would cause a downstream chain reaction of flooding and would put the Bartlett Carry Road bridge at risk

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Two well heads by the Water Treatment Plant have been elevated north of Lake Flower
- The 2015 Franklin County Hazard Mitigation Plan describes an action to reduce annual flooding and washouts on Corey Road by replacing the culvert and monitoring the roadway

COMMUNITY	TOWN OF HARRIETSTOWN
POPULATION	5,710
FIRM DATE	1/3/1985
NFIP STATUS	Participating
FIRM STATUS	Original
LOMC(S)	19
POLICIES	13
INSURANCE IN FORCE	\$2,335,000
# PAID LOSSES	0
TOTAL LOSSES PAID	\$0
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	5/14/2015
CRS RATING	N/A



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Mitigation and Risk Reduction Needs:

- Construction of a low bridge by Bigelow Road would facilitate wildfire prevention and aid in rescue of all-terrain vehicles
- In the next three years, footprint building data could be collected
- Within one to three years, existing floodwalls could be raised along the Saranac River
- Within one to three years, bottleneck flood hazard for the Saranac River along Dorsey Street could be mitigated
- Within one to three years, the levee around the Water Treatment Plant could be assessed
- Dam Emergency Action Plans should be written and approved within the next three years
- Contacts should be coordinated and organized throughout the dam chain, from Harrietstown to Lake Champlain, within the next three years
- In the next three years, a tax district could be created in the upper Saranac Lake area, with the government overseeing the Bartlett Carry Dam, to aid in funding repairs
- Within the next seven years, the Dewdrop Inn could be elevated above flood levels depicted for the Saranac River
- In the next three to seven years, a comprehensive engineering and dam plan and dam breach study are needed along the Saranac Lakes Chain
- The Saranac River within town limits should be dredged to remove pinch points in the next few years
- In three to seven years, protection could be added for two additional well heads at the waste water treatment plant and water treatment plant on the Saranac River
- In the next 15 years, a restudy of the Saranac River could be used to secure funding to harden and floodproof at-risk structures
- Two vacant and for-sale Repetitive Loss properties could be purchased in the next 15 years (warehouse building and Scotts Florist and Greenhouse)
- Within the next 15 years, the Saranac Lake Dam could be sold to New York State for the State to control its releases

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Coordination with the Silver Jackets is recommended for studies that will aid justification of funding for hardening structures

TOWN OF SANTA CLARA | FRANKLIN COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Bartlett Carry Dam, a private earthen dam in Harrietstown, forms the Upper Saranac Lake. The water level will drop four feet upstream in the Town of Santa Clara if the dam is breached, which will cause flooding in downstream communities in a chain-reaction effect
- In the next three to seven years, the county's FIRMs need to be revised to incorporate flood hazard data
- Community requests a restudy with a detailed analysis of the Saranac River from the boundary between the Town of Harrietstown and the Town of Santa Clara to the headwaters of the Saranac River at Upper Saranac Lake

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Maintenance to control invasive milfoil species in nearby lakes
- The 2015 Franklin County Hazard Mitigation Plan describes an action to control flood damage and washouts on Keese Mill Road by replacing its culvert

Mitigation and Risk Reduction Needs:

- Phosphate control and remediation are needed to control the algae blooms that may result from beaver dams in the lower end of Upper Saranac Lake; this can change the characteristics of the lake
- An invasive species known as milfoil is a problem in the three-lake system, including Harrietstown; constant maintenance is required; 25,000 to 35,000 visitors come annually to the lake system (Fish Creek Ponds campsite), although the town itself only has 400 residents. The campsite surrounds Square Pond, First Pond, and South Pond
- In the next one to three years, replace or repair Bartlett Carry Dam for Upper Saranac Lake; a dam breach is possible without ongoing mitigation; may need to pursue additional funding or oversight outside of the local communities

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- No needs identified

COMMUNITY	TOWN OF SANTA CLARA
POPULATION	345
FIRM DATE	N/A
NFIP STATUS	Participating
FIRM STATUS	All Zone C and X - No Published FIRM
LOMC(S)	0
POLICIES	3
INSURANCE IN FORCE	\$1,050,000
# PAID LOSSES	0
TOTAL LOSSES PAID	\$0
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	A
ORDINANCE EFFECTIVE DATE	3/25/1985
CRS RATING	N/A



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TOWN OF TUPPER LAKE | FRANKLIN COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- On Tupper Lake in the Village of Tupper Lake, both the wastewater treatment facility and Tupper Lake Municipal Park flood multiple times throughout the year (this location is outside and west of the Saranac River watershed)

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2015 Franklin County Hazard Mitigation Plan describes an action to control flood damage and washouts on Mill Street by replacing the bridge

Mitigation and Risk Reduction Needs:

- No needs identified

TRAINING, OUTREACH, AND/OR PLANNING SUPPORT NEEDS IDENTIFIED:

- Viable high-water marks: Waste Water Treatment Facility on Tupper Lake has 1-percent-annual-chance flood marker on electric utility poles (this location is outside and west of the Saranac River watershed)

COMMUNITY	TOWN OF TUPPER LAKE
POPULATION	5,970
FIRM DATE	1/2/1950 Rescinded
NFIP STATUS	Participating
FIRM STATUS	All Zone C and X - No Published FIRM
LOMC(S)	1
POLICIES	8
INSURANCE IN FORCE	\$2,030,000
# PAID LOSSES	2
TOTAL LOSSES PAID	\$4,271
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	A
ORDINANCE EFFECTIVE DATE	3/25/1985
CRS RATING	N/A



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RECOMMENDATIONS FOR FUTURE RISK MAP PROJECT SCOPE

The priorities for new or revised floodplain mapping within the Saranac River Watershed are a result of this Discovery project, through which FEMA learned what flood risk data and resources are needed to inform local decisions. Pre-Discovery community engagement meetings were held for the Saranac River Watershed via webinar from June 11 to 19, 2018. The purpose of the pre-Discovery webinars was to discuss the Discovery process and collect information on community mapping needs, as well as determine if any data that might exist could be incorporated into a possible Risk MAP project. Counties, communities, and other interested stakeholders throughout the watershed area were invited to the webinars.

