

Wyoming County Multi-Jurisdictional All-Hazard Mitigation Plan Update

May, 2014

*This document was prepared for the Wyoming County
Emergency Management Office in Wyoming County, New York
by the Genesee/Finger Lakes Regional Planning Council.*

May 2014



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Mission Statement:

Genesee/Finger Lakes Regional Planning Council (G/FLRPC) will identify, define and inform its member counties of issues and opportunities critical to the physical, economic and social health of the region. G/FLRPC provides forums for discussion, debate and consensus building and develops and implements a focused action plan with clearly defined outcomes, which include programs, personnel and funding.

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Chapter 1: Introduction

SECTION 1.1 BACKGROUND

The update to the Wyoming County Multi-Jurisdictional All-Hazard Mitigation Plan was prepared by the Genesee/Finger Lakes Regional Planning Council (G/FLRPC) under the direction of the Wyoming County All-Hazard Mitigation Plan Update Committee, and Wyoming County Office of Emergency Management.

It was understood that much of the content of the existing 2008 plan may still be relevant, and should remain in the Update, but it was important to repeat each step of the original planning process in order to determine what was still relevant and up-to-date and what should stay as background information. Going through the process again and reviewing past information helped to determine where new information was needed and what changes needed to be made to reflect current conditions. Genesee/Finger Lakes Regional Planning Council (G/FLRPC) led the process and wrote the Plan Update with guidance and information provided by Wyoming County Emergency Management and the Hazard Plan Update Committee. The text makes note of portions that are updated vs. portions that use existing text.

SECTION 1.2 PURPOSE

The purpose of the Wyoming County Multi-Jurisdictional All-Hazard Mitigation Plan Update process was to review the Existing Plan and makes changes where appropriate to reflect current conditions and priorities in order to adjust and improve the Existing Plan. This included the addition of new data, review of risk and vulnerability factors, and review of past mitigation actions/progress in order to create an updated risk assessment and mitigation action strategy.

The general purpose of the Plan Update is the same as the Existing Plan which was to help the County and its municipalities:

- Break the cycle of destruction affecting the lives, safety and property of local residents by addressing mitigation concerns prior to future hazard events;
- Pursue effective mitigation strategies that are realistic, achievable and will reduce the potential of future damage and economic loss;
- Plan ahead for recovery efforts that will follow future disaster events;
- Qualify for additional pre-disaster and post-disaster funding; and
- Meet New York State and Federal legislative requirements regarding pre-disaster mitigation.

SECTION 1.3 SCOPE

The scope of the Wyoming County Multi-Jurisdictional All-Hazard Mitigation Plan Update is countywide. The Plan addresses natural and man-made hazards identified as a threat to the residents and property of the County and its twenty-four municipalities (the Village of Pike was dissolved and incorporated into the Town of Pike thus reducing the number of municipalities).

SECTION 1.4 AUTHORITY

Federal authorization to prepare a countywide all-hazard mitigation plan comes from the Disaster Mitigation Act of 2000 and 44 CFR (Code of Federal Regulations, Title 44). These regulations provide a mandate directing local

governments to assess the potential dangers posed by natural hazards to their communities and propose cost effective means of reducing/eliminating the threats posed by those hazards.

Hazard mitigation planning programs are strongly encouraged and supported by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974, known as the Stafford Act (PL 93-288, as amended) and New York State Executive Law Article 2B: State and Local Natural and Man-Made Disaster Preparedness.

SECTION 1.5 FUNDING

The Plan Update was funded in a similar way to the Existing Plan in part by a grant through the Hazard Mitigation Grant Program (HMGP) through the Federal Emergency Management Agency and the New York State Office of Emergency Management. The Wyoming County Emergency Management Office administered the grant and provided the required grant match. Representatives from Wyoming County agencies and municipalities contributed significant in-kind time and effort towards the collection and review of data critical in developing this plan.

Chapter 2: The Planning Process

SECTION 2.1: PLAN UPDATE COMMITTEE

G/FLRPC led the committee process with the assistance of Wyoming County Emergency Management and presented information and ideas to the Hazard Plan Update Committee. The Committee and Wyoming County Emergency Management provided guidance, set priorities, provided data and acted in the decision making role throughout the process to decide what should remain the same vs. what should be updated or changed and contributed to the direction and content of those changes.

All of the organizations and job titles that were represented on the original Planning Committee were invited to participate again (some roles were filled by new representatives where there was a staff change). Groups invited to participate included:

- representatives from each municipality;
- relevant county, state and federal agencies;
- health care and emergency service providers;
- and an assortment of other interested stakeholders

The Planning Committee only included one or a few people from municipalities. All throughout the process Committee members were encouraged to share information they received at meetings with their municipalities or agencies, and gather additional data and information at this level to return to the Committee.

The following table lists the stakeholders that participated in the all-hazard mitigation planning update process through meeting attendance.

Table 2.1: Hazard Plan Update Committee			
Active members (attended at least one meeting)			
First Name	Last Name	Agency or Municipality	Title
Doug	Patti	Town of Attica	Town Supervisor
Bruce	Kruger	Town of Attica	Superintendent of Highways
Howard	Barracough	Town of Attica	Town Councilman
Douglas	Post	Village of Attica	Clerk/Treasure
Ken	Czworka	Town of Bennington	Superintendent of Highways
Ellen	Grant	Town of Bennington	Town Supervisor
Richard	Jensen	Town of Bennington	Superintendent of Highways
Darryl	Nourse	Town of Castile	Deputy Superintendent of Highways
Stephen	Tarbell	Town of Castile	Town Supervisor
Cliff	Scott	Town of Castile	
Tom	Wright	Village of Castile	Assistant Fire Chief
Marvin	Wilcox	Village of Castile DPW	Superintendent of Public Works
Michael	Bell	Town of Covington	Superintendent of Highways
Jerry	Davis	Town of Covington	Town Supervisor
Joe	Kushner	Town of Eagle	Town Supervisor
Randy	Williams	Town of Eagle	Superintendent of Highways
Doug	Bailey	Town of Eagle	Bliss Fire Department
Don	Roberts	Town of Eagle, Town and Village of Gainesville, Village of Perry, Town of Pike	Zoning Officer
Dennis	Hare	Town of Gainesville	Superintendent of Highways

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Tom	Dixon	Town of Gainesville	Town Supervisor
Jean	Totsline	Town of Genesee Falls	Town Supervisor
Jim	Fleischman	Town of Java	Town Supervisor
Daniel	George	Town of Java	Superintendent of Highways
Daniel	Leuer	Town of Middlebury	Town Supervisor
Robert	Smart	Town of Middlebury	Superintendent of Highways
Ken	Strathearn	Town of Middlebury	
Franklin	Dickes	Town of Orangeville	Superintendent of Highways
Jim	Brick	Town of Perry	Town Supervisor
Mike	Post	Town of Perry	Deputy Superintendent of Highways
Edward	Koziel	Village of Perry	Superintendent of Public Works
Howard	Wood	Village of Perry	Mayor
Terry	Murphy	Village of Perry	Administrator
Mike	Laraby	Village of Perry	Trustee/Dep. Mayor
Todd	Hinz	Village of Perry	Public Works
Larry	Rogers	Town of Pike	Town Supervisor
Sandy	King	Town of Pike	Deputy Treasure/Clerk/Bookkeeper
John	Knab	Town of Sheldon	Town Supervisor
David	Ricketson	Town of Sheldon	Superintendent of Highways
Lynne	Metz	Town of Sheldon	Town Board Member
Thomas	Coverdale, Jr.	Village of Silver Springs	Deputy Mayor
James	Nauert	Village of Silver Springs	Superintendent of Public Works
Pam	Fiegl	Village of Silver Springs	Clerk/Treasure
Tom	Dixon	Village of Silver Springs	Mayor
Rebecca	Ryan	Town of Warsaw	Town Supervisor
Dave	Lanni	Town of Warsaw	Superintendent of Highways
James	Nelson	Town of Wethersfield	
John	Copeland	Town of Wethersfield	Town Supervisor
Gilbert	Stearns	Village of Warsaw	Superintendent of Public Works
Anthony	Santoro	Wyoming County Emergency Management	Director of Fire and Emergency Management
Pearl	Granger	Wyoming County Emergency Management	Administrative Assistant
Art	Buckley	Wyoming County Planning	County Planner
Tom	Kicior	Genesee/Finger Lakes Regional Planning Council	Senior Planner
Dave	Zorn	Genesee/Finger Lakes Regional Planning Council	Executive Director
Joan	Petzen	Cornell Cooperative Extension, Wyoming County	Agriculture - Program Leader
Nicholas	MacVie	NYS Office of Emergency Management / DHSES	Regional Coordinator
Doris	Bannister	Wyoming County	Historian
Rhonda	Pierce	Wyoming County Clerk's Office	Clerk
Jim	Bodensteiner	Wyoming County Community Action	Director of Housing Opportunities
Lori	Roche	Wyoming County Community Health System	Chief Clinical Officer
David	Rumsey	Wyoming County DSS	Commissioner
Don	Roberts	Wyoming County Fire and Building Codes	County Code Enforcement Officer
Greg	Collins	Wyoming County Health Department	Commissioner of Public Health/Medical Director
Laura	Paolucci	Wyoming County Health Department	Public Health Administrator
Brian	Meyers	Wyoming County Health Department	Emergency Preparedness Coordinator

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Todd	Gadd	Wyoming County Highway Department	County Highway Superintendent
Dawn	Luckenbach	Wyoming County Highway Department	Secretary to the Highway Supt.
Colleen	Eccleston	Wyoming County Mental Health Department	Assistant Director For Adult Services
Rick	Dean	Wyoming County Real Property Tax Services	Director
Greg	McKurth	Wyoming County Soil and Water Conservation District	District Manager
Amy	McGinnis	Wyoming County Soil and Water Conservation District	Conservation Technician

The Plan Update Committee members listed above participated in developing the Plan by attending meetings, offering ideas, concerns and direction and providing data and information related to their areas of expertise and affiliation. See Appendix Ch-2 *Hazard Plan Update Committee Meeting Attendance/Participation* for more detailed participation information.

Meeting information and plan drafts were distributed to the above groups including those that chose not to participate.

Additional organizations in the County not included in the table above were invited to participate, but choose not to take an active role such as the Red Cross; NYS Police; Warsaw Police; Wyoming County: IDA, Office of the Aging, Real Property Tax Services, and the Sheriff's Office

Municipalities and agencies (such as EMOs) from Counties bordering Wyoming County were also invited to participate on the updated Planning Committee, but chose not to. All committee meetings were open to general public, and meeting notifications were posted on the Wyoming County website.

The Wyoming County Office of Emergency Management (EMO) provided overall project update oversight, including identifying individuals and organizations for participation, sending meeting invitations and information to the Planning Committee, and helping to obtain data.

G/FLRPC staff provided technical assistance to the committee members, updated maps, set meeting agendas, ran meetings, and assisted the County EMO with organizing meeting dates, times, and locations, as well as preparing minutes for each meeting.

G/FLRPC staff also conducted research for updates and additions such as those related to: federal, state and local laws/plans/programs; community demographics; recent hazard events; building trends; and values/location of Critical Facilities and Community Assets. Sources of information consisted of a variety of federal, state and local organizations and databases as well as information provided by Plan Update Committee members.

SECTION 2.2: A MULTI-JURISDICTIONAL EFFORT

The Plan Update was a multi-jurisdictional effort which included twenty-four municipalities in Wyoming County (see *Map 1 – Wyoming County*). The Existing Plan included twenty-five municipalities, but in 2009 the Village of Pike was dissolved as a political entity into the Town of Pike.

Municipal representatives such as Supervisors/Mayors, Clerks, Code/Zoning Officers, Highway Dept. Officials, and Public Works Officials were asked to attend both the regular committee meetings and the regional meetings which were held at a more local level to gather specific municipal data. County and non-municipal agencies were asked to attend the regular committee meetings, and a special Agency meeting.

The Town and Village of Arcade were in the process of completing their own municipal Town and Village Hazard Mitigation Plan Update when the County process was beginning. The County and Arcade's processes even overlapped by a few months. Arcade's plan was approved 3/19/2012 as an appendix to the County Plan. Because Arcade had just

gone through the entire in-depth process on their own, representatives from the Village, Town and County agreed that the data within the Arcade Update would be considered up-to-date in general, and could be used for the County Plan Update rather than requiring Arcade to start the entire process all over again. Arcade was kept informed about meetings and progress, and contacted to reconfirm data when needed. Arcade's annual public meeting for plan review was held in the Village of Arcade on 4/26/13 and also served as a more formal review of the Plan to determine if any changes or updates were needed before information was incorporated into the County Plan Update. For more information see the March 26, 2013 meeting summary below, or view the *Village of Arcade All Hazard Mitigation Plan Update* at: <http://www.gflrpc.org/Publications/ArcadeAllHazard/HazardMitigationPlanUpdate/index.htm>

Table 2.2: Wyoming County Municipalities

Arcade, Town	Castile, Town	Gainesville, Village	Perry, Town	Warsaw, Town
Arcade, Village	Castile, Village	Genesee Falls, Town	Perry, Village	Warsaw, Village
Attica, Town	Covington, Town	Java, Town	Pike, Town	Wethersfield, Town
Attica, Village	Eagle, Town	Middlebury, Town	Sheldon, Town	Wyoming, Village
Bennington, Town	Gainesville, Town	Orangeville, Town	Silver Springs, Village	*(Village of Pike has been dissolved)

SECTION 2.3: PLANNING CHRONOLOGY

The following documentation offers a chronological overview of each meeting held by the Wyoming County All-Hazard Mitigation Plan Update Committee, as well as the regional municipal meetings and public presentation/Q&A meetings held to inform the public of the process and plan and allow them to ask questions, contribute ideas, and get involved if they chose to.

2.3.A: Meetings

October 12, 2011 – Plan Update Committee - The first Plan Update Committee meeting was both a kick-off meeting that included a PowerPoint presentation explaining hazard planning, the update process and the committee's roles, as well as a working meeting. This included a review and update of the Hazards New York (HAZNY) process used to rank hazards, and a request for updated land use plans and laws.

See Chapter 5 for more in-depth description of the HAZNY update.

October 19, 20, 2011 - Regional Meetings

October 19, 2011 - Region 3, morning meeting in the Town of Perry

October 19, 2011 - Region 4, afternoon meeting in the Town of Pike

October 20, 2011 - Region 1, morning meeting in the Town of Bennington

October 20, 2011 - Region 2, afternoon meeting in the Town of Eagle

Regional meetings were held in order to discuss the Plan Update and collect more detailed data specific to each municipality. The County was divided along municipal boundaries into four planning regions and one meeting was held in each region. Having multiple locations for meetings around the county also made it convenient for more people to attend.

Region 1 – Northwest - Town of Attica, Village of Attica, Town of Bennington, Town of Orangeville, Town of Sheldon

Region 2 – Southwest - Town of Arcade, Village of Arcade, Town of Eagle, Town of Java, Town of Wethersfield

Region 3 – Northeast - Town of Covington, Town of Middlebury, Town of Perry, Village of Perry, Town of Warsaw, Village of Warsaw, Village of Wyoming

Region 4 - Southeast - Town of Castile, Village of Castile, Town of Gainesville, Village of Gainesville, Town of Genesee Falls, Town of Pike, Village of Silver Springs

Meetings were attended by municipal representatives such as board/council members, clerks, zoning officers, highway dept. officials, public works dept. officials, fire dept. officials, etc. (see Appendix Ch-2 *Hazard Plan Update Committee Meeting Attendance/Participation*). Attendees discussed various hazard mitigation topics and contributed local knowledge and information needed for the Plan Update. Information collected at these meetings was incorporated into chapters 3-7 of this Plan Update. Specific topics of discussion included:

- the update process and Existing Plan
- hazard locations;
- historic hazard events;
- updated County hazard ranks and municipal concerns;
- new and updated local laws/plans/studies;
- existing Critical Facilities/Community Asset Facilities and additions;
- and potential locations of future development areas;

April 30, 2012 –Plan Update Committee - consisted of a review of work completed, data gathered, and gathering new information. The Committee reviewed data collected from databases, organizations and the municipal regional meetings including historic hazard events and vulnerability information, such as draft hazard maps. Committee members also contributed related information and shared additional knowledge/data on new topics. Topics included:

- obtaining local law updates;
- past hazard events;
- future development areas;
- National Flood Insurance Program (NFIP) compliance;
- Critical Facilities and Community Asset Facilities location and assessment;
- planning for the public meeting.

July 10, 2012 – Public Meeting – G/FLRPC gave a presentation at the Wyoming County Board of Supervisors meeting to inform the public about Hazard Planning, the Hazard Planning Update taking place and ways the public could get involved if interested. The presentation was aimed at people who were not familiar with the process. The decision was made to present at a board of supervisors meeting instead of holding a meeting just to talk about Hazard planning for two main reasons. This type of meeting would ensure good public attendance (including the types of people interested in public processes) and it served to inform the town supervisors more about the process and give them a chance to ask questions or give feedback (not all supervisors were involved on the committee).

The meeting was scheduled after some of the assessment was complete in order to include some of this information regarding hazard events, vulnerability etc. The presentation started with a background explanation of what Hazard Planning is, and why it is important, and moved on to a summary of the Existing Plan and an explanation of the update process. Early progress was reported, and next steps in the process were explained. The presentation concluded with an invitation to contact G/FLRPC anytime or visit the web page for more information or to get involved in the process.

A question and answer session followed. Attendees were supportive of the Plan process and a few questions were asked from the Board of Supervisors relating to how a Plan Update would open up FEMA/NYSOEM funding opportunities.

February 20, 2013 – Plan Update Committee-Agency Meeting – This meeting targeted County, Regional and State Agencies to discuss the hazard plan at the County scale. Discussion included information sharing and concerns of specific agencies, especially County Departments. Agency representatives discussed and shared information regarding: past hazard plan implementation, mitigation action progress, and mitigation action changes and additions going forward. Attendees were encouraged to review Chapter 8 of the Existing Plan which was posted online. The

Goals and Objectives of the Existing Plan were reviewed. Each action was reviewed individually to determine progress made (incomplete, ongoing, complete, etc.), if the action was still a priority to include in the update, if the priority had changed, if any additions or changes needed to be made, and finally what additional mitigation actions should be added for the update based on current vulnerability.

March 26, 2013 – *Village and Town of Arcade Annual Hazard Plan Review Meeting* – The meeting was hosted by the Village after a Village Board meeting. It was attended by the Village Board, Village Department of Public Works, Arcade Fire Department, County Planning Department, County Health Department, and about 10 members of the public. Larry Kilburn, Superintendent of Public Works gave a background of the Plan and information about mitigation action progress. The group discussed whether vulnerability had changed the first year due to new hazard events, new development, etc. The consensus was that it had not, and that the information in the one year old plan was still up-to-date, and should be incorporated into the County Plan without needing major changes. Members of the public had a few basic background questions regarding Hazard Planning.

