



FEMA

# Flood Risk Study Albany County, NY

**FEMA REGION II**  
**March 26, 2012**

**RiskMAP**  
Increasing Resilience Together



# Agenda

- Introductions
- Objectives
- Map Modernization (MapMod) Program Overview
- Albany County MapMod Update
- Introduction of Albany County Risk MAP Project
- Milestones
- Questions & Feedback

# Introductions

**Introductions** • Objectives • MapMod • Risk MAP Non-Regulatory Products/Datasets • Milestones

- **Local – Albany County & Communities**
- **State – New York State Department of Environmental Conservation (NYSDEC)**
  - Floodplain Management Section Chief:* William Nechamen, CFM
  - Environmental Engineer:* Arvind Goswami, P.E., CFM
  - Environmental Engineer:* Kelli Higgins-Roche, CFM
- **FEMA Region II**
  - Senior Engineer:* Paul K. Weberg, P.E.
  - Floodplain Management and Insurance Lead:* Tonya Evans & Rich Einhorn

# Objectives

Introductions • **Objectives** • MapMod • Risk MAP Non-Regulatory Products/Datasets • Milestones

- To provide an overview of Albany County's flood risk study
- Introduce the Risk MAP program and the non-regulatory products and datasets that the local officials will be receiving
- To promote community engagement and enhance capability to effectively manage flood risk

# Map Modernization (MapMod) Overview

Introductions • Objectives • **MapMod** • Risk MAP Non-Regulatory Products/Datasets • Milestones

- Prior to 2003, more than 70 percent of the nation's flood maps were at least 10 years old. In Albany County, with few exceptions, the communities' flood maps dated back to the 1980s
- Congress appropriated funds in 2003 and directed FEMA to develop and implement the MapMod program, which:
  - Created county-wide digital maps
  - Utilized more current data to update maps
  - Developed a new platform to convert from paper to digital format

# Albany County Flood Risk Study

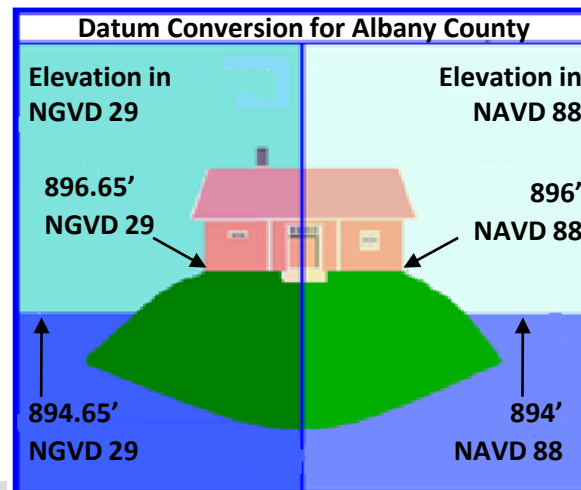
Introductions • Objectives • **MapMod** • Risk MAP Non-Regulatory Products/Datasets • Milestones

- **County-wide FIRM (125 panels), including 18 incorporated communities**
  - No Special Flood Hazard Areas identified within the Village of Colonie
- **Re-study of 25 miles of detailed studies**
  - **Re-study:** Conducting new Hydrologic and Hydraulic analyses using updated topographic data (LiDAR) to revise the 1%- and 0.2%- annual-chance flood hazard areas
- **23 miles of limited detailed studies**
  - **Limited detailed:** Conducting new Hydrologic and Hydraulic analyses using updated topographic data (LiDAR) to revise the 1% annual-chance flood hazard areas (no field survey)
- **Re-delineation of 133 miles of detailed studies**
  - **Re-delineation:** Previously identified floodplains and associated detailed flood elevations paired with updated topographic data (LiDAR) that retains the integrity of the existing Engineering analysis
- **Analysis of 138 approximate stream miles**
  - **Approximate Stream:** Hydrology was performed using NED dataset and 2006 USGS regression equations. Hydraulics analysis and mapping was performed using LiDAR data and HECRAS Models.