Following the pre-Discovery engagement meetings, the project team held two Discovery meetings for the stakeholders within the Saranac River Watershed on July 24 and 25, 2018. During these meetings, the project team followed up on the information collected during the pre-Discovery webinars and provided an opportunity for the communities and other stakeholders to identify mapping needs. The project team used the information collected throughout the Discovery process, as well as information collected from previous stakeholder engagement meetings, to develop this proposed scope. All study requests will be entered into FEMA's Coordinated Needs Management Strategy (CNMS) database and considered for future floodplain mapping projects.

The Saranac River Watershed consists of three counties and 21 communities. Participation in the Discovery process included all three counties and 15 communities attending the pre-Discovery webinars, completing the questionnaire, attending the in-person Discovery meetings, or responding to follow-up correspondence.

In the Saranac River Watershed, Clinton County has digital countywide Flood Insurance Rate Maps (FIRMs), whereas Essex and Franklin Counties have not been modernized to a digital countywide product. New detailed and approximate studies, along with digital countywide maps in Essex and Franklin Counties, would assist communities in enforcing floodplain regulations and managing development.

The Saranac River Watershed study requests listed in the tables below were prioritized based on community interest expressed during the Discovery process, the presence of existing data and flood maps, the proximity to recent or proposed development, and the status of the water body in the CNMS database.

Many local officials provided general comments during the 2018 Discovery process regarding the need for updated hydrologic and hydraulic analyses of flood hazards, dam breach analyses for numerous dams along the Saranac River and its tributaries, Dam Emergency Action Plans and State-level regulation of dams, Emergency Response Plans, Wildfire Protection Plans, updated flood hazard maps, and mitigation of areas of known flood risk in the Saranac River watershed. Local officials also identified the following locations as being high priorities for restudy: the Saranac River at its confluence with Lake Champlain and near the Water Resource Recovery facility, Bushey Street east of Route 22, and Underwood Avenue and Dock Street along Route 9 North in the City of Plattsburgh; Ladue Street (adjacent to wetlands), Main Street at Morrisonville (due to ice jams), the Hamlet of Redwood (due to ice jams and sediment buildup), and the Clinton County Landfill on Sand Road in the Towns of Plattsburgh and Schuyler Falls; Cane Road and Ore Bed Road in the Hamlet of Redford (due to ice jams); Franklin Falls Pond/Dam and Union Falls Pond/Dam in the Town of Franklin; the Waste Water Treatment Plant in the Town of St. Armand and Village

of Saranac Lake; Moose Pond Bridge in the Town of St. Armand; the Lake Flower area and hydraulic structures downstream of the lake in the Village of Saranac Lake (where businesses and village buildings have repetitive flood risk); and Bartlett Carry Dam and Upper Saranac Lake in the Towns of Harrietstown and Santa Clara. A high restudy priority was also identified for Mead Brook/Mead Reservoir/West Brook and Patterson Brook/Patterson Reservoir due to aging dams for the reservoirs and needs for inundation mapping in the vicinity. In addition, as an outcome of the Lake Champlain Watershed Discovery project, which was completed in 2016, the following locations were identified as needs within the Saranac River Watershed: Lake Champlain in the City of Plattsburgh due to repeated flood events; Saranac River in the Town of Saranac due to annual flood events; and True Brook in the Town of Saranac due to new home construction and the need for more up-to-date flood hazard maps.



DETAILED STUDY REQUESTS

High Priority Detailed Study Requests

RANKING	COMMUNITY REQUESTING STUDY (and community name, if different)	DETAILED LOCATION DESCRIPTION	MILEAGE OF WATER BODY STUDY REQUEST (within the area of concern)	DESCRIPTION OF REQUEST AND RISK TO ADDRESS (What does the community want? Is there new development nearby?)
1	Town of Schuyler Falls (Clinton County)	Saranac River – for the entire length within the community	16.28	An updated study was requested by the Town of Schuyler Falls. The Town noted specific flood hazards along the Saranac River including: Ladue Street and Main Street (at Morrisonville Fire Department); and the Clinton County Landfill (west of Morrisonville).
2	Town of St. Armand (Essex County)	Saranac River – for the entire length within the community	17.85	An updated study was requested to address concerns with Moose Pond Road Bridge and the wastewater treatment plant (WWTP), which are subject to flood hazards. The Town of St. Armand is considering relocating the WWTP and has already elevated two wellheads above the 0.2-percent-annual-chance flood elevation.
3	City of Plattsburgh (Clinton County)	Saranac River – for the entire length within the community	5.82	The City of Plattsburgh requested a restudy to address and inform a number of concerns. The Water Resource Recovery Facility at the mouth of the Saranac River needs a new berm, since it flooded in 2011. The berm along the Underwood Estates Mobile Home Park/ Underwood Avenue also needs repairs and an extension following ice jam/sediment build-up that resulted in flooding in 2018. The city also cited the Route 9 bridge area as experiencing repeat flooding.
4	Town of Plattsburgh (Clinton County)	Saranac River – for the entire length within the community	18.73	An updated study was requested to address concerns in the Town of Plattsburgh related to sediment buildup on Bushey Street, especially for homes not part of previous buyout. The Town noted that it would help to buy out more houses.