April 25, 2013 – *Plan Update Committee – Municipal Workshop* – Municipal representatives of the Plan Update Committee were invited to attend a workshop type meeting to provide information with focus on the mitigation strategy. Representatives were asked to give information pertaining to municipal mitigation action progress and updates. This included determining whether each existing action was incomplete, ongoing, complete, etc.; if the action was still a priority to include in the update; if the priority had changed; if any additions or changes needed to be made; and finally what additional mitigation actions should be added for the update based on current vulnerability. Many representatives believe expanding the amount of mitigation actions their community would try to accomplish was not realistic especially when they had not completed all of the previous actions. Attendees also provided information on past hazard plan monitoring/implementation progress, and the implementation methods their municipalities will use going forward

A description of data needs was distributed prior to the meeting and some municipalities chose the option to submit all of this information prior to the meeting rather than attending the workshop.

October, 2013 – *Plan Review* – The full committee, the public and additional stakeholders were invited to review the draft plan and give comments and concerns. (see below).

2.3.B: Public Participation

All planning committee and regional (municipal) meetings were open to the general public. Meeting announcements as well as Plan information, and drafts for review were posted on the Wyoming County Bureau of Emergency Management Webpage at http://www.wyomingco.net/emergency/2012_All_Hazard_Mitigation_Plan.html. The decision to host the project webpage on the county's website was made in order to attract the attention of residents who may be visiting the website for other reasons.

The public was invited to attend the **July 10, 2012** – *Public Meeting*, described above. Press releases were sent to the Batavia Daily News which published the meeting announcements. Announcements were also posted on the Wyoming County Bureau of Emergency Management Webpage.

In October 2013, a press release was issued explaining that copies of the draft Plan Update were available for the public to review in the Wyoming County Emergency Management Office and posted to the projects website on the County Emergency Management page. This announcement was also sent to committee members and anyone who had participated in the process (see Appendix Ch-2 Hazard Plan Update Committee Meeting Attendance/Participation). Additional organizations in Wyoming County that were not directly involved in the process were also invited to review such as the Red Cross; NYS Police; Warsaw Police; Wyoming County: IDA, Office of the Aging, Real Property Tax Services, and the Sheriff's Office. Municipalities and agencies (such as EMOs) from Counties bordering Wyoming

County were also invited to review the draft plan. Reviewers were asked to read the plan and ask questions, suggest changes, recommend additions or point out any issues.

In addition to changes/edits made by Wyoming EMO, specific comments were given by:

- Wyoming County Code Enforcement Officer (and Zoning Officer for Eagle, Pike, Village of Perry, Town and Village of Gainesville) – regarding floodplain management procedures and a new floodplain development database
- Town of Pike – regarding a structure thought to have been in a flood zone
- Wyoming County Health Department, Emergency Preparedness Coordinator – regarding a committee member name correction
- Wyoming County Health Department, Public Health Administrator
- Town of Castile – regarding a committee member name correction, dangerous intersection additions, and adjustments to municipal utility company providers
- Village of Castile DPW – regarding a dangerous intersection name correction
- Wyoming County Historian – regarding corrections to Wyoming County’s historic background

2.3.C Town and Village of Arcade Hazard Plan Meetings and Public Participation

June 2, 2010 – The Committee met with G/FLRPC to discuss the content of the Existing Plan and planning process and the update process that would be undertaken.

December 13, 2010 – The Committee was joined by Bill Correa from NYSOEM who facilitated an update to Hazards New York (HAZNY) in order to reevaluate and rank hazards based on their effects and Arcade’s vulnerability to each. The Committee also reviewed and updated the hazard location extents, updated the Critical Facilities, and reviewed existing mitigation actions that were completed since the Existing Plan was adopted.

December 28, 2010 – Committee Conference Call - Committee members and G/FLRPC participated in a conference call in order to finish updating the HAZNY ranking.

January 19, 2011 – The Committee met and reviewed the vulnerability assessment for each hazard and added more information and detail where possible. This meeting also included a discussion of future land use and development trends as well as a determination of which hazards should be prioritized and investigated in-depth for the Mitigation Strategy. The Committee also reviewed and adopted the Wyoming County Hazard Mitigation Plan’s goals and objectives to be used for the Town and Village of Arcade’s Hazard Mitigation Plan Update.

March 8, 2011 – Committee members reviewed the suggested mitigation actions from the Existing Plan to determine revisions. Next, the Committee reviewed a comprehensive list of potential action additions and chose to add those they believed were medium to high priority actions. Actions were further prioritized qualitatively based a number of factors including community acceptance, cost effectiveness, capacity to undertake, and social/economic/environmental impact. The Committee also decided to update the Plan Maintenance section of the document using the Wyoming County Hazard Mitigation Plan as a guide.

Much of the Planning Committee itself was chosen in order to represent a large cross-section of the general public in the Town and Village of Arcade. In addition to this input, the general public was also invited to be involved in the planning process, and to review the draft update.

The public was invited to participate in the Plan update process by attending two public meetings/presentations, and reviewing the draft Plan. The first public meeting was discussed at the December 21, 2010 Village Board of Trustees meeting and the minutes of the meeting were posted in the Arcade Herald. Both public meetings were held immediately prior to regularly scheduled Village Board of Trustee meetings. Members of the Town Board and the

public were invited to attend. The meeting was advertised (meeting topic, date, location) on the Village of Arcade's website and in the Arcade Herald.

The following two public meetings/presentations were held:

- January 4, 2011
 - Summarized the 2005 Plan/Process and the Update Process
 - Reviewed the revised hazard rankings
 - Received input from attendees and answered questions
 - Incorporated input and considered concerns in further plan process and development
- May 17, 2011
 - Summarized the Existing Plan/Process and the Update Process
 - Reviewed the draft of the Plan Update including the Risk Assessment, Mitigation Strategy, and Plan Maintenance
 - Received input from attendees and answered questions
 - Incorporated input and concerns into the final draft Plan

Prior to the second public meeting the public was invited, via the Village of Arcade's website and the Arcade Herald Newspaper, to review the draft report. Input and concerns were very minimal and were related specifically to clarification and minimizing confusion. These comments did not affect the mitigation or implementation strategy.

It is also important to note that a tremendous amount of public input was incorporated in the Town and Village of Arcade Flood Mitigation Action Plan (see <http://gflrpc.org/Publications/ArcadeFlood.htm>) and the 2005 Town and Village of Arcade Hazard Mitigation Plan, both of which formed the basis for the start of this update.

Chapter 3: Legislation, Regulations and Programs

Legislation, regulations and programs that were either new or updated since the Existing Plan was written were identified, examined and summarized for the Plan Update. Where documents covered in the Existing Plan were unchanged, information, descriptions and assessments from the Existing Plan were used.

Federal, State and County legislation regulations and programs were reviewed and summarized below. Local documents were covered in more depth and were used to update the existing Law Assessment which can be found in Appendix Ch-3 *Wyoming County Local Law Assessment*.

SECTION 3.1: FEDERAL

3.1.A: Federal Government Responsibilities

The Federal Emergency Management Agency (FEMA) reviews the prioritized list of state submitted applications and decides which to approve or reject based on program guidelines. FEMA has final approval authority for funding all projects. Upon approval of a project application, the FEMA Region II Director will notify the Governor's Authorized Representative (GAR). FEMA will also notify the GAR when funding for approved projects is available for disbursement to subgrantees.

3.1.B: Pre-Disaster Mitigation Program

According to FEMA, The Pre-Disaster Mitigation (PDM) program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event.

Funding these plans and projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. PDM grants are to be awarded on a competitive basis and without reference to state allocations, quotas, or other formula-based allocation of funds.

The PDM program is authorized by Section 203 of the Stafford Act, 42 U.S.C. 5133. The PDM program is designed to assist States, Territories, Indian Tribal governments, and local communities to implement a sustained pre-disaster natural hazard mitigation program to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding from future disasters.

Project Eligibility

In accordance with 44 CFR Part 201, all Applicants must have a FEMA-approved State or Tribal (Standard or Enhanced) Mitigation Plan by the application deadline and at the time of obligation of the grant funds.

All applicants must be participating in the National Flood Insurance Program (NFIP) if they have been identified through the NFIP as having a Special Flood Hazard Area (a Flood Hazard Boundary Map (FHBM) or Flood Insurance Rate Map (FIRM) has been issued). In addition, the municipality must not be suspended or on probation from the NFIP.

Eligible Activities Include:

- Mitigation Projects - Property Acquisition and Structure Demolition, Property Acquisition and Structure Relocation, Structure Elevation, Dry Floodproofing of Historic Residential Structures, Dry Floodproofing of Non-residential Structures, Minor Localized Flood Reduction Projects, Structural Retrofitting of Existing Buildings, Non-structural Retrofitting of Existing Buildings and Facilities, Safe Room Construction, Infrastructure Retrofit, Soil Stabilization, Wildfire Mitigation
- Hazard Mitigation Planning
- Management Costs

3.1.C: National Flood Insurance Program (NFIP)

According to FEMA, the NFIP is an insurance program which municipalities with flood risk gain admission into by enacting certain floodplain management ordinances in order to reduce damage to flooding in the future. After a community is participating in the NFIP, property owners and renters are able to purchase federally backed NFIP Insurance. The NFIP creates maps, which are called Flood Insurance Rate Maps (FIRMs), of the 100-year floodplain (1% annual chance of exceedence) areas in a municipality which show what areas are most susceptible to flooding and that are required to have flood insurance

See section 7.6 National Flood Insurance Program for more information on specific municipal participation.

SECTION 3.2: NEW YORK STATE

3.2.A: New York State Responsibilities

State Government Program Administration: Under the 404 HMGP, the state, as grantee, is responsible for processing subgrants to eligible applicants. The Governor's Authorized Representative (GAR) serves as the grant administrator for all authorized HMGP funds. On behalf of the GAR, the Mitigation and Disaster Administration Branches in the New York State Office of Emergency Management (NYSOEM) handles the day to day activities of the 404 HMGP. Among other things, the Hazard Mitigation Branch provides technical advice and assistance to eligible subgrantees, informs them of the availability of the program, and assists in the preparation and review of project applications. The financial management component of the program such as disbursements and financial reports to FEMA are administered by the Disaster administration Branch.

Project Selection: It is the state's responsibility to identify and select hazard mitigation projects and forward them to the Federal Emergency Management Agency (FEMA) for review and approval.

The state is responsible for establishing procedures and priorities for selecting mitigation measures. In addition to the consideration of the minimum program criteria outlined above, project selection will consider the following:

- measures which best fit the overall Plan for development and/or hazard mitigation in the community, disaster area, or state;
- measures that if not taken, will have a severe detrimental impact on the applicant: such as the potential for loss of life; loss of essential services; damage to Critical Facilities; or economic hardship on the community;
- measures that have the greatest potential impact on reducing future disaster losses;
- measures that are designed to accomplish multiple objectives such as damage reduction, environmental enhancement and economic recovery.

The Hazard Mitigation Policy Committee, of the State Disaster Preparedness Commission, and its subcommittees provide specialized assistance to the Mitigation Branch, where necessary, for the purposes of administering the HMGP. An example of such assistance is the formation of a project Review Board to review and prioritize projects.

A Project Review Board will be convened in order to select and/or prioritize the projects which will be forwarded to FEMA for funding approval.

If available funding is sufficient to fund all of the projects for which funding is requested, all completed project applications received will be ranked and forwarded to FEMA for funding.

If there are insufficient funds, NYSOEM will transmit to FEMA a prioritized list of projects whose funding equals the amount available. This prioritized project listing will be developed with the assistance of the Project Review Board. All additional projects will be prioritized and submitted to FEMA as alternatives to the first group of prioritized projects.

If during the review and ranking process additional information is required for a project, such supplementary information will be requested by the Mitigation Branch of NYSOEM.

Notification of Applicants: Based upon the list of selected projects submitted by the Review Board, the GAR will notify all subgrantees of the decision regarding their application.

Transmission of Selected Projects to FEMA: NYSOEM will transmit to FEMA the application package containing all required documentation.

3.2.B: Hazard Mitigation Grant Program

According to the NYS Hazard Mitigation Grant Program Handbook (2006):

The Hazard Mitigation Grant Program was established by the Robert T. Stafford Disaster relief and Emergency Assistance Act (The Stafford Act), Public Law 93-288, as amended. Authorized under Section 404 of the Stafford Act, regulations implementing the program are found in the Code of Federal Regulations (CFR) at 44 CFR Part 206, Subpart N. Hereafter, the Hazard Mitigation Grant Program (HMGP) will be referred to as the 404 HMGP and the funds provided there under will be referred to as 404 HMGP funds or 404 funds.

The intent of the program is to effectively reduce future disaster damages, public expenditure, private losses and a community's vulnerability to natural hazards. In conjunction with other hazard mitigation plans and programs, the 404 HMGP provides an opportunity for a community to develop a comprehensive hazard mitigation program, which can be its best insurance against the impacts and costs of future disasters.

Eligible Project Categories

Eligible projects must result in increased protection to lives, and property--public and private. They include, but are not limited to:

- Structural hazard control or protection projects, such as changing ordinance for new construction, or installing back flow valves or flap gates;
- Construction activities that will result in protection from natural hazards, such as berms and other minor construction projects.
- Retrofitting of facilities, such as elevating buildings above base flood elevations, or filling in basements;
- Acquisition or relocation projects that move structures out of hazard areas;
- Development and adoption of State or local mitigation standards to reduce or eliminate risks;
- Development or improvement of comprehensive hazard mitigation programs with implementation as an essential component;
- Development of Hazard Mitigation Plans (maximum amount of funding for planning is up to 7% of the HMGP funding).

SECTION 3.3: COUNTY AND LOCAL

3.3.A: County Legislation and Regulations

Wyoming County is authorized to perform pre-disaster planning under the: Disaster Relief Act of 1974 (Public Law 93-288), Federal Civil Defense Act of 1950, and Presidential Executive Order 11490. The County is given legal authority through the Superfund Amendments & Reauthorization Act of 1986 (Public Law 99-499), Title III – Emergency Planning & Community Right to Know Act of 1986 and NYS Defense Emergency Act (as amended).

3.3.B Wyoming County Emergency Management Plan

The Wyoming County Comprehensive Emergency Management Plan outlines “a general all-hazards management guidance, using existing organizations and lines of authority to allow the County to meet its responsibilities before, during, and after an emergency occurs.” (*Wyoming County Emergency Management Plan*, ii) The Plan stipulates that specific annexes such as this Flood Mitigation Action Plan can be attached as a “hazard-specific” annex.

The Plan defines the chain of command and hierarchy under which emergency management operations in Wyoming County take place. The primary responsibility to prevent, respond, and aid in recovery during an emergency rests with the municipality. The local jurisdiction must fully utilize all of its own resources before requesting the aid and services of the County Emergency Management Department.

3.3.C: Local Government Responsibilities

Local governments and other eligible local entities are required to assist the state in identifying appropriate mitigation measures. The Chief Elected Official (CEO) of each jurisdiction or non-profit organizations applying for 404 HMGP funding assistance is ultimately responsible for the satisfaction of all local requirements under Sections 404 and 409, P.L. 93-288.

NYSOEM strongly recommends that the CEO of each County that is applying for 404 HMGP funding, or that contains jurisdictions or non-profit organizations which are applying, appoint a Local Hazard Mitigation Officer (LHMO) who will serve as the point of contact with the State Hazard Mitigation Section. This appointee will also assist in the coordination of all local hazard mitigation activities taking place in all jurisdictions in the county. The Chief Executive, or his designee, from each eligible entity that applies for 404 HMGP funding must sign the Project Application Form, the State-local Disaster Assistance Agreement, and all required attachments to the application. Each applicant for 404 funding must designate a point of contact for each project.

SECTION 3.4: REVIEW OF PLANS, REPORTS AND STUDIES

The following plans, reports and studies have been reviewed and information contained within them integrated, where appropriate, into this All-Hazard Mitigation Plan:

County

- Wyoming County Health Department reports:
 - 2011 Annual Report
 - 2010 Annual Report
 - 2009 Annual Report
 - 2008 Annual Report
 - 2007 Annual Report
 - 2006 Annual Report
 - 2005 Annual Report
 - 2004 Annual Report
 - 2003 Annual Report
- Wyoming County Public Health Emergency Preparedness and Response Plan (2012)
- Wyoming County Comprehensive Emergency Management Plan and Appendices
 - 1: National Interagency Incident Management System (NIIMS); Incident Command System Position Description
 - 2: Standard Operating Guide for Emergency Operations Center (EOC)
 - 3: Instructions for Declaring a State of Emergency and Issuing Emergency Orders within Wyoming County
- Wyoming County Hazardous Materials Plan and Appendices (updated December 2004).
 - A: Inventory
 - B: Hazardous Materials Sites
 - C: Team Roster
 - D: Hazardous Materials Site Maps
 - E: Department of Public Works
- Emergency Operations Plan – American Red Cross, Wyoming County Chapter
- Genesee & Wyoming Counties – Joint Flood Mitigation Plan

State & Federal

- New York State Comprehensive Emergency Management Plan (2011)
- New York State Homeland Security System for Schools

Municipal

See Section 3.5 and Appendix Ch-3 *Wyoming County Local Law Assessment*.

Summary

The above new and updated legislation regulations and programs were reviewed during the mitigation planning process by the Genesee/Finger Lakes Regional Planning Council staff. This review was carried out for a number of reasons:

- The review helped G/FLRPC staff better understand the roles and responsibilities of various County and Non/Municipal agencies in disaster planning, response, and recovery activities.
- The review process ensured the recommendations within the Mitigation Strategy did not conflict with any Existing Plans or regulations.
- The review process helped identify any gaps that exist in County disaster planning efforts that could be plugged by specific mitigation measures within the Mitigation Strategy.
- The review assisted G/FLRPC staff and the Planning Committee with analyzing the potential impacts of hazard events. Overall, these plans and studies provided a valuable source of information.

SECTION 3.5: REVIEW OF MUNICIPAL LAND USE PLANS AND REGULATIONS

The existing Hazard Plan included a thorough review of municipal (town and village) land use plans and laws. This review analyzed documents such as comprehensive plans, zoning codes, and subdivision regulations. This review was carried out for essentially the same reasons listed in the summary above but in addition, it identified gaps in local land use laws that need to be addressed as part of the hazard mitigation planning process.

During the update process the Hazard Planning Committee assisted in identifying and providing any land use plans and regulations that were created or updated since the review in the Existing Plan. These new plans and regulations were incorporated in the existing assessment, which can be found in Appendix Ch-3 - *Local Law Assessment*. The analysis of plans and regulations that remained unchanged were still included in the update in order to illustrate a comprehensive overview at this point in time. See also Map 2 - Wyoming County Municipal Zoning.

Chapter 4: Community Profiles

This section consists County and individual municipal profiles. Information such as community histories, geography and climate that have not changed since the Existing Plan was written remain unchanged. Other portions such as land use, population and demographics, building permits, development trends, etc. have been updated to reflect changes that have occurred in recent years.

A number of maps are included at the end of this chapter, some of which are included for general background information, others related directly to information discussed in this chapter.

