APPENDIX C. MEETING DOCUMENTATION

Appendix C includes meeting agendas, sign-in sheets and meeting notes (where applicable and available) for meetings convened during the development of the Cattaraugus County Hazard Mitigation Plan.

MEETING NOTES

Meeting	Cattaraugus County Hazard Mitigation Plan (HMP) Steering Committee Kickoff Meeting		
Date	July 24, 2019	**Time**	10:00 a.m. – 12:10 p.m.
Location	Cattaraugus County Public Works Conference Room, 8810 Route 242, Little Valley, NY		
Attendees	Jack Searles, County Administrator, Cattaraugus County		
	Christopher Baker, Director of Emergency Services, Cattaraugus County Emergency Services		
	Devin Blue, Deputy Commissioner, Cattaraugus County Department of Public Works (DPW)		
	Mark C. Burr, Director, Engineering and Highway Divisions, Cattaraugus County DPW		
	Naomi Gennings, National Incident Management System (NIMS) Coordinator, Cattaraugus County Emergency Services		
	Chris Holewinski, Geographic Information System (GIS) Coordinator, Cattaraugus County Office of Real Property and GIS Services		
	Kim Merrill, Secretary to the Commissioner, Cattaraugus County DPW		
	Tony Subbio, Project Manager, Tetra Tech		

Purpose

The purpose of the kickoff meeting was to initiate the planning process to update the Cattaraugus County HMP. The meeting provided an opportunity for the Steering Committee to meet Tetra Tech's project manager and to discuss the project.

Discussion Points

This section summarizes each discussion point addressed during the kickoff meeting.

Introductions

Mr. Baker welcomed attendees. Attendees introduced themselves, identified their experience in hazard mitigation planning, and described their areas of focus and concern for the planning process. Those concerns are summarized below.

- Mr. Searles stated that he fully supports the County's mitigation efforts. He noted that there are "hot spots" throughout the County where hazards have significant impacts.
- Mr. Baker stated that the County's communities are being affected by flash flooding on small creeks and streams caused by storms that pass through the area.
- Ms. Gennings maintains a database of hazard impacts. Mr. Subbio requested the database. Ms. Gennings reported that the County is experiencing 100-year storms quite often. Culverts and stormwater management structures cannot handle the amount of water from these storms. Some municipalities are independent to a fault, and deny the County's offers of assistance.
- Mr. Holewinski wants to develop data that the County receive to make the mitigation process easier.
- Mr. Burr reported that the first two versions of the HMP were written internally, mostly by DPW personnel. He wants to focus on outreach to the 32 towns, 2 cities, and 9 villages. The County's small communities are

intimidated by bureaucracy, and the County has struggled with communicating with these municipalities. Mr. Burr suggested coordinating with the Town Boards and Highway Superintendents for information. Most of the damaged infrastructure is owned by municipalities. Three tribal reservations are located within the County. The reservations' representatives participate in county planning efforts, but they have their own mitigation plans and will not be involved in this HMP update. Mr. Burr would like to see more detailed projects identified and further developed than had been in the past versions of the HMP. The County has struggled to determine valid cost estimates for identified projects. Local officials need education on mitigation. The County has provided mitigation project application support, but has not led the implementation of any mitigation project'.

- Mr. Blue has been involved in a few acquisition projects.
- Ms. Merrill has worked with the Town of Albion on a mitigation project.

Project Scope Review

This section summarizes each phase of the project discussed at the kickoff meeting.

Phase 1 – Organize the Resources

Mr. Subbio discussed the formation of the Planning Partnership (the Partnership), which is the group of representatives from jurisdictions and stakeholder agencies involved with the HMP update process. The Planning Partnership Kickoff Meeting is scheduled from 6:00-8:00 p.m. on September 19, 2019. The meeting will be held to introduce the members to the planning process and explain the data-gathering worksheets that each jurisdiction will need to complete.

The County Department of Economic Development, Planning, and Tourism will be represented on the Steering Committee; however, the representative was unavailable for the meeting. Other County departments will be invited to participate as members of the Planning Partnership. Emergency Services has points of contact for all municipalities and schools in the County. The Department of Economic Development, Planning, and Tourism maintains lists of business and industry groups in the County, and these groups will be invited to participate. The following state and federal agencies are active in Cattaraugus County and will be invited to participate in the planning process:

- New York State Police (NYSP)
- NYS Office of Fire Prevention and Control (OFPC)
- NYS Department of Environmental Conservation (DEC)
- NYS Department of Transportation (NYSDOT)
- U.S. Army Corps of Engineers (USACE)

Municipalities will complete a Letter of Intent to Participate (LOI) to acknowledge that they will be plan participants and to confirm understand of their roles and responsibilities in the planning process. Mr. Subbio provided the template LOI to Mr. Baker on July 13, 2019. Mr. Baker will discuss the LOIs at the County's two shared services meetings on August 15 and August 29, 2019. Mr. Baker will then coordinate distributing the LOI templates and receiving completed LOIs.

Mr. Subbio provided a brief introduction to the set of information-gathering worksheets that Tetra Tech will use to collect information from the municipalities. The worksheets will be discussed in greater detail at the Planning Partnership Kickoff Meeting.

Tetra Tech will conduct a set of community support meetings with the municipalities in mid-October 2019. Mr. Subbio will identify a week for the meeting that works for Tetra Tech staff and will provide the information to Mr. Baker.

Tetra Tech is developing a project website: www.cattarauguscountyhmp.com. Tetra Tech will maintain this website throughout the planning process. Included on the website will be links to a set of surveys to be completed by individuals and stakeholder agencies to provide information for the HMP update.

Phase 2 – Risk Assessment

Mr. Subbio sent Mr. Baker Tetra Tech's wish list of GIS data on July 5, 2019. Mr. Baker sent it to Mr. Holewinski during the meeting.

The following hazards will be profiled in the updated HMP:

- Floods (including dam failure)
- Landslide
- Severe Storms (including tornados
- Severe Winter Storms (including ice storms)
- Utility Interruption (focused on power outage and communication failure)
- Wildfire

Upon completion of the hazard profiles, Tetra Tech will review the risk assessment with the Partnership and the public.

Phase 3 – Mitigation Strategy

The Steering Committee will set the goals and objectives for the HMP and will share them with the Partnership. Tetra Tech will use the information reported by the municipalities regarding their capabilities and the status of the mitigation actions from the 2013 version of the HMP to identify and prioritize mitigation actions for inclusion in the updated HMP.

Tetra Tech will compile the information from the worksheets, risk assessment, capability assessment, and mitigation actions into a jurisdictional annex for the County and each of its municipalities. The jurisdictional annexes detail the analysis and information of the HMP for the respective jurisdictions to make the document easier to use for local officials.

Phase 4 – Plan Maintenance

Tetra Tech will work with the Steering Committee to develop procedures for maintaining the HMP over the next 5 years. These procedures will be documented in the Plan Maintenance section of the HMP. This section will also describe the ways in which the HMP is integrated with other planning mechanisms, such as comprehensive and master plans, local regulations, etc.

Mitigation actions will be loaded into Tetra Tech's Plan Review Tool to allow for ongoing plan maintenance.

Phase 5 – Draft and Final Plans

Throughout the planning process, Tetra Tech will develop the HMP document. The main body will profile the County, explain the planning process, include the risk assessment and mitigation strategy, and discuss maintenance of the plan. Each jurisdiction will have its own annex in the HMP, which will provide information specific to that jurisdiction.

The draft plan will be shared with the Steering Committee for review and comment throughout the planning process. After making any required changes, Tetra Tech will post the HMP for public review. The public review period will be advertised and will last for 30 days. Tetra Tech will then conduct a public meeting with the Partnership to gather feedback on the plan draft and make any required changes.

Tetra Tech will then submit the draft for the State's formal review. NYS Division of Homeland Security and Emergency Services (DHSES) will review the draft. If changes are required, Tetra Tech will make the changes and resubmit the document to the State. After the State is satisfied with the draft, the State will forward it to Federal Emergency Management Agency (FEMA) Region II for review. FEMA Region II will review the draft within 45 days, and Tetra Tech will make any required changes upon receipt of review comments from FEMA. When FEMA is satisfied with the HMP, FEMA will grant the HMP "approvable pending adoption" status to indicate that it meets all requirements.

The County and participating jurisdictions will formally adopt the HMP by resolution. After adoption, each jurisdiction will receive a letter from FEMA stating that the HMP is formally approved.

Project Schedule Review

Mr. Subbio reviewed the project schedule. If the municipalities provide information in a timely manner and fully participate in the planning process, the draft HMP will be ready for Steering Committee review by the end of January 2020.

Next Steps

The following next steps were discussed at the meeting:

- Ms. Gennings will provide Tetra Tech the hazard events database, watershed plans, and the County Comprehensive Emergency Management Plan (CEMP) for incorporation into the HMP.
- The Planning Partnership Kickoff Meeting will be held from 6:00-8:00 p.m. on Thursday, September 19, 2019. Mr. Baker will identify a location.
- Tetra Tech will begin developing hazard profiles for the hazards identified.

The meeting adjourned at 12:10 p.m.

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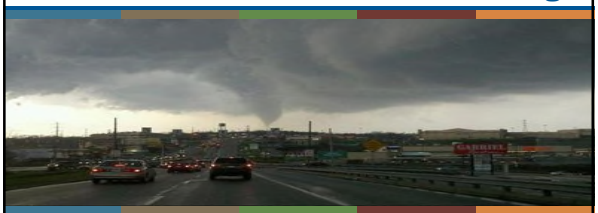
Cattaraugus County Hazard Mitigation Plan Update Steering Committee Kickoff Meeting



Agenda

- Introductions
- Project Scope Review
- Project Schedule Review
- Next Steps
- Questions

Introductions

- Name
- Agency
- Mitigation Experience
- Focus and Concerns

Project Scope Review

- Phase 1 – Organize the Resources
  - Planning Partnership
    - County Departments
    - State Agencies
    - General Public
    - Municipalities
    - Neighboring Counties
    - Soil and Water Conservation District
    - Chamber of Commerce
    - Schools and Higher Education
    - Tourism Groups
  - Letters of Intent to Participate

Project Scope Review (Continued)

- Phase 1 – Organize the Resources (Continued)
  - Jurisdictional Worksheets
    - Outline
    - Hazards of Concern
    - Capability Assessment
    - NFIP Floodplain Administrator Questionnaire
    - Mitigation Action Review
    - New Development and Building Permits
    - Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing

Project Scope Review (Continued)

- Phase 1 – Organize the Resources (Continued)
  - Stakeholder Outreach
    - Community Support Meetings
    - Project Website
    - Surveys
      - Individuals
      - Stakeholders
    - Planning Partnership Meetings (Open to the Public)
      - Risk Assessment Review
      - Plan Draft Review

Project Scope Review (Continued)

- Phase 2 – Risk Assessment
  - Hazards of Concern (2013)
    - Dam Failure
    - Floods
    - Ice Storms
    - Landslide
    - Severe Storms/ Wind Storm/ Hurricane Remnants
    - Tornado
    - Wildfire
    - Winter Storms
  - Combination of hazards
  - Up to two additional hazards

Project Scope Review (Continued)

- Phase 2 – Risk Assessment (Continued)
  - HAZUS-MH Analysis
    - Flood – 1-percent and 0.2-percent annual chance floodplains
    - Wind – 100-year or 500-year MRP event
  - Quantitative Analysis for Geographic Hazards
  - Qualitative Analysis for Landslide Hazard
  - Review Risk Assessment with Planning Partnership

Project Scope Review (Continued)

- Phase 3 – Mitigation Strategy
  - Develop Goals and Objectives
    - Develop with Steering Committee
    - Review with Planning Partnership
  - Assess Capabilities
  - Mitigation Strategy Workshop
  - Annex Development

Project Scope Review (Continued)

- Phase 4 – Plan Maintenance
  - Annual Review
  - Integration with Other Planning Mechanisms
  - BATool[SM]
- Phase 5 – Draft and Final Plans
  - Develop the Document
    - Develop and finalize main body
    - Finalize jurisdictional annexes
  - Draft Plan Reviewed by the Steering Committee throughout the Process

Project Scope Review (Continued)

- Phase 5 – Draft and Final Plans (Continued)
  - Public Review
  - Draft Plan Review Meeting (open to the public)
  - Submission to NYS DHSES and FEMA
  - Update as Necessary
  - "Approvable Pending Adoption"

Project Schedule Review

Project Schedule

Subject to Change

Task	Timeframe
Phase 1 – Organize the Resources	▸ Planning Partnership Kickoff Meeting conducted in late August 2019 ▸ Information gathering sessions conducted in mid-September 2019 ▸ Public outreach conducted throughout the planning process ▸ Project Closeout Meeting conducted after the updated HMP receives "Approvable Pending Adoption" status
Phase 2 – Risk Assessment	▸ Hazards profiled by early October 2019
Phase 3 – Mitigation Strategy	▸ Capabilities assessed by the end of December 2019 ▸ Goals and objectives identified by end of October 2019 ▸ Mitigation Strategy Workshop conducted in early November 2019 ▸ Jurisdictional annexes completed by mid-January 2020
Phase 4 – Plan Maintenance	▸ Procedures developed by the end of October 2019 ▸ BATool℠ program developed by end of January 2020 ▸ Plan development to begin at the beginning of the project ▸ Public review period from mid-January to mid-February 2020 ▸ Draft Plan Review Meeting conducted in mid-February 2020 ▸ Draft plan finalized and submitted to NYS DHSES at the end of February 2020 ▸ NYS DHSES reviews draft plan by the middle of April 2020 ▸ Update draft plan based on NYS DHSES comments and resubmit by mid-May 2020 ▸ NYS DHSES and FEMA Region II review updated draft plan through mid-July 2020 ▸ Plan receives "Approvable Pending Adoption" status by the end of July 2020
Phase 5 – Draft and Final Plans	

Next Steps

- Document Request
- GIS Data
- Planning Partnership Kickoff Meeting
- Risk Assessment Update

Questions?

Thank you for your time!

Contacts

Christopher Baker
cjbaker@cattco.org
(716) 938-2240

Tony Subbio
tony.subbio@tetratech.com
(717) 545-3580

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE
Steering Committee Kickoff Meeting

Wednesday, July 24, 2019 | 10:00 a.m. – 12:00 p.m.

1. **Introductions**
2. **Project Scope Review**
   a. Phase 1 – Organize the Resources
   b. Phase 2 – Risk Assessment
   c. Phase 3 – Mitigation Strategy
   d. Phase 4 – Plan Maintenance
   e. Phase 5 – Draft and Final Plans
3. **Project Schedule Review**
4. **Next Steps**
   a. Document Request
   b. GIS Data
   c. Planning Partnership Kickoff Meeting
   d. Risk Assessment Update
5. **Questions**

Project Schedule

Subject to Change

Task	Timeframe
Phase 1 – Organize the Resources	► Planning Partnership Kickoff Meeting conducted in late August 2019 ► Information gathering sessions conducted in mid-September 2019 ► Public outreach conducted throughout the planning process ► Project Closeout Meeting conducted after the updated HMP receives "Approvable Pending Adoption" status
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July 24, 2019: Record of Attendance

HAZARD MITIGATION PLANNING MEETING

START: 10:00 AM

END: 12:10 pm

NAME	COMPANY/DEPARTMENT	EMAIL	PHONE
CHRIS BAKER	CATT CO. ESU	CJBAKER@CATTCO.ORG	716-498-0697
Tony Subbio	Tetra Tech	tony.subbio@tetratech.com	717-545-3583
Devin Blow	Catt Co DPW	dmblow@cattco.org	716-938-2493
Kim Hamrick	DPW	khamrick@cattco.org	938-2450
Chris Holewinski	Rgl Property	cholewinski@CattCo.org	938-2322
Naomi Gennings	CattCo OES	nagennings@cattco.org	716-938-2210
Mark C Burr	CatCo DPW	mcburr@cattco.org	716-930-2431
Jack Seurles	Catt City Adm	jrseurles@Cattco.org	7169382577

MEETING NOTES

Meeting	Cattaraugus County Hazard Mitigation Plan (HMP) Planning Partnership Kickoff Meeting		
Date	November 7, 2019	**Time**	5:15 – 7:05 p.m.
Location	Cattaraugus County Legislative Chambers, 303 Court Street, Little Valley, NY		
Attendees	Naomi Gennings, National Incident Management System (NIMS) Coordinator, Cattaraugus County Emergency Services		
	Crystal Abers, Director of Economic Development, Planning, and Tourism, Cattaraugus County Department of Economic Development, Planning, and Tourism		
	Charles Davis, Supervisor, Town of Ashford		
	Marcia Spencer, Clerk, Village of Delevan; and Supervisor, Town of Yorkshire		
	Jeff VanDeCar, Budget Officer, Town of Hinsdale		
	Fred Filock, Supervisor, Town of Leon		
	Robert Keis, Supervisor, Town of Mansfield		
	Lena Ruper, Deputy Town Clerk, Town of Napoli		
	David Rupp, Highway Superintendent, Town of New Albion		
	Sherry Rupp, Town Clerk, Town of New Albion		
	Annette Parker, Supervisor, Town of Olean		
	Thomas Povhe, Town of Persia		
	John Walgus, Supervisor, Town of Persia		
	Anthony Evans, Mayor, Village of Portville		
	Dale Senn, Supervisor, Town of Randolph		
	Tim Jackson, Supervisor, Town of Salamanca		
	Christopher Lexer, Building Code Enforcement Officer, Town of Yorkshire		
	Bob Miller, Superintendent, Ellicottville Central Schools		
	David Miller, Olean General Hospital		
	Ben Halsey, Superintendent, Pioneer Central School District		
	Kevin Clapp, Planning Manager, Mitigation Programs, New York State Division of Homeland Security and Emergency Services (NYS DHSES)		
	Lauren Ortiz, U.S. Army Corps of Engineers (USACE)		
	Tony Subbio, Project Manager, Tetra Tech		

Purpose

The purpose of the Planning Partnership Kickoff Meeting was to initiate the planning process to update the Cattaraugus County HMP with the jurisdictions and other stakeholders that have an interest in the HMP. The meeting provided an opportunity for the Planning Partnership to meet Tetra Tech's project manager and to discuss the planning process.