# Albany County Vertical Datum Conversion Factor

Introductions • Objectives • **MapMod** • Risk MAP Non-Regulatory Products/Datasets • Milestones

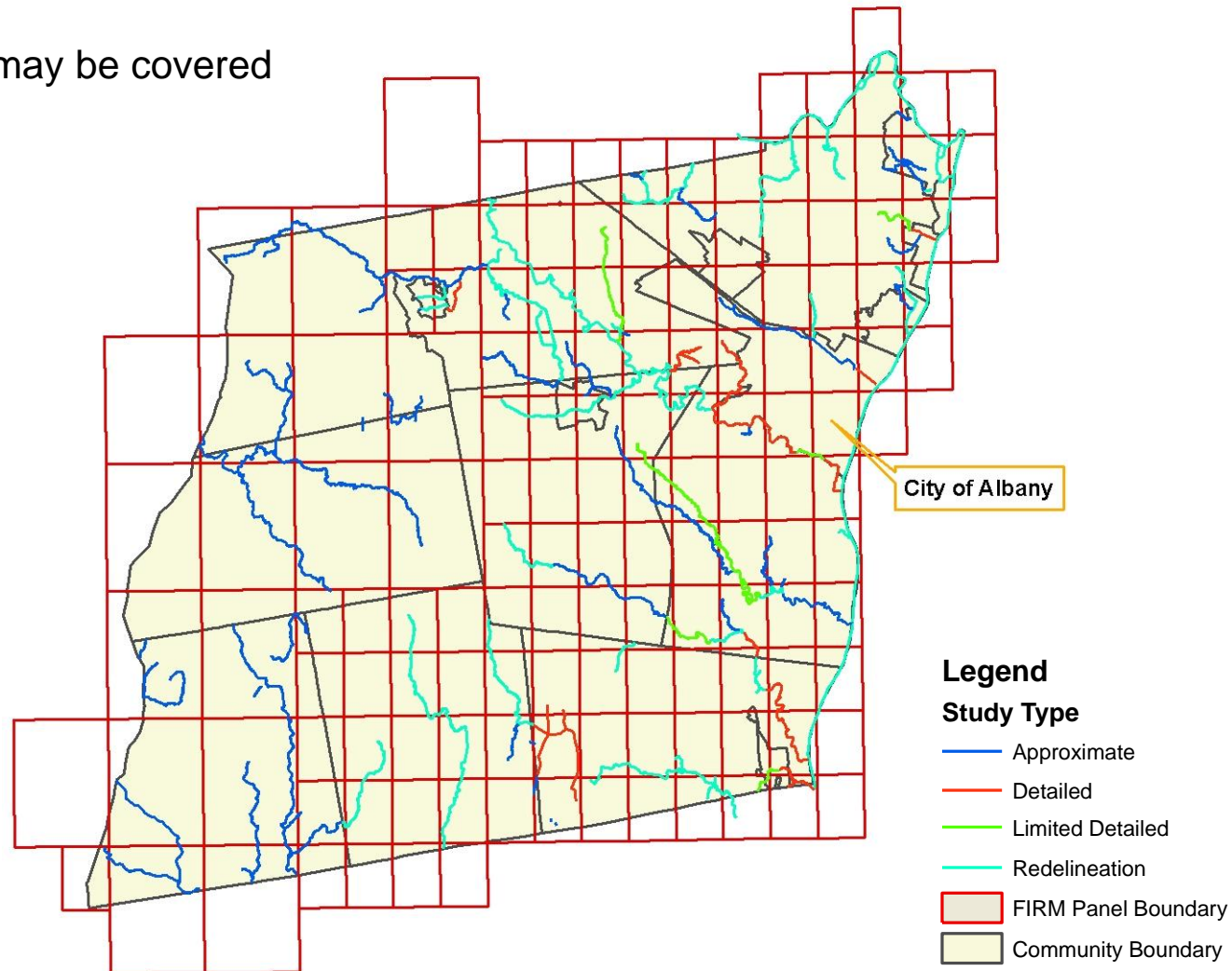
- The digital FIRM and FIS report were produced in the FEMA County-wide format in the North American Vertical Datum of 1988 (NAVD88)
- Stream by stream datum conversion factor was used instead of a single countywide conversion factor
- Average datum conversion factor was: **-0.65 feet**
  - $\text{NAVD 88} = \text{NGVD 29} - 0.65 \text{ feet}$



# Albany County Paneling Scheme

Introductions • Objectives • **MapMod** • Risk MAP Non-Regulatory Products/Datasets • Milestones

- Some of the communities may be covered with more than one panel
- Paneling scheme created from 1:24,000 USGS quads





# Albany County Flood Risk Study & Next Steps

Introductions • Objectives • **MapMod** • Risk MAP Non-Regulatory Products/Datasets • Milestones

- On March 1, 2012 each community received:
  - Preliminary Flood Insurance Study (FIS) report
  - Preliminary Paper Flood Insurance Rate Maps (FIRMs)
  - DVD containing digital FIRM & FIS and geographic information system (GIS) data: GIS viewer and preliminary shapefiles