High Priority Detailed Study Requests cont'd

RANKING	COMMUNITY REQUESTING STUDY (and community name, if different)	DETAILED LOCATION DESCRIPTION	MILEAGE OF WATER BODY STUDY REQUEST (within the area of concern)	DESCRIPTION OF REQUEST AND RISK TO ADDRESS (What does the community want? Is there new development nearby?)
5	Town of Saranac (Clinton County)	Saranac River – for the entire length within the community	9.75	Community requests updated study, rainfall/snowmelt increase flood risk, flooding impacts buildings, hydraulic and earthen dam structures, dam breach analysis, potential for mitigation projects, CNMS mapping need.
6	Village of Saranac Lake (Essex and Franklin Counties)	Saranac River (including Lake Flower) – for the entire length within the community	2.51	The Village of Saranac Lake requested a restudy and is especially interested in the downstream reach in Essex County, particularly with respect to the Waste Water Treatment Plant (WWTP) that flooded in 2011, which the village is considering protecting with a new levee. The Village identified several other flood mitigation needs. These include: elevating or upsizing vulnerable bridges spanning the river; elevating or relocating vulnerable businesses; completing a buyout for repetitive loss properties; addressing chokepoints in the river and increasing the Saranac River flow capacity through the Village through dredging or making structural improvements along the shoreline.
7	Town of Harrietstown (Franklin County)	Saranac River – for the entire length within the community	23.31	An updated study was requested to address concerns in the Town of Harrietstown, the private Bartlett Carry Dam is a breach concern. Dam failure, a concern also cited by the Village of Saranac Lake, could have a domino effect along the Saranac River and threaten the Bartlett Carry Road Bridge, approximately 1,000 feet downstream of the dam.

High Priority Detailed Study Requests cont'd

RANKING	COMMUNITY REQUESTING STUDY (and community name, if different)	DETAILED LOCATION DESCRIPTION	MILEAGE OF WATER BODY STUDY REQUEST (within the area of concern)	DESCRIPTION OF REQUEST AND RISK TO ADDRESS (What does the community want? Is there new development nearby?)
8	Town of Santa Clara (Franklin County)	Saranac River – from the Town of Harrietstown/Town of Santa Clara boundary to the headwaters of the Saranac River at Upper Saranac Lake	8.58	The Town of Santa Clara noted that a breach of the Bartlett Carry Dam (downstream in Harrietstown) would drop the lake water level by 4 feet in town. The Town requested a restudy with detailed analysis.
9	Town of Black Brook (Clinton County)	Saranac River – for the entire length within the community	13.55	An updated study for the Saranac River was requested to better represent current flood hazards. Note: this request came from Clinton County, rather than the Town of Black Brook.
10	Town of Franklin (Franklin County)	Saranac River – for the entire length within the community	9.73	The Town of Franklin indicated a concern with Franklin Falls Pond and Franklin Falls Dam along the Saranac River and requested a restudy.
11	Town of Plattsburgh (Clinton County)	Patterson Brook – from the confluence with Mead Brook to the Patterson Reservoir at Sandburn Brook	1.8	An updated study was requested for Patterson Brook. The reservoir system has a dam dated from 1910.
12	Town of Plattsburgh (Clinton County)	Mead Brook – Mead Reservoir – West Brook – from the confluence with the Saranac River to the headwaters of West Brook	3.58	An updated study was requested for the Mead Reservoir System, which experiences flooding. The reservoir system has a dam dated from 1910 and is tied to Sandburn Brook, West Brook, and Mead Brook.
13	Town of Beekmantown (Clinton County)	Unnamed flooding source (at Greenbriar Way crossing) – for the reach just upstream and downstream of Greenbriar Way	0.70	The Town of Beekman requested a restudy; this is especially needed at Greenbriar Way, which is subject to scour from high-velocity runoff from the mountains. The current FIRM does not show any SFHA for this location.

Medium Priority Detailed Study Requests

RANKING	COMMUNITY REQUESTING STUDY (and community name, if different)	DETAILED LOCATION DESCRIPTION	MILEAGE OF WATER BODY STUDY REQUEST (within the area of concern)	DESCRIPTION OF REQUEST AND RISK TO ADDRESS (What does the community want? Is there new development nearby?)
14	Town of Beekmantown (Clinton County)	Sandburn Brook (at General Leroy Manor Road crossing) – for the reach just upstream and downstream of the road	6.70	The Town of Beekman cited the need for a restudy near General Leroy Manor Road, a location subject to scour from high-velocity runoff from the mountains. The Town noted the culvert was built on fill which washed out and was replaced without engineering analysis; there is a need for a larger culvert. Most of the Town has no identified SFHAs.
15	Town of Saranac (Clinton County)	True Brook – from the confluence with the Saranac River to the headwaters of True Brook	7.80	There is an identified need for a restudy of True Brook, specifically at True Brook Road, to address concerns with flood hazards associated with beaver dams.
16	Town of Saranac (Clinton County)	Cold Brook from the confluence with the North Branch Saranac River to the headwaters of Cold Brook	5.84	An updated study was requested on Cold Brook, specifically at Square Dashnaw Road and Standish Road.

Lower Priority Detailed Study Requests

RANKING	COMMUNITY REQUESTING STUDY (and community name, if different)	DETAILED LOCATION DESCRIPTION	MILEAGE OF WATER BODY STUDY REQUEST (within the area of concern)	DESCRIPTION OF REQUEST AND RISK TO ADDRESS (What does the community want? Is there new development nearby?)
17	Town of Franklin (Franklin County)	North Branch Saranac River – for the entire length within the community	15.54	A restudy was requested for North Branch Saranac River, for the entire length within the community, specifically at Goldsmith Road.
18	Town of Franklin (Franklin County)	Negro Brook – from the confluence with Rickerson Brook to the headwaters of Negro Brook	10.43	The Town of Franklin requested a restudy of Negro Brook specifically at Bigelow Road, east of County Route 55. The bridge is no longer passable and emergency vehicles cannot currently cross the brook.
19	Town of Franklin (Franklin County)	Alder Brook – from the confluence with North Branch Saranac River to the headwaters of Alder Brook	10.21	The Town of Franklin requested a restudy for Alder Brook along State Route 3, where two culverts handle increasing water runoff from Alder Brook Mountain into the North Branch Saranac River.
20	Town of Franklin (Franklin County)	Lincoln Brook – for the entire length within the community	3.89	A restudy was requested for Lincoln Brook, specifically at Plank Road, to address washed out culverts and arch plates.
21	Town of Brighton (Franklin County)	Rickerson Brook – from the confluence with Lyon Brook to the headwaters of Rickerson Brook	5.70	The Town of Brighton requests a restudy of Rickerson Brook to address beaver dam activity and water backup/erosion.
22	Town of Franklin (Franklin County)	Frenchs Brook – for the entire length within the community	3.82	A restudy was requested for Frenchs Brook, specifically at Plank Road, to address washed out culverts and arch plates.

