Discovery Report Appendix H Discovery Meeting Summary Memorandum Mid-Hudson Watershed HUC 02020006

June 2017



Federal Emergency Management Agency Department of Homeland Security 26 Federal Plaza New York, NY

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Flood Protection and Dam Safety 625 Broadway, Albany, New York 12233-3504 P: (518) 402-8185 | F: (518) 402-9029 www.dec.ny.gov

Memorandum

To: Mid-Hudson Watershed Discovery Project File

From: NYSDEC Floodplain Management Section

Date: June 2017

Re: Mid-Hudson Watershed Discovery Meeting Summary

Two initial Pre-Discovery webinars were held for all stakeholders within the Mid-Hudson Watershed on May 10, 2016 and May 11, 2016. The purpose of these webinars was to:

- introduce watershed stakeholders to Risk MAP Discovery project concepts;
- review the Discovery Stakeholder Survey to be completed by watershed stakeholders; the survey served as a way for FEMA and NYSDEC to collect information upfront on communities mapping needs and existing data that could be incorporated into a possible Risk MAP project; and
- to discuss upcoming timelines for future Discovery Meetings and the Discovery project overall.

Five Risk MAP Discovery Meetings were held in the Mid-Hudson Watershed during the week of October 17, 2016. The purpose of the Discovery Meetings was to present the draft Discovery Report and Maps containing the information collected to date, and to provide the communities with an additional opportunity for input.

This memo is a summary of the information collected through the Discovery project engagement process for the Mid-Hudson Watershed and will be used to determine the floodplain mapping restudy priorities.



Department of Environmental Conservation Albany County, CID# 36001C Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: June 5, 2016, October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Lee Bormann, Critical Incident Émergency Management Unit Commander (Survey and Meeting) Albany County Sheriff Office 58 Verda Avenue Clarksville, NY 12041 518-720-8025 Lbormann@albanycounty.com

Peter Bayzon, Natural Resource Specialist (Meeting) Albany County Soil and Water Conservation District P.O. Box 497 24 Martin Road Voorheesville, NY 12186 518-765-7923 peter.bayzon@ny.nacdnet.net

Scott Siegel, Policy Analyst (Meeting) Office of the Albany County Executive 112 State Street Room 900 Albany, NY 12207 518-447-7040 scott.siegel@albanycountyny.gov

Laura DeGaetano, Senior Planner (Meeting) Albany County Office of Economic Development, Conservation and Planning 112 State Street, Suite 1006 Albany, NY 12207 518-447-5670 Iaura.degaetano@albanycountyny.gov

Leslie Lombardo, Senior Planner (Meeting) Albany County Office of Economic Development, Conservation and Planning 447 New Salem Road Albany, NY 12186 518-447-5644 <u>leslie.lombardo@albanycounty.com</u>

Albany County Stream Study Requests (in priority order):

- 1. The Hudson River is in need of a new/revised detailed study for the entire reach within the county. There has been development in certain communities along the river, including in the Town of Bethlehem.
- Vly Creek is in need of a revised detailed study from the confluence with the Normans Kill through the Village of Voorheesville. This is a densely settled area with development pressures.

- 3. The Vloman Kill is in need of a new detailed study from Route 32 to Route 85. There is new development along the stream.
- 4. Basic Creek is in need of an updated detailed study from Basic Creek Reservoir through the Hamlet of Westerlo.
- 5. Catskill Creek is in need of a revised approximate study for the entirety of the stream within the county. There are flash flooding issues along the stream.
- 6. Fox Creek from the county line past County Route 357 is in need of a new approximate study. There are issues with the bridge over the county road but few buildings in the area.

Other Stakeholders:

• N/A

GIS Users:

 Laura DeGaetano, Senior Planner (Meeting) Albany County Office of Economic Development, Conservation and Planning 112 State Street, Suite 1006 Albany, NY 12207 518-447-5670 laura.degaetano@albanycountyny.gov

Historical Flood Problems:

- Erosion is a big problem along the Normans Kill and the stream may have exceeded the mapped floodplain boundaries.
- There are problems with erosion and culvert blowouts along Fox Creek.
- There are repeated flooding problems along Basic Creek.
- There are repeated flooding problems, including flash flooding, along Catskill Creek.
- The Village of Green Island is located along the Hudson River with a concentrated population. It has a hydroelectric dam and drinking water is from wells. Serious flooding has not occurred since the Sacandaga Reservoir was built. Isolated flooding has occurred. However the use of sand bags as a preventative measure has helped.
- Menands Village One Apartments and the surrounding area are prone to flooding. Tributaries into the Hudson River and the Hudson River itself have flooded this area in the past, affecting approximately 100 residences.
- County sewer plants in Menands and the Port of Albany are at a low elevation near the Hudson River and many of the older storm drains run into the sewer system so that the facility can become overloaded.
- Preston Hollow in Rensselaerville: Catskill Creek is a secondary tributary that is fed by many small streams. This area was devastated by Hurricane Irene, which resulted in the destruction of dozens of homes and infrastructure. No mitigation has occurred post-Irene.
- Colonie Forts Ferry and Dunsbach Ferry Roads area: This area is along the Mohawk River and has seen flooding due to large ice jams from spring thaw.
- Flooding has also occurred at:
 - Western Avenue / Route20 in front of Stuyvesant Plaza
 - o Central Avenue at the Colonie/Albany corporate limits
 - Quay Street in Albany near the Corning Preserve
 - Western Avenue / Route 20 at Dutch Manor Lane
 - o Route 85A / Maple Road in Voorheesville under the CSX trestle
 - Coeymans Landing Marina

- Albany County Colonie Department of Public Works Substation: Most of the facility is located within the 100-year floodplain along Shaker Creek which is an urban stream prone to flash flooding. Property contains some chemicals as well as valuable equipment. A response plan for protecting assets during major storm events is needed to ensure continuity of critical services to county residents.
- County Route 9 (Canady Hill Road) between Bradt Hollow Road and County Route 1 in the West Berne area: Significant portions of County Route 9 are submerged during heavy rain and snowmelt events due to the Switz Kill overtopping its banks. Downstream of this point, there is also substantial backup of water on County Route 1 at Fox Creek. The problem in both locations may be exacerbated by the entry of a tributary stream to Fox Creek a short distance downstream of the Switz Kill confluence that joins in a very narrow horseshoe bend, restricting flow. In general, the very low gradient and numerous blowdowns remaining from Irene and other events within the stream channel have created a number of obstructions that impede flow.
- County Route 1 at Church Road in Berne/Westerlo: A series of undersized culvert crossings, including both County Route 1 (36" pipe) and Church Road (pair of 18" pipes, and a second 36" pipe) are causing the water to jump out of its channel and flow onto Church Road during heavy runoff events.
- County Route 252 at 157A near Warner's Lake, Berne: One travel lane washed out completely during Hurricane Irene near this location (and on other occasions has flooded out), causing partial closure of the road for one week. An undersized circular CMP culvert became clogged during Irene, resulting in heavy bed load deposition in the stream and overtopping of the road south of the crossing. This causes severe inundation of the neighboring fields west of the road, which overflows east to west, and cuts off a connecting private road containing several homes (Strevell Lane) from all access to the highway. The problem is exacerbated by beaver activity on the same tributary upstream of the road, which contributes to clogging of the culvert as well as releases of water when the beaver dams fail. There is a dirt access road on the south side of the stream (east side of County Route 252) that retains the water in the channel during moderate storms, keeping it from entering a stone lined ditch from which the overtopping occurs.
- County Route 404 over Basic Creek Reservoir, Westerlo: The causeway over the reservoir has on several occasions become completely submerged during heavy rain events.
- County Route 405 over Eightmile Creek, Westerlo: During Hurricane Irene, three circular culverts at this crossing were overwhelmed, causing overtopping and complete washout of the roadway. Repairs were made but the intersection remains vulnerable to future flood events due to the probability of snags at the upstream end of the culverts causing backup of water.
- County Route 412 at Hannacrois Creek immediately south of Westerlo town line: Crossing contains one 36" Corrugated Metal Pipe (CMP) and a 24" High Density Polyethelyne (HDPE) "overflow" culvert which are insufficient to carry flow during high water. The road is frequently overtopped, and water travels into the drainage ditch adjacent to driveway.
- County Route 203 at Normanskill Creek, Guilderland/New Scotland: During Hurricane Irene, an area about 1,000 feet wide flooded in this location, causing severe damage to several properties and forcing closure of the road, which carries moderate traffic volume as a link between Voorheesville and the Westmere area. Areas along the road immediately to the northeast of the bridge remain vulnerable to rapid erosion as well.
- County Route 353 crossing over a tributary of Crystal Lake Creek at Gulf Road: The CMP culvert at this location was severely damaged during Irene, with the bottom completely compromised, and is overwhelmed during heavy rainfall events.
- There are no verifiable high water marks in the county.

Community Planning and Ongoing Projects:

- There is a stream restoration project underway along Onesquethaw Creek (Department of Transportation [DOT] and U.S. Fish and Wildlife Service [FWS]).
- There is a stream restoration project along the Bozen Kill that is referenced in the county hazard mitigation plan.
- There is an NRCS stream restoration project (Environmental Quality Benefits Program) for the tributary to Basic Creek north of Route 1.
- There is residential development pressure in the Town of Bethlehem, with other development spreading into the Town of New Scotland.
- There is a subdivision development near Routes 85 and 85A in the Town of New Scotland and the Village of Voorheesville. New water supply lines along Route 85 are contributing to development.
- The county does not have an open space plan.
- There is an Onesquethaw Creek watershed management plan. Peter Bayzon is the point of contact.
- There is a 10-year old watershed management plan for Coeymans Creek that is no longer active.
- There is a Watervliet Reservoir Watershed Plan. The Capital District Regional Planning Commission is the lead.

Mitigation Activities:

- The county is currently working on an update of its hazard mitigation plan which is anticipated to be completed in early 2017. Scott Siegel is the point of contact.
- No prior mitigation activities were noted.

Training Needs:

• Training on Hazard Mitigation and Grant Programs and the Community Rating System (CRS) would be helpful.

National Flood Insurance Program/Floodplain Management Information:

- No Letter of Map Change (LOMC) clusters were noted.
- The county is familiar with the CRS program and would like more information about it. Nancy Heinzen of the Albany County Stormwater Coalition may be interested in CRS training.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS digital format.
 - There is an annexation to the Village of Altamont near the northern boundary of the village that has recently occurred.
 - Transportation features are available in GIS format.
 - Parcel and zoning data are available in GIS format.
 - Stormwater Coalition is developing building footprints in MS4 areas. The City of Albany may also have building footprints available.
- Engineering Data
 - Locations of flood control structures are not available.
 - The county uses the NYSDEC dam dataset.

- The towns of Bethlehem and Colonie may have survey data available.
- The Hudson River Estuary Program has some culvert location data.
- There are temporary stream gages associated with the Albany/Watervliet combined sewer overflow project. The Capital District Regional Planning Commission is the lead.
- <u>Risk Assessment Data</u>
 - The sheriff's office is collecting data for an update of the 911 system.
 - The sheriff's office is also working on a rail line geographic response plan.
 - Hazard mapping and historical flood inundation areas are not available.

- From Scoping Maps
 - There is flash flooding in the Preston Hollow area south and west of Route 352 in the Town of Rensselaerville.
 - The Village of Altamont has annexed parts of the county to the north (west of Route 397).
- Other
 - There is a karst area around the Vly Creek Reservoir in the Town of New Scotland.

City of Albany, Albany County, CID# 360001 Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

William Simcoe, Deputy Commissioner of Water & Water Supply City of Albany 10 North Enterprise Drive Albany, NY 12204 518-434-5300 wsimcoe@albanyny.gov

Dan Sherman, Senior Building Inspector City of Albany 200 Henry Johnson Boulevard Suite 1 Albany, NY 12210 518-434-5995 <u>dsherman@albanyny.gov</u>

Robert McGee Building & Regulatory Compliance City of Albany 200 Henry Johnson Blvd, Suite 1 Albany, NY 12210

Kevin Ruswick, PE, CFM Schnabel Engineering (Consultant, City of Albany) 28 Corporate Drive, Suite 104 Clifton Park, NY 12065 518-348-8577 kruswick@schnabel-eng.com

David Railsback Schnabel Engineering (Consultant, City of Albany) 28 Corporate Drive, Suite 104 Clifton Park, NY 12065 518-348-8575 drailsback@schnabel-eng.com

City of Albany Stream Study Requests (in priority order):

 The current FEMA modeling for Patroon Creek from Everett Road to the confluence with the Hudson River reflected on the Flood Insurance Rate Map is outdated and a revised detailed study is needed. There is currently dam break modeling being performed for this stream using HEC-RAS 2D.

- 2. The City is concerned about the accuracy of the current mapping for the Normans Kill due to a recent landslide and reconstruction efforts. Changes to the stream channel need to be reflected in an updated detailed study for the stream.
- 3. The upsizing of a culvert along the Krum Kill needs to be reflected on the Flood Insurance Rate Map.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- The city's main issues with flooding are from Patroon Creek, the Normans Kill, the Krum Kill, and flooding related to the combined sewer system.
- During Hurricanes Floyd and Irene, Patroon Creek, the Krum Kill, and the Normans Kill flooded. There was local street flooding along Beaver Creek and CSO.
- There are no verifiable high water marks in the city.

Community Planning and Ongoing Projects:

- A new culvert was installed along the Krum Kill downstream of the Thruway. CHA performed a study for the project.
- Along Patroon Creek, 2,000 feet of culvert were removed and stream was daylighted near Tivoli Lake.
- There is not recent or planned residential or commercial development in the city since it is mostly fully developed already.
- There are piped streams in the city including:
 - Beaver Creek with the outfall at Arch Street
 - The Rudt Kill which flows under the D&H building
 - Fox Creek near the DEC building
 - Unnamed creek at Hoffman Park & Crank Street
- The city does not have an open space plan.
- The city does not have or participate in a watershed management plan.

Mitigation Activities:

- The city participates in the county hazard mitigation plan.
- The city limits new development to the 10 year pre-development discharge as part of its MS4 plan.

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - Building Code Requirements
 - Effective Public Outreach
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are LOMC clusters near Broadway and Pearl Street and near the landslide on the Normans Kill.
- The city is familiar with the CRS program and would like more information about it.

• The city has an active floodplain development permit process. Rob McGee is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - The city uses data from Albany County and the state.
 - Building footprint data are not available.
- Engineering Data
 - There are three dams along Patroon Creek. Dam break modeling is available, and this may be an area for a potential Letter of Map Revision (LOMR).
 - Schnabel Engineering is performing dam safety inundation mapping of Rensselaer Lake Dam
 - There is 2 foot LiDAR data available from 2011 for the county on the State GIS Clearinghouse.
 - There are two flood gauges on the Normans Kill.
 - There is a study performed by CHA for Normans Kill (by the country club).
 - There is a study performed by CHA for a new larger culvert downstream of the Thruway for the Krum Kill.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - There is modeling for a dam break, with inundation map shapefiles for Patroon Creek that was done by Schnabel Engineering.

- From Scoping Maps
 - The Normans Kill was affected by a recent landslide and reconstruction efforts are underway near the Normanside Country Club. The Town of Bethlehem is on the other side of the stream. CHA modeled the area.
- <u>Other</u>
 - o N/A

Village of Altamont, Albany County, CID# 360002 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 10, 2016; October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Jeff Moller, Superintendent of Public Works (Survey and Meeting) Village of Altamont P.O. Box 643 Altamont, NY 12009 518-861-8554, Ext. 16 <u>villagedpw@nycap.rr.com</u>

Nicholas Sala, MS4 Operator, Department of Public Works (Meeting) Village of Altamont 6370 Gun Club Road Altamont, NY 12009 518-861-6913 <u>AltamontStormwater@gmail.com</u>

Village of Altamont Stream Study Requests (in priority order):

- 1. Tributary to the Bozen Kill (south of Main Street) needs an updated detailed study to reflect culvert upgrade projects along Brandle Road and Park Street.
- 2. The Bozen Kill needs an updated approximate study.
- 3. Fly Creek needs an updated detailed study. During large rain events, the stream jumps its banks and floods large portions of nearby neighborhoods.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- Several times in the past ten years, a tributary of the Bozen Kill has overtopped the banks and flooded roads and yards.
- Under large rain events the Village has problems with the Fly Creek (a tributary to the Bozen Kill that runs along Western Avenue, Schoharie Plank Road and crosses Gun Club Road) jumping its banks and flooding large portions of the neighborhoods.
- During Hurricanes Floyd and Sandy, Fly Creek flooded along Western Avenue, Schoharie Plank Road, and Dunnsville Road. Minor flooding along Park Street also occurred.
- There have been repeated flooding problems along Schoharie Plank Road and County Route 1279. [no specific flooding source noted]
- There are no verifiable high water marks in the village.

Community Planning and Ongoing Projects:

- There is a culvert replacement underway at Brandle Road along a tributary to the Bozen Kill. Jeff Moller is the point of contact. Work will be completed later this year.
- There is no recent or planned residential or commercial development in the village.
- There are no piped or naturally occurring underground streams in the community.

- The village does not have an open space plan.
- The village does not have or participate in a watershed management plan.

Mitigation Activities:

- The village adopted the county hazard mitigation plan on November 4, 2010. Jeff Moller is the point of contact.
- The village periodically cleans the creek bed of accumulated stony debris along the tributary to the Bozen Kill north of Main Street.

Training Needs:

• Training on Hazard Mitigation and Grant Programs would be helpful to the village.

National Flood Insurance Program/Floodplain Management Information:

- There are no known LOMC clusters in the village.
- The village is familiar with the CRS program and would like more information about it.
- The village has an active floodplain development permit process. The Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Transportation features are not available.
 - Parcel and zoning data are available in hard copy format.
 - Building footprint data are available in hard copy format.
- Engineering Data
 - Locations of flood control structures are available in hard copy format.
 - Locations of dams are available in hard copy format.
 - Local survey data are available in hard copy format.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the village.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in hard copy format in the county hazard mitigation plan.
 - Hazard mapping data are available in hard copy format.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - A grant application was submitted to update a bridge that the Town of Guilderland owns along the tributary to the Bozen Kill at Grand Street.
- Other
 - o N/A

Town of Berne, Albany County, CID# 360003 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Todd Schwendeman, Planning Board Member Town of Berne 1522 Helderberg Trail Berne, NY 12023 518-369-5722 toddskifast@gmail.com

Phyllis Johnson, ZBA, Fire Commissioner, Emergency Management Committee Member Town of Berne 47 Smith Lane Berne, NY 12023 518-872-9370 cwj042@aol.com

Town of Berne Stream Study Requests (in priority order):

- 1. The Foxen Kill is in need of a new detailed study. There is significant development along the stream and the current floodplain is not accurate. This stream is located outside of the Mid-Hudson Watershed.
- 2. The Tributary to Warners Lake is in need of a revised approximate study. The area currently has no flood hazards mapped and there have been flooding problems in this area. This stream is located outside of the Mid-Hudson Watershed.
- 3. Helderberg Lake is in new of a new approximate study. The lake currently has no flood hazards mapped.
- 4. Thompsons Lake is in need of a revised approximate study. The current floodplain is not accurate.
- 5. The Switz Kill is in need of a new detailed study. This is a significant flooding source in the community. This stream is located outside of the Mid-Hudson Watershed.
- 6. The Tributary to Thompsons Lake is in need of an updated approximate study.
- 7. Woodstock Lake is in need of a new approximate study. There are seasonal homes present and the area currently has no flood hazard mapping. The lake is located outside of the Mid-Hudson Watershed.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

• There are homes affected by flooding along the Foxen Kill at Long Road. Basement flooding also has occurred along much of the stream.

- There have been flooding problems at Warners Lake and its tributary near Mill Dam Road.
- There are homes outside of the floodplain that have flooded along the Foxen Kill off of Route 192.
- Hurricane Irene caused significant damage to homes, highways, commercial zones along the Foxen Kill and the Switz Kill.
- Pinnacle Road near the tributary to Helderberg Lake washed out.
- There are repeated flooding problems at the bottom of Tabor Road and the intersection of Routes 14 and 443 along Fox Creek, including an ice jam.
- There is a verifiable high water mark in the town from Hurricane Irene along the Foxen Kill at the intersection of Irish Hill Road and Route 443. The points of contact are Anita Clayton, Town Clerk (518-872-1448 x101) and Melissa Hale-Spencer, Altamont Enterprise Newspaper (518-861-5005).

Community Planning and Ongoing Projects:

- A bridge and sinkhole were repaired and riprap replaced along the Foxen Kill at the intersection of Irish Hill Road and Route 443.
- Culverts were replaced along Tabor Road along the Foxen Kill.
- The parking lot of the town garage was expanded near the intersection of Routes 9 and 443 near the Foxen Kill floodplain.
- There is a new fire house and county fire training center north of Long Road near the Foxen Kill.
- There are no piped or naturally occurring underground streams in the community.
- The town does not have an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town adopted the county hazard mitigation plan in 2007. Tom Remment (518-447-7000) and Scott Seigel are the points of contact.
- There have been mitigation activities performed in the town, including at the conservation area west of Hill Road along the Switz Kill and the town park along the Foxen Kill at the intersection of Irish Hill Road and Route 443.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs
 - Effective Public Outreach

National Flood Insurance Program/Floodplain Management Information:

- There are no known LOMC clusters in the town.
- The town is familiar with the CRS program via training with the Emergency Managers Group and does not need more information about it.
- The town does not have an active floodplain development permit process. The town's Code Enforcement Officer, Tim Lippert, is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are not available.
 - Transportation features are available in hard copy format.

- Contact: Tim Lippert, Kathy Brown (Planning Clerk, 518-872-1448), Anita Clayton
- Parcel and zoning data are available in hard copy format.
 - Contact: Tim Lippert, Kathy Brown (Planning Clerk, 518-872-1448), Anita Clayton
- Building footprint data are available in hard copy format.
 - Contact: Tim Lippert, Kathy Brown (Planning Clerk, 518-872-1448), Anita Clayton
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are available from the DOT.
 - Local flood gage or rain gage data are available at Berne Knox Westerlo Central School.
 - Flood hazard studies for public/private funded projects in the town are available from the DOT.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - Basement flooding occurred along the Foxen Kill for properties along Tabor Road and Route 443 and at Route 2 and Route 443.
 - There was an ice jam at the bottom of Tabor Road along the Foxen Kill.
- <u>Other</u>
 - o N/A

Town of Bethlehem, Albany County, CID# 361540 Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Justin Harbinger, Building Inspector Town of Bethlehem 445 Delaware Avenue Delmar, NY 12054 518-439-4955 jharbinger@townofbethlehem.org

Town of Bethlehem Stream Study Requests (in priority order):

1. A segment of the Normans Kill is in need of an updated detailed study in the vicinity of the Normanside Country Club. This area was subject to a landslide due to the illegal placement of fill that blocked the entire channel. Reconstruction efforts have changed the course of the stream.

Other Stakeholders:

• N/A

GIS Users:

 Keith Menia, Town GIS Coordinator <u>kmenia@townofbethlehem.org</u> 518-439-4955

Historical Flood Problems:

- In 2011 Hurricane Irene resulted in basement flooding for many buildings.
- There is a verifiable high water mark in Henry Hudson Park marked on a park building. Justin Harbinger is the point of contact.

Community Planning and Ongoing Projects:

- There was a culvert replacement completed several months ago at Krum Kill Road along the Krum Kill.
- There is a new commercial development (Vistatech Park) south of the Normans Kill and Maher Road that is not far from the current floodplain.
- There is development occurring in Bethlehem Center west of the Hudson River.
- There are no piped or naturally occurring underground streams in the community.
- The town has an open space plan that is overseen by the town open space committee. Rob Leslie, Director of Planning is the point of contact.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town participates in the county hazard mitigation plan. Jack Brennan, Director of Emergency Management, is the town point of contact.
- Open space along the Onesquethaw Creek floodplain in the vicinity of South Bethlehem Town Park is being preserved by the town. The town has a tax incentive program in place that provides tax breaks for property owners if they preserve their land as open space.

Training Needs:

• No training needs were identified.