## Roles & Responsibilities of Local Communities:

- Review & Comment on these preliminary FIRMs & FIS
  - NYSDEC and FEMA will be conducting Community Coordination (CCO) meetings in mid-April
- Flood Risk communications with residents

# Example Mitigation Project

Introductions • Objectives • **MapMod** • Risk MAP Non-Regulatory Products/Datasets • Milestones

- Re-designed everything when the developer (Keystone Associates) saw the new Broome County, NY preliminary maps and raised the site in City of Binghamton two feet putting the finished floor of the building two feet above the new 1% (100-year) event
- Due to the new flood maps and a developer making prudent risk management decision, the new development was saved from the 2011 floods





FEMA

# Albany County Risk MAP Project

**RiskMAP**

Increasing Resilience Together



# Map Mod to Risk MAP

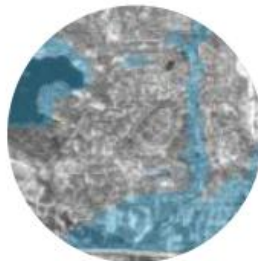
Introductions • Objectives • MapMod • **Risk MAP Non-Regulatory Products/Datasets** • Milestones



- Map Modernization used increasingly-available technology to increase the quality, reliability, and availability of flood hazard maps and data
- It focused on digitizing maps to provide timely, accurate information to community planners



Risk MAP further enhances the maps, involves communities during the assessment and planning stages, and guides and encourages them to communicate risk to their constituents



# What is Risk MAP?

Introductions • Objectives • MapMod • **Risk MAP Non-Regulatory Products/Datasets** • Milestones

In 2009, FEMA developed the Risk Mapping, Assessment, and Planning (Risk MAP) initiative. The goal of Risk MAP is to deliver, in collaboration with State, local, and Tribal entities, **quality data** that increases **public awareness** and leads to **action that reduces risk** to life and property.



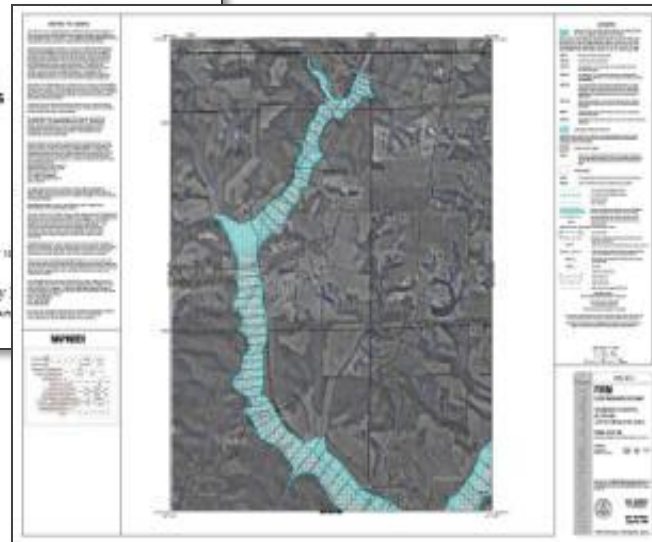
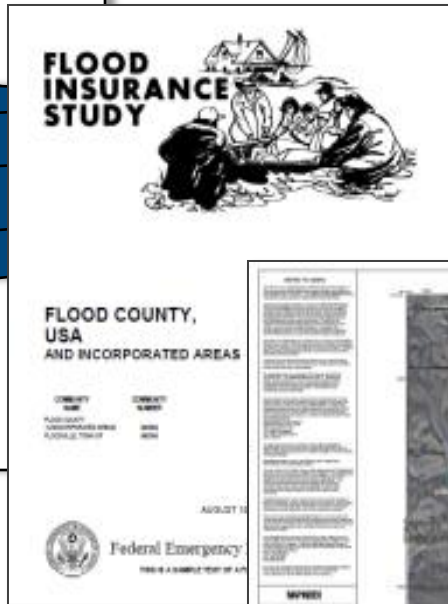
# Program Product Comparisons

Introductions • Objectives • MapMod • Risk MAP Non-Regulatory Products/Datasets • Milestones