Total Detailed Stream Study Request Mileage: 202.12 miles

APPROXIMATE STUDY REQUESTS

New Approximate Study Requests

Some stakeholders requested detailed studies that may be more appropriate as approximate studies due to location and level of development.

RANKING	COMMUNITY REQUESTING STUDY (and community name, if different)	DETAILED LOCATION DESCRIPTION	MILEAGE OF WATER BODY STUDY REQUEST (within the area of concern)	DESCRIPTION OF REQUEST AND RISK TO ADDRESS (What does the community want? Is there new development nearby?)
1	Town of Altona (Clinton County)	Unnamed tributary to Sandburn Brook (this is only one stream within the Saranac River watershed)	1.01	An updated study was requested by the Town of Altona to address concerns with flood hazards associated with beaver dams.

Total Approximate Stream Study Requests: 1.01 miles



TOTAL WATERSHED STUDY REQUESTS SUMMARY

Total Detailed Stream Study Request Mileage: 202.12 miles

Total New Approximate Stream Study Requests: 1.01 miles

TOTAL MILEAGE OF ALL REQUESTS: 203.13 miles



STUDY REQUESTS OUTSIDE PROJECT AREA

Finally, a number of communities provided study requests for stream segments located outside of the project area. These segments will not be prioritized as part of this effort; however, they will be added to FEMA's CNMS database for inclusion in a future project.

COMMUNITY REQUESTING STUDY (and community name, if different)	DETAILED LOCATION DESCRIPTION	MILEAGE OF WATER BODY STUDY REQUEST (within the area of concern)	DESCRIPTION OF REQUEST AND RISK TO ADDRESS (What does the community want? Is there new development nearby?)
City of Plattsburgh (Clinton County)	Scomotion Creek – at the confluence with Lake Champlain to 0.3 mile upstream	0.30	Townhomes in the City of Plattsburgh experience basement flooding due to sediment buildup in Scomotion Creek. The City also cited two pump stations along Margaret Street as needing high-lake level protection.
Town of Beekmantown (Clinton County)	Kennon Brook (in the vicinity of Military Turnpike) – for the entire length within the community	3.03	The Town of Beekmantown cited several locations along Military Turnpike as subject to scour from high-velocity runoff from the mountains. The current FIRM does not show any SFHA for this roadway area.
Town of Altona (Clinton County)	Witherspoon Brook Tributary 2 (Rainbow Banquet Hall property) – for the reach just upstream and downstream of the property	0.70	In the Town of Altona flooding impacts the Rainbow Banquet Hall property (in the north part of town). An updated flood study with elevations was requested to address a LOMR.
Town of Peru (Clinton County)	Little Ausable River (Heyworth Mason Park area)	0.40	The Town of Peru indicated Heyworth Mason Park (buyouts on the Little Ausable River) as a flood risk.
Town of Schuyler Falls (Clinton County)	Unnamed flooding source (at Mark Road crossing, approximately 1 mile west of Irish Settlement Road and Military Turnpike intersection) – for the entire length within the community	0.70	The Town of Schuyler Falls cited Mark Road (south of Irish Settlement Road) as a flood risk.



RESOURCES

The following information is intended to support resource sharing between local communities and State and Federal agencies. As one of the outcomes of Risk MAP, communities will have updated flood risk information that can inform other efforts, such as reducing the impact of flooding to structures, lowering flood insurance premiums, planning to mitigate risk and reduce losses, understanding flood hazard data, trainings to support staff, seeking grants for hazard mitigation projects, and learning more about the information used in this report. These resources were gathered in response to requests from communities during the Discovery process.

REDUCING YOUR COMMUNITY'S FLOOD INSURANCE PREMIUMS

The National Flood Insurance Program (NFIP) aims to reduce the impact of flooding on private and public structures by providing affordable insurance to property owners and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures. Overall, the program reduces the socioeconomic impact of disasters by promoting the purchase and retention of general risk insurance, but also of flood insurance, specifically. All of the communities within the Saranac River Watershed participate in the NFIP. The information below can help address any questions community staff and residents may have about flood insurance.

FEMA's FloodSmart website contains publicly available resources that can be used to help communities be better prepared against their flood risk and includes information on:

- How to buy or renew flood insurance;
- Why you need flood insurance;
- How to understand your risk;
- How to reduce your cost; and
- How to file a claim.

Visit FEMA's FloodSmart website to learn more about the NFIP at www.FloodSmart.gov.



REDUCING YOUR COMMUNITY'S FLOOD INSURANCE PREMIUMS

The NFIP's Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS:

1. Reduce flood damage to insurable property;
2. Strengthen and support the insurance aspects of the NFIP; and
3. Encourage a comprehensive approach to floodplain management.

Through the CRS program, participating communities can find success:

- Using stronger regulatory standards;
- Obtaining a heightened awareness and outreach towards flood risk;
- Gaining credibility, recognition, and political support;
- Protecting the environment, increasing quality of life, and supporting resilience;
- Avoiding flood damage and reducing vulnerability;
- Improving capability and organizing internal programs and operations;
- Broadening flood insurance coverage and achieving more accurate ratings; and
- Forging partnerships with State, Federal, or other local agencies, businesses, non-profits, and elected officials.

While no communities within the Saranac River Watershed currently participate in the CRS program, as of May 1, 2018, there were 35 communities in New York State that are enrolled in the CRS and are eligible for discounts on flood insurance premiums (FEMA 2018, NFIP Flood Insurance Manual).