National Flood Insurance Program/Floodplain Management Information:

- There are no known LOMC clusters in the town.
- The town is familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. The town's building inspector is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Transportation features are available in GIS format.
 - Parcel and zoning data are available in GIS format.
 - Building footprint data are available in hard copy format. The town is preparing a building footprint GIS data layer.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are available in GIS format.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available from the town's Emergency Management Coordinator.
 - Hazard mapping data are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - Another landslide occurred along the Normans Kill about 10 years ago north of Route 443 close to the waste water treatment plant.
 - There is a potential flooding issue along the Vloman Kill at Route 144 and Lyons Road that the Town is looking into.
 - There is an erosion problem south of the high school along an unnamed tributary that the town has already been in contact with the DEC about.
- <u>Other</u>
 - Landslide/Illegal fill placement issue along the Normans Kill occurred in April 2015. Currently tied up in litigation to determine who covers remediation costs. Remediation has since been completed by the USACE and the National Guard.

Town of Coeymans, Albany County, CID# 360005 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

John Cashin, Building Inspector Town of Coeymans 18 Russell Avenue Ravena, NY 12143 518-756-2850 jcashin@coeymans.org

Town of Coeymans Stream Study Requests (in priority order):

- 1. An updated detailed study of Hannacrois Creek is needed. Flooding frequently occurs and many properties are located in the current floodplain. Several Letters of Map Amendment have also been issued along the stream.
- 2. An updated detailed study of Coeymans Creek is needed. Miller Road frequently washes out.
- 3. An updated detailed study of the Hudson River is needed.

Other Stakeholders:

 Scott Searles, Town Highway Superintendent Town of Coeymans <u>ssearles@coeymans.org</u>

GIS Users:

• N/A

Historical Flood Problems:

- Hannacrois Creek floods frequently.
- Flooding along Coeymans Creek at Miller Road also occurs, in addition to tidal flooding from the Hudson River.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There are several debris removal projects along Hannacrois Creek, south of Blossom Hill Road and Thompsons Road.
- There is a proposed project to raise the grade of Miller Road along Coeymans Creek because it floods frequently. This project was proposed in the hazard mitigation plan.
- There is a DOT project underway to replace the Route 144 bridge over Hannacrois Creek.
- Recent development in the town includes an industrial park near the Port of Coeymans and the Lefarge Cement Plant along Coeymans Creek (3,000 acres, some issues with pollution and discharge).
- There is a <u>2016 report</u> that describes residents' concern with development along Coeymans Creek that references the Port of Coeymans industrial park.
- There is a buried pipe in the town that carries water from Alcove Reservoir to the City of Albany.

- The town does not have a formal open space plan. However, the Town Conservation Area/Conservation Advisory Committee wants to keep more open space preserved along Coeymans Creek.
- The town participates in the Hudson River Keepers program. The <u>Onesquethaw-Coeymans Watershed Study</u> was completed in 2008.

Mitigation Activities:

- A draft hazard mitigation plan was prepared for the town by Delaware Engineering which should be finalized within the next few months.
- There are efforts to preserve open space along Coeymans Creek in a town park. The plan is currently under review by the zoning board.

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs
 - Community Rating System (Most important to the town)

National Flood Insurance Program/Floodplain Management Information:

- There are a few LOMCs issued or underway in the town.
- The town is not familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. The town's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy and GIS format.
 - Contact: Code Enforcement Officer
 - Transportation features are available in hard copy and GIS format.
 - Contact: Code Enforcement Officer
 - Parcel and zoning data are available in GIS format.
 - Contact: Čode Enforcement Officer
 - Building footprint data are available in hard copy format.
 - Contact: Code Enforcement Officer
- Engineering Data
 - Locations of flood control structures may be available.
 - There are no dams located in the town.
 - Local survey data are available in hard copy format.
 - Contact: Code Enforcement Officer
 - Local flood gage and rain gage data are not available.
 - There are DOT and USACE study data available in GIS format for the town.
- Risk Assessment Data
 - Essential/critical facilities in or near the floodplain include the sewer plant located in the Hudson River floodplain and a fire station in the Hannacrois Creek floodplain.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - The North Woods Nature Preserve is a 300-acre NYSDEC preserve located along Coeymans Creek west of Interstate 87.
- Other
 - N/A

Town of Colonie, Albany County, CID# 360007 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: Not Submitted Discovery Meeting Attendance: Did not attend

Town of Colonie Stream Study Requests (in priority order):

The Town of Colonie chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Colonie, Albany County, CID# 365377 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: Not Submitted Discovery Meeting Attendance: Did not attend

Village of Colonie Stream Study Requests (in priority order):

The Village of Colonie chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Village of Green Island, Albany County, CID# 360009 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: May 10, 2016, October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Sean Ward, Executive Assistant to the Mayor (Meeting and Survey) 20 Clinton Street Green Island, NY 12183 518-273-2201 seanw@villageofgreenisland.com

Village of Green Island Stream Study Requests (in priority order):

1. The effect of the upper Hudson and Mohawk Rivers on the village needs to be studied. The current effective study is outdated (Dec. 1979) and inaccurate. Many changes have occurred since then that could have a positive effect on the community's ability to sustain high water. The Mohawk River is located outside of the Mid-Hudson Watershed.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- The village has not experienced flooding that affected residences since 1936 and then it was limited to largely basement flooding.
- There are no areas of repeated flooding.
- The village did not note any verifiable high water marks.

Community Planning and Ongoing Projects:

- There is a reconstruction project for Albany Avenue at the south end of the village. Sean Ward is the point of contact.
- There is no recent or planned residential or commercial development in the village.
- There are no piped or naturally occurring underground streams in the community.
- The village has an open space plan dated March 2013. Sean Ward is the point of contact.
- The village does not have or participate in a watershed management plan.

Mitigation Activities:

- The village participates in the county hazard mitigation plan which is currently being updated. Sean Ward is the point of contact.
- There is an area for potential mitigation at the southern end of the village.

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are LOMCs throughout the village.
- The village would like more information about the CRS program.
- The village has an active floodplain development permit process. Maggie Alix, the village's Code Enforcement Officer, and Kristin Swinton, the Chair of the Planning Board are the points of contact.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Transportation features are available in hard copy format.
 - Parcel and zoning data are available in hard copy format.
 - Building footprint data are available in hard copy format.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are available in hard copy format.
 - Local survey data are not available.
 - Local flood gage or rain gage data are available in hard copy format.
 - There are no available flood hazard studies for public/private funded projects in the village.
- Risk Assessment Data
 - Essential/critical facilities data are available in hard copy format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are available in hard copy format.

- From Scoping Maps
 - There's a potential mitigation site along the Hudson River at the southernmost corporate limit of the village at Lower Hudson Avenue.
- Other
 - Flood insurance through the NFIP has become very costly. There have been five reported claims and three actual awards totaling \$29,308. During that same time, over \$3 million in premiums has been paid.

Town of Guilderland, Albany County, CID# 360010 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Ken D'Arpino, Storm Water Management Officer Town of Guilderland French's Mill Road P.O. Box 162 Guilderland, NY 12084 518-861-5108 darpinok@townofguilderland.org

Town of Guilderland Stream Study Requests (in priority order):

- 1. The Krum Kill is in need of an updated detailed study. The stream has repeated flooding problems due to undersized culverts that frequently affect a large commercial development
- 2. Mill Pond is in need of a new detailed study. There is currently no Special Flood Hazard Area shown in this location but the area floods due to an undersized culvert.
- 3. Black Creek is in need of a new detailed study. There is new development occurring in close proximity to the existing Special Flood Hazard Area.

Other Stakeholders:

- Jackie Suidy, Town Building-Zoning Lead Town of Guilderland 518-356-1980 <u>suidyj@townofguilderland.org</u>
- Steve Oliver, Highway Superintendent Town of Guilderland 518-861-5108 <u>olivers@townofguilderland.org</u>

GIS Users:

• N/A

Historical Flood Problems:

- The Krum Kill floods in any heavy rain event due to undersized culverts. A commercial area is affected.
- Flooding has also recently occurred along Mill Pond.
- The town did not note any verifiable high water marks.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects, including bridge/culvert replacements, since the last Flood Insurance Rate Map update.
- There is a new residential development west of Black Creek and Route 201, south of Meadowdale Road that is adjacent to the floodplain.
- There are no piped or naturally occurring underground streams in the community.

- The town did not indicate if they have an open space plan. However, the 20 West development that is east of the Normans Kill and south of State Route 20 has open space as part of its site.
- The town participates in a watershed management plan. The points of contact are members of the Planning Board and Zoning Board: Jan Weston, Town Planner (518-356-1980) and John Wemple, Conservatory Department Head.

Mitigation Activities:

- The town participates in the county hazard mitigation plan and is currently coordinating with the county on the latest plan.
- There are plans for various mitigation activities but funding is an issue. Stream restoration activities have been performed. The points of contact are the Planning and Zoning Boards.

Training Needs:

• Training on Hazard Mitigation and Grant Programs would be helpful to the town.

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters known in the town.
- The town would like more information about the CRS program.
- The town has an active floodplain development permit process. The town's Planning and Zoning Board is responsible for floodplain permitting activities.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and hard copy format.
 - GIS data is available from the county
 - Transportation features are available in GIS and hard copy format.
 - GIS data is available from the county
 - Parcel and zoning data are available in GIS and hard copy format.
 - Contact: Town Planning and Zoning Board
 - Building footprint data are available in GIS and hard copy format.
 - Contact: Town Planning and Zoning Board
- Engineering Data
 - Locations of flood control structures are available in hard copy format.
 - Contact: Town Planning and Zoning Board
 - Locations of dams are not available.
 - The City of Watervliet owns a dam located in the town.
 - Local survey data are available in GIS format.
 - <u>McKownville Drainage Study</u> prepared by Delaware Engineering.
 - Local flood gage or rain gage data are not available.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in hard copy format.
 - Contact: Town Planning and Zoning Board
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available. However, the City of Watervliet may have a dam break study for the dam located in the town that is owned by the city.
 - Historical flood inundation areas are available in GIS format.
 - Contact: Delaware Engineering

- From Scoping Maps
 - The dam owned by the City of Watervliet is located at the Watervliet Reservoir, just north of Hurst Road.
- <u>Other</u>
 - N/A

Town of Knox, Albany County, CID# 360011 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Dan Sherman, Senior Building Inspector Town of Knox P.O. Box 116 Albany, NY 12107 518-858-6331 dasherman@nycap.rr.com

Town of Knox Stream Study Requests (in priority order):

The Town feels that the current Special Flood Hazard Areas shown on the Flood Insurance Rate Map are accurate and does not have any requests for new or updated studies at this time.

Other Stakeholders:

• N/A

GIS Users:

 Betty Ketcham, GIS Analyst Town of Knox

Historical Flood Problems:

- No historical flooding problems were noted.
- The town did not note any verifiable high water marks.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects, including bridge/culvert replacements, since the last Flood Insurance Rate Map update.
- There is no recent or planned residential or commercial development in the town.
- There are naturally occurring underground streams in the community but no additional details were provided.
- The town does not have an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town participates in the county hazard mitigation plan. No point of contact was provided.
- The town did not report any prior flood mitigation activities.

Training Needs:

• No training needs were identified.

National Flood Insurance Program/Floodplain Management Information:

- No LOMC clusters in the town were noted.
- No information about CRS was provided.
- No information about whether the town has an active floodplain development permit process was provided.

Available Data:

- Base Map Data
 - The town uses county and state data sets for base map data.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - N/A
- Other
 - N/A

Village of Menands, Albany County, CID# 360012 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Village of Menands Stream Study Requests (in priority order):

The Village of Menands chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Town of New Scotland, Albany County, CID# 360013 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: Not submitted Discovery Meeting Attendance: Did not attend

Town of New Scotland Stream Study Requests (in priority order):

The Town of New Scotland chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Ravena, Albany County, CID# 361346 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 6, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Joseph Burns, Building/Fire Inspector Village of Ravena 15 Mountain Road Ravena, NY 12143 518-756-8201 ravbuildinginspector@gmail.com

Village of Ravena Stream Study Requests (in priority order):

1. A new/revised detailed study is needed for the Tributary 1 to Hannacrois Creek to accurately reflect flooding problems caused by old, outdated culverts for the NYS Thruway and CSX Railroad. The portion of the stream west of the Thruway currently has an approximate study.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- The village has responded to several floods in the last 5 to 10 years.
- There is flooding along Tributary 1 to Hannacrois Creek during every heavy rain storm. This is due to old, outdated culverts for the NYS Thruway and CSX Railroad along the stream. The south side of Main Street is especially prone to repeated flooding due to this flooding source.
- The village did not note any verifiable high water marks.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects, including bridge/culvert replacements, since the last Flood Insurance Rate Map update.
- There is no recent or planned residential or commercial development in the village.
- There are underground culverts on the south side of Main Street that contain discharge from Tributary 1 to Hannacrois Creek.
- The village does not have an open space plan.
- The village does not have or participate in a watershed management plan.

Mitigation Activities:

- The village noted that the county hazard mitigation plan is currently being updated.
- The village did not report any prior flood mitigation activities.

Training Needs:

• Training on Hazard Mitigation and Grant Programs would be helpful to the village.

National Flood Insurance Program/Floodplain Management Information:

- The village did not indicate the presence of any LOMC clusters.
- The village is familiar with the CRS program and would like more information about it.
- The village has an active floodplain development permit process. The Building Department is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Contact: Village Building Department
 - Transportation features are available in hard copy format.
 Contact: Village Clerk
 - Parcel and zoning data are available in hard copy format.
 - Contact: Village Clerk/Building Department
 - Building footprint data are available in hard copy format.
 - Contact: Village Building Department
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are available in hard copy format.
 Contact: Village Building Department
 - o Local flood gage and rain gage data are not available.
 - There are flood hazard studies for public/private funded projects in the village available in hard copy format.
 - Contact: Village Building Department
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in hard copy format.
 - Contact: Village Clerk/Building Department
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
- 0 N/A
- Other
 - The Village noted that Tributary 1 to Hannacrois Creek was recently restudied for the Albany County countywide Flood Insurance Rate Map effective March 2015.

Town of Rensselaerville, Albany County, CID# 360014 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: Not submitted Discovery Meeting Attendance: Did not attend

Town of Rensselaerville Stream Study Requests (in priority order):

The Town of Rensselaerville chose not to attend either the pre-Discovery webinars or the inperson Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Voorheesville, Albany County, CID# 360015 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: Not submitted Discovery Meeting Attendance: Did not attend

Village of Voorheesville Stream Study Requests (in priority order):

The Village of Voorheesville chose not to attend either the pre-Discovery webinars or the inperson Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time. City of Watervliet, Albany County, CID# 360016 Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: June 7, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Mark Gleason, General Manager City of Watervliet 2 15th Street Watervliet, NY 12189 518-270-3800 <u>mgleason@watervliet.com</u>

City of Watervliet Stream Study Requests (in priority order):

The City of Watervliet chose not to attend the in-person Discovery Meeting. The Discovery stakeholder survey received by NYSDEC did not include any stream study requests. Absent different information, it is assumed the City has no stream study requests at this time.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- The city has not had a significant flood disaster within the last decade.
- Minor flooding occurred at the I-787 intersection in 2011 due to Hurricane Irene.
- There are no areas that experience repeated flooding problems in the city.
- There are no verifiable high water marks in the city.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects, including bridge/culvert replacements, since the last Flood Insurance Rate Map update.
- There is no recent or planned residential or commercial development in the city.
- The Dry River, which begins on the eastern border of the city, is culverted under the city. Starting at 12th Avenue, the river runs west to Hudson Shores Park where it confluences with the Hudson River.
- The city does not have an open space plan.
- The city does not have or participate in a watershed management plan.

Mitigation Activities:

• The city did not provide any information about a hazard mitigation plan or flood mitigation activities.

Training Needs:

- Training on the following topics would be helpful to the city:
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- No information about LOMC clusters was provided by the city.
- The city is not familiar with the CRS program and would like more information about it.
- The city does not have an active floodplain development permit process. The city's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Contact: Jeremy Smith, City Clerk
 Transportation factures are not evoluble
 - Transportation features are not available.
 - Parcel and zoning data are available in hard copy format.
 - Contact: Mark Gilchrist, Zoning Department
 - Building footprint data are available in hard copy format.
 - Contact: Code Enforcement Department
- Engineering Data
 - Locations of flood control structures are available in hard copy format.
 - Contact: Mark Gleason, City General Manager
 - Locations of dams are available in hard copy format.
 - Contact: Mark Gleason, City General Manager
 - Local survey data are available in hard copy format.
 - Contact: Code Enforcement Department
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies for public/private funded projects in the city are available in hard copy format.
 - Jeff Budrow, Lead Engineer, Weston & Sampson (Engineering subcontractor)
- Risk Assessment Data
 - Essential/critical facilities data are available in hard copy format.
 - Contact: Robert Conlen, Fire Chief
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in hard copy format.
 - Contact: Mark Gleason, City General Manager
 - Historical flood inundation areas are available in hard copy format.
 - Contact: Mark Gleason, City General Manager

- From Scoping Maps
 - 0 **N/A**
- Other
 - **N/A**

Town of Westerlo, Albany County, CID# 360017 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Keith Wright, Town Highway Superintendent Town of Westerlo 671 County Route 401 Cairo, NY 12193 518-797-3205 westroads@MhCable.com

Jody Ostrander, Deputy Town Highway Superintendent Town of Westerlo 671 County Route 401 Cairo, NY 12193 518-797-3205 westroads@MhCable.com

Town of Westerlo Stream Study Requests (in priority order):

The Town feels that the current Special Flood Hazard Areas shown on the Flood Insurance Rate Map are accurate and does not have any requests for new or updated studies at this time.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- There were significant damages from Hurricane Irene in 2011. The following repairs were performed with FEMA funding:
 - Dunbar Hollow area a section of the road west of the bridge was washed out.
 - Lobdell Mill Road washed out on the east side of the bridge over Basic Creek.
 - A culvert at Boomhower Road along the tributary of Silver Creek was also damaged and had to be repaired.
 - The area by Westerlo Town Park flooded and had to be restored
- During Hurricane Irene, a culvert at Eight Mile Creek under Pine Valley Road was also overtopped but there was no damage.
- Beavers are increasing the flooding area at Troutner Lake. There is a concern that if the beaver dam breaks that it could cause flooding downstream.
- County Route 143 has two 24 inch pipes which often clog with debris.
- There were no verifiable high water marks noted.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects, including bridge/culvert replacements, since the last Flood Insurance Rate Map update.
- There is not recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the town.

- The town does not have an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town does not participate in a hazard mitigation plan.
- The town did not report any prior flood mitigation activities.

Training Needs:

• No training needs were identified.

National Flood Insurance Program/Floodplain Management Information:

- No LOMC clusters in the town were noted.
- No information about CRS was provided.
- No information about whether the town has an active floodplain development permit process was provided.

Available Data:

- Base Map Data
 - Political boundaries are not available.
 - Transportation features are not available.
 - Parcel and zoning data are not available.
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - Lobdell Mill Road washed out during Hurricane Irene. \$250,000 in FEMA funds were used to install a culvert and replace fill.
- Other
 - The pipe on Slade Hill Road is six feet in diameter.

Columbia County, CID# 36021C Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: June 3, 2016, June 9, 2016, June 21, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Patrice Perry, Senior Planner (Meeting) Columbia County Planning & Economic Development 401 State Street Hudson, NY 12534 518-828-3375 Patrice.perry@columbiacountyny.com

Dean Knox, Director of Engineering Division (Survey and Meeting) Columbia County Department of Public Works P.O. Box 324 Route 23B Hudson, NY 12534 518-828-7011 Dean.knox@columbiacountyny.com

Edward Stiffler, Economic Developer (Survey) Columbia County Economic Development Corporation 4303 Route 9 Hudson, NY 12534 518-828-4718 estiffler@columbiaedc.com

Steve Nack, Natural Resource Specialist (Survey) Columbia County Soil & Water Conservation District 1024 State Route 66 Ghent, NY 12075 518-828-4386 <u>steve.nack@ccswcd.org</u>

Columbia County Stream Study Requests (in priority order):

Patrice Perry

- 1. Kinderhook Creek is in need of a revised detailed study, from just north of the Village of Valatie to just south of the Village of Kinderhook. This is one of the few developed areas within the county, and there is some development pressure in this area.
- 2. Kinderhook Creek and Wyomanock Creek are in need of new detailed studies from the county line to the Hamlet of New Lebanon. This area has a high repetitive loss rate. There is also recent development in this area, along with a school.
- 3. Bashbish Brook and the Roeliff Jansen Kill are in need of a new detailed studies, from the confluence of the Bashbish and the Roeliff Jansen Kill to the Hamlet of Copake Falls. This area has repeated flood losses and infrastructure damage.
- 4. There are a number of small lakes in the county that have development on them or have some development pressure. The county would like Base Flood Elevations established

for the following lakes: Copake Lake, Upper Rhoda Pond, Lower Rhoda Pond, Chrysler Pond, Kinderhook Lake, and Twin Lakes.

Dean Knox

- 1. The Roeliff Jansen Kill is in need of an updated detailed study from Robinson Pond Dam to Hudson River (Towns of Germantown, Livingston, Copake, Clermont, Milan, Gallatin, Pine Plains, and Ancram).
- 2. Claverack Creek is in need of an updated detailed study for its entire length within the county (Towns of Stockport and Claverack).
- 3. Hollowville Creek is in need of a new detailed study for its entire length within the county (Town of Claverack).
- 4. Indian Creek should be studied by approximate methods for its entire length within the county (Towns of Canaan, Chatham, and Austerlitz).
- 5. Taghkanic Creek should be studied by approximate methods for its entire length within the county (Towns of Claverack, Greenport, Taghkanic, Copake, and Hillsdale).
- 6. Wyomanock Creek should be studied by detailed methods for its entire length within the county (Town of New Lebanon).
- 7. Green River should be studied by approximate methods for its entire length within the county (Towns of Austerlitz and Hillsdale). This stream is located outside of the Mid-Hudson Watershed.

Steve Nack

1. Bashbish Brook should be studied using detailed methods in the Town of Copake

Other Stakeholders:

- Columbia County Town Highway Superintendent Association c/o Bernie Meyers, Town of Canaan Highway Superintendent 518-781-4455
- Columbia County Board of Supervisors 401 State Street Hudson, NY 12534 518-828-0871

GIS Users:

• N/A

Historical Flood Problems:

- The County noted the Roeliff Jansen Kill, Claverack Creek, Hollowville Creek, Indian Creek, Taghkanic Creek, Wyomanock Creek, Bish Bash Creek, and Green River experience repeated flooding issues. These are usually due to either extreme rain or precipitation events or during periods of rain with a snowpack and frozen ground.
- Specific floodprone areas include:
 - Claverack Creek at County Route 29 in the Town of Greenport
 - Claverack Creek just south of Route 23B in the Town of Claverack. Flooding overtops the road in this area.
 - Unnamed Tributary to the Hudson River at County Route 46 in the Town of Stuyvesant
 - Hollowville Creek at the intersection of County Route 16 and 27B in the Town of Claverack

- Hollowville Creek along Route 23 and 273 has development and a trailer park that has flooded frequently in the recent past.
- Taghkanic Creek at County Route 7 in the Town of Copake
- Kinderhook Creek from the northern county boundary to the northeast corner of the county in the Town of New Lebanon. This area has a high number of repetitive losses at Lebanon Valley speedway.
- There are no verifiable high water marks in the county.

Community Planning and Ongoing Projects:

- The county performs a variety of culvert replacements each year, but no specific details were provided.
- On Route 24, south of Interstate 90, there are a couple of bridges being replaced on Indian Creek.
- The Route 29 bridge over Claverack Creek may be elevated to help mitigate some of the flooding issues at this crossing.
- There is an aquatic connectivity study being performed to assess the impact of culverts and bridges on fish and wildlife passage.
- Along Route 9, from the City of Hudson heading north to the intersection of Route 9 and Route 25, there are a number of residential buildings being converted to commercial uses.
- The Route 9 corridor in the Villages of Valatie and Kinderhook has heavy development pressure. The Valatie Kill and Kinderhook Creek floodplains are near this area.
- Route 295 from the Town of Ghent to the Town of Chatham has commercial development and development pressure.
- Route 9H from the intersection of Route 66 to approximately the intersection of Route 23 has commercial development and development pressure in the Town of Claverack. Portions of this area are located near the floodplain.
- There are no piped or naturally occurring underground streams in the county.
- The county does not have an open space plan. However, local jurisdictions within the county may have their own.
- The county does not have or participate in a watershed management plan. However, local jurisdictions may have their own or participate in one.