## Traditional Regulatory Products

### DFIRM Database

- Flood\_Hazard\_Data
- Political\_Boundaries
- Public\_Land\_Survey\_System
- TopoData
- Community\_Panel\_Info
- L\_Comm\_Info
- L\_MT1\_LOMC
- L\_Pan\_Revis
- L\_Pol\_FHBM
- L\_Riv\_Model
- L\_Stn\_Start
- L\_Wtr\_Nm
- S\_Bfe
- S\_DOQ\_Index
- S\_Firm\_Pan
- S\_Gen\_Struct
- S\_Label\_Ld
- S\_Label\_Pt
- S\_LOMR
- S\_Perm\_Bmk
- S\_Quad
- S\_Riv\_Mrk
- S\_Tnspport\_Ar



# Program Product Comparisons

Introductions • Objectives • MapMod • Risk MAP Non-Regulatory Products/Datasets • Milestones

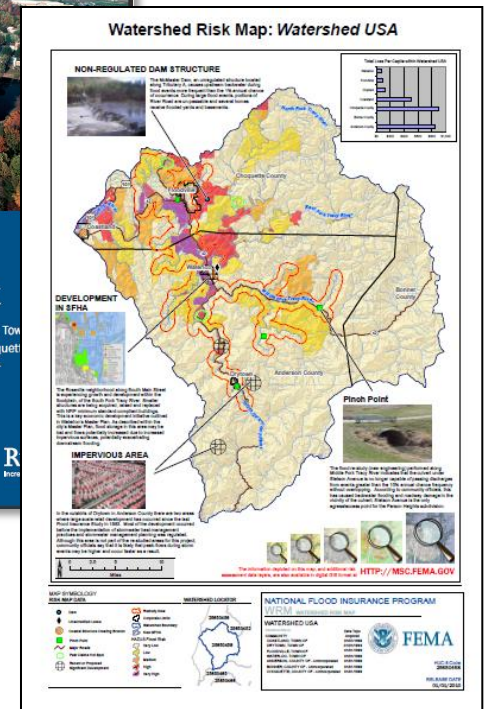
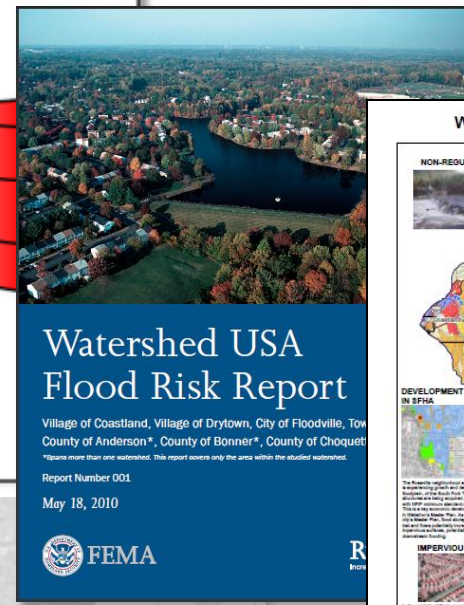
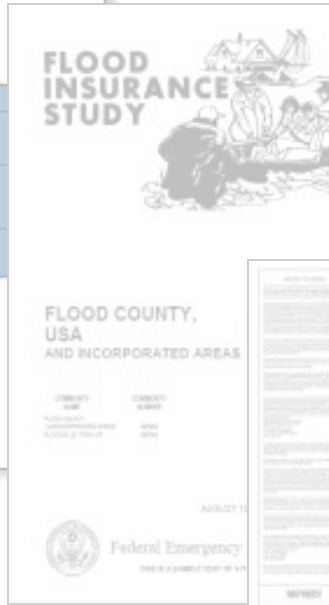
## Non-Regulatory Flood Risk Products

### DFIRM Database

- Flood\_Hazard\_Data
- Political\_Boundaries
- Public\_Land\_Survey\_System
- TopoData
- Community\_Panel\_Info
- L\_Comm\_Info
- L\_MT1\_LOMC
- L\_Pan\_Revis
- L\_Pol\_FHBM
- L\_Riv\_Model
- L\_Stn\_Start
- L\_Wtr\_Nm
- S\_Bfe
- S\_DOQ\_Index
- S\_Firm\_Pan
- S\_Gen\_Struct
- S\_Label\_Ld
- S\_Label\_Pt
- S\_LOMR
- S\_Perm\_Bmk
- S\_Quad
- S\_Riv\_Mrk
- S\_Tnsport\_Ar

### Flood Risk Database (FRD)

- Community\_Panel\_Info
- L\_Comm\_Info
- L\_MT1\_LOMC
- L\_Pan\_Revis
- L\_Pol\_FHBM
- L\_Riv\_Model
- L\_Stn\_Start
- L\_Wtr\_Nm
- S\_Bfe
- S\_DOQ\_Index
- S\_Firm\_Pan
- S\_Gen\_Struct
- S\_Label\_Ld
- S\_Label\_Pt
- S\_LOMR
- S\_Perm\_Bmk
- S\_Quad
- S\_Riv\_Mrk
- S\_Tnsport\_Ar