For more information about ways to reduce insurance premiums and increase your community's resilience through the CRS program, visit <https://www.fema.gov/national-flood-insurance-program-community-rating-system>.

For additional questions, contact Marianne Luhrs of FEMA Region II at Marianne.Luhrs@fema.dhs.gov.

MITIGATION PLANNING TO REDUCE LOSS OF LIFE AND PROPERTY

Disasters can cause loss of life; damage buildings and infrastructure; and have consequences for a community's economic, social, and environmental well-being. Hazard mitigation is the effort to reduce loss of life and property and is most effective when implemented under a comprehensive, long-term plan. Through the Hazard Mitigation Plan process, communities identify risks and vulnerabilities associated with natural disasters, and develop long-term strategies for protecting people and property from future hazard events. Benefits of mitigation planning include:

- Protecting public safety and preventing loss of life and injury;
- Reducing harm to existing and future development;
- Maintaining community continuity and strengthening the social connections that are essential for recovery;
- Preventing damage to a community's unique economic, cultural, and environmental assets;

- Minimizing operational downtime and accelerating recovery of government and business after disasters;
- Reducing the costs of disaster response and recovery and the exposure of risk for first responders; and
- Helping accomplish other community objectives, such as capital improvements, infrastructure protection, open space preservation, and economic resiliency.

The *Summary of Community Risks Identified* section of this report describes mitigation actions identified by the communities during the Discovery effort. This information can be integrated into local hazard mitigation planning efforts and included, if not already present, in the Hazard Mitigation Plan.

FEMA provides more information about hazard mitigation planning, mitigation planning requirements, Hazard Mitigation Plan status, planning process and mitigation strategy development resources, and contact information to obtain additional guidance and trainings online at <https://www.fema.gov/media-library/assets/documents/30627>.

The New York State Division of Homeland Security and Emergency Services leads hazard mitigation planning efforts in New York State and offers state-wide resources. For more information, visit <http://www.dhses.ny.gov/recovery/mitigation/planning.cfm>.

In addition, the draft 2019 New York State Hazard Mitigation Plan provides extensive information on hazards and mitigation planning efforts. Access the draft plan online at <http://mitigateny.availabs.org/>.

UNDERSTANDING THE VALIDITY OF FLOOD HAZARD DATA

To maintain the validity of flood hazard data over time, FEMA assesses its inventory of FIRMs and flood risk studies and determines whether conditions on the ground are still adequately represented on the FIRM panels for that area. When the information on the FIRM does not adequately represent actual conditions, it is considered a “flood hazard mapping need” and a new or updated FEMA flood hazard study for the area may be warranted.

FEMA uses GIS technology and develops policies, requirements, and procedures to coordinate the management of flood hazard mapping needs in the Coordinated Needs Management Strategy (CNMS). Through the CNMS, FEMA identifies and tracks the lifecycle of community mapping needs.

The CNMS is beneficial for community officials to understand the validity of data in order to make informed decisions on community planning and flood mitigation. For a detailed summary of how the CNMS was utilized within the Saranac River Watershed, please reference the *Recommendations for Future Risk MAP Scope* section.

Access the CNMS Data Viewer via <https://msc.fema.gov/cnms/>.

For more information, visit <https://www.fema.gov/coordinated-needs-management-strategy>.

TRAININGS TO SUPPORT LOCAL MITIGATION EFFORTS

Various Federal and State agencies provide trainings for flood mitigation efforts and hazard mitigation planning. Throughout this Discovery effort, many communities expressed interest in trainings for staff. The resources below can support those needs.

TRAINING SOURCE	PURPOSE
FEMA	<p>Emergency Management Institute (EMI)</p> <p>The EMI develops and delivers emergency management training to enhance the capabilities of State, local, and Tribal government officials to minimize the impact of disasters and emergencies on the public. Particular emphasis is placed on governing doctrine such as the National Response Framework, National Incident Management System, and the National Preparedness Guidelines.</p> <p>For more information, visit https://training.fema.gov/.</p> <p><i>Highlighted training opportunities:</i></p> <ul style="list-style-type: none"> • Mitigation eGrants for the Subgrant Applicant (IS0030.b) • Mitigation Planning for Local and Tribal Communities (IS0318) • Mitigation Basics for Mitigation Staff (training per hazard type: Tornado-IS0319, Wildfire-IS0320, Hurricane-IS0321, Flood-IS0322, Earthquake-IS0323)
ASFPM	<p>Association of State Floodplain Managers (ASFPM) Trainings</p> <p>The ASFPM provides trainings, both in-person and online, to support local floodplain management and floodplain managers.</p> <p>For more information, visit http://www.floods.org/index.asp?menuID=237&firstlevelmenuID=182.</p> <p><i>Related resource:</i></p> <ul style="list-style-type: none"> • FEMA has developed the National Flood Insurance Program Floodplain Management Requirements: A Study Guide and Desk Reference for Local Officials (FEMA 480) to support floodplain managers obtaining their Certified Floodplain Manager (CFM) designation and to assist when implementing local floodplain management ordinances. <p>For more information, visit https://www.fema.gov/media-library/assets/documents/902.</p>
NYSDEC	<p>The New York State Department of Environmental Conservation can provide community staff trainings related to the NFIP and floodplain regulations.</p> <p>For more information, contact Floodplain Management staff at floodplain@dec.ny.gov.</p>

SEEKING GRANTS AND SUPPORT FOR HAZARD MITIGATION PROJECTS

Various Federal and State agencies provide grant funding for mitigation projects, though some have prerequisites, such as receiving a Presidential Major Disaster Declaration or having an active Hazard Mitigation Plan. Furthermore, the New York State Hazard Mitigation Plan will provide information on previously approved mitigation projects, grant sources, and links to additional mitigation resources. Access the draft 2019 New York State Hazard Mitigation Plan online at <http://mitigateny.availabs.org/>.

