



FEMA

REGION II DISCOVERY REPORT



AUSABLE RIVER WATERSHED | HUC 04150404

CLINTON AND ESSEX 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 Ausable River Watershed.

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

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STUDY INFORMATION

The Federal Emergency Management Agency's (FEMA) 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 and promoting risk discussions within the watershed.

The Discovery process for the Ausable 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 Ausable River Watershed includes communities in Clinton and Essex Counties. This list includes all communities located within the Ausable River Watershed. 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. For the purposes of this Discovery Report, the term "Ausable River Watershed" refers to all communities included in this project.

Clinton County:

Town of AuSable
Town of Black Brook*
Town of Peru*

Essex County:

Town of Chesterfield
Town of Elizabethtown[§]
Town of Jay
Town of Keene[§]
Town of Lewis
Town of Newcomb[§]
Town of North Elba*, [§]
Town of North Hudson[§]
Town of St. Armand*
Town of Willsboro
Town of Wilmington*
Village of Lake Placid
Village of Keeseville[†]

* Also spans Saranac River Watershed

[§] Also spans Upper Hudson Watershed

[†] The Village of Keeseville was dissolved on July 9, 2013. This area is represented by the Town of Chesterfield and the Town of AuSable



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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 Ausable River Watershed, which consists of two counties and 15 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 Ausable 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 Ausable 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 Ausable River Watershed was developed. Data collected from community stakeholders within the watershed during this Discovery process 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 and updated detailed and approximate studies in Clinton and Essex Counties, as well as providing modernized flood maps in a digital format in Essex County. It recommends a total of 31.4 miles for detailed stream studies, which includes four high priority detailed study requests, as well as 42.1 miles for new and updated 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 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 Ausable 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 Ausable River Watershed.



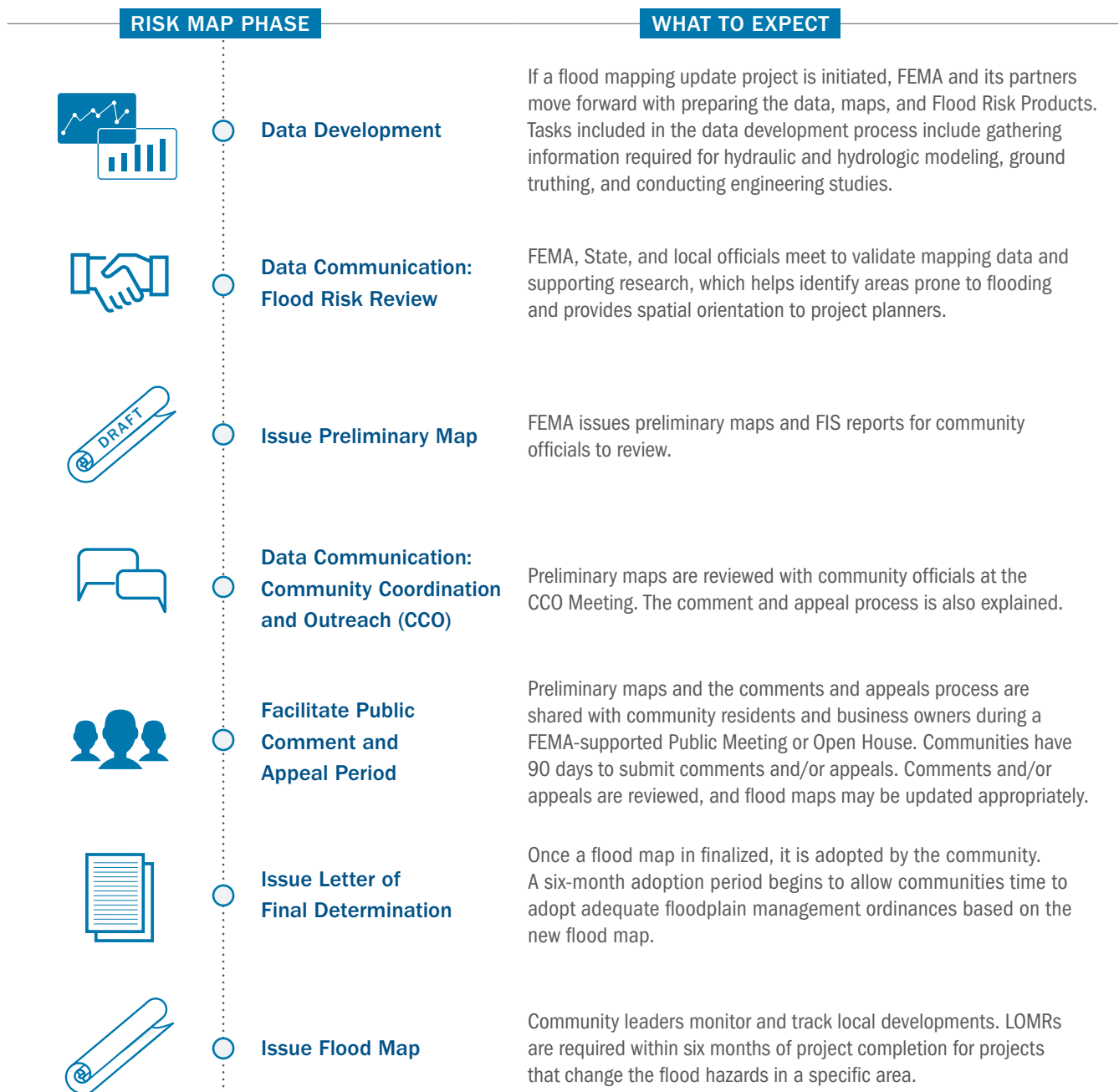
YOUR RISK MAP PROCESS



Discovery Meeting:
July 24, 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	Illustrates overall flood risk within the project area by including the outcomes of assessments completed during the flood risk mapping project.	Can be used by communities as outreach tools to communicate risk to residents more clearly.
 FLOOD RISK DATABASE	Provides communities with geospatial information collected during the risk assessment process. Offers effective ways to visualize and communicate flood risk. Four datasets are included.	
 1. Changes Since Last FIRM (CSLF)	Highlights how the latest FIRMs differ from the previous maps to help communities understand the changes and prepare for adoption of new maps.	Communities can use this to engage residents and businesses about their changing risk and the implications for flood insurance.
 2. Flood Risk Assessment	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.	Can help guide community mitigation efforts by highlighting areas where risk reduction actions may produce the most effective results.
 3. Flood Depth and Analysis Grid	Communicates detailed information about the depth and velocity of floodwaters, as well as the probability of an area being flooded over time.	Officials can use depth grids to show individuals the depth of flooding their home might experience at different flood frequencies.
 4. Areas of Mitigation Interest	Explains how various physical factors affect the severity of flooding.	Information can be tied to the local HMP, which can help projects gain traction and help officials secure funding for those projects.

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 Ausable 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 an in-person Discovery Meeting 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 Ausable River Watershed, as well as for the Saranac 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 Ausable River Watershed, approximately 110 stakeholders were contacted by email or phone, including the following:

- Eighty community officials representing all municipalities within the watershed (see Project Area Community List)
- Thirty 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

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 Ausable River Watershed Discovery process included the following:

- Adirondack Council, Inc.
- Adirondack Park Agency (APA)
- Ausable River Association
- Boquet River Association

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 and Essex Counties. See Appendix C for the webinar presentation and a full list of questions.