Mitigation Activities:

- William Black, Director of the County Emergency Management Office, is the point of contact for the county's hazard mitigation plan. The most recent plan is dated 2008.
- The Columbia County Soil and Water Conservation District (SWCD) performs some stream restoration work when streams are damaged by a flood event. Steve Nack of the SWCD is the county point of contact.
- There have also been local culvert improvements and zoning/building code modifications that are referenced in the hazard mitigation plan.

Training Needs:

- Training on the following topics would be helpful to the county:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs
- A three hour class to introduce the basics of floodplain management to various local officials would be helpful. There is not a lot of development pressure in the floodplains, so a longer class may not be warranted.

• A class to assist local officials in learning their roles in a post-disaster flood response would also be useful.

National Flood Insurance Program/Floodplain Management Information:

- The county representatives were not aware of any LOMC clusters in the county.
- The county is not familiar with the CRS program and would like more information about it.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Contact: Suzette Booy, Real Property Tax Director (suzette.booy@columbiacountyny.com)
 - Transportation features are available in hard copy and non-GIS digital format.
 - Contact: Dean Knox, Director of Engineering (dean.knox@columbiacountyny.com)
 - Parcel and zoning data are available in hard copy and GIS format.
 - Contact: Suzette Booy, Real Property Tax Director (suzette.booy@columbiacountyny.com)
 - Building footprint data may be available in hard copy format from individual jurisdictions.
- Engineering Data
 - Locations of flood control structures are available from the DEC Region 4 office.
 - Locations of dams are available from the DEC Region 4 office. Several of the dams in the county include:
 - Philmont Reservoir Dam
 - Dam just upstream of Stuyvesant Falls on Kinderhook Creek
 - Hydropower facility on Kinderhook Creek
 - Dam on Claverack Creek just north of Route 20 bridge
 - Local survey data is available in hard copy format.
 - Contact: Dean Knox, Director of Engineering (dean.knox@columbiacountyny.com)
 - $\circ\,$ There is one flood gage on the Rossman Bridge. It is unknown if digital data is available from this gage.
 - Hydraulic analysis for bridges are available.
 - Contact: Dean Knox, Director of Engineering (<u>dean.knox@columbiacountyny.com</u>); NYSDOT Region 8 Structures Office
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - A dam break inundation study for the dam located on Kinderhook Creek is available. The analysis was performed for a residential homeowners association.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - Claverack Creek frequently floods to the east of Route 29 and south of Route 23B in the Town of Claverack.
- Other
 - N/A

Town of Ancram, Columbia County, CID# 361312 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 5, 2016, June 7, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Colleen Lutz, Planning Clerk (Principal point of contact) (Survey) Town of Ancram 1416 County Route 7 Ancram, NY 12502 518-329-6512, Ext. 205 planningboard@townofancram.org

Hugh Clark, Town Board Member/Deputy Town Supervisor (Meeting) Town of Ancram 1003 County Route 3 Ancram, NY 12503 518-329-2926 hclark@fairpoint.net

Art Bassin, Town Supervisor (Survey) Town of Ancram 1416 County Route 7 Ancram, NY 12502 518-469-7768 abassin@aol.com

Town of Ancram Stream Study Requests (in priority order):

1. The Roeliff Jansen Kill, Punch Brook, and Drowned Lands Swamp are in need of new detailed studies. These three flooding sources comprise one distinct area that frequently floods and results in road closures.

Other Stakeholders:

 David Boice, Town of Ancram Fire Department 518-329-3430; <u>boichomecare@fairpoint.net</u>

GIS Users:

• N/A

Historical Flood Problems:

- In recent years higher amounts of precipitation are received in shorter time periods which
 result in the closure of major roads in the town such as Hall Hill Road, Wiltsie Bridge Road,
 Dam Road, State Route 82 and County Route 3 along Punch Brook, Shekomeko Creek,
 and the Roeliff Jansen Kill.
- There are distinctive areas of flooding on Wiltsie Bridge Road just west of the intersection of County Route 3 at the bridge, Dam Road approximately ¼ mile west of the intersection with State Route 82, and along County Route 3 at the bridge over the Drowned Lands Swamp by the Pond Restaurant.
- There is a verifiable high water mark in the town at the Ancram Paper Mill at the dam and bridge over State Route 82. Colleen Lutz, Planning Clerk is the point of contact.

Community Planning and Ongoing Projects:

- There is a project underway to replace two culverts in the Roeliff Jansen Kill watershed (Pat's Road and Hall Hill Road). The replacements will increase capacity. The upgrade for Pat's Road is complete. The upgrade for Hall Hill Road will be delayed until spring due to push back from property owners. The point of contact is Colleen Lutz.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the community.
- The town's comprehensive plan (adopted in 2010) includes an open space preservation component. A farmland protection plan was also adopted in 2011. These documents are available on the town's website. The points of contact are Hugh Clark and Art Bassin.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town participates in the county hazard mitigation plan.
- The town's 2014 zoning law has some restrictions that may be recognized as mitigation measures. No specific details were provided.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - o Building Code Requirements
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters identified in the town.
- The town is not familiar with the CRS program and would like more information about it.
- The town does not have an active floodplain development permit process. The town's zoning enforcement officer is responsible for floodplain permitting. Development in the floodplain is discouraged.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and hard copy format.
 - Contact: Colleen Lutz, Town Planning Clerk (Data is from the county)
 - Transportation features are available in GIS and hard copy format.
 - Contact: Colleen Lutz, Town Planning Clerk (Data is from the county)
 - Parcel and zoning data are available in GIS and hard copy format.
 - Contact: Colleen Lutz, Town Planning Clerk (Data is from the county)
 - Building footprint data are available in hard copy and non-GIS digital format.
 - Contact: Colleen Lutz, Town Planning Clerk
- Engineering Data
 - Locations of flood control structures are available in hard copy format.
 - Locations of dams are available in GIS and hard copy format. (NYSDEC Dam Inventory data)
 - Local survey data are available in hard copy format.
 - Contact: Colleen Lutz, Town Planning Clerk
 - \circ Local flood gage or rain gage data are not available.
 - Flood hazard studies for public/private funded projects in the town are available in GIS and hard copy format.

- Contact: Nan Stoltzenburg/Don Meltz (for flood hazard studies)
- Contact: Colleen Lutz, Town Planning Clerk (culvert replacement project)
- Risk Assessment Data
 - Essential/critical facilities data are available in hard copy format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in hard copy format.
 - Historical flood inundation areas are available in hard copy format.

- From Scoping Maps
 - Route 17 at the Roeliff Jansen Kill is closed at least every spring due to flooding from snow melt.
 - Flooding along Route 3/17 at Drowned Lands Swamp can range from six inches to several feet high.
 - There is a dam along Punch Brook near Route 82 and Maple Lane in Ancramdale. This is a swampy area prone to flooding.
 - There is a dam along the Roeliff Jansen Kill at Pooles Mill Road.
- Other
 - o N/A

Town of Austerlitz, Columbia County, CID# 361385 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Austerlitz Stream Study Requests (in priority order):

The Town of Austerlitz chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Canaan, Columbia County, CID# 361313 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None Submitted Discovery Meeting Attendance: Did not attend

Town of Canaan Stream Study Requests (in priority order):

The Town of Canaan chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Chatham, Columbia County, CID# 361314 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: Not submitted Discovery Meeting Attendance: Did not attend

Village of Chatham Stream Study Requests (in priority order):

The Village of Chatham chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Town of Chatham, Columbia County, CID# 361523 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: Not submitted Discovery Meeting Attendance: Did not attend

Town of Chatham Stream Study Requests (in priority order):

The Town of Chatham chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Claverack, Columbia County, CID# 360173 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Claverack Stream Study Requests (in priority order):

The Town of Claverack chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Clermont, Columbia County, CID# 361315 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Clermont Stream Study Requests (in priority order):

The Town of Clermont chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Copake, Columbia County, CID# 360174 Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: May 10, 2016, May 24, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

William Gregory, Highway Superintendent Town of Copake Highway Department 230 Mountain View Road Copake, NY 12516 518-325-4222 copakehighwaydepart@yahoo.com

Jeffrey Nayer, Town Supervisor Town of Copake 230 Mountain View Road Copake, NY 12516 518-329-1234 townofcopake@fairpoint.net

Town of Copake Stream Study Requests (in priority order):

The Town of Copake chose not to attend the in-person Discovery Meeting. The Discovery stakeholder surveys received by NYSDEC did not include any stream study requests nor any additional information besides the contact information above. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Gallatin, Columbia County, CID# 361316 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 5, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Drew Weaver, Code Enforcement Officer/Floodplain Manager Town of Gallatin P.O. Box 67 Ancram, NY 12502 518-398-7571 pineplainsbi@yahoo.com

Town of Gallatin Stream Study Requests (in priority order):

The Town indicated that there were no known inaccuracies on the current Flood Insurance Rate Map.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- The Roeliff Jansen Kill floods repeatedly and is the primary flooding source in the town.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects, including bridge/culvert replacements, since the last Flood Insurance Rate Map update.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the community.
- The town does not have an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town does not have a community-based hazard mitigation plan.
- The town did not report any prior flood mitigation activities.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the town.
- The town is not familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. The town's Code Enforcement Officer and Planning Board are responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are not available.
 - Transportation features are not available.
 - Parcel and zoning data are available in hard copy format and non-GIS digital format.
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are available in hard copy format.
 - Contact: Columbia County Clerk's Office
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies for public/private funded projects in the town are not available.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - ∘ N/A
- Other
 - o N/A

Town of Germantown, Columbia County, CID# 361317 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Germantown Stream Study Requests (in priority order):

The Town of Germantown chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Ghent, Columbia County, CID# 361318 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Benjamin Perry, Town Highways Superintendent Town of Ghent 2603 State Route 66 Ghent, NY 12075 518-392-2651 <u>ghenthwy@fairpoint.net</u>

Town of Ghent Stream Study Requests (in priority order):

The Town feels that the current Special Flood Hazard Areas shown on the Flood Insurance Rate Map are accurate and does not have any requests for new or updated studies at this time.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- Agwamuck Creek leaves its banks at the upstream side of Hickory Hill Road and floods the road.
- The portion of Widows Creek upstream of Stockport Road is narrow which results in the creek backing up and washing out the road.
- The double culvert at Angel Hill Road clogs on the east side.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- Several of the arches on Arch Bridge Road have been replaced.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the community.
- The town does not have an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

• No information was provided about a hazard mitigation plan or mitigation activities.

Training Needs:

• No training needs were noted.

National Flood Insurance Program/Floodplain Management Information:

- No LOMC clusters were noted.
- No information about CRS or floodplain development permitting was provided.

Available Data:

• No data is available from the town.

- From Scoping Maps

 Several of the arches along Arch Bridge Road have been replaced near the intersection with Schnackenberg Road.
- <u>Other</u>
 - N/A

Town of Greenport, Columbia County, CID# 361319 Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Greenport Stream Study Requests (in priority order):

The Town of Greenport chose not to attend the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Hillsdale, Columbia County, CID# 361320 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Hillsdale Stream Study Requests (in priority order):

The Town of Hillsdale chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

City of Hudson, Columbia County, CID# 361512 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 13, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Rob Perry, Superintendent of Public Works (Survey and Meeting) City of Hudson 520 Warren Street Hudson, NY 12534 518-965-5235 dpwsupt@mhcable.com

City of Hudson Stream Study Requests (in priority order):

- 1. An updated detailed study of the Hudson River is needed due to the presence of several at-risk structures.
- 2. A new detailed study of the tributary to the Hudson River at the southeastern corporate limit is needed due to the presence of several at-risk structures.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- During Hurricane Irene, the high water level at Churchtown Reservoir required the water plant to be shut down.
- During Hurricane Sandy, there was flooding in the Amtrak parking lot. There was also flooding back into the overflow contact tank at the sewer plant.
- There are repeated flooding problems at Mill Street along a tributary to the Hudson River.
- There are bulkheads along the Hudson River where high water marks from past flooding events are visible. One is near the wastewater treatment plan where the water was about 10 to 11 feet high. The other is near the train station.

Community Planning and Ongoing Projects:

- There are is a project underway to replace the Ferry Street Bridge. This is an FHWA project (DOT Region 8 8T0723).
- There is no recent or planned residential or commercial development in the city.
- There is an underground stream at 900 Columbia Street. The ground elevation is high in this area.
- The city does not have an open space plan.
- The city does not have or participate in a watershed management plan.

Mitigation Activities:

- The city participates in the county hazard mitigation plan dated 4/22/2015. Rob Perry is the point of contact.
- There were no prior mitigation activities noted.

Training Needs:

• No training needs were indicated.

National Flood Insurance Program/Floodplain Management Information:

- No LOMC clusters were noted.
- The city is not familiar with the CRS program and would like more information about it.
- The city does not have an active floodplain development permit process.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Transportation features are not available.
 - Parcel and zoning data are available in GIS and hard copy format.
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are available in hard copy and GIS format.
 - Locations of dams are available in hard copy and GIS format.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the city.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in hard copy format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are available in GIS format.

- From Scoping Maps
 - The train station southeast of the Hudson River is located in the Special Flood Hazard Area.
 - There is an open space area near the state boat launch on the Hudson River that was remediated in the 1990s. Tanks were removed and the area was converted to a park.
 - There is a Request for Proposals out to develop property near the train station (\$10-20 million dollar range.)
- Other
 - **N/A**

Town of Kinderhook, Columbia County, CID# 361321 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Kinderhook Stream Study Requests (in priority order):

The Town of Kinderhook chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Kinderhook, Columbia County, CID# 361048 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Village of Kinderhook Stream Study Requests (in priority order):

The Village of Kinderhook chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Town of Livingston, Columbia County, CID# 360175 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Livingston Stream Study Requests (in priority order):

The Town of Livingston chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of New Lebanon, Columbia County, CID# 360176

Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 7, 2016, October 5, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Colleen Teal, Town Supervisor (Survey and Meeting) Town of New Lebanon P.O. Box 328 New Lebanon, NY 12125 518-794-8889 <u>supervisor@townofnewlebanon.com</u>

Cissy Hernandez, Building/Planning/Zoning Administrator (Meeting) Town of New Lebanon P.O. Box 328 New Lebanon, NY 12125 518-794-8884 PZclerk@townofnewlebanon.com

Town of New Lebanon Stream Study Requests (in priority order):

1. A new detailed study is needed for both Kinderhook and Wyomanock Creeks. There is development along both streams and significant flooding problems. Both streams are currently mapped as Zone A.

Other Stakeholders:

- Kent Pratt, Code Enforcement Officer Town of New Lebanon 518-794-8884 <u>ceo@townofnewlebanon.com</u>
- Phil Tkacy, NYS DOT 518-257-6896
 - Contact for NYSDEC funded remediation project at U.S. Route 20 where PCBs were removed. The town would like the land to be restored by the NYSDEC to its original ground elevation so it is less prone to flooding.

GIS Users:

• N/A

Historical Flood Problems:

- There are significant flooding issues along Kinderhook and Wyomanock Creeks that are exacerbated by lack of maintenance. Downed trees and sediments are impacting the stream's ability to move water through the town during rainstorms or with snow melt. Both streams run the full length of the town and flood on a fairly regular basis (e.g. annually).
- Lebanon Valley Speedway is prone to repeated flooding from Kinderhook Creek.
- The areas along Canaan Road, where it runs parallel to U.S. Route 20 along Wyomanock Creek and Kinderhook Creek throughout the western end of town from the intersection of County Route 9N, are significantly affected by repeated flooding.

- There is an RV park and a trailer park along Kinderhook Creek that have experienced flood damage. The trailer park is the biggest problem area in terms of flooding.
- Flooding from Kinderhook Creek and its Tributary has caused damage at School House Road and the State Route 20.
- Flooding at the confluence of Kinderhook Creek and Wyomanock Creek caused damage along Adams Crossing Road.
- There are no verifiable high water marks in the town. However the town has some photographs of high water that may be of assistance.

Community Planning and Ongoing Projects:

- Several culverts have been upgraded at the Canaan Road crossings with Wyomanock Creek and at the Lovers Lane crossing of a tributary to Wyomanock Creek.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the community.
- The town does not have an open space plan but has an inventory included as part of its <u>comprehensive plan</u> that was prepared by the town's Conservation Advisory Council.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town participates in the county hazard mitigation plan that is currently under review by the state. The Town Supervisor is the point of contact.
- The town has conducted some minor stream restoration activities to mitigate damages which occurred during recent disasters. This has included adding riprap along Kinderhook Creek north of Adams Crossing Road to mitigate erosion. In 2012 the Wyomanock Creek channel was cleaned out and the existing culvert at Canaan Road expanded. The town supervisor is the point of contact for additional details.
- The town is hoping that the Kinderhook and Wyomanock Creeks can be cleaned out to increase their capacity.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Building Code Requirements
 - Hazard Mitigation and Grant Programs
 - Effective Public Outreach

National Flood Insurance Program/Floodplain Management Information:

- There is LOMC activity along the Kinderhook and Wyomanock Creeks.
- The town is not familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process but training is needed. The town's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy and non-GIS digital format.
 - Transportation features are available in hard copy and non-GIS digital format.
 - Parcel and zoning data are available in hard copy and non-GIS digital format.
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.

- Locations of dams are not available.
- Local survey data are not available.
- Local flood gage or rain gage data are not available.
- There are no available flood hazard studies for public/private funded projects in the town.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - The meandering of the Wyomanock Creek channel is infringing on a septic field north of Old Shaker Road.
 - Rickey Dam is located south of Route 72 and east of Salls Road.
- Other
 - The town's aquifer is very close to the surface.
 - North of the Wyomanock Creek and U.S. Route 20 crossing, the ground elevation was lowered during a NYSDEC funded remediation project where PCBs were removed. The town would like the land to be restored by the NYSDEC to its original ground elevation so it is less prone to flooding.

Village of Philmont, Columbia County, CID# 361006 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 14, 2016, October 3, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Michael Scheller, Highway Superintendent (Meeting) Village of Philmont Department of Public Works 18 Eagle Street Philmont, NY 12565 518-672-7640 philmontDPW@yahoo.com

Doug Cropper, Village Trustee (Meeting and Survey) Village of Philmont P.O. Box 822 Philmont, NY 12565 518-672-7032 philvlg@mhcable.com

Stanley F. Koloski, Building Inspector/Code Enforcement Officer (Survey) Village of Philmont P.O. Box 822 Philmont, NY 12565 518-672-7032 <u>Alfred@mhcable.com</u>

Village of Philmont Stream Study Requests (in priority order):

The Village does not currently have a Flood Insurance Rate Map and does not have any requests for new studies at this time.

Other Stakeholders:

• N/A

GIS Users:

 Jane Di'Gennero, Mapping Technician Columbia County State Street Hudson, NY 12534 (518) 828-0909

Historical Flood Problems:

- There was historic flooding in along Agawamuck Creek and the reservoir on Lakeside Drive in 1937, 1938 and 1973.
- The earthen dam at Philmont Reservoir off of Harder Road is a possible flooding source. The location is monitored by NYSDEC dam engineer, Syad Alam and a weakness in the dam was noted.
- There are no verifiable high water marks in the village.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects, including bridge/culvert replacements, since the last Flood Insurance Rate Map update.
- There is a recent residential I development (30-40 lots) on Overlook Court and Summit Heights.
- There are piped streams in the village which are old water supply pipes to the 1900s era mills (4-6 ft diameter).
- The village does not have an open space plan.
- The village does not have or participate in a watershed management plan.

Mitigation Activities:

- The village adopted the Village of Philmont Emergency Action Plan on August 18, 2010. Mayor Skip Speed is the point of contact (518-672-7032).
- No other mitigation activities were noted.

Training Needs:

- Training on the following topics would be helpful to the village:
 - Floodplain Management Administration
 - Building Code Requirements
 - Hazard Mitigation and Grant Programs
 - Effective Public Outreach

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the village.
- The village is not familiar with the CRS program and would like more information about it.
- A Board of Trustees resolution dated June 13, 2016 names the Building Department as responsible for floodplain development permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Contact: Village Clerk (518-672-7032)
 - Transportation features are available in hard copy format.
 - Parcel and zoning data are available in hard copy and non-GIS digital format.
 - Contact: Town Assessor (518-672-4470)
 - A limited number of building footprints are available in hard copy format in the Building Department and Assessor's files.
- Engineering Data
 - Locations of flood control structures are available in hard copy format.
 - Locations of dams are available in GIS and hard copy format.
 - Contact: Jane Di-Gennero, Columbia County Mapping Department
 - \circ $\;$ Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are flood hazard studies for public/private funded projects in the village in hard copy format (Village of Philmont Emergency Action Plan).
 - Contact: Village Clerk (518-672-7032)
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in hard copy format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in hard copy format.

• Historical flood inundation areas are not available.

- From Scoping Maps
 - There is a dam break analysis available for Philmont Reservoir Dam. NYSDEC will ask Dam Safety to update the village on the status of the dam.
 - There is a dam at Summit Lake. This area has flooded in 1938 and 1973. The dam was rebuilt and is well maintained. There is a dam break analysis available.
 - There is a conservation zone around Summit Lake.
- Other
 - The sewage treatment plant near the corporate limits, located in the Town of Claverack, is located in a floodplain and floods from both North Creek and Agawamuck Creek. How can it be protected?

Town of Stockport, Columbia County, CID# 361322 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Stockport Stream Study Requests (in priority order):

The Town of Stockport chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Stuyvesant, Columbia County, CID# 361323 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Stuyvesant Stream Study Requests (in priority order):

The Town of Stuyvesant chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Taghkanic, Columbia County, CID# 361323 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Taghkanic Stream Study Requests (in priority order):

The Town of Taghkanic chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Valatie, Columbia County, CID# 361508 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 18, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Barbara A. Fischer, Village Clerk (Survey) Village of Valatie P.O. Box 457 Valatie, NY 12184 518-758-9806 clerk@valatievillage.com

Diane Argyle, Mayor (Meeting) Village of Valatie 3211 Church Street Valatie, NY 12184 518-758-9806 mayor@valatievillage.com

Village of Valatie Stream Study Requests (in priority order):

1. Kinderhook Creek for its entire distance within the village, is in need of an updated detailed study. This area, including the village water/sewer treatment plant, flooded during Hurricane Irene.

Other Stakeholders:

 John Ruchel, Town of Kinderhook Highway Department (Village contracts out highway maintenance to the Town) 518-258-6100

GIS Users:

 Frank Bevens, Deputy Mayor Village of Valatie
 518-965-8391
 trbevens@valatievillage.com

Historical Flood Problems:

- During Hurricane Irene and Tropical Storm Lee the southwest corner of the village experienced flooding from Kinderhook Creek. The creek has widened in recent years and the topography has changed.
- There are verifiable high water marks on the state overpass and in the park near Kinderhook Creek.

Community Planning and Ongoing Projects:

- See Mitigation Activities section for several projects that affected the village.
- There is new development occurring in the village both north and south of Upper Main Street and east of Mechanic Street. The on-going development is not very close to the floodplain.

- There is a new house that has been constructed near Kinderhook Creek, west of Route 9 in the southwest corner of the village. There are several other lots in this area and across Route 9.
- There are two piped or naturally occurring underground streams in the village. One is located in the area of 1012 Kinderhook Street in the field behind homes located along Route 9 and the other is east of Williams Street near the village hall.
- The village has an open space plan that includes details of preserving open space in River Street Park and Pachaquack Park.
- The village does not have or participate in a watershed management plan.

Mitigation Activities:

- The village participates in the county hazard mitigation plan that is dated 2008.
- A new berm was constructed along Kinderhook Creek near the southeastern corporate limit of the village.
- There have been discussions between the owner of a privately owned dam and the DEC to repair the dam but no progress has yet been made.
- In 1998, concrete slabs were installed to mitigate flooding along Kinderhook Creek.
- In 2016, the DOT placed dirt mounds along Kinderhook Creek to mitigate flooding.

