Franklin County, NY
RiskMAP Kick Off Meeting

February 10, 2021

- Send a message with your name, role, & community or organization in the chat.
- We'll ask people who joined via phone to introduce themselves.

As partners with FEMA, it's important we create dialogue about your needs for flood risk information.

What do Franklin communities aspire to accomplish using today's meeting?

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Today's Goals

1	2	3
The value of updated flood maps for your community	Recap of Flood Risk Study history, including Discovery and Base Level Engineering	Review county-wide study scope, products and outreach process

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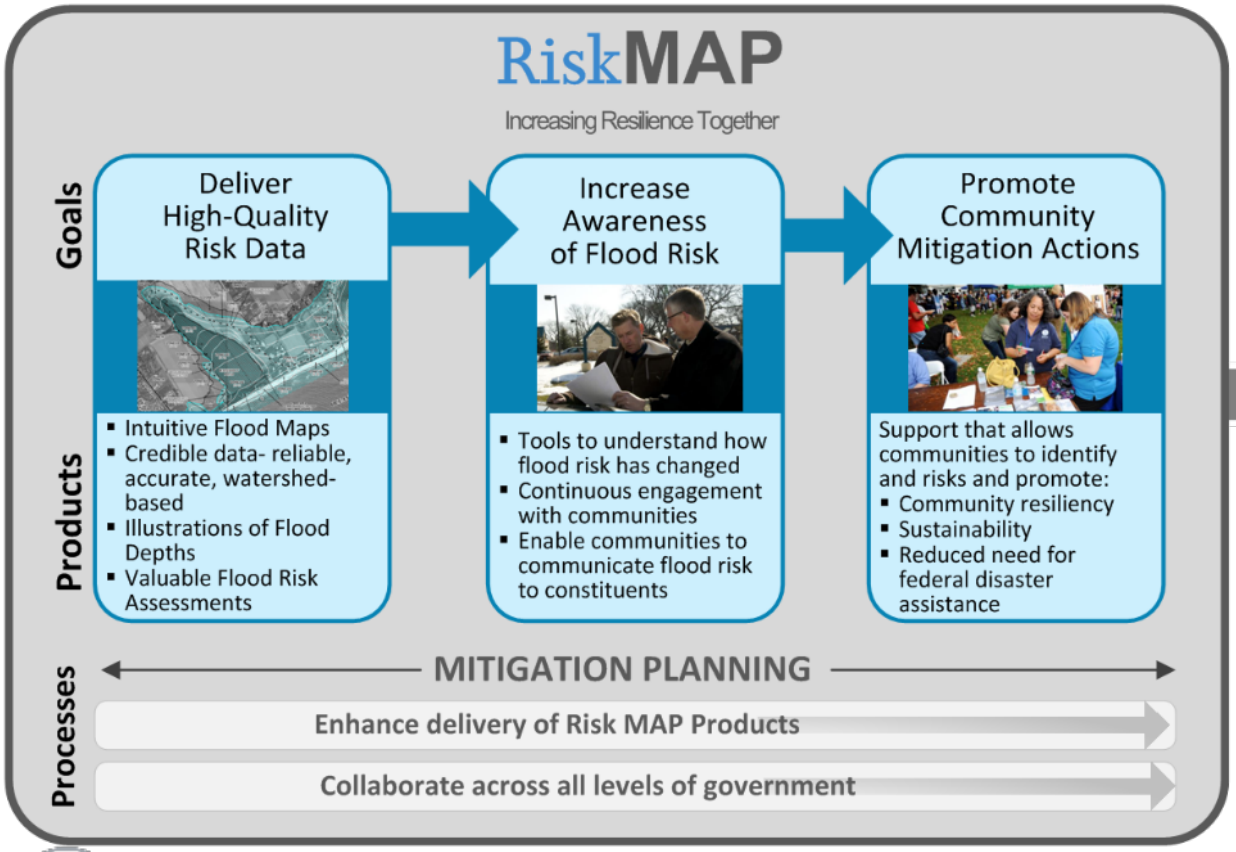
FEMA Mitigation Division

Risk Analysis Branch

Goal: Stronger and Safer Communities



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The Value of Updated Flood Maps for Local Communities

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Flood Maps Guide Progress By:

Identifying and Assessing Flood Risk

Establishing Flood Insurance Rates

Determining Local Land Use

Informing Engineers and Developers

Equipping Emergency Managers

Why we are here

We want to help communities understand flood risk and take action to reduce it because…

Risk changes over time

- All floods are different. Nature and communities change.

Flooding happens

- Communities may face flooding. Is your community active or reactive to flood risk?.

Mitigation is Possible

- Proactive communities plan to reduce flood impacts and other hazards.

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How did we get here?
Review past activities

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Discovery / Post-Discovery Progress
Recap

North Country Watershed

- Meetings held in September 2019
- Discovery project completed in March 2020
- Community input guided FEMA priorities
- Franklin County's Highest Priorities included:
  - Salmon River
  - St. Regis River
  - Little Salmon River
  - Indian Lake and Mountain Lake
  - Lower Chateaugay Lake