Pre-Discovery Information Exchange Webinars

The Ausable 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 *Ausable 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 one in-person Discovery Meeting for the Ausable River Watershed on Tuesday, July 24, 2018, in the Town of Jay 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
- Breakout session guide
- Notetaking guide

4. POST-DISCOVERY ENGAGEMENT

Following the Ausable 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 Ausable 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.



AUSABLE RIVER WATERSHED CHARACTERISTICS AND GEOGRAPHY

The Ausable River Watershed is in northeastern New York State, just west of Lake Champlain, and occupies 514 square miles. Portions of Clinton and Essex Counties lie within the watershed, and the Adirondack Park covers nearly the entire watershed. The watershed ranges in elevation from 95 to 5,323 feet above sea level, with the highest elevations found in the southern part of the watershed (U.S. Department of Agriculture 2011).

The watershed is primarily rural. According to the 2011 National Land Cover Database, only 3.3 percent of the Ausable River Watershed is developed with open space and low-intensity uses, while 0.3 percent is developed with medium- and high-intensity uses. Lake Placid is the only area in the watershed considered urban. Agriculture in this watershed is minimal because of its topography. Forests comprise 87.3 percent of the watershed, followed by wetlands at 2.5 percent, open water at 2 percent, and grassland, shrub, crops, and barren land at less than 2 percent each (National Land Cover Database 2011).

There are 35 dams in the Ausable River Watershed, including seven dams that, if they were to fail, could cause substantial economic loss or the loss of lives (NYSDEC 2018).

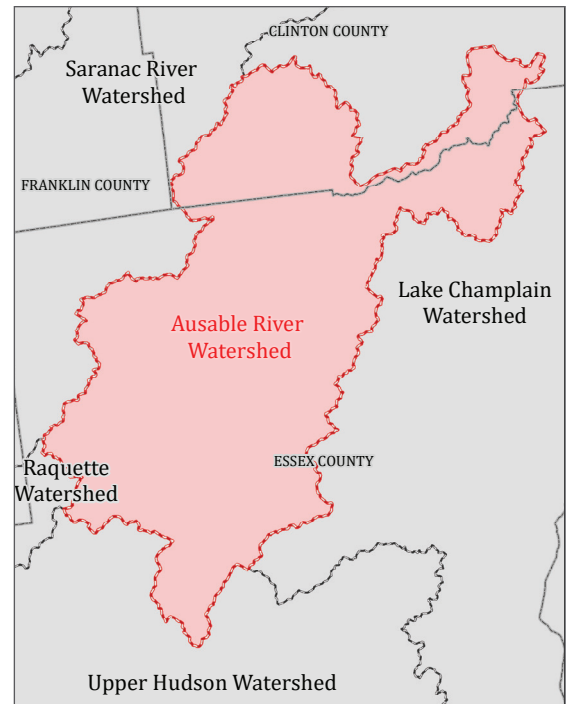


FIGURE 1: Ausable River Watershed

◆ Unclassified Potential	0
◆ No/Negligible Potential	4
◆ Low Potential	24
◆ Intermediate Potential	5
◆ High Potential	2
TOTAL	35

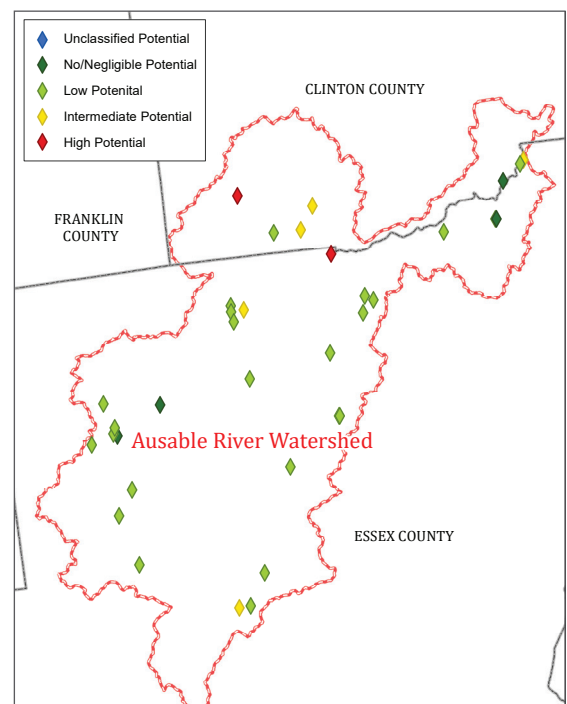


FIGURE 2: Dams within the Ausable River Watershed

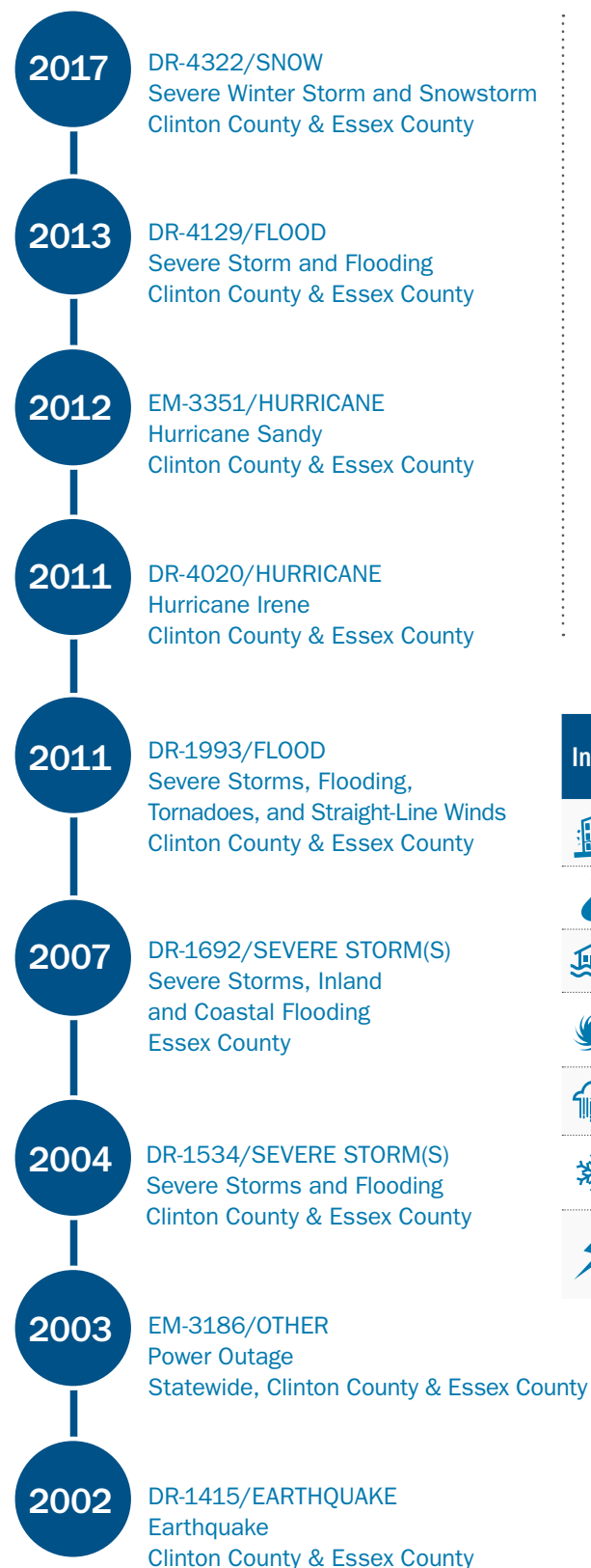
Watershed boundaries are classified based on hydrologic units following a numerical classification system. The Ausable River Watershed boundary is represented by the HUC-8 code of 04150404. The numbers are arranged by scale, with the first two numbers representing the region, and the following two numbers each representing the sub-regions, accounting units, and cataloging units, respectively. The Ausable River Watershed shares boundaries with:

- Lake Champlain Watershed (04150408)
- Raquette Watershed (04150305)
- Saranac River Watershed (04150406)
- Upper Hudson Watershed (02020001)

The Discovery processes for the Saranac River and Upper Hudson Watersheds are currently underway, and a recommended scope of work will be summarized in their respective final reports 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.fema.com/Region2/Discovery>.










WATERSHED DISASTER DECLARATIONS



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 Ausable River Watershed dating back to 1993. The number of declarations informed the need for this Discovery effort within the Ausable River Watershed. The timeline shows the 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	1	(DR): 2002
 FIRE	Clinton County & Essex County	1	(DR): 2001
 FLOOD	Clinton County & Essex County	3	(DR): 2013, 2011, 1996
 HURRICANE	Clinton County & Essex County	4	(DR): 2011, 1999, (EM): 2012, 2005
 SEVERE STORM(S)	Clinton County & Essex County	5	(DR): 2007, 2004, 2000, 1998, 1996
 SNOW	Clinton County & Essex County	3	(DR): 2017, 1998 (EM): 1993
 OTHER (Power Outage & West Nile Virus)	Statewide, Clinton County & Essex 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)



53



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, and Franklin and Essex Counties. The county has a total area of 1,037 square miles, 78.7 square miles of which are water. The estimated population of Clinton County within the Ausable River Watershed is 10,667. 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). The average farm size is 0.4 square miles. Approximately 102.5 square miles of land are in the Ausable 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 Ausable River Watershed, additional areas in the county are also in the Saranac 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).

Common Flooding Concerns

In Clinton County within the Ausable River Watershed, flooding effects are highly dependent on local assets and geography. Ice jams were among the most common flooding concerns shared by communities. Ice jams reportedly occur on the Ausable River in the Towns of AuSable, Black Brook, and Peru. The Town of Black Brook requested updated flood maps for the Ausable River and Palmer Brook, while the Town of Peru noted that the existing flood maps are potentially inaccurate in some locations.

In addition to notes taken by the project team during the Discovery Meetings, the total building asset value in the floodplain was identified as \$311,852,627. Clinton County did not identify any critical facilities within the floodplain (Clinton County NY 2014).

Common Mitigation Concerns

Several themes emerged while compiling feedback from Clinton County communities and through review of the 2014 Clinton County Hazard Mitigation Plan (HMP). Culverts are in need of replacement in the Town of Black Brook on Forestdale and Nelson Roads, as well as in the Town of Peru near State Route 22. Mitigation efforts to restore form and function to the Ausable River in segments through the Town of AuSable, which includes the Hamlet of Keeseville, and the Town of Black Brook were described in the HMP and 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.

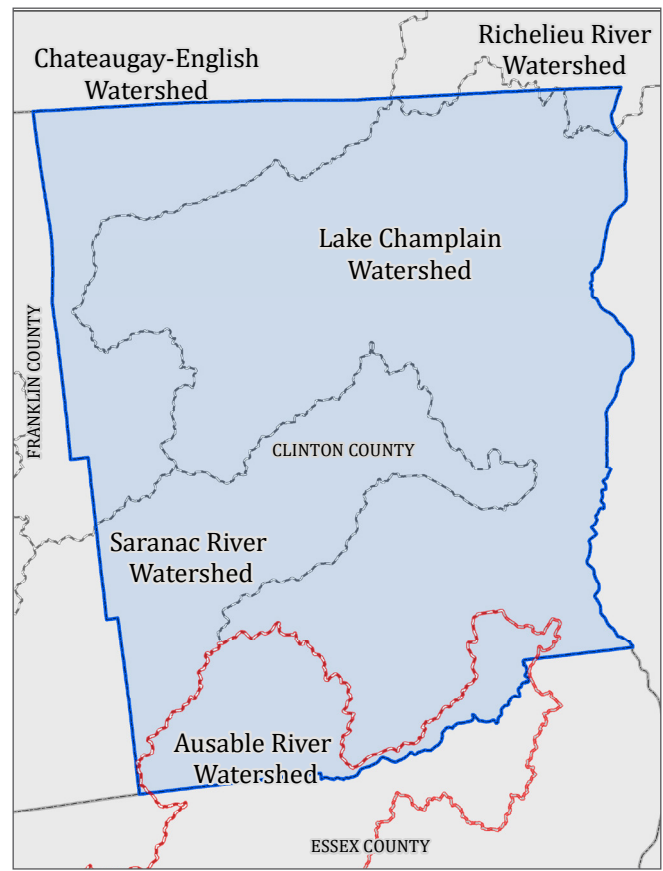


FIGURE 3: The Ausable River Watershed within Clinton County

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)



54



ESTIMATED FARMS
IN WATERSHED

(U.S. DEPARTMENT OF AGRICULTURE 2011)

TOP INDUSTRIES
IN COUNTY:

HEALTH CARE &
SOCIAL ASSISTANCE,
ACCOMMODATION AND
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 2014)



FLOOD



WINTER
STORM



WINDSTORM



DROUGHT



WILDFIRE



DAM FAILURE



ICE STORM

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 Ausable River Watershed is 26,072. 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, 412.1 square miles of Essex County land is in the Ausable 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 Ausable River Watershed, additional areas in the county are also in the Saranac 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).

Common Flooding Concerns

In Essex County, communities that participated in the Discovery process for the Ausable River Watershed shared a variety of flooding concerns and mapping needs with some commonly identified issues. Flooding has caused erosion on Cassidy Road from Carney Brook in the Town of Chesterfield and on Route 9 from The Branch in the Town of Elizabethtown. Several communities cited locally important facilities that are at risk: the sewer plant and Government Offices and emergency shelter near the Ausable River in the Town of Jay; a senior home near the East Branch Ausable River in the Town of Keene; and the wastewater treatment plant in the Town of St. Armand. New, updated flood maps were of interest to many municipalities and were specifically requested by the Towns of Chesterfield, Elizabethtown, Jay, and Keene. The total structure value with flood risks in the county was estimated at \$766,411,503. Essex County has identified 15 critical facilities within the floodplain (Essex County NY 2011).

Common Mitigation Concerns

Communities in Essex County shared several mitigation concerns during the Discovery meetings and described in the expired 2011 Essex County Hazard Mitigation Plan, including multiple old or improperly sized bridges that experience flooding and ice jams. The Towns of Elizabethtown, Chesterfield, Jay, Keene, and North Hudson identified bridges that could use repair, improvement, or elevation. Similarly, the Towns of Chesterfield and Newcomb, as well as the Village of Lake Placid, cited many culverts needed to be enlarged or replaced. The Towns of Jay and St. Armand raised the need to relocate important waste and wastewater treatment facilities out of flood risk areas. Repairing damaged banks and restoration of the Ausable River and its tributaries was an idea shared by the Towns of Jay, Keene, and Lewis. More detailed information on the flooding and mitigation concerns described here can be found within the *Summary of Community Risks Identified* section.