Training Needs:

- Training on the following topics would be helpful to the village:
 - Floodplain Management Administration
 - Building Code Requirements
 - Hazard Mitigation and Grant Programs
 - Effective Public Outreach

National Flood Insurance Program/Floodplain Management Information:

- It is not known if there are any LOMC clusters in the village.
- The village is not familiar with the CRS program and would like more information about it.
- The village has an active floodplain development permit process. The village's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Contact: Columbia County
 - Transportation features are not available.
 - Parcel and zoning data are available in GIS and hard copy format.
 - Contact: Village Building Inspector
 - Building footprint data are available in hard copy format.
 - Contact: Village Building Inspector
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams may be available from Columbia County.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the village.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in hard copy format.

- Contact: Columbia County
- Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in hard copy format.
 - Contact: Columbia County
- Historical flood inundation areas are available in hard copy format.
 - Contact: Columbia County

- From Scoping Maps
 - The village boundary was not correct on the scoping map. Changes were noted on the western side of the village north and west of Route 9.
 - A private dam in need of repairs is located just north of Main Street along the Valatie Kill.
 - An area of open space, south of Pump House Road, was preserved from development along Kinderhook Creek. There are also high water marks on trees in the park.
- <u>Other</u>
 - The village's zoning map was updated in 2012 and is kept by the county.

Dutchess County CID# 36027C Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: July 29, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Robert S. Wills, Senior GIS Project Coordinator (Survey) Dutchess County Department of Planning and Development 27 High Street 2nd Floor Poughkeepsie, NY 12601 845-486-3643 rwills@dutchessny.gov

Larry Brody, GIS Specialist (Meeting) Dutchess County 392 Creek Road Poughkeepsie, NY 12601 845-486-2709 Ibrody@dutchessny.gov

William H. Beale, Emergency Management Coordinator (Meeting) Dutchess County Emergency Response Department 392 Creek Road Poughkeepsie, NY 12601 845-486-2082 wbeale@dutchessny.gov

Robert Balkind, Deputy Commissioner (Survey) Dutchess County Department of Public Works 626 Dutchess Turnpike Poughkeepsie, NY 12603 845-486-2925 rbalkind@dutchessny.gov

Dutchess County Stream Study Requests (in priority order):

1. Sawkill Creek in the Town and Village of Red Hook is in need of a revised detailed study. This stream is prone to flooding.

Other Stakeholders:

• N/A

GIS Users:

- Larry Brody, GIS Specialist Dutchess County 392 Creek Road Poughkeepsie, NY 12601 845-486-2709 Ibrody@dutchessny.gov
- Joe Rutkowski, GIS Project Leader

Dutchess County Office of Central and Information Services 845-486-2408 jrutkowski@dutchessny.gov

Historical Flood Problems:

- Flooding has occurred along Fishkill Creek, Wappinger Creek, Tenmile River, Housatonic River, Wassaic Creek, Shekomeko Creek, Sprout Creek, Jackson Creek, and Crum Elbow Creek. However, most of this flooding is outside of the Mid-Hudson watershed.
- During Irene and Lee, flooding occurred at Odak Farm Road and Battenfield Road in the Towns of Milan and Red Hook.
- Repeated flooding problems occur in the Towns of Dover, Amenia, Pine Plains, Milan, LaGrange, East Fishkill, Fishkill, Pawling, and Clinton.
- Sawkill Creek in the Town of Red Hook floods due to trees and other riverine blockages obstructing flow.
- There are verifiable high water marks in the county but no specific details were provided. Larry Brody has pictures of flooding at the Route 51 Bridge over the Roeliff Jansen Kill.

Community Planning and Ongoing Projects:

- There are multiple bridge replacements throughout the county. Robert Balkind is the point of contact.
- There is a project to replace a culvert at the top of Turkey Hill Road (4x4 buttressed inlet to replace 36 inch pipe). Robert Balkind is the point of contact.
- There has been recent development in the county including a 600-unit residential development/golf club along Route 12, south of the Roeliff Jansen Kill. A 2014 report of recent development in the county is available through the county's website at <u>http://www.co.dutchess.ny.us/CountyGov/Departments/Planning/Major_Projects_Report_2014.pdf</u>.
- There are piped or naturally occurring underground streams in the county but no specific details were provided.
- The county has an open space plan. The county's Greenway Compact report is available on the county's website at <u>http://www.co.dutchess.ny.us/CountyGov/Departments/Planning/Centers Greenspaces</u> <u>Greenway Guides.pdf</u>.
- The Dutchess Land Conservancy, Scenic Hudson, the Town of Red Hook and the USDA Natural Resources Conservation Service have conserved hundreds of acres of agricultural land in the Town of Red Hook.
- The county participates in the Sawkill Creek Watershed group, the Wappingers Creek Inter-municipal Council, the Tenmile Watershed group, and the Hudson River Estuary program. Brian Scoralick, Dutchess County Soil and Water Conservation District (<u>Brian.Scoralick@ny.nacdnet.net</u>) is the point of contact.

Mitigation Activities:

- The county's hazard mitigation plan was approved in early 2016 and adopted this fall with 100% municipal involvement. William Beale, County Emergency Manager is the point of contact.
- A recent mitigation activity included the removal of a railroad abutment along the Roeliff Jansen Kill near the Columbia County boundary. Larry Brody is the point of contact.

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- No information about LOMC clusters in the county was provided.
- The county is familiar with the CRS program and would like more information about it.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format. There have been some minor changes to political boundaries.
 - Contacts: Larry Brody or Joe Heggenstaller, Dutchess County Data Office of Central and Information Services
 - Transportation features are available in GIS format.
 - Contacts: Larry Brody or Joe Heggenstaller, Dutchess County Data Office of Central and Information Services
 - Parcel and zoning data are available in GIS format. Access to parcel data is available through county website (dutchess.ny.gov).
 - Contacts: Larry Brody; Betsy Mark (<u>bmark@dutchessny.gov</u>), Dutchess County Real Property Tax Service Agency; or Robert Wills, Department of Planning and Development
 - Building footprint data are available in GIS format.
 - Contacts: Larry Brody or Joe Heggenstaller, Dutchess County Data Office of Central and Information Services
- Engineering Data
 - Locations of flood control structures are not available.
 - The county uses the NYSDEC dam data set.
 - Local survey data are available in GIS format.
 - Contact: Larry Brody
 - Local flood gage or rain gage data are available.
 - Contacts: Jen Epstein (jepstein@riverkeeper.org) for the Roeliff Jansen Kill; Robert Wills, Department of Planning and Development
 - Flood hazard studies are available in hard copy format.
 - Contacts: Brian Scoralick; Robert Balkind
- <u>Risk Assessment Data</u>
 - Essential/Critical Facilities data are available in GIS format.
 - Contacts: Larry Brody or Joe Heggenstaller, Dutchess County Data Office of Central and Information Services
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are available in the county hazard mitigation plan.

- From Scoping Maps
 - No additional data was included on the scoping map.
- Other

• The county has terrain models to support 2 foot contours countywide and a firstreturn surface model. The county suggests using USGS 1 meter terrain models available for Dutchess and Ulster Counties for any map revisions that occur as a result of this Discovery project. Town of Milan, Dutchess County, CID# 361339 Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: June 2, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

William Gallagher, Town Supervisor Town of Milan 20 Wilcox Circle Milan, NY 12571 845-758-5133 Ext. 2 <u>supervisor@milan-ny.gov</u>

Town of Milan Stream Study Requests (in priority order):

The Town feels that the current Special Flood Hazard Areas shown on the Flood Insurance Rate Map are accurate and does not have any requests for new or updated studies at this time.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- The Rock City area was flooded during Hurricane Irene.
- No repeated flooding problems were noted.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects since the last Flood Insurance Rate Map update.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the community.
- The town has an open space plan that is incorporated into its comprehensive plan which was adopted on August 13, 2007.
- The town participates in the Wappinger Falls Watershed Management Plan. William Gallagher, Town Supervisor, is the point of contact.

Mitigation Activities:

- No information about hazard mitigation planning activities was provided.
- The town has provisions for retention ponds.

Training Needs:

• No training needs were noted.

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the town.
- The town is not familiar with the CRS program and would like more information about it.

• The town has an active floodplain development permit process. Stephen Cole, the Town's Builder Inspector/Code Enforcement Officer (<u>bldginsp@milan-ny.gov</u>; 845-758-5133 Ext. 134) is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and hard copy format.
 Contact: Town Building Department
 - Transportation features are available in GIS and hard copy format.
 - Contact: Town Building Department
 - Parcel and zoning data are available in GIS and hard copy format.
 - Contact: Town Building Department
 - Building footprint data are available in GIS and hard copy format.
 - Contact: Town Building Department
- Engineering Data
 - Locations of flood control structures are available in GIS format.
 - Contact: Town Building Department
 - Locations of dams are available in GIS format.
 - Contact: Town Building Department
 - Local survey data are available in GIS and hard copy format.
 - Contact: Town Building Department
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in GIS and hard copy format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - N/A
- Other
 - N/A

Town of North East, Dutchess County, CID# 361340 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: March 8, 2017 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Kenneth W. McLaughlin, Building Inspector/Flood Zone Administrator Town of North East P.O. Box 516 Millerton, NY 12546 845-240-2118 <u>kmclaughlin@lagrangeny.gov</u>

Town of North East Stream Study Requests (in priority order):

- 1. The Town Highway Garage is in need of being moved out of the floodplain to a more suitable location. (This is a mitigation need, rather than a mapping need.)
- The unnamed tributary to Webutuck Creek east of State Route 22 is in need of a new approximate study from Downey Road to Lower Mill Road. This stream is located outside of the Mid-Hudson Watershed.
- 3. Webutuck Creek is in need of a revised detailed study from Beilke Road to Indian Lake Road. This stream is located outside of the Mid-Hudson Watershed.
- 4. Kelsey Brook is in need of a revised detailed study from the county boundary to the confluence with Webutuck Creek. This stream is located outside of the Mid-Hudson Watershed.

Other Stakeholders:

• N/A

GIS Users:

 Eoin Wrafter, Dutchess County Planning and Development 27 High Street Poughkeepsie, NY 12601 845-486-3600

Historical Flood Problems:

- There are flooding problems that occur along Lower Mill Road from an unnamed swamp/creek that backs up a culvert and a railroad trestle alongside the road.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- A culvert replacement is planned along Lower Mill Road to alleviate flooding from an unnamed creek/swamp. Robert Stevens, Town Highway Superintendent is the point of contact.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the town.
- The town does not have an open space plan.
- The town participates in the Dutchess County Rural Water Supply Management Plan that is managed by the Cornell Cooperative Extension.

Mitigation Activities:

- The town board adopted the county hazard mitigation plan on August 8, 2012.
- No other information about mitigation activities was provided. However, in terms of mitigation needs, the Town Highway Garage is in need of being moved out of the floodplain to a more suitable location.

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are no known LOMC clusters in the town.
- The town is not familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. The town building inspector is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Transportation features are available in hard copy format.
 - Parcel and zoning data are available in hard copy format.
 - Building footprint data are available in hard copy format.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- Risk Assessment Data
 - Essential/critical facilities data are available in hard copy format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - ∘ **N/A**
- Other
 - **N/A**

Town of Pine Plains, Dutchess County, CID# 361141 Pre- Discovery Webinar Attendance: May 10, 2016 Discovery Stakeholder Survey Completed: June 2, 2016, June 8, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Drew Weaver, Code Enforcement Officer/Floodplain Manager Pine Plains Department of Building P.O. Box 955 Pine Plains, New York, 12567 518-398-7110 pineplainsbi@yahoo.com

John Forelle, Chair of Town Planning Board Pine Plains Department of Planning 468 Tripp Road Pine Plains, NY 12567 518-398-1404 johnforelle@gmail.com

Town of Pine Plains Stream Study Requests (in priority order):

The town feels that the current Special Flood Hazard Areas shown on the Flood Insurance Rate Map are accurate and does not have any requests for new or updated studies at this time.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- The southern area of Thompson Pond and Stissing Lake have had repeated flooding issues. Minor flooding along Shekomeko Creek has also occurred.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There was a bridge replacement at North Main Street over Shekomeko Creek (Point of contact: Town Highway Department).
- Another bridge replacement is being proposed by the Dutchess County Public Works Department for Hoffman Road over Shekomeko Creek.
- There is no recent or planned residential or commercial development in the town.
- There are piped or naturally occurring underground streams in the community but no details were provided.
- The town has an open space plan that is available on the town website. Open space plans are also required by the Zoning Law and Subdivision Regulations for certain land subdivisions.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

• The town participates in the county hazard mitigation plan.

• A portion of the Shekomeko Creek stream bank was rebuilt by the Town Highway Department to protect Silver Nails Road.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Building Code Requirements
 - Hazard Mitigation and Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are no known LOMC clusters in the town.
- The town is not familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. Drew Weaver, the Town's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are not available.
 - Transportation features are available in hard copy format.
 - Parcel and zoning data are available in hard copy format and online through the town's website.
 - Building footprint data are partially available online through Dutchess County's Parcel Access site.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are available in hard copy format.
 - Contact: Town Zoning Enforcement Officer
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- Risk Assessment Data
 - Essential/critical facilities data are available online through Dutchess County's Parcel Access website.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - ∘ N/A
- Other
 - o N/A

Town of Red Hook, Dutchess County CID# 361143 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Red Hook Stream Study Requests (in priority order):

The Town of Red Hook chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Red Hook, Dutchess County CID# 361614 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 11, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Ed Blendell, Mayor Village of Red Hook 7467 South Broadway Red Hook, NY 12571 914-475-0104 eblundell@redhooknyvillage.org

Village of Red Hook Stream Study Requests (in priority order):

1. An unnamed pond on private land southeast of the intersection of East Market Street and North Broadway should be studied. It overtops its banks during major storms.

Other Stakeholders:

• N/A

GIS Users:

 Robert Flores, GIS Coordinator 845-758-1081

Historical Flood Problems:

- An unnamed pond on private land is prone to overtopping during major storms such as Hurricanes Irene and Sandy.
- There are no verifiable high water marks in the village.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects since the last Flood Insurance Rate Map update.
- There is no recent or planned residential or commercial development in the village.
- There are no piped or naturally occurring underground streams in the community.
- The village does not have an open space plan.
- The village does not have or participate in a watershed management plan.

Mitigation Activities:

• No information about hazard mitigation planning or projects was provided.

Training Needs:

• Training on hazard mitigation and grant programs would be helpful to the village.

National Flood Insurance Program/Floodplain Management Information:

- No LOMC clusters were noted.
- The town is familiar with the CRS program and does not need more information about it.
- The town does not have an active floodplain development permit process. There are no floodplain areas in the village.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and hard copy format.
 - Transportation features are not available.
 - Parcel and zoning data are available in non-GIS digital format.
 - Building footprint data are not available.
- Engineering Data
 - There are no flood control structures in the village.
 - There are no dams in the village.
 - Local survey data are available in non-GIS digital format.
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies are not available.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood zones are not available.

- From Scoping Maps
 - ∘ **N/A**
- <u>Other</u>
 - N/A

Town of Rhinebeck, Dutchess County CID# 361144 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 3, 2016, June 4, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Sharon Sherrod, Vice Chair Town of Rhinebeck Planning Board Town of Rhinebeck Planning Department 80 East Market Street Rhinebeck, NY 12572 845-876-3409 Town.clerk@rhinebeck-ny.gov

Elizabeth Spinzia, Town Supervisor Town of Rhinebeck 80 East Market Street Rhinebeck, NY 12572 845-876-3409 Town.supervisor@rhinebeck-ny.gov

Town of Rhinebeck Stream Study Requests (in priority order):

The town feels that the current Special Flood Hazard Areas shown on the Flood Insurance Rate Map are accurate and does not have any requests for new or updated studies at this time.

Other Stakeholders:

• N/A

GIS Users:

• Bob Wills, Dutchess County Planning Department

Historical Flood Problems:

- Flooding occurred along the Landsman Kill and the Rhinebeck Kill during Hurricanes Irene and Sandy. Flooding also occurred at the town landing on the Hudson River during Hurricane Irene.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects since the last Flood Insurance Rate Map update.
- There are two recent developments in the town: Grasmere, a 50-250 acre spa and hotel and Gardens 3, a 70-unit condominium.
- There are no piped, or naturally occurring underground streams within the community.
- There are open space provisions included in the town's 2009 comprehensive plan available on the town website.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

• The town participates in the county hazard mitigation plan which is dated April 14, 2015. The town points of contact are the Town Supervisor, Elizabeth Spinzia, the Town Highway Superintendent, Barry Sherrod, and the EMS Coordinator, Henry Campbell. • No mitigation activities were noted.

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- No LOMC clusters were noted.
- The town is familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. Ron Evangelista, the town Zoning Administrator, is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Transportation features are not available.
 - Parcel and zoning data are available in GIS and hard copy format. This information is available on the Dutchess County Parcel Access website.
 - Contact: Bob Wills, Dutchess County Planning
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - The town uses the NYSDEC dam data set.
 - Local survey data are available in hard copy format.
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies for public/private funded projects are not available.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
- 0 N/A
- <u>Other</u>
 - o N/A

Town of Stanford, Dutchess County CID# 361145 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Donald Smith, Code Enforcement Officer Town of Stanford 26 Town Hall Road 845-868-7128 townofstanford@yahoo.com

Town of Stanford Stream Study Requests (in priority order):

- 1. Wappinger Creek Reach 1 (from Salt Point Turnpike to 250 feet upstream of Creamery Road) is in need of a revised detailed study. There is a bridge that is to be replaced along this stream on Bulls Head Road. This area is also a developed area. This stream is located outside of the Mid-Hudson Watershed.
- 2. Wappinger Creek Reach 3 (from 250 feet upstream of Creamery Road to the northern corporate limits) is in need of a new detailed study. There is a new business district being designated from Reach 1 to Cold Spring to approximately the intersection of NY Route 82 and County Route 53 (just north of intersection of Wappinger Creek and Cold Spring Creek). This stream is located outside of the Mid-Hudson Watershed.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- There was some localized flooding along Wappinger Creek in 2008 that flooded a couple of structures. The town did not experience much flooding during the more recent large scale storms (Irene, Lee, and Sandy).
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There is a bridge that will be replaced at Bulls Head Road over Wappinger Creek.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the community.
- There is a master plan being developed for the town. The master plan will include open space provisions.
- Dutchess County has a watershed plan that the town participates in.

Mitigation Activities:

- The town participates in the county hazard mitigation plan which was finalized in 2016.
- No specific mitigation activities were noted.

Training Needs:

• Training on Floodplain Management Administration would be helpful. There is not a lot of building pressure in the town but the floodplain administrator would take advantage of additional training if offered.

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the town.
- The town is familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process and uses the state model floodplain permit. The Town Code Enforcement Officer is responsible for floodplain permitting. However, the Code Enforcement Officer has not yet had to issue a permit. There is low development pressure in the town.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Transportation features are available in GIS format.
 - Parcel and zoning district data are available in GIS format.
 - Building footprint data are not available. However, the town does have aerial photography available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies for public/private funded projects are not available.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood zones are available in the form of historical flood maps.

- From Scoping Maps
 - The Bullshead Road bridge replacement project over Wappinger Creek is in Stanfordville, west of Route 82.
- <u>Other</u>
 - o N/A

Village of Tivoli, Dutchess County CID# 361507 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Village of Tivoli Stream Study Requests (in priority order):

The Village of Tivoli chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Greene County CID# 36039C Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: July 29, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Thomas F. Hoyt, Deputy Highway Superintendent (Survey and Meeting) Greene County Highway Department 240 West Bridge Street Catskill, NY 12414 (518) 943-4600 thoyt@discovergreene.com

Raymond Ward, Tax Mapping & GIS Manager (Survey and Meeting) Greene County Real Property Tax Service 411 Main Street, Suite 447 Catskill, NY 12414 518-719-3525 rward@discovergreene.com

Ed Diamante, Principal Planner (Meeting) Greene County Economic Development, Tourism, and Planning 411 Main Street Catskill NY, 12414 518-719-3290 ediamante@discovergreene.com

Joel DuBois (Survey and Meeting) Greene County Soil and Water Conservation District 518-622-3620 joel@gcswcd.com

June Gambacorta (Meeting) Greene County Highway Department 240 West Bridge Street Catskill, NY 12414 518-943-4600 jgambacorta@discovergreene.com

John Farrell, Director (Meeting) Greene County Emergency Services 25 Volunteer Drive Cairo, NY 12413 518-622-3643 jfarrell@discovergreene.com

Elizabeth LoGuidice, Extension Educator (Survey and Meeting) Columbia/Greene County Cornell Cooperative Extension 6055 NYS Route 23 Acra, NY 12405 518-622-9820 Ext. 33

Eml37@cornell.edu

Greene County Stream Study Requests (in priority order):

- Catskill Creek needs a new detailed study from the Hudson River to County Route 67 in the Town of Durham. The county believes the Special Flood Hazard Area is inaccurate. This stream reach experiences both repetitive flooding and significant erosion.
- Kaaterskill Creek needs an updated detailed study from Catskill Creek in the Town of Catskill to the Catskill Forest Preserve lands also in the Town of Catskill. There is repetitive flooding and the stream alignment has shifted.
- 3. The entire reach of Coxsackie Creek within the Town of Coxsackie needs an updated detailed study. This is a developed area.
- 4. Sickles Creek in the Town of New Baltimore needs a revised approximate study from the confluence with Coxsackie Creek to the NYS Thruway. There is tidal flooding in this area and the drainage is blocked at high tide.

The county also expressed concern regarding the hydrologic analysis used to develop the FEMA floodplains. They believe the models differ significantly from the results of nearby USGS gages using standard evaluation software such as Peak FQ. The flows used in the models tend to be much higher than the flows returned by Peak FQ. Therefore, the county believes there is systematic inaccuracy in the models especially for the Batavia Kill.

Other Stakeholders:

- Jeff Flack, Executive Director Greene County Soil and Water Conservation District 518-622-3620 jeff@gcswcd.com
- Warren Hart, Director Greene County Economic Development, Tourism, & Planning Department 518-719-3290 whart@discovergreene.com
- Robert Van Valkenburg, Superintendent Greene County Highway Department 518-943-4600 rvanvalkenburg@discovergreene.com

GIS Users:

 Raymond Ward, Tax Mapping and GIS Manager Greene County Real Property Tax Service 411 Main Street, Suite 447 Catskill, NY 12414 518-719-3525 rward@discovergreene.com

Historical Flood Problems:

• Past flooding from Hurricanes Irene and Sandy occurred along the Hudson River, Catskill Creek, Kaaterskill Creek, Sickles Creek, the Shingle Kill at the Town Park in Cairo, Bowery Creek in the Town of Cairo, Schoharie Creek and the Batavia Kill. (Schoharie Creek and the Batavia Kill are not located in the Mid-Hudson Watershed.)

- Hurricane Irene changed the stream channel of the upper Catskill Creek from Livingstonville to Preston Hollow in Albany & Schoharie Counties.
- There is repeated flooding in the following areas:
 - Sickles Creek at County Route 61 in the Town of New Baltimore (Lat. 42.3924, Long. -73.8014)
 - Kaaterskill Creek at County Route 30 in the Town of Catskill (Lat. 42.2173, Long. -73.8976)
 - Catskill Creek at County Route 47 near Leeds in the Town of Catskill (Lat. 42.2544, Long. -73.9057)
 - Kaaterskill Creek at County Route 47 in the Town of Catskill (Lat. 42.2205, Long. -73.9003)
 - Catskill Creek in the Village of Catskill along West Main Street, Water Street and Catskill Park.
 - Hudson Riverfront in the Towns and Villages of Coxsackie, Athens and Catskill
 - Debris at the Hamlet of Natural Dam in the Town of Gouverneur (outside the Mid-Hudson Watershed) collects during high water
- There is a high water mark from Hurricane Irene on the County Highway building in the Village of Catskill.