SECTION 4.1 WYOMING COUNTY BACKGROUND

4.1.A. Introduction

Wyoming County was formed on May 19, 1841 from land belonging to Genesee County. The County seat was established in the Town of Warsaw. The county's name is derived from a Delaware Indian term meaning "broad bottom lands." During the 1700s the Seneca Indians used the area for hunting, trapping and fishing, until in 1797 they relinquished their title over the land to speculator Robert Morris. Morris then sold the land to trustees of the Holland Land Company, a consortium of Dutch investors interested in developing frontier lands in North America. The Seneca withdrew to several small reservations within the company's vast 3.3 million acre tract, which was surveyed in the late 1790s by Joseph Ellicott, the company's chief surveyor and land sales agent.

Settlement in what is now Wyoming County commenced in 1802 following the completion of Ellicott's surveys. Under his leadership, surveyors delineated a grid pattern of townships that remains visible on the county's landscape today. Many municipal boundaries and County roads follow the surveyor's grid laid out more than two centuries ago.

Given the area's remote and undeveloped condition, the Holland Land Company was forced to invest considerable resources in surveying, road building, advertising, and other measures to attract settlers to the area. Ellicott and his surveyors kept detailed notes on the area's topography, geology, plant and animal life, and soil conditions that were invaluable to later settlers. Ellicott took decisive steps to shape the pattern of settlement in the future County by surveying town lines, laying out key roadways, and attracting skilled workers such as millers, blacksmiths, innkeepers, and other artisans who frequently established the nucleus of future settlements. When Ellicott retired from his post in 1821 he had effectively laid the foundations of Wyoming County's future growth and development.

By the 1820s settlement in the future County was well underway. The earliest settlers, mostly from New England and eastern New York, established themselves in the towns of Attica, Middlebury, and Sheldon. However, due to the plentiful supply of cheap land, settlers rapidly spread throughout the area. By 1810 all of the future county's townships were inhabited and the population stood at 2,724 people. The next four decades witnessed steady population growth; by 1850 there were about 30,000 people in the county. This figure would remain remarkably consistent over the next one hundred years.

In the 1850s the county's transportation network was enhanced by the construction of the Genesee Valley Canal and several railroad lines. The canal, running south through the Genesee Valley, linked the county's eastern townships with the Erie Canal in Rochester. An impressive engineering feat, the canal never proved commercially viable and was abandoned in 1878. Railroads, however, provided a key stimulus for the local economy. The first railway line, linking Attica to Rochester, was completed in 1842. During the following decades several new rail lines were built, including the Rochester and State Line and the Arcade and Attica.

During the early 1900s the County began a coordinated road construction and maintenance program. This program boosted the local economy by providing jobs for highway workers and offering farmers and manufacturers efficient

transportation links to the outside world, thus stimulating both dairy farming and various manufacturing activities. Early industrial activities in the County included salt mining, textile manufacturing, and quarrying.

During the twentieth century Wyoming County retained its rural and agricultural roots. Its distance from large cities like Rochester and Buffalo meant that it was not affected by post World War II suburban sprawl over the landscape. Some villages including Warsaw and Attica, however, have seen some minor suburban expansion outward from their historic cores. The County has been adversely affected by the closure of important manufacturing plants, and despite the ongoing importance of dairy farming and remaining industrial plants, many residents commute to work in places outside the County.

4.1.B. Location and Landscape Features

Wyoming County is centrally located within western New York, immediately to the west of the Genesee River and about midway between Lake Ontario and the New York – Pennsylvania border. It is bounded on the north by Genesee County, on the east by Livingston County, on the south by Allegany and Cattaraugus Counties, and on the west by Erie County. The Genesee River makes up a segment of the county's southeastern boundary.

The County is roughly square in shape, extending over 601 square miles of land. The largest body of water within the County is Silver Lake, which lies mostly within the Town of Castile, although the northernmost part of the lake borders the Town and Village of Perry. This little glacial lake is the only "Finger Lake" west of the Genesee River. Numerous smaller lakes, ponds, and creeks can be found throughout the County. The main watercourses include the Oatka, Tonawanda, Cayuga, Buffalo, Wiscoy and Cattaraugus Creeks. Generally, surface water drains outward from the center of the County. The County is part of the Cattaraugus Hills, a sub-region of the Appalachian Upland. See Map 3 – Wyoming County Water Resources & Map 4 – Wyoming County Watersheds.

Wyoming County's landscape is overwhelmingly rural. Farms and forested areas, interspersed with small hamlets and villages, dominate the landscape. See Map 5 - Wyoming County Land Cover. The county's northern half features many pronounced hills and valleys, while the higher southern portion has a gentler, rolling topography. An 800 foot deep post-glacial canyon cut by the Genesee River, which runs along the southeastern border of the county, forms an impressive gorge that is known as the "Grand Canyon of the East" and forms the backbone of Letchworth State Park. See Map 6 - *Wyoming County Topography*, Map 7 - *Wyoming County Steep Slopes* & Map 8 - *Wyoming County Elevation*.

The rich agricultural lands found throughout the County are a result of the glaciation of the last ice age, which ended about 10,000 years ago. All of Wyoming County was covered by glaciers that brought glacial till from the north. The quality of this till varies from one area to the next, but the majority of it provides excellent farming soils.

The County's primeval forest included beech, sugar maple, hemlock, white pine, and basswood trees. Devonian shale, sandstone and siltstone make up the County's bedrock. Important natural geologic resources include salt and natural gas. Salt is present under the County except for the northwestern corner, while natural gas is found in large pockets in the western third of the County and the northeast corner.

A myriad of transportation routes exist within Wyoming County. No major expressways pass through the county, but a number of State roads (Routes 19, 19A, 20A, 39, 63, 77, 78, 98, 238, 246, 354 and 436) traverse the County. Two major railroads, Norfolk and Rochester Southern, operate rail lines through the County. See Map 1 – Wyoming County. Lastly, the Perry-Warsaw Airport, located in the Town of Perry directly between the villages of Perry and Warsaw, serves small private and business aircraft.

4.1.C. Climate

Wyoming County's climate is classified as humid-continental, with an average July temperature of 67F and an average January temperature of 20F. The average annual precipitation amount is 43 inches, of which 19 inches fall during the growing season. Annual snowfall usually ranges from 110 to 120 inches. These figures vary throughout the county,

and are higher in the western portions of the County due to the effect of Lake Erie on weather patterns. Transportation problems and extensive municipal snow-removal operations are common in the winter months, especially in the County's western townships. This is due in large part to lake effect snow storms generated over Lake Erie.

SECTION 4.2 LAND USE AND ECONOMIC DEVELOPMENT

4.2.A. Historic Profile

During the early 1800s the future county's primitive transportation system prevented the development of large scale agriculture and industry. Despite the presence of productive farm land, many early residents supported themselves through subsistence agriculture. The most reliable source of income for the earliest settlers was the sale of potash, a byproduct of the clearance of forests for farm fields. In addition to potash, grain production and sheep and cattle ranching largely dominated the county's early economy.

Wyoming County's early industrial establishments consisted of sawmills and gristmills built by the first settlers to supply their immediate needs. Throughout the early and mid-1800s, industrial activities in the County revolved around agriculture. By 1855 the County had 30 gristmills, 77 sawmills, 16 tanneries, woolen mills that relied on locally produced wool, small foundries that produced farming equipment, and a paper mill.

As increased competition from the Midwest lowered the price of grain and falling wool prices made sheep farming less profitable, the dairy industry grew in importance. Dairy farming led to the construction of cheese and butter factories, which remained important local businesses well into the twentieth century.

The County's first major non-agricultural industry, salt production, did not develop until the 1880s. In 1878 the first salt well was discovered in the Town of Middlebury near the Village of Wyoming. Solution mining techniques, which involved pumping water down to the salt strata to dissolve the salt and force it back to the surface as brine, were used to extract the mineral. By 1900 salt mines provided a major underpinning for the local economy. The Warsaw Salt Company, based in Warsaw; the Worcester Salt Company, based in Silver Springs; the Pearl Salt Company, based in Covington; and the Perry Salt Company, based in Perry, were the County's leading salt producers. In the early 1900s the salt mining industry declined in importance, although some salt works remain in operation in the early twenty-first century, such as the Morton Salt Company in Silver Springs.

Textile manufacturing replaced salt shortly after the turn of the twentieth century. Early textile plants located in Arcade, Perry, Warsaw, and the Village of Wyoming attracted many Polish immigrants to the County. Arcade developed as the industrial "hub" of the county, producing an array of goods including yarn and textiles, automobile parts, and precision instruments. Local manufacturing struggled through the Great Depression but revived in the wartime economy of the 1940s. Textile plants produced uniforms and factories produced tools and equipment for the Armed Forces.

In 1931 the State Department of Correctional Services opened the Attica Correctional Facility, a maximum security prison that provided the area with an entirely new employment sector. The Attica Correctional Facility is perhaps the most well-known prison in the United States after Alcatraz, due to the infamous 1971 prisoner uprising. In 1985 the State opened the Wyoming Correctional Facility, a medium security prison, on a site adjacent to the older prison. As of 2011, the two prisons employed almost 1500 people.

In the 1950s, the construction of the New York State Thruway a few miles north of Wyoming County and the accompanying reduction in freight train service to the County signaled a major shift in the County's economy. The closure of large manufacturing plants began in the late 1950s and continued through the 1990s. Arcade retains significant manufacturing businesses in the early twenty-first century, but has lost important plants including Motorola. Perry has suffered the loss of several important factories, including the Perry Knitting Company, the Robeson Cutlery Company, and Champion (textiles). Other important businesses to leave the County include Otis Elevator, which closed its Warsaw plant in 1966 and Westinghouse Castings, which closed its Attica plant in 1986.

However, despite these losses, the manufacturing sector was still responsible for 13.2% of Wyoming County's employment in 2010. Wyoming County's major manufacturing sector employers, as of 2011, are Prestolite Electric (650 employees, Arcade), American Precision Industries (160, Arcade), Markin Tubing, Inc. (103, Covington) and Morton Salt (160, Silver Springs). As of 2011, the largest private sector employer within the County was Pioneer Credit Recovery (912, Perry and Arcade).

Despite the importance of these manufacturing plants, Wyoming County's key industry is agriculture, specifically dairy farming. The commercialization and mechanization of the farming industry has decreased number of farms and the acreage of land under cultivation during the late twentieth century. Wyoming County continues to be a major dairy farming area. The County has the most cattle and milk cows in the region and produces more milk than all other counties in the region. In addition to dairying, major crops include potatoes, wheat, corn, peas, beans, apples, berries and hay. Christmas trees and maple sugar are side products of many farms.

Tourism is a growing industry. Many tourists in the County come to see the beautiful scenery and breathtaking vistas at Letchworth State Park. Other unique tourist attractions in the County include train excursions on the Arcade & Attica Railroad and the historic Village of Wyoming, known as the "Gaslight Village" because of the natural gas streetlights still in use along its main thoroughfares.

4.2.B. Current County Development Trends

The Existing Plan utilized the *Regional Development Analysis* document (G/FLRPC, 2004) which included an overall analysis of development trends in Wyoming County. For this analysis, data from the *Regional Population Forecast: County, City, Town, and Village Projections for the Genesee/Finger Lakes Region* (G/FLRPC, 2003) were applied to the land available for development and zoning capacity figures to roughly estimate build out potential in residential, commercial, and industrial development categories.

The Regional Development Analysis has not been updated at this time but it was still used as the most recent review of developable land. Overall the data helps to illustrate the larger development trends within the County and should not have changed a great deal since 2004 based on the pace of development since then (see Table 4.1 Building Permits).

Based on the Regional Development Analysis, as of 2004 Wyoming County municipalities had approximately 171,000 acres of land available for development. The projected number of available residential lots was between 71,000 and 136,000. The allowable square footage for commercial development was approximately 15.5 million. The allowable square footage for industrial development is approximately 24.9 million. As these figures indicate, there is plenty of undeveloped land in Wyoming County. Additionally, as shown by the building permit data below, there is little demand for new construction. The County's low population growth also makes it highly unlikely that major new development will occur in Wyoming County over the next forty years. The County is only projected to grow by 7% by 2050 (see Table 4.2).

Building permit data from the Existing Plan was updated using the annual G/FLRPC Land Use Monitoring Report. The following tables indicate, by municipality, where the major growth areas in the County are and the types of development permits that were issued; either residential or commercial. Data on industrial permits was not available. Permits for towns cover the area outside of the villages and do not include the permit numbers for villages located within the town boundaries, which are tracked separately.

Based on the tables below, trends have emerged for permits issued in Wyoming County. Residential permits issued declined in Wyoming County from 2001-2011. The number of residential permits peaked in 2002 with an overall County number of 146. The Town of Arcade had the highest number of residential permits issued with a total of 144 (including the Village) from 2001-2011. County commercial permits peaking at 77 in 2008. The Village of Arcade had the highest number of commercial permits issued with a total of 54 from 2001-2011.

Table 4.1: Wyoming County Land Use: Building Permits

Municipality	Residential Units										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Arcade (TOV)	16	15	9	12	12	10	13	14	11	9	8
Arcade (Village)	-	5	-	3	2	2	1	1	0	1	0
Attica (TOV)	2	8	7	5	4	1	0	5	3	1	3
Attica (Village)	2	-	1	2	3	0	1	0	2	5	1
Bennington	12	19	7	12	12	13	10	6	7	9	5
Castile (TOV)	6	6	2	4	5	6	3	4	6	5	3
Castile (Village)	-	1	1	2	2	1	0	1	1	1	2
Covington	5	4	1	2	5	0	5	5	4	3	1
Eagle	6	12	5	5	5	9	1	5	1	6	2
Gainesville (TOV)	4	6	5	2	5	3	9	0	1	3	2
Gainesville (Village)	-	-	-	-	-	0	0	0	0	0	0
Genesee Falls	1	-	-	2	1	0	0	1	5	0	2
Java	6	16	6	6	7	7	6	4	4	3	3
Middlebury (TOV)	6	8	4	2	4	3	1	4	1	0	3
Orangeville	3	16	12	8	7	2	4	2	4	3	1
Perry (TOV)	4	6	3	3	8	3	4	6	3	0	1
Perry (Village)	-	6	2	1	-	1	1	1	0	0	0
Pike (TOV)	7	-	6	5	-	2	2	7	4	1	2
Pike (Village)	-	-	-	-	-	1	0	0	0	0	0
Sheldon	5	6	8	8	10	2	5	6	4	4	2
Silver Springs (Village)	1	-	3	-	1	0	3	1	0	0	0
Warsaw (TOV)	8	12	9	7	10	6	0	0	1	2	2
Warsaw (Village)	-	DNA	-	3	-	0	0	0	0	0	0
Wethersfield	-	DNA	4	2	2	0	5	0	0	3	2
Wyoming (Village)	-	-	-	-	-	0	0	2	4	1	0
County Totals	94	146	95	96	105	72	74	75	66	60	45
DNA = Data not available.											
Municipality	Commercial Units										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Arcade (TOV)	DNA	1	2	1	1	4	1	2	2	1	1
Arcade (Village)	DNA	1	1	22	7	3	9	8	0	2	1
Attica (TOV)	DNA	DNA	1	3	DNA	0	1	2	0	0	0
Attica (Village)	1	DNA	2	DNA	2	3	0	4	4	0	1
Bennington	DNA	1	4	DNA	DNA	2	3	3	17	0	2
Castile (TOV)	DNA	1	3	1	2	2	1	4	3	0	0
Castile (Village)	DNA	1	DNA	1	DNA	1	0	5	0	0	0
Covington	DNA	DNA	DNA	DNA	4	0	1	0	2	2	1
Eagle	DNA	4	1	DNA	2	8	5	3	1	0	1
Gainesville (TOV)	DNA	7	1	DNA	3	0	0	1	1	1	0
Gainesville (Village)	DNA	DNA	1	DNA	DNA	0	1	0	0	0	0
Genesee Falls	DNA	2	1	DNA	DNA	0	0	3	0	0	0
Java	DNA	8	1	1	2	5	2	8	2	1	2

Middlebury (TOV)	DNA	1	DNA	DNA	1	1	1	1	0	1	0
Orangeville	DNA	DNA	DNA	DNA	DNA	0	1	4	0	0	1
Perry (TOV)	DNA	2	2	2	DNA	2	7	3	2	0	0
Perry (Village)	2	3	1	1	9	0	3	2	0	1	2
Pike (TOV)	DNA	DNA	1	2	2	1	6	3	0	0	2
Pike (Village)	DNA	DNA	DNA	1	DNA	0	1	0	0	0	0
Sheldon	DNA	3	1	5	6	1	7	10	6	2	2
Silver Springs (Village)	DNA	DNA	2	1	3	3	2	1	1	0	1
Warsaw (TOV)	DNA	1	4	2	3	2	4	1	4	1	2
Warsaw (Village)	DNA	DNA	DNA	DNA	DNA	0	3	1	2	0	0
Wethersfield	DNA	DNA	DNA	2	5	0	3	1	1	0	2
Wyoming (Village)	DNA	DNA	DNA	DNA	2	2	0	7	3	0	0
County Totals	3	36	29	45	54	40	62	77	51	12	21
DNA = Data not available.											
Source: Wyoming County Building Department, 2001-2011.											

4.2.C. Current Municipal Development Trends

Regional meetings were held with municipal officials, who were asked to supply information regarding the anticipated location of any new development they expect to occur in the near future. Overall, very little new development is expected in Wyoming County.

Please refer to the Map 9 – Wyoming County Future Development Areas while reviewing the municipal development details below. This map is based on the input of County and municipal officials and provides, in graphic form, the information presented in the above list. This map indicates that local officials do not see significant new development occurring outside limited areas in the vicinity of the Villages of Arcade and Warsaw, as well as in the Town of Bennington which is seeing new rural residential growth as a result of the continuing spread of the Greater Buffalo area.

Town of Arcade

Development within the Town and Village of Arcade is projected to be slow. If development were to occur it is likely to be along the north side of NYS Route 98; from the Village limits to Genesee Road the north side of NYS Route 39 at Sawmill Drive; and south of Steele Avenue and east of Edward Street. These areas are currently zoned commercial and industrial (HC/LI), are consistent with current land-use planning goals, and are not more vulnerable to hazards. Additional areas for potential development include: north of the Village limits south of Genesee Road and west of Curriers Road; south side of NYS Route 39 east of County Line Road; both sides of North Street between Northwoods Road and West Street and the south side of NYS Route 39, west of Bixby Hill Road.

Village of Arcade

Development within the Town and Village of Arcade is projected to be slow. If development were to occur it is likely to be along the north side of NYS Route 98; from the Village limits to Genesee Road; the north side of NYS Route 39 at Sawmill Drive; and south of Steele Avenue and east of Edward Street. These areas are currently zoned commercial and industrial (HC/LI), and are consistent with current land-use planning goals, and are not more vulnerable to hazards than other areas in Arcade. Additional areas for potential development include: north of the Village limits south of Genesee Road and west of Curriers Road; south side of NYS Route 39 east of County Line Road; both sides of North Street between Northwoods Road and West Street; and the south side of NYS Route 39, west of Bixby Hill Road.

Town of Attica

The Town of Attica does not anticipate any major new developments.