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Introductions

Ms. Gennings welcomed attendees and provided some brief background information on the HMP update process. Ms. Gennings also introduced Mr. Subbio, who facilitated the remainder of the meeting. Attendees introduced themselves and identified any particular areas of focus or concern they have for this planning process. The points of concern addressed during the initial meeting introductions are summarized below:

- Mr. Miller stated that the school's basement along Route 219 has flooded.
- Mr. Halsey stated that traffic at the school is a concern.
- The Town of Hinsdale has a few projects to include in the HMP.
- Landslides are a concern in the Town of New Albion on Route 353 through the Village of Cattaraugus.
- The Town of New Albion applied for a mitigation grant for four homes on Lovers Lane. The application is under review.
- The Town of Olean has implemented several Federal Emergency Management Agency (FEMA)-funded mitigation projects. There are two cross culverts (bridges) that need to be upgraded.
- Mr. Walgus stated that flooding is a problem in the Town of Persia. The town has worked with the Village of Gowanda and the USACE on a diversion channel.
- There are five or six houses with repetitive flooding problems in the Town of Ashford.
- Mr. Miller stated that hospital staff members are concerned about accidents on the nearby railroad tracks and interstate highway.
- The Town of Yorkshire has received grant funding for property buyouts and demolition. The town applied for additional funding, but it was not awarded. Landslides are an issue along Creek Road. Some small bridges need to be replaced.

Quick Introduction to Hazard Mitigation

Mr. Subbio provided a brief introduction to the concept of hazard mitigation by defining types of mitigation activities and describing the FEMA Hazard Mitigation Assistance (HMA) grant program. In addition, Mr. Subbio provided a brief overview of federal and New York State (NYS) planning requirements for HMPs.

Project Scope Review

This section summarizes each phase of the project discussed at the kickoff meeting.

Phase 1: Organize the Resources

Mr. Subbio discussed the role of the Planning Partnership (the Partnership). He identified organizations included in the Partnership, such as County departments, local jurisdictions, schools, NYS departments, community groups, neighboring jurisdictions, and others. As members of the Partnership, each attendee

should work with stakeholders to provide and solicit information about the hazards that affect the County, actions that can be taken to mitigate the impact of those hazards, and the steps of the planning process.

Mr. Subbio reviewed the information collection worksheets for each jurisdiction to complete.

Mr. Subbio discussed stakeholder outreach that would be conducted during the planning process. A set of information-gathering meetings will be held in January 2020. These meetings will afford municipal officials and other stakeholders an opportunity to provide information and discuss possible solutions to the problems that hazards cause in their jurisdictions.

Tetra Tech developed a project website, www.cattarauguscountyhmp.com, that will host information on the plan, including planning process information and draft documents for review. Tetra Tech also developed simple surveys for stakeholder groups and members of the public to provide information on their knowledge of the hazards they face and actions that can be taken to mitigate impacts from those hazards. These surveys will be distributed by Ms. Gennings.

Two planning meetings will be held that will be open to the general public: one to review the results of the updated risk assessment, and one to review the draft plan.

Phase 2: Risk Assessment

The following hazards will be profiled in the updated HMP:

- Floods
- Landslide
- Severe Storms
- Severe Winter Storms
- Utility Interruption
- Wildfire

The 1-percent and 0.2-percent annual chance floods, and the 100-year and 500-year wind events, will be examined using FEMA's Hazards-U.S. (HAZUS) software. Quantitative analysis will be conducted for geographic hazards; qualitative analysis will be completed for other hazards. Upon completion of the hazard profiles, Tetra Tech will review the risk assessment with the Partnership and the public.

Phase 3: Mitigation Strategy

The Steering Committee will set the goals and objectives for the HMP and will share them with the Partnership. Tetra Tech will use the information reported by the municipalities regarding their capabilities and the status of the mitigation actions from the 2014 version of the HMP to identify and prioritize mitigation actions for inclusion in the updated HMP.

Tetra Tech and NYS DHSES planners will conduct a Mitigation Solutions Workshop to help identify actions to address problems and problem areas identified in the risk assessment and capabilities assessment.

Tetra Tech will compile the information collected from the worksheets, risk assessment, capability assessment, and mitigation actions into a jurisdictional annex for the County and each of its municipalities. The jurisdictional annexes detail the analyses conducted and information compiled in the HMP for the respective jurisdictions to make the document easier for local officials to use.

Phase 4: Plan Maintenance

The updated HMP will include procedures for updating the HMP over its 5-year lifespan. These procedures (and each jurisdictional annex) will describe the ways in which hazard mitigation is integrated into organizations' routine operations. Following FEMA approval of the HMP, Tetra Tech will load the mitigation actions into its BATool[SM] Program to facilitate tracking the status of mitigation actions on a regular basis.

Phase 5: Draft and Final Plans

Throughout the planning process, Tetra Tech will develop the HMP document. The main body will profile the County, explain the planning process, include the risk assessment and mitigation strategy, and discuss maintenance of the plan. Each jurisdiction will have its own annex in the HMP, which will provide information specific to that jurisdiction.

The draft plan will be shared with the Steering Committee for review and comment throughout the planning process. After making any required changes, Tetra Tech will post the HMP for public review. The public review period will be advertised and will last for 30 days. Tetra Tech will then conduct a public meeting with the Partnership to gather feedback on the plan draft and make any required changes.

Tetra Tech will then submit the draft for the State's formal review. NYS DHSES will review the draft. If changes are required, Tetra Tech will make the changes and resubmit the document to the State. After the State is satisfied with the draft, the State will forward it to FEMA Region II for review. FEMA Region II will review the draft within 45 days, and Tetra Tech will make any required changes upon receipt of review comments from FEMA. When FEMA is satisfied with the HMP, FEMA will grant the HMP "approvable pending adoption" status to indicate that it meets all requirements.

The County and participating jurisdictions will formally adopt the HMP by resolution. After adoption, each jurisdiction will receive a letter from FEMA stating that the HMP is formally approved.

Project Schedule Review

Mr. Subbio reviewed the project schedule. If the municipalities provide information in a timely manner and fully participate in the planning process, the draft HMP will be ready for public review by the end of May 2020. The Steering Committee and Tetra Tech will strive to complete the plan in the time allotted.

Next Steps

The following next steps were discussed at the meeting:

- The county and municipalities will complete the information-gathering worksheets by December 6, 2019. Jurisdictions are encouraged to submit whatever they have completed by that time. Electronic versions of the handouts will be distributed via e-mail.
- Partnership members will forward any plans, regulations, or studies that may be relevant to hazard mitigation to Mr. Subbio.
- Tetra Tech will continue developing hazard profiles for the hazards analyzed in the HMP.
- The information-gathering sessions will be conducted in January 2020.

The meeting adjourned at 7:05 p.m.

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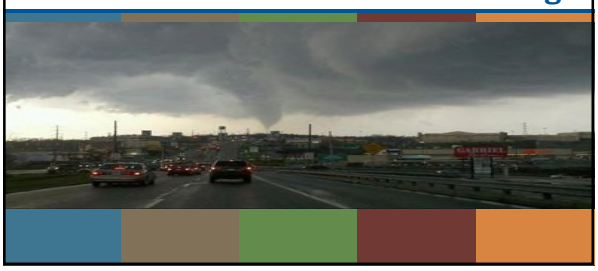
Cattaraugus County Hazard Mitigation Plan Update Planning Partnership Kickoff Meeting



Agenda

- Introductions
- Quick Intro to Hazard Mitigation
- Planning Process
- Project Schedule Review
- Introduce Worksheets
- Next Steps
- Questions

Introductions

- Name
- Agency
- Mitigation Experience
- Focus and Concerns

Quick Intro to Hazard Mitigation

National Preparedness System: Mission Areas

Prevention	Protection	Mitigation	Response	Recovery

*Hazard Mitigation is any action taken to reduce or eliminate **long-term risk** to people and property from disasters.*

Quick Intro to Hazard Mitigation (Cont.)

Local Plans and Regulations	• Updating building codes • Integrating risk into Master Plans
Education and Awareness Programs	• Flood insurance information • Know your risk! campaign
Natural Systems Protection	• Preserving natural floodplain functions • Protecting well recharge areas
Structure and Infrastructure Projects	• Constructing a levee • Elevating a house above the base flood level

Quick Intro to Hazard Mitigation (Cont.)

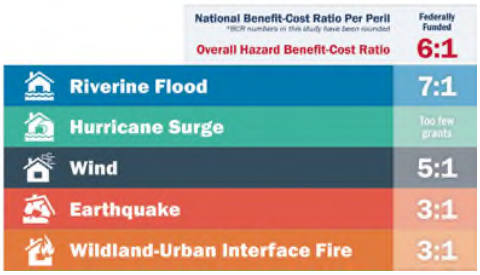
- Disaster Mitigation Act of 2000
  - Risk assessment
  - Public outreach and participation
  - Process for update
  - Formal State and FEMA review
  - Documentation of acceptance by the community
- Hazard Mitigation Assistance

Quick Intro to Hazard Mitigation (Cont.)

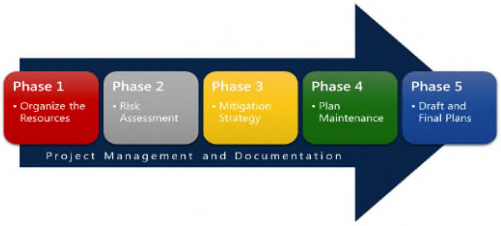
- New York State Additional Requirements
  - Jurisdictional teams
  - Assess critical facilities
  - Plan for displaced residents
  - Plan for evacuation needs and sheltering
  - Document past mitigation accomplishments
  - Include jurisdictional annexes
  - Develop mitigation actions
  - Identify funding sources
  - Plan for climate change

Quick Intro to Hazard Mitigation (Cont.)

Per FEMA's 2017 National Institute of Building Sciences report, mitigation saves $$$!



Planning Process



Project Scope Review

- Phase 1 – Organize the Resources
  - Planning Partnership
    - County Departments
    - State Agencies
    - General Public
    - Municipalities
    - Neighboring Counties
    - Soil and Water Conservation District
    - Chamber of Commerce
    - Schools and Higher Education
    - Tourism Groups
  - Letters of Intent to Participate

Project Scope Review (Continued)

- Phase 1 – Organize the Resources (Continued)
  - Jurisdictional Worksheets
    - Outline
    - Hazards of Concern
    - Capability Assessment
    - NFIP Floodplain Administrator Questionnaire
    - Mitigation Action Review
    - New Development and Building Permits
    - Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing

Project Scope Review (Continued)

- Phase 1 – Organize the Resources (Continued)
  - Stakeholder Outreach
    - Community Support Meetings
    - Project Website
    - Surveys
      - Individuals
      - Stakeholders
    - Planning Partnership Meetings (Open to the Public)
      - Risk Assessment Review
      - Plan Draft Review

Project Scope Review (Continued)

- Phase 2 – Risk Assessment
  - Hazards of Concern
    - Floods
    - Landslide
    - Severe Storms
    - Severe Winter Storms
    - Utility Interruption
    - Wildfire

Project Scope Review (Continued)

- Phase 2 – Risk Assessment (Continued)
  - HAZUS-MH Analysis
    - Flood – 1-percent and 0.2-percent annual chance floodplains
    - Wind – 100-year or 500-year MRP event
  - Quantitative Analysis for Geographic Hazards
  - Qualitative Analysis for Landslide Hazard
  - Review Risk Assessment with Planning Partnership

Project Scope Review (Continued)

- Phase 3 – Mitigation Strategy
  - Develop Goals and Objectives
    - Develop with Steering Committee
    - Review with Planning Partnership
  - Assess Capabilities
  - Mitigation Strategy Workshop
  - Annex Development

Project Scope Review (Continued)

- Phase 4 – Plan Maintenance
  - Annual Review
  - Integration with Other Planning Mechanisms
  - BATool[SM]
- Phase 5 – Draft and Final Plans
  - Develop the Document
    - Develop and finalize main body
    - Finalize jurisdictional annexes
  - Draft Plan Reviewed by the Steering Committee throughout the Process

Project Scope Review (Continued)

- Phase 5 – Draft and Final Plans (Continued)
  - Public Review
  - Draft Plan Review Meeting (open to the public)
  - Submission to NYS DHSES and FEMA
  - Update as Necessary
  - "Approvable Pending Adoption"

Project Schedule Review

Project Schedule

Subject to Change

Task	Timeframe
Phase 1 – Organize the Resources	► Planning Partnership Kickoff Meeting conducted November 7, 2019 ► Information gathering sessions conducted in mid-November 2019 ► Public outreach conducted throughout the planning process ► Project Closeout Meeting conducted after the updated HMP receives "Approvable Pending Adoption" status
Phase 2 – Risk Assessment	► Hazards profiled by mid-January 2020
Phase 3 – Mitigation Strategy	► Capabilities assessed by the end of January 2020 ► Goals and objectives identified by mid-February 2020 ► Mitigation Strategy Workshop conducted in late February 2020 ► Jurisdictional annexes completed by mid-April 2020
Phase 4 – Plan Maintenance	► Procedures developed by the end of January 2020 ► BATool℠ program developed by end of April 2020
Phase 5 – Draft and Final Plans	► Plan development to begin at the beginning of the project ► Public review period from the end of April to the end of May 2020 ► Draft Plan Review Meeting conducted at the end of May 2020 ► Draft plan finalized and submitted to NYS DHSES middle of June 2020 ► NYS DHSES reviews draft plan by the end of July 2020 ► Update draft plan based on NYS DHSES comments and resubmit by mid-August 2020 ► NYS DHSES and FEMA Region II review updated draft plan through mid-October 2020 ► Plan receives "Approvable Pending Adoption" status by the end of October 2020

Next Steps

- Complete worksheets
- Provide reports and plans
- Update risk assessment
- Conduct information gathering sessions

Questions?

Thank you for your time!

Contacts

Christopher Baker
cjbaker@cattco.org
(716) 938-2240

Tony Subbio
tony.subbio@tetratech.com
(717) 545-3580

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE

Planning Partnership Kickoff Meeting

Thursday, November 7, 2019 | 5:00 – 7:00 p.m.

1. **Introductions**
2. **Quick Intro to Hazard Mitigation**
3. **Project Scope Review**
   a. Phase 1 – Organize the Resources
   b. Phase 2 – Risk Assessment
   c. Phase 3 – Mitigation Strategy
   d. Phase 4 – Plan Maintenance
   e. Phase 5 – Draft and Final Plans
4. **Project Schedule Review**
5. **Next Steps**
   a. Complete worksheets
   b. Provide reports and plans
   c. Update risk assessment
   d. Conduct information gathering sessions
6. **Questions**

Project Schedule

Subject to Change

Task	Timeframe
Phase 1 – Organize the Resources	► Planning Partnership Kickoff Meeting conducted November 7, 2019 ► Information gathering sessions conducted in mid-November 2019 ► Public outreach conducted throughout the planning process ► Project Closeout Meeting conducted after the updated HMP receives "Approvable Pending Adoption" status
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HazMit Planning Meeting Sign in Sheet

Date: 11-7-2019 Start Time : 17:00 End Time: 19:05

First Name	Last Name	Cell Phone #	Agency/ Organization	Email
Laura	Ortiz W-879-4407	716-868-9809	laura.v.ortiz@usace.army.mil	laura.v.ortiz@usace.army.mil
Kevin ~~Clapp~~	clapp	518-369-3263	kevin.clapp@dhses.ny.gov DHSES	→
LENA	RUPER	257-6122	NAPOLI	
Sherry	Rupp	472-4424	New Albion	newalbionclerk@hotmail.com
David	Rupp	560-9447	New Albion	newalbionhighway@gmail.com
Annette	Parker	716-378-0626	Town of Olean	drvrad@verizon.net
THOMAS	POWHE	716-725-5117	T/o Persia	Tinlodge@verizon.net
John	Walgus	716-532-4042	Town of Persia	JohnWalgus@TownofPersia.com
FRED	Flock	7165485089	TOWN OF LEON	FRA00@NETSYNC.NET
Ben	Halsey	716 307-9056	Pioneer CSD	bhalsey@pioneercsd.org
Anthony	EVANS	7163789327	Village of Portville	aevans@cattco.ny → OVC2
Crystal	Abers	7169382310	County Cattaraugus	Cabers@cattco.org
TIM	JACKSON	716-499-9850	TOWN OF SALAMANCA	TIM8758@YAHOO.COM
ROBERT	KEIS	716-474-5730	TOWN OF MANSFIELD	robertkeis2@gmail.com
David	Miller	716-244-1182	Olean General Hospital	dwmiller@ogh.org
Charlie	Danna	716-244-3597	TOWN of ~~Ashford~~	TOASupervisor@Yahoo.com

HazMit Planning Meeting Sign in Sheet

Date: 11-7-2019 Start Time : 17:00 End Time: 19:05

First Name	Last Name	Cell Phone #	Agency/ Organization	Email
Jeff	VanDeCar	716-307-6353	T. of Hinsdale	jeffvandecar@roadrunner.com
Christopher	Lexer	716-560-8964	T of Yorkshire	yorkshirecode@yahoo.com
MARCIA	SPENCER	716 244 1115	YORKSHIRE/Delevan	delevanclerk@roadrunner.com yorkshiresupervisor@roadrunner.com
Bob	Miller	716-378-5316	Ellicottville Central School	bmiller@ville.wnyric.org
DALE	SENN	716 397-3316	T. RANDOLPH	dwsenn@windstream.net
Tony	Subbio	717-856-4290	Tetra Tech	tony.subbio@tetratech.com
Naomi	Gennings	716-512-2605	Cattco OES	nagennings@cattco.org.