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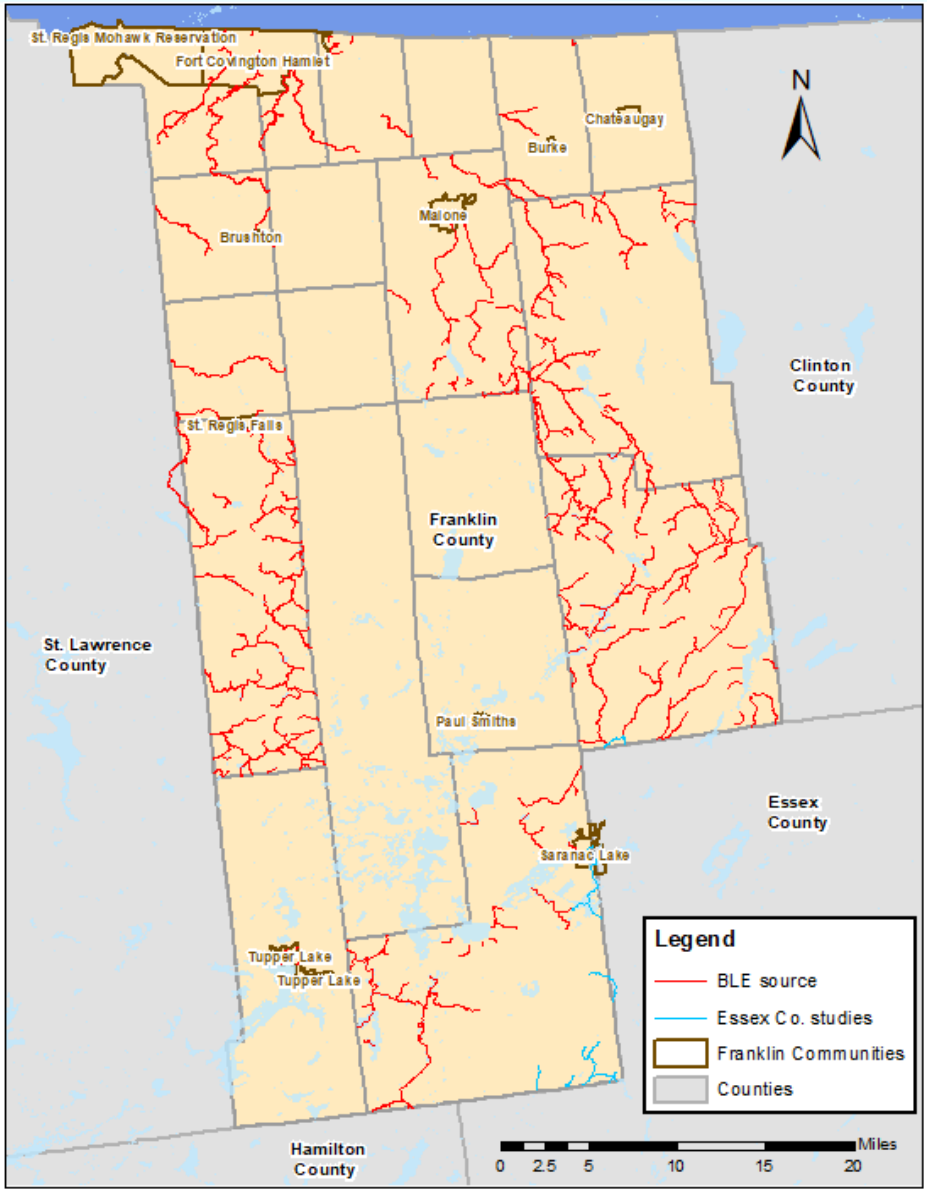
Leveraged Data – Base Level Engineering *Recap*

- Base Level Engineering
  - Approximate – 557 miles
- Any local flood studies that FEMA should be aware of?



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What is being studied now?
Discuss scope of new study

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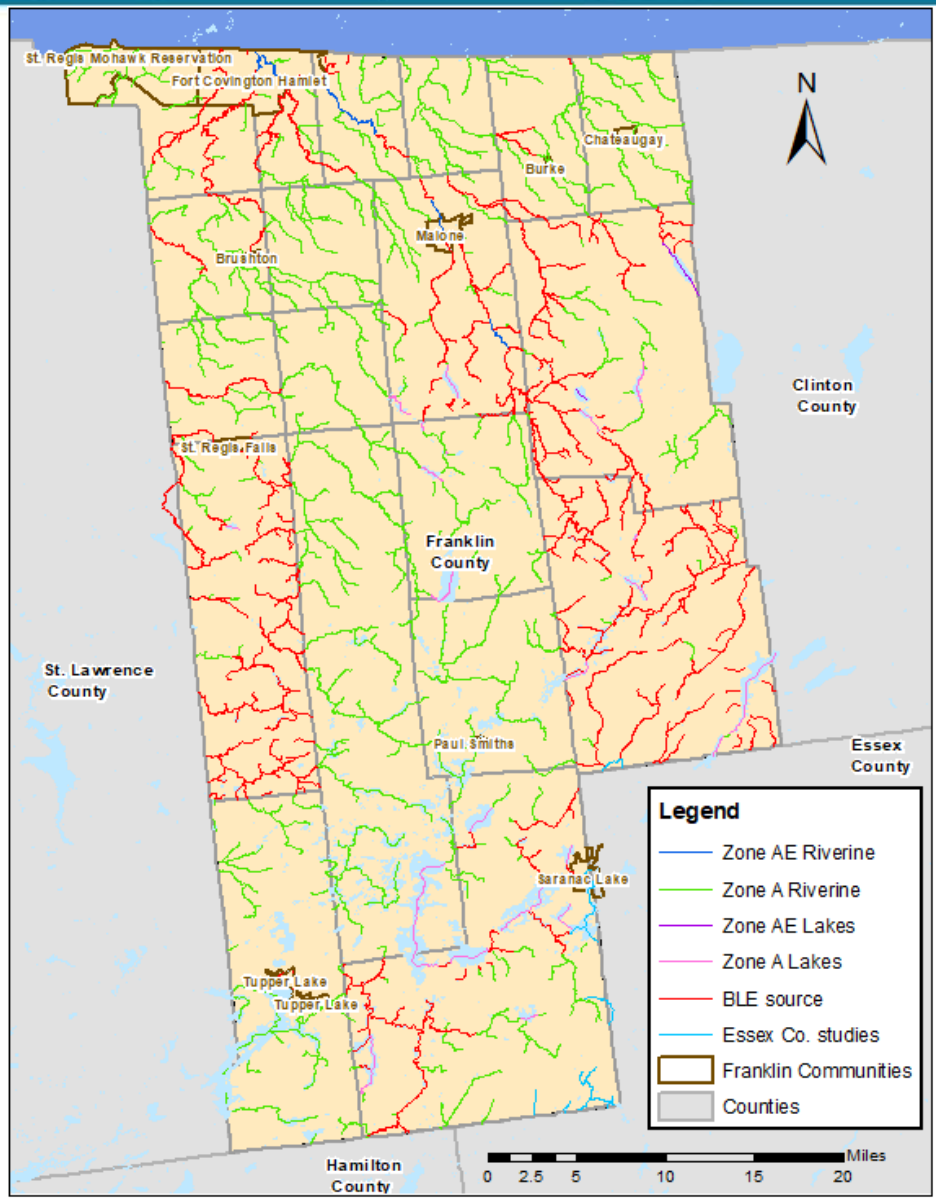
Franklin County, Countywide Flood Risk Study Scope

- **First time digital maps**
- **Additional flooding sources analyzed**
  - Detailed riverine studies (AE Zone) – 2 streams, 19 miles
  - Detailed lake studies (AE Zone) – 2 lakes, 4 miles
  - Approximate (A Zone) studies – multiple streams, 1332.6 miles
- **26 updated communities**
- **233 map panels**
- **Review meetings**
  - Hydrology Meeting
  - Hydraulics Meeting
  - Flood Risk Review Meeting