Village of Attica

Within the Village of Attica a new water tank is being built. Limited residential development has also occurred off of Sokol Drive (2 units) with 4 multi-family units planned. The Chevrolet Dealership along Route 238 is also expanding, and falls within the Village flood zone. Hillcrest Industries is also establishing a new rail loading dock at their location on Favor Street.

Town of Bennington

The Town of Bennington identified the possibility for natural gas storage within the empty wells located within the Town in the future. No additional development was identified.

Town of Castile

Within the Town of Castile a compressor station has been proposed along Oak Hill Road. No additional major development has been identified.

Village of Castile

The Village of Castile does not anticipate any major new development.

Town of Covington

Within the Town of Covington some minor development is planned; a new farm complex at Synergy, LLC located on the south side of Lemley Road; a small (1.8 acre) area near the existing Town Building may also be developed for a court/office. No major new development is anticipated.

Town of Eagle

The Town of Eagle anticipates a limited amount of residential development (approximately 4 homes per year) south of Route 39. The flood zone does cross into this general area, so the Town should closely monitor where new development is going. A new commercial building is anticipated to be built Route 39 east of Route 362.

Town of Gainesville

The Town of Gainesville does not anticipate any major new development.

Village of Gainesville

The Village of Gainesville does not anticipate any major new development.

Town of Genesee Falls

The Town of Genesee Falls does not anticipate any major new development.

Town of Java

The Town of Java anticipates if hydro-fracking is allowed to go forward, the gas fields throughout the Town could be reused leading to potential development.

Town of Middlebury

The Town of Middlebury does not anticipate any major new development.

Town of Orangeville

The Town of Orangeville does not anticipate any major new development.

Town of Perry

The Town of Perry does not anticipate any major new development.

Village of Perry

The Village of Perry anticipates the development of a senior housing project along Tempest Street. Additionally the former A&A Metal Fabricating, Inc. site, along Washington Street was identified as a potential location for light industry/manufacturing. The flood zone does cross into this general area, so the Village should closely monitor where new development is going.

Town of Pike

The Town of Pike does not anticipate any major new development.

Town of Sheldon

Within the Town of Sheldon a large additional to Pearls Farm located on Center line Road is being planned. No other major development was identified within the Town.

Village of Silver Springs

The Village of Silver Springs does not anticipate any major new development. If development were to occur the likely location would be near Village Park, which is located off of Church Street. Residential or light industrial development could possibly locate there.

Town of Warsaw

Within the Town of Warsaw the Wal-Mart located along Route 19 is expanding into a super Wal-Mart. A new sewer and water district is being formed from Buffalo Road to Saltvale Road with potential for commercial and some residential development to occur in this area.

Village of Warsaw

Steuben Trust Bank purchased Mucher Rentals, located within the Village of Warsaw on Buffalo Street and New York State Route 19, and is developing the property into a bank. No other development is anticipated to occur within the Village.

Town of Wethersfield

The Town of Wethersfield does not anticipate any major new development.

Village of Wyoming

The Village of Wyoming does not anticipate any major new development.

SECTION 4.3 POPULATION TRENDS AND DEMOGRAPHICS

For a century, from 1850 to 1950, the County's population remained fairly consistent, at about 30,000 people. The County began to populate and develop in the 1950s. Today, most towns and villages are at or near their highest rates of population or are beginning to decline. Wyoming County has increased in population slowly between 1960 and 2000 but in the most recent decade from 2000 to 2010 the trend has shifted and the County lost 1269 people.

The highest rates of population decline are found in the historic village centers, while most growth is occurring in previously undeveloped lands in the County. Six of the County's eight villages have experienced declining rates of population over the last fifty years – Attica (-12%), Castile (-25%), Gainesville (-38%), Perry (-21%), Warsaw (-5%) and Wyoming (-17%). Most of this decline was present from 2000-2010. Although the villages of Pike, Silver Springs, and Arcade did not decline in population over this fifty year period, their rate of growth was much slower than their surrounding towns. The Village of Arcade, for example, grew by only 7%, or 141 people, between 1960 and 2010 while the Town of Arcade grew by 47%, or 1,344 people, over that same time period.

In 2013, Genesee/Finger Lakes Regional Planning Council finished updating the *Regional Population Forecast: County, City, Town, and Village Projections for the Genesee/Finger Lakes Region* (G/FLRPC, 2012). This project was an update of the 2003 projections, to reflect new 2010 census population numbers and additional information. Populations for Wyoming County and each municipality were projected out to 2050. The process started by creating quantitative projections based solely on past population numbers, and then included a qualitative method to adjust projections based on information gathered from interviews with County and municipal officials and review of data such as residential permits and construction trends, infrastructure availability/capacity, land use regulations, etc.

Projections show the County and most municipalities experiencing slight population increases in the next 40 years based on historical population trends, but if instead recent trends from the last decade hold true populations could continue to decrease in the future.

Table 4.2 shows the historic population figures from Wyoming County by Municipality for the years 1960-2010 as well as the projected population for the years 2020-2050.

Table 4.2: Wyoming County Historic and Projected Population												
Location	Historic Population						Change 1960-2010		Projected Population			
	1960	1970	1980	1990	2000	2010	Number	%	2020	2030	2040	2050
Wyoming County	34,793	37,688	39,895	42,507	43,424	42,155	7,362	21%	43,095	43,891	44,583	45,194
Arcade	2,861	3,048	3,714	3,938	4,184	4,205	1,344	47%	4,291	4,365	4,428	4,484
Arcade (V)	1,930	1,972	2,052	2,081	2,026	2,071	141	7%	2,066	2,062	2,058	2,055
Attica	5,781	6,171	5,693	7,383	7,806	7,702	1,921	33%	7,863	7,997	8,114	8,219
Attica (V)	2,758	2,909	2,643	2,622	2,579	2,419	-339	-12%	2,449	2,474	2,495	2,515
Bennington	1,983	2,544	2,889	3,046	3,349	3,359	1,376	69%	3,465	3,553	3,631	3,700
Castile	2,609	3,156	2,865	3,042	2,873	2,906	297	11%	2,463	2,459	2,456	2,452
Castile (V)	1,346	1,330	1,135	1,078	1,051	1,015	-331	-25%	1,000	988	977	967
Perry (V)	4,629	4,538	4,198	4,219	3,945	3,673	-956	-21%	3,705	3,733	3,755	3,776
Covington	827	953	1,075	1,266	1,357	1,232	405	49%	1,303	1,363	1,416	1,462
Eagle	896	996	1,216	1,155	1,194	1,192	296	33%	1,213	1,231	1,246	1,260
Gainesville	2,032	2,177	2,133	2,288	2,333	2,182	150	7%	2,244	2,296	2,341	2,381
Gainesville (V)	369	385	334	340	304	229	-140	-38%	246	260	272	283
Silver Springs (V)	726	823	801	852	844	782	56	8%	807	828	846	862
Genesee Falls	397	397	553	488	460	438	41	10%	450	460	469	477
Java	1,757	1,949	2,273	2,197	2,222	2,057	300	17%	2,136	2,203	2,261	2,312
Middlebury	1,416	1,503	1,561	1,532	1,508	1,441	25	2%	1,458	1,472	1,485	1,496
Wyoming (V)	526	514	507	478	513	434	-92	-18%	447	457	467	475
Orangeville	633	820	1,103	1,115	1,301	1,355	722	114%	1,383	1,408	1,429	1,447
Perry	5,372	5,367	5,437	5,353	4,876	4,616	-756	-14%	4,662	4,703	4,736	4,766
Pike	878	916	991	1,081	1,086	1,114	236	27%	1,122	1,129	1,136	1,141
Pike (V)*	345	373	367	384	382	371	26	8%	N/A	N/A	N/A	N/A
Sheldon	1,898	2,296	2,644	2,487	2,561	2,409	511	27%	2,495	2,568	2,631	2,688
Warsaw	4,803	4,721	5,074	5,342	5,423	5,064	261	5%	5,211	5,335	5,444	5,539
Warsaw (V)	3,653	3,619	3,619	3,830	3,814	3,473	-180	-5%	3,581	3,672	3,752	3,822

Wethersfield	650	674	674	794	891	883	233	36%	892	900	907	913
*Pike (V) dissolved on December 31, 2009. For consistency the population located within the former Village boundaries was included												
Source: Regional Population Forecasts: County, City, Town and Village Projections for the Genesee/Finger Lakes, Genesee/Finger Lakes Regional Planning Council, September 2012.												

See Map 10 *Wyoming County Population Density*.

Of the 15,501 households in Wyoming County, 68% are family households with the remaining 32% non-family households. Householders living with their own children, whom are under the age of 18, account for 27.5% of Wyoming County households. Married couples living together comprise 53.3% of households; 9.5% have a female householder with no husband present; and 25.7% of all households consist of only one person. Additionally 26.7% of all households consist of at least one member who is 65 years old or older. The average household size in the County is 2.46 people and the average family size is 2.95 people.

The racial makeup of the County's population is 91.6% white; 5.6% black; 0.4% Asian; 0.3% American Indian and Alaskan Native; and 0.9% two or more races. The age distribution of the County's population is 22.9% aged 19 or younger, 33.2% between the ages of 20 and 44, 30.2% between the ages of 45 and 64, and 13.5% are 65 years of age and older. The median age of a County resident is 40.9 years.

Table 4.3: Wyoming County 2010 Age Cohort

Municipality	Under Age 25	Aged 25 to 34	Aged 35 to 44	Aged 45 to 54	Aged 55 to 64	Aged 65 to 74	Aged 75 and over
Arcade	1305	525	497	701	557	323	297
Arcade (V)	721	309	249	301	251	117	123
Attica	1655	1804	1540	1382	720	193	66
Attica (V)	886	304	340	373	302	493	379
Bennington	891	290	461	628	559	316	214
Castile	871	334	340	448	465	257	201
Castile (V)	333	126	127	143	133	77	76
Covington	376	127	190	210	172	106	51
Eagle	389	129	134	237	146	94	63
Gainesville	882	279	421	515	388	277	115
Gainesville (V)	72	13	30	48	28	17	21
Silver Springs (V)	220	88	104	127	92	85	66
Genesee Falls	107	48	65	83	54	44	37
Java	627	225	299	366	277	151	112
Middlebury	575	222	235	301	267	153	122
Orangeville	378	118	205	231	226	115	82
Perry	1487	593	611	656	587	372	310
Perry (V)	1183	496	474	516	473	273	258
Pike	401	126	121	174	155	94	43
Pike (V)	137	46	40	48	52	32	16
Sheldon	677	265	334	416	358	203	156

Warsaw	1534	565	636	795	702	383	449
Warsaw (V)	1100	424	444	510	433	230	332
Wethersfield	290	99	119	162	113	62	38
Wyoming (V)	148	66	59	56	51	29	25
Source: U.S. Census Bureau, Census 2010.							

Table 4.4: Wyoming County Median Household Income by Municipality, 1990, 2000 and 2010

Municipality	1990	2000	2010
Arcade	\$25,108	\$35,982	\$44,632
Arcade (V)	\$25,784	\$33,724	\$41,705
Attica	\$27,684	\$44,877	\$52,147
Attica (V)	\$26,196	\$40,234	\$47,196
Bennington	\$36,250	\$45,448	\$60,170
Castile	\$26,641	\$35,762	\$50,167
Castile (V)	\$22,138	\$34,519	\$44,464
Covington	\$30,811	\$40,446	\$60,227
Eagle	\$23,750	\$36,765	\$38,906
Gainesville	\$25,638	\$37,188	\$46,484
Gainesville (V)	\$23,594	\$31,875	\$41,250
Silver Springs (V)	\$23,295	\$34,338	\$41,293
Genesee Falls	\$27,083	\$30,250	\$37,500
Java	\$28,869	\$43,708	\$57,557
Middlebury	\$29,474	\$43,125	\$56,625
Wyoming (V)	\$25,536	\$38,750	\$39,792
Orangeville	\$30,147	\$45,208	\$63,500
Perry	\$24,423	\$39,455	\$46,011
Perry (V)	\$24,228	\$35,596	\$42,589
Pike	\$29,152	\$37,328	\$61,033
Pike (V)	\$31,250	\$39,000	\$53,000
Sheldon	\$31,380	\$43,232	\$51,433
Warsaw	\$26,659	\$37,699	\$42,746
Warsaw (V)	\$24,809	\$35,592	\$37,971
Wethersfield	\$29,000	\$37,337	\$43,958
Source: U.S. Census Bureau, Census 2010.			

SECTION 4.4 OVERVIEW

Government: Wyoming County is governed by a Board of Supervisors. The Board has sixteen members, one representing each town. Each Board member's voting power is based on the population of the town he/she represents. One member serves as presiding Chairman; the Chairman is the county's chief administrative official. The County

includes twenty-five administrative units comprising sixteen towns and nine villages, and the County seat is located in the Village of Warsaw.

Towns (16): Arcade, Attica, Bennington, Castile, Covington, Eagle, Gainesville, Genesee Falls, Java, Middlebury, Orangeville, Perry, Pike, Sheldon, Warsaw, Wethersfield.

Villages (8): Arcade, Attica, Castile, Gainesville, Perry, Silver Springs, Warsaw, Wyoming.

Police Departments (6): Arcade Police Department, Attica Police Department, Perry Police Department, Warsaw Police Department, Wyoming County Sheriff, New York State Police.

Fire Departments (18): Arcade Fire Department, Attica Fire Department, Bennington Fire Department, Castile Fire Department, Cowlesville Fire Department, Eagle Fire Department, Gainesville Fire Department, Harris Corners Fire Department, North Java Fire Department, Perry Center Fire Department, Perry Fire Department, Pike Fire Department, Sheldon Fire Department, Silver Springs Fire Department, Strykersville Fire Department, Varysburg Fire Department, Warsaw Fire Department, Wyoming Fire Department.

Ambulance (19): Arcade Fire and Rescue Squad, Attica Fire Department, Bennington Fire and Rescue Squad, Bliss Rescue Squad, Castile Fire and Rescue Squad, Cowlesville Fire Company, Gainesville Fire Department, Genesee Falls Fire and Rescue Squad, Harris Corners Fire Department Rescue Squad, Monroe Ambulance, North Java Rescue Squad, Perry Emergency Ambulance Squad, Pike Rescue Squad, Sheldon Fire and Rescue Squad, Silver Springs Fire and Rescue Squad, Strykersville Fire and Rescue Squad, Varysburg Fire and Rescue Squad, Warsaw Fire and Rescue Squad, Wyoming Hook & Ladder Company.

School Districts (12): Attica Central School District, Letchworth Central School District, Perry Central School District, Warsaw Central School District, Wyoming Central School District, Yorkshire – Pioneer Central School District, *Alden Central School District, *Alexander Central School District, *Fillmore Central School District, *Holland Central School District, *Pavilion Central School District, *Keshequa Central School District. See Map 11 – *Wyoming County School Districts*.

*denotes a school district based outside Wyoming County that serves students in the county.

Electric Companies (3): New York State Electric & Gas Corporation (NYSEG), Rochester Gas & Electric (RG&E), National Grid.

Natural Gas Companies (3): New York State Electric & Gas Corporation (NYSEG), Rochester Gas & Electric (RG&E), National Fuel Gas.

Telecommunications Companies (2): Verizon New York, Inc., Frontier Telephone of Rochester.

SECTION 4.5 MUNICIPAL PROFILES

Town of Arcade	Wyoming County, New York Zip Code: 14030
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Arcade lies within the southwest portion of Wyoming County. State highways 39 and 98 intersect in the Village center. Dates of Settlement and Incorporation: Arcade was first settled in 1807. In 1818 the Town was incorporated from Sheldon by the name of China. The name was changed to Arcade in 1866. Notable Facts: Wool mills were the earliest manufacturing in Arcade. All different types of manufacturing took place throughout the 20th century, including: knit goods, bowling pins, hydraulic jacks and precision instruments, Agriculture also plays an important role --most farming centers on dairying, potatoes and hay. LANDSCAPE FEATURES Topography: Rolling and hilly upland Hydrography: Cattaraugus Creek, Clear Creek Watersheds: The Town of Arcade lies almost entirely within the Upper Cattaraugus Creek watershed. However, the northwest corner is part of the Buffalo Creek watershed and a slight bit of the Wiscoy Creek watershed permeates the southeastern boundary of the town. AREA Square Miles: 47.1 Acres: 30,144 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Arcade increased by 13.2% from 3,714 to 4,205. It is projected that Arcade's population will continue to increase through 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 4,205 Sex Ratio: Male 48.8%, Female 51.2% Median Age: 40.6 Median Household Income: \$44,632 Housing Units: 1,975 Median Housing Value: \$106,200 SCHOOL DISTRICTS Pioneer CSD UTILITIES Electricity: Municipal Natural Gas: National Fuel Telephone: Verizon Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Arcade Police Department, Wyoming County Sheriff, NYS Police Fire Departments: Arcade Fire Department Emergency Medical Services: Arcade Ambulance, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital (Warsaw), Bertrand Chaffee Hospital (Springville) NATURAL, CULTURAL, & HISTORIC RESOURCES Historic and Cultural Resources: The Arcade and Attica Railroad, incorporated in 1917, has been operating historic excursions since 1962. In 1980 it was added to the National Register of Historic Places.

Village of Arcade	Wyoming County, New York Zip Code: 14009
COMMUNITY DESCRIPTION Location/Boundaries: The Village of Arcade lies within the southwest portion of the Town of Arcade. State highways 39 and 98 intersect in the Village center. Dates of Settlement and Incorporation: Arcade was first settled in 1807. In 1818 the Town was incorporated from Sheldon by the name of China. The name was changed to Arcade in 1866. Notable Facts: Wool mills were the earliest manufacturing in Arcade. All different types of manufacturing took place throughout the 20th century, knit goods, bowling pins, hydraulic jacks and precision instruments, to name a few. Agriculture also plays an important role. Most farming centers on dairying, potatoes and hay. LANDSCAPE FEATURES Topography: Rolling and hilly upland Hydrography: Cattaraugus Creek, Clear Creek Watersheds: The Village of Arcade lies entirely within the Upper Cattaraugus Creek watershed. AREA Square Miles: 2.5 Acres: 1,600 POPULATION TRENDS Over the past several decades, the population of the Village of Arcade experienced little change. It is projected that the population of the Village of Arcade will decline slightly between 2010 and 2050. (G/FLRPC, 2012) DEMOGRAPHICS Population: 2,071 Sex Ratio: Male 47.5%, Female 52.5% Median Age: 35.2 Median Household Income: \$41,705 Housing Units: 935 Median Housing Value: \$99,900	SCHOOL DISTRICTS Pioneer CSD UTILITIES Electricity: Municipal Natural Gas: National Fuel Telephone: Verizon Water Supply: Municipal Waste Water: Municipal PUBLIC SAFETY Police Departments: Arcade Police Department, Wyoming County Sheriff, NYS Police Fire Departments: Arcade Fire Department Emergency Medical Services: Arcade Ambulance, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital (Warsaw), Bertrand Chaffee Hospital (Springville) NATURAL, CULTURAL, & HISTORIC RESOURCES Historic and Cultural Resources: The Arcade and Attica Railroad, incorporated in 1917, has been operating historic excursions since 1962. In 1980 it was added to the National Register of Historic Places.