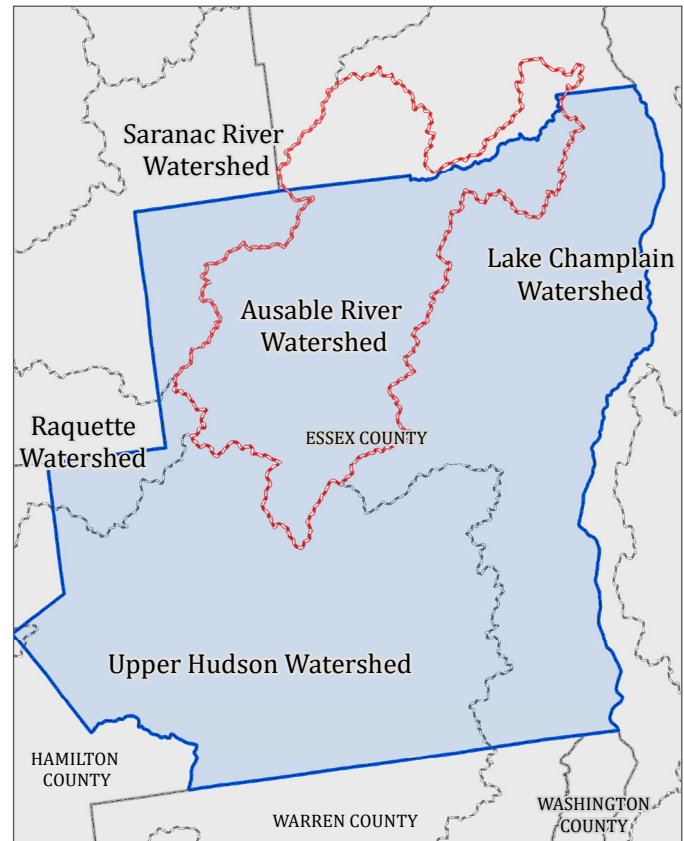


FIGURE 4: The Ausable River Watershed within Essex County

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 watershed 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 Ausable River Watershed, Clinton County has updated digital countywide FIRMs (effective as of 9/28/2007) and Essex County has older, community-based paper FIRMs developed between 1985 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 seven detailed stream study mapping needs and eight approximate studies were identified by watershed stakeholders. There were also seven 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 AUSABLE | CLINTON COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Changes Since Last FIRM maps are requested on any updated stream studies
- Ice jam-associated flooding occurs on the Ausable River
- The Hamlet of Keeseville experiences flooding from the Ausable River upstream of Front Street

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- The 2014 Clinton County Hazard Mitigation Plan describes an action to monitor water levels and regularly remove limbs and debris to reduce the threat of damage
- The 2014 Clinton County Hazard Mitigation Plan calls for coordination with the U.S. Army Corps of Engineers (USACE) to repair or replace a wall structure along the Ausable River through the center of the Hamlet of Keeseville
- 42 homes have been acquired in the past six years

Mitigation and Risk Reduction Needs:

- No needs identified

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

- General outreach training would be beneficial
- Clinton County officials noted that distribution of homeowner and renter preparedness materials could be beneficial to the community

COMMUNITY	TOWN OF AUSABLE
POPULATION	3,145
FIRM DATE	9/28/2007
NFIP STATUS	Participating
FIRM STATUS	All Zone A, C, and X - No Elevations Determined
LOMC(S)	2
POLICIES	8
INSURANCE IN FORCE	\$1,690,300
# PAID LOSSES	14
TOTAL LOSSES PAID	\$510,630
CAV	10/1/2014
CAC	9/30/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	7/16/2007
CRS RATING	N/A

Note: The Town of AuSable 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 BLACK BROOK | CLINTON COUNTY

The Town of Black Brook should also consult the Saranac 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 riprap 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

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

-
- 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

TOWN OF PERU | CLINTON COUNTY

The Town of Peru should also consult the Saranac 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

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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-
- 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

TOWN OF CHESTERFIELD | ESSEX COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- A Changes Since Last FIRM map was requested on any updated stream studies
- Stickney Bridge, where Stickney Bridge Road meets Route 9 and crosses the Ausable River, is undersized and affected by ice jams
- Ice jams often form along the Ausable River in town
- The Hamlet of Keeseville experiences flooding upstream of Front Street, from the Ausable River
- An open culvert affects Little Trout Brook
- The area near the convergence of Gay Brook and the Ausable River experiences high water, ice jams, and erosion

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 educate contractors
- The Plan also describes an action to make the Swinging Bridge area near River Street on the Ausable River in the Hamlet of Keeseville more flood-resistant

Mitigation and Risk Reduction Needs:

- The area around Cassidy Road is eroded by Carney Brook, affecting 10 residences and two businesses, and should be mitigated
- Within the next three years, new remotely operated generators should be acquired
- In the next seven years, the bridge on Little Trout Brook and Port Douglas should be updated
- Between three to seven years, round culverts that overfill should be removed on Little Trout Brook and Port Douglas
- Within the next 15 years, a junkyard on Route 9 and Lower Road needs to be bought out and remediated to stop pollutants from being dumped into the Ausable River

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

- Essex County officials requested training on 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 CHESTERFIELD
POPULATION	2,445
FIRM DATE	5/4/1987
NFIP STATUS	Participating
FIRM STATUS	Original
LOMC(S)	6
POLICIES	8
INSURANCE IN FORCE	\$2,080,400
# PAID LOSSES	8
TOTAL LOSSES PAID	\$230,558
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	7/11/2017
CRS RATING	N/A



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TOWN OF ELIZABETHTOWN | ESSEX COUNTY

The Town of Elizabethtown should also consult the Upper Hudson Watershed Discovery report to review the Recommendations for Future Risk MAP Project Scope, if available.

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Route 9, including at the Maple Street bridge at Route 9N, experiences erosion and flooding at The Branch
- Seven homes by the east side of Route 10 experience flooding north of the Boquet River
- Route 9 at Split Rock Falls on the Boquet River floods multiple times annually
- An access road on Woodruff Street has experienced flooding from The Branch up to two feet in depth
- The Boquet River, in the area of River Street and Lincoln Pond Road, was identified for a restudy
- The convergence of The Branch and Barton Brook near Water Street was identified for a restudy, with the segment of Barton Brook by Noble Terrace Park being the highest priority area
- The county stated that the Hamlet of New Russia floods annually, causing road closures. Nearby flood sources include the Boquet River and Roaring Brook

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Some buyout programs have been completed for previously flooded structures
- A Light Detection and Ranging flyover was completed in Essex County
- The 2011 Essex County Hazard Mitigation Plan describes an action for the town to enforce new International Building Center seismic ratings and also educate contractors

Mitigation and Risk Reduction Needs:

- A tree planting program could be implemented
- Bridge elevations could be increased
- An outreach or notification system for flooding and other risks could be established, as could enrollment in a personal protection program