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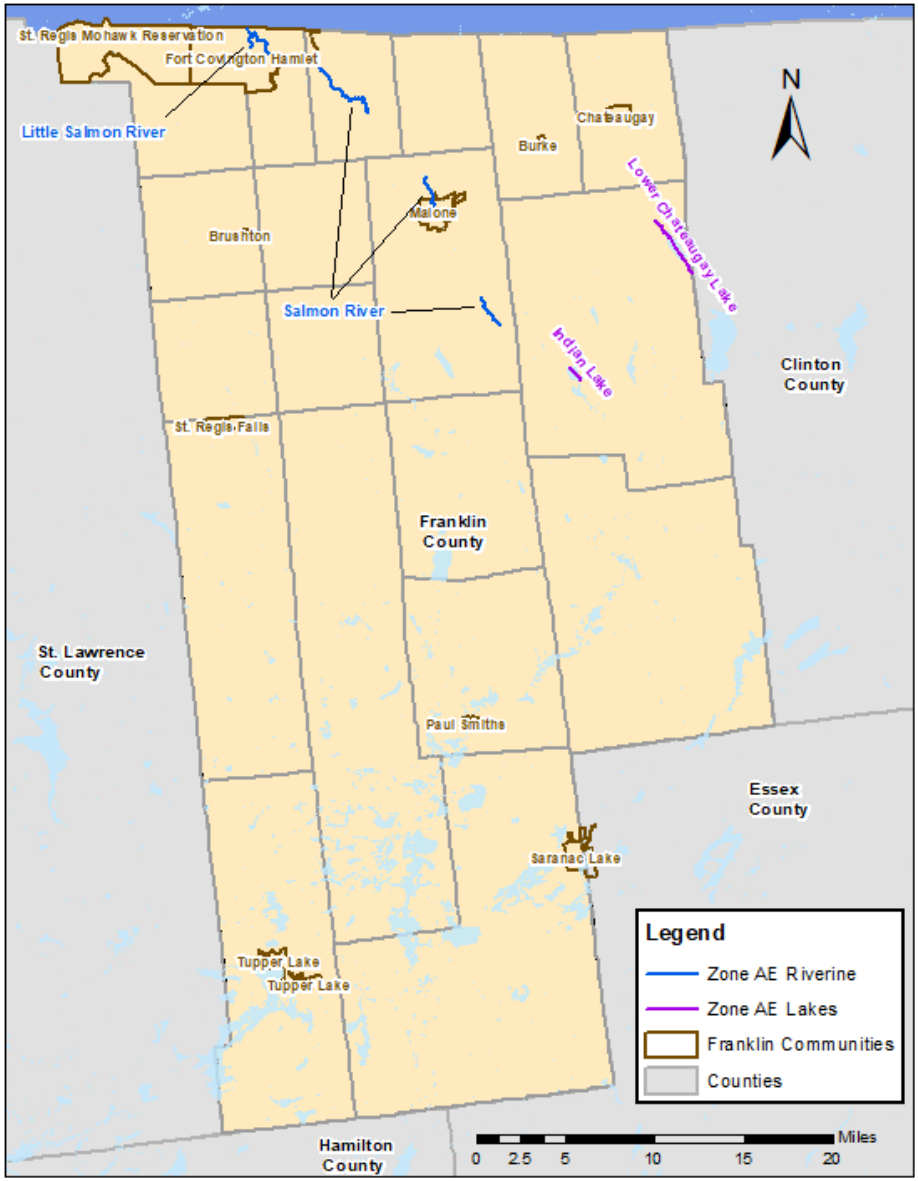
Detailed (AE Zone) Study Scope

- **2 Studied Streams – 19.1 miles total**
  - Little Salmon River – 1.1 miles
  - Salmon River – 18.0 miles
- **2 Studied Lakes – 3.7 miles**
  - Indian Lake – 1.0 miles
  - Lower Chateaugay Lake – 2.7 miles



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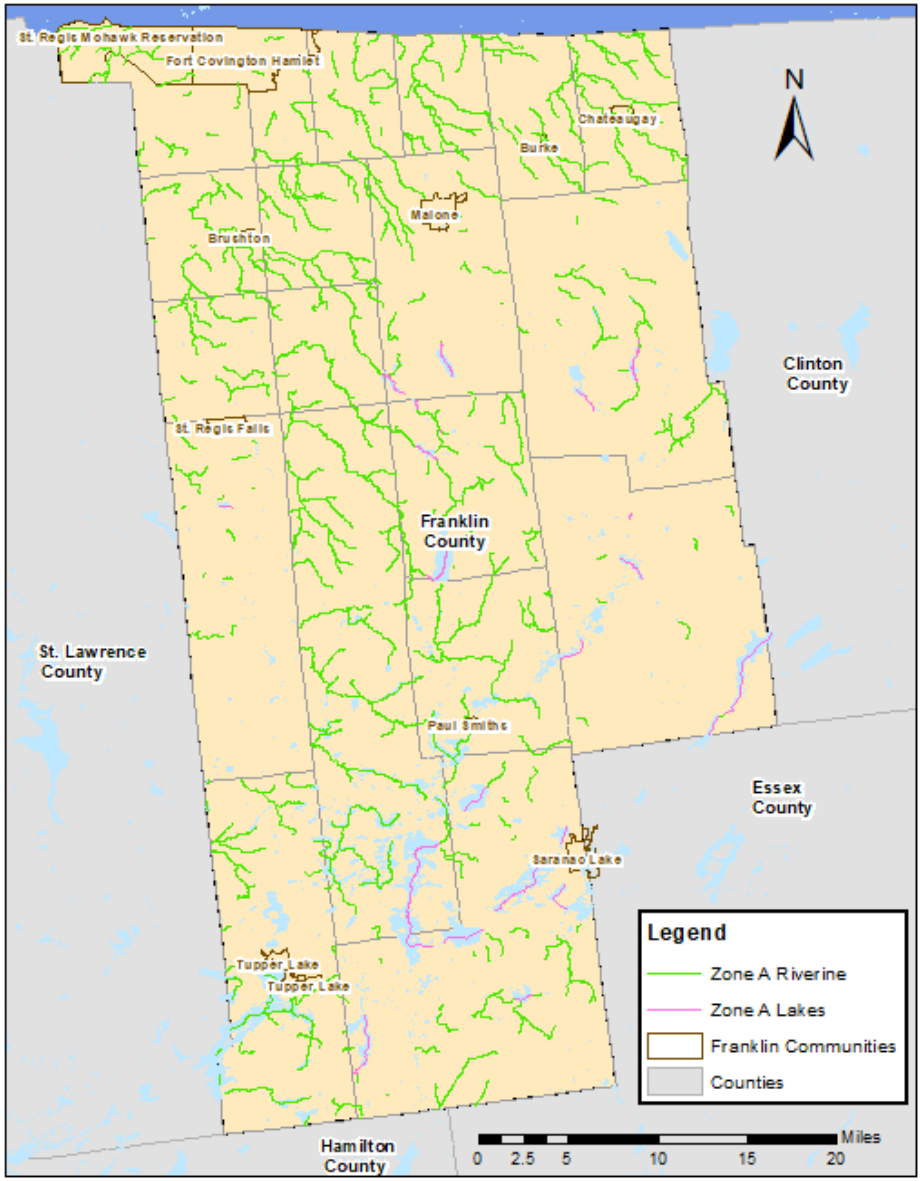
Approximate (A Zone) Study Scope