Town of Attica	Wyoming County, New York Zip Code: 14011
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Attica lies within the north western portion of the County of Wyoming bordering Genesee County to the North, the Towns of Orangeville and Sheldon to the South the Town of Bennington to the West and the Towns of Middlebury and Warsaw to the East. Dates of Settlement and Incorporation Attica was settled in 1802. The Town of Attica was incorporated in 1811. Notable Facts: Families were attracted to this area because of plentiful land from the Holland Land Company. Farming has always been a major occupation of the community. In the 1920's New York State began to expand its penal system. By March 1929 697 acres were acquired for a new maximum security prison. Construction began in October; two years later the first inmates were transferred to Attica. The prison became the leading employer for Attica and one of the leading employers for Wyoming County. In 1931 a prison farm was completed. In 1984 a second medium security facility was added. LANDSCAPE FEATURES Topography: The flats of the Tonawanda Creek follow Route 98 north toward Batavia through the middle of the town. The Town has been hit by major floods in 1902, 1972, and 1999. Hydrography: Tonawanda Creek, Crow Creek, and Baker Brook. Watersheds: Upper Tonawanda Creek AREA Square Miles: 35.7 Acres: 22,848	POPULATION TRENDS Since 1960 the population of the Town of Attica increased 33.2% from 5,781 to 7,702. It is projected that Attica will grow at a 6.7% rate between 2010 and 2050. (G/FLRPC, 2003) DEMOGRAPHICS <i>Population:</i> 7,702 <i>Sex Ratio:</i> Male 73.9%, Female 26.1% <i>Median Age:</i> 38.0 <i>Median Household Income:</i> \$52,147 <i>Housing Units:</i> 1,729 <i>Median Housing Value:</i> \$101,200 SCHOOL DISTRICTS Attica Central School UTILITIES <i>Electricity:</i> National Grid <i>Natural Gas:</i> National Fuel Gas <i>Telephone:</i> Verizon <i>Water Supply:</i> Village of Attica <i>Waste Water:</i> Village of Attica PUBLIC SAFETY <i>Police Departments:</i> Village of Attica Police, Wyoming County Sheriff Department, NYS Police. <i>Fire Departments:</i> Attica Fire Department <i>Emergency Medical Services:</i> Attica Fire Department, Monroe Ambulance (through Wyoming County Community Hospital) <i>Nearby Medical Facilities:</i> Wyoming Community Hospital, Family Care Center NATURAL, CULTURAL & HISTORIC RESOURCES <i>Parks/Preserves:</i> Java Beagle Club, Veterans Memorial Park, Attica Youth Athletics fields. <i>Historic and Cultural Resources:</i> Attica Post Office, Attica Historical Museum, Stevens Community Library, and the High School Performing Arts center.

Village of Attica	Wyoming County, New York Zip Code: 14011
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Attica lies within the northwestern portion of the County of Wyoming bordering Genesee County to the North, the Towns of Orangeville and Sheldon to the South the Town of Bennington to the West and the Towns of Middlebury and Warsaw to the East. The Village of Attica straddles Wyoming and Genesee Counties. State Highways 238 and 98 intersect in the Village center. Dates of Settlement and Incorporation: Attica was settled in 1802. The Town of Attica was incorporated in 1811, followed by the incorporation of the Village of Attica in 1837. Notable Facts: Families were attracted to this area because of plentiful land from the Holland Land Company. Farming has always been a major occupation of the community. In the 1920's New York State began to expand its penal system. By March 1929 697 acres were acquired for a new maximum security prison. Construction began in October; two years later the first inmates were transferred to Attica. The prison became the leading employer for Attica and one of the leading employers for Wyoming County. In 1931 a prison farm was completed. In 1984 a second medium security facility was added. LANDSCAPE FEATURES Topography: The flats of the Tonawanda Creek follow Route 98 north toward Batavia through the middle of the town. The Town has been hit by major floods in 1902, 1972, and 1999. Hydrography: Tonawanda Creek, Crow Creek, and Baker Brook. Watersheds: Upper Tonawanda Creek AREA Square Miles: 1.68 Acres: 1,075.2	POPULATION TRENDS Between 1970 and 2010, the population of the Village decreased by 16.8% from 2,909 to 2,419. It is projected that the Village of Attica will increase at a rate of approximately 4.0% between 2010 and 2050. (G/FLRPC, 2012) DEMOGRAPHICS (Census 2010) <i>Population:</i> 2,419 <i>Sex Ratio:</i> Male 48.4%, Female 51.6% <i>Median Age:</i> 38.1 <i>Median Household Income:</i> \$47,196 <i>Housing Units:</i> 1166 <i>Median Housing Value:</i> \$95,100 SCHOOL DISTRICTS Attica CSD UTILITIES Electricity: National Grid Natural Gas: National Fuel Gas Telephone: Verizon Water Supply: Village of Attica Waste Water: Village of Attica PUBLIC SAFETY Police Departments: Village of Attica Police, Wyoming County Sheriff Department, NYS Police. Fire Departments: Attica Fire Department Emergency Medical Services: Attica Fire Department, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming Community Hospital, Family Care Center NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Java Beagle Club, Veterans Memorial Park, Attica Youth Athletics fields. Historic and Cultural Resources: Attica Post Office, Attica Historical Museum, Stevens Community Library, and the High School Performing Arts center.

Town of Bennington	Wyoming County, New York Zip Code: 14037
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Bennington is located in the northwest portion of Wyoming County. Genesee County is to the north and Erie County to the west. It is bordered by Attica on the east and Sheldon to the south. Dates of Settlement and Incorporation: Bennington was first settled in 1802. It was formed from Sheldon and incorporated in 1818. Notable Facts: The Town of Bennington was settled along an Indian path between the Genesee River and the Buffalo Creek Reservation. Bennington was home to Cowlesville Furnace, an industrial iron producer, in the mid-19th century. Today Bennington is a farming town. LANDSCAPE FEATURES Topography: Gently rolling hills, predominately agriculture. Hydrography: Tonawanda Creek, Cayuga Creek Watersheds: Bennington lies primarily in the Cayuga Creek watershed. Other watersheds protrude into the Town boundaries, such as Buffalo Creek, Ransom Creek to Mouth, Murder Creek and Upper Tonawanda Creek. AREA Square Miles: 55.1 Acres: 35,264 POPULATION TRENDS Between 1980 and 2000, the population of the Town of Bennington increased by 16.2% from 2,889 to 3,359. It is projected that Bennington will gain approximately 10% in population by the year 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 3,359 Sex Ratio: Male 51.7%, Female 48.3% Median Age: 45.6 Median Household Income: \$60,170 Housing Units: 1,425 Median Housing Value: \$145,100 SCHOOL DISTRICTS Attica CSD, Alexander CSD, Alden CSD UTILITIES Electricity: NYSEG Natural Gas: National fuel Telephone: Verizon Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Bennington Volunteer Fire Co. Emergency Medical Services: Bennington Volunteer Fire Co., Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital

Town of Castile	Wyoming County, New York Zip Code: 14427
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Castile is located in the southeastern portion of Wyoming County. Castile's eastern border is made up of the Genesee River Gorge that runs through Letchworth State Park. The Village of Castile is in the southwestern corner of the Town where Route 39 and Route 19A intersect. Dates of Settlement and Incorporation: Settlement in this area began in 1809. In 1821 the Town of Castile was formed from Perry and incorporated. The Village of Castile was incorporated in 1877. Notable Facts: The Town of Castile was home to Mary Jemison, an adopted Seneca author. The Town produced lumber in the 19th century and was home to the Greene Sanitarium. All of Silver Lake State Park and part of Letchworth State Park are in Castile. Farming, including dairy, potato and apple, play a key role in Castile's economy. LANDSCAPE FEATURES Topography: The Genesee River Gorge makes up the southeastern border of the Town of Castile. It is an 800 ft. deep post glacial gorge cut by the Genesee River. The rest of the valley is composed of highly cultivated rolling hills. Hydrography: Genesee River, Silver Lake Watersheds: The Town of Castile lies almost exclusively in the Wiscoy Creek to Canaseraga Creek watershed except for a small portion of the northwest corner that is in the Oatka Creek watershed. The Village of Castile is entirely within the Wiscoy Creek to Canaseraga Creek watershed. AREA Square Miles: 37 Acres: 23,680 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Castile increased by 1.4% from 2,865 to 2,906. It is projected that the Town of Castile's population will decline by approximately 15% by the year 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 2,906 Sex Ratio: Male 49.8%, Female 50.2% Median Age: 42.5 Median Household Income: \$50,167 Housing Units: 1,738 Median Housing Value: \$101,500 SCHOOL DISTRICTS Letchworth CSD, Perry CSD, Castile Christian Academy UTILITIES Electricity: NYSEG, Rochester Gas & Electric, Castile Municipal Electric Company Natural Gas: Rochester Gas & Electric, Fillmore Gas Inc., Dominion Transmission Inc. Telephone: Frontier Water Supply: Village of Castile Waste Water: Village of Castile PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Castile Volunteer Fire Dept. Emergency Medical Services: Castile Volunteer Fire Dept., Castile Rescue Squad, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital

Village of Castile	Wyoming County, New York Zip Code: 14427
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Castile is located in the southeastern portion of Wyoming County. Castile's eastern border is made up of the Genesee River Gorge that runs through Letchworth State Park. The Village of Castile is in the southwestern corner of the Town where Route 39 and Route 19A intersect. Dates of Settlement and Incorporation: Settlement in this area began in 1809. In 1821 the Town of Castile was formed from Perry and incorporated. The Village of Castile was incorporated in 1877. Notable Facts: The Town of Castile was home to Mary Jemison, an adopted Seneca author. The Town produced lumber in the 19th century and was home to the Greene Sanitarium. All of Silver Lake State Park and part of Letchworth State Park are in Castile. Farming, including dairy, potato and apple, play a key role in Castile's economy. LANDSCAPE FEATURES Topography: The Genesee River Gorge makes up the southeastern border of the Town of Castile. It is an 800 ft. deep post glacial gorge cut by the Genesee River. The rest of the valley is composed of highly cultivated rolling hills. Hydrography: Genesee River, Silver Lake Watersheds: The Town of Castile lies almost exclusively in the Wiscoy Creek to Canaseraga Creek watershed except for a small portion of the northwest corner that is in the Oatka Creek watershed. The Village of Castile is entirely within the Wiscoy Creek to Canaseraga Creek watershed. AREA Square Miles: 1.4 Acres: 896	POPULATION TRENDS Between 1980 and 2010, the population of the Village of Castile decreased by 12% from 1,135 to 1,015. It is projected that the Village of Castile's population will decline at a slow rate over the next several decades. (G/FLRPC, 2012) DEMOGRAPHICS Population: 1,015 Sex Ratio: Male 48.2%, Female 51.8% Median Age: 38.9 Median Household Income: \$44,464 Median Family Income: \$42,019 Families Below Poverty Line: 7.40% Individuals Below Poverty Line: 9.3% Housing Units: 453 Median Housing Value: \$82,200 SCHOOL DISTRICTS Letchworth CSD, Castile Christian Academy UTILITIES Electricity: NYPA-NYSEG, Castile Municipal Electric Company Natural Gas: National Fuel, Fillmore Gas Inc., Dominion Transmission Inc. Telephone: Frontier Water Supply: Municipal Waste Water: Municipal PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Castile Volunteer Fire Dept. Emergency Medical Services: Castile Volunteer Fire Dept., Castile Rescue Squad, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Silver Lake State Park

Town of Covington	Wyoming County, New York Zip Code: 14533
COMMUNITY DESCRIPTION Location/Boundaries: Covington is located in the northeast corner of Wyoming County. It is bordered by Genesee County to the north, Livingston County to the east, the Town of Middlebury to the west and the Town of Perry to the South. New York State Routes 19, 246 and 63 all pass through the Town of Covington. Dates of Settlement and Incorporation: The Town of Covington was first settled in 1806. It was incorporated in 1817. Notable Facts: The Town of Covington was home to one of Wyoming County's early salt companies, the Pearl Salt Company. Dairy farming is the predominate agriculture followed by wheat, corn and vegetable growing. LANDSCAPE FEATURES Topography: Rolling hills dominated by agriculture define the topography of Covington. Hydrography: Oatka Creek Watersheds: The Town of Covington lies within a three watersheds, though the majority is in the Oatka Creek watershed. The southeast corner of the Town lies within the Beards Creek watershed and a small part of the northeast corner is in the Canaseraga Creek to Oatka Creek watershed. AREA Square Miles: 26.1 Acres: 16,704 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Covington increased 12.7% from 1,075 to 1,232. It is projected that Covington's population will have steady growth through 2050 gaining approximately 18% in population. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 1,232 Sex Ratio: Male 51.2%, Female 48.8% Median Age: 40.9 Median Household Income: \$60,227 Housing Units: 502 Median Housing Value: \$88,400 SCHOOL DISTRICTS Pavilion CSD, Wyoming CSD, Perry CSD UTILITIES Electricity: National Grid Natural Gas: National Fuel Telephone: Frontier, Verizon Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Pavilion Fire Department, Wyoming Fire Department, Perry Center Fire Department Emergency Medical Services: Monroe Ambulance (through Wyoming County Community Hospital), Pavilion Rescue, Wyoming Fire Department Rescue Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Historic and Cultural Resources: Pratt truss bridge.

Town of Eagle	Wyoming County, New York Zip Code: 14024
COMMUNITY DESCRIPTION Location/Boundaries: Town of Eagle is located on the southern border of Wyoming County. It is bordered by Wethersfield to the north, Pike to the east, Allegany County to the south and Arcade to the west. NYS State Highways 362 and 39 intersect within the town's border. Dates of Settlement and Incorporation: The Town of Eagle was settled in 1808. It was formed from Pike and incorporated in 1823. Notable Facts: Historically lumber, cheese and apples have been important products of Eagle. At the turn of the 20th Century the Bliss Manufacturing Company (originally an iron foundry but later produced woodenware) was opened, but closed a few decades later in 1935. Agriculture is still one of the most important industries in Eagle. Wind power is the other major industry. Over 90 wind towers are present in the town. LANDSCAPE FEATURES Topography: Rolling and hilly upland Hydrography: Wiscoy Creek Watersheds: The majority of Eagle lies within the Wiscoy Creek watershed; however the northwestern corner is part of the Upper Cattaraugus Creek watershed and the southeastern corner is in the Canadea Creek to Wiscoy Creek watershed. AREA Square Miles: 36.4 Acres: 23,296 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Eagle decreased by 2% from 1,216 to 1,192. It is projected that Eagle's population will slightly increase each decade through 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 1,192 Sex Ratio: Male 50.3%, Female 49.7% Median Age: 40.7 Median Household Income: \$38,906 Housing Units: 564 Median Housing Value: \$74,000 SCHOOL DISTRICTS Letchworth CSD, Pioneer CSD UTILITIES Electricity: National Grid Natural Gas: National Fuel Telephone: Verizon Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Eagle Hose Emergency Medical Services: Bliss Rescue, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Rita George Memorial Recreation Center

Town of Gainesville	Wyoming County, New York Zip Code: 14550
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Gainesville is located in the southeastern part of Wyoming County. It is bordered by Warsaw to the north, Castile to the east, Pike to the south and Wethersfield to the west. New York State Routes 19, 19A and 76 run through the town. The Village of Gainesville is located in the center of the Town and the Village of Silver Springs is located in the eastern portion of the town. Dates of Settlement and Incorporation: The Town of Gainesville was first settled in 1805. It was formed from Warsaw in 1814. Notable Facts: The Town of Gainesville, originally named Hebe, has been home to rock quarrying in the past and is home today to large-scale agriculture. Dairy and potato farming are the major agricultural products. LANDSCAPE FEATURES Topography: Rolling hills dominated by agriculture. Hydrography: Watersheds: The Town of Gainesville lies within three watersheds, the Oatka Creek watershed in the north, the Wiscoy Creek watershed in the south and the Wiscoy Creek to Canaseraga Creek watershed in the east. AREA Square Miles: 35.6 Acres: 22,784 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Gainesville increased by 2% from 2,133 to 2,182. It is projected that the Town of Gainesville will increase by 2020 and maintain a steady growth rate through 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 2,182 Sex Ratio: Male 50.7%, Female 49.3% Median Age: 42.3 Median Household Income: \$46,484 Housing Units: 965 Median Housing Value: \$79,400 SCHOOL DISTRICTS Letchworth CSD, Warsaw CSD UTILITIES Electricity: NYSEG, National Grid Natural Gas: National Fuel Telephone: Frontier Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Gainesville Fire Department Emergency Medical Services: Gainesville Fire Department, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Historic and Cultural Resources: Pratt truss bridge.

Village of Gainesville	Wyoming County, New York Zip Code: 14066
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Gainesville is located in the southeastern part of Wyoming County. It is bordered by Warsaw to the north, Castile to the east, Pike to the south and Wethersfield to the west. New York State Routes 19, 19A and 76 run through the town. The Village of Gainesville is located in the center of the Town and the Village of Silver Springs is located in the eastern portion of the town. Dates of Settlement and Incorporation: The Town of Gainesville was first settled in 1805. It was formed from Warsaw in 1814. Notable Facts: The Town of Gainesville, originally named Hebe, has been home to rock quarrying in the past and is home today to large-scale agriculture – primarily of dairy and potato farming LANDSCAPE FEATURES Topography: Rolling hills dominated by agriculture. Hydrography: Watersheds: The Village of Gainesville lies entirely within the Wiscoy Creek watershed. AREA Square Miles: .9 Acres: 576 POPULATION TRENDS Between 1980 and 2010, the population of the Village of Gainesville decreased 31.4% from 334 to 229. It is projected that the Village of Gainesville will reverse this trend and increase by approximately 23% between 2010 and 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 229 Sex Ratio: Male 52.4%, Female 47.6% Median Age: 44.8 Median Household Income: \$41,250 Housing Units: 112 Median Housing Value: \$66,700 SCHOOL DISTRICTS Letchworth CSD, Warsaw CSD UTILITIES Electricity: Natural Gas: National Fuel Telephone: Frontier Water Supply: Waste Water: PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Gainesville Fire Department Emergency Medical Services: Gainesville Fire Department, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Historic and Cultural Resources: Pratt truss bridge.