Community Planning and Ongoing Projects:

- The Black Bridge over Catskill Creek (a pedestrian bridge) in the Village of Catskill was recently rehabilitated.
- Some county culverts were upsized when possible. Andy Myers of the Hudson River Estuary Program is the point of contact.
- There have been several DOT (Routes 81 and 145 bridges over Catskill Creek in the Town of Durham) and Federal Emergency Watershed Protection (EWP) (stream restoration along Kaaterskill Creek in the Town of Catskill) projects in the area post-Irene.
- The Greene County Cornell Cooperative Extension is working to prioritize culvert replacements in a sub-basin of Catskill Creek.
- Areas of recent development are primarily on the Route 9W corridor in the Town of Coxsackie but not in floodplains.
- There are new sewers and potential development by Thruway exit 21, along County Route 23B in the Town of Catskill.
- Phase 1 of an Open Space Survey was done about 15 years ago; there have been no updates since.
- The Greene County Cornell Cooperative Extension is starting a Catskill Creek Watershed Awareness Project which has maps, assessments and a watershed description. Elizabeth LoGuidice is the point of contact.
- The Greene Land Trust, Hudsonia, the Greene County Cornell Cooperative Extension, and the Conservation Leaders Alliance developed conservation priorities which consider open space, important habitat, conservation and flood mitigation to help inform local planning efforts.

Mitigation Activities:

- The county hazard mitigation plan was approved by all of the jurisdictions in 2015 and is waiting for FEMA approval to be formally adopted.
- There were about ten buyouts in the valley area after Hurricane Irene. Michelle Yost, Greene County SWCD is the point of contact.
- Projects in the valley include:

- Stream restoration project for the portion of Kaaterskill Creek near the Hamlet of Palenville in the Town of Catskill - NRCS Emergency Watershed Protection (EWP) grant and some FEMA funding.
- Ten Mile Creek Bridge by Saybrook Valley Road was damaged and repaired in the Town of Durham.
- Bowery Creek in the Town of Cairo near Edison Timmerman Road
- Catskill Creek streamside acquisition by Scenic Hudson and the Greene Land Trust

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - Effective Public Outreach
 - o Building Code Requirements
 - Hazard Mitigation & Grant Programs

Local planners need continuing education credits. A program on floodplain issues would be well attended.

National Flood Insurance Program/Floodplain Management Information:

- No LOMC clusters were noted in the county.
- The county is not familiar with the CRS program. The Village of Catskill is most likely to be interested in the program.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format. The state dataset is used.
 - Transportation features are available in GIS format.
 - Contact: Raymond Ward
 - Parcel data are available in GIS format.
 Contact: Raymond Ward
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are available.
 - Contact: Greene County SWCD
 - The county uses the NYSDEC dam dataset.
 - Local survey data are available in GIS format.
 - Contact: Greene County SWCD
 - Local flood gage or rain gage data are available from Greene County SWCD; weather station located at the Cooperative Extension building in the Hamlet of Acra within the Town of Cairo.
 - The Hudson River Estuary Program has been working on a culvert inventory including areas of the county. Data is on the <u>NAACC</u> website.
 - Contact: Andrew Meyer
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in GIS format.
 - Contact: Raymond Ward
 - Hazard mapping data are available in the county's hazard mitigation plan.
 - Historical flood inundation areas are available.
 - Contact: Greene County SWCD

• The Scenic Hudson and Hudson River Estuary Program are developing flood inundation mapping for the Village of Catskill which considers sea level rise.

- From Scoping Maps
 - There is flooding and ponding along Kaaterskill Creek at the intersection of Routes 32 and 23A in the Town of Catskill.
 - Catskill Creek near the Freehold airport in the Town of Greenville is an area of repeated flooding.
- Other
 - N/A

Town of Athens, Greene County CID# 36117 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Athens Stream Study Requests (in priority order):

The Town of Athens chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Athens, Greene County CID# 360285 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Village of Athens Stream Study Requests (in priority order):

The Village of Athens chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Town of Cairo, Greene County CID# 360286

Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Debra Sommer, Deputy Highway Superintendent P.O. Box 728 Cairo, NY 12413 518-622-9515 highwaydeputy@townofcairo.com

Town of Cairo Stream Study Requests (in priority order):

- 1. Catskill Creek is in need of a revised detailed study. The area in the vicinity of Morehouse Road frequently floods and a mitigation project is being proposed in the area.
- 2. The Tributary 1 to Catskill Creek near Lincoln Drive needs a new detailed study. This is an area that frequently floods.
- 3. Tributary 2 to Catskill Creek needs a new detailed study to incorporate the upsized culverts on Harold Myers Road and Sandy Plain Road.

Other Stakeholders:

 Dan Benoit, Town Supervisor Town of Cairo 518-622-3120

GIS Users:

 Raymond Ward, Greene County Tax Mapping and GIS Manager 518-719-3525
 <u>rward@discovergreene.com</u>

Historical Flood Problems:

- An unnamed stream at Lincoln Drive floods during small storms due to an undersized culvert.
- Multiple flooding episodes have occurred at Harold Myers Road. A box culvert replacement last year has alleviated the problem.
- Catskill Creek floods and overtops Moorehouse Road periodically.
- There are significant flooding problems at Bogardus and Chadderdon Road along Bowery Creek.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There was a project performed along Morehouse Road. Data is available in the current draft of the county hazard mitigation plan.
- Culvert wingwall and headwall repairs were made on Bogardus Road, Chatterdon Road (Bowery Creek), and Black Head Mountain Road (Dutcher Creek) (FEMA funded project).
- There was a culvert upgrade at Sandy Plain Road (tributary to Catskill Creek) that was completed in October 2015. This project increased the size of the culvert opening.
- There was a culvert upgrade at Harold Myers Road (tributary to Catskill Creek) that increased the size of the culvert opening. This work was completed in September 2015.

- There is a culvert replacement project planned for Bald Hills Road crossing of the tributary to Trout Brook. The town is currently awaiting the completion of the hydrology study. The size of the culvert may need to be increased.
- There is a FEMA-funded project underway to replace culvert wingwalls and headwalls at Bailey Road crossing of the tributary to the Shingle Kill.
- There are numerous additional culvert replacement projects underway, including Morehouse Road along Catskill Creek and Blackhead Mountain Road along the Shingle Kill.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the community aside from culverted streams.
- The town representative was not sure if the community has an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town participates in the county hazard mitigation plan which is currently being updated. Debra Somer is the town's point of contact.
- There was a buyout of a property on Warren-Stine Road along Catskill Creek several years ago.
- There is a proposed mitigation project to alleviate flooding on Morehouse Road from Catskill Creek.

Training Needs:

• Training on building code requirements would be helpful to the town.

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the town.
- The town is familiar with the CRS program and does not need more information about it.
- The town does not have an active floodplain development permit process.

Available Data:

- Base Map Data
 - The town uses political boundary data available from the state.
 - Transportation features are available from Greene County.
 - Parcel and zoning data are available from Greene County.
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies for culvert replacements are available.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps

 - There was a landslide along Bald Hills Road near a tributary to Trout Brook.
 There have been road washouts on Bald Hills Road and Jones Road near the Catskill Park boundary.
- <u>Other</u>
 - During Hurricane Irene a landslide occurred at Bald Hills Road.
 - In 2008, a landslide occurred at Warren-Stine Road.

Town of Catskill, Greene County CID# 361116 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 5, 2016, October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Doreen Davis, Town Supervisor (Meeting) Town of Catskill 439 Main Street Catskill, NY 12414 518-943-2141 ddavis@townofcatskillny.gov

Elliott Fishman, Code Enforcement Officer (Survey and Meeting) Town of Catskill Code Enforcement Office 439 Main Street, 2nd floor Catskill, NY 12414 518-943-2141, Ext. 101 <u>efishman@townofcatskillny.gov</u>

Town of Catskill Stream Study Requests (in priority order):

Town representatives indicated they would speak with other community officials who had better historical data and forward any stream study requests at a later date. As of X 2017 no additional information was provided.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- In general, there are repeated flooding problems on both Catskill Creek and Kaaterskill Creek. Both flooded during Hurricane Irene in 2011.
- There has been repeated flooding on Kaaterskill Creek where Route 32A crosses the Creek.
- During Hurricane Irene and Tropical Storm Lee (2011) there was flooding on Pennsylvania Avenue from Route 23A to Maple Grove Road and in the area around the intersection of Mountain Turnpike Road and Route 32 due to various tributaries to Kaaterskill Creek.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There is a new concrete wall structure between Kaaterskill Creek and Woodstock Avenue. This wall was constructed in 2013.
- There is a new culvert planned for replacement where Pennsylvania Avenue crosses an unnamed tributary to Kaaterskill Creek.
- There is development occurring north of Mountain Turnpike and east of State Route 32 near a flood zone at the site of an old resort.
- There are no piped or naturally occurring underground streams in the community.
- The town does not have an open space plan.

• The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town participates in a hazard mitigation plan that was prepared by the Cornell Cooperative Extension. No additional details were provided.
- There were four buyouts in the area near the intersection of Route 238 and Route 47 along Catskill Creek after Hurricane Irene and Tropical Storm Lee.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs
 - Methods for Determining Base Flood Elevations

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the town.
- The town is not familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. The town's code enforcement officer is responsible for floodplain permitting and the state's model floodplain permit is used.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and hard copy format. Town web viewer available at: <u>http://chamaps.com/catskill/</u>.
 - Transportation features are not available.
 - Parcel and zoning data are available in GIS and hard copy format. Town web viewer available at: <u>http://chamaps.com/catskill/</u>.
 - Building footprint data are available in GIS format. Town web viewer available at: http://chamaps.com/catskill/.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data (subdivision information) are available in hard copy format.
 Contact: Greene County Clerk
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies for public/private funded projects in the town are not available.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - Buyouts after Hurricane Irene and Tropical Storm Lee are concentrated along Catskill Creek at the intersection of Routes 23B and 46 to the north of Route 23.

- Other
 - A Community Assistance Visit conducted by NYSDEC in 2014 indicated that the town code enforcement office uses GIS effectively.

Village of Catskill, Greene County CID# 360287 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Betsy Cothren, Village Clerk Village of Catskill 422 Main Street Catskill, NY 12414 518-953-3830 bcothern@villageofcatskill.net

Kathy Darling, Village Purchasing Agent Village of Catskill 422 Main Street Catskill, NY 12414 518-943-5505 katedpw@mhcable.com

Village of Catskill Stream Study Requests (in priority order):

- 1. Catskill Creek is in need of an updated detailed study. This area is populated, has commercial development, and has experienced property damage from flooding.
- 2. Hudson River is in need of an updated detailed study. This area is populated and has experienced property damage from flooding.
- 3. Dubois Creek has the potential for backwater flooding from Catskill Creek but there is no floodplain shown on the Flood Insurance Rate Map. The map should be updated to reflect the hazard that is present in this area.
- 4. There is an isolated Zone X shown on the Flood Insurance Rate Map at the confluence of Catskill Creek with the Hudson River.

Other Stakeholders:

 Nancy Richards 518-943-7117 <u>nrichards@villageofcatskill.net</u>

GIS Users:

 Ray Ward, GIS Coordinator Greene County 518-719-3525 rward@discovergreene.com

Historical Flood Problems:

- During Hurricane Irene, flooding from Catskill Creek crossed Main Street. The Hudson River also flooded.
- During Hurricane Sandy, Catskill Creek and the Hudson River flooded due to storm surge.
- In the spring and occasionally at other times, flooding occurs due to snow melt and rain fall along the entire reach of Catskill Creek and the Hudson River with in the village limits.
- Dubois Creek occasionally floods due to backwater from Catskill Creek.

• There are no known verifiable high water marks in the village. There may be high water marks along Catskill Creek within the Town of Catskill just north of the village limits. There may be an additional high water mark on Uncle Sam Bridge (Route 385) over Catskill Creek in the Town of Catskill.

Community Planning and Ongoing Projects:

- There is a project underway to construct a walking loop on the east side of Catskill Creek. The project includes the update of a pedestrian bridge.
- There is a \$3 million project underway to construct the American Dance Institute the building is very close to Catskill Creek (part of the Dunn property). The project is scheduled to be completed by 2018.
- There are no piped or naturally occurring underground streams in the village.
- The county has an open space plan. The sections of the Hudson River Greenway Trail System in the Village of Catskill include the RamsHorn-Livingston Sanctuary Trail and the Catskill Walking Trail.
- The village participates in a watershed management plan but no further details were provided.

Mitigation Activities:

- The village participates in the county hazard mitigation plan which is currently being updated.
- Open space in the floodplain is being preserved in some areas (see projects listed in the section above).
- The village helped with the teardown of a building in the floodplain (not owned by the village).

Training Needs:

- Training on the following topics would be helpful to the village:
 - Floodplain Management Administration
 - Building Code Requirements
 - Effective Public Outreach
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the village.
- The village is familiar with the CRS program and would like more information about it.
- The village has an active floodplain development permit process. The village's Code Enforcement Officer Mike Ragaini is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and hard copy format.
 - Contact: Ray Ward, Greene County GIS Coordinator
 - Transportation features are available in GIS and hard copy format.
 - Contact: Mike McGrath, Department of Public Works Superintendent
 - Parcel and zoning data are available in GIS, hard copy, and other digital format.
 Contact: Nancy Richards, Planning/Zoning Coordinator
 - Building footprint data may be available from the county.

- Engineering Data
 - There are no flood control structures in the village.
 - There are no dams in the village.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available. However, there may be a gage on Fred Calvo's property in the northwest portion of the village along Catskill Creek.
 - There is a hard copy/digital study available for the Green Street boring project that was performed 6-10 years ago.
 - Contact: Mike Sullivan, Crawford & Associates, Hudson, NY
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood zones (existing FEMA flood study data from 2015) are available.

- From Scoping Maps
 - A new pump station along Catskill Creek close to the northern corporate limit has been elevated higher. FEMA funds were used for the pump station mitigation efforts.
 - A potential corporate limit discrepancy was noted in the south to the east of Burget Creek.
 - The limits of flooding along Catskill Creek due to Irene were south of West Main Street.
- Other
 - Some fill has recently been placed in the northwest part of the village, near the Town of Catskill. The Town of Catskill engineering department is the point of contact.

Town of Coxsackie, Greene County CID# 361115 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Coxsackie Stream Study Requests (in priority order):

The Town of Coxsackie chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Coxsackie, Greene County CID# 360288 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Village of Coxsackie Stream Study Requests (in priority order):

The Village of Coxsackie chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Town of Durham, Greene County CID# 360289 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Durham Stream Study Requests (in priority order):

The Town of Durham chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Greenville, Greene County CID# 360290 Pre- Discovery Webinar Attendance: May 10, 2016 Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Greenville Stream Study Requests (in priority order):

The Town of Greenville chose not to attend the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of New Baltimore, Greene County CID# 360295 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Alan VanWormer, Highway Department/EMS Coordinator Town of New Baltimore 3809 County Route 51 Hannacroix, NY 12087 518-756-7685 nbfdprez@yahoo.com

Nicholas A. Dellisanti, Town Supervisor Town of New Baltimore 3809 County Route 51 Hannacroix, NY 12087 ndellisanti@townofnewbaltimore.org

Town of New Baltimore Stream Study Requests (in priority order):

1. The Hudson River need a new detailed study to incorporate the impacts of the waste water treatment plant pump station mitigation project at Mill Street.

Other Stakeholders:

• Dan King, Greene County Emergency Management Office

GIS Users:

• N/A

Historical Flood Problems:

- The wastewater treatment plant pump station on Mill Street sometimes floods. A mitigation project to construct a flood wall was recently completed.
- There are repeated flooding problems along the Hudson River including:
 - Two areas near Matthews Point that affect several homes
 - At the confluence with Coxsackie Creek near Route 61 which frequently washes out (more than once a year)
 - Grapeville School on County Route 26 floods due to an undersized culvert.
- There are no known verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There is a potential USACE project that includes dredging the Hudson River channel and placing fill on Houghtaling Island. There is citizen concern about the project.
- A new bridge at Deans Mill over Hannacrois Creek is scheduled to be completed in Fall 2016.
- In 2010, two culverts at Meadow Falls were widened from 24 inches to 36 inches along a tributary to Hannacrois Creek.
- In 2009, two small culverts at Beaver Lane were widened to 36 inches along West Medway Creek.
- In 2013, a 24 inch culvert was replaced with a 36 inch culvert at Hillcrest Road along a tributary to Hannacrois Creek.

- In 2010, two 18 inch culverts were widened to 24 inches at Mirror Lake Road along a tributary to Fuller Pond.
- There is commercial development occurring on Route 9W. There are also small subdivisions scattered throughout the town (a minimum of two acres.)
- There are no piped or naturally occurring underground streams in the town.
- The town representatives were not sure if the community has an open space plan.
- No information was provided about whether the town has or participates in a watershed management plan.

Mitigation Activities:

- The town has a draft hazard mitigation plan dated January 2016 that has not been formally adopted. Nick Dellisanti, Town Supervisor, is the town point of contact.
- No prior mitigation activities were noted.

Training Needs:

• Training on building code regulations for code enforcement officers would be helpful, especially regarding private roads near Matthews Point.

National Flood Insurance Program/Floodplain Management Information:

- There are no known LOMC clusters in the town.
- The town is not familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. The town's code enforcement officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in non-GIS digital format.
 - Contact: Greene County
 - Transportation features are available.
 - Contact: Greene County
 - Parcel and zoning data may be available.
 - Contact: Greene County Highway Department
 - Building footprint data may be available for large industrial projects along Route 9W.
 - Contact: Greene County IDA
- Engineering Data
 - Locations of flood control structures may be available.
 - Locations of dams are available in GIS format.
 - Contact: Greene County
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies for public/private funded projects are not available.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in GIS format.
 - Contact: Greene County (for county hazard mitigation plan)
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - There is a privately owned dam west of Highmount Road and north of Hannacroix Road that may not be in the NYSDEC data layer. The county may have information in the hazard mitigation plan.
 - There is a dam at the Coxsackie Reservoir that is owned by the Village of Coxsackie.
 - There is a low area prone to flooding along Coxsackie Creek close to the confluence with the Hudson River at Route 61. Route 61 is washes out several times a year with heavy rain and high tide on the Hudson River. Structures are not impacted.
- <u>Other</u>
 - o N/A

Rensselaer County, CID# 36083C Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Linda Vonder Heide, Principal Planner Rensselaer County Office of Economic Development & Planning 1600 7th Avenue Troy, NY 12180 518-270-2921 Ivonderheide@rensco.com

Rensselaer County Stream Study Requests (in priority order):

- 1. The Poesten Kill needs a revised detailed study for its entire reach within the county. This stream flooded during Hurricane Irene.
- 2. The Wynants Kill should be restudied using detailed methods for its entire length within the City of Troy. This stream frequently floods.
- 3. The Hudson River from Route 7 in the City of Troy south to Route 20 in the Town of East Greenbush is in need of a revised detailed study.
- 4. The Quacken Kill is in need of a new detailed study from Route 351 to the Brunswick/Grafton corporate limits due to recurrent flooding.
- 5. Quackenderry Creek should be restudied using detailed methods from the confluence with the Hudson River to Route 4, in the City of Rensselaer and Town of North Greenbush due to recurrent flooding caused by development.

Other Stakeholders:

- Poestenkill Business Association
- Rensselaer Plateau Alliance (Jim Bonesteel at the county has contact information)
- Rensselaer County Land Trust (Nick Conrad, NYSDEC has contact information)

GIS Users:

- Joline Weidlich, GIS Team Leader Rensselaer County Bureau of Research and Information Systems jweidlich@rensco.com
- Kelly Paslow, Director of Public Safety Rensselaer County <u>kpaslow@rensco.com</u>

Historical Flood Problems:

- In the Town of Poestenkill, water from Dyken Pond was released into a creek that overflowed.
- Flooding has occurred in the Cropseyville area of the Town of Brunswick and in downtown Troy along the Hudson River.
- Repeated flooding has occurred in the following locations:
 - City of Troy along the Wynants Kill
 - City of Rensselaer along Quackenderry Creek (Problem has been addressed)
 - The Poesten Kill where the stream channel is migrating in the Town of Poestenkill

- \circ Hudson River from Route 7 in the City of Troy south to Route 20 in the Town of East Greenbush
- There may be verifiable high water marks in the county. Kelly Paslow, the county Emergency Services Director, may have information.

Community Planning and Ongoing Projects:

- Wayne Bonesteel, the county's engineer, is the point of contact for recent, ongoing or proposed projects.
- Recent development activities in the county include:
 - The area north of Route 136 near the Wynants Kill is being rezoned for development in the Town of North Greenbush.
 - Development is occurring in the Cropseyville area in the Town of Brunswick along the Route 2 corridor.
 - Heavy development is occurring in the vicinity of Route 4 and I-90 south of the City of Rensselaer.
 - Development is occurring along Route 7 in the Towns of Pittstown and Hoosick in the northern part of the county. However, there is no flooding in this area.
- There are a number of large culverts, including along Mill Creek and Quackenderry Creek, in the City of Rensselaer.
- The county does not have a formal open space plan. The Rensselaer County Land Trust is working on an informal open space plan and an updated agricultural and farmland protection plan, including a plan for the purchase of development rights and right to farm requirements.

Mitigation Activities:

- The county recently received a grant to update its hazard mitigation plan.
- The county installed a high water dam along Quackenderry Creek in the City of Rensselaer as a flood mitigation measure.

Training Needs:

- Training on CRS and for building inspectors would be helpful.
- The county suggested contacting the Capital District Region Planning Council to provide training at their activities.

Available Data:

- Base Map Data
 - No information provided.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - There is bridge replacement data available for County Route 49.
 - Contact: Rensselaer County Engineering Department
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies for public/private funded projects are not available.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - There is recurrent flooding along the Hudson River from Route 7 in the City of Troy south to Route 20 in the Town of East Greenbush
- Other
 - There may be mapping available for the County MS4 areas in the county's hazard mitigation plan.

Town of Berlin, Rensselaer County CID# 360672 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Berlin Stream Study Requests (in priority order):

The Town of Berlin chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time. Town of Brunswick, Rensselaer County CID# 361130 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 6, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

William Bradley, Superintendent of Water (Survey) Town of Brunswick Department of Water 336 Town Office Road Troy, New York 12180 518-209-2466 wbradley@townofbrunswick.org

Karen Guastella, Building Inspector (Meeting) Town of Brunswick Department of Building 336 Town Office Road Troy, New York 12180 518-279-3461, Ext. 111 kguanstella@townofbrunswick.org

Town of Brunswick Stream Study Requests (in priority order):

- 1. The Quacken Kill Reach One is in need of an updated detailed study from the southern corporate limits to approximately 5,970 feet upstream, south of State Highway 2. The current map is not accurate in this area and there are residential properties along the reach.
- 2. The Quacken Kill Reach Two is in need of a new detailed study from south of State Highway 2 to the eastern corporate limits. The current map is not accurate in this area.
- 3. The Poesten Kill Reach Two, from north of Rutledge Lane to the western corporate limits, is in need of a new detailed study.
- 4. An unnamed stream north of the Hamlet of Haynersville is in need of a new detailed study due to recent flooding issues. This stream is located outside of the Mid-Hudson Watershed.

Additionally, the town noted that more street names on the Flood Insurance Rate Maps would be helpful.

Other Stakeholders:

• N/A

GIS Users:

 William Bradley, Superintendent of Water Town of Brunswick Department of Water 336 Town Office Road Troy, New York 12180 518-209-2466 wbradley@townofbrunswick.org

Historical Flood Problems:

• During Hurricane Irene, flooding along the Quacken Kill and the Poesten Kill caused infrastructure damage.

- During normal 100-year rain events, no flooding occurs in the town.
- There are verifiable high water marks in the community, documented by photos taken during Hurricane Irene, and based on town employee observations.

Community Planning and Ongoing Projects:

- There is a project planned by the town Highway Department to resize a culvert in the Hamlet of Haynersville near a trailer park that floods during rainstorms located northwest of the intersection of Route 7 and Deep Kill Road.
- There is a planned development of 80 apartment units at the intersection of McChesney Avenue and Bone Street Lane along Sweet Milk Creek.
- There is a planned development of 7 single family homes at the intersection of Farm to Market Road (State Route 351) and Penny Royal Lane.
- There are no piped or naturally occurring underground streams in the community.
- The town does not have an open space plan but one is currently in development.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town did not indicate whether they participate in the county hazard mitigation plan or have their own plan.
- The town did not report any prior flood mitigation activities.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Building Code Requirements
 - Effective Public Outreach

National Flood Insurance Program/Floodplain Management Information:

- The town did not indicate whether there are known LOMC clusters in the town.
- The town is familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. The Building Department is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and other digital format.
 Contact: NYSGIS
 - Contact: NYSGIS
 rependentation footures are evailable
 - Transportation features are available in GIS and other digital format.
 - Contact: NYSGIS.
 - Parcel and zoning data are available in GIS and other digital format.
 Contact: NYSGIS/Rensselaer County
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are available in GIS format.
 - Contact: NYSGIS
 - Local survey data are available in hard copy format.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.