AGENDA

January 15-17, 2020

CATTARAUGUS COUNTY MITIGATION PLAN UDATE

- **Hazard Mitigation Plan**
  - What is it really.
    - Self assessment of what hazards we have and what capabilities we have to address those hazards.
      - Repeat problems
      - Mitigation actions
      - Prioritize
- **Why?**
  - Stafford Act requires it- declared and mitigation
    - Allocated for Declared moving to Mitigation- 6%
      - Makes it difficult to get
    - Future grants being tied to
- **Flooding**
  - What areas
  - What can be done
- **Projects completed**
  - Do you have any Projects in the past you have done with FEMA
  - Paperwork Showing it
  - Do you need us to look in our records
- **Worksheets**
  - Who needs help

Meeting Sign in Sheet

Hazardous Mitigation Plan January 15, 2020– Delevan

Time: 1:00pm—3:00pm

	Name	Position	Municipality	Contact #	Email	Signature
1	Larry Feldman	Code Enforcement	Town of Ashford	716-942-6016	lfeldmanceo@gmail.com	Larry Feldman
2	Tim Bycoads	Superintendant	T/o MACHIAS	716-353-8911	machiashwy2015@yahoo.com	T—
3	Daren A. Smith	Supt	~~T/o Yorkshire~~ Village Delevan	716-307-586		Daren A. Smith
4	ROBERT KEIS	TOWN SUPERVISOR	TOWN OF MANSFIELD	716-474-5730	robertkeis2@gmail.com	Robert C. Keis
5	Chris Leger	Supt	Town of Yorkshire	716 560-8964	yorkshirecode@yahoo.com	
6	Marcia Spencer	Town Supervisor	Town of Yorkshire	716 2441115	yorkshiresupervisor@roadrunner.com	Marcia Spencer
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Meeting Sign in Sheet

Hazardous Mitigation Plan January 16, 2020—South Dayton

Time: 9:00am—11:00am

	Name	Position	Municipality	Contact #	Email	Signature
1	Niles Pierson	Town Eng.	Ellicottville	716-699-9005	Niles.C.Pierson@evlengineering.com	
2	Tom Scharf	Highway Supt.	"	"	Thomas.Scharf@ "	
3	Dave Herkman	Code Officer	Perrysburg	484-3173	Perrysburgcodeofficer@gmail.com	
4	Scott Rich	Mayor	South Dayton	612-3457	RoutineRIDS@Hotmail	
5	Tom Pavlik	Dias Coord.	Persia	725-5117	Timlodge@verizon.net	
6	Tom Benz	Supt	East Otto	560-5285	eastottohwy@Gmail.com	
7	Tom Chupa	Supt	Dayton	229-9510	thomas1964@ic600.com	
8	Mel Shaw	CEO	Persia	747-7104	MelShaw57@Gmail.com	
9	Cody Uhl	Highway Supt.	Randolph	716-485-6037	highway@randolphny.net	
10	FRED Filock	SUPERVISOR	LEON	7165485087	FRADO@NETSYAC.NET	
11	Robert Barber	Highway Supt.	Otto	716-474-6744	Skeetersplete@AOL.com	
12	Jim Pryll	Supper	Village of S. DAYTON	716 512 4752		
13	Tim Wilkey	ASST Sup	Village of S. Dayton	7162448781		
14	DAN ACKLEY	Highway	Town of Persia	7163536384	persiahighway@roadrunner.	
15	Mark C Burr	Catt Co. DPW	Cattaraugus County	7169382431	mcburr@Cattco.org	
16	Dan Stang	Highway Supt	Town of Perrysburg	716 359-5517		
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Meeting Sign in Sheet

Hazardous Mitigation Plan January 16, 2020—Little Valley

Time: 1:00pm—3:00pm

	Name	Position	Municipality	Contact #	Email	Signature
1	Mark C Burr	Engineering	Cattaraugus County	938-2431	mcburr@cattco.org	Mark C Burr
2	Kim Merrill	Secty Dpw	CCDPW	938 2480	kamerrill@cattco.org	Kim Merrill
3	Jeff Holler	CEO	OTTO, E OTTO, LEON	307-3069	EASTOTTO CEO@GMAIL.COM	
4	Robert Young	Superintendent	Village of Little Valley	498-1676	Volv Superintendent @ Village of Little Valley.org	
5	Koly Gross	Streets Supt.	Village of Little Valley	969 7765	Volv Street water @gmail.com	
6	Jim Bowen	Mayor	Village of Little Valley	244-1831	mayor@villageoflittlevalley.org	
7	Tom Crouse	Highway	T/O Little Valley	938-6423		Thomas Crouse
8	Sue Koch	Town Clerk	Town of Little Valley	938-6441	townLVI@yahoo.com	Susan J Koch
9	Tamara Booth	Supv.	Town of Red House	354-9194	Town of Red House@hotmail.com	Tamara L Booth
10	Brian Booth	HIGHWAY SUPT	" " " "	785-6194	" " "	Brian Booth
11	Ann Rugg	Supervisor	Town of E. Otto	923-3690	ecttosupervisor@gmail.com	Ann Rugg
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Meeting Sign in Sheet

Hazardous Mitigation Plan January 16, 2020—Little Valley

Time: 7:00pm—9:00pm

	Name	Position	Municipality	Contact #	Email	Signature
1	Kim Merrill	Secy Comm DPW		938-2480	kamerrill@cattco.org	
2	Kathy Ellis	Commissioner	CCDPW	938-2460	kmellis@cattco.org	
3	Mark Cleaver	Director of Engineering	CCDPW	938-2431	mcleaver@cattco.org	
4	Kevin Clapp	Plan. mgr Mit Prog.	DHSES	518 473 3866	Kevin.Clapp@dhses.ny.gov	
5	Naomi Gennings	NIMS coordinator	CCOES	716-572-2605	nagenning@cattco.org	
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Meeting Sign in Sheet

Hazardous Mitigation Plan January 17, 2020—Hinsdale

Time: 9:00am—11:00am

	Name	Position	Municipality	Contact #	Email	Signature
1	Frank Snyder	Superintendent	Village of Allegany			
2	George Schneider Jr	Highway Supt	T/O Lyndon			
3	Richard Michael Sr	Highway Supt.	T/O Ischua			
4	John Mosher	Highway Supt	T/O Allegany			
5	Jason Peal	Highway Supt	T/O Humphrey			
6	James Hitchcock	Supervisor	T/O Allegany			
7	JERRY DZURICK	CODES.	T/O. ALLEGANY			
8	WALT PUTT	CODE	T/O HINSDALE			
9	John Helgager	Code	Village of Allegany	(716) Cell. 790-0073	jhelgager@allegany.org	
10	Jim Scuttle	deputy Highway Supt	T/O Hinsdale			
11	Jed Mascho	Highway Supt.	T/O Hinsdale			
12	BOB RING	DPW DIRECTOR	CITY OF OLEAN		BRING@CITYOFOLEAN.COM	
13	FRANK WATSON	CEO	TOWN OF ~~NEW ALBION~~ DAYTON			
14	Kevin Clapp	Plan. mgr. mit Progs	DHSES		kevin.clapp@dhses.ny.gov	
15	Justin Long	Superintendent DPW	V/O Portville		vopdpw@gmail.com	
16	John Krist	Code	V/O Portville		JohnKrist18@Yahoo.com	
17	Jeff VanDeCar	T. Supervisor	Hinsdale		jeffvandecar@roadrunner.com	
18	Kelly Karst	Fire Chief	Hinsdale		Kwkarst@yahoo.com	
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MEETING NOTES

Meeting	Cattaraugus County Hazard Mitigation Plan (HMP) Steering Committee Meeting		
Date	August 18, 2020	**Time**	10:00 – 10:55 a.m.
Location	Teleconference		
Attendees	Kim Merrill, Secretary to the Commissioner, Cattaraugus County Department of Public Works (DPW)		
	Mark C. Burr, Director, Engineering and Highway Divisions, Cattaraugus County DPW		
	Naomi Gennings, National Incident Management System (NIMS) Coordinator, Cattaraugus County Emergency Services		
	Corrina Cavallo, Deputy Chief of Mitigation Programs, New York State Division of Homeland Security and Emergency Services (NYS DHSES) – left the meeting at 10:20 a.m.		
	Kevin Clapp, Planning Manager, Mitigation Programs, NYS DHSES		
	Tony Subbio, Project Manager, Tetra Tech		

Purpose

The purpose of the meeting was to (1) review the status of the project with the Steering Committee, and (2) review the set of draft mitigation goals and objectives that were developed for the updated HMP.

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Project Status

Mr. Subbio reported that all worksheets from all jurisdictions have been received. Tetra Tech's planners continue to follow up with municipal officials for any required information. Mr. Subbio reported that one of Tetra Tech's planners, Ms. Beth LeFevre, has resigned, and her communities will be served by Mr. Brian Kehoe, Tetra Tech's mitigation planner based in Rochester, New York. The following municipalities are affected by the change:

- Town of Ashford
- Town of Carrollton
- Town of East Otto
- Town of Ellicottville
- Village of Ellicottville
- Village of Gowanda
- Town of Great Valley
- Town of Little Valley
- Village of Little Valley
- Town of Mansfield
- Town of Otto
- Town of Red House
- City of Salamanca
- Town of Salamanca

The hazard analysis has been completed. The hazard profiles are being finalized; they will be complete in the next few days. Upon completion, the draft hazard profiles will undergo Tetra Tech's quality review process.

Jurisdictional annexes and mitigation actions are under development. Tetra Tech's planners are using the information provided by each jurisdiction and the results of the risk assessment to develop identify mitigation projects.

Ms. Merrill requested that Mr. Subbio establish a shared document whereby Tetra Tech's planners and county staff could see real-time updates to notes regarding municipal outreach.

Goals and Objectives

Mr. Subbio reviewed the document containing the goals and objectives from the 2014 HMP and the suggested set of goals and objectives for the updated plan. He reported that the risk assessment showed that critical facilities in hazard areas (primarily the floodplain) and stormwater management issues were still the largest issues in the county. Flood damage prevention ordinances are out of date and need to be updated to meet state law, and floodplain administrators need to be trained on the requirements of the National Flood Insurance Program (NFIP). In addition, over 2,200 structures are present in the floodplain but fewer than 500 flood insurance policies are in place. The suggested set of goals and objectives addresses these issues, and is simplified to apply to all hazards. The Steering Committee had the following comments on the suggested goals and objectives:

- Mr. Burr requested that a new objective to acquire or relocate structures at risk from landslides be added to Goal 1.
- There were no changes requested to Goal 2 or its objectives.
- Ms. Merrill requested that Objective 3.1 be updated to reflect that the county would provide opportunities for training local officials.
- Ms. Gennings requested that Objective 3.2 be updated to reflect that the county would continue to educate individuals. The county already engages in significant outreach to residents.

Mr. Subbio will update the suggested goals and objectives and provide the revised set to Ms. Merrill, who will share it with the rest of the Steering Committee for final review.

Schedule

Mr. Subbio reviewed the remaining tasks and the schedule for their completion. The Steering Committee made the following decisions:

- The Risk Assessment Review meeting will be conducted via webinar from 6:00-7:30 p.m. on September 3, 2020.
- The Steering Committee will decide if and how the Mitigation Strategy Workshop(s) will be conducted based on the participation of municipal officials on the webinar.
- If they occur, the Mitigation Strategy Workshop(s) would be held on September 17-18, 2020.
- Ms. Merrill suggested that the county could host municipal officials at the Mitigation Strategy Workshop(s) in person, while Tetra Tech's staff could participate remotely.

Tetra Tech's planners are still on track to have the HMP drafted by the beginning of October 2020.

MEETING NOTES

Next Steps

The following next steps were discussed at the meeting:

- Mr. Subbio will revise the draft goals and objectives and provide them to Ms. Merrill for distribution to the Steering Committee.
- The Risk Assessment Review Meeting will be conducted via webinar on September 3, 2020.
- Ms. Merrill and Mr. Subbio will determined if and how the Mitigation Strategy Workshops will be held after the Risk Assessment Review Meeting.
- Mr. Subbio will develop a shared document for tracking outreach to municipal officials.

The meeting adjourned at 10:55 a.m.

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE

Steering Committee Meeting

Tuesday, August 18, 2020 | 10:00 – 11:00 a.m.

1. **Welcome**
2. **Project Status**
3. **Goals and Objectives**
4. **Schedule**
5. **Next Steps**
   a. Risk Assessment Review Meeting
   b. Mitigation Action Development
   c. Draft Completion
6. **Questions**

Cattaraugus County Hazard Mitigation Plan

2014 Hazard Mitigation Plan Goals and Objectives – For Reference

Winter Storms

Goal A1 Reduce health and safety risk to Cattaraugus County citizens in the event of future winter storm events.

Objectives:

- Educate citizens on the levels of snow winter storm warnings.
- Make citizens aware of safe alternate heating sources.
- Encourage families/individuals to have an emergency communications plan.
- Reduce health and safety risk to citizens regarding driving in winter conditions.

Goal A2 Reduce potential of infrastructure damages from future winter storm events.

Objectives:

- Implement an informational program to encourage local utility companies to harden or bury their transmission lines.
- Reduce risk to existing above ground utilities from trees that may be susceptible to damage during winter storm events.
- Make sure critical facilities have emergency communications plans and power backup plans.

Goal B1 Reduce loss of life and raise public awareness about flood hazards, flood safety, and flood damage protection measures.

Objectives:

- Periodically distribute flood hazard information to owners of flood-prone property and the general public. Information will include flood-prone areas (known locations of high water table), property owner responsibilities for streams, flood-proofing ideas, flood insurance, and flood safety measures.
- Develop and implement a public outreach and education program about stormwater management.
- Implement an educational program for local government with important flood fighting information.
- Make sure citizens understand floodplain maps and regulations and risks.
- Ensure that there is adequate emergency centers and that they are located in accessible areas.

Floods

Goal B2 Protect new and existing structures and infrastructure, as well as replace undersized and repeatedly damaged infrastructure.

Objectives:

- Ensure the risk is reduced for high flooding risk properties, especially repetitive loss properties.

- See that Code Enforcement Officers receive periodic training to effectively enforce existing floodplain development regulations.
- Identify, replace, and protect undersized or repeatedly damaged infrastructure.

Goal B3 Ensure that streams, drainage ways, and drainage structures are maintained to minimize the potential for obstruction of flow.

Objectives:

- Develop and implement a strategy for stabilizing stream channels in locations where bank erosion threatens development.
- Develop and implement a strategy for maintenance of privately owned stormwater drainage systems.

Goal B4 Clean Debris from creeks, waterways, and drainage structures

Objectives:

- Ensure that water collection and drainage in critical areas is minimized following flash flooding events.
- Ensure current storm drainage systems can handle flash flooding events.
- Develop and implement a program for routine inspection and maintenance of streams, roadside ditches, and drainage-ways to reduce the potential for flooding caused by debris obstructions.
- Remove debris laying in the creeks following tornados and severe storms.

Goal B5 Identify/Acquire Repetitive Loss Properties

Objectives:

- Identify repetitively damaged structures.
- Seek funding to acquire repetitively damaged structures.
- Turn repetitively damaged properties into green space.

Severe Storms

Goal C1 Reduce loss of life and risk of damage to utility infrastructure in Cattaraugus County in the event of a severe storm event.

Objectives:

- Periodically distribute severe storm information to property owners and the general public. Information will include supplies to have on hand, emergency numbers, electrical wire safety, falling trees and limbs safety.
- Implement an educational program for local government with important severe storm survival information.
- Severe scour occurs at bridges and culverts during severe storm events, explore protection methods.
- Ensure utility lines are protected from severe storm related damage.
- Ensure falling trees or branches do not damage utility lines during a severe storm event.
- Ensure that all residential and commercial building codes adopted throughout Cattaraugus County reference the most current standards for wind uplift.

- Encourage implementation of preventive measures for existing development to reduce the vulnerability to severe weather damage, such as the proper way to anchor mobile homes.

Ice Storms

Goal D1 Reduce loss of life and raise public awareness about ice storm events and how to respond.

Objectives:

- Educate the public as to downed utility hazards.
- Reduce health and safety risk to citizens regarding driving in winter conditions.
- Educate the public as to public announcements, warnings and closures.

Goal D2 Reduce loss of life and risk of damage to infrastructure in Cattaraugus County in the event of an ice storm event.

Objectives:

- Ensure utility lines are protected from ice storm related damage.
- Ensure falling trees during a severe storm event do not damage utility lines.
- Ensure improvement of emergency power and communication capabilities during an ice storm event.
- Investigate road reconfiguration in historically problematic areas.

Tornado

Goal E1 Reduce loss of life and safety risk to the community during the occurrence of a future tornado event.