Town of Genesee Falls	Wyoming County, New York Zip Code: 14536
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Genesee Falls is located in the southeast corner of Wyoming County. It borders Livingston County on its east and Allegany County to the south. It is bordered by Pike on the west and Castile (primarily) to the north. (It shares a small portion of its northern border with Gainesville as well.) The Genesee River makes up the eastern border of the town. Dates of Settlement and Incorporation: The Town of Genesee Falls was first settled in 1804. It was formed from Pike and Portage in 1846. Notable Facts: The Genesee River makes up the eastern border of Genesee Falls. The river led to the development of the Genesee Valley Canal in the mid-19th century. The Town is home to the Genesee River falls and part of William P. Letchworth's purchase that is now Letchworth State Park. LANDSCAPE FEATURES Topography: Gently rolling hills are broken up by the Genesee River Gorge that makes up a portion of the town's border. Hydrography: Genesee River. Watersheds: The Town of Genesee Falls lies almost entirely within the Wiscoy Creek to Canaseraga Creek watershed. A small portion of the town's western border is in the Wiscoy Creek watershed. AREA Square Miles: 15.5 Acres: 9,920 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Genesee Falls decreased 20.7% from 553 to 438. It is projected that the Town will increase in population by approximately 9% by 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 438 Sex Ratio: Male 49.1%, Female 50.9% Population: 438 Median Age: 44.9 Median Household Income: \$37,500 Housing Units: 222 Median Housing Value: \$75,200 SCHOOL DISTRICTS Letchworth CSD, Keshequa CSD UTILITIES Electricity: NYSEG, National Grid Natural Gas: National fuel Telephone: Frontier Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Genesee Falls Fire and Rescue Emergency Medical Services: Genesee Falls Fire and Rescue, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Letchworth State Park Historic and Cultural Resources: Pratt truss bridge, Genesee Valley Canal

Town of Java	Wyoming County, New York Zip Code: 14082
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Java is located in the southwestern portion of Wyoming County. It is bordered on the north by Sheldon, the east by Wethersfield, the south by Arcade and the west by Erie County. New York State Routes 77, 78 and 96 run through the Town of Java. Dates of Settlement and Incorporation: The Town of Java was first settled in 1809 and was formed from Arcade in 1832. Notable Facts: Java is home to the Beaver Meadow Audubon Center. The primary industry in Java is dairy farming; however there is some manufacturing as well. LANDSCAPE FEATURES Topography: Gently rolling hills dominated by agriculture. Hydrography: Java Lake, Beaver Meadow Audubon Center. Watersheds: The Town of Java lies within three watersheds. The majority of the Town is in the Buffalo Creek watershed, the northeastern corner lies in the Upper Tonawanda Creek watershed and the southeastern corner is in the Upper Cattaraugus Creek watershed. AREA Square Miles: 47.1 Acres: 30,144 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Java decreased 9.5% from 2,273 to 2,057. The population is projected to increase by over 12% between 2010 and 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 2,057 Sex Ratio: Male 51.6%, Female 48.4% Median Age: 41.1 Median Household Income: \$57,557 Median Family Income: \$47,120 Housing Units: 1,013 Median Housing Value: \$119,200 SCHOOL DISTRICTS Yorkshire – Pioneer CSD, Holland CSD, Attica CSD UTILITIES Electricity: NYSEG Natural Gas: National Fuel Telephone: Verizon Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: North Java Fire and Rescue, Strykersville Fire & Rescue Emergency Medical Services: North Java Fire and Rescue, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Java Lake, Beaver Meadow Audubon Center.

Town of Middlebury	Wyoming County, New York Zip Code: 14039
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Middlebury is located in the northeast of Wyoming County with Genesee County to the north, Covington and Perry to the east, Warsaw to the south and Attica to the west. New York State Route 19 runs through the Town of Middlebury and through the center of the Village of Wyoming. The Village of Wyoming is located on the eastern border of Middlebury. Dates of Settlement and Incorporation: The Town of Middlebury was first settled in 1802 and was formed from Warsaw in 1812. Notable Facts: In the later 19th century salt brine was struck in the Town and has continued to play a role in the local economy since. The Town is primarily agricultural. The Hillside Inn, a Kentucky family's 52-room summer residence, is located in the Village of Wyoming. LANDSCAPE FEATURES Topography: Gently rolling hills dominated by agriculture. Hydrography: Little Tonawanda Creek, Oatka Creek Watersheds: The Town of Middlebury lies in, essentially, two watersheds; the Upper Tonawanda Creek watershed in the western half of Town and the Oatka Creek watershed in the eastern half of town. The Black Creek watershed protrudes slightly into the northern section of the town. AREA Square Miles: 35.7 Acres: 22,848 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Middlebury decreased 7.7% from 1,561 to 1,441. It is projected that the Town will grow over the next several decades and return closer to its 2000 population level of 1,508 by 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 1,441 Population: 1,441 Sex Ratio: Male 51.4%, Female 48.6% Median Age: 43 Median Household Income: \$56,625 Housing Units: 625 Median Housing Value: \$94,900 SCHOOL DISTRICTS Wyoming CSD, Warsaw CSD, Pavilion CSD, Attica CSD, Alexander CSD UTILITIES Electricity: NYSEG, National Grid Natural Gas: NYSEG Telephone: Frontier, Verizon Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Wyoming Fire Department Emergency Medical Services: Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Carlton Hill State Multiple Use Area Historic and Cultural Resources: Hillside Inn, AppleUmpkin Festival, Wyoming Water Cure, Middlebury Academy

Town of Orangeville	Wyoming County, New York Zip Code 14167
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Orangeville lies in the center of Wyoming County. It is bordered by Attica on the north, Warsaw to the east, Wethersfield to the south and Sheldon to the west. New York State Routes 20A and 238 run through the town. Dates of Settlement and Incorporation: The Town of Orangeville was settled in 1804 and was formed from Attica in 1816. Notable Facts: Orangeville is primarily a dairy town. Many who are not in the agriculture sector commute to Attica or other nearby towns. LANDSCAPE FEATURES Topography: Gently rolling hills dominated by agriculture. Hydrography: Watersheds: The Town of Orangeville lies in three different watersheds. The majority is in the Upper Tonawanda Creek watershed, the southeastern corner is in the Wiscoy Creek watershed and the eastern portion of the Town is in the Oatka Creek watershed. AREA Square Miles: 35.6 Acres: 22,784 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Orangeville increased by 23% from 1,103 to 1,355. It is projected that the Town's population will continue to grow at a lower rate of 3.8% between 2010 and 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 1,355 Sex Ratio: Male 52.0%, Female 48.0% Median Age: 44.2 Median Household Income: \$63,500 Housing Units: 642 Median Housing Value: \$118,200 SCHOOL DISTRICTS Warsaw CSD, Attica SCD UTILITIES Electricity: National Grid Natural Gas: National Fuel Telephone: Verizon Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Emergency Medical Services: Monroe Ambulance (through Wyoming County Community Hospital), Warsaw Rescue Squad Nearby Medical Facilities: Wyoming County Community Hospital

Town of Perry	Wyoming County, New York Zip Code: 14481
COMMUNITY DESCRIPTION Location/Boundaries: The Village of Perry lies within the townships of Perry and Castile. NYS highways 39 and 246 intersect in the Village. Dates of Settlement and Incorporation: Perry was first settled in 1806. The Town of Perry was formed from Leicester and incorporated in 1814. The Village was incorporated in 1830. Notable Facts: The Town of Perry lies on the eastern border of Wyoming County and the western border of Livingston County. The Village of Perry lies on the southern border of the Town and is split between the Town of Perry and the Town of Castile. Perry was known for its numerous mills in the 1800s and early 1900s that were located along the Silver Lake outlet. The Perry Salt Company and the Perry Knitting Mill were both based in Perry and contributed to the growth of the Town around the turn of the 20th century. Other knitting and manufacturing businesses would follow, including Archway Cookies which is still located in Perry. Like the rest of Wyoming County, agriculture is an important sector. LANDSCAPE FEATURES Topography: Rolling hills Hydrography: Silver Lake, located along the west side of the Village. The Silver Lake Outlet bisects the Village of Perry from west to east. Watersheds: Wiscoy Creek to Canaseraga Creek watershed, Beards Creek watershed, and Oatka Creek watershed AREA Square Miles: 36.4 Acres: 23,296 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Perry decreased 15% from 5,437 to 4,616. Perry is projected to increase in population by approximately 3.2% by 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 4,616 Sex Ratio: Male 48.7%, Female 51.3% Median Age: 39.4 Population: 4,616 Median Household Income: \$46,011 Housing Units: 2,190 Median Housing Value: \$77,900 SCHOOL DISTRICTS Perry CSD UTILITIES Electricity: NYSEG Natural Gas: Rochester Gas & Electric Telephone: Frontier Water Supply: Municipal Waste Water: Municipal PUBLIC SAFETY Police Departments: Perry Police Department, Wyoming County Sheriff, NYS Police Fire Departments: Perry Fire Department, Perry Center Fire Department Emergency Medical Services: Perry Emergency Ambulance, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Perry Medical Center, Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Village of Perry Park, Barney Kalisz Park, Silver Lake State Park, Letchworth State Park Historic and Cultural Resources: Arts Council of Wyoming County, Perry Public Library, Epworth Hall-Silver Lake, Wyoming Historical Pioneer Association, Hoag Memorial Gallery, Stowell-Wiles Gallery

Village of Perry	Wyoming County, New York Zip Code: 14530
COMMUNITY DESCRIPTION Location/Boundaries: The Village of Perry lies within the townships of Perry and Castile. NYS highways 39 and 246 intersect in the Village. Dates of Settlement and Incorporation: Perry was first settled in 1806. The Town of Perry was formed from Leicester and incorporated in 1814. The Village was incorporated in 1830. Notable Facts: The Town of Perry lies on the eastern border of Wyoming County and the western border of Livingston County. The Village of Perry lies on the southern border of the Town and is split between the Town of Perry and the Town of Castile. Perry was known for its numerous mills in the 1800s and early 1900s that were located along the Silver Lake outlet. The Perry Salt Company and the Perry Knitting Mill were both based in Perry and contributed to the growth of the Town around the turn of the 20th century. Other knitting and manufacturing businesses would follow, including Archway Cookies which is still located in Perry. Like the rest of Wyoming County, agriculture is also an important sector. LANDSCAPE FEATURES Topography: Rolling hills Hydrography: Silver Lake, located along the west side of the Village. The Silver Lake Outlet bisects the Village from west to east. Watersheds: Wiscoy Creek to Canaseraga Creek watershed. (Silver Lake watershed) AREA Square Miles: 2.37 Acres: 1516.8 POPULATION TRENDS Between 1980 and 2010, the population of the Village of Perry decreased at a rate of 12.5% from 4,198 to 3,673. The Village is projected to reverse this trend and increase at a slow rate over the next several decades through 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 3,673 Sex Ratio: Male 47.6%, Female 52.4% Median Age: 38.7 Population: 3,673 Median Household Income: \$42,589 Housing Units: 1,765 Median Housing Value: \$76,000 SCHOOL DISTRICTS Perry CSD UTILITIES Electricity: NYSEG Natural Gas: Rochester Gas & Electric Telephone: Frontier Water Supply: Municipal Waste Water: Municipal PUBLIC SAFETY Police Departments: Perry Police Department, Wyoming County Sheriff, NYS Police Fire Departments: Perry Fire Department, Perry Center Fire Department Emergency Medical Services: Perry Emergency Ambulance, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Perry Medical Center, Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Village of Perry Park, Barney Kalisz Park, Silver Lake State Park, Letchworth State Park Historic and Cultural Resources: Arts Council of Wyoming County, Perry Public Library, Epworth Hall-Silver Lake, Wyoming Historical Pioneer Association, Hoag Memorial Gallery, Stowell-Wiles Gallery

Town of Pike	Wyoming County, New York Zip Code: 14130
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Pike is located in the southeastern section of Wyoming County. Routes 39 and 19 run through the Town. Dates of Settlement and Incorporation: The Town of Pike was settled in 1806. The Town was formed from Nunda in 1818. Notable Facts: Pike is a rural Town. The main industry is farming, particularly dairy, potatoes and cash crops. There is a growing population of Amish. The Wyoming County Fair is held here. Most of the residents who do not work on farms commute to Warsaw, Buffalo, Rochester, Arcade, and other more populated places to work. Many people work for Wyoming County, the NYS prison system, the school district, or private businesses. In 2009 the Village of Pike was dissolved as a political entity into the Town of Pike. LANDSCAPE FEATURES Topography: The Town of Pike consists of rolling hills, wood lots, streams, farm land, and abundant open space. Hydrography: Numerous small streams, including the East Koy and Wiscoy creeks. Watersheds: The Town of Pike lies almost entirely within the Wiscoy Creek watershed. However, the southwestern corner is in the Caneadea Creek to Wiscoy Creek watershed. AREA Square Miles: 31.1 Acres: 19,904 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Pike increased by 12.4% from 991 to 1,114. It is projected that Pike's population will increase at a slight rate growing by approximately 2.4% by the year 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 1,114 Sex Ratio: Male 51.1%, Female 48.9% Median Age: 38.8 Population: 1,114 Median Household Income: \$61,033 Families Below Poverty Line: 7.5% Housing Units: 462 Median Housing Value: \$71,100 SCHOOL DISTRICTS Letchworth CSD UTILITIES Electricity: National Grid Natural Gas: National Fuel Telephone: Frontier Water Supply: Private Waste Water: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Pike Volunteer Fire Department Emergency Medical Services: Pike Rescue Squad, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Health Service, Community Medical Center in Castile NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Wyoming County Fair Grounds Historic and Cultural Resources: Wyoming County Fair, Pike Community Library

Town of Sheldon	Wyoming County, New York Zip Code: 14037
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Sheldon is on the western border of Wyoming County. The Town is bordered to the west by Erie County, to the north by Bennington, Java to the south and Orangeville to the east. New York State Routes 77, 78 and 96 pass through the Town of Sheldon. Dates of Settlement and Incorporation: The Town of Sheldon was settled in 1804 and was formed from Batavia in 1808. Notable Facts: Manufacturing and agriculture have played a key role in Sheldon's history. Agriculture, particularly dairy, continues to be a major segment of the towns economy. Wind power is also a major industry; over 70 wind towers are present in the town. LANDSCAPE FEATURES Topography: Gently rolling hills dominated by agriculture. Hydrography: Cayuga Creek, Tonawanda Creek Watersheds: The western portion of Sheldon lies in the Buffalo Creek watershed. The central section of the Town is part of the Cayuga Creek watershed and the eastern portion of the Town is in the Upper Tonawanda Creek watershed. AREA Square Miles: 47.3 Acres: 30,272 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Sheldon declined at the rate of 8.9% from 2,644 to 2,409. It is projected that the Town's population will increase by over 11% by the year 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 2,409 Sex Ratio: Male 52.6%, Female 47.6% Median Age: 43.1 Median Household Income: \$51,433 Families Below Poverty Line: 7.20% Individuals Below Poverty Line: 5.8% Housing Units: 1,112 Median Housing Value: \$122,600 SCHOOL DISTRICTS Attica CSD, Holland CSD, Yorkshire – Pioneer CSD UTILITIES Electricity: NYSEG Natural Gas: National Fuel Telephone: Verizon Water Supply: Private PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Sheldon Fire Co. Emergency Medical Services: Sheldon Fire Co., Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital

Village of Silver Springs	Wyoming County, New York Zip Code: 14550
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Gainesville is located in the southeastern part of Wyoming County. It is bordered by Warsaw to the north, Castile to the east, Pike to the south and Wethersfield to the west. New York State Routes 19, 19A and 76 run through the town. The Village of Gainesville is located in the center of the Town and the Village of Silver Springs is located in the eastern portion of the town. Dates of Settlement and Incorporation: The Town of Gainesville was first settled in 1805. It was formed from Warsaw in 1814. The Village of Silver Springs was incorporated in 1895. Notable Facts: Salt has played a significant role in Silver Spring's history. The first salt company in the Village was the Duncan Salt Company, later known as the Worcester Salt Company. Today the Morton Salt Company is based in Silver Springs. The Silver Springs Manufacturing Company, later known as Lucas Rule Company, was based in Silver Springs until 1965. LANDSCAPE FEATURES Topography: Rolling hills dominated by agriculture. Watersheds: The Village of Silver Springs lies almost entirely within the Wiscoy Creek to Canaserega Creek watershed. The very northern tip of the Village is in the Oatka Creek watershed. AREA Square Miles: .9 Acres: 576 POPULATION TRENDS Between 1980 and 2010, the population of the Village of Silver Springs declined at the rate of 2.4% from 801 to 782. It is projected that the Village of Silver Springs' population will reverse this trend and increase by approximately 10% between 2010 and 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 782 Population: 782 Sex Ratio: Male 47.2%, Female 52.8% Median Age: 42.4 Median Household Income: \$41,293 Families Below Poverty Line: 6.5% Housing Units: 367 Median Housing Value: \$74,200 SCHOOL DISTRICTS Letchworth CSD UTILITIES Electricity: Silver Springs Municipal Electric Natural Gas: National Fuel Telephone: Frontier Water Supply: Waste Water: PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Silver Springs Fire and Rescue Emergency Medical Services: Silver Springs Fire and Rescue, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Historic and Cultural Resources: Pratt truss bridge.