This list is not intended to be exhaustive and links provided below should be consulted for up-to-date information.

GRANT SOURCE	PURPOSE
FEMA	Hazard Mitigation Grant Program A statewide competitive grant available after a Presidential Major Disaster Declaration for post-disaster, All-Hazard Mitigation Plans and projects. These are generally due to the State 12 months after a declaration. For more information, visit: https://www.fema.gov/hazard-mitigation-grant-program .
FEMA	Pre-Disaster Mitigation Grant Program A nationally competitive grant available annually for pre-disaster All-Hazard Mitigation Plans and projects. Applications are due to the State about three months after a Federal announcement, which typically occurs in the spring. For more information, visit https://www.fema.gov/pre-disaster-mitigation-grant-program .
FEMA	Flood Mitigation Assistance Grant Program A nationally competitive grant available annually for pre-disaster flood hazard funding of plans and projects to reduce flood damage risk to structures with flood insurance coverage. Applications are generally due to the State approximately three months after a Federal announcement, which typically occurs in the spring. For more information, visit https://www.fema.gov/flood-mitigation-assistance-grant-program .
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)	Various Grant Programs HUD has offered various categories of grant support in the past. The Capacity Building for Community Development and Affordable Housing and Lead-Based Paint Hazard Reduction program are two recent funding opportunities with potential for relevance in supporting hazard mitigation. For more information, visit https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo .
HUD	Community Development Block Grant (CDBG) HUD provides flexible grants to help cities, counties, and States recover from Presidential Major Disaster Declarations subject to the availability of supplemental appropriations. Projects seeking grant support must address a disaster-related impact, direct or indirect, in a Presidentially declared county for the covered disaster, be a CDBG eligible activity, and meeting a CDBG national objective. For more information, visit https://www.hudexchange.info/programs/cdbg-dr/ .
NY DEPARTMENT OF ENVIRONMENTAL CONSERVATION	Various Grant Programs Some grant categories previously available in New York include Solid and Hazardous Waste, Water Protection, Watershed-based programs, Environmental Cleanup, Wildlife Protection, Land and Forest Protection, Environmental Justice, Climate Change, Food Scraps Reduction, Food Donation, and Food Scraps Recycling programs. For more information, visit https://www.dec.ny.gov/pubs/grants.html .

GRANT SOURCE	PURPOSE
NY DEPARTMENT OF HOMELAND SECURITY AND EMERGENCY SERVICES	<p>Various Grant Programs</p> <p>Grant program categories recently available in New York, which can be applicable to mitigation activities, include Regional Catastrophic Planning, Transit Security, Assistance to Firefighters, and Coastal Fish and Wildlife Service. For more information, visit http://www.dhses.ny.gov/grants/.</p> <p>To view current State and Federal funding opportunities that encourage the development and implementation of long-term, cost effective, and resilience mitigation projects, visit http://mitigateny.availabs.org/strategies/funding.</p>
NY DEPARTMENT OF STATE	<p>Various Grant Programs</p> <p>NY Department of State offers a number of funding programs including (but not limited to) Smart Growth Grants, Watershed Protections, Environmental Protection Fund, and Local Waterfront Revitalization Program grants. For more information, visit https://www.dos.ny.gov/grants.html.</p>
NY ENVIRONMENTAL FACILITIES CORPORATION	<p>Various Grant Programs</p> <p>The Environmental Facilities Corporation is a public benefit corporation that provides financial and technical assistance to communities by providing low-cost financing for water quality infrastructure projects. For more information, visit https://www.efc.ny.gov/.</p>
NY GRANTS REFORM	<p>Streamlining State Grant Processes</p> <p>A Master Contract for Grants has been released to reduce time and costs for both New York State and grantees. This portal allows communities to search for open grants from various State agencies from one location. For more information, visit https://grantsmanagement.ny.gov.</p>
NY GOVERNOR'S OFFICE OF STORM RECOVERY	<p>NY Rising</p> <p>Although there are no longer new communities coming into the NY Rising program, the website can be consulted to track project progress and for additional open funding opportunities. For more information, visit https://stormrecovery.ny.gov/.</p>
U.S. ARMY CORPS OF ENGINEERS	<p>Various Grant Programs</p> <p>Some recent grants from USACE have assisted in management and enhancement of natural resources, research on a variety of environmental topics, environmental issues, nearshore data collection, and education and training on environmental maintenance and management. For more information, visit https://www.iwr.usace.army.mil/Missions/Flood-Risk-Management/.</p>
U.S. DEPARTMENT OF AGRICULTURE — NATIONAL RESOURCE CONSERVATION SERVICE	<p>Various Grant Programs</p> <p>The National Resource Conservation Service conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damage caused by floods and other natural disasters. Some programs, like the Emergency Watershed Protection Program, may only be provided following a natural disaster. For more information, visit https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/.</p>
U.S. GEOLOGICAL SURVEY	<p>Water Resources National Competitive Grants</p> <p>The USGS, in cooperation with the National Institutes for Water Resources, supports an annual call for proposals to focus on water problems and issues that are of a regional or interstate nature or that relate to a specific program priority identified by the Secretary of the Interior and the Institutes. Projects covered by this program have included evaluation of approaches to water treatment, infrastructure design, retrofitting, maintenance, management, and replacement; alternative approaches and governance mechanisms for integrated management of ground and surface waters; and the evaluation and assessment of conservation practices. For more information, visit https://water.usgs.gov/wrri/national-competitive-grants.php.</p>



Local and regional organizations often support the implementation of mitigation projects through means other than provision of grants. Some of these resources are highlighted below. Since the list is not exhaustive, the county Soil and Water Conservation District or the Adirondacks Lakes Alliance, Inc. can be consulted for insight on additional resources.