Objectives:

- Educate the public to secure all loose items on decks, porches and in yards.
- Provide resident education regarding tornado protection and preparedness.
- Minimize the number of loose items that can become hazardous and dangerous during a tornado event.
- Give as much warning as possible when a Tornado threat is active.
- Educate Code Enforcement Officers on building and maintenance codes.

Goal E2 Reduce losses from tornado events to present and future structures in Cattaraugus County.

Objectives:

- Ensure that existing mobile homes and older buildings having the most potential for losses from tornado events are protected.
- Ensure that all Cattaraugus County and municipal building codes reflect current standards for anchoring against straight line and tornado winds.
- Clean Tornado debris from waterways after Tornado to prevent future flooding events.

Wildfire

Goal F1 Reduce health and safety risk to Cattaraugus County residents in the event of future wildfires.

Objectives:

- Make sure that residents are educated on hazards of wildfires, evacuation procedures, and open burning laws and penalties.
- Ensure that Fire Departments have improved capabilities for responding to and extinguishing wildfires.
- Ensure residents are aware of precautions to prevent spreading of fires.
- Ensure firefighters know where there are alternate sources of water.

Goal F2 Reduce threat to existing and future structures from wildfires.

Objectives:

- Ensure that high and moderate wildfire risk areas are identified.
- Ensure that critical facilities and number of residential properties in high and moderate wildfire risk areas are identified.
- Ensure that building codes include fire resistant precautions.
- Ensure that wildfire vulnerability assessments are done.

Landslides

Goal G1 Reduce the danger to the public and damage to private property/infrastructure in Cattaraugus County in the event of a landslide.

Objectives:

- Educate the public on what to look for and what to do when land starts to slide.
- Make sure the possibility of future damage to private homes is minimized.
- Make sure future damage to underground utilities and services, electric grid, natural gas, water and sewer lines, and communication networks are minimized.

Dam Failure

Goal H1 Reduce health and safety risk to Cattaraugus County residents in the event of future dam failures.

Objectives

- Ensuring that dams are properly maintained and meet applicable design standards.
- Ensure that there is an emergency plan in place.
- Ensure that there is an evacuation plan in place.
- Complete a Dam Risk Assessment for each site.
- Educate the public.
- Seek funding to complete inundation maps and update plans.

2020 Suggested Goals and Objectives

Goal 1: Protect life, property, and critical infrastructure from hazard impacts.

Objective 1.1	Retrofit critical infrastructure to protect against hazard impacts.
Objective 1.2	Enhance stormwater management infrastructure.
Objective 1.3	Ensure that critical facilities can continue to function during and after hazard impacts.
Objective 1.4	Acquire, retrofit, or relocate structures from flood-prone areas.
Objective 1.5	Encourage residents and business owners to insure their property against hazard impacts, including through flood insurance through the National Flood Insurance Program (NFIP).

Goal 2: Reduce the risk of hazards on life, property, and the environment.

Objective 2.1	Develop and/or update local regulations based on current information and best practices.
Objective 2.2	Maintain natural waterways and drainage systems to reduce the impacts of hazards.

Goal 3: Educate the public, officials, and other stakeholders about the hazards they face and what can be done to mitigate hazard impacts.

Objective 3.1	Ensure that local officials attend current training on regulatory issues and best practices.
Objective 3.2	Educate individuals throughout the County on the hazards they face and what property protection measures they can take.

MEETING NOTES

Meeting	Cattaraugus County Hazard Mitigation Plan (HMP) Risk Assessment Review Meeting		
Date	September 3, 2020	**Time**	6:00 – 7:20 p.m.
Location	Webinar		
Attendees	Crystal Abers, Director of Economic Development, Planning & Tourism, Cattaraugus County Department of Economic Development, Planning & Tourism		
	Kathleen M. Ellis, Commissioner, Cattaraugus County Department of Public Works		
	Kimberly Merrill, Secretary to the Commissioner, Cattaraugus County Department of Public Works		
	Naomi Gennings, National Incident Management System (NIMS) Coordinator/Assistant to the Director, Cattaraugus County Emergency Services		
	Julie Carr, Personnel Director, Cattaraugus County Human Resources Department		
	Craig Gardner, Safety Engineer Trainee, Cattaraugus County Human Resources Department		
	Kirk Snyder, Systems Analyst Programmer, Cattaraugus County Information Services		
	John Helgager, Code Enforcement Officer, Village of Allegany		
	John A Pfeffer, Supervisor, Town of Ashford		
	Bruce Tanner, Public, Town of Carrollton		
	Tina Hyde, Supervisor, Town of Coldspring		
	Matthew McAndrew, Supervisor, Town of Ellicottville		
	Bridget Holmes, Clerk, Town of Farmersville		
	Donna Vickman, Councilwoman, Town of Farmersville		
	Robert Breton, Supervisor, Town of Franklinville		
	Lorrie Fisher, Deputy Supervisor, Town of Franklinville		
	Carol Sheibley, Deputy Mayor, Village of Gowanda		
	Jeff VanDeCar, Supervisor, Town of Hinsdale		
	Jeffrey Goodyear, Supervisor, Town of Ischua		
	Fred Filock, Supervisor, Town of Leon		
	Susan Koch, Clerk, Town of Little Valley		
	James Bowen, Mayor, Village of Little Valley		
	Robert Young, Public Work Superintendent, Village of Little Valley		
	Robert Keis, Supervisor, Town of Mansfield		
	Lena Ruper, Deputy Town Clerk/Registrar/Tax Collector, Town of Napoli		
	Patrick Murphy, Supervisor, Town of New Albion		
	David Rupp, Highway Superintendent, Town of New Albion		
	Tim Richardson, Fire Chief, City of Olean		
	Bob Ring, Public Works Director, City of Olean		

MEETING NOTES

	Robert Barber, Highway Superintendent, Town of Otto
	Paul Stang, Councilman, Town of Otto
	John Walgus, Supervisor, Town of Persia
	Tony Evans, Mayor, Village of Portville
	Dale Senn, Supervisor, Town of Randolph
	Heather Lamberson, Supervisor, Town of South Valley
	Mary Ruth, Town Clerk, Town of South Valley
	Kevin Clapp, Planning Manager, Mitigation Programs, New York State Division of Homeland Security and Emergency Services (NYS DHSES)
	Tony Subbio, Project Manager, Tetra Tech, Inc. (Tetra Tech)

Purpose

The purpose of the Risk Assessment Review Meeting was to review the results of the updated risk assessment analysis performed for the HMP update by Tetra Tech, collect feedback on the analysis, and identify problem areas or issues for each of the hazards identified.

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Review Risk Assessment

Mr. Subbio reviewed the results of Tetra Tech's risk assessment. Feedback on the analysis of each hazard is provided below.

- Flood
  - Attendees had no feedback on the flood analysis.
- Landslide
  - Ms. Merrill stated that County Route 76 (Lover's Lane) is on unstable soil.
  - Mr. Rupp asked if the landslide hazard profile examined geology as well as slope. He stated that Route 353 is sliding. Water trapped in clay soil is pushing the ground, causing landslides.
- Severe Storms
  - Attendees had no feedback on the severe storms analysis.
- Severe Winter Storms
  - Attendees had no feedback on the severe winter storms analysis.
- Utility Interruption
  - Attendees had no feedback on the utility interruption analysis.
- Wildfire
  - Burn bans are reducing the number of brush fires occurring in the county.
  - Wildfires that do occur are typically less than 0.25 acre in size.

MEETING NOTES

Review Risk Ranking

Mr. Subbio discussed each hazard's risk ranking scores, which are based on Tetra Tech's current ranking methodology. Wildfires, severe storms, and severe winter storms were ranked as the highest-priority hazards, based on fact that (1) a sizable portion of the county is located within the wildland-urban interface, and (2) the entire county is vulnerable to severe storms and severe winter storms. Attendees agreed that the county is most concerned with and vulnerable to flooding and landslides. The Steering Committee will review the ranking methodology and make appropriate changes.

Next Steps

The following next steps were discussed at the meeting:

- The Steering Committee will review the risk ranking methodology.
- Municipal officials will work with their assigned planners to identify problem areas and problem statements.
- Tetra Tech's planners and municipal officials will develop mitigation actions for each jurisdiction.
- The draft of the HMP will be completed and submitted to NYS DHSES in early October.

The webinar adjourned at 7:20 p.m.

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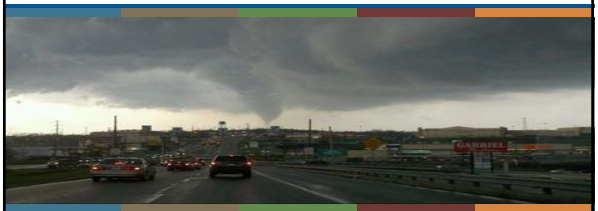
Cattaraugus County Hazard Mitigation Plan Update Risk Assessment Review Meeting



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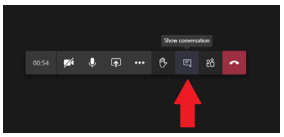
Welcome

- If you are attending the webinar on your computer, please add your name, title, and organization(s) to the Chat.
  - Bring your mouse to the lower part of the screen until a set of buttons appears.
  - Click "Show Conversation."



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Welcome

Agenda:

- Review Risk Assessment
- Review Risk Ranking
- Next Steps
- Questions

3

Review Risk Assessment

- Flood
  - History
    - 10 Presidential Disaster Declarations
    - 54 events since 1950
  - Location
    - 1-percent annual chance floodplain
    - Dam inundation areas
    - Flash flooding

4

Review Risk Assessment

- Flood (Continued)
  - Impacts
    - $66.8 million in reported property damage since 1950
  - Probability
    - 54 events in the last 70 years – 77% chance each year

5

Review Risk Assessment

- Flood (Continued)
  - 1-percent Annual Chance Floodplain
    - 3,858 people (5.0% of total population)
    - 2,210 buildings (5.6% of total)
    - $2.0 billion in structure and contents replacement cost value (RCV)
    - $240.9 million in expected losses
    - 232 critical facilities, including 152 bridges
    - 25,387 tons of debris

6

Review Risk Assessment

- Flood (Continued)
  - Flood Insurance Statistics (as of July 30, 2020)
    - 479 policies in the County
    - 329 policies in the 1% annual chance floodplain
    - 382 claims
    - $2.87 million in payments
  - Repetitive Loss (RL)
    - Two or more reported losses over $1,000 in any 10-year rolling period since 1978
    - 60 total

7

Review Risk Assessment

- Landslide
  - Steep slopes (>25% grade) found throughout the county
  - Constant maintenance and repairs
  - History
    - Route 16 between Franklinville and Hinsdale – large landslides
    - Roads dropping/sliding
  - Landslide Hazard Areas
    - 1,651 people (2.2% of total pop.)
    - 1,030 buildings (2.6% of total)
    - $875.9 million in structure and contents RCV
    - 117 critical facilities (63 bridges)

8

Review Risk Assessment

- Severe Storms
  - Hail
  - Wind
  - Lightning
  - Thunderstorms
  - Tornado
  - Hurricane/Tropical Storm

9

Review Risk Assessment

- Severe Storms (Continued)
  - History
    - 10 Presidential Disaster Declarations
    - 274 events since 1950
  - Impacts since 2013
    - No reported fatalities
    - 2 reported injuries
    - $7.3 million in property damage
    - $196,000 in crop damage
    - Trees/wires down
  - Probability
    - 29 events since 2013 – 100% chance each year

10

Review Risk Assessment

- Severe Storms (Continued)
  - Every structure is exposed
  - HAZUS Model – 500-year MRP Event
    - Less than 39 mph – not even tropical storm force
    - $90,000 in expected structure damage
    - No critical facilities impacted
    - Insignificant income loss
    - No debris

11

Review Risk Assessment

- Severe Winter Storm
  - Heavy Snow
  - Blizzards
  - Ice Storms

12

Review Risk Assessment

- Severe Winter Storm (Continued)
  - History
    - 8 Presidential Disaster Declarations since 1954
    - 118 major events since 1950
  - Impacts
    - No fatalities or injuries reported
    - $13.4 million in property damage
    - Up to $774,000 in crop damage
    - Accidents
    - Travel delays
  - Probability
    - 118 events in 70 years – 100% chance each year

13

Review Risk Assessment

- Severe Winter Storm (Continued)
  - Entire population is vulnerable
    - Increase in traffic accidents
    - Overexertion
    - Hypothermia
    - Reduction in ability to access emergency services
  - All buildings exposed - $38.5 billion
  - Loss of functionality of critical facilities
  - Economic impacts from loss of business

14

Review Risk Assessment

- Utility Interruption
  - History
    - 1 Presidential Disaster Declaration - 2003
    - 16 incidents since 2013
    - Primarily caused by other hazards
  - Impacts
    - HVAC failure
    - Communications failure
    - Food spoilage
    - Basement flooding
  - Probability
    - 16 incidents in the last 7 years – 100% chance each year

15

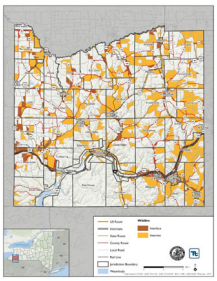
Review Risk Assessment

- Utility Interruption (Continued)
  - Entire population is vulnerable
    - Food safety
    - Carbon monoxide exposure from generators
    - Individuals dependent on medical equipment
    - Access to potable water
  - Cost of spoiled food/goods
  - Cost to government and community service groups

16

Review Risk Assessment

- Wildfire
  - History
    - 500-1,700+/- from 2003-2017, according to state records
    - Numerous events that burned more than 10 acres
  - Location
    - Wildland/urban interface
      - Interface
      - Intermix
    - 1.5 miles from wildland
  - Impacts
    - No records
  - Probability
    - Frequent



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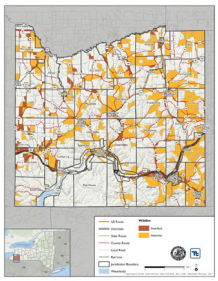
Review Risk Assessment

- Wildfire (Continued)
  - Population exposed
    - 66,384
    - 86.8% of county
  - Building stock
    - 14,468 buildings exposed
    - $18.3 billion in value exposed
    - 47.4% of total building value
  - 697 critical facilities



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Review Risk Ranking

Hazard of Concern	Prob.	Pop.	Built Env.	Econ.	Adapt Cap.	Future Cond.	Risk Ranking Value
Wildfire	2	9	6	3	2	3	6.9
Severe Storms	3	9	2	1	1	2	5.0
Severe Winter Storms	3	9	2	1	1	2	5.0
Utility Interruption	3	6	2	2	2	2	4.7
Floods	3	3	2	1	2	3	3.6
Landslides	1	3	2	1	2	1	2.8

19

Next Steps

- Identify problems and problem areas
- Develop mitigation actions
- Submit the HMP for review

20

Questions?

Thank you for your time!

21

Contacts

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kamerrill@cattco.org
(716) 938-9121 ext. 2480

Tony Subbio
tony.subbio@tetratech.com
(717) 839-5654

22

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN (HMP) UPDATE
Risk Assessment Review Meeting

Thursday, September 3, 2020 | 6:00 – 7:30 p.m.

1. **Welcome**
2. **Review Risk Assessment**
   a. Flood
   b. Landslide
   c. Severe Storms
   d. Severe Winter Storms
   e. Utility Interruption
   f. Wildfire
3. **Review Risk Ranking**
4. **Next Steps**
   a. Identify problems and problem areas
   b. Develop mitigation actions
   c. Submit the HMP for review
5. **Questions**

Cattaraugus County
Hazard Mitigation Plan (HMP)

Risk Ranking Score – Countywide

Hazard of Concern	Prob.	Pop.	Built Env.	Econ.	Adapt Cap.	Future Cond.	Risk Ranking Value
Wildfire	2	9	6	3	2	3	6.9
Severe Storms	3	9	2	1	1	2	5.0
Severe Winter Storms	3	9	2	1	1	2	5.0
Utility Interruption	3	6	2	2	2	2	4.7
Floods	3	3	2	1	2	3	3.6
Landslides	1	3	2	1	2	1	2.8

Notes:

Prob. = Probability

Pop. = Impact on the Population (higher numbers reflect a higher percentage of the population being at risk)

Built Env. = Impact on the built environment (higher numbers reflect a higher percentage of the property value in the county being at risk)

Econ. = Impact on the Economy (higher numbers reflect higher loss estimates)

Adapt. Cap. = Adaptive Capacity (higher numbers reflect less capability to address hazard impacts)

Future Cond. = Impact of future conditions on the hazard (higher numbers indicate higher future risk from the hazard

To update the actions and initiatives for your mitigation strategy, please consider the questions below. Suggested actions will be developed based on an analysis of Cattaraugus County's needs and capabilities, or will be carried over from the previous hazard mitigation plan (HMP) update based on the responses given in Worksheet 4. Some questions may not apply to your municipality.

1. Which properties in your jurisdiction are most at-risk to flood events and would have the greatest need for retrofitting or other flood hazard mitigation measures? Specific property addresses do not need to be listed (to ensure residential privacy), but names of streets or neighborhoods can be included.