- Risk Assessment Data
 - Essential/critical facilities data are available in hard copy format.

 - Hazard mapping data are not available.
 Historical flood inundation areas are not available.

- From Scoping Maps
 - o N/A
- <u>Other</u> •
 - N/A

Village of Castleton, Rensselaer County CID# 360673 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Village of Castleton Stream Study Requests (in priority order):

The Village of Castleton chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Town of East Greenbush, Rensselaer CID# 361133 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of East Greenbush Stream Study Requests (in priority order):

The Town of East Greenbush chose not to attend either the pre-Discovery webinars or the inperson Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time. Village of East Nassau, Rensselaer County CID# 360257 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 13, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Thomas A. Kernan, Trustee (Survey and Meeting) Village of East Nassau P.O. Box 268 East Nassau, NY 12062 518-766-5131 thomas.kernan@villageofeastnassau.org

Village of East Nassau Stream Study Requests (in priority order):

- 1. The entire reach of Kinderhook Creek within the village needs a revised detailed study due to more frequent flooding.
- The entire reach of Black Brook within the village needs a revised detailed study. Flooding is occurring more frequently and the flood water is swifter moving and rises higher than in the past.
- 3. Tsatsawassa Creek is in need of a new detailed study in Hoag's Corners. There are capacity issues with older culverts along the Tsatsawassa Lake Road.
- 4. The unnamed tributary to Kinderhook Creek that crosses Hayes Road and NY State Route 66 often overtops a portion of Hayes Road. A new detailed study is needed to reflect the enlargement of culverts for these roads and to properly assess flood hazards. This is not a heavily developed area.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- Aside from the flood of 1945, there are numerous times when Kinderhook Creek and Black Brook have exceeded their floodplains. Flooding is occurring more frequently and water is rising higher than in the past.
- There are no verifiable high water marks in the village.

Community Planning and Ongoing Projects:

- There are bridge replacements underway at Route 66 and Route 20 over Kinderhook Creek.
- There is very little recent or planned residential or commercial development in the village.
- There are no piped or naturally occurring underground streams in the community.
- No information was provided about open space planning or watershed management plan participation.

Mitigation Activities:

• No information was provided about mitigation planning or activities.

Training Needs:

• No training needs were noted.

National Flood Insurance Program/Floodplain Management Information:

• No information was provided about LOMC clusters, interest in CRS, or the community's floodplain development permit process.

Available Data:

- Base Map Data
 - No data are available.
- Engineering Data
 - No data are available.
- Risk Assessment Data
 - No data are available.

- From Scoping Maps
 - There are a lot of colonial era (Pre-Revolutionary war) buildings along Tsatsawassa Creek to the east of Hoag's Corners and also just south of Tsatsawassa Lake.
 - The area along the tributary to Tsatsawassa Creek near Lake Lane and Lake Road is generally not floodprone but there are a few issues with culverts.
- <u>Other</u>
 - N/A

Town of Grafton, Rensselaer CID# 361150 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Grafton Stream Study Requests (in priority order):

The Town of Grafton chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Village of Nassau, Rensselaer CID# 361155 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Village of Nassau Stream Study Requests (in priority order):

The Village of Nassau chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Town of Nassau, Rensselaer CID# 360675 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Nassau Stream Study Requests (in priority order):

The Town of Nassau chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of North Greenbush, Rensselaer CID# 361164 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 6, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Megan Malone, Executive Assistant to Town Supervisor Town of North Greenbush 2 Douglas Street Wynantskill, NY 12198 518-283-5313, Ext. 5 <u>supervisorsoffice@townofng.com</u>

Town of North Greenbush Stream Study Requests (in priority order):

The Town of North Greenbush chose not to attend either the pre-Discovery webinars or the inperson Discovery Meeting. The Discovery stakeholder survey received by NYSDEC did not include any stream study requests nor any additional information besides the contact information above. Absent different information, it is assumed the Town has no stream study requests at this time. Town of Poestenkill, Rensselaer County CID# 360676 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Paul Barringer, Code Enforcement Officer Town of Poestenkill 38 Davis Drive P.O. Box 210 Poestenkill, NY 12140 518-283-5100, Ext. 102 <u>cepoest@nycap.rr.com</u> <u>barrpf@nycap.rr.com</u>

Dominic Jacangelo, Town Supervisor Town of Poestenkill 38 Davis Drive P.O. Box 210 Poestenkill, NY 12140 518-283-5100 <u>djacangelo@poestenkillny.com</u>

Town of Poestenkill Stream Study Requests (in priority order):

- 1. The Poesten Kill Reach One is in need of a revised detailed study due to severe flooding that occurred in the vicinity during Hurricane Irene.
- 2. The Poesten Kill Reach Two is in need of a new detailed study. This reach currently has an approximate study only. Severe flooding occurred during Hurricane Irene causing damage to portions of Plank Road in East Poestenkill.
- 3. The Tributary to the Poesten Kill, west of Fifty Six Road, is in need of a new detailed study due to severe flooding that occurred in the vicinity during Hurricane Irene that washed out roads and caused damage to a culvert.
- 4. Vosburg Pond is in need of a new detailed study due to severe flooding that occurred during Hurricane Irene.

Other Stakeholders:

• Robert Brunet, Code Enforcement Officer, Building Inspector and Water Manager Town of Poestenkill (Currently on medical leave)

GIS Users:

• N/A

Historical Flood Problems:

- The town experienced major flood damage as a result of Hurricane Irene and Tropical Storm Lee.
- The Poesten Kill has the most frequent flooding in the area. It damaged several homes and washed out roads during Hurricane Irene.
- Severe erosion occurred along Plank Road when the Poesten Kill flooded during Hurricane Irene.

- Homes were flooded during Hurricane Irene at the lowest point of the Poesten Kill, northwest of the Deer Creek Road cul-de-sac.
- Ice jams have occurred at Betens Kill Creek near Barberville Falls.
- There are repeated flooding problems experienced by structures and a phone switching station along the Poesten Kill west of Barberville Falls.
- High water levels were noted at the State Route 351 bridge across the Poesten Kill. Photographs are available.

Community Planning and Ongoing Projects:

- There is an ongoing NYSDEC project to restore the streambed along the Poesten Kill, east of State Route 351, following damage from Hurricane Irene
- There is a proposed project to develop a solar farm along the Poesten Kill at the intersection of Plank Road and Davis Drive. However this area is currently zoned as residential.
- There are proposed plans to replace a culvert along Reichards Farm Road, north of the Poesten Kill.
- Two culverts are proposed to be replaced along Dater Hill Road.
- Bridge replacements on Dzembo Road over a tributary to the Poesten Kill are being proposed.
- Just north of the Rensselaer County Airport is a USACE flood control project completed in the 1980s along the Poesten Kill.
- There are several new single family homes built behind the junk yard, just north of Reichards Lake.
- A 28-parcel subdivision has been recently approved for east of Averill Park Road, south of the small unnamed tributary east of Route 66.
- There is a 17-parcel subdivision to be built south of the intersection of Spring Avenue (State Route 130) and McKinley Way. This area is near the Poesten Kill and has known erosion issues.
- The Poesten Kill has some underground aquifers that sometimes experience intrusion from salt and hazardous materials.
- There is not a lot of development pressure in the town. Subdivisions are being built very slowly.
- The town has an open space plan. Most open space in the area is forest product or agricultural land.
- The town is very active in MS4-related planning and has a soil erosion law.

Mitigation Activities:

- The town participates in the county hazard mitigation plan.
- The town did not report any prior flood mitigation activities.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs
- There has been a high turnover of town officials in recent years. Many current staff were not at the town during Hurricane Irene. Therefore training would be very helpful.

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the town.
- The town is not familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. The town's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Contact: Rensselaer County
 - Transportation features are available in hard copy format. The county may have GIS data for the town.
 - Parcel and zoning data are available in GIS format.
 - Contact: Rensselaer County
 - Building footprint data are available in GIS format.
 - Contact: Rensselaer County
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are available on NYSDEC paper maps.
 - Local survey data are available in GIS Format.
 - Contact: Rensselaer County
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - There is a new water storage tank at the end of Hinkles Road put in place in 2011.
 - Erosion from Hurricane Irene occurred along the Poesten Kill south of Hinkles Road.
- <u>Other</u>
 - The town requested additional assistance from FEMA and NYSDEC to provide more boots on the ground post-storm to inform community officials what their options are for recovery, especially with regards to property buyouts.

City of Rensselaer, Rensselaer County CID# 361032 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 17, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Mike Brown, Assistant Planning Director (Meeting and Survey) City of Rensselaer Planning Department 62 Washington Street Rensselaer, New York 12144 518-465-1693 <u>Mike.brown@rensselaerny.gov</u>

City of Rensselaer Stream Study Requests (in priority order):

- 1. The Hudson River is in need of a revised detailed study for its entire length within the city. There is high development pressure along the waterfront, including plans for a mixed residential / commercial area, including apartment buildings. There are also plans to redevelop the area near the old high school, with some sports fields and recreation facilities in the near future.
- Quackenderry Creek is in need of a revised detailed study. There is some development pressure along the northern portion of the creek, including possible development of a park and open space area near the East Greenbush line. There have been changes throughout the creek that may affect flooding, including construction of a small dam in 2008 just east of Catherine Street to help alleviate flooding issues.
- 3. Mill Creek is in need of a revised detailed study. This creek flows into the Hudson River and passes through an area that has development pressure and redevelopment plans.

Other Stakeholders:

- Charles E. Moore, AICP, Director of Planning and Development City of Rensselaer City Hall
 62 Washington Street Rensselaer, NY 12144
- John Thomas City of Rensselaer Water Department

GIS Users:

• N/A

Historical Flood Problems:

- There was repeated flooding along Quackenderry Creek in the eastern part of the city, in particular from Catherine Street downstream to the Hudson River. This repeated minor flooding has largely been mitigated by the construction of a small dam on the creek.
- There are no verifiable high water marks in the city.

Community Planning and Ongoing Projects:

 A new dam was constructed in 2008 along Quackenderry Creek near the intersection of Catherine Street and 4th Street to assist in flood control. There is also a retention pond that was constructed upstream of the dam

- Quackenderry Creek has been widened at the intersection of 6th Street and John Street and at the intersection of 6th Street and Partition Street.
- Several culverts throughout the city have been replaced; no details were provided on location.
- The areas along the waterfront of the Hudson River are experiencing notable residential and commercial development.
- Quackenderry Creek is piped underneath the Amtrak Rail Station parking lot.
- The city has an open space plan. Charles Moore, City Planner, is the point of contact.
- The city participates in Rensselaer County's Watershed Management (MS4) Plan.

Mitigation Activities:

- The city possibly participates in the county hazard mitigation plan.
- A new dam and basin was constructed along the Quackenderry Creek in 2008. Stream restoration has also occurred in several places along this creek.

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - o Building Code Requirements
 - Hazard Mitigation & Grant Programs

The city has hired new personnel for the planning of new development along the Hudson River. These new personnel could use training regarding the topics above.

National Flood Insurance Program/Floodplain Management Information:

- There are no noted LOMC clusters in the city.
- The city is familiar with the CRS program and wants more information about it.
- The city representative was not familiar with the city's floodplain development permit process and suggested contacting the city's Building department for further information.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Contact: Rensselaer County
 - Transportation features are available in GIS format.
 - Contact: Rensselaer County
 - Parcel and zoning data are available in GIS format.
 - Contact: Rensselaer County (Municity is the program used)
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Location of Quackenderry Dam is available in GIS format.
 - Local survey data are available in hard copy format.
 - Local flood gage or rain gage data may be available along Mill Creek and/or Quackenderry Creek.
 - Contact: John Thomas, City Water Department
 - There are no available flood hazard studies for public/private funded projects in the city.
- Risk Assessment Data
 - Essential/critical facilities data are available in hard copy format.

- There is an emergency action plan available for the Quackenderry Dam.
- Historical flood inundation areas are not available.

- From Scoping Maps
 - Development pressure along the Hudson River extends from Route 9 north to the I-90 bridge.
 - The new dam along Quackenderry Creek is east of Fourth Street, close to the corporate limits.
- <u>Other</u>
 - N/A

Town of Sand Lake, Rensselaer County CID# 361167 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 2, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Mike Wager, Building Inspector (Survey and Meeting) Town of Sand Lake Building Department P.O. Box 273 Sand Lake, NY 12153 518-674-2026 <u>mwager@sand-lake.us</u>

Town of Sand Lake Stream Study Requests (in priority order):

1. The entirety of the Wynants Kill (Reaches One, Two and Three) needs a new/revised detailed study due to the age of the previous study, bridge replacements, the presence of residential properties in the area, and flooding during Hurricane Irene. Reach Two is currently an approximate study.

Other Stakeholders:

- Brian Hunt, Highway Superintendent Town of Sand Lake Public Works/Highway Department
- Joel Hunt, Dispatcher Town of Sand Lake Public Works/Highway Department

GIS Users:

• N/A

Historical Flood Problems:

- The town was flooded by Hurricane Irene in 2011, causing several culvert washouts.
- The Wynants Kill flooded in Averill Park. This creek has also experienced repeated flooding problems.
- There are verifiable high water marks located along the Wynants Kill in Averill Park.

Community Planning and Ongoing Projects:

- There was a bridge replacement in 2013 along the Wynants Kill at Route 43.
- There were several culvert washouts in 2011. Projects have been performed to upgrade these culverts.
- There is no recent or planned residential or commercial development in the town.
- There are no piped or naturally occurring underground streams in the community.
- The town has an open space plan that was developed about five or ten years ago. Monica Ryan, Town Planner, is the point of contact.
- The town does not have or participate in a watershed management plan. However, a watershed survey may have been performed. Monica Ryan, Town Planner, is the point of contact.

Mitigation Activities:

- The town has its own local hazard mitigation plan.
- The town did not report any prior flood mitigation activities.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Hazard Mitigation & Grant Programs
 - Building Code Requirements

National Flood Insurance Program/Floodplain Management Information:

- There are concentrations of LOMCs along the Wynants Kill.
- The town is familiar with the CRS program and does not need more information about it.
- The town has an active floodplain development permit process. Mike Wager, the town building inspector, is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy and non-GIS digital format.
 - Transportation features are available in hard copy and non-GIS digital format.
 - Parcel and zoning data are available in hard copy and non-GIS digital format. Data are available on the town's website.
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are available in hard copy and GIS format. Dams in the town include Lower Kaine Dam and Hastings Dam.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - The Glass Lake Association has prepared a dam breach evacuation plan for the lake.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - Hastings Dam along the Wynants Kill was built in the 1800s.
 - A dam was removed from along the Wynants Kill at Route 77.
- Other
 - Mike Wager feels that Johnny Cake Bridge over the Wynants Kill is undersized, creating a bottle neck that backs up water and affects several homes, including his own. The bridge is owned by the town. The town leadership does not support the replacement of the bridge. Mike Wager asked for support from FEMA/NYSDEC to convince the town leadership that the bridge replacement was necessary. Paul Hoole, from FEMA Region 2, met with Mike during the meeting and indicated that there was not much FEMA or the state could do, but will follow up on FEMA assistance that may be available.
 - A privately owned dam along the Wynants Kill, near Route 49, needs maintenance. However the owner does not have the funding to keep it up. NYSDEC has surveyed the dam (B class). Alon Dominitz is the NYSDEC point of contact for the dam.

 \circ $\;$ Alton Knapp has processed a number of LOMCs in the town.

Town of Schodack, Rensselaer County CID# 361169 Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: June 3, 2016, July 5, 2016, October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Nadine Fuda, Director of Planning and Zoning (Survey and Meeting) Town of Schodack Department of Planning and Zoning 265 Schuurman Rd Castleton, NY 12033 518-477-7938 <u>Nadine.fuda@schodack.org</u>

Kenneth J. Holmes, Superintendent of Highways (Survey and Meeting) Town of Schodack Highway Department 265 Schuurman Rd Castleton, NY 12033 518-766-4000 holmesk@albany.twcbc.com

Nick Defruscio, Assistant Building Inspector/Code Enforcement Officer (Meeting) Town of Schodack Building Department 265 Schuurman Rd Castleton, NY 12033 518-477-7940 nick@schodack.org

Town of Schodack Stream Study Requests (in priority order):

- 1. The entirety of the Muitzes Kill Reach One needs an updated detailed study due to repeated flooding events, new flood control structures, fill activity, and flood risk to structures.
- 2. The Moordener Kill needs an updated detailed study near a trailer park at the intersection of East Schodack Road and Poyneer Road. This area was inundated during Hurricane Irene and has continuing erosion problems. There is also a culvert that is undersized that contributes to flooding problems in this area.

Other Stakeholders:

 Dennis Dowds, Town Supervisor Town of Schodack 518-477-7918

GIS Users:

• N/A

Historical Flood Problems:

- The Moordener Kill, Vlockie Kill, and Muitzes Kill have all had flooding during past storms with 100 year to 500 year flood events.
- Areas have typically flooded when inundated by quick storms of more than 4 inches of rain. The area is also particularly vulnerable during hurricane events.
- Schodack Island in the Hudson River is a low lying area and floods frequently.

- Structures along Route 9J are at risk from flooding from the Hudson River and the Muitzes Kill.
- The Clove Road Bridge that crosses the Muitzes Kill experiences repeated flooding events after rain storms that leave several feet of water on the road in addition to debris. Work was done in the 1980s to replace a span structure with a triple box culvert.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There is a bridge replacement project planned at the intersection of East Schodack Road and State Route 9/20. This is a NYSDOT project.
- There are planned developments along Empire State Boulevard for new medical and trucking facilities.
- The Schodack Terrace and the Valatie Kill aquifers run north to south along Route 9. See town law 223 for more information.
- The Schodack Area Land Trust has a 57 acre preserve in the town. Nadine Fuda is the point of contact.
- The town participates in a watershed management plan. Nadine Fuda is the point of contact (518-477-7938).

Mitigation Activities:

- The town hazard mitigation plan is dated July 13, 2012 and was adopted in 2012. Nadine Fuda is the point of contact (518-477-7938).
- The town reported there are prior flood mitigation activities but provided no details.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are no reported LOMC clusters in the town.
- The town is not familiar with the CRS program but would like more information about it.
- The town does not have an active floodplain development permit process. Nick DeFruscio (518-477-7940) is responsible for floodplain permitting in the town.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy format.
 - Transportation features are available in hard copy format.
 - Parcel and zoning data are available in hard copy format.
 - Building footprint data are available in hard copy format.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.

- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - There is a privately owned broken dam along the Muitzes Kill near Muitzeskill Road.
- Other
 - The town has enacted erosion and sedimentation control measures in accordance with Article XVII of New York's Environmental Conservation Law.

Town of Stephentown, Rensselaer County CID# 361170 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Owen Cassavaugh, Building Inspector Town of Stephentown Department of Code Enforcement and Zoning 26 Grange Hall Road Stephentown, NY 12168 518-733-6233, Ext. 3 <u>dhbuildinsp@taconic.net</u>

Dean Herrick, Code Enforcement Officer Town of Stephentown Department of Code Enforcement and Zoning 26 Grange Hall Road Stephentown, NY 12168 518-733-6233, Ext 3 <u>dhbuildinginsp@fairpoint.net</u>

Town of Stephentown Stream Study Requests (in priority order):

1. The town believes the current maps are accurate. However a digital floodplain mapping product is badly needed.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- Damages caused by Hurricane Irene in 2011 and repaired with money from FEMA include:
 - East Road several culvert replacements along Tributaries to East Brook
 - State Route 22 bridge replacement over Kinderhook Creek
 - State Route 43 bridge replacement over Kinderhook Creek
 - State Route 43 bridge replacement over Black River
 - South Stephentown Road culvert replacements along Tributaries to Kinderhook Creek.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- See projects above following Hurricane Irene.
- Six new houses on West Road were constructed near Kinderhook Creek but they are not located in the floodplain.
- There are no piped or naturally occurring underground streams in the community.
- The town does not have an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

• No information about mitigation planning was provided.

• The town center no longer floods as often, likely because of the removal of a railroad bridge and bridge updates following Irene.

Training Needs:

• No training needs were noted.

National Flood Insurance Program/Floodplain Management Information:

- No information about LOMC clusters or CRS was provided.
- Two houses on Bert Hager Road near Kinderhook Creek needed floodplain permits.

Available Data:

- Base Map Data
 - No data are available.
- Engineering Data
 - No data are available.
- <u>Risk Assessment Data</u>
 - \circ No data are available.

- From Scoping Maps
 - There are ice jams along Black Brook near Route 43.
 - NYSDEC told a property owner to upgrade or remove a deck along Kinderhook Creek in the vicinity of Nassau Road.
 - There is an elevated house along Kinderhook Creek at Wimple Road.
- Other
 - o N/A

City of Troy, Rensselaer County CID# 360677 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 20, 2016 Discovery Meeting Attendance: October 20, 2016

Community Representative(s):

Chris Wheland, Superintendent of Public Utilities City of Troy Department of Public Utilities 25 Water Plant Road Troy, New York 12182 518-369-3259 Chris.wheland@troyny.gov

Todd Dickinson, Engineering Aid City of Troy, Engineering Department 433 River Street Troy, NY 12180 518-279-7130 Todd.Dickinson@troyny.gov

Laura Amos, Assistant to Mayor City of Troy 433 River Street Troy, NY 12180 518-279-7156 Laura.Amos@troyny.gov

City of Troy Stream Study Requests (in priority order):

- 1. The Hudson River needs an updated detailed study within the corporate limits. The 1922 seawall has been recently repaired. (High priority)
- 2. The Poesten Kill is in need of an updated detailed study due to development in the area and the presence of two dams. (High priority)
- 3. The Wynants Kill needs an updated approximate study from the confluence with the Hudson River to the confluence with Burden Pond. (Low priority)
- 4. An existing analysis for Burden Pond is available that needs to be incorporated into the Flood Insurance Rate Map. (Low priority)
- 5. Data from an existing dam break analysis is available to be incorporated into the Flood Insurance Rate Map for the Piscawen Kill. This stream is located outside of the Mid-Hudson Watershed. (Low priority)
- The Paensic Kill is in need of an updated approximate study. There is a small amount of development in this area. This stream is located outside of the Mid-Hudson Watershed. (Low priority)
- 7. Data from an existing dam break analysis is available to be incorporated into the Flood Insurance Rate Map for Ida Lake. (Low priority)

Other Stakeholders:

 Monica Kurzejeski Deputy Mayor City of Troy 433 River Street Troy, NY 12180

Monica.Kurzejeski@troyny.gov

- Chris Brazee
 City of Troy Building Department
 <u>Chris.Brazee@troyny.gov</u>
- Charles Doyle
 City of Troy Building Department
 <u>Charles.Doyle@troyny.gov</u>
- Steve Strichman, Director of Planning City of Troy Planning Department 433 River Street Troy, NY 12180 <u>steve.strichman@troyny.gov</u>.

GIS Users:

 Chris Brazee, GIS Technician City of Troy Building Department 433 River Street Troy, NY 12180 <u>Chris.brazee@troyny.gov</u>

Historical Flood Problems:

- Hurricane Irene caused historic flooding along the Poesten Kill, the Wynants Kill, and the Hudson River.
- The Hudson River causes repeated flooding problems west of 1st Avenue from 112th Street to 123rd Street, south of Hoosick Street.
- There is a verifiable high-water mark located behind Brown's Brewery at 417 River Street.

Community Planning and Ongoing Projects:

- The existing seawall between Hoosick Street (Route 7) and State Route 2 is being repaired. It was built in 1922.
- The Spring Avenue Bridge was recently replaced.
- There is recent commercial development downtown near the sea wall, including the redevelopment of Monument Square and Old City Hall.
- There are piped underground streams in the community, downstream of Wright Lake. The culvert in this area is too small.
- The city is unsure of whether they have an open space plan. Monica Kurzejeski (<u>Monica.kurzejeski@troyn.gov</u>) has more information.
- The city does not have or participate in a watershed management plan.

Mitigation Activities:

• The city participates in the county's hazard mitigation plan.