Town of Warsaw	Wyoming County, New York Zip Code: 14569
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Warsaw lies in the northeastern quadrant of Wyoming County. Warsaw is intersected by NYS Route 19, running north to south, and Route 20A, running east to west. The Village of Warsaw lies within the Town. Dates of Settlement and Incorporation: The Town of Warsaw was first settled in 1803 as part of the Holland Land Purchase. It was formed from Batavia and incorporated in 1808. The Village of Warsaw was incorporated in 1843. Notable Facts: The Town of Warsaw contains most of the Wyoming County offices, including the County Clerk, County Court, and County Public Safety Building. A large portion of the land is under a tax exemption. The Town of Warsaw has a larger than average number of elderly. There are three housing developments for minimum income and/or old age. LANDSCAPE FEATURES Topography: The varying elevations within the Town of Warsaw are due to the Oatka Creek, flowing south to north. The elevation change ranges from approximately 1,050 to 1,600 feet above sea level, with a much sharper elevation range in the western portion of the Town. Hydrography: Oatka Creek, Stony Brook Creek Watersheds: Warsaw lies entirely within the Oatka Creek watershed, with the slight exception of small intrusions of the Upper Tonawanda Creek watershed in the northwest corner and the Wiscoy Creek to Canaseraga Creek watershed in the east. AREA Square Miles: 35.4 Acres: 22,656 POPULATION TRENDS Between 1990 and 2010, the population of the Town of Warsaw has declined by 5.2% from 5,342 to 5,064. It is projected that Warsaw's population will increase by approximately 9.4% between the years 2010 and 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 5,064 Sex Ratio: Male 47.7, Female 52.3% Median Age: 41.2 Median Household Income: \$42,746 Families Below Poverty Line: 8.8% Housing Units: 2,355 Median Housing Value: \$92,300 SCHOOL DISTRICTS Warsaw CSD, Wyoming CSD, Letchworth CSD UTILITIES Electricity: NYSEG Natural Gas: Rochester Gas & Electric Telephone: Frontier Water Supply: Mostly private, water district provided to 75 customers in the Village of Warsaw Waste Water: No sewer except for Wal-Mart Plaza PUBLIC SAFETY Police Departments: Warsaw Village Police, Wyoming County Sheriff's Department, NYS Police Fire Departments: Warsaw Fire Department Emergency Medical Services: Warsaw Rescue Squad, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital, Eastside Nursing Home, Extended Care of Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Falls on Stony Brook Creek, Village of Warsaw Park Historic and Cultural Resources: Warsaw Public Library, Monument Historical District, Civil War Monument, Warsaw Historical Society, Gates Historical House

Village of Warsaw	Wyoming County, New York Zip Code: 14569
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Warsaw lies in the northeastern quadrant of Wyoming County. Warsaw is intersected by NYS Route 19, running north to south, and Route 20A, running east to west. The Village of Warsaw lies within the Town. Dates of Settlement and Incorporation: The Town of Warsaw was first settled in 1803 as part of the Holland Land Purchase. It was formed from Batavia and incorporated in 1808. The Village of Warsaw was incorporated in 1843. Notable Facts: The Village of Warsaw contains most of the Wyoming County offices, including the County Clerk, County Court, and County Public Safety Building. A large portion of the land is under a tax exemption. The Town and Village has a larger than average number of elderly. There are three housing developments for minimum income and/or old age. LANDSCAPE FEATURES Topography: The varying elevations within the Town of Warsaw are due to the Oatka Creek, flowing south to north. The elevation change ranges from approximately 1,050 to 1,600 feet above sea level, with a much sharper elevation range in the western portion of the Town. Hydrography: Oatka Creek, Stony Brook Creek Watersheds: The Village of Warsaw lies entirely within the Oatka Creek watershed. AREA Square Miles: 4.1 Acres: 2,624 POPULATION TRENDS Between 1980 and 2010, the population of the Village declined at the rate of 4% from 3,619 to 3,473. It is projected that the Village of Warsaw's population will increase back towards the 2000 population of 3,814 by the year 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 3,473 Sex Ratio: Male 47.5%, Female 52.5% Median Age: 39.9 Median Household Income: \$37,971 Families Below Poverty Line: 7% Housing Units: 1,647 Median Housing Value: \$88,900 SCHOOL DISTRICTS Warsaw CSD, Wyoming CSD, Letchworth CSD UTILITIES Electricity: NYSEG Natural Gas: Rochester Gas & Electric Telephone: Frontier Water Supply: Municipal Waste Water: Municipal PUBLIC SAFETY Police Departments: Warsaw Village Police, Wyoming County Sheriff's Department, NYS Police Fire Departments: Warsaw Fire Department Emergency Medical Services: Warsaw Rescue Squad, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital, Eastside Nursing Home, Extended Care of Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Falls on Stony Brook Creek, Village of Warsaw Park Historic and Cultural Resources: Warsaw Public Library, Monument Historical District, Civil War Monument, Warsaw Historical Society, Gates Historical House

Town of Wethersfield	Wyoming County, New York Zip Code: 14113
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Wethersfield is located in the center of Wyoming County. It is bordered by Orangeville to the north, Gainesville to the east, Eagle to the south and Java to the west. New York State Routes 76 and 362 pass through Wethersfield. Dates of Settlement and Incorporation: The area was first settled in 1809. In 1823 the Town of Wethersfield was formed from Orangeville and incorporated. Notable Facts: The Town of Wethersfield is home to one of the first wind farms in the Northeast. Wind power is now a major industry in the town, over 60 wind towers are present. LANDSCAPE FEATURES Topography: The northeast portion of the Town has large rolling hills that gradually level out to flatter landscape in the southeast. The Town of Wethersfield has the highest elevation point in Wyoming County. Most of the land is agricultural. Hydrography: Faun Lake, East Koy Creek, Trout Brook Watersheds: Wethersfield lies primarily in the Wiscoy Creek and Upper Tonawanda Creek watersheds. A small segment of the southwest corner lies in the Upper Cattaraugus Creek watershed. AREA Square Miles: 35.83 Acres: 22,931.2 POPULATION TRENDS Between 1980 and 2010, the population of the Town of Wethersfield increased 31% from 674 to 883. It is projected that Wethersfield's population will increase by approximately 3% by the year 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 883 Sex Ratio: Male: 53.0%, Female: 47.0% Median Age: 39.79 Median Household Income: \$43,958 Families Below Poverty Line: 13.6% Housing Units: 451 Median Housing Value: \$98,900 SCHOOL DISTRICTS Warsaw CSD, Letchworth CSD, Yorkshire – Pioneer CSD UTILITIES Electricity: National Grid Natural Gas: Telephone: Verizon Water Supply: private Waste Water: private PUBLIC SAFETY Police Departments: Wyoming County Sheriff, NYS Police Fire Departments: Gainesville Fire Department, North Java Fire Department, Bliss Fire Department Emergency Medical Services: Gainesville Emergency Ambulance, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Parks/Preserves: Two of Wyoming County Forests are located within the Town of Wethersfield Historic and Cultural Resources: Many trout fishing streams

Village of Wyoming	Wyoming County, New York Zip Code: 14591
COMMUNITY DESCRIPTION Location/Boundaries: The Town of Middlebury is located in the northeast of Wyoming County with Genesee County to the north, Covington and Perry to the east, Warsaw to the south and Attica to the west. New York State Route 19 runs through the Town of Middlebury and through the center of the Village of Wyoming that is located on the eastern border of town. Dates of Settlement and Incorporation: The Town of Middlebury was first settled in 1802 and was formed from Warsaw in 1812. The Village of Wyoming was settled in 1809 and incorporated in 1916. Notable Facts: The Hillside Inn, a Kentucky family's 52-room summer residence, is located in the Village of Wyoming. Wyoming is also home to the Middlebury Academy, founded in 1817. Wyoming is known as the "Gaslight Village" because its streets are lit by gaslight lamps. Every autumn the AppleUmpkin Festival is held in the village. 70 buildings in the center of the Village of Wyoming are on the National Register of Historic Places. LANDSCAPE FEATURES Topography: Gently rolling hills dominated by agriculture. Hydrography: Little Tonawanda Creek, Oatka Creek Watersheds: The Village of Wyoming lies entirely within the Oatka Creek watershed. AREA Square Miles: .7 Acres: 448 POPULATION TRENDS Between 1980 and 2010, the population of the Village of Wyoming declined at the rate of 14.4% from 507 to 434. It is projected that the Village's population will increase by approximately 9% between the years 2010 and 2050. (G/FLRPC, 2012)	DEMOGRAPHICS Population: 434 Sex Ratio: Male 50.2%, Female 49.8% Median Age: 35.8 Median Household Income: \$39,792 Families Below Poverty Line: 5.1% Housing Units: 171 Median Housing Value: \$86,700 SCHOOL DISTRICTS Wyoming CSD UTILITIES Electricity: New York Electric & Gas Natural Gas: National Fuel Gas Telephone: Frontier Water Supply: Village of Wyoming Waste Water: none PUBLIC SAFETY Police Departments: Wyoming County Sheriff's Department, NYS Police Fire Departments: Wyoming Fire Department Emergency Medical Services: Wyoming Fire Department, Warsaw Ambulance, Monroe Ambulance (through Wyoming County Community Hospital) Nearby Medical Facilities: Wyoming County Community Hospital NATURAL, CULTURAL, & HISTORIC RESOURCES Natural Resources: Oatka Creek Historic and Cultural Resources: Hillside Inn, AppleUmpkin Festival, Wyoming Water Cure, Middlebury Academy, Wyoming Village Hall, Gas Lights throughout the village.

Chapter 5: Hazard Analysis

SECTION 5.1: PURPOSE

NYS Office of Emergency Management's HAZNY (Hazards New York) process was used for the Existing Plan to help identify and rank hazards. This process and the ranking of each hazard was reviewed and adjusted where need be for the Plan Update.

The purpose of reviewing and updating the Hazard Analysis is the same as it was for the Existing Plan and is twofold: 1.) Identify all natural, technological and human-caused hazards that might affect Wyoming County and its municipalities, and 2.) Narrow the list to those hazard types that are most likely to occur and which present the greatest potential threat.

It was important to review and update the HAZNY to determine if hazard ranks should be adjusted to reflect current conditions. The group did not start the process over from scratch but rather reviewed each rank and the HAZNY responses that created each hazard rating in order to make adjustments where necessary.

SECTION 5.2: HAZNY PROGRAM BACKGROUND

The HAZNY program was developed by the American Red Cross and the New York State Emergency Management Office. HAZNY is an automated interactive spreadsheet that asks specific questions on potential hazards in a community and records and evaluates the responses to these questions. The program calculates a score for each of the potential hazards based on the responses to the questions. The program includes historical and expert data on selected hazards and is designed specifically for groups of stakeholders rather than for use by individual jurisdictions. This ranking of hazards provides the community with a factual basis for prioritizing the community's resources to prepare for, respond to, and mitigate against the hazards that pose the greatest risk to the community.

The five categories covered in the Hazard Analysis session are: Scope, Frequency, Impact, Duration, and Onset.

Scope indicates the size of an area that would be impacted by a potential hazard. For this hazard analysis category, HAZNY participants are asked if the hazard in question has the capability of triggering other hazards in a cascading effect. The area of the impact of the hazard itself and its cascading effects, where they exist, are analyzed.

Frequency predicts how often a hazard has occurred in the past and could occur in the future.

Impact analyzes how the hazard will impact the lives and safety of people, as well as possible damage to public and private property. Specifically, impact is concerned with the hazard's ability to seriously injure or kill people, create private economic impact as well as impact on public facilities.

Onset inquires about warning time; that is, how much time is there between the initial recognition of the approaching hazard and when the hazard will impact the community in question.

Duration analyzes how long the expected hazard will remain active; that is, over what period of time does the hazard occur, and how long will it take the community to recover from the event.

SECTION 5.3: 2003-2005 PROCESS SUMMARIZED

The original HAZNY ranking was completed in 2003 through a process of 6 meetings organized by the Wyoming County Emergency Management Office in conjunction with the State Emergency Management Office. These meetings included County and municipal officials and consisted of ranking the severity of potential hazards according

to their projected impact on the County based on factors including duration, impact, frequency, cascade effects, warning time, and recovery time.

In 2002, the Wyoming County Office of Emergency Services, in conjunction with the New York State Office of Emergency Management (NYSOEM), carried out a hazard rating process. Using the automated HAZNY program, a group of State, County, Municipal, and Red Cross representatives ranked twenty-six potential hazards that, based on past incidents, could occur again in the county. A representative from NYSOEM facilitated the meetings and recorded the results. The results of this process were analyzed and included in the 2008 Wyoming County Multi-Jurisdictional All-Hazard Mitigation Plan.

In 2005 the Wyoming County Office of Emergency Services conducted a series of six meetings at which groups of municipal officials used the HAZNY program to create municipal HAZNY ratings. These meetings produced hazard ratings that specified the hazard concerns of the individual towns and villages in the county.

At the Planning Committee, and County Agency/Non-Municipal meetings both held in late April 2006, attendees expressed satisfaction with the hazard ranking.

At the April 2006 regional meetings the municipal representatives were asked to review and discuss their perspective on the county-wide hazard rating. This was done by comparing the county-wide hazard rating with individual municipal hazard ratings. Each municipal official was asked for comments regarding his/her municipality's hazard concerns. The local officials were in agreement regarding the municipal HAZNY results; they discussed some of their specific hazard concerns but did not wish to alter the ratings.

This municipal level analysis resulted in the hazard priorities by pulling those hazards ranked "High" and "Moderately High" from the municipal HAZNY ratings and compiling them into a single table. Potential hazards described as "High" or "Moderately High" by municipal officials at the Regional meetings were also incorporated into this table.

The final step involved developing profiles for each potential hazard listed in the 2003 Hazard Analysis Report. These profiles use the official New York State Emergency Management Office definitions for hazard events, examine previous hazard incidents through a detailed historical review, and provide a basic estimation of the probability of future events.

SECTION 5.4: UPDATE PROCESS

During the HAZNY update process, the group had access to more information to incorporate into the ranking than was available during the initial HAZNY; much of the data collection and risk analysis was gathered later in the process and not available at the time of the original HAZNY (i.e. detailed historic hazard events, etc.). The data from the Existing Plan along with the committee's knowledge of current conditions were both used to update the HAZNY ranking.

5.4.A: Plan Update Committee Review and Update of HAZNY Ranks

Wyoming County Emergency Management and G/FLRPC began the process by reviewing existing data and highlighting areas of the existing HAZNY that appeared to need adjustment. This information was presented to the committee at the October 12, 2011 meeting as recommended potential changes. The committee used these recommendations and discussed which hazards seemed to be rated correctly based on current conditions and which needed to be adjusted to finalize the HAZNY ranking update.

Changes in score and rank are illustrated in Table 5.1. More detailed information pertaining to each hazards score and rank can be found in section 5.5.

The committee analyzed 26 hazards (13 of which were natural hazards) that could potentially affect the municipalities within Wyoming County. HAZNY rated the hazards based on the updated assessment and assigned each hazard a numerical value. These values are categorized as follows:

321 to 400	High Hazard
241 to 320	Moderately High Hazard
161 to 240	Moderately Low Hazard
44 to 160	Low Hazard

Table 5.1: HAZNY Rank and Scoring							
Hazard	HAZNY Update				Existing HAZNY		
	Rating	Rank	Natural Hazard Rank	Category	Rating	Rank	Natural Hazard Rank
Fire	316	1		Moderately High	295	2	
Flood (Natural Hazard)	300	2	1		290	3	1
Severe Storm (Natural Hazard)	266	3	2		245	7	4
Ice Storm (Natural Hazard)	262	4	3		282	4	2
Winter Storm - Severe (Natural Hazard)	258	5	4		270	5	3
HAZMAT in Transit	251	6			304	1	
Tornado (Natural Hazard)	244	7	5		239	9	5
Water Supply Contamination	237	8		Moderately Low	254	6	
HAZMAT - Fixed Site	236	9			238	10	
Trans Accident	234	10			205	14	
Utility Failure	228	11			212	12	
Oil Spill	208	12			211	13	
Blight (Natural Hazard)	198	13	6		196	15	7
Explosion	192	14			175	18	
Extreme Temps (Natural Hazard)	188	15	7		160	21	10
Terrorism	188	16			242	8	
Earthquake (Natural Hazard)	186	17	8		175	19	9
Epidemic (Natural Hazard)	186	18	9		227	11	6
Ice Jam (Natural Hazard)	172	19	10		118	26	13
Air Contamination	166	20		Low	152	23	
Civil Unrest	164	21			192	16	
Radiological - Fixed Site)	160	22			170	20	
Drought (Natural Hazard)	150	23	11		176	17	8
Fuel Shortage	150	24			153	22	
Infestation (Natural Hazard)	143	25	12		148	24	11
Landslide (Natural Hazard)	138	26	13		138	25	12

Source: Wyoming County HAZNY Report, October 2011.

High Hazards

There were no High Hazards identified.

Moderately High Hazards

Seven hazard types were identified as moderately high hazards: Fire, Flood*, Severe Storm*, Ice Storm*, Winter Storm (Severe)*, HAZMAT in Transit, and Tornado*.

Moderately Low Hazards

Fourteen hazard types were identified as moderately low hazards: Water Supply Contamination, Hazardous Materials (Fixed Site), Transportation Accident, Utility Failure, Oil Spill, Blight*, Explosion, Extreme Temperatures*, Terrorism, Earthquake*, Epidemic*, Ice Jam*, Air Contamination and Civil Unrest.

Low Hazards

Six Low Hazards were identified: Radiological (Fixed Site), Drought*, Fuel Shortage, Infestation* and Landslide*

*Natural Hazards

5.4.C: Municipal Review of HAZNY and Hazard Priorities

The County-wide HAZNY update was used as the basis for discussing hazard ranking at the municipal level at the four regional meetings held on October 19th and 20th 2011. After reviewing the County-wide hazard rankings municipal representatives were then given a chance to express their concerns as to whether County-wide ranks also reflected specific municipal hazard concerns. They were encouraged to consider local conditions, concerns, and priorities, to make this determination.

For the most part municipal representatives agreed that the County hazard rankings were representative of their municipalities, and did not think it was necessary to make any adjustments. A few municipal representatives believed the County-wide rank of one or two hazards should be adjusted on the local level. These changes are shown in the table below.

Table 5.2 Municipal Hazard Ranking Adjustments			
Municipality	Hazard	Local Adjustment to County Rank	Resulting Municipal Hazard Category
Perry (V)	Ice Storm	Increase Rank	Remains "Moderately High"
Perry (V)	Fire	Slightly Decrease Rank	Remains "Moderately High"
Perry (V)	Water Supply Contamination	Increase Rank	Increased to "Moderately High"
Pike	Water Supply Contamination	Increase Rank	Increased to "Moderately High"
Castile (V)	Utility Failure	Increase Rank	Increased to "Moderately High"
Silver Springs (V)	Utility Failure	Increase Rank	Increased to "Moderately High"
Genesee Falls	Ice Jam	Increase Rank	Increased to "Moderately High"
Bennington	Ice Jam	Increase Rank	Increased to "Moderately High"
Attica (T)	Ice Jam	Increase Rank	Increased to "Moderately High"
Attica (T)	Oil Spill	Decrease Rank	Decreased to "Low"

Below are the Town and Village of Arcade's Hazard Rankings. For the full Arcade HAZNY report see: <http://www.gflrpc.org/Publications/ArcadeAllHazard/HazardMitigationPlanUpdate/2RiskAssessment.pdf>

Table 5.3 - Arcade HAZNY Hazard Ranking

Hazard	2010-2011 Score	2010-2011 Rank
Winter Storm (Natural Hazard)	268	1
Flood (Natural Hazard)	256	2
Severe Storm (Natural Hazard)	255	3
HAZMAT in Transit	232	4
Utility Failure	230	5
Ice Storm (Natural Hazard)	224	6
Transportation Accident	224	7
Fire	221	8
Blight (Natural Hazard)	208	9
HAZMAT at Fixed Site	196	10
Structural Collapse	182	11
Tornado (Natural Hazard)	182	12
Extreme Temperature (Natural Hazard)	180	13
Explosion	176	14
Terrorism	172	15
Ice Jam (Natural Hazard)	169	16
Drought (Natural Hazard)	168	17
Epidemic (Natural Hazard)	155	18
Landslide (Natural Hazard)	154	19
Civil Unrest	151	20
Earthquake (Natural Hazard)	144	21
Air Contamination	138	22
Water Supply Contamination	136	23
Oil Spill	124	24

SECTION 5.5: HAZARD ANALYSIS REPORT UPDATE RESULTS

Hazard(s) rated as moderately high: FIRE, FLOOD, SEVERE STORM, ICE STORM, WINTER STORM (SEVERE), HAZMAT (IN TRANSIT), TORNADO

FIRE: 316, Moderately High Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Some Potential

Frequency: A Frequent Event

Onset: No Warning

Hazard Duration: One Day

Recovery Time: Less Than One Day

Impact:

- Serious Injury or Death is Likely, but not in Large Numbers
- Severe Damage to Private Property
- Severe Structural Damage to Public Facilities

FLOOD (NATURAL HAZARD): 300, Moderately High Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Highly Likely

Frequency: A Frequent Event

Onset: Several Hours Warning

Hazard Duration: One Day

Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely
- Severe Damage to Private Property
- Severe Structural Damage to Public Facilities

SEVERE STORM (NATURAL HAZARD): 266, Moderately High Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Highly Likely

Frequency: A Frequent Event

Onset: Several Hours Warning

Hazard Duration: One Day

Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Moderate Structural Damage to Public Facilities

ICE STORM (NATURAL HAZARD): 262, Moderately High Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Highly Likely