GRANT SOURCE	PURPOSE
CHAMPLAIN WATERSHED IMPROVEMENT COALITION OF NY	The Champlain Watershed Improvement Coalition of NY (CWICNY) has a statewide roadside drainage program with the goal of improving the capacity of roadside ditches, which could assist some communities with mitigating flooding sources. For more information, visit https://www.cwicny.org/ .
LAKE CHAMPLAIN BASIN PROGRAM	The Lake Champlain Basin Program has a grant program for water quality and protection projects within the adjacent Lake Champlain Watershed. The program also can provide technical support to communities through the watershed Environmental Assistance Program in conjunction with the USACE. For more information, visit http://www.lcbp.org/about-us/grants-rfps/ .
NORTH ATLANTIC AQUATIC CONNECTIVITY COLLABORATIVE	The North Atlantic Aquatic Connectivity Collaborative can assist communities with prioritizing mitigation activities through their research to analyze culvert capacities to determine if they are undersized. This information could be incorporated into modeling but also could help communities determine where culverts should be resized to mitigate flooding. For more information, visit https://streamcontinuity.org/assessing_crossing_structures/index.htm .



EXPLORING DATA SOURCES USED IN DISCOVERY

Discovery is a process of data mining, collection, and analysis through active collaboration with communities. FEMA gathered a significant amount of data before the Discovery Meeting to focus community engagement on identifying more localized information and sources of data. Additionally, the Region led the review of the Hazard Mitigation Plans, NFIP data, and other local socioeconomic data for each of the jurisdictions prior to the Discovery meetings.

During the Discovery meetings, FEMA asked communities and stakeholders to identify areas of concern that could be addressed during the flood study through updated flood maps, revised ordinances, and desired mitigation projects. The data collected was used to produce the Discovery Map Geodatabase and this Discovery Report. The table below provides an overview of the data collected and utilized.

DATA	UTILIZATION	SOURCE
AVERAGE ANNUAL LOSS	Discovery Map Geodatabase	FEMA Hazus Average Annualized Loss Viewer
BOUNDARIES: COMMUNITY	Discovery Map Geodatabase	FEMA FIRM Database
BOUNDARIES: COUNTY AND STATE	Discovery Map Geodatabase	US Census, NYS GIS Program Office
BOUNDARIES: ADIRONDACK PARK AGENCY	Discovery Report	Adirondack Park Agency
BOUNDARIES: WATERSHED	Discovery Map Geodatabase	USGS National Hydrography
CENSUS BLOCKS	Discovery Map Geodatabase	US Census
COORDINATED NEEDS MANAGEMENT STRATEGY	Discovery Map Geodatabase	FEMA Coordinated Needs Management Strategy
CRS PARTICIPATION	Discovery Report	FEMA Community Information System
DAMS	Discovery Report, Discovery Map Geodatabase	NYSDEC Inventory of Dams
DECLARED DISASTERS	Discovery Report	FEMA Disaster Declaration Database
EARTHQUAKES	Discovery Report	USGS Earthquake Hazards Program
ECONOMIC CHARACTERISTICS	Discovery Report	US Economic Census
EFFECTIVE FLOODPLAINS: SPECIAL FLOOD HAZARD AREAS	Discovery Map Geodatabase	FEMA National Flood Hazard Layer from the Map Service Center
FARMS	Discovery Report	USDA National Agricultural Statistics Service

DATA	UTILIZATION	SOURCE
HAZARD MITIGATION ASSISTANCE GRANTS	Discovery Report	FEMA Hazard Mitigation Assistance Grants Database
ICE JAMS	Discovery Report	USACE Ice Jam Database
IDENTIFIED MITIGATION ACTIONS	Discovery Report, Discovery Map Geodatabase	County Hazard Mitigation Plans, Discovery meetings
INDIVIDUAL ASSISTANCE	Discovery Report	FEMA Individuals and Households Program Database
LAND USE	Discovery Report	National Land Cover Database
LETTERS OF MAP CHANGE	Discovery Report, Discovery Map Geodatabase	FEMA Mapping Information Platform
LEVEE INVENTORY	Discovery Map Geodatabase	FEMA National Levee Inventory Map
LIDAR	Discovery Map Geodatabase	NYS LiDAR
MITIGATION PLAN STATUS AND SUMMARY	Discovery Report	FEMA Mitigation Planning Portal
NATIONAL HYDROGRAPHY STREAM DATA	Discovery Map Geodatabase	FEMA National Flood Hazard Layer from the Map Service Center
NFIP PARTICIPATION	Discovery Report	FEMA Community Information System
POPULATION	Discovery Report	US Census Bureau Quick Facts
PUBLIC ASSISTANCE	Discovery Report	FEMA Public Assistance Database
STREAM GAGES AND FLOWS	Discovery Map Geodatabase	USGS National Water Information System
STRUCTURES	Discovery Map Geodatabase	FEMA National Flood Hazard Layer from the Map Service Center
TOPOGRAPHY	Discovery Map Geodatabase	USGS Topographic Maps
TRANSPORTATION	Discovery Map Geodatabase	NYS GIS Clearinghouse
WATERSHED BACKGROUND INFORMATION	Discovery Report	USDA NRCS Rapid Watershed Assessment Profiles
WILDFIRES	Discovery Report	USFS 2012 Wildland Fire Potential

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LIST OF APPENDICES

A. Discovery Watershed Maps



A series of white, wavy, concentric lines on a dark blue background, resembling topographic map contour lines.