2. What public outreach and education actions would you be most interested in implementing? Circle all that apply.
   A. Provide general hazard risk preparedness and mitigation and related National Flood Insurance Program (NFIP) information in regular newsletters and mailings.
   B. Provide hazard risk and risk reduction information through social media channels and e-mail blast systems.
   C. Post flyers and other readily available NFIP informational materials at the municipal hall or distribute at regular civic meetings.
   D. Develop and maintain a hazard risk management webpage on the municipal website where information and mapping can be posted.
   E. Encourage private business owners and managers of infrastructure that provide critical services in post-disaster situations to develop Continuity of Operations Plans or Business Continuity Plans.
   F. Enhance public outreach to residents in NFIP floodplain areas, which may include distributing periodic articles and including handouts in the annual newsletter, to inform them of annual grant opportunities.
   G. Other:

3. Which critical facilities still need or would benefit from a backup generator or redundant power supply?

4. Which critical facilities have been damaged by flood events and require floodproofing or relocation?

5. Which roads would benefit from mitigation or structural projects to reduce vulnerability to flood or stormwater incidents? Also, please specify the types of projects that would most help a high-risk road (for example, new/expanded culvert, road elevation, repaving, etc.), if this information is available.

6. What areas in the municipality are still in need of stormwater rehabilitation and upgrades?

7. What other mitigation projects are you interested in or is your municipality targeting for completion during the next 5 years? Please provide as much detail as possible.

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

RISK ASSESSMENT REVIEW MEETING SIGN-IN
DEPARTMENT OF PUBLIC WORKS

Thursday, September 3, 2020

Start time: 1 pm **End time:** 7:30 pm

NAME	MUNICIPALITY	EMAIL	PHONE
Kim Nemetz	DPW	kamemetz@cattco.org	938-2480
Dawn Gennings	OES	nagennings@cattco.org	
Carol Sheibley	Village of Gowanda	csheib@verizon.net	716-532-3494
Susan Koch	Town of Little Valley	townNL@yahoo.com	716 938-6444
Donna Dickson	Town of Farmersville	dannoi@aol.com	
John Helgager	Village of Allegany	jhelgager@allegany.org	(716) Cell. 790-0073

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

RISK ASSESSMENT REVIEW MEETING SIGN-IN
LITTLE VALLEY COUNTY CENTER – LEGISLATIVE CHAMBERS

Thursday, September 3, 2020

Start time: 6:05 pm **End time:** 7:30 pm

NAME	MUNICIPALITY	EMAIL	PHONE
Lena Ruper	Napoli		938-6668
Mike C. Kruis	MANSFIELD		716-474-5730
Julie Carr	Cattaraugus County	jjcarr@catco.org	716 938 2241
Kirk Snyder	Catt County	KWSnyder@catco.org	938-2210
JOHN A PFEFFER	ASHFORD	ASHFORDNYSUPERVISOR @ GMAIL.COM	801838
Crystal Abers	Cat Co.	cabers@catco.org	307-6900
[illegible]	[illegible]	[illegible]	[illegible]
Mike McAndrew	ELLICOTTVILLE		699-2100
John Walgus	Persia		532-4042 X7
Dale Senn	Randolph		397 3316

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Cattaraugus County
Hazard Mitigation Plan
2020 Update

Mitigation Strategy Workshop

1

Today's Topics

- Introductions
- Hazard Mitigation Review
- Developing Mitigation Strategies
- Development of Actions and Action Worksheets using Problem Statements
- Discuss opportunities for integrating mitigation into daily operations
- Next Steps

2

2

What is hazard mitigation?

Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event

"provides the blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and local ability…" (CFR).

3

3

Mitigation Works!

- The nation saves **$6** for every **$1** spent through mitigation grants funded via select federal agencies.

National Benefit-Cost Ratio (BCR) Per Peril *BCR numbers in this study have been rounded	Beyond Code Requirements	Federally Funded
Overall Hazard Benefit-Cost Ratio	$4:1	$6:1
Riverine Flood	$5:1	$7:1
Hurricane Surge	$7:1	Too few grants
Wind	$5:1	$5:1
Earthquake	$4:1	$3:1
Wildland-Urban Interface Fire	$4:1	$3:1

4

4

Key Components to Hazard Mitigation

3 KEY COMPONENTS THAT CONTRIBUTE TO NATURAL HAZARD MITIGATION PLANNING

6/3/20 5

5

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Mitigation Strategy

6 6

6

2020 HMP Hazards of Concern

- Flood
- Landslide
- Severe Storm
- Severe Winter Storm
- Utility Failure
- Wildfire

7

7

Risk Reduction

To Reduce Risk:

- ***Manipulate the Hazard***:
  - Structural flood control
- ***Reduce/Eliminate Exposure***:
  - Property acquisition
- ***Reduce Vulnerability***:
  - Retrofit
- ***Increase Capability***:
  - $, preparation, technical assistance, planning, enforcement

8

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NYS Requirements for Mitigation Strategy Update

- Need to develop *at least 2 Action Worksheets*
- *Repetitive and Severe Repetitive Loss Properties* - need an action with specific details (street or neighborhood names)
- Identify critical facilities, assess vulnerabilities and ensure protection to the 500-year flood event or worst-case scenario
  - If already protected, we must note how
  - *If not protected, a mitigation action must be developed*
- Plan for Climate Change and propose actions to address

9

9

NYS Requirements for Mitigation Strategy Update

- MUST identify evacuation routes and shelters in the plan
  - Identify actions to make evacuation routes and shelters viable, if not already
- MUST identify temporary housing and permanent housing locations in the plan
  - Identify actions to develop these locations, even if outside of jurisdictional boundaries

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NYS Requirements for Mitigation Strategy Update

- Proposed actions MUST have specific information identified including:
  - Project lead
  - Estimated cost
  - Timeline
  - Whether the action involves a critical facility
  - Etc.
- All of these required items are identified within the proposed action table. Each cell of the table MUST be filled out!

11

11

Connection to the Mitigation Strategy

- Need a clear connection between vulnerability and proposed mitigation actions.
- Capability assessment provides insight into challenges/opportunities for the mitigation strategy as well.
- Provides the factual basis for activities proposed in the mitigation strategy.

Risk and Capability Assessments → **Mitigation Strategy**

12

12

What are we focusing on for our mitigation strategy?

- Stronger connection between the risk assessment and mitigation strategy
- More specific actions
  - Specific projects, in specific locations, in a specific timeframe
- Diverse actions
  - Focus on highest ranked hazards but also look to address other hazards
  - Include a variety in the types of actions

13

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FEMA Mitigation Action Types

Plans and regulations include government authorities, policies, or codes that encourage risk reduction, such as building codes and state planning regulations. This may also include planning studies.

Structure and infrastructure projects involve modifying existing structures and infrastructure or constructing new structures to reduce the impact of hazards.

Natural systems protection projects minimize losses while also preserving or restoring the function of natural systems.

Education and awareness programs include long-term, sustained programs to inform and educate citizens and stakeholders about hazards and mitigation options. This category could also include training.

14

14

Update the Mitigation Strategy

- Review our Goals and Objectives
- Start with Problems (many identified on your Problem Statement Worksheets)
  - Areas that have been impacted
  - Recurring issues
  - Critical/Lifeline facilities in the floodplain
  - RL/SRL properties need mitigating
  - Lack of identified locations for temporary housing and permanent housing (outside of the floodplain)

15

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Update the Mitigation Strategy

- Identify New Mitigation Actions/Projects
- Modify 'Carry-Over' projects from the 2014 HMP - more specific or address different aspect of original problem

16

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Making Previous Actions More Specific

17

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Previous problem and action

- Problem: Critical facilities require backup power.
- Solution: Acquire backup power for critical facilities.

18

18

Improved problem and action

- Problem: Town Hall lacks a backup power source. The Town Hall houses the Emergency Operations Center and also can serve as a backup shelter. Lack of power results in a breakdown of continuity of operations and prevents the Town Hall from providing critical services during a hazard event.
- Solution: The Town Engineer will work with the Office of Emergency Management to research and purchase the appropriately sized backup generator for the Town Hall. The DPW will install the backup generator and necessary electrical components and will be responsible for testing and upkeep of the generator after installation.

19

EVEN MORE Improved problem and action

- Problem: Town Hall lacks a backup power source. The Town Hall houses the Emergency Operations Center and also can serve as a backup shelter for approximately 100 people. Lack of power results in a breakdown of continuity of operations and prevents the Town Hall from providing critical services during a hazard event.
- Solution: The Town Engineer will work with the Office of Emergency Management to research and purchase a 75 kW generator for the Town Hall. The DPW will install the backup generator on the roof of the Town Hall and necessary electrical components and will be responsible for testing and upkeep of the generator after installation.

20

Previous problem and action

- Problem: Falling trees result in power outages.
- Solution: Complete tree trimming.

21

Improved problem and action

- Problem: High hazard trees pose a risk for falling on private property and utilities during storm events. The town does not have a program in place to monitor and inspect trees and identify ones that need to be trimmed or removed.
- Solution: The town will develop a vegetation management program. This program will include routine inspections of trees in the municipal rights-of-way, identify trees that are in need of trimming or removal, and conduct the trimming and removal. This will help reduce tree damage, road closures, and power outages during severe weather events. A majority of the tree work will be conducted by the Highway Department; however, outside contractors might be used if removal is beyond the Department's capability.

22

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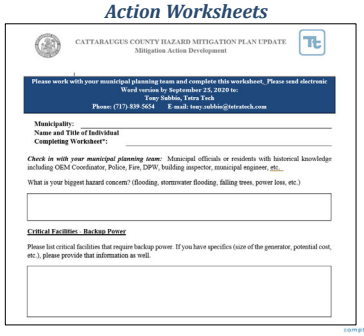
Mitigation Development Worksheet

23

Tetra Tech has emailed *Problem Statements* to help fill out your *Mitigation Development Worksheet* and *Action Worksheets*



CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE
Mitigation Action Development

Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by September 25, 2020 to:
Tony Sabbio, Tetra Tech
Phone: (717) 339-5654 E-mail: tony.sabbio@tetratech.com

Municipality:
Name and Title of Individual Completing Worksheet*:

Check in with your municipal planning team: Municipal officials or residents with historical knowledge including OEM Coordinator, Police, Fire, DPW, building inspector, municipal engineer, etc.

What is your biggest hazard concern? (flooding, stormwater flooding, falling trees, power loss, etc.)

Critical Facilities - Backup Power

Please list critical facilities that require backup power. If you have specifics (size of the generator, potential cost, etc.), please provide that information as well.

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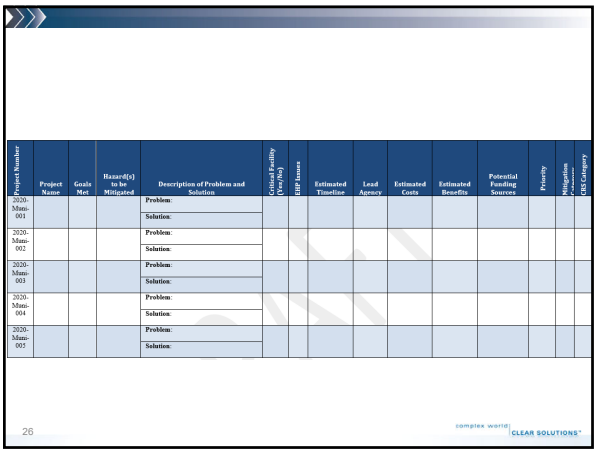

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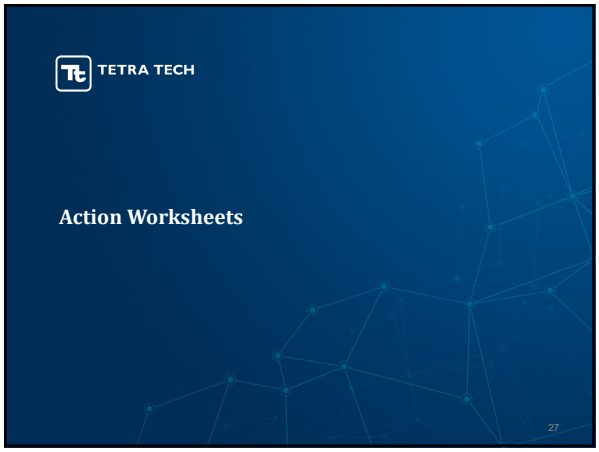

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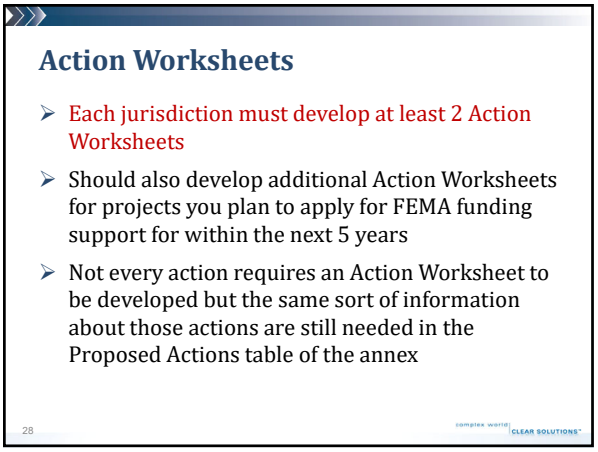

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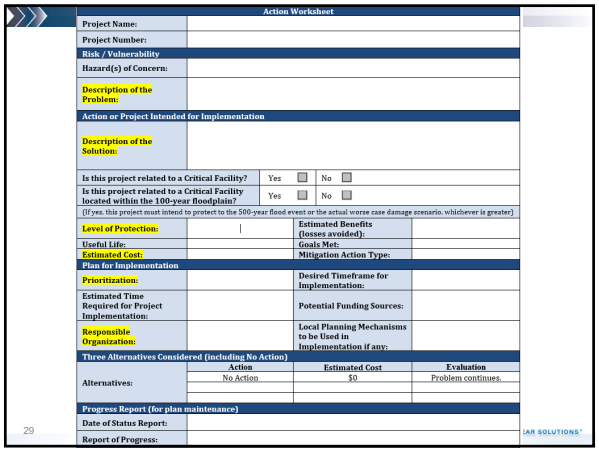

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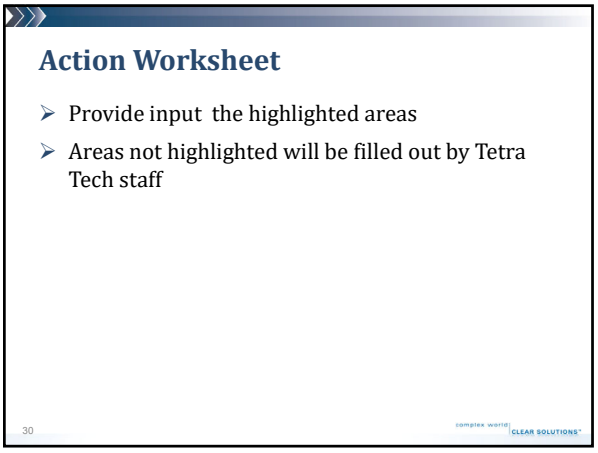

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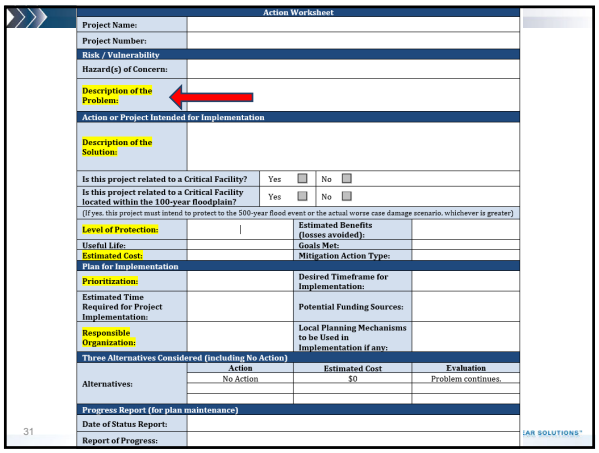

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Action Worksheet

- Description of the Problem
  - What is the problem?
  - What is the risk?
  - Where is the problem occurring?
  - Who is the problem impacting?
  - Have there been past damages?
  - How frequently does the problem occur?

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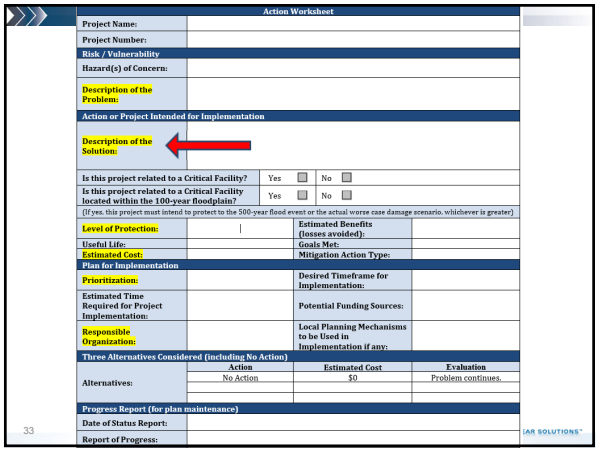


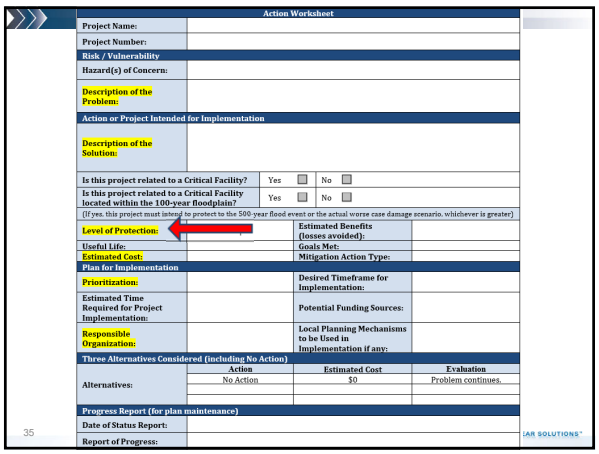
33

Action Worksheet

- Description of the Solution
  - How do you propose to solve or mitigate the problem?
  - What are the design specifications?
    - Height and length of a floodwall
    - kW for backup generators
    - Number of structures to be bought out or elevated
    - Etc.
  - Who is responsible for what aspects of the project?