- **Completes countywide stream coverage**
- **Approximate Streams – 1332.6 miles**
  - Notable streams include:
    - Little Salmon – 37.4 miles
    - East Branch St. Regis River – 21.7 miles
    - Raquette River – 23.7 miles
    - Salmon River – 29.3
    - St. Regis River – 46.7 miles
- **Approximate Lakes – 60.7 miles**
  - Notable lakes include:
    - Mountain View Lake
    - Upper Saranac Lake
    - Middle Saranac Lake
    - Lower Saranac Lake
    - Union Falls Pond
    - Franklin Falls Pond



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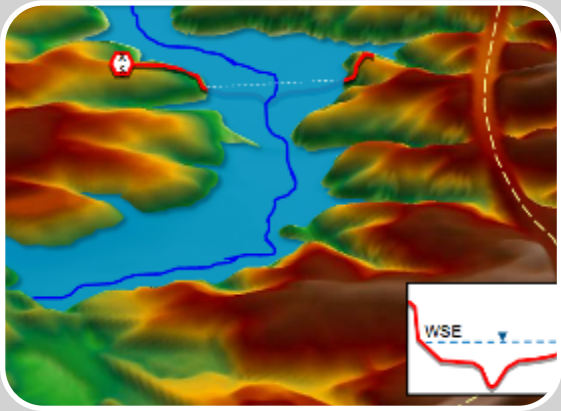
Flood Hazard Analysis



Hydrology

Volume of water?

Peak Flows?

When will storm water or runoff make it to the stream?

Hydraulics

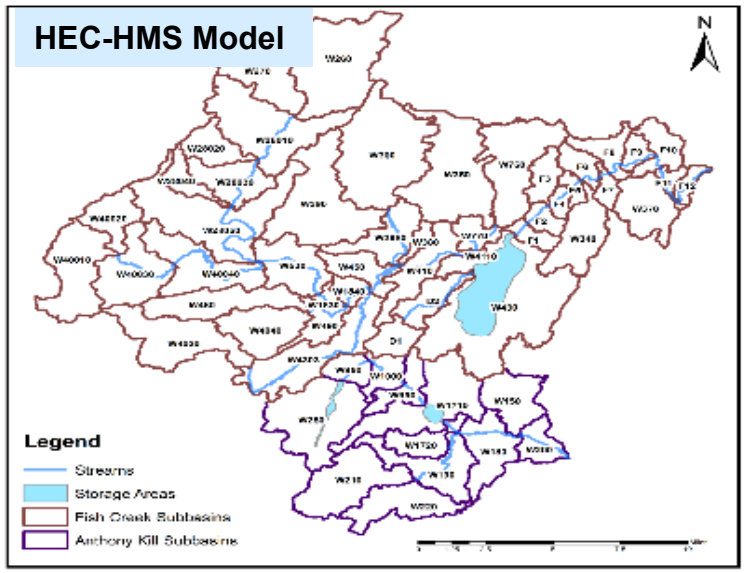
Will the stream in question be able to convey all storm water or runoff that arrives?

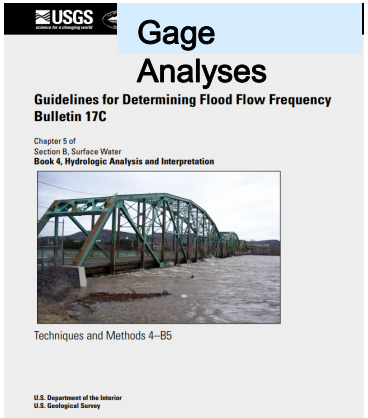
Floodplain Mapping

What areas of a community will be inundated based on engineering analysis?

Engineering Methods - Hydrologic Analysis

- **Typical Methods FEMA utilizes**
  - Statistical Gage Analyses
  - Regression Analyses
  - Rainfall Runoff Modeling
- **Gage/Regression are based on availability stream gage data**
- **Rainfall-Runoff physical modeling chosen due to limited gage data**
  - Using HEC-HMS models
- **Discharges developed for**
  - 10%, 4%, 2%, 1%, 1%+, 1%-, 0.2%
  - Inputs for hydraulic analyses

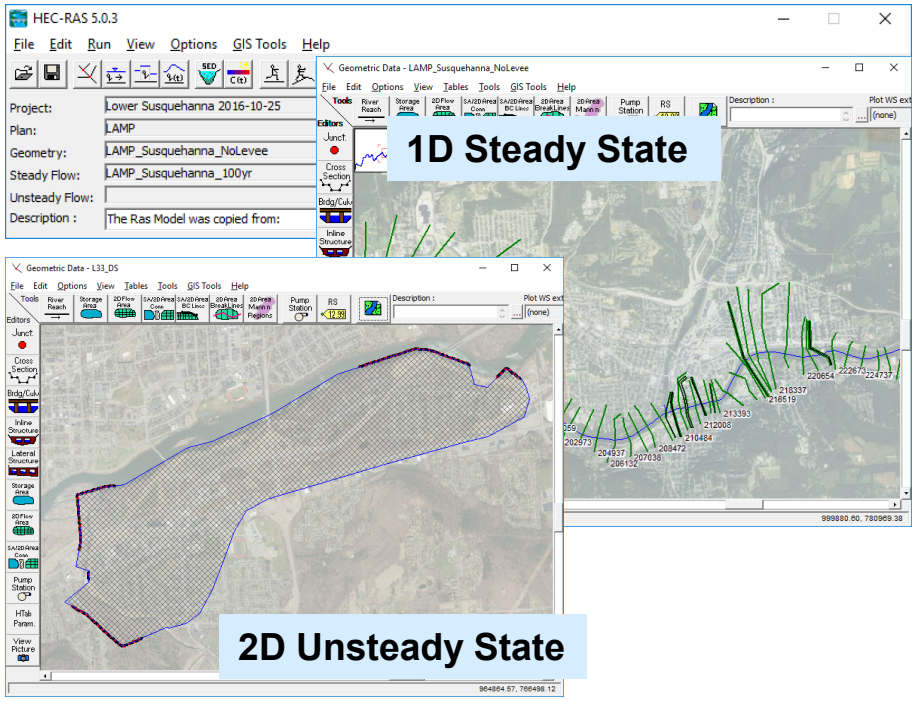




Engineering Methods - Hydraulic Analysis

- **Modeling developed using USACE's HEC-RAS Program**
  - One Dimensional (1D) Steady State
- **Terrain Data**
  - Provides topographic elevation information
  - Supplemented by field survey
  - Data Sources:
    - 2014 USGS Clinton Essex Lake Champlain
    - 2015 NYS Warren Washington Essex
    - 2016/17 FEMA Franklin St. Lawrence
    - 2017 FEMA Fulton Saratoga Herkimer Franklin
- **Field Survey for Detailed only**
  - Collection underway: 22 structures and 194 under water channel sections