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

- Community officials shared that social media training on warnings/alerts/disaster response would help increase community preparedness
- 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 ELIZABETHTOWN
POPULATION	1,165
FIRM DATE	1/20/1993
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	0
POLICIES	14
INSURANCE IN FORCE	\$3,280,500
# PAID LOSSES	23
TOTAL LOSSES PAID	\$273,106
CAV	9/18/2013
CAC	9/7/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	7/20/1984
CRS RATING	N/A



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TOWN OF JAY | ESSEX COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Changes Since Last FIRM maps are requested on any updated stream studies
- The removal of the Rome Dam will affect stream hydraulics, so a new hydrology and hydraulic study is needed along the West Branch Ausable River, which is also near an area of potential growth
- Hazards of concern include bank erosion, ice jamming, undersized culverts, windstorms, and general ice damage along the East Branch Ausable River
- The Ausable River Association is seeking grant funding for a comprehensive East Branch Ausable River study for river restoration. Currently, a program funded by the Governor's Office of Storm Recovery for the East Branch Ausable River in the Town of Jay is ongoing
- The Town of Jay Government Offices and emergency shelter is in a low-lying floodplain on a series of bends on the East Branch Ausable River and may be at risk
- The Grove and Jersey Bridges are undersized along the East Branch Ausable River; the abutments of those bridges can exacerbate ice jams
- A sewer plant off Grove Road is impacted by ice jams and flooding from the Ausable River
- The area above Stickney Bridge is prone to ice jams
- Carey Road is too low-lying and experiences flooding because of undersized culverts and an undersized constricting bridge on the East Branch Ausable River.
- Stormwater flooding off steep slopes near Trumbulls Road and Lincoln Hill Lane causes ditches alongside roads to erode, which results in washouts

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Two-foot, open-bottom, arch-shaped culverts were placed on Hazen Road to allow water to flow more freely
- Replace the bridge on Main Street over the Ausable River

Mitigation and Risk Reduction Needs:

- To mitigate ice jams and improve flood resilience, replace the Stickney Bridge where it crosses the Ausable River and the Grove Road and Jersey Bridge Road
- An inventory of bridges is desired

COMMUNITY	TOWN OF JAY
POPULATION	2,505
FIRM DATE	6/17/2002
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	4
POLICIES	29
INSURANCE IN FORCE	\$5,752,800
# PAID LOSSES	165
TOTAL LOSSES PAID	\$3,130,083
CAV	10/18/2013
CAC	9/8/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	6/13/2002
CRS RATING	N/A



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-
- Perform river restoration and repairs to the damaged bank systems in the East Branch Ausable River
 - Remove the Water Treatment Plant on the Ausable River from the at-risk location near Grove Road
 - In one to three years, the community is interested in coordinating with the Governor's Office of Storm Recovery NY Rising project team to acquire structure footprint data
 - Within the next 15 years, Carey Road should be moved farther from the tributary to the East Branch Ausable River
 - Within the next 15 years, the Adirondack Park Agency could extend the hamlet area to preserve the community tax base and enable buyouts

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

- The town is interested in social media and outreach training as well as grant guidance from the NYS Department of Environmental Conservation (NYSDEC) regarding Climate Smart Communities
- Bridge inventory data would benefit planning
- 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 KEENE | ESSEX COUNTY

The Town of Keene should also consult the Upper Hudson Watershed Discovery report to review the Recommendations for Future Risk MAP Project Scope, if available.

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- The area where the Ausable River meets Airport Road is heavily eroded with high sediment loads
- In the Town of Keene during heavy rain events, flooding and bank erosion occurs at the confluence of Gulf Brook and the East Branch Ausable River
- Homes, bridges, and roads along Jones Brook and Gulf Brook are frequently flooded
- The Ausable River Association is seeking grant funding for a comprehensive East Branch Ausable River study for river restoration
- The Styles Brook area is vulnerable to flooding and community requests an updated flood study to assess a misaligned and undersized bridge that causes issues downstream
- Lacey Road Bridge over the East Branch Ausable River was affected by flooding in Hurricane Irene
- The “Neighborhood House,” a senior home in Keene Valley, is an assisted-living facility in a flood-prone area at New York 73 and Country Club Way along the East Branch Ausable River
- Mudslides occurred in 2018 on Cascade Brook, south of Owls Head Road

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Property acquisition beginning in the area near Hurricane Road, where Jones Brook joins Gulf Brook, still has funding needs after coordination with FEMA, the Department of Housing and Urban Development, and NY Rising with the Governor’s Office of Storm Recovery
- Hydrology modeling is being based on 2014 Light Detection and Ranging (LiDAR) data
- The 2011 Essex County Hazard Mitigation Plan describes an action to raise the road height at Hulls Falls Road along the Ausable River, which floods often and is a gauge for flooding around town

COMMUNITY	TOWN OF KEENE
POPULATION	1,105
FIRM DATE	6/5/1985
NFIP STATUS	Participating
FIRM STATUS	All Zone A, C, and X - No Elevation Determined
LOMC(S)	2
POLICIES	33
INSURANCE IN FORCE	\$9,340,100
# PAID LOSSES	31
TOTAL LOSSES PAID	\$922,335
CAV	9/18/2013
CAC	9/28/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	6/5/1985
CRS RATING	N/A

Mitigation and Risk Reduction Needs:

- A bridge on 9N needs to be replaced near where Gulf Brook meets the Ausable River
- Gulf Brook could undergo restoration in the next one to three years
- In the next seven years, the Ausable River can be restored with help from the U.S. Fish and Wildlife Service
- In the next 10 years, wetland areas that once surrounded the Marcy Field Airport along the Ausable River should be re-established
- Within the next 15 years, the road at the airport can be raised for improved use in critical and rescue scenarios
- Replace undersized bridges (Lacey Bridge, Beers Bridge, Keene 9N Bridge, and Styles Brook Bridge) along or near the East Branch Ausable River within the next 15 years

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 LEWIS | ESSEX COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Hurricane Irene overwhelmed roadways and culverts and caused flooding damage to bridges along North Branch Boquet River
- Ice storms are a prioritized local hazard concern

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- Culvert replacement and repair work are ongoing
- The 2011 Essex County Hazard Mitigation Plan describes an action to replace 150 feet of retainer wall along Route 9 at the bottom of First Congregational Church Hill

Mitigation and Risk Reduction Needs:

- Border Release Advance Screening and Selectivity and County Soil and Water can help to prioritize culvert and bridge replacement areas
- Identify stream areas in need of restoration

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

- The community would like assistance to expand engagement efforts in order to better inform residents about hazards and flood insurance
- 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 LEWIS
POPULATION	1,380
FIRM DATE	5/15/1985
NFIP STATUS	Participating
FIRM STATUS	All Zone A, C, and X - No Elevation Determined
LOMC(S)	1
POLICIES	1
INSURANCE IN FORCE	\$84,000
# PAID LOSSES	3
TOTAL LOSSES PAID	\$81,086
CAV	9/29/1994
CAC	9/28/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	5/15/1985
CRS RATING	N/A



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TOWN OF NEWCOMB | ESSEX COUNTY

The Town of Newcomb should also consult the Upper Hudson 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 to replace an eight-foot culvert on Goodnow Flow Road