34

34



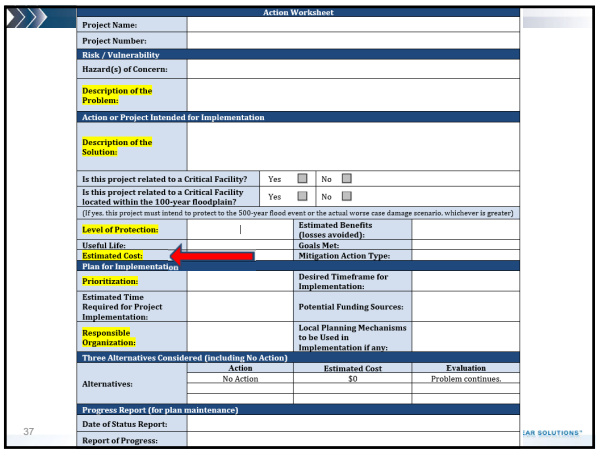
35

Action Worksheet

- Level of Protection
  - What level event is the project being designed to protect to?
    - For flood protection: 1% flood (100-year flood), 0.2% flood (500-year flood)
    - For stormwater improvements: 5 year, 10 year rain events
  - If not a specific level, include brief description of what protections are
    - For generators: Prevents power loss

36

36

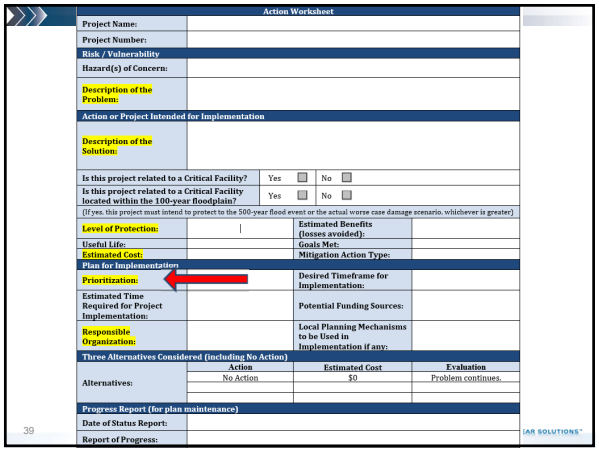


37

Action Worksheet

- Estimated cost
  - What will the project cost?
  - If project includes phases or components, what will each phase or component cost?
    - New generator: $25K, elevation platform for generator: $1K

38

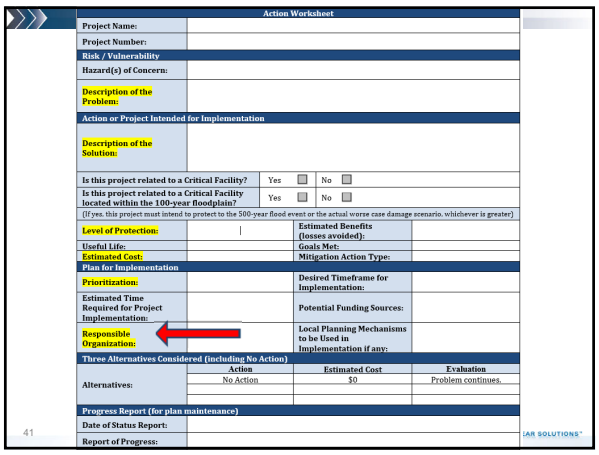


39

Action Worksheet

- Prioritization
  - High, Medium, or Low
  - Use the second page of AW to evaluate each action and assist in the determination of priority (to be discussed shortly)

40



41

Action Worksheet

- Responsible Organization
  - Identify the lead organization/department/individual for the project
  - Identify any supporting organizations/departments/ individuals for the project.

42

Evaluation of Actions

Evaluation and Prioritization		
Project Name:		
Project Number:		
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		

43

43

Prioritization of Actions

- Consider the benefits and costs
- Consider the implementation timeline
- Consider the areas/problems of greatest need
- Consider the funding sources
- High/Medium/Low priority

44

44

Schedule Review and Next Steps

- Return your Mitigation Development Worksheet TODAY
- Work with your assigned Tetra Tech planner to complete your development of your annex and mitigation actions
- All actions and annexes are required to be completed by October 2!

45

45

Thank you for your time today.
Any Questions?

Be well and stay safe.

46

46

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE

Mitigation Strategy Workshop

Monday, September 21, 2020 | 2:00 – 4:00 p.m.

1. **Welcome and Opening Remarks**
2. **Hazard Mitigation Review**
3. **Developing Mitigation Strategies**
   a. NYS Requirements
   b. Areas of Focus
   c. Types of Mitigation Actions
4. **Making Previous Actions More Specific**
5. **Fill Out and Return Your Mitigation Development Worksheet**
6. **Proposed Action Tables**
7. **Action Worksheets**
8. **Questions**
9. **Next Steps**

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE

Mitigation Strategy Workshop

Monday, September 21, 2020 | 6:00 – 8:00 p.m.

1. **Welcome and Opening Remarks**
2. **Hazard Mitigation Review**
3. **Developing Mitigation Strategies**
   a. NYS Requirements
   b. Areas of Focus
   c. Types of Mitigation Actions
4. **Making Previous Actions More Specific**
5. **Fill Out and Return Your Mitigation Development Worksheet**
6. **Proposed Action Tables**
7. **Action Worksheets**
8. **Questions**
9. **Next Steps**

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE

Mitigation Strategy Workshop

Tuesday, September 22, 2020 | 8:00 – 10:00 a.m.

1. **Welcome and Opening Remarks**
2. **Hazard Mitigation Review**
3. **Developing Mitigation Strategies**
   a. NYS Requirements
   b. Areas of Focus
   c. Types of Mitigation Actions
4. **Making Previous Actions More Specific**
5. **Fill Out and Return Your Mitigation Development Worksheet**
6. **Proposed Action Tables**
7. **Action Worksheets**
8. **Questions**
9. **Next Steps**

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE

Mitigation Strategy Workshop

Wednesday, September 23, 2020 | 8:00 – 10:00 a.m.

1. **Welcome and Opening Remarks**
2. **Hazard Mitigation Review**
3. **Developing Mitigation Strategies**
   a. NYS Requirements
   b. Areas of Focus
   c. Types of Mitigation Actions
4. **Making Previous Actions More Specific**
5. **Fill Out and Return Your Mitigation Development Worksheet**
6. **Proposed Action Tables**
7. **Action Worksheets**
8. **Questions**
9. **Next Steps**

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE

Mitigation Strategy Workshop

Thursday, September 24, 2020 | 6:00 – 8:00 p.m.

1. **Welcome and Opening Remarks**
2. **Hazard Mitigation Review**
3. **Developing Mitigation Strategies**
   a. NYS Requirements
   b. Areas of Focus
   c. Types of Mitigation Actions
4. **Making Previous Actions More Specific**
5. **Fill Out and Return Your Mitigation Development Worksheet**
6. **Proposed Action Tables**
7. **Action Worksheets**
8. **Questions**
9. **Next Steps**

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE

Mitigation Strategy Workshop

Friday, September 25, 2020 | 8:00 – 10:00 a.m.

1. **Welcome and Opening Remarks**
2. **Hazard Mitigation Review**
3. **Developing Mitigation Strategies**
   a. NYS Requirements
   b. Areas of Focus
   c. Types of Mitigation Actions
4. **Making Previous Actions More Specific**
5. **Fill Out and Return Your Mitigation Development Worksheet**
6. **Proposed Action Tables**
7. **Action Worksheets**
8. **Questions**
9. **Next Steps**

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the Hazard***:
  ○ Clear stormwater drains and culverts
• ***Reduce exposure to the hazard***:
  ○ Locate or re-locate outside of hazard area
  ○ Institute low impact development techniques on property
• ***Reduce vulnerability to the hazard:***
  ○ Retrofit existing structures and utilities above Base Flood Elevation (BFE)
  ○ Floodproof existing structures (wet- or dry floodproofing).
  ○ Store hazardous materials above BFE or outside of floodprone areas
• ***Increase Capability***
  ○ Develop household mitigation plan, such as retrofit savings, communication capability with outside, 72-hr. self-sufficiency during and after an event
  ○ Buy flood insurance
	• ***Manipulate the Hazard:***
	  ○ Clear stormwater drains and culverts
	• ***Reduce exposure to the hazard:***
	  ○ Locate business critical facilities or functions outside hazard area
	  ○ Institute low impact development techniques on property
	• ***Reduce vulnerability to the hazard:***
	  ○ Build redundancy for critical functions/ retrofit critical buildings.
	  ○ Provide flood-proofing measures when new critical infrastructure must be located in floodplains.
	  ○ Harden structures and infrastructure (wet and dry-floodproofing)
	  ○ Store hazardous materials above BFE or outside of floodprone areas
	• ***Increase Capability:***
	  ○ Increase capability by having cash reserves for reconstruction
	  ○ Develop and adopt a Continuity of Operations Plan (COOP)
	  ○ Solicit 'cost-sharing" through partnerships with private sector stakeholders on projects with multiple benefits.
		• ***Manipulate the Hazard:***
		  ○ Clear stormwater drains and culverts
		  ○ Dredging, levee construction, providing retention areas…
		  ○ Structural flood control: levee's, dams, channelization, revetments.
		  ○ Construct regional stormwater control facilities
		  ○ Lead and develop a county-wide stream clearing strategy including the development of thresholds for response/action.
		• ***Reduce exposure to the hazard:***
		  ○ Locate/re-locate critical facilities outside of hazard area
		  ○ Acquire or relocate identified repetitive loss properties.
		  ○ Promote open space uses in identified high hazard areas via techniques such as: PUD's, easements, setbacks, greenways, sensitive area tracks.
		  ○ Adopt land development criteria such as PUD's, Density transfers, clustering
		  ○ Institute low impact development techniques on property
		  ○ Acquire vacant land or promote open space uses in developing

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
	○ Dam owner/operators should continue to be aware of and understand dam inspection and reporting requirements. ○ Ensure that all dam EAP's are kept in compliance with NYSDEC Regulations.	watersheds to control increases in runoff ○ Pass an ordinance to incorporate additional zoning classifications into flood zones within each municipality. ○ Increase floodplain standards within municipal ordinances and include provisions for enforcing best practice standards by requiring a minimum freeboard of 2' to align with NY State Standards. ○ Continue development application reviews by County Planning Board to reduce risky development practices. • ***Reduce vulnerability to the hazard:*** ○ Harden structures and infrastructure (wet and dry-floodproofing) ○ Provide redundancy for critical functions and infrastructure ○ Adopt appropriate regulatory standards such as cumulative substantial improvement/damage, freeboard, lower substantial damage threshold, compensatory storage. ○ Stormwater management regulations and master planning.

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Adopt "no-adverse impact" floodplain management policies that strive to not increase the flood risk on down-stream communities. ○ Participate in the Community Rating System (CRS) ○ Implement as-built regulatory requirements ○ Implement site review ordinances/requirements ○ Establish stream maintenance programs with stakeholders (e.g. Soil and Water Conservation District) - support county leads of such efforts ○ Incorporate retrofitting/replacement of critical facilities and infrastructure in Capital Improvement Plans (CIPs) ○ Promote the use of vegetation/plants as green erosion control measures to reduce localized flooding. ○ Work with the SWCD and other groups to address removal of debris, log jams, etc. in flood vulnerable stream sections • ***Increase Capability:***

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Produce better hazard maps, and improve access to flood hazard mapping ○ Capture/survey "high-water" marks during flood events. ○ Provide technical information and guidance on appropriate mitigation options available to businesses and homeowners ○ Enact tools to help manage development in hazard areas (stronger controls, tax incentives, information) ○ Establish an additional layer of zoning within flood hazard areas ○ Develop strategy to take advantage of post disaster opportunities ○ Improve compliance with and enforcement of the NFIP ○ Develop mitigation partnerships with regional stakeholders ○ Join Community Rating System (CRS) program, or improve level of participation in CRS ○ Develop and implement a public information strategy for flood hazard awareness, flood insurance (NFIP) and mitigation ○ Maintain existing data as well as gather new data needed to define risks and vulnerability.

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Create a building and elevation inventory of structures in the floodplain ○ Identify flood prone areas that may be in need of new flood studies ○ Establish a program to identify and educate owners of flood-prone properties of potential mitigation options (e.g. elevations, relocations) ○ Charge a hazard mitigation fee on all new permits to create a hazard mitigation funding source for initiatives or grant cost share requirements. ○ Integrate floodplain management policies into other planning mechanisms within the planning area. ○ Establish a Stormwater Utility to deal with urban drainage/flooding issues ○ Establish incentives to promote flood hazard mitigation of private property (e.g. permit fee waivers). ○ Adopt ordinances/standards for cumulative damages and/or improvements ○ Upgrade NFIP Floodplain ordinance, as well as other

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		ordinances to current or above current state and federal standards. ○ Develop and adopt a COOP ○ Join "Storm Ready" Program ○ Participate in county and regional training programs ○ Provide additional training/certification to NFIP floodplain administrators and code officials. ○ Implement annual training to account for turnover of municipal officials. ○ Maintain and enhance flood forecasting ability, including the establishment and maintenance of critical stream gages ○ Explore grant funding opportunities and potential partnerships to help maintain existing gages and install additional gages to improve forecasting and flood warning ability. ○ Promote awareness and participation in alert systems such as NYAlert ○ Support and participate in regional flood management efforts

FLOOD		
Personal Scale	Corporate Scale	Government Scale
		○ Support and implement hazard disclosure for the sale/re-sale of property in identified risk zones. ○ Provide continued and enhanced training for emergency responders ○ Establish a revolving "bank" or budget line item to fund grant application support ○ Continue to review updated Flood Insurance Rate Maps to ensure accuracy as well as maintaining lines of communication with homeowners to make them aware of potential changes related to their property status. ○ Provide trainings for FPA's on the NFIP/Floodplain Best Practices and also pursue CFM accreditation for municipal FPA's. ○ Build and maintain relationships to develop regional watershed/floodplain mitigation solutions. ○ Pursue grant funding opportunities to fund repairs of catchments and infrastructure on a proactive basis. ○ Explore grant funding opportunities related to climate

FLOOD		
Personal Scale	Corporate Scale	Government Scale
		change to fund mitigation projects.

Landslide		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the Hazard***:
  ○ Apply soil stabilization measures, such as planting soil stabilizing vegetation on steep slopes
• ***Reduce exposure to the hazard***:
  ○ None
• ***Reduce vulnerability to the hazard:***
  ○ None
• ***Increase Capability***
  ○ None
	• ***Manipulate the Hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ None
	• ***Increase Capability:***
	  ○ None
		• ***Manipulate the Hazard:***
		  ○ Implement reinforcement measures in high-risk areas
		  ○ Use debris flow measures that may reduce damage in sloping areas, such as stabilization, emergency dissipation, and flow control measures
		  ○ Apply soil stabilization measures, such as planting soil stabilizing vegetation on steep, publicly owned slopes
		• ***Reduce exposure to the hazard:***
		  ○ Consider hazard areas in land-use planning, zoning and development siting
		  ○ Acquire structures in highest hazard areas (demolish and convert to restricted open space)
		  ○ Relocation of Structures
		  ○ Open Space Preservation
		  ○ Create or increase setback limits on parcels near high-risk parcels
		• ***Reduce vulnerability to the hazard:***
		  ○ Consider hazard areas in land-use planning and development siting
		  ○ Stabilize vulnerable slopes near
		  ○ structures and infrastructure.
		  ○ Work with stakeholders such as USGS and SWCD to develop appropriate risk reduction strategies.