HEC-RAS Models



- **Flood Hazard Data Generated**
  - Elevations: 10%, 4%, 2%, 1%, 1%+, 1%-, 0.2%
  - Floodplain extents: 10%, 1%, 0.2%, Floodway

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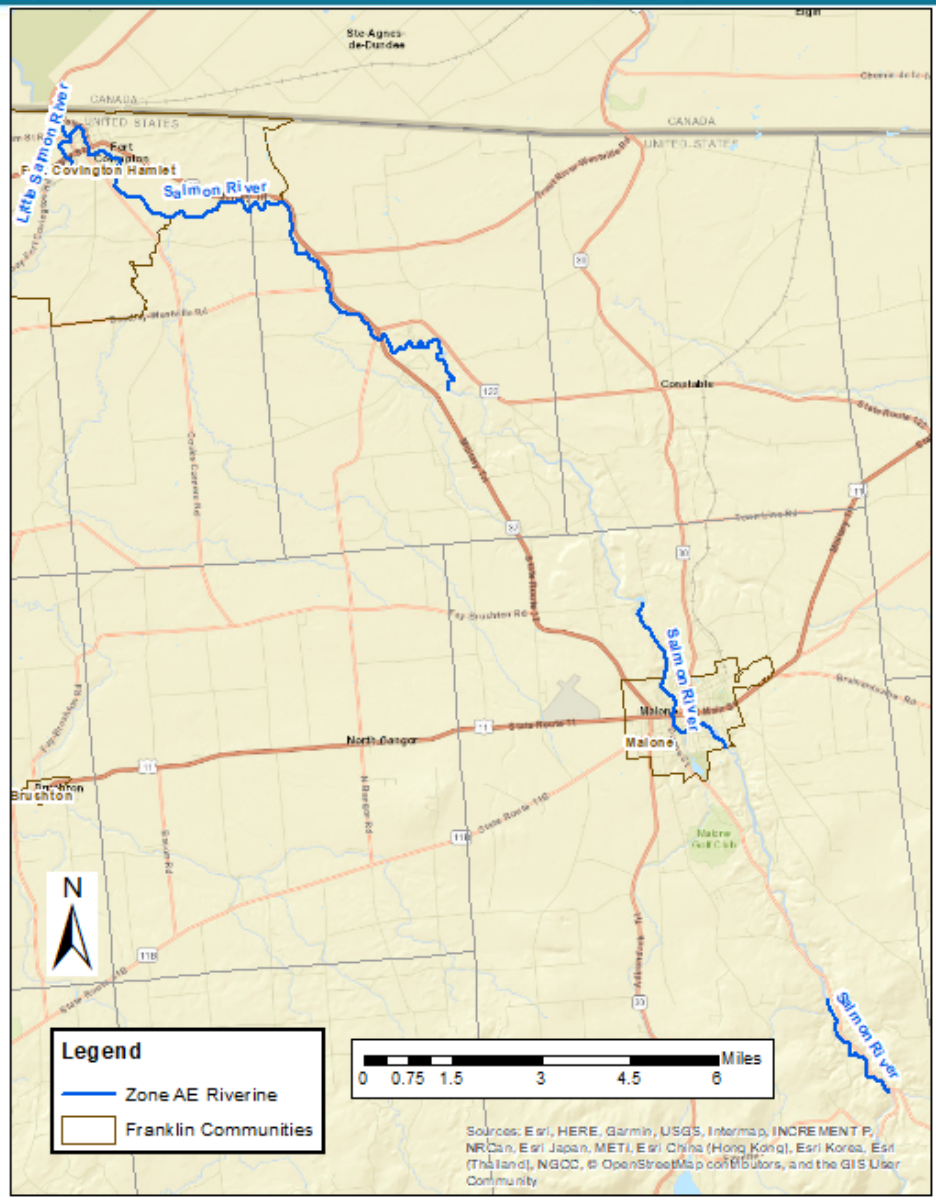
Engineering Methods - Detailed Streams

- **Hydrologic Method: USGS Regression Equations/Gage Analysis**
  - Little Salmon River
  - Salmon River
- **Hydraulic Method: HEC-RAS, 1D steady state hydraulic model**
  - Little Salmon River – 1.1 miles
  - Salmon River – 18.0 miles



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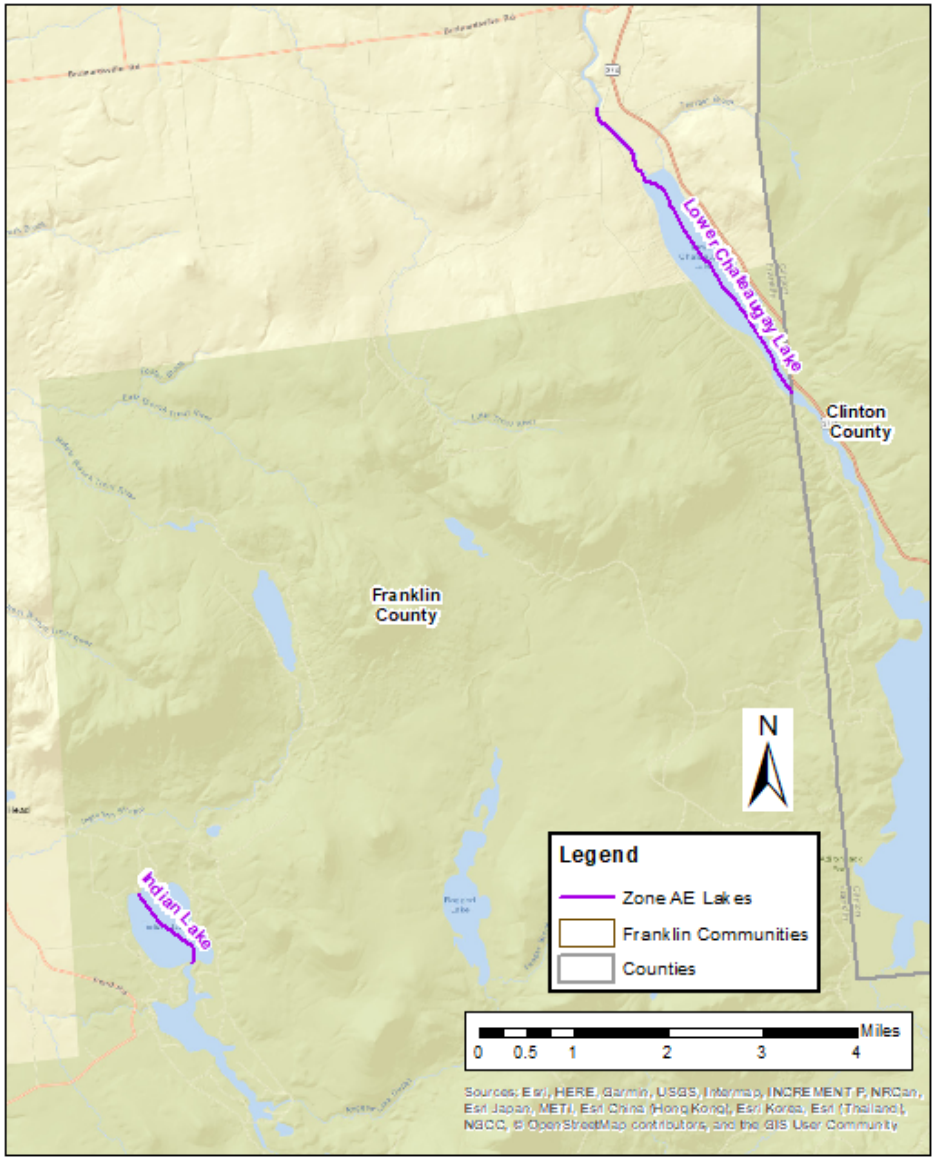
Engineering Methods - Detailed Lakes