APPENDIX A

REGION II DISCOVERY REPORT DISCOVERY WATERSHED MAPS

SARANAC RIVER WATERSHED | HUC 04150406

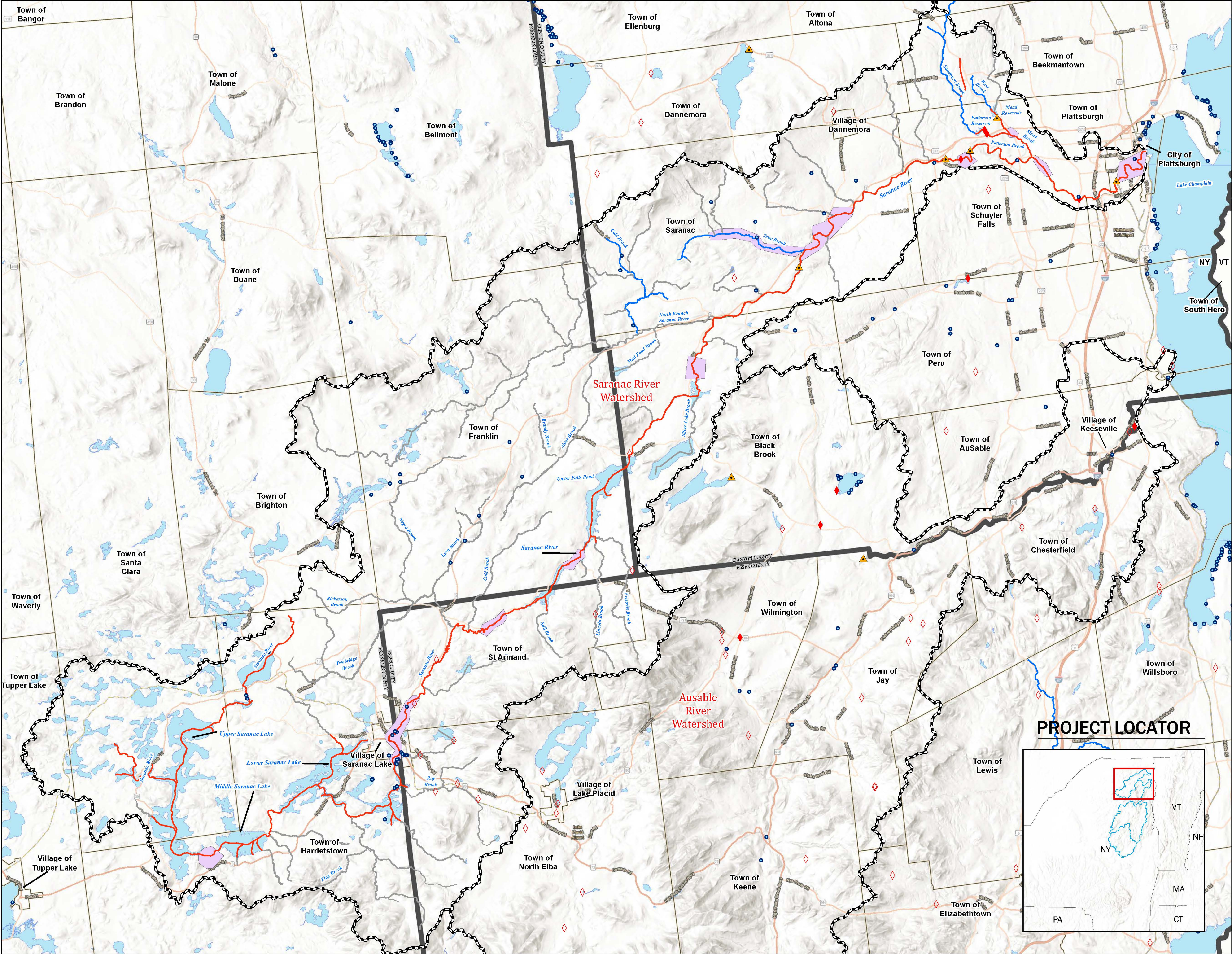
Department of Homeland Security
Federal Emergency Management Agency Region II
26 Federal Plaza, Room 1807
New York, NY 10278

March 2019



FEMA

RiskMAP
Increasing Resilience Together



LEGEND AND NOTES

- Watershed Boundary
- CNMS Request Area
- LOMA

- Dams
- Low Hazard
 - Intermediate Hazard
 - High Hazard

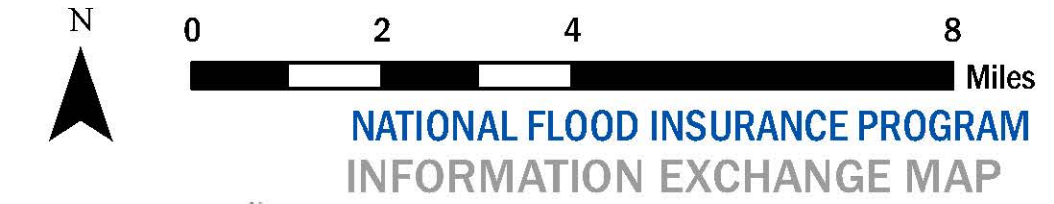
- Stream Priority Ranking
- High
 - Medium
 - Low

Data Sources: FEMA Region II, FEMA Map Service Center, USGS, US Army Corps of Engineers, NOAA, New York State GIS Clearinghouse, and the Adirondack Park Agency.

Additional information provided by local hazard mitigation plans, local jurisdiction GIS data, and Community Discovery interviews.

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors
Sources: Esri, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

1 inch = 2 miles 1:128,000



NATIONAL FLOOD INSURANCE PROGRAM INFORMATION EXCHANGE MAP

NEW YORK DISCOVERY

The community lies in the following watershed(s):
Saranac River Watershed
HUC_8 Code 04150406

Map Contains: COMMUNITY

NUMBER
Altona, Town of
Beekmantown, Town of
Belmont, Town of
Blackbrook, Town of
Brighton, Town of
Dannemora, Town of
Dannemora, Village of
Duane, Town of
Franklin, Town of
Harrietstown, Town of
North Elba, Town of
Peru, Town of
Plattsburgh, City of
Plattsburgh, Town of
Santa Clara, Town of
Saranac, Town of
Saranac Lake, Village of
Schuyler Falls, Town of
St. Armand, Town of
Tupper Lake, Town of
Wilmington, Town of

DATE March 2019

This is a non-regulatory product and is provided to your community for information gathering and sharing purposes only.

PROJECT LOCATOR