# Flood Risk Products and Datasets

Introductions • Objectives • MapMod • **Risk MAP Non-Regulatory Products/Datasets** • Milestones

## Albany County will receive the following:

### Flood Risk Products

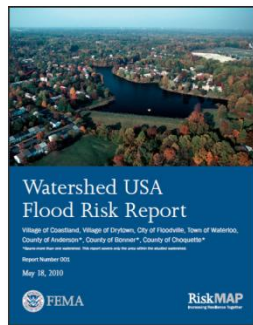
- Flood Risk Database
- Flood Risk Report
- Flood Risk Map

### Flood Risk Datasets

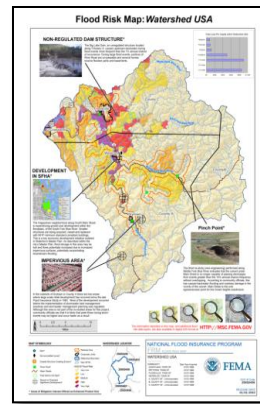
- Flood Depth & Analysis Grids
- Flood Risk Assessments
- Areas of Mitigation Interest



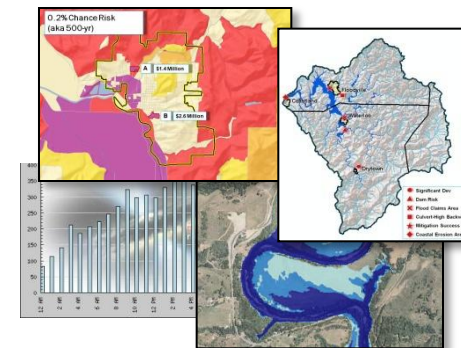
Flood Risk Database



Flood Risk Report



Flood Risk Map



Flood Risk Datasets



# Flood Risk Products and Datasets

Introductions • Objectives • MapMod • **Risk MAP Non-Regulatory Products/Datasets** • Milestones

## Broome County, NY

- Frank Evangelisti's testimonial video for the 2011 ASFPM town hall meeting
  
- <http://youtu.be/4p3cu8eTV7s>

# Milestones

Introductions • Objectives • MapMod • Risk MAP Non-Regulatory Products/Datasets • **Milestones**

- **Spring 2007:** Albany County scoping meetings
- **Fall 2007:** Albany County-wide Flood Insurance Study/Flood Insurance Rate Maps funded
- **Fall 2011:** Risk MAP products and datasets funded
- **March 1, 2012:** Preliminary Albany County FIS and FIRM delivered
- **Mid-April 2012:** CCO meetings with the community officials followed by Open House meetings
- **Summer 2012 – Fall 2013:** Training on Flood Risk Products and Datasets; Technical review of hazard mitigation plans
- **Summer 2013:** Letter of Final Determination (LFD)
- **Winter 2013:** Effective Flood Maps delivered

# Resources

- **FEMA:** [www.fema.gov](http://www.fema.gov)
  - **Floodsmart, the official site of the National Flood Insurance Program (NFIP):** [www.floodsmart.gov](http://www.floodsmart.gov)
  - **Risk Assessment, Mapping and Planning Partners:** [www.RAMPP-team.com](http://www.RAMPP-team.com)
  - **NFIP Reform:** [www.fema.gov/business/nfip/nfip\\_reform.shtm](http://www.fema.gov/business/nfip/nfip_reform.shtm)
  - **Risk MAP Non-Regulatory Products:** Appendix N and O
- 
- New York State - NFIP Coordinator
  - New York State Office of Emergency Management

# Questions & Feedback

- [www.RAMPP-TEAM.com/ny.htm](http://www.RAMPP-TEAM.com/ny.htm): PowerPoint Presentation & additional information will be posted

## Contact Information

- **FEMA Region II**

Paul Weberg

212-680-3638

[Paul.Weberg@fema.dhs.gov](mailto:Paul.Weberg@fema.dhs.gov)

Tonya Evans

212-680-8562

[Tonya.Evans@fema.dhs.gov](mailto:Tonya.Evans@fema.dhs.gov)

- **New York State Department of Environmental Conservation (NYSDEC)**

William Nechamen, CFM

518-402-8146

[wsnecham@gw.dec.state.ny.us](mailto:wsnecham@gw.dec.state.ny.us)