- **Hydrologic Method: Stage-Frequency Analysis**
  - Lower Chateaugay Lake
- **Hydrologic Method: Volumetric calculations**
  - Indian Lake
- **Hydraulic Method: Static Elevation Mapped**
  - Indian Lake – 1.0 miles
  - Lower Chateaugay Lake – 2.7 miles



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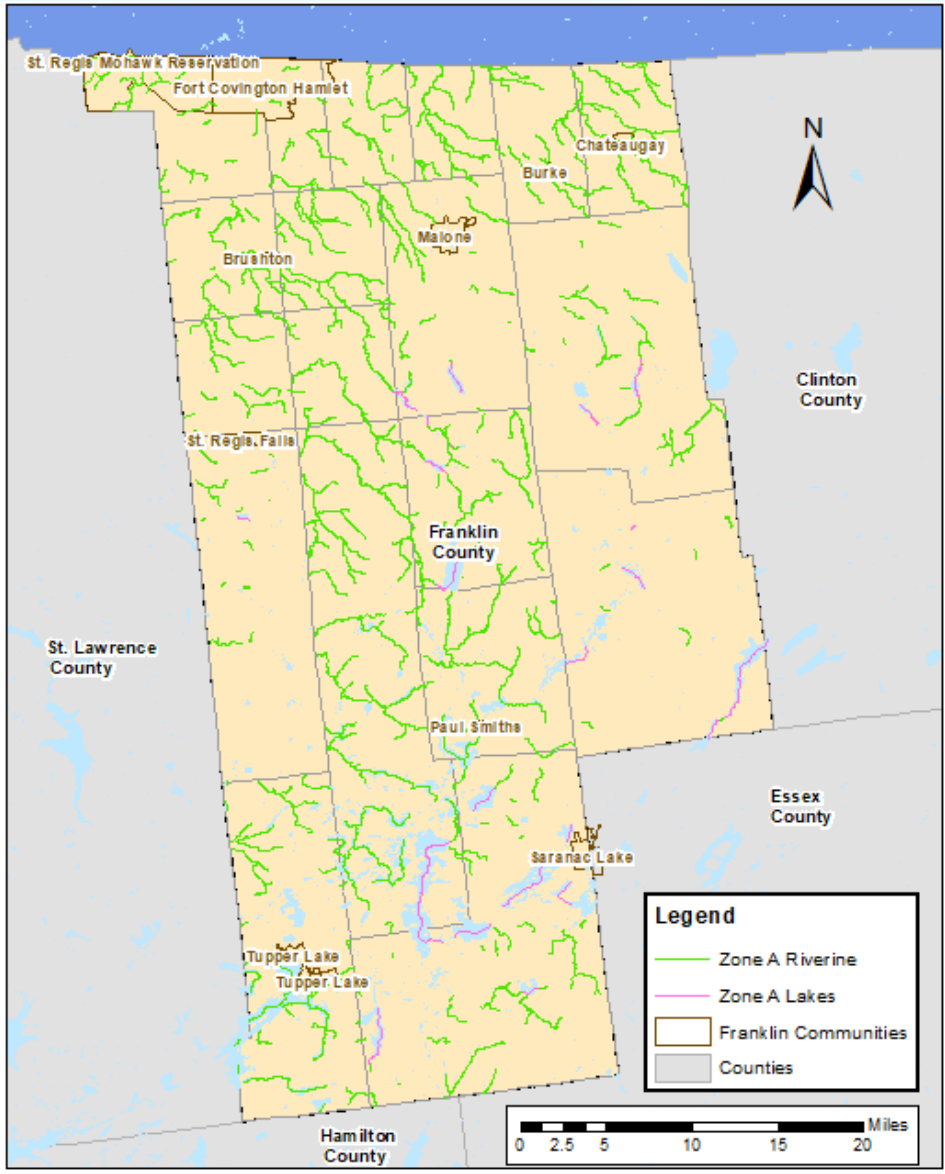
Engineering Methods - Approximate Studies

- **Approximate Streams – 1393.3 miles**
  - Hydrologic Method
    - Gage Analysis
    - USGS Regression Equations
    - Volumetric Calculations
  - Hydraulic Method
    - 1D Steady State Hydraulic Model
    - Lake Volumetric Calculations assuming no outflows



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Where are we now and what is next?
Discuss next steps