Landslide		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Install catch-fall nets for rocks at steep slopes near roadways • ***Increase Capability:*** ○ Increase understanding of hazard areas (e.g. Landslide Susceptibility Maps) - geotechnical surveys, LIDAR and mapping ○ Assessing vegetation in wildfire-prone areas to prevent landslides after fires (e.g. encourage plants with strong root systems) ○ Work with stakeholders such as USGS, NYS - Geological Survey and SWCD to develop appropriate risk reduction strategies. ○ Support and implement hazard disclosure for the sale/re-sale of property in identified risk zones ○ Develop county-level programs to document slide events (landslide inventory), and maintain its currency

SEVERE STORMS/HURRICANE/NOR'EASTER		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the Hazard***:
  ○ None
• ***Reduce exposure to the hazard***:
  ○ None
• ***Reduce vulnerability to the hazard:***
  ○ Retrofit structures (improved roofing, glazing, insulation, etc.)
  ○ Provide for redundant heat and power
  ○ Contact municipality or utilities to trim or remove trees that could affect power lines
  ○ Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation Program.
• ***Increase Capability***
  ○ Improve awareness of impending severe weather (e.g. joining NYAlert, obtain a NOAA weather radio)
  ○ Promote 72-hour self-sufficiency
  ○ Provide for redundant heat and power
	• ***Manipulate the Hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ Relocate critical infrastructure, such as power lines, underground
	  ○ Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations.
	• ***Increase Capability:***
	  ○ Contact municipality or utilities to trim or remove trees that could affect power lines
	  ○ Create redundancy (e.g. backup generators)
	  ○ Improve awareness of impending severe weather (e.g. joining NYAlert, obtain a NOAA weather radio)
	  ○ Develop a Continuity of Operations Plan (COOP)
	  ○ Monitor impending storm events so that you can release employees in such a manner as to not negatively impact emergency response personnel/services.
		• ***Manipulate the Hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ None
		• ***Reduce vulnerability to the hazard:***
		  ○ Harden infrastructure such as locating utilities underground.
		  ○ Trimming trees back from power lines
		  ○ Designate and strengthen critical road sections and bridges.
		  ○ Adopt ordinances that regulate the type and quantity of trees planted near utility lines
		  ○ Relocate critical infrastructure, such as power lines, underground
		• ***Increase Capability:***
		  ○ Support programs such as "Tree Watch" that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.
		  ○ Enforce building codes
		  ○ Increase communication alternatives
		  ○ Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors.
		  ○ Modify landscape and other ordinances to encourage

SEVERE STORMS/HURRICANE/NOR'EASTER		
Personal Scale	**Corporate Scale**	**Government Scale**
		appropriate planting near overhead power, cable, and phone lines ○ Promote awareness and participation in alert systems such as NYAlert ○ Provide NOAA weather radios to the public ○ Create/Enhance "mutual aid" agreements for response to all emergencies ○ Create/identify evacuation routes to be utilized during severe storm events. ○ Develop debris management plans. ○ Join "Storm-Ready" program ○ Provide early warning of impending severe storm events to identified critical or essential facilities. This would include facilities such as large employments centers, schools, hospitals ○ Promote emergency power supplies to private property. ○ Improve, expand or harden communications facilities and services ○ Recruit additional emergency personnel or use mutual aid agreements

SEVERE STORMS/HURRICANE/NOR'EASTER		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Increase sheltering capabilities ○ Increase capability to respond to power outages and downed power lines. Establish partnerships with utility providers through pro-active planning.

SEVERE WINTER STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the Hazard***:
  ○ None
• ***Reduce exposure to the hazard***:
  ○ Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation)
• ***Reduce vulnerability to the hazard:***
  ○ Insulate House to provide greater thermal efficiency and reduce heat loss.
  ○ Provide redundant heat and power
  ○ Insulate Structure
  ○ Ensure natural gas input/release valves do not get covered in snow
• ***Increase Capability***
  ○ Trim or remove trees that could affect power lines
  ○ Prepare emergency food and supplies to be self-sufficient for at least 72 hours in the event of a severe winter storm.
  ○ Be aware of inclement weather conditions and move your vehicles off of the street as severe weather systems approach.
  ○ Retrofit structures
	• ***Manipulate the Hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ Relocate critical infrastructure, such as power lines, underground
	  ○ Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations.
	  ○ Install tree wire
	• ***Increase Capability:***
	  ○ Trim or remove trees that could affect power lines
	  ○ Create redundancy in utilities and communications
	  ○ Develop a Continuity of Operations Plan (COOP) to address operations before, during and after coastal storm events.
	  ○ Utilize weather radios at the work place to keep your employees aware of severe weather conditions.
		• ***Manipulate the Hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ None
		• ***Reduce vulnerability to the hazard:***
		  ○ Harden infrastructure such as locating utilities underground where appropriate.
		  ○ Trimming trees back from power lines
		  ○ Designate snow routes and strengthen critical road sections and bridges.
		  ○ Adopt codes and regulations that address the issues of parking of vehicles along roadways during severe weather events.
		  ○ Develop or enhance the capacity/capability of stormwater conveyance systems.
		  ○ Provide backup power sources at vital critical facilities.
		• ***Increase Capability:***
		  ○ Support programs that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.
		  ○ Establish and enforce building codes that require all roofs to withstand snow loads--

SEVERE WINTER STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**
		Develop/Improve/Enforce building Codes in Hazard Areas ○ Increase communication alternatives ○ Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors. ○ Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines ○ Provide weather radios to vulnerable populations ○ Enhance public awareness campaigns to address those issues of alert and warning and actions to take during severe weather events. ○ Utilize the best available technology to enhance the warning systems for all severe weather events (i.e.: tornado warning systems). ○ Coordinate severe weather warning capabilities and the dissemination of warning amongst those agencies within the planning are with the highest degree of capability.

SEVERE WINTER STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Encourage local ordinances for planting tree near lines and join Tree City USA. ○ Increase tree management programs. ○ Join the Community Rating System ○ Join "Storm-Ready" ○ Retrofit critical structures and promote hazard resistant construction ○ Keep open communications and education of hazards for mobile home communities ○ Retrofit above-ground utilities to underground facilities if appropriate ○ Create a salt reserve or research alternates to stretch salt reserve. ○ Ensure accessibility to hospitals. ○ Provide better debris logistics and removal. ○ Provide better communication systems and back-up communication systems to inform public of hazards and to communicate during the hazard event.

Utility Failure		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the Hazard***:
  ○ None
• ***Reduce exposure to the hazard***:
  ○ Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation)
• ***Reduce vulnerability to the hazard:***
  ○ Insulate House to provide greater thermal efficiency and reduce heat loss.
  ○ Provide redundant heat and power
  ○ Insulate Structure
  ○ Ensure natural gas input/release valves do not get covered in snow
• ***Increase Capability***
  ○ Trim or remove trees that could affect power lines
  ○ Prepare emergency food and supplies to be self-sufficient for at least 72 hours
	• ***Manipulate the Hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ Relocate critical infrastructure, such as power lines, underground
	  ○ Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations.
	  ○ Install tree wire
	• ***Increase Capability:***
	  ○ Trim or remove trees that could affect power lines
	  ○ Create redundancy in utilities and communications
		• ***Manipulate the Hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ None
		• ***Reduce vulnerability to the hazard:***
		  ○ Harden infrastructure such as locating utilities underground where appropriate.
		  ○ Trimming trees back from power lines
		  ○ Provide backup power sources at vital critical facilities.
		• ***Increase Capability:***
		  ○ Support programs that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.
		  ○ Increase communication alternatives
		  ○ Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors.
		  ○ Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines
		  ○ Provide weather radios to vulnerable populations

Utility Failure		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Encourage local ordinances for planting tree near lines and join Tree City USA. ○ Increase tree management programs. ○ Join "Storm-Ready" ○ Retrofit above-ground utilities to underground facilities if appropriate ○ Provide better communication systems and back-up communication systems to inform public of hazards and to communicate during the hazard event.

WILDFIRE		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the Hazard***:
  ○ Clear potential fuels on property; dry, overgrown underbrush; diseased trees
• ***Reduce exposure to the hazard***:
  ○ Clean and maintain defensible space around structures
  ○ Locate outside hazard area
  ○ Mow regularly
• ***Reduce vulnerability to the hazard:***
  ○ Create and maintain defensible space around structures, provide water on site.
  ○ Use fire-retardant building materials
  ○ Create defensible spaces around your home.
• ***Increase Capability***
  ○ Employ Firewise techniques to safeguard your home
  ○ Identify alternative water supply points proximate to your home such as swimming pools, lakes, streams
  ○ Support your local fire department
  ○ Be aware of weather conditions that support/enhance the probability of wildfires
	• ***Manipulate the Hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	•
	• ***Reduce vulnerability to the hazard:***
	  ○ Create and maintain defensible space around structure and infrastructure and provide water onsite
	  ○ Use fire-retardant building materials
	  ○ Provide stored water to be utilized for fire fighting with appropriate fire department connections at facilities not equipped with fire hydrants or inadequate fire hydrant spacing
	• ***Increase Capability:***
	  ○ Support Firewise community initiatives
		• ***Manipulate the Hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ Clear fuels (dry underbrush, diseased trees) on land that can trigger and maintain wildfires
		  ○ Implement Best Management Practices on public lands
		• ***Reduce vulnerability to the hazard:***
		  ○ Create and maintain defensible space around structure and infrastructure
		  ○ Higher regulatory standards
		  ○ Establish water main supply and hydrants in unhydranted areas
		  ○ Decrease hydrant spacing
		  ○ Purchase
		• ***Increase Capability:***
		  ○ More public outreach and education efforts including an active “Firewise” program
		  ○ Identify fire response and alternative evacuation routes
		  ○ Seek alternative water supplies in urban wildland interface areas.
		  ○ Become a "Firewise" community
		  ○ Increase capability to fight wildfires utilizing equipment that can support wildfire fighting such as: tankers, engines with "pump-and-run" capabilities, dump tanks for tanker shuttle operations.

WILDFIRE		
		○ Develop/implement wildfire management plans. ○ Establish Mutual Aid Agreements with the Tender Task Force ○ Develop a Water Supply Plan

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE
Mitigation Action Development

Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by September 25, 2020 to:
Tony Subbio, Tetra Tech
Phone: (717)-839-5654 E-mail: tony.subbio@tetratech.com

Municipality: _____
Name and Title of Individual Completing Worksheet*: _____

Check in with your municipal planning team: Municipal officials or residents with historical knowledge including OEM Coordinator, Police, Fire, DPW, building inspector, municipal engineer, etc.

What is your biggest hazard concern? (flooding, stormwater flooding, falling trees, power loss, etc.)

Critical Facilities - Backup Power

Please list critical facilities that require backup power. If you have specifics (size of the generator, potential cost, etc.), please provide that information as well.

Critical Facilities - Flood Protection

If your emailed problem statement list included critical facilities that were located in the special flood hazard area (100-year floodplain), list them here and identify if they are protected from the 0.2% (500-year) flood or what could be done to protect them (relocate, elevate, floodproof, etc.). If you are unsure of their protections, assume they need additional protections.

Culverts - Undersized/In Need of Upgrade

Please indicate the location (Street? Stream/river?) of any culverts in your community that are undersized or are damaged from past flood events.

Flood Protection – Elevation or Buyout

Please identify homes or neighborhoods that would benefit from elevation or buyout to prevent future flood damages.

Infrastructure Protection

Please identify roads and other infrastructure that needs protection from flooding, storms, etc. Indicate what the protection measures are (elevate roadway, harden infrastructure, etc.)

Other Projects

Please identify other projects that you have in mind after reviewing your problem statements, past actions, risk assessment results, and mitigation catalog.

Action Worksheet			
Project Name:			
Project Number:			
Risk / Vulnerability			
Hazard(s) of Concern:			
Description of the Problem:			
Action or Project Intended for Implementation			
Description of the Solution:			
Is this project related to a Critical Facility?	Yes ☐	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:		**Estimated Benefits (losses avoided):**	
Useful Life:		**Goals Met:**	
Estimated Cost:		**Mitigation Action Type:**	
Plan for Implementation			
Prioritization:		**Desired Timeframe for Implementation:**	
Estimated Time Required for Project Implementation:		**Potential Funding Sources:**	
Responsible Organization:		**Local Planning Mechanisms to be Used in Implementation if any:**	

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Evaluation and Prioritization		
Project Name:		
Project Number:		
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		

Guidance to Complete the Mitigation Action Worksheet

The following provides additional guidance on how to complete the Mitigation Action Worksheet. Please note that NYS DHSES requires a minimum of two proposed mitigation activities; one of which cannot be a generator.

- If you have NFIP repetitive or severe repetitive flood loss properties, you must include a specific project to mitigate including the general location (neighborhood name, area of town – do not include specific addresses), type of mitigation (acquisition, elevation), details regarding outreach to homeowners and schedule for implementation.

- If you have critical facilities or lifelines in the floodplain, please identify a mitigation project to reduce flood impacts. If you already mitigated, please indicate the action completed. If it is not within your jurisdiction, consider working with the facility owner to conduct a feasibility study to identify the most effective path forward – need an outcome of the study to determine next steps.

Action Worksheet

Project Name: Please identify a unique project name for the mitigation action.

Project Number: 2020-Jurisdiction-001.

Assessing the Risk and Vulnerability

Hazard(s) of Concern: Please identify the hazard(s) being addressed with this action.

Description of the Problem: Provide a detailed narrative of the problem. Describe the hazard you wish to mitigate, its impacts to the jurisdiction, past damages and loss of service, etc. Include the street address of the property/project location (if applicable), adjacent streets, and easily identified landmarks such as water bodies and well-known structures, and end with a brief description of existing conditions (topography, terrain, hydrology) of the site.

Action/Project Intended for Implementation

Description of the Solution: Provide a detailed narrative of the solution. Describe the physical area (project limits) to be affected, both by direct work and by the project's effects; how the action would address the existing conditions previously identified; proposed construction methods, including any excavation and earth-moving activities; where you are in the development process (e.g., are studies and/or drawings complete), etc., the extent of any analyses or studies performed (attach any reports or studies).

Critical Facility: Please indicate whether or not the identified project is related to a critical facility or lifeline in your community.

Level of Protection: Please identify the level of protection the proposed project will provide. For example, 100-year (1%) flood.

Useful Life: Identify the number of years the project will provide protection against the hazard.

Estimated Cost: Identify all estimate costs associated with implementation.

Estimated Benefits: Identify the benefits that implementation of this project will provide (e.g., risk reduction). If dollar amounts are known, include them. If dollar amounts are unknown or are unquantifiable, describe the losses that will be avoided.

Mitigation Action Type:

Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.

Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

Goals:

Goal 1 - Protect life, property, and critical infrastructure from hazard impacts.

Goal 2 - Reduce the risk of hazards on life, property, and the environment.

Goal 3 - Educate the public, officials, and other stakeholders about the hazards they face and what can be done to mitigate hazard impacts.

Plan for Implementation

Prioritization: Please enter High/Medium/Low. Refer to the prioritization exercise and table.

Estimated Time Required for Project Implementation: Provide the estimated time required to complete the project from start to end.

Responsible Organization: Identify the name of a department or agency responsible for implementation, not the jurisdiction.

Desired Timeline for Implementation: Identify the desired start time for this project. For example, within six months.

Potential Funding Source(s): Identify multiple sources of potential funding. For example, FEMA HMGP and PDM Grants, CDBG-DR funding, etc.

Local Planning Mechanism to be Used in Implementation (if any): Consider the use of local planning mechanisms that will be used to implement the project.

Evaluation of Potential Actions/Projects

Actions/Projects Considered: Please consider three different options to mitigate the problem identified. One alternative is always to accept the current level or risk (tolerate the vulnerability/problem) by deciding to take no action at this time. Please include the name of the action considered, estimated cost to complete the project, and a description of the pros and cons of the project.

Reporting on Progress (for plan maintenance)

Date of Status Report: This section should be completed during plan maintenance/evaluation.

Report of Progress: Describe what progress, if any, has been made on this project. If it has been determined the jurisdiction no longer wishes to pursue implementation, state that here and indicate why.

Update Evaluation of the Problem and/or Solution: Provide an updated description of the problem and solution, and what has happened since initial consideration/development.

Please note this report on progress should be done, at minimum, each year prior to the annual Planning Committee update outlined in the plan maintenance procedures.

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

MITIGATION STRATEGY WORKSHOP SIGN-IN

DATE: 9/21/2020

Start time: 2:00pm **End time:** 4:15pm

NAME	ORGANIZATION	EMAIL	PHONE
Carol Sheibley	Village of Gowanda		716-532-3353
Robert Young	Village of Little Valley		716-498-1676
Susan Koch	Town of Little Valley - Town Clerk	yahoo.com	716-938-6441-W 716-938-6014-C
Thomas CROSS	T/O LV	" " " "	716 938-6123
Dan Stamy	T/o Perrysburg		716-359-5517
Joanna Quickmire	Town Farmersville		716-498-3209
David Rapp	Town New Albion		716-560-9[illegible] 716-257-3357
Mark CBurr	Cat Co. DPW		716-938-2431
Kimberly Merrill	CCDPW		716-938-2480
Naomi Gennings	CattCo OES	nagennings@cattco.org	716-512-2605

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

MITIGATION STRATEGY WORKSHOP SIGN-IN

DATE: 9/21/2020

Start time: 5:50pm **End time:** 8:00pm

NAME	ORGANIZATION	EMAIL	PHONE
Kim Merrill	DPW	kamerrill@cattco.org	7169382480
Terry McClory	T/O Franklinville	TPM716@yahoo.com	307-73 oc
Tim Byroads	T/O Machias	Machiashwy2015@yahoo.com	(716)353-8
Naomi Gennings	CattCo OES	nagennings@cattco.org	(716)512-2605
Mark CBurr	Catt Co. DPW	mcburre@cattco.org	716 938-243

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

MITIGATION STRATEGY WORKSHOP SIGN-IN

DATE: 9/22/2020

Start time: 8:00am **End time:** 10:20am

NAME	ORGANIZATION	EMAIL	PHONE
Kim Merritt	DPW	kamerrill@cattco.org	716 938 2480
Tom Chupa	DAYTON 2299510	TthomasChupa1954@icloud.com	
Mark Chudy	VO Ellicottville	Mark chudy@evlengineering.com	498 414 6098
Steve Karpoff	Poyton	Steve deputy5073@aol.com	9947
Don Wo	Village of [illegible]	[illegible]	257-5101
Jim Ayl	Village South, DAYTON		512-4752
Bryan Farmer	T/O Conewango	BryanJFarmer@icloud	490-2173
MIKE FOX	T/O CARROLLTON		716 378 3-3c
Jason Pearl	T/O Humphrey	humphreyhighway dept@gmail	378-6648