Mitigation and Risk Reduction Needs:

- No needs identified

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 NEWCOMB
POPULATION	435
FIRM DATE	6/5/1985
NFIP STATUS	Participating
FIRM STATUS	All Zone A, C, and X - No Elevation Determined
LOMC(S)	15
POLICIES	11
INSURANCE IN FORCE	\$1,573,000
# PAID LOSSES	12
TOTAL LOSSES PAID	\$210,146
CAV	N/A
CAC	2/16/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	3/26/1993
CRS RATING	N/A

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



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TOWN OF NORTH ELBA | ESSEX COUNTY

The Town of North Elba should also consult the Saranac 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 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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TOWN OF NORTH HUDSON | ESSEX COUNTY

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

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- The highest-priority area for restudy is east of Palmer Pond on the Schroon River, where a campground, equestrian center, and brewery are currently being constructed. This area floods, which presents ingress and egress concerns along the road that could be problematic during tourist season. The area is currently within the Special Flood Hazard Area, but the buildings here are not currently in use due to substantial flood damage
- East Mill Brook was highlighted as needing an updated approximate flood study near the Pepper Hollow Road crossing because the bridge had been washed out and has been replaced
- Blue Ridge Road experiences flooding and ice jam-related flooding from The Branch near the confluence with the Schroon River
- Johnson Pond Road experiences flooding from Johnson Pond Brook; it may put a nearby structure at risk
- An unconsolidated and unstable bank exists at Duntley Road, near the Schroon River
- Elk Lake Road near Clear Pond experiences washouts
- There are liquefaction risks between Walker Brook and West Mill Brook near Service Road, as Essex County was noted as an area with earthquake activity
- High winds are another hazard of concern
- Two Ensign Pond Road bridges frequently wash out due to flooding from Black Brook
- The community is interested in digital FIRMs and updated flood maps

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- North Hudson Beach Park has experienced frequent flooding from the Schroon River and has been converted into a ballfield and park
- The 2011 Essex County Hazard Mitigation Plan describes an action to replace culverts on Elk Lake Road

COMMUNITY	TOWN OF NORTH HUDSON
POPULATION	240
FIRM DATE	5/15/1985
NFIP STATUS	Participating
FIRM STATUS	All Zone A, C, and X - No Elevation Determined
LOMC(S)	1
POLICIES	3
INSURANCE IN FORCE	\$770,000
# PAID LOSSES	1
TOTAL LOSSES PAID	\$36,802
CAV	N/A
CAC	9/29/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	12/17/1992
CRS RATING	N/A

Mitigation and Risk Reduction Needs:

- Perform property buyouts within the floodplain
- Replace bridges with damage and flood risk
- Within one to three years, create a communication plan to notify campground tourists in the event of flooding
- In the next seven years, assessments of flood risk at dams could be completed
- In the next 15 years, two bridges at Ensign Pond Road that experience flooding may be elevated and their risk may be mitigated

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

- The community requested Earthquake ShakeMaps
- 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 Saranac 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	4/12/2016
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.



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TOWN OF WILLSBORO | ESSEX COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- The Saw Mill Dam immediately north of Route 22 was removed on the Boquet River in 2015 in partnership with the U.S. Fish and Wildlife Service, and the area needs a hydrology and hydraulic restudy
- Flooding has reduced on the river since the Saw Mill Dam removal
- The Willsboro Dam was removed from the Boquet River, and a hydrology and hydraulic study is needed for the altered floodplain
- Downtown Willsboro is affected by the Boquet River flooding
- Development and growth is occurring along Lake Champlain
- Other hazards to be considered are high winds, snow, and earthquakes and liquefaction

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- A grant was awarded to replace failing portions of a septic system less than 250 feet from the lake shore
- A Brownfield remediation project is considered for the Boquet River, Gilliland Lane, and Black Ash Pond area, part of which will include a wetland component
- The 2011 Essex County Hazard Mitigation Plan describes an action to continue the program to spread “black ash” on river ice to assist melting in downtown flood-prone areas

Mitigation and Risk Reduction Needs:

- No needs identified

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 WILLSBORO
POPULATION	2,025
FIRM DATE	5/18/1992
NFIP STATUS	Participating
FIRM STATUS	Revised
LOMC(S)	42
POLICIES	19
INSURANCE IN FORCE	\$4,088,200
# PAID LOSSES	9
TOTAL LOSSES PAID	\$104,697
CAV	N/A
CAC	9/28/2011
ORDINANCE LEVEL	D
ORDINANCE EFFECTIVE DATE	3/18/1987
CRS RATING	N/A

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



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TOWN OF WILMINGTON | ESSEX COUNTY

The Town of Wilmington should also consult the Saranac 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 also 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.



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VILLAGE OF LAKE PLACID | ESSEX COUNTY

SUMMARY OF MAPPING NEEDS AND HAZARDS IDENTIFIED:

- Generally, the village stated its culverts cannot always handle flooding from storm runoff in large events. They stated this can affect properties; however, it is not considered to cause major issues
- Lakes within parks are considered sensitive, and the Adirondack Park Agency and the NYS Department of Environmental Conservation (NYSDEC) are involved in these areas

HAZARD MITIGATION ACTIONS IDENTIFIED:

Planned, Completed, or Ongoing Projects:

- In 2015, it was identified that there was salt contamination in Mirror Lake
- The village has rerouted stormwater to assist in mitigating the impact of salt in Mirror Lake
- The 2011 Essex County Hazard Mitigation Plan indicates that the village will review the summary and modifications to be made to zoning and permitting plans to participate in the FireWise Communities program

Mitigation and Risk Reduction Needs:

- Stormwater management plans are needed

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	VILLAGE OF LAKE PLACID
POPULATION	2,520
FIRM DATE	N/A
NFIP STATUS	Participating
FIRM STATUS	All Zone C and X - No Published FIRM
LOMC(S)	0
POLICIES	7
INSURANCE IN FORCE	\$1,652,400
# PAID LOSSES	0
TOTAL LOSSES PAID	\$0
CAV	N/A
CAC	N/A
ORDINANCE LEVEL	A
ORDINANCE EFFECTIVE DATE	6/30/1976
CRS RATING	N/A

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

RECOMMENDATIONS FOR FUTURE RISK MAP PROJECT SCOPE

The priorities for new or revised floodplain mapping within the Ausable 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 Ausable 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 a Discovery meeting for the stakeholders within the Ausable River Watershed on July 24, 2018. During this meeting, 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 Ausable River Watershed consists of two counties and 15 communities. Participation in the Discovery process included two counties and nine communities attending the pre-Discovery webinars, completing the questionnaire, attending the in-person Discovery meetings, or responding to follow-up correspondence.

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

The Ausable 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.

In addition, previous CNMS mapping needs collected during the Lake Champlain Watershed Discovery process, which was completed in 2016, were incorporated into the Ausable River Watershed Discovery process. As one of the outcomes, the Lake Champlain Watershed Discovery Report documented the change in hydraulic conditions on the Ausable River due to the removal of structures along its shoreline, and an updated detailed study was requested.