Training Needs:

- Training on the following topics would be helpful:
 - Floodplain Management Administration
 - Building Code Requirements

National Flood Insurance Program/Floodplain Management Information:

- There is a LOMR at Vander Hyden Estates near the Wynants Kill.
- The city is not familiar with the CRS program but would like additional information about it.
- The city has an active floodplain development permit process. Carlo Sorriento is the city's point of contact responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy and GIS format.
 - Transportation features are available in hard copy and GIS format.
 - Parcel and zoning data are available in hard copy and GIS format.
 - Building footprint data are available in GIS format.
- Engineering Data
 - Locations of flood control structures, including city sea wall, are available in hard copy and GIS format.
 - o Locations of dams are available in hard copy and GIS format.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - Flood hazard studies are available in hard copy and GIS format for the sea wall and certain dam projects in the city. Studies/data are also available for Burden Pond, Ida Lake and Bradley Lake.
- Risk Assessment Data
 - Essential/critical facilities data are available in hard copy and GIS format.
 - Dam break analyses are available for the Piscawen Kill and Ida Lake.
 - The Hurricane Irene inundation area has been mapped and can be used for future emergency response efforts.
 - Historical flood inundation areas are available in paper/hard copy format (photos).
 - Contact: Kathy Shephan, County Historian. 518-272-7232; also available at rchsonline.org

- From Scoping Maps
 - There is a capped hazard site at Front and River Streets.
 - The Route 2 area up to 5th Avenue was evacuated during Hurricane Irene.
- <u>Other</u>
 - o N/A

Schenectady County CID# 36093C Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Schenectady County Stream Study Requests (in priority order):

Schenectady County chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the County has no stream study requests at this time.

Village of Delanson, Schenectady County CID# 360737 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Village of Delanson Stream Study Requests (in priority order):

The Village of Delanson chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Village has no stream study requests at this time.

Town of Duanesburg, Schenectady County CID# 361191 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Duanesburg Stream Study Requests (in priority order):

The Town of Duanesburg chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the town has no stream study requests at this time.

Town of Princetown, Schenectady County CID# 361192 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Princetown, Stream Study Requests (in priority order):

The Town of Princetown chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Rotterdam, Schenectady County CID# 360740

Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 3, 2016, June 6, 2016, October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Mickey Maher, Building Inspector (Survey and Meeting) Town of Rotterdam 1100 Sunrise Boulevard Schenectady, NY 12306 518-355-7575 Ext. 333 <u>mmaher@rotterdamny.org</u>

Peter Comenzo, Senior Planner (Survey) Town of Rotterdam 1100 Sunrise Boulevard Schenectady, NY 12306 518-355-7575 Ext. 338 pcomenzo@rotterdamny.org

Town of Rotterdam Stream Study Requests (in priority order):

 The Mohawk River is in need of an updated detailed study. There has been roadwork recently completed along the I-890 exit near Erie Boulevard which may have affected the accuracy of the Special Flood Hazard Area. There is also development pressure/possibility of redeveloping parts of an old industrial complex in the same area. This flooding source is located outside of the Mid-Hudson Watershed.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- The town has had a number of flood events in the Rotterdam Junction area along the Mohawk River and the Erie Canal in the northwest portion of the town (outside the Mid-Hudson Watershed). This area had very serious flooding in the 2006 flooding of the Mohawk River and 2011 with Tropical Storm Lee that heavily damaged homes.
- High water marks were taken in two areas after Hurricane Irene and Tropical Storm Lee. There is one high water mark at the end of Mark Street in a public park in Rotterdam Junction. The other is in the Long Pond Village apartment complex at the intersection of Campbell Road and I-890.

Community Planning and Ongoing Projects:

- The Long Pond Village apartments were built between 2008 and 2009.
- There are a number of piped streams in the Coldbrook area of Rotterdam. These streams have been piped since around the 1930s, 1940s and 1950s. This area has a fairly high water table so most of the homes have been built on grade without basements.
- There has been interest in redevelopment of the General Electric plant that is on the south side of I-890.

- The town has an open space plan that includes conservation zones.
- The town participates in the Schenectady County Watershed Board.

Mitigation Activities:

- The town has a hazard mitigation plan that was adopted in 2005.
- There has been some stream work performed in the Moccasin Kill between the Thruway overpass and Route 5S. This mainly consisted of the removal of debris and armoring of the stream banks.
- There was some dredging work performed in the Mohawk River from the Route 103 bridge to the Parkis Street area in Rotterdam Junction.

Training Needs:

• Training on Floodplain Management Administration would be helpful to the town.

National Flood Insurance Program/Floodplain Management Information:

- There have been a large number of LOMAs issued in the area of the Normans Kill. When the town received new maps in 2014, this area was mapped and the affected properties were removed from the flood hazard area. The new maps issued in 2014 accurately show the flood hazard areas within the town.
- The town is familiar with the CRS program and would like more information about it.
- The town uses the state model floodplain development permit for development in the floodplain.
- The town building inspector is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Contact: Schenectady County
 - Transportation features are available in GIS format.
 - Contact: Schenectady County
 - Parcel and zoning data are available in GIS format.
 - Contact: Schenectady County
 - It is not known if building footprint data are available.
- Engineering Data
 - Locations of flood control structures are available in GIS format.
 - There are no dams in the town.
 - Local survey data are available in non-GIS digital format and hard copy format.
 - Local flood gage or rain gage data are not available.
- Risk Assessment Data
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - The paper Flood Insurance Rate Maps that the town used prior to the new digital Flood Insurance Rate Maps issued in 2014 have been digitized.

- From Scoping Maps
 - Flooding from the Normans Kill occurred south of Wemple Road during Hurricane Irene and Tropical Storm Lee.

- There are piped streams in the Coldbrook area south of Altamont Avenue.
- Other
 - There is a small private levee / berm for the shopping center located on Campbell Road. The berm has gates that can be closed during a storm to prevent the water from coming onto the property. This system is maintained by the owners of the shopping center.
 - The Erie Canal has a lock in the area (Lock 9).

Schoharie County CID# 36095C Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: May 19, 2016, June 2, 2016, June 2, 2016, October 3, 2016, October 19, 2016 Discovery Meeting Attendance: October 19, 2016

Community Representative(s):

Shane Nickle, Senior Planner/Hazard Mitigation Coordinator (Survey and Meeting) Schoharie County Planning and Development Agency 276 Main Street, Suite 2 P.O. Box 396 Schoharie, NY 12157 518-295-8770 shanenickle@co.schoharie.ny.us

Lillian Bruno, Planner (Meeting) Schoharie County Planning and Development Agency 276 Main Street, Suite 2 P.O. Box 396 Schoharie, NY 12157 518-295-8770 Iillianbruno@co.schoharie.ny.us

Stephen Hoerz, District Manager (Survey) Schoharie County Soil and Water Conservation District 173 South Grand Street, Suite #3 Cobleskill, NY 12043 518-823-4535 <u>s.hoerz@schoharieswcd.org</u>

Alicia A. Terry, Senior Planner (Survey) Schoharie County Planning and Development Agency 276 Main Street, Suite 2 P.O. Box 396 Schoharie, NY 12157 518-295-8770 aliciaterry@co.schoharie.ny.us

Brian Fleury, GIS Specialist (Survey) Schoharie County Planning and Development Agency 276 Main Street, Suite 2 P.O. Box 396 Schoharie, NY 12157 518-295-8770 brianfleury@co.schoharie.ny.us

Schoharie County Stream Study Requests (in priority order):

1. Lake Creek (also known as Hauverville Creek) in the Town of Broome should have a new detailed study from the county line to the confluence with Catskill Creek. This is a currently unmapped stream with some residential development and is likely to develop further. The

area sustained significant flood damage including the complete destruction of three homes due to Hurricane Irene in 2011.

2. Catskill Creek in the Town of Broome is in need of a new detailed study. The establishment of Base Flood Elevations is needed since the area is a mix of rural residences and commercial uses.

Other Stakeholders:

- Jason Wayman, Town of Broome Highway Superintendent 518-827-5074 <u>broomehgy@midtel.net</u>
- Peter Nichols and Steve Hurtz, Schoharie County Soil and Water Conservation District

GIS Users:

 Brian Fleury, GIS Specialist 518-295-8770 brianfleury@co.schoharie.ny.us

Historical Flood Problems:

- During Hurricane Irene, severe flooding throughout the Schoharie Valley occurred along Schoharie Creek, including in the Town of Broome.
- All streams in the county have had flooding issues. Many feed into Schoharie Creek.
- Severe flooding occurred in 1996, 2005, and 2011 (Hurricane Irene), including along Catskill and Lake Creeks. Severe damage to three residences along Lake Creek occurred in 2011.
- Lake Creek near the confluence with Catskill Creek near the Hamlet of Livingstonville along State Route 145 repeatedly floods.
- The Fire Hall in Livingstonville has had flooding problems.
- The Villages of Esperance, Middleburgh, and Schoharie have all experienced repeated flooding along Schoharie, Little Schoharie, Line, and Cobleskill Creeks.
- The unnamed tributary to Vlaie Pond in the Town of Broome has repeatedly flooded.
- There are verifiable high water marks in the Hamlet of Livingstonville. Jason Wayman (518-827-5074; <u>broomehgy@midtel.net</u>), the Town of Broome Highway Superintendent, is the point of contact. There are many other locations in various villages as well.

Community Planning and Ongoing Projects:

- There are several ongoing projects including:
 - Hudson River Estuary grant program funded study of an unnamed tributary to Vlaie Pond north of Lassen Road. Shane Nickle, Schoharie County Planning, is the point of contact.
 - NRCS Emergency Watershed Protection (EWP) project. Tom Lacko, NRCS Schoharie office is the point of contact.
 - Various bridge and culvert projects. The Town of Broome Highway department is the point of contact.
- There is development pressure in the Lake Creek area (second homes).
- There are no piped or naturally occurring underground streams in the county in the project area.
- The town does not have an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The Town of Broome participates in the county hazard mitigation plan which was adopted on October 25, 2013. The county is in the process of updating the plan. Shane Nickle, Schoharie County Planning, is the county point of contact.
- In 2005, a property at CCC Road along Rt. 145 was bought out near the Albany County boundary. This property was recently planted as part of the Trees for Tribs program.
- Between 2011 and 2014, two properties along Catskill Creek were purchased as part of a buyout program in the Town of Broome. Shane Nickle, Schoharie County Planning, is the point of contact.

Training Needs:

- Training on the following topics would be helpful:
 - Effective Public Outreach
 - Hazard Mitigation & Grant Programs
 - Floodplain Management Administration
 - Building Code Requirements

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters in the Town of Broome.
- The county is familiar with the CRS program and does not need more information about it.
- The Town of Broome has an active floodplain development permit process. The town's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Contact: Brian Fleury, Schoharie County
 - Transportation features are available in GIS format.
 - Contact: Brian Fleury, Schoharie County
 - Parcel and zoning data are available in GIS format.
 - Contact: Brian Fleury, Schoharie County
 - Building footprint data are not available.
- Engineering Data
 - There are no flood control structures in the Town of Broome.
 - Locations of dams are available in GIS format.
 - Contact: Brian Fleury, Schoharie County
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There are no available flood hazard studies for public/private funded projects in the town.
- Risk Assessment Data
 - Essential/critical facilities data are available in GIS format.
 - Contact: Brian Fleury, Schoharie County
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in GIS format.
 - Historical flood inundation areas are available in GIS and hard copy format.
 - Contact: Brian Fleury, Schoharie County

- From Scoping Maps
 - There are erosion issues along a portion of Catskill Creek near Livingstonville.
 - One of the buyouts after Hurricane Irene on Catskill Creek is located south of State Route 19, to the west of the Hamlet of Livingstonville.
- <u>Other</u>
 - The Livingstonville Fire House is near the Special Flood Hazard Area.

Town of Broome, Schoharie County CID# 361431 Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: June 3, 2016 Discovery Meeting Attendance: Did not attend

Community Representative(s):

Thomas Loucks, Code Enforcement Officer Town of Broome P.O. Box 946 Middleburgh, NY 12122 518-231-8400 tom_loucks@yahoo.com

Town of Broome Stream Study Requests (in priority order):

The Town of Broome chose not to attend the in-person Discovery Meeting. The Discovery stakeholder survey received by NYSDEC did not include any stream study requests. Absent different information, it is assumed the town has no stream study requests at this time.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- Schoharie Creek is the town's main flooding source and has flooded repeatedly.
- There are no verifiable high water marks in the town.

Community Planning and Ongoing Projects:

- There are no recent, ongoing, or proposed private/public projects, including bridge/culvert replacements, since the last Flood Insurance Rate Map update.
- There is no recent or planned development in the town.
- There are no piped or naturally occurring underground streams in the community.
- The town does not have an open space plan.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

• No information about hazard mitigation planning or other activities was provided.

Training Needs:

• No training needs were indicated.

National Flood Insurance Program/Floodplain Management Information:

- No LOMC clusters were identified.
- The town is familiar with the CRS program and does not need more information about it.
- The town has an active floodplain development permit process. The town's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

Base Map Data

- Political boundaries are available in GIS format.
- Transportation features are not available.
- Parcel and zoning data are available in GIS format.
- Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are available in hard copy format.
 - Local flood gage or rain gage data are available in non-GIS digital format.
 - There are no available flood hazard studies for public/private funded projects in the town.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in GIS format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in GIS format.
 - Historical flood inundation areas are available in GIS format.

- From Scoping Maps
 - 0 N/A
- <u>Other</u>
 - N/A

Ulster County CID# 36111C Pre- Discovery Webinar Attendance: Attended Discovery Stakeholder Survey Completed: October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Aaron Bennet, Environmental Planner Ulster County 17 Pearl Street Kingston, NY 12401 845-338-7682 aben@co.ulster.ny.us

Amanda LaValle, Environmental Coordinator Ulster County 17 Pearl Street Kingston, NY 12401 845-338-7682 alav@co.ulster.ny.us

Joe Whittaker, Highway & Bridges Field Operations Manager Ulster County 317 Shamrock Lane Kingston, NY 12401 845-340-3100 jwhi@co.ulster.ny.us

Kirk Peters, Department of Public Works Ulster County 317 Shamrock Lane Kingston, NY 12401 845-340-3122 kpet@co.ulster.ny.us

Ulster County Stream Study Requests (in priority order):

- 1. A revised detailed study for Lower Esopus Creek from the Ashokan Reservoir to Saugerties is needed, as are depth grids for the various (1, 5, 10, 25, 100, 500 yr), return interval floods. There is significant flooding and development pressure along this stream.
- 2. A revised detailed study for Sawkill Creek from Shady Lane to Esopus Creek is needed, as are depth grids for the various (1, 5, 10, 25, 100, 500 yr), return interval floods. There have been buyouts in the area and the stream has been dredged.
- 3. A new detailed study is needed for the Little Beaver Kill from the area below Yankeetown Pond to Kenneth Wilson State Park and the low-lying areas along the tributary stream in the vicinity of Ulster County Route 45 (Wittenberg Rd) where inundation problems to homes and the roadway occur.
- 4. A new detailed study is needed for the Platte Kill in the area around Mt. Marion to Glenerie where inundation problems to homes and roadways occur. There is new housing in this area.
- 5. The Hudson River is in need of a revised study. There are some critical facilities located in the floodplain.

6. Butternut Creek within the Town of Olive needs a new detailed study. The stream runs through a residential area and regularly floods, even in small, 2+ year return interval storm events, resulting in a lot of ponding, debris blockages, and closed roads, including Bostock Lane, which is where the town meeting hall and police station are located. This stream is located outside of the Mid-Hudson Watershed.

The following issue was also noted a possible error on the soon-to-be effective countywide FIRM for the county:

The new (currently still preliminary) Base Flood Elevations along the Beaver Kill in the vicinity of Willow (Sickler Road and Flats) may be incorrect (Town of Woodstock). The area is very flat, and two tributaries enter which can cause discrepancies in the HEC-RAS modeling, resulting in large "jumps" in Base Flood Elevations (Wagner Creek and Mink Hollow).

NYSDEC is coordinating with FEMA to ensure any necessary corrections are made.

Other Stakeholders:

• N/A

GIS Users:

 Thomas Hynes, Ulster County Information Services, GIS Department <u>thyn@co.ulster.ny.us</u>

Historical Flood Problems:

• Due to steep topography through much of the Mid-Hudson basin in Ulster County, small rain events often result in localized, flash-flooding in addition to the many large storm events that have been well documented in the county recently. Additionally, spilling conditions at the Ashokan Reservoir combined with moderate to heavy rainfall events can increase flooding conditions for several communities.

Lower Esopus Creek:

- Hurley Mountain Road Crossing (upstream of bridge and downstream to confluence with Plattekill Creek)
- Village of Saugerties

Hudson River:

- Saugerties (from confluence with Esopus Creek upstream to Cantine Dam)
- Kingston (at Kingston Point and from confluence with Rondout Creek upstream to NYS Route 213)

Sawkill Creek:

- Bearsville (downstream of NYS Route 212 and Wittenberg Road intersection)
- Woodstock (Tannery Brook at Simmons Court and at Orchard Lane)
- Woodstock (Playhouse Lane Plaza /Millstream Road area)
- County Route 30/Zena Road area (between Gitnick Road and Lazy Brook Lane)
- Zena (John Joy Road area (upstream and downstream)
- Sweet Meadows area (Melissa Road)
- Near confluence with Esopus Creek (Between I-87 overpass and Sawkill Road bridge area and further upstream)

Plattekill Creek:

Mount Marion area

Little Beaverkill Creek:

• Wittenberg (below outlet of Yankeetown Pond to Coldbrook Road)

Beaverkill Creek:

- Willow (Sickler Road flats area)
- Ideal Park Road area
- Mt. Tremper (Heintz Road to Miller Road)

Areas outside of the Discovery project area:

Upper Esopus Creek

- Oliverea at McKenley Hollow and Esopus
- Oliverea at Deer Lane
- Big Indian at Birch Creek / Esopus confluence
- Shandaken at Esopus Creek / Bushnellsville confluence
- Shandaken at Esopus Creek / Fox Hollow confluence downstream to the "Portal"
- Allaben along Esopus Creek (Wettje Road to Ernst Road and Hummingbird Lane)
- Phoenicia hamlet (above Stony Clove / Esopus confluence continuing downstream to Sleepy Hollow Campground - "Campground Curve")
- Mt. Pleasant / Mt. Tremper (above Esopus / Beaverkill confluence Emerson Resort area downstream through Mt. Tremper hamlet to Shuhose Road)
- Boiceville hamlet on Esopus Creek

Hudson River:

- Port Ewen (Tilden Street vicinity, downstream of Rondout confluence)
- Port Ewen (Town of Esopus WWTP along River Road)
- Highland Landing (River Road vicinity)
- Marlboro (confluence with Lattintown Creek vicinity)

Stony Clove Creek:

- Chichester (Stony Clove Lane vicinity)
- Chichester (Silver Hollow Road downstream to Ox Clove Road)
- Phoenicia (School Lane downstream to confluence with Esopus Creek)

Birch Creek:

• Pine Hill (Bonnie View / Birch Creek confluence to Belleayre Lake)

Bushnellsville Creek:

• Shandaken (NYS Route 42 / Rosa Road area)

Bushkill Creek:

• West Shokan (Bush Kill / Dry Brook confluence)

Butternut Creek:

• Shokan (Red Maple Road downstream to NYS Route 28)

Areas With Repeated Flooding Problems:

Hudson River:

- Village of Saugerties (Lighthouse Drive / Canal Street)
- City of Kingston (East and West Strand Street) and Sawkill

Sawkill Creek:

- Zena (John Joy Road area)
- Sweet Meadows (Melissa Drive, Sawkill Road)

Tannery Brook:

 Woodstock (Tannery Flats); also at the confluence with tributary along Playhouse Lane Lower

Esopus Creek:

- Town of Ulster (Sandy Road, Esopus Avenue, Orlando Street, Buckley Street, and Brigham Lane); this is an area of repetitive losses and buyouts
- Town of Hurley (Wynkoop Road, Brinks Lane, Fording Place Road)
- There are verifiable high water marks in the county from the 2005 flood of Lower Esopus Creek, as documented in the April 2005 <u>USGS report</u> on this flood.

Community Planning and Ongoing Projects:

- Two new, larger bridges are being built in Shandaken, one over the Esopus Creek at Shandaken (Route 28) and Bushnellsville Creek (near Glenbrook Park); (Outside of Discovery project area)
- Five additional new upsized bridges were built in the summer of 2016 in Shandaken (townowned) over Peck Hollow, Little Peck Hollow, Muller Road, the Panther Kill, and Lower Birch Creek Rd. Eric Hofmeister, Shandaken Highway Supervisor (845-688-9901) is the point of contact. (Outside of Discovery project area)
- Three more bridge replacements are scheduled in the next two years: Esopus in Big Indian, Mt. Tremper, and then in Mt. Tremper over the Beaver Kill; https://www.dot.ny.gov/main/business-center/designbuildproject19
- Ulster County Bridge (Wynkoop Road) over Esopus Creek in Hurley and the County bridge over the Platte Kill in Saugerties on Glasco Turnpike were replaced in 2014.
- Several new significant stream bank restoration projects were performed since the last map update along Stony Clove Creek and Warner Creek (upstream of confluence with Stony Clove). Adam Doan, Ulster County Soil & Water Conservation District (845-688-3047) is the point of contact. (Outside of Discovery project area)
- Recent development in the county includes:
 - Town of Ulster, west of City of Kingston in Esopus Creek Floodplain:
 - Large commercial development underway near the traffic circle in Kingston – 20,000 square feet immediately adjacent to Esopus Creek;
 - An 80-90 room hotel on Powell Lane (off of Sandy Lane) is being planned;
 - On the north side of I-587 in the Town of Ulster has run water and sewer into the floodplain (for purpose of development) and are planning to run more;
 - A new car dealership is being built (elevated) in floodplain along Esopus Creek just west of traffic circle;
 - City of Kingston, Esopus Creek

- Affordable housing proposal in Esopus Creek floodplain, south of traffic circle (behind Holiday Inn) is currently seeking state and other funding.
- Tannery Brook is piped within the City of Kingston.
- The county has an open space plan dated 2009, available online at http://ulstercountyny.gov/planning/open-space-plan. Dennis Doyle, Director of Planning (ddoy@co.ulster.ny.us) is the point of contact.
- The county is a partner in the Upper Esopus Creek, Broadstreet Hollow, the Beaver Kill, Bushnellsville, and Stony Clove Watershed Management Plans. There is also a process underway to fund and develop a plan for the Lower Esopus Watershed, which the county will also be involved in.

Mitigation Activities:

- The county is awaiting FEMA approval of the 2016 update of its 2009 hazard mitigation plan. Steve Peterson, Director of Emergency Management (<u>spet@co.ulster.ny.us</u>) is the point of contact.
- The county is participating in three buyout programs, including the "Greater Catskills I FBO" (mainly Lower Esopus), the Greater Catskills II FBO (mainly Wawarsing), and the current Post-Irene FEMA HMGP which includes more than 30 parcels. There is also a forthcoming NYC DEP Voluntary Flood Buyout Program that may impact the Towns of Shandaken, Olive, and Woodstock.
- Additionally, the Towns of Shandaken, Olive, and Woodstock are NY Rising Communities where additional flood hazard mitigation activities are being implemented.

Training Needs:

- Training on the following topics would be helpful to the county:
 - Hazard Mitigation & Grant Programs
 - Effective Public Outreach

National Flood Insurance Program/Floodplain Management Information:

- There are LOMC concentrations along Lower Esopus Creek between Saw Kill confluence and Glenerie and along the Saw Kill between Kingston Reservoir #2 and Kingston Reservoir #1.
- The county is familiar with the CRS program and does not need more information about it. The Town of Shandaken (not in Discovery project area) is seriously considering joining the program.

Available Data:

- Base Map Data
 - Political boundaries are available in hard copy and GIS format.
 - Contact: Thomas Hynes, Ulster County GIS Department (<u>thyn@co.ulster.ny.us</u>) (data is also available for download through county website)
 - Transportation features are available in hard copy and GIS format.
 - Contact: Thomas Hynes, Ulster County GIS Department (<u>thyn@co.ulster.ny.us</u>) (data is also available for download through county website)
 - Parcel and zoning data are available in hard copy and GIS format.