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

MITIGATION STRATEGY WORKSHOP SIGN-IN

DATE: 23 September 2020

Start time: 8:00am **End time:** 10:23am

NAME	ORGANIZATION	EMAIL	PHONE
Kimberly Merrill	DPW	kamerrill@cattco.org	716 938 2480
Jeffrey Van DeCar	Hinsdale	jeffvandecar@gmail.com	716-307-6353
Brad Hurley	mansfield	bkhurley44@AOL.com	474-76?
John Mashier	Allegany		796-1182
Joel Fiebelkorn	Leon	Leonhighway@Hotmail.com	394-1080
DALE SENN	RANDOLPH	dusenn@windstream.net	5973316
Dale Blood	Naples	dsbleblood01@gmail	938-683
Jim Milligan	Salamanca city	jmilligan@salmun.com	945-9C
Jim Haggerty	T/O Freedom	jhaghwysuper@gmail.com	258-8187
Mark CBurr	Catt Co DPW	mcburr@cattco.org	938-24

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

MITIGATION STRATEGY WORKSHOP SIGN-IN

DATE: 24 September 2020

Start time: 6pm **End time:** 8:30pm

NAME	ORGANIZATION	EMAIL	PHONE
Kimberly Merrill	DPW	kamerrill@cattco.org	716938.2480
David Heckman	Perrysburg/Rudolph		716-964-3173
Christopher Lester	Yorkshire	yorkshirecode@yahoo	716560-8964
MATT MCANDREW	ELLICOTTVILLE		716-699-2100
Ben Slotman	Ellicottville	Ben.Slotman@erlengineering.com	699 9005
Tim ENGELS 716-560-6391	ASHFORD HIGHWAY	ashfordgar@YAHOO	716 942-3243
ANTHONY EVANS	Portville	aEVANS@cattco.org	716-938-2641
Daren A. Smith	Delevan	delevansupt@roadrunner	716 307-5816
Naomi Gennings	Cattco OES	nagennings@cattco.org	716-512-2605
Mark C Burr	CattCo DPW	mcburr@cattco.org	716-938-243
Kathy Ellis	CCDPW	kmellis@cattco.org	716-938-2460
CRYSTAL ABERS	EDPT		
John Helgager	V. Allegany	jhelgager@allegany.org	(716)790-0073
TIM JACKSON	T/SALA	TIMJ4987@GMAIL	716-945-2541

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

MITIGATION STRATEGY WORKSHOP SIGN-IN

DATE: 25September 2020

Start time: 8:00am **End time:** 10:15am

NAME	ORGANIZATION	EMAIL	PHONE
Kimberly Mewill	CCDPW	kamewill@cattco.org	716 9382480
Pat Zink	T/o OLEAN	zinker65@yahoo.com	372-1060
George Schneider	T/o Lyndon	Lyndonhighway@yahoo.com	
John Walgus	T/o Persia	johnWalgus@	Town of Persia Co 716-260-7398
Cary Hatch	V/O Franklinville	chatch@franklinvilleny.org	716 676 5703
Toni Benz - (11:15)	T/o East Otto	EastOttoHwy@Gmail.com	
Bob Ring	City of Olean	BRING@CITYOFOLEAN.ORG	716.376 5650
Mark C Burr	Catt Co. DPW	mcburr@Cattco.org	716-9380-2431
Best phone #: (716) 676-9928			

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

MITIGATION STRATEGY WORKSHOP SIGN-IN

DATE: 29 September 2020

Start time: 9:30am **End time:** 11:45am

NAME	ORGANIZATION	EMAIL	PHONE
Kimberly Merrill	DPW	Kamerrill@cattco.org	716 938 7480
Robert Barber	T/O Otto	SKeeterspete@AOL.com	474-6746
Steve Mudd	T/O Portville	Smudd.H88@Gmail.com	(Todd Shaw 716-378-9988) (716-378-47
John Kist	T/O Portville	JohnKist18@Yahoo.com	716-307-160
MARK BURR	DPW	MCBURR@CATTCO.ORG	716 938 2431

MEETING NOTES

Meeting	Cattaraugus County Hazard Mitigation Plan (HMP) Draft Review Meeting		
Dates	November 19, 2020	**Times**	6:00 – 6:45 p.m.
Location	Webinar and In-person at the Cattaraugus County Department of Public Works, 8810 Route 242, Jack Ellis Drive, Little Valley, NY 14755		
Attendees	Richard Hemlich, Legislator, Cattaraugus County		
	Mark C. Burr, Director, Engineering and Highway Divisions, Department of Public Works, Cattaraugus County		
	Kim Merrill, Secretary to the Commissioner, Department of Public Works, Cattaraugus County		
	Mike Prinino, Deputy Commissioner, Department of Public Works, Cattaraugus County		
	Naomi Gennings, National Incident Management System (NIMS) Coordinator, Cattaraugus County Emergency Services		
	Steve Raiport, Disaster Control Coordinator, Town of Dayton		
	Ann Rugg, Supervisor, Town of East Otto		
	Matthew McAndrew, Supervisor, Town of Ellicottville		
	Gary Palumbo, Planner, Town of Ellicottville and Village of Ellicottville		
	Ben Slotman, Project Engineer at MDA Consulting Engineers, Town of Ellicottville and Village of Ellicottville		
	Carol Sheibley, Deputy Mayor, Village of Gowanda		
	Fred Filock, Supervisor, Town of Leon		
	Susan Koch, Town Clerk, Town of Little Valley		
	Jim Bowen, Mayor, Village of Little Valley		
	Robert Keis, Supervisor, Town of Mansfield		
	Bob Ring, Public Works Superintendent, City of Olean		
	Tim Richardson, Chief, City of Olean Fire Department		
	Dan Ackley, Highway Superintendent, Town of Persia		
	John Walgus, Supervisor, Town of Persia		
	Timothy Emley, Supervisor, Town of Portville		
	Kevin Clapp, Planning Manager, Mitigation Programs, New York State Division of Homeland Security and Emergency Services (NYS DHSES)		
	Paul Hoole, Mitigation Planning, Federal Emergency Management Agency (FEMA) Region II		
	Tony Subbio, Project Manager, Tetra Tech		

Purpose

The purpose of this meeting was to collect comments on the complete draft of the updated HMP.

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Draft Plan Review

Mr. Subbio led a discussion regarding each of the sections of the HMP. These sections are available on the HMP project website. Information addressed in each section is summarized below:

- **Section 1: Introduction** describes mitigation planning, identifies the participating jurisdictions, and provides an overview of the HMP. Attendees had no comments on, or corrections to, this section.
- **Section 2: Plan Adoption** describes the plan adoption process. Attendees had no comments on, or corrections to, this section.
- **Section 3: Planning Process** identifies the participants of the planning process, describes the planning activities undertaken during the HMP update process, and describes how the planning process will continue after the draft is approved. Mr. Subbio listed the meetings that were conducted as part of the planning process, and discussed the delays caused by the pandemic. Attendees had no comments on, or corrections to, this section.
- **Section 4: County Profile** describes the history of the county, its physical features, the population and demographics, building stock, land use and trends, and critical facilities. Mr. Burr stated that he will contact Mr. Subbio regarding suggestions about the soils analysis.
- **Section 5: Risk Assessment** identifies the hazards of concern, describes how each hazard is prioritized based on the level of risk it poses to the county and its jurisdictions, and includes full profiles of each hazard of concern. The hazards of concern are floods, landslides, severe storms, severe winter storms, utility failure, and wildfire. Attendees had no comments on, or corrections to, this section.
- **Section 6: Mitigation Strategies** describes past accomplishments in implementing hazard mitigation initiatives throughout the county; lists the hazard mitigation goals and objectives; describes the federal, state, county, and local capabilities that can be leveraged to reduce vulnerability to hazards; and describes how mitigation actions were identified, evaluated, and prioritized by each jurisdiction. Attendees had no comments on, or corrections to, this section.
- **Section 7: Plan Maintenance** identifies the HMP Coordinator and describes the responsibilities associated with this role. Ms. Merrill will be the Cattaraugus County HMP Coordinator. Section 7 also identifies members of the Planning Partnership that will maintain the plan over the next 5 years and describes how the plan will be monitored, evaluated, and updated. This section also describes the ways in which the HMP is integrated into other planning mechanisms and vice versa. Attendees had no comments on, or corrections to, this section.
- **Section 8: Planning Partnership** lists the participating jurisdictions and introduces the content of the jurisdictional annexes. Attendees had no comments on, or corrections to, this section.
- **Section 9: Jurisdictional Annexes** contains an annex for each participating jurisdiction. Each annex identifies the primary and alternate points of contact for the jurisdiction, describes the jurisdiction, assesses the risk posed to the jurisdiction by the hazards of concern, identifies

critical facilities, describes the jurisdiction's capabilities to implement hazard mitigation, lists the status of all mitigation actions in the 2014 version of the HMP, identifies the actions that the jurisdiction included in the HMP update, and prioritizes those actions. Mr. Subbio stated that the plan includes nearly 550 actions across the 44 jurisdictions. Key actions include the following:

  - A countywide flood insurance rate map (FIRM) update
  - Updates to the municipalities' flood damage prevention ordinances
  - Training for municipal floodplain administrators
  - Protecting critical facilities
  - Upgrades to stormwater management infrastructure

  Mr. Slotman stated that he will send comments to Mr. Subbio in the morning. Mr. Palumbo stated that he will coordinate with Mr. Slotman on the comments. Mr. Raiport confirmed with Ms. Merrill and Mr. Subbio that comments on the Town of Dayton's annex have been received. Ms. Merrill stated that the county will submit a few changes as well.
- Mr. Subbio described the set of appendices that are included in the plan. Attendees had no comments on, or corrections to, the appendices.

Next Steps

The following next steps were identified during the meeting:

- Tetra Tech will finalize the draft plan.
- Tetra Tech and the county will provide the updated sections to Mr. Clapp and Mr. Hoole.
- Mr. Hoole stated that FEMA can issue the "approvable pending adoption" status to the HMP soon after receiving the updated sections of the plan, based on the discussions of edits to be made.

Ms. Merrill thanked the county and municipal officials, Mr. Clapp, and Mr. Hoole for attending the meeting and otherwise participated in the planning process. The meeting adjourned at 6:45 p.m.

TETRA TECH

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Cattaraugus County Hazard Mitigation Plan Update

Plan Draft Review Meeting

1

Welcome

2

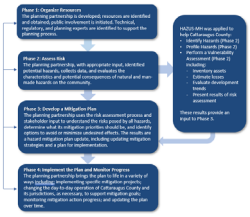
Agenda

- Welcome
- Draft Plan Review
- Next Steps
- Questions

3

Draft Plan Review

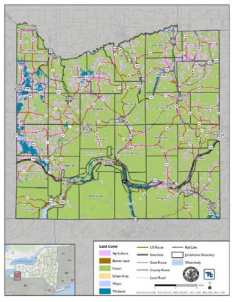
- Section 1: Introduction
  - Mitigation Planning
  - Participating Jurisdictions
  - Overview
- Section 2: Plan Adoption
  - Adoption Process
- Section 3: Planning Process
  - Participants
  - Activities
  - Ongoing Process



4

Draft Plan Review

- Section 4: County Profile
  - History
  - Physical Setting
  - Population and Demographics
  - General Building Stock
  - Land Use and Population Trends
  - Critical Facilities
- Section 5: Risk Assessment
  - Hazards of Concern
  - Hazard Ranking
  - Hazard Profiles



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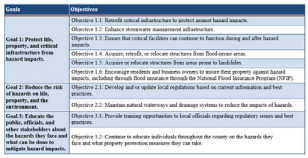
Draft Plan Review

- Section 6: Mitigation Strategies
  - Past Accomplishments
  - Goals and Objectives
  - Capability Assessment
    - Plans, Programs, and Resources Available
    - Administrative and Technical Capabilities
    - Fiscal Capabilities
  - Mitigation Strategy Development and Update
    - Action Identification
    - Evaluation and Prioritization
    - Benefit/Cost Review



Goals	Objectives
Goal 1: Protect life, property, and critical infrastructure from hazard impacts.	Objective 1.1: Retrofit critical infrastructure to protect against hazard impacts.
	Objective 1.2: Enhance stormwater management infrastructure.
	Objective 1.3: Ensure that critical facilities can continue to function during and after hazard impacts.
	Objective 1.4: Acquire, retrofit, or relocate structures from flood-prone areas.
	Objective 1.5: Acquire or relocate structures from areas prone to landslides.
	Objective 1.6: Encourage residents and business owners to insure their property against hazard impacts, including through flood insurance through the National Flood Insurance Program (NFIP).
Goal 2: Reduce the risk of hazards on life, property, and the environment.	Objective 2.1: Develop and/or update local regulations based on current information and best practices.
	Objective 2.2: Maintain natural waterways and drainage systems to reduce the impacts of hazards.
Goal 3: Educate the public, officials, and other stakeholders about the hazards they face and what can be done to mitigate hazard impacts.	Objective 3.1: Provide training opportunities to local officials regarding regulatory issues and best practices.
	Objective 3.2: Continue to educate individuals throughout the county on the hazards they face and what property protection measures they can take.

6

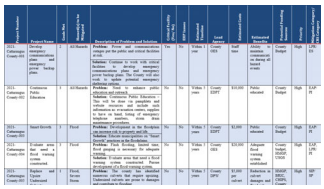
Draft Plan Review

- Section 7: Plan Maintenance
  - HMP Coordinator
  - Ongoing Planning Partnership
  - Monitoring
  - Continuous Evaluation and Progress Reports
  - Updating
  - Integration of Hazard Mitigation with Existing and Future Programs
  - Continued Public Involvement

7

Draft Plan Review

- Section 8: Planning Partnership
  - Participating Jurisdictions
  - Introduce Jurisdictional Annexes
- Section 9: Jurisdictional Annexes
  - Municipal Planning Team
  - Municipal Profile
  - Hazard Event History
  - Vulnerabilities
  - Capabilities
  - Mitigation Strategy
  - Status of Past Mitigation Actions
  - Current Mitigation Actions



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Draft Plan Review

- Appendices
  - Appendix A: Adoption Resolutions
  - Appendix B: Participation Matrix
  - Appendix C: Meeting Documentation
  - Appendix D: Public and Stakeholder Outreach
  - Appendix E: Risk Assessment Supplementary Data
  - Appendix F: Critical Facilities
  - Appendix G: Plan Review Tools
  - Appendix H: Plan Review Matrix

9

Status and Next Steps

- Status:
  - Submitted to NYS DHSES on October 16, 2020
  - NYS DHSES review and address comments through November 6, 2020
  - Submitted to FEMA Region II on November 6, 2020
- Next Steps:
  - Finalize the draft based on this meeting
  - Provide any updates to NYS DHSES and FEMA
  - FEMA review through mid-January 2021
  - Revise and resubmit (if necessary) by the end of January 2021
  - Approvable pending adoption in February 2021
  - Plan adoption in March 2021

10

Thank you for your time today.
Any questions?

Be well and stay safe.

11

11

AGENDA

CATTARAUGUS COUNTY HAZARD MITIGATION PLAN UPDATE
Plan Draft Review Meeting

Thursday, November 19, 2020 | 6:00 – 8:00 p.m.

1. **Welcome**
2. **Draft Plan Review**
   a. Section 1: Introduction
   b. Section 2: Plan Adoption
   c. Section 3: Planning Process
   d. Section 4: County Profile
   e. Section 5: Risk Assessment
   f. Section 6: Mitigation Strategies
   g. Section 7: Plan Maintenance
   h. Section 8: Planning Partnership
   i. Section 9: Jurisdictional Annexes
   j. Appendices
3. **Status and Next Steps**
   a. Status
   b. Next Steps
4. **Questions**

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

PLAN DRAFT REVIEW MEETING SIGN-IN & LIST OF CALL-IN ATTENDEES

Thursday, November 19, 2020

Start time: 6pm **End time:** 12:45 pm

NAME	MUNICIPALITY	EMAIL	PHONE
Kimberly Merrill	CCDPW	kamerill@cattco.org	7169382450
Mark C Burr	Catt Co DPW	Mcburr@Cattco	716-938-24
Mike Prinino	Cattco DPW	mjprinino@cattco.org	7169382
Susan Koch	Town of Little Valley	townlv2@yahoo.com	716 938-6441

2020 MULTIJURISDICTIONAL HAZARD MITIGATION PLAN

PLAN DRAFT REVIEW MEETING SIGN-IN & LIST OF CALL-IN ATTENDEES

Thursday, November 19, 2020

On the call

NAME	MUNICIPALITY	EMAIL	PHONE
Tony Subbio	Tetra Tech		
DPW group - Kimberly Merrill	Secretary to Commissioner of Public Works		
Michael Primino	Deputy Commissioner		
Mark C. Burr	Director of Engineering		
Sue Keech	Town of Little Valley Clerk		
Ben Slotman	Village & Town of Ellicottville - Engineer		
Matt McAndrew " "	- Supervisor		
Dave Hoole	- FEMA		
Kevin Clapp	- DHSES		
Richard Helmich	- Public Works Committee Chairman		
↳ Cattaraugus County Legislator			
Robert Keis	- Town of Mansfield - Supervisor		
Ann Rigg	- Town of East Otto - Supervisor		
Jim Richardson	- City of Olean - Fire Chief		
Dan Ackley	- Town of Persia - Highway Superintendent		
Steve Raiport	- Town of Dayton - Emergency Manager		
Naomi Jennings	- Catt Co. Emergency Services		
Bob Rice	City of Olean Public Works Director		
Gary Palumbo	- Ellicottville T+V - Planner		
Fred Floth	- Leon - Town Supervisor		
Jim Bowen	- Village of Little Valley - Mayor		
→ 6:32 pm - John Walczus	Town of Persia - Supervisor		
→ 6:36 pm - *94 number?			
→ Jim Emley - Ashford?			