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 Jay (Essex County)	East Branch Ausable River— Confluence with the Ausable River through Town of Jay	13.5	Ice jams and undersized culverts result in flooding from the East Branch Ausable River for its entire length within the Town of Jay, and there is potential to leverage data from the Ausable River Association
2	Town of Black Brook (Clinton County)	Palmer Brook— Confluence with the Ausable River to approximately 1.5 miles upstream of Palmer Hill Road	6.4	Flooding impacts homes near the confluence of Palmer Brook and the Ausable River
3	Town of Jay (Essex County) Town of Black Brook (Clinton County)	Ausable River— Upstream corporate boundary for the Town of Jay to the confluence of the East Branch Ausable River	3.7	In the Town of Jay, flooding impacts homes and could impact the Government Offices and emergency shelter. In the Town of Black Brook there is potential for future development in the area. Communities requested an updated flood study for use in floodplain management
4	Town of Jay (Essex County)	West Branch Ausable River— From the Town of Jay corporate boundary to approximately 0.6 miles downstream	0.6	This is an area of potential growth and there is an opportunity to leverage data due to Rome Dam removal



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?)
5	Town of Jay (Essex County)	West Branch Ausable River— From the confluence with the Ausable River to approximately 0.7 miles upstream	0.7	This is an area of potential growth and there is an opportunity to leverage data due to Rome Dam removal
6	Town of Peru (Clinton County)	Ausable River (State Route 9 crossing)—from just upstream of the road crossing to a point approximately 0.6 miles downstream	1.5	The Town of Peru requested a restudy of the Ausable River at the Sewage Treatment Plant and the State Route 9 bridge deck; the riverbed needs a functional assessment

Low 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?)
7	Town of North Elba (Essex County)	West Branch Ausable River— where Route 86 crosses River Road upstream to the crossing of Cascade Road and River Road	5.0	Ice jams result in flooding along River Road, which requires rerouting of traffic and emergency services

Total Detailed Stream Study Requests: 31.4 miles

APPROXIMATE STUDY REQUESTS

New Approximate Study Requests

Several stakeholders also provided a list of stream segments where they would like to see new approximate studies.

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 Keene (Essex County)	Gulf Brook—from the confluence with the East Branch Ausable River to the confluence with Jones Brook	0.7	Flooding impacts homes and bridges; there is a potential mitigation project near the confluence with the East Branch Ausable River
2	Town of Keene (Essex County)	Jones Brook—from the confluence with Gulf Brook to the corporate boundary of the Town of Keene	4.5	Flooding impacts homes and bridges and there is a potential mitigation project
3	Town of Keene (Essex County)	Styles Brook—from the confluence with East Branch Ausable River to approximately 0.5 mile upstream of the intersection between Styles Brook Road and Jay Mountain Road	5.3	Undersized public infrastructure creates flooding problems at Styles Brook Road.

Total Approximate Stream Study Requests: 10.5 miles

Updated Approximate Study Requests

Certain stakeholders requested updated approximate studies for all streams within their corporate limits. Typically, all existing approximate studies will be updated in areas receiving new digital mapping. However, since these segments were specifically requested, they are being included for reference.

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?)
4	Town of Jay (Essex County)	West Branch Ausable River—from the corporate boundary of Town of Black Brook to the corporate boundary for Town of Jay	4.2	Area of potential growth and leverage data due to Rome Dam removal
5	Town of Keene (Essex County)	East Branch Ausable River—approximately 1 mile downstream from the intersection of Route 73 and 9N to the corporate boundary for Town of Keene	12.7	Critical facilities located within flood-prone areas; potential to leverage data from the Ausable River Association
6	Town of Keene (Essex County)	East Branch Ausable River—Corporate boundary of the Town of Keene to where the river crosses Hulls Falls Road	5.8	Undersized public infrastructure creates flooding problems; potential to leverage data from the Ausable River Association
7	Town of Chesterfield (Essex County)	Ausable River—from the Village of Keeseville to the corporate boundary of Town of Chesterfield	8.2	Stormwater flooding causes roadway washouts along multiple locations along the Ausable River (Stickney Bridge Road, Front Street, Swinging Bridge and River Street).
8	Town of Black Brook (Clinton County)	Allegany Brook—from the confluence with Black Brook to approximately 0.7 miles upstream	0.7	Frequent flooding; community requests updated study

Total Updated Approximate Stream Study Requests: 31.6 miles

TOTAL WATERSHED STUDY REQUESTS SUMMARY

Total Detailed Stream Study Request Mileage: 31.4 miles

Total New Approximate Stream Study Requests: 10.5 miles

Total Updated Approximate Stream Study Requests: 31.6 miles

TOTAL MILEAGE OF ALL REQUESTS: 73.5 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?)
Town of Willsboro (Essex County)	Boquet River—from the confluence with Lake Champlain to the corporate boundary of Town of Willsboro	7.0	Request for updated hydrology and hydraulic study due to dam removal changing the impacts of flooding
Town of Lewis (Essex County)	North Branch Boquet River—the entire stream reach within Town of Lewis	9.7	Roadways, bridges, and culverts are flooded during severe events
Town of Peru (Clinton County)	Little Ausable River—From Interstate 87 to a downstream intersection with Jarvis Road	4.3	Updated flood elevation would assist community in upgrading sewer system
Town of Elizabethtown (Essex County)	The Branch—from the confluence with the Boquet River to approximately 0.5 miles upstream of the Route 9N crossing	2.6	Updated detailed flood study request at the confluence with Barton Brook.
Town of Elizabethtown (Essex County)	Barton Brook—from the confluence with The Branch to approximately 1.1 miles upstream	1.1	Updated flood study request at the confluence with The Branch

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 Ausable 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.



LOWERING 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 Ausable 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 Ausable 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
AUSABLE RIVER ASSOCIATION	The Ausable River Association partners with municipalities, government agencies, and other stakeholders to protect the river for its ecologic value, including by integrating natural stream restoration planning and techniques into public storm response, infrastructure development, road maintenance, and private projects. For more information, visit https://www.ausableriver.org/programs .
BOQUET RIVER ASSOCIATION	The Boquet River Association promotes improvements to and stewardship of the Boquet River and implements a Watershed Management Plan. The association collaborates with stakeholders to find solutions to problems affecting the water quality and overall health of the river.
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 used.

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



The top section of the cover features a dark blue background with white, stylized topographic contour lines that flow from the left towards the right, creating a sense of depth and movement.