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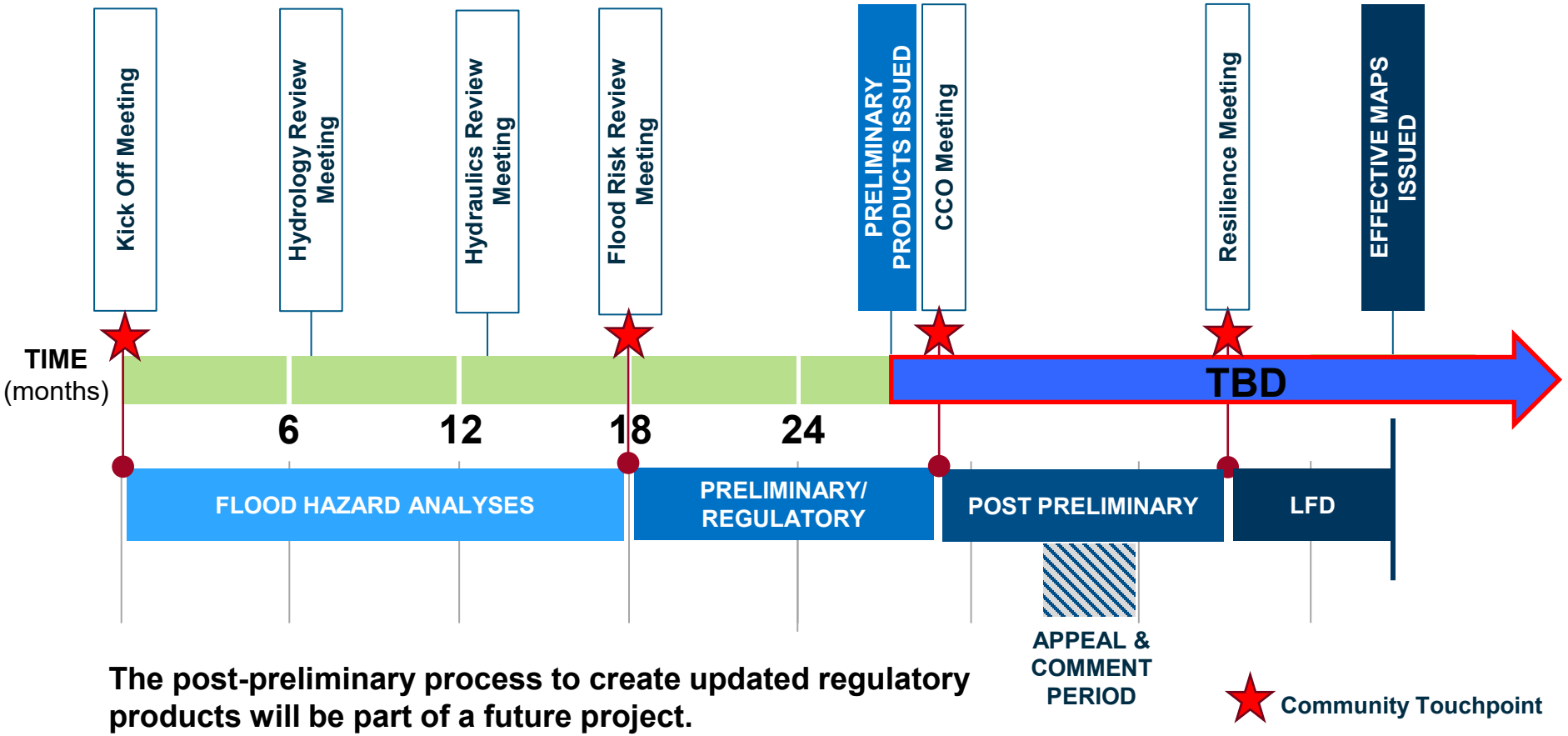
Overall Flood Risk Project Timeline



The post-preliminary process to create updated regulatory products will be part of a future project.

Major Study Milestones

- **Data Development (June 2022)**
  - Terrain processing
  - Engineering Methods Concurrence (620 letters)
  - Field reconnaissance and survey
  - Hydrologic modeling
  - Hydraulic modeling
  - Floodplain mapping (workmaps)
- **Flood Risk Review Meeting (October 2022)**
  - Review work map products with communities
- **Preliminary Products Update (FIRM & FIS)**
  - Preliminary Maps Issued (April 2023)

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What will communities receive?
Preliminary and Planning Products

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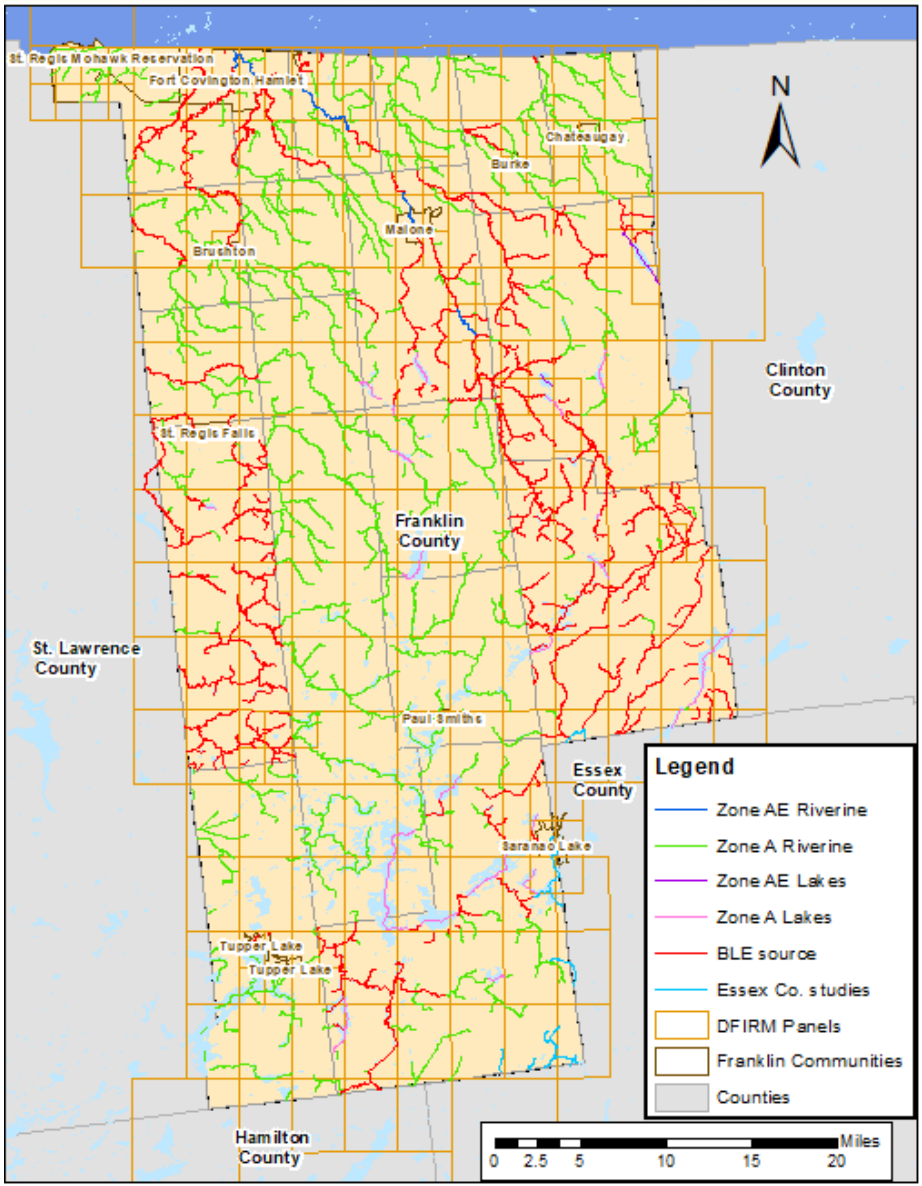
Work Maps