- Contact: Thomas Hynes, Ulster County GIS Department (<u>thyn@co.ulster.ny.us</u>) (data is also available for download through county website)
- Building footprint data are available in GIS format.
 - Contact: Thomas Hynes, Ulster County GIS Department (<u>thyn@co.ulster.ny.us</u>)
- Engineering Data
 - Locations of flood control structures are available in hard copy format.
 - Contact: Steve Peterson (<u>spet@co.ulster.ny.us</u>), Department of Emergency Management
 - Locations of dams are available in GIS format.
 - Contact: Thomas Hynes, Ulster County GIS Department (<u>thyn@co.ulster.ny.us</u>)
 - Local survey data are not available.
 - Local flood gage or rain gage data are available in non-GIS digital format.
 - USGS Stream Gage network website (National Water Information System)
 - There are no available flood hazard studies for public/private funded projects.
- Risk Assessment Data
 - Essential/critical facilities data are available in hard copy and GIS format.
 - Contacts: Thomas Hynes, Ulster County GIS Department (<u>thyn@co.ulster.ny.us</u>) and Steve Peterson (<u>spet@co.ulster.ny.us</u>), Department of Emergency Management
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in hard copy format.
 - Contact: Steve Peterson (<u>spet@co.ulster.ny.us</u>), Department of Emergency Management
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - There are some critical facilities located in the Hudson River floodplain.
 - There is a lot of "migrating flooding" occurring in the county.
 - There is a repetitive loss cluster in the Town of Hurley at Brinks and Wynkoop Roads.
- Other
 - The county requested assistance with the FEMA Levee Analysis and Mapping Procedure (LAMP) for the un-accredited levees in the City of Kingston.
 - The county has archived pictures of various flood events.

Town of Hurley, Ulster County CID# 360857 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Glenn Hoffstatter, Code Enforcement Officer Town of Hurley Building Department/Code Enforcement 10 Wamsley Place P.O. Box 569 Hurley, NY 12443 845-338-0051 building@townofhurley.org

Town of Hurley Stream Study Requests (in priority order):

In general, the Town believes the Flood Insurance Rate Maps are accurate. However, there are several errors the community officials noticed on the new Ulster County countywide Flood Insurance Rate Map and Flood Insurance Study report that have not yet been addressed, including:

- Floodway Data Table value errors for Esopus and Englishmans Creek
- Stream names are not correct in some areas

NYSDEC is coordinating with FEMA to ensure the necessary corrections are made.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- Esopus Creek causes repeated flooding problems in the town (including in 2005 and 2011), especially along Evergreen Lane and Brinks Lane, northeast of Wynkoop Road.
- There are issues related to erosion and high velocities, and agricultural levees along Esopus Creek, which has jumped its banks in multiple areas within the town.
- Stony Creek experiences backwater flooding from Esopus Creek.
- The town representative referred to the <u>USGS report on the Esopus Creek Basin</u> on the April 2-3, 2005 flood event. This report contains high water mark and other flood information about this event.

Community Planning and Ongoing Projects:

- Two years ago, a bridge was replaced over Esopus Creek at Wynkoop Road.
- There is no recent or planned residential or commercial development in the town.
- The town representative is not aware of any piped or naturally occurring underground streams in the community.
- The town has an open space plan. Joan Pascione, who is on the Town Conservation Advisory Committee, is the point of contact for this plan.
- The town participates in the West of Hudson Watershed plan.

Mitigation Activities:

- The town participates in the county hazard mitigation plan. Glenn Hoffstatter is the point of contact.
- The town reported two buyouts after the 2005 and 2008 floods near the intersection of Wynkoop Road and Main Street, southeast of Esopus Creek.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are a number of LOMCs scattered throughout the town, several along the Stony Kill and Preymaker Creek.
- The town is familiar with the CRS program and does not want more information about it.
- The town has an active floodplain development permit process. Glenn Hoffstatter is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Contact: Ulster County
 - Transportation features are available in GIS format.
 - Contact: Ulster County
 - Parcel and zoning data are available in GIS format.
 - Contact: Ulster County
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are not available.
 - Local survey data are not available.
 - Local flood gage data is available nearby on Esopus Creek near Mt. Marion and Marbletown.
 - There are no available flood hazard studies for public/private funded projects in the town.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are not available.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - The biggest flooding problems along Esopus Creek are at Brinks Road and Route 5 off of Wynkoop Road.
 - The two property buyouts are located south of Brinks Road off of Wynkoop Road along Esopus Creek.

- There is some LOMA activity along Thielpate Road near a tributary to Esopus Creek.
- <u>Other</u>
 - There is an environmental impact study being planned along Esopus Creek. The scope of this study has not yet been finalized.
 - There is one property owner who owns much of the Esopus Creek floodplain through the Towns of Marbletown, Hurley, and Ulster. The property is primarily farmland which may be beneficial for possible mitigation opportunities along the stream.
 - The town fire station is located in the 500-year floodplain for Esopus Creek.

City of Kingston, Ulster County CID# 360858 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Tom Tiano, Department Chief City of Kingston Building Safety Division 5 Garraghan Drive Kingston, NY 12401 845-331-1217 ttiano@kingston-ny.gov

Julie Noble, Environmental Education/Sustainability Coordinator City of Kingston 467 Broadway Kingston, NY 12401 845-481-7339 julieInoble@kingston-ny.gov

City of Kingston Stream Study Requests (in priority order):

- 1. Esopus Creek is in need of an updated detailed study. The current study is outdated and there is development occurring along the stream.
- 2. Rondout Creek is in need of an updated detailed study from the confluence with the Hudson River to the corporate limits. This stream is located outside of the Mid-Hudson Watershed.
- 3. Twaalfskill Brook is in need of an updated detailed study from the confluence with Rondout Creek to just upstream of Brook Street. This stream is located outside of the Mid-Hudson Watershed.
- 4. The Hudson River is in need of an updated detailed study due to proposed development along the shoreline.
- 5. Tannery Brook is in need of a new approximate study from the confluence with Esopus Creek to the corporate limits. Heavy rain events cause flooding along the stream.
- 6. Main Street Brook is in need of a new approximate study from Lucas Avenue to the corporate limits. Flooding occurs at the Main Street bridge.

Other Stakeholders:

- Ralph Swenson, City Engineer City of Kingston 420 Broadway Kingston, NY 12401 (845) 334-3967
- Mary McNamara Lower Esopus Watershed Partnership
- River Keeper
 Scenic Hudson

GIS Users:

 Julie Noble, Environmental Education/Sustainability Coordinator City of Kingston

Historical Flood Problems:

- Hurricane Sandy in 2012 caused flooding along Rondout Creek, flooding a wastewater treatment plant in the city, in addition to other areas.
- Rondout Creek experiences repeated flooding problems during rain events or during high tides.
- There are no verifiable high water marks in the city.

Community Planning and Ongoing Projects:

- A piped portion of Tannery Brook had a sinkhole that required repair. The problem was caused by a leaking stormwater tunnel constructed by the NYC Water Board.
- There is an ongoing project to retrofit two parking lots with green infrastructure for onsite stormwater management.
- There is proposed mixed use (commercial, residential, and park) re-development of the Hudson River waterfront including Hudson Landing in a former quarry.
- Tannery Brook and Main Street Brook are partially piped. An unnamed stream along Delaware Avenue is also piped.
- The city is in the process of developing an open space plan with funding from the Hudson River Estuary Program. They are also working on a natural resource inventory.
- The city has a Rondout Creek Watershed Management Plan dated October 2015 that is located on the city's website. Milone and MacBroom is the point of contact for the plan.

Mitigation Activities:

- The city participates in the county hazard mitigation plan. The plan is currently under revision, with a draft prepared in 2015.
- In 2010, a culvert expansion and brook cleaning was completed on Twaalfskill Brook. The city engineer has the hydraulic analysis from this work. (This stream is located outside of the Mid-Hudson watershed).

Training Needs:

• Training on zoning in Special Flood Hazard Areas would be helpful to the city.

National Flood Insurance Program/Floodplain Management Information:

- There are no LOMC clusters identified in the city.
- The city is familiar with the CRS program and would like more information about it.
- The city has an active floodplain development permit process. The city requested that a template of the floodplain permit form be sent. Tom Tiano is responsible for floodplain permitting in the city.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS format.
 - Contact: Julie Noble
 - Transportation features are available in GIS format.
 - Contact: Julie Noble
 - Parcel and zoning data are available in GIS format.
 - Building footprint data are not available.

- Impervious surface data are available in GIS format.
 - Contact: Julie Noble
- Engineering Data
 - Locations of flood control structures are available in GIS Format.
 - Contact: Julie Noble
 - Locations of dams are not available.
 - Local survey data are not available.
 - Local flood gage or rain gage data are not available.
 - There is planning underway for the Risings Water Hudson River / Corps of Engineers Plan. There is also a study to upgrade the wastewater treatment plant.
 - Hydraulic analysis from the 2010 culvert expansion and brook cleaning on Twaalfskill Brook is available. The City Engineer is the point of contact.
- Risk Assessment Data
 - Asset mapping was done as part of the City of Kingston Tidal Waterfront Flooding Task Force. The critical facilities mapped included the wastewater treatment plant, cultural institutions, the maritime museum, brownfields, natural gas storage on Rondout Creek, and the Rondout Creek shipyard. Julie Noble is the point of contact.
 - The COAST software tool provided numerical values of assets on the waterfront. The report is at <u>http://www.kingston-</u> ny.gov/filestorage/8463/10432/10440/10479/12782/10486/10488/FinalCOASTRe port09092013_final.pdf.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - There is a piped stream that extends from Third Avenue to the Kingston Point Park. (located outside of the watershed)
- Other
 - N/A

Town of Kingston, Ulster County CID# 361218 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Kingston, Stream Study Requests (in priority order):

The Town of Kingston chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Marbletown, Ulster County CID# 361219 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Marbletown, Stream Study Requests (in priority order):

The Town of Marbletown chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.

Town of Saugerties, Ulster County CID# 360863 Pre- Discovery Webinar Attendance: Attended

Discovery Webinar Attendance: Attendance: May 25, 2016, October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Alvah Weeks Jr., Code Enforcement Officer/Zoning Administrator (Survey) Town of Saugerties Department of Safety and Buildings 4 High Street Saugerties, NY 12477 845-246-2800 Ext. 332 aweeks@saugerties.ny.us

Mary McNamara, Education & Outreach (Meeting) Ashokan Reservoir Watershed Group – Lower Esopus Watershed Partnership 845-417-5555 marywaterbyrd@gmail.com

Town of Saugerties Stream Study Requests (in priority order):

- 1. Esopus Creek is in need of an updated detailed study. The creek has caused repeated flooding losses in the past, leading to several property buyouts. There are currently a number of on-going mitigation projects along the creek, such as bulkhead replacements, that should be considered in the updated study.
- 2. The Sawyer Kill needs a new detailed study due to compromised floodplains and to generate a more detailed Special Flood Hazard Area.
- 3. An updated detailed study is needed along the Kate Yaeger Kill, especially between cross sections E and G, through the residential area.
- 4. Kaaterskill Creek is in need of a new detailed study in a residential area located where the creek crosses the Greene County line in the west, heading downstream in an east/northeasterly direction where it crosses back into Greene County to the north.
- 5. Plattekill Creek near Carrelis Road is in need of a new detailed study to establish Base Flood Elevations. There is residential development in this area.

Other Stakeholders:

• N/A

GIS Users:

- Claudette Zinkow, Code Enforcement/GIS
 - Town of Saugerties Department of Safety and Buildings 4 High Street Saugerties, NY 12477 845-246-2800 Ext. 331 czinkow@saugerties.ny.us

Historical Flood Problems:

 Esopus Creek is a source of historic flooding problems. The east side of the creek experiences significant deposition and erosion that impacts the water quality, leading to algae blooms and decreased recreational use. Buyouts have occurred along the creek near Clay Finger Road, above Glenerie Falls. Together, development, agriculture, and the Ashokan Reservoir have significant impact on the Esopus Creek flooding and water quality.

- Fish Creek has also experienced flooding problems.
- On Flood Insurance Rate Map panel 3611C0095E, the residential road along Plattekill Creek near Carrelis Road experiences repeated flooding issues.
- Hurricanes Sandy and Irene caused significant tidal flooding along the Hudson River and along the Lower Esopus Creek below the dam.
- Ashokan Reservoir has led to sustained high flows into Esopus Creek, causing repeated flooding issues. These flooding events are especially significant when severe storms coincide with high tide on the Hudson River (this area is a tidal estuary).
- There are verifiable high-water marks potentially identified as part of the USGS study on Esopus Creek from the 2005 flood.

Community Planning and Ongoing Projects:

- There is an ongoing study to stabilize an unnamed stream in the town, as part of the \$1 million Rising Waters Grant. Engineers Jeff Hogan and Bruce Ulter are points of contact for this project at 845-246-3671.
- In 2016, the USACE is working on dredging the tidal area of Esopus Creek. There are also several property buyouts along this creek.
- The Village of Saugerties has a proposed project to expand the reservoir and add another filtration path.
- The Platte Kill Bridge was replaced in 2016.
- The Glasco Turnpike Bridge was replaced.
- Bulkhead repairs are occurring at Tina Chorvas Park and Saugerties Lighthouse. Beach restoration is also ongoing in this area.
- There is no recent or planned residential or commercial development in the town.
- There are some naturally occurring underground streams in the north and west parts of the town.
- The town stated they have an open space plan. However no further details were provided.
- The town participates in the Lower Esopus Creek Watershed Management Plan, drafted in 2009 and funded by NYC DEP due to issues with the Ashokan Reservoir.

Mitigation Activities:

- The town did not report if they participate in a hazard mitigation plan.
- Ashokan Reservoir provided some mitigation for the town in terms of flooding during Hurricane Irene.

Training Needs:

- Training on the following topics would be helpful to the town:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs
- The town requested additional training related to agriculture best management practices, especially as it relates to wetlands and open space areas and incorporating agricultural management into the town's open space plan. The town also requested additional support from NYSDEC and FEMA to improve stakeholder engagement for the Esopus Creek watershed management plan.

National Flood Insurance Program/Floodplain Management Information:

• There are LOMCs downstream of the southern reach of the Kate Yaeger Kill, the Beaver Kill, and the Esopus Creek.

- The town is not familiar with the CRS program and would like additional information about it.
- The town has an active floodplain development permit process. The town's Code Enforcement Officer is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and hard copy format.
 - Transportation features are available in hard copy format.
 - Parcel and zoning data are available in GIS and hard copy format.
 - Building footprint data are available in hard copy format.
- Engineering Data
 - Locations of flood control structures are available in hard copy format.
 - Locations of dams are available in GIS and hard copy format.
 - o Local survey data are available in hard copy format and non-GIS digital format.
 - Local flood gage or rain gage data are not available.
 - There are flood hazard studies for local public/private funded projects available in hard copy, GIS, and non-GIS digital format.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in GIS and hard copy format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in hard copy format.
 - Contacts: Eyal Saad, Village of Saugerties Code Enforcement Officer and Alvah Weeks, Town of Saugerties Code Enforcement Officer
 - Historical flood inundation areas are available in GIS format.

- From Scoping Maps
 - There is a dam along the Plattekill Creek at Route 32 north of Mount Marion Park that needs to be restored to preserve the reservoir nearby.
 - There were property buyouts along Clay Finger Road near Glenerie Falls.
 - Flooding near the high school along the Sawyer Kill compromised water quality.
- Other
 - The Town/Village of Saugerties would like to develop a better understanding of stormwater infrastructure and green infrastructure, and the potential to use in the town, village, and Barclay Heights.
 - The Town of Hurley has a pilot water project that may be of interest to the Discovery process.

Village of Saugerties, Ulster County CID# 361504 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: June 2, 2016, October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

Eyal Saad, Code Enforcement Officer (Survey) Village of Saugerties 43 Partition Street Saugerties, NY 12477 845-246-2321 Ext. 303 esaad@villageofsauterties.org

Alexander Wade, Emergency Management Specialist (Meeting) Village of Saugerties 43 Partition Street Saugerties, NY 12477 845-849-5343 Ajax_1@usa.net

Village of Saugerties Stream Study Requests (in priority order):

- 1. Esopus Creek in in need of an updated detailed study. The creek has caused repeated flooding losses in the past, leading to several property buyouts. There are currently a number of ongoing mitigation projects along the creek, such as bulkhead replacements, that should be considered in the updated study.
- 2. The Hudson River, within the corporate limits, needs an updated detailed study.
- 3. The Sawyer Kill needs a new detailed study due to compromised floodplains and to generate a more detailed Special Flood Hazard Area.

Other Stakeholders:

 Alvah Weeks, Building Inspector/Zoning Enforcement Officer Town of Saugerties Department of Safety and Buildings 4 High Street Saugerties, NY 12477 845-246-2800 x333 AWeeks@saugerties.ny.us

GIS Users:

- Eyal Saad, Code Enforcement Officer Village of Saugerties Department of Code Enforcement 43 Partition Street Saugerties, NY 12477 845-849-5343
 esaad@villageofsaugerties.org
- Claudette Zinkow, Municipal Code Aide Town of Saugerties Department of Safety and Buildings 4 High Street Saugerties, NY 12477 845-246-2800 x331 czinkow@saugerties.ny.us

Historical Flood Problems:

- Historic flooding occurred during Hurricanes Irene and Sandy. Flooding also occurs during heavy rains as a result of discharge from the Ashokan Reservoir.
- The Lower Esopus Creek below the dam floods frequently, especially as a result of severe storms that coincide with high tide on the Hudson River. This area is a tidal estuary.
- There are no verifiable high-water marks located in this community.

Community Planning and Ongoing Projects:

- There is a bulkhead rebuild and remediation project, as a result of Hurricane Sandy, located along Esopus Creek at East Bridge Street.
- There is a bulkhead stabilization project at the Saugerties Lighthouse as a result of damages sustained during Hurricane Sandy.
- There is some work being done at the village beach on the jetties.
- There is a considerable amount of recent and planned residential or commercial development in the village.
- There are no reported piped or naturally occurring underground streams in the village.
- The village does not have an open space plan.
- The village participates in the Lower Esopus Watershed Management Plan (draft completed in 2009). This plan was developed using money from NYC DEP due to issues with the Ashokan Reservoir.
- The village also participates in the Saugerties Reservoir Management Plan, circa 1978. Mike Hopf, the Village Water Superintendent, is the point of contact regarding this plan (845-849-5012).

Mitigation Activities:

- The village participates in a hazard mitigation plan dated 1999. Alexander Wade is the point of contact.
- The village reported several buyouts along Esopus Creek. There are also several homes in the floodplain that have been elevated. Bulkheads are being repaired to prevent erosion into Esopus Creek.

Training Needs:

- Training on the following topics would be helpful to the village:
 - Floodplain Management Administration
 - Effective Public Outreach
 - Building Code Requirements
 - Hazard Mitigation & Grant Programs

National Flood Insurance Program/Floodplain Management Information:

- There are LOMCs downstream of the southern reach of the Kate Yaeger Kill, the Beaver Kill, and Esopus Creek.
- The village is familiar with the CRS program and would like more information about it.
- The village has an active floodplain development permit process. The regulations are incorporated into Local Law No. 7-2009, Chapter 120, Town Municipal Law "Flood Damage Prevention." Eyal Saad, the village's Code Enforcement Officer, is responsible for floodplain permitting.

Available Data:

- Base Map Data
 - Political boundaries are available in GIS and hard copy format. These maps were updated in 2015.
 - Contact: Eyal Saad, Code Enforcement Officer. 845-246-2321
 - Transportation features are not available.
 - Parcel and zoning data are available in GIS and hard copy format. Data is sourced from Ulster County Real Property and updated to local conditions; updated in 2015.
 - Contact: Eyal Saad, Code Enforcement Officer. 845-246-2321
 - Building footprint data are not available.
- Engineering Data
 - Locations of flood control structures are not available.
 - Locations of dams are available in GIS and hard copy format.
 - Local survey data are available in hard copy format.
 - Local flood gage or rain gage data are available in GIS and other digital format. The Mount Marion gauge shows the height of Esopus Creek.
 - Contact: USGS
 - There are no other relevant flood hazard studies available for public/private funded projects in the village.
- <u>Risk Assessment Data</u>
 - Essential/critical facilities data are available in hard copy format.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are available in hard copy format.
 - Contact: Eyal Saad, Code Enforcement Officer. 845-246-2321
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - There is siltation of tidal flats occurring along the Hudson River.
 - There is a senior citizens home near the Esopus Creek confluence with the Hudson River. It was constructed in 1999.
- Other
 - **N/A**

Town of Ulster, Ulster County CID# 360866 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: October 18, 2016 Discovery Meeting Attendance: October 18, 2016

Community Representative(s):

James E. Quigley, 3rd, Town Supervisor Town of Ulster 1 Town Hall Drive Lake Katrine, NY 12449 845-382-2765 Ext. 1 <u>ulstersupervisor@townofulster.org</u>

Town of Ulster Stream Study Requests (in priority order):

- Commercial development activities along Esopus Creek, including the placement of fill in the floodplain along Washington Avenue between the City of Kingston corporate limit and the New York State Thruway traffic circle, need to be reflected in a revised detailed study for this stream to update the FIRM.
- 2. Preymaker Brook is in need of a revised approximate study. This is an area affected by flooding due to plugged culverts as a result of beaver activity. This area has low density development and population.

Other Stakeholders:

• N/A

GIS Users:

• N/A

Historical Flood Problems:

- There is flooding along Preymaker Brook due to beaver activity and undersized culverts.
- Esopus Creek experienced flooding in 2005, damaging a number of properties.
- The portion of Rondout Creek near Saint Remy floods frequently but there is no development in this area.
- A trailer park along Rondout Creek at the far southern part of the town flooded during Sandy, affecting several rows of trailers.
- There is tidal flooding near Eddyville when Rondout Creek backs up.
- There may be verifiable high water marks at the wastewater treatment plant.

Community Planning and Ongoing Projects:

- There have been several buyouts in the Esopus Creek floodplain east of Route 42 near Orlando Street and also south of Route 587.
- There is no recent or planned development in the town.
- A tributary to Esopus Creek is piped. The stream is located south of Route 199.
- The town does not have an open space plan, but there are zoning protections in place to preserve open space. Some farmland has had conservation easements placed on them.
- The town does not have or participate in a watershed management plan.

Mitigation Activities:

- The town has prepared a draft hazard mitigation plan. James Maloney, the Town Assessor, is the point of contact.
- There have been several buyouts in the Esopus Creek floodplain east of Route 42 near Orlando Street and also south of Route 587.

Training Needs:

• Training on hazard mitigation and grant programs would be helpful to the town.

National Flood Insurance Program/Floodplain Management Information:

- There is a LOMC cluster along Beach Road near the Hudson River.
- The town is familiar with the CRS program and would like more information about it.
- The town has an active floodplain development permit process. A point of contact was not provided.

Available Data:

- Base Map Data
 - The town uses county data sets.
- Engineering Data
 - No data are available.
- <u>Risk Assessment Data</u>
 - The wastewater treatment plant is located in the floodplain. A drinking water processing plant is in or very near the floodplain.
 - Hazard mapping data (e.g. dam break inundation maps, chemical depots, sink holes, etc.) are not available.
 - Historical flood inundation areas are not available.

- From Scoping Maps
 - There is active commercial development along the Esopus Creek south of Route 28. There is some fill in this area that is not reflected on the Flood Insurance Rate Map.
 - There is vacant land to the west of the Esopus Creek, just south of the confluence of the Saw Kill due to 2005 flooding.
 - I-209 acts as a levee along the Esopus Creek and protects the area on the other side from flooding.
- Other
 - There is a flood gage in the City of Kingston but historical data is not saved.
 - The wastewater treatment plant needs to be floodproofed.

Town of Woodstock, Ulster County CID# 360868 Pre- Discovery Webinar Attendance: Did not attend Discovery Stakeholder Survey Completed: None submitted Discovery Meeting Attendance: Did not attend

Town of Woodstock, Stream Study Requests (in priority order):

The Town of Woodstock chose not to attend either the pre-Discovery webinars or the in-person Discovery Meeting. No Discovery stakeholder survey was received by NYSDEC. Absent different information, it is assumed the Town has no stream study requests at this time.