APPENDIX A

REGION II DISCOVERY REPORT DISCOVERY WATERSHED MAPS

AUSABLE RIVER WATERSHED | HUC 04150404

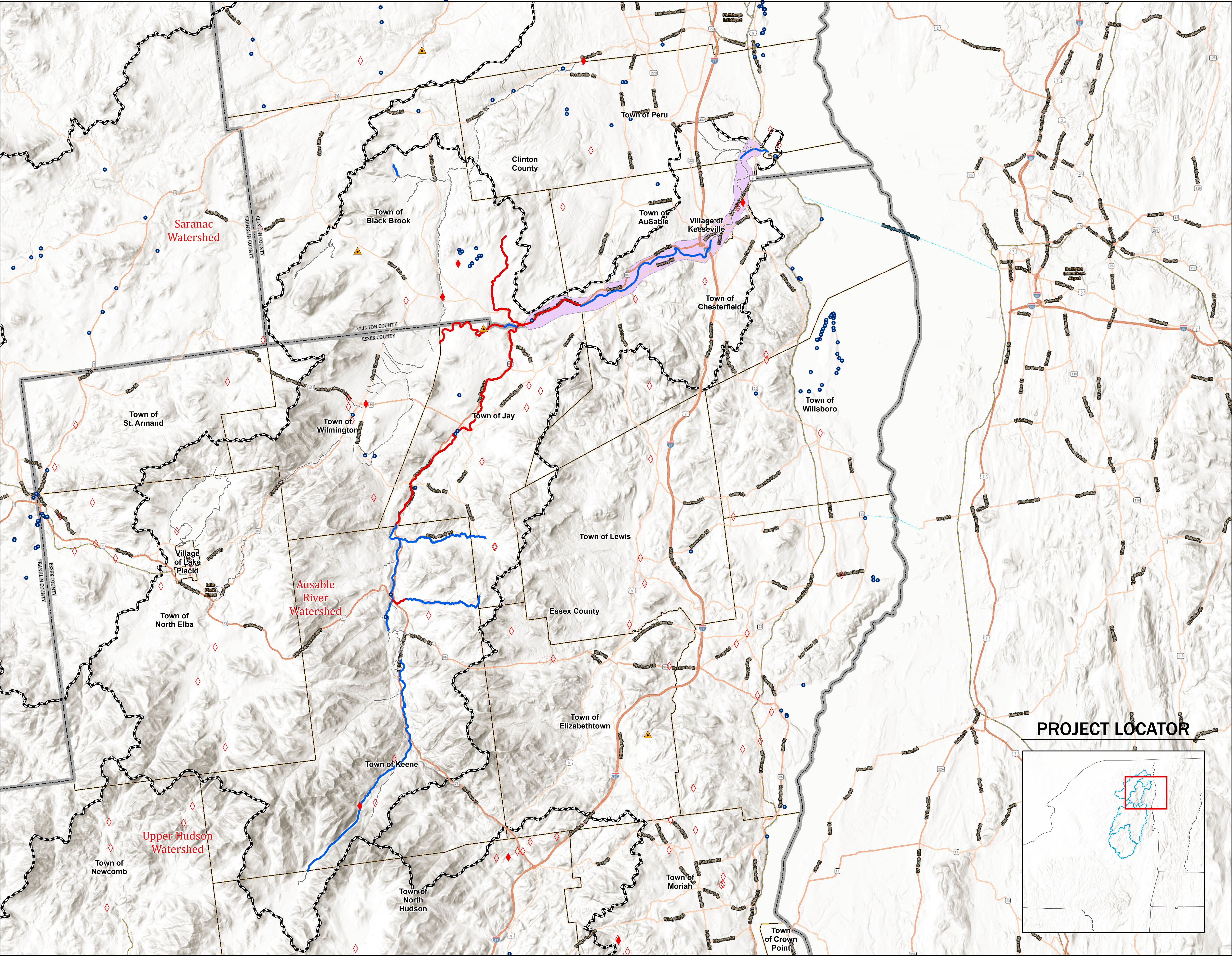
Department of Homeland Security
Federal Emergency Management Agency Region II
26 Federal Plaza, Room 1807
New York, NY 10278

March 2019



FEMA

RiskMAP
Increasing Resilience Together



LEGEND AND NOTES

- Watershed Boundary
- Jurisdiction Boundary
- CNMS Request Area
- LOMA

- Dams
- Low Hazard
 - Intermediate Hazard
 - High Hazard

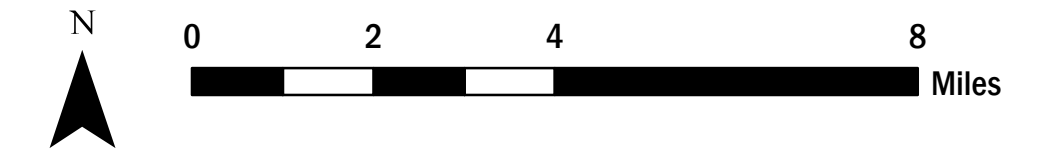
- Stream Priority Ranking
- High
 - Medium
 - Low

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.

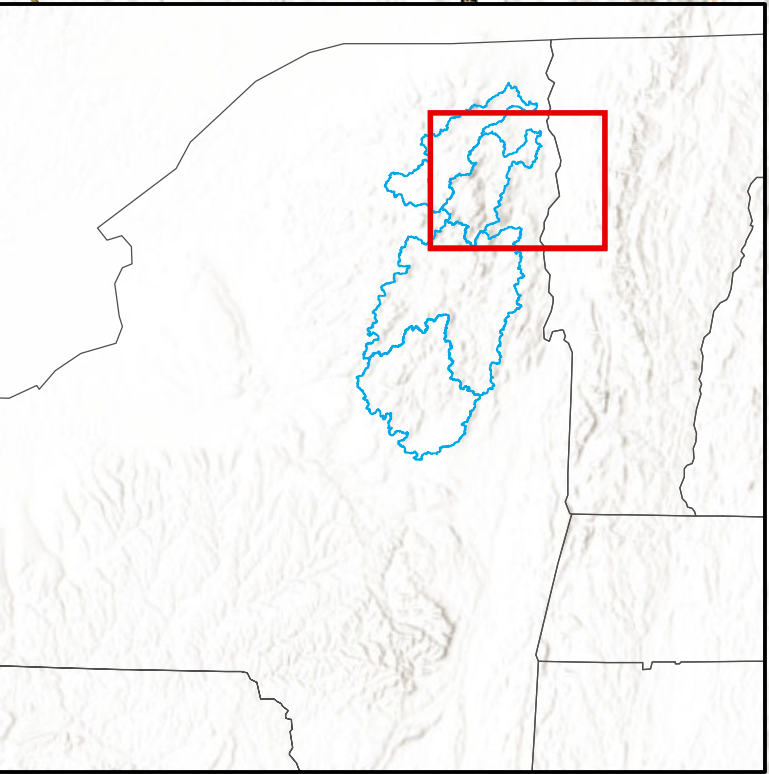
Additional information provided by local hazard mitigation plans, local jurisdiction GIS data, and Community Discovery interviews.

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Sources: Esri, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasyreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

1 inch = 2.1 miles 1:134,108



PROJECT LOCATOR



NATIONAL FLOOD INSURANCE PROGRAM INFORMATION EXCHANGE MAP

NEW YORK DISCOVERY
The community lies in the following watershed(s):
Ausable River Watershed
04150404

Map Contains:

COMMUNITY	NUMBER
AUSABLE, TOWN OF	360165
BLACK BROOK, TOWN OF	361309
CHESTERFIELD, TOWN OF	360264
CROWN POINT, TOWN OF	361148
ELIZABETHTOWN, TOWN OF	361388
JAY, TOWN OF	360265
KEENE, TOWN OF	361151
KEESEVILLE, VILLAGE OF	360266
LAKE PLACID, VILLAGE OF	361492
LEWIS, TOWN OF	361152
MORIAH, TOWN OF	361389
NEWCOMB, TOWN OF	361390
NORTH ELBA, TOWN OF	361156
NORTH HUDSON, TOWN OF	361391
PERU, TOWN OF	361384
ST. ARMAND, TOWN OF	361157
WILLSBORO, TOWN OF	360267
WILMINGTON, TOWN OF	361161

DATE March 2019

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