- **Draft floodplain mapping shared using work maps**
- **Flood Risk Review meeting provides a review of the new engineering analysis results, allowing communities to:**
  - Identify potential updates for Hazard Mitigation Plans
  - Provide insight and input on hydrology and hydraulic results in updated study area
  - Seek local buy-in and review possible use of analysis
  - Identify areas of large changes and potential opportunities for risk reduction
  - Identify risk communications needs and options

Preliminary Mapping Products

- **Preliminary product development commences after work map comment period**
- **Seamless countywide mapping produced**
  - Incorporates North Country BLE mapping
- **Preliminary Digital Flood Insurance Rate Map (DFIRM) Database**
- **233 Preliminary FIRM Panels**
- **Flood Insurance Study (FIS) Report**



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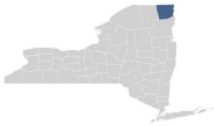
Flood Insurance Rate Map (FIRM) *Example*

L_Comm_Info.dbf	dBASE Table
L_Comm_Revis.dbf	dBASE Table
L_ManningsN.dbf	dBASE Table
L_Meetings.dbf	dBASE Table
L_Mtg_POC.dbf	dBASE Table
L_Pol_FHBM.dbf	dBASE Table
L_Source_Cit.dbf	dBASE Table
L_Summary_Discharges.dbf	dBASE Table
L_XS_Elev.dbf	dBASE Table
L_XS_Struct.dbf	dBASE Table
S_Base_Index.shp	Shapefile
S_BFE.shp	Shapefile
S_FIRM_Pan.shp	Shapefile
S_Fld_Haz_Ar.shp	Shapefile
S_Fld_Haz_Ln.shp	Shapefile
S_Gen_Struct.shp	Shapefile
S_Hydro_Reach.shp	Shapefile
S_Label_Ld.shp	Shapefile
S_Label_Pt.shp	Shapefile
S_Nodes.shp	Shapefile
S_PLSS_Ar.shp	Shapefile
S_Pol_Ar.shp	Shapefile
S_Profil_Basln.shp	Shapefile
S_Stn_Start.shp	Shapefile
S_Subbasins.shp	Shapefile
S_Submittal_Info.shp	Shapefile
S_Trnsport_Ln.shp	Shapefile
S_Wtr_Ln.shp	Shapefile
S_XS.shp	Shapefile
Study_Info.dbf	dBASE Table

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 2



CLINTON COUNTY, NEW YORK

AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
ALTONA, TOWN OF	361379
AUSABLE, TOWN OF	360165
BEEKMANTOWN, TOWN OF	360166
BLACK BROOK, TOWN OF	361309
CHAMPLAIN, TOWN OF	361311
CHAMPLAIN, VILLAGE OF	360167
CHAZY, TOWN OF	361310
CLINTON, TOWN OF	361380
DANNEMORA, TOWN OF	361381
DANNEMORA, VILLAGE OF	360024
ELLENBURG, TOWN OF	361382
MOOERS, TOWN OF	361383
PERU, TOWN OF	361384
PLATTSBURGH, CITY OF	360168
PLATTSBURGH, TOWN OF	360169
ROUSES POINT, VILLAGE OF	360170
SARANAC, TOWN OF	360171
SCHUYLER FALLS, TOWN OF	360172

PRELIMINARY
2/27/2020

REVISED:

FLOOD INSURANCE STUDY NUMBER
36019CV000B
Version Number 2.6.3.0

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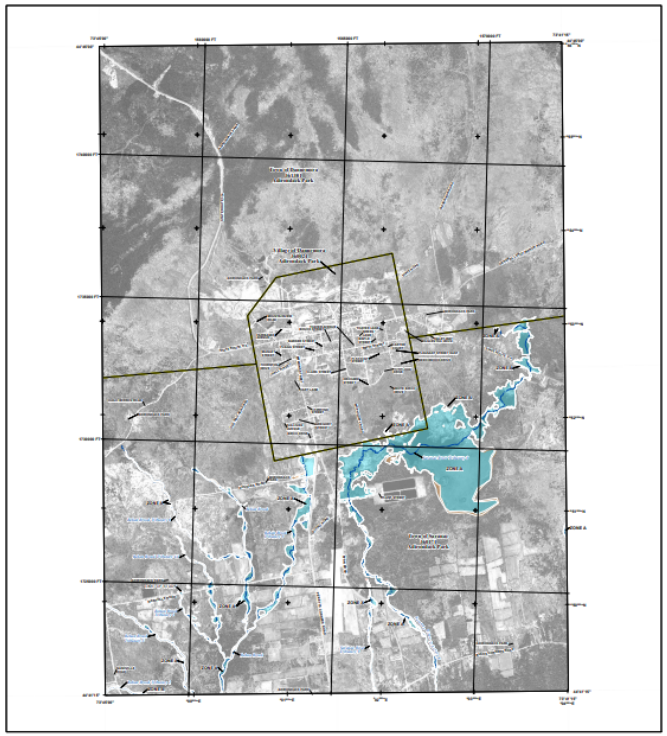

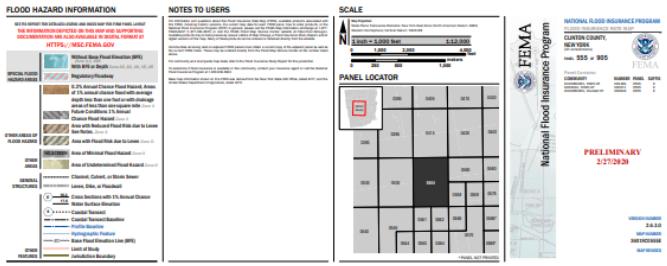

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Knowing the Risk

Communities that develop a sound understanding of flood risk will be more empowered to...

- Effectively plan use of resources for natural hazards and potential disasters;
- Implement effective hazard mitigation projects;
- Effectively regulate current and future development without increasing risk; and/or
- Effectively communicate about natural hazards to its residents about personal and community mitigation projects that can reduce long-term risk.

Contacts

- **FEMA Project Monitor**
  Bob Schaefer
  347-882-7989
  robert.schaefer@fema.dhs.gov
- **STARR II Project Manager**
  Justin King
  919-532-2329
  justin.king@stantec.com
- **STARR II Regional Support Center**
  Rosemary Bolich
  646-490-3848
  rosemary.bolich@stantec.com
- **NY State Department of Environmental Conservation**
  Regional Contact: Vince Spadaro
  Central Office Contact: Brad Wenskoski
  518-402-8185
  floodplain@dec.ny.gov

Questions? Comments?

Thank you!

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