Frequency: A Regular Event

Onset: Several Hours Warning

Hazard Duration: Two to Three Days

Recovery Time: Three Days to One Week

Impact:

- Serious Injury or Death Unlikely
- Severe Damage to Private Property
- Moderate Structural Damage to Public Facilities

WINTER STORM (SEVERE) (NATURAL HAZARD): 258, Moderately High Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Some Potential

Frequency: A Frequent Event

Onset: Several Hours Warning

Hazard Duration: Two to Three Days

Recovery Time: Three Days to One Week

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

HAZMAT (IN TRANSIT): 251, Moderately High Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Highly Likely

Frequency: A Regular Event
Onset: No Warning
Hazard Duration: One Day
Recovery Time: One to Two Days

Impact:

- Serious Injury or Death is Likely, but not in Large Numbers
- Moderate Damage to Private Property
- Little or No Structural Damage to Public Facilities

TORNADO (NATURAL HAZARD): 244, Moderately High Hazard

Potential Impact: Throughout a Large Region
Cascade Effects: Some Potential
Frequency: An Infrequent Event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: One to Two Days

Impact:

- Serious Injury or Death is Likely, but not in Large Numbers
- Severe Damage to Private Property
- Severe Structural Damage to Public Facilities

Hazard(s) rated as moderately low: WATER SUPPLY CONTAMINATION, HAZMAT (FIXED SITE), TRANS ACCIDENT, UTILITY FAILURE, OIL SPILL, BLIGHT, EXPLOSION, EXTREME TEMPS, TERRORISM, EARTHQUAKE, EPIDEMIC, ICE JAM, AIR CONTAMINATION, CIVIL UNREST

WATER SUPPLY CONTAMINATION: 237, Moderately Low Hazard

Potential Impact: Throughout a Small Region
Cascade Effects: Some Potential
Frequency: An Infrequent Event
Onset: No Warning
Hazard Duration: More Than One Week
Recovery Time: More Than Two Weeks

Impact:

- Serious Injury or Death is Likely, but not in Large Numbers
- Little or No Damage to Private Property
- Moderate Structural Damage to Public Facilities

HAZMAT (FIXED SITE): 236, Moderately Low Hazard

Potential Impact: Throughout a Large Region
Cascade Effects: Some Potential
Frequency: A Regular Event
Onset: No Warning
Hazard Duration: One Day
Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Moderate Structural Damage to Public Facilities

TRANS ACCIDENT: 234, Moderately Low Hazard

Potential Impact: Several Locations

Cascade Effects: Highly Unlikely

Frequency: A Frequent Event

Onset: No Warning

Hazard Duration: Less Than One Day

Recovery Time: Less Than One Day

Impact:

- Serious Injury or Death is Likely, but not in Large Numbers
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

UTILITY FAILURE: 228, Moderately Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Some Potential

Frequency: A Regular Event

Onset: No Warning

Hazard Duration: One Day

Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

OIL SPILL: 208, Moderately Low Hazard

Potential Impact: Several Locations

Cascade Effects: Some Potential

Frequency: A Regular Event

Onset: No Warning

Hazard Duration: One Day

Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

BLIGHT (NATURAL HAZARD): 198, Moderately Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Some Potential

Frequency: A Rare Event

Onset: No Warning

Hazard Duration: More Than One Week

Recovery Time: More Than Two Weeks

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

EXPLOSION: 192, Moderately Low Hazard

Potential Impact: Several Locations

Cascade Effects: Highly Likely

Frequency: An Infrequent Event

Onset: No Warning

Hazard Duration: Less Than One Day

Recovery Time: Less Than One Day

Impact:

- Serious Injury or Death is Likely, but not in Large Numbers
- Moderate Damage to Private Property
- Moderate Structural Damage to Public Facilities

EXTREME TEMPS (NATURAL HAZARD): 188, Moderately Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Some Potential

Frequency: A Regular Event

Onset: Several Days Warning

Hazard Duration: Four days to One Week

Recovery Time: Less Than One Day

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

TERRORISM: 188, Moderately Low Hazard

Potential Impact: Several Locations

Cascade Effects: Highly Likely

Frequency: A Rare Event

Onset: No Warning

Hazard Duration: One Day

Recovery Time: One to Two Weeks

Impact:

- Serious Injury or Death is Likely, but not in Large Numbers
- Little or No Damage to Private Property
- Severe Structural Damage to Public Facilities

EARTHQUAKE (NATURAL HAZARD): 186, Moderately Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Highly Likely

Frequency: An Infrequent Event

Onset: No Warning

Hazard Duration: Less Than One Day

Recovery Time: Less Than One Day

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

EPIDEMIC (NATURAL HAZARD): 186, Moderately Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Highly Likely

Frequency: An Infrequent Event

Onset: More Than One Week Warning

Hazard Duration: More Than One Week

Recovery Time: More Than Two Weeks

Impact:

- Serious Injury or Death is Likely, but not in Large Numbers
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

ICE JAM (NATURAL HAZARD): 172, Moderately Low Hazard

Potential Impact: Several Locations

Cascade Effects: Some Potential

Frequency: An Infrequent Event

Onset: No Warning

Hazard Duration: One Day

Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

AIR CONTAMINATION (NATURAL HAZARD): 166, Moderately Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Highly Likely

Frequency: A Rare Event

Onset: No Warning

Hazard Duration: Two to Three Days

Recovery Time: Less Than One Day

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

CIVIL UNREST: 164, Moderately Low Hazard

Potential Impact: Several Locations

Cascade Effects: Highly Likely

Frequency: An Infrequent Event

Onset: One Day Warning

Hazard Duration: Four days to One Week

Recovery Time: Three Days to One Week

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

Hazard(s) rated as low: RADIOLOGICAL (FIXED SITE), DROUGHT, FUEL SHORTAGE, INFESTATION, LANDSLIDE

RADIOLOGICAL (FIXED SITE): 160, Low Hazard

Potential Impact: Several Locations

Cascade Effects: Some Potential

Frequency: An Infrequent Event

Onset: No Warning

Hazard Duration: Less Than One Day

Recovery Time: Less Than One Day

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

DROUGHT (NATURAL HAZARD): 150, Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Some Potential

Frequency: An Infrequent Event

Onset: More Than One Week Warning

Hazard Duration: More Than One Week

Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

FUEL SHORTAGE: 150, Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Some Potential

Frequency: An Infrequent Event

Onset: More Than One Week Warning

Hazard Duration: More Than One Week

Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

INFESTATION (NATURAL HAZARD): 143, Low Hazard

Potential Impact: Throughout a Large Region

Cascade Effects: Some Potential

Frequency: A Rare Event

Onset: More Than One Week Warning

Hazard Duration: More Than One Week

Recovery Time: More Than Two Weeks

Impact:

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Little or No Structural Damage to Public Facilities

LANDSLIDE (NATURAL HAZARD): 138, Low Hazard

Potential Impact: Several Locations

Cascade Effects: Some Potential

Frequency: A Rare Event

Onset: No Warning

Hazard Duration: Less Than One Day

Recovery Time: One to Two Days

Impact:

- Serious Injury or Death Unlikely

- Moderate Damage to Private Property
- Little or No Structural Damage to Public Facilities

SECTION 5.6: HAZARDS OF CONCERN

Based upon the above analysis and Committee discussion the Plan will focus on the “Hazards of Concern” which have been deemed to be all of those that were ranked moderately high, as well as a number of those ranked moderately low, especially a few that were natural hazards. Many of these were considered Hazards of Concern based on their high probability and/or dangerous effects (see Section 6 - Hazard Profiles)

Hazards of Concern

Natural

- Flood
- Severe Storm
- Ice Storm
- Winter Storm
- Tornado
- Earthquake
- Epidemic

Human-Caused

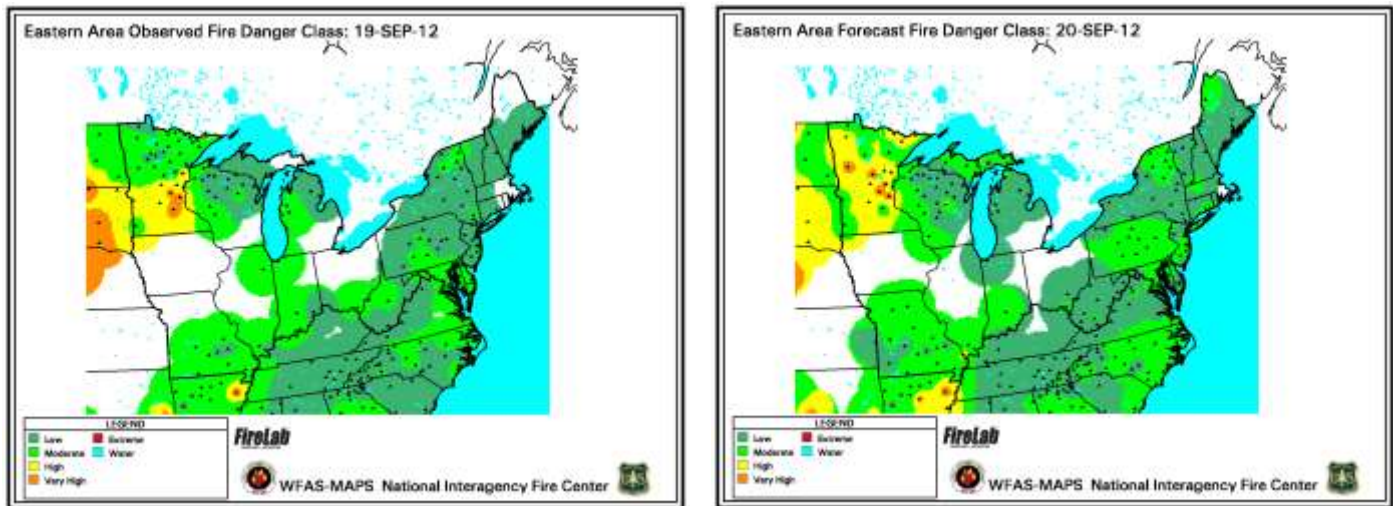
- Fire
- HAZMAT in Transit
- Water Supply Contamination
- HAZMAT Fixed Site
- Transportation Accident
- Utility Failure

Other hazards that did not make the “Hazards of Concern” category may still present some risk to the county, but they were not considered priorities for various reasons, and time and resources were thought to be more effective in focusing on the high priority Hazards of Concern. Many of these hazards were not considered Hazards of Concern based on hazard assessment information from Existing Plan (see <http://www.gflrpc.org/Publications/WyomingAllHazard/MitigationPlan/Chapter6.pdf>), as well as the HAZNY ranking which included impact on people, properties and facilities; cascade effects; frequency; onset; duration; and recovery time. Hazards that were considered but ultimately excluded from the detailed assessment and mitigation process are listed below with a brief explanation of why:

Natural Hazards Excluded

- Blight - Moderately Low HAZNY Ranking, considered low probability in Existing Plan based on past occurrence (1 recorded event in 105 years).
- Extreme Temperatures - Moderately Low HAZNY Ranking, considered low probability in Existing Plan based on no recorded incidence of prolonged temperatures having a serious impact on human and/or animal populations, nor any prolonged incidence of temperatures in the “Danger” category of the heat index (105-129 degrees) or the “Extreme Danger” category (130 degrees and higher)
- Ice Jam– Moderately Low HAZNY Ranking, considered low probability in Existing Plan based on past occurrence (3 recorded events in 105 years). The main effect of this hazard is flooding which is considered a Hazard of Concern and has been fully assessed.
- Air Contamination - atmospheric, not material spill related - Moderately Low HAZNY Ranking, low probability based on past occurrence. The other type of air contamination based on chemical spills is mostly caused by HAZMAT in transit and HAZMAT fixed site events which are covered in detail as Hazards of Concern.

- Drought – Low HAZNY Ranking, considered low probability in Existing Plan based on past occurrence of substantial droughts (3 recorded in 105 years).
- Infestation – Low HAZNY Ranking, considered low probability in Existing Plan based on past occurrence (0 recorded events in 105 years). Some minor incidents have caused problems for farmers, but no major crop losses or environmental damage has occurred.
- Landslide –considered low probability in Existing Plan based on past occurrence. *New York State Hazard Mitigation Plan, Figure 3-36* lists Wyoming County in the lowest category of Landslide Susceptibility – “Low Landslide Incidence”. Moderately Low HAZNY Ranking.
- Wildfire – Wildfire’s specifically are considered low probability. According to the NYS Hazard Mitigation Plan, only 1 municipality in the County has a wildfire event on record (Arcade)ⁱ. According to the US Forest Service’s Wild Fire Assessment System, Wyoming County is within the “Low” Danger Class both observed and forecasted, as can be seen in the maps belowⁱⁱ.



DEC has also created state regulations regarding open burning which should further reduce vulnerability to wildfire.

“Fire” is still a Hazard of Concern, therefore the effects of wildfire are still incorporated to some extent in this plan.

Human-Caused Hazards Excluded

- Explosion - Moderately Low HAZNY Ranking, considered low probability in Existing Plan based on past occurrence (16 recorded events in 105 years). The causes and effects of explosions are covered in detail through other Hazards of Concern such as in-transit and fixed-site HAZMAT spills, oil spills, fires transportation accidents and utility failures.
- Terrorism - Moderately Low HAZNY Ranking, considered low probability in Existing Plan based on past occurrence (4 recorded events in 105 years, 1 of 4 incidents resulted in injury). One hazard that could be associated with terrorism is utility failure which is covered in detail as a Hazard of Concern.
- Civil Unrest - Moderately Low HAZNY Ranking, considered low probability in Existing Plan based on past occurrence (1 recorded event in 105 years).
- Radiological Fixed Site – Low HAZNY Ranking, no nuclear reactors located in Wyoming County, and no fixed site incidents have occurred within the County. One incident occurred in Wayne County at Ginna Nuclear Facility, but the incident was carefully managed and no radiation was released off site. There was no effect on Wyoming County.

- Fuel Shortage – Low HAZNY Ranking, considered low probability in Existing Plan based on past occurrence (2 recorded events in 105 years, most recent event was 95 years ago).
- Oil Spill – Not excluded, include in HAZMAT Fixed Site, and HAZMAT in Transit.

Chapter 6: Hazard Profiles

INTRODUCTION

This chapter provides a series of profiles for each of the hazards considered *Hazards of Concern* in Chapter 5. Information from profiles in the Existing Plan were used and updated where needed. The events from the Existing Plan were included in the update to give a full history of events and to accurately portray hazard probability over a longer period of time. Information and maps from the NYS Hazard Mitigation Plan were also included. This plan was updated in 2011, therefore all maps and information do not always include most recent years, but the data was still important to include.

For ease of review, this chapter is organized into two main parts. Natural hazards are profiled in Part I, *Natural Hazard Profiles*. Man-made hazards are profiled in Part II, *Human-Caused Hazard Profiles*.

Each individual hazard is assigned its own Section. Each section is then broken down into six subsections, which are:

- Definition
- History - past incidences of that hazard (both those included in the Existing Plan and updated recent events between 2006-2012)
- Impacts - a brief description of the actual and/or potential impacts of that hazard
- Damage - an updated review of recorded damages including, where available, estimated costs of those damages
- Probability - an updated probability of future occurrences based on the number of past events
- Research - the sources of the data included in the profile

All these sections are filled out to the greatest extent possible with information available for this Plan; where good data was not available, the Plan identifies what additional data should be developed.

The following natural hazards are profiled in Part I: Flood, Severe Storm, Ice Storm, Winter Storm (Severe), Tornado, Earthquake and Epidemic.

The following hazards are profiled in Part II: Fire, Hazmat (in Transit), Water Supply Contamination, Hazmat (Fixed Site), Transportation Accident, Utility Failure and Oil Spill.

Much of the historic information in this chapter was included in the Existing Plan and was originally collected from the *New York State Standard Multi-Hazard Mitigation Plan*, the digital *All-Hazard Mitigation Plan Development Toolkit* prepared by FEMA and NYSOEM, Wyoming County and municipal officials, the Wyoming County Historian's Office, and online resources such as the National Climatic Data Center's U.S. Storm Events Database. Additional sources are noted under the "Research" of each section.

Additional detail regarding the Town and Village of Arcade's vulnerability to hazards can be found at <http://www.gflrpc.org/Publications/ArcadeAllHazard/HazardMitigationPlanUpdate/2RiskAssessment.pdf>

CRITERIA FOR FUTURE PROBABILITY

Each hazard profile has a section that displays a percentage figure for future probability of occurring in the County. Probabilities from the Existing Plan were adjusted to include recent hazard events. This percentage, unless otherwise noted, was calculated by dividing the number of recorded past incidents by the number of years for which good records are available.

6.1.C: Impacts: Floods have generally caused power outages, potable water shortages, and closings of schools and businesses, as well as damage to property, particularly to private residences.

6.1.D: Damage: Recent flood damage recorded between 2006 and 2012 totaled approximately \$258,000, bringing the total estimate between 1900 and 2012 up to approximately \$13,813,000 (although costs have not been provided for all floods). This total does not include many of the economic costs such as those associated with closed businesses, reduced operations, employee absence, limited or delayed agricultural operations, or the effects of long term erosion.

6.1.E: Future Probability: 44 events/112 years = 37.5%. This hazard is ranked as a Moderate Probability.

While major floods might be considered Moderate Probability, this hazard should probably be considered a high probability due to numerous minor floods that have occurred over the years. Local officials recognize flood events have the potential to cause widespread damage in vulnerable, low lying areas.

In addition, according to NYSDEC, Wyoming County has two “deficient” dams. The Attica Reservoir Dam and the Camp Schoellkopf #2 Dam are considered deficient because of issues with seepage, maintenance, and spillway capacity^{iv}. Both of these dams are in the Hazard Class B (see below).

Class "B" or "Intermediate Hazard" dam: A dam failure may result in damage to isolated homes, main highways, and minor railroads; may result in the interruption of important utilities, including water supply, sewage treatment, fuel, power, cable or telephone infrastructure; and/or is otherwise likely to pose the threat of personal injury and/or substantial economic loss or substantial environmental damage. Loss of human life is not expected.^v

According to the NYS DEC *Inventory of Dams* Google Earth Layer, the Attica Dam (upper) in the Town of Attica is the only dam in Wyoming County considered a Hazard Class C - “High Hazard” defined below.^{vi}

Class "C" or "High Hazard" dam: A dam failure may result in widespread or serious damage to home(s); damage to main highways, industrial or commercial buildings, railroads, and/or important utilities, including water supply, sewage treatment, fuel, power, cable or telephone infrastructure; or substantial environmental damage; such that the loss of human life or widespread substantial economic loss is likely.^{vii}

6.1.F: Research: Flood data was obtained from the National Climatic Data Center (NCDC) for the time period of 1955-2012. Additional information was obtained from the National Weather Service Forecast Office for the time period of 2006-2012. Some historic data was obtained from archived materials at the Wyoming County Historian’s Office and the *Western New Yorker* archives. Dam information was obtained from NYSDEC

For additional details regarding the Town and Village of Arcade’s vulnerability to flooding see the Town and Village of Arcade Hazard Mitigation Plan Update^{viii}.

For information on the National Flood Insurance Program see section 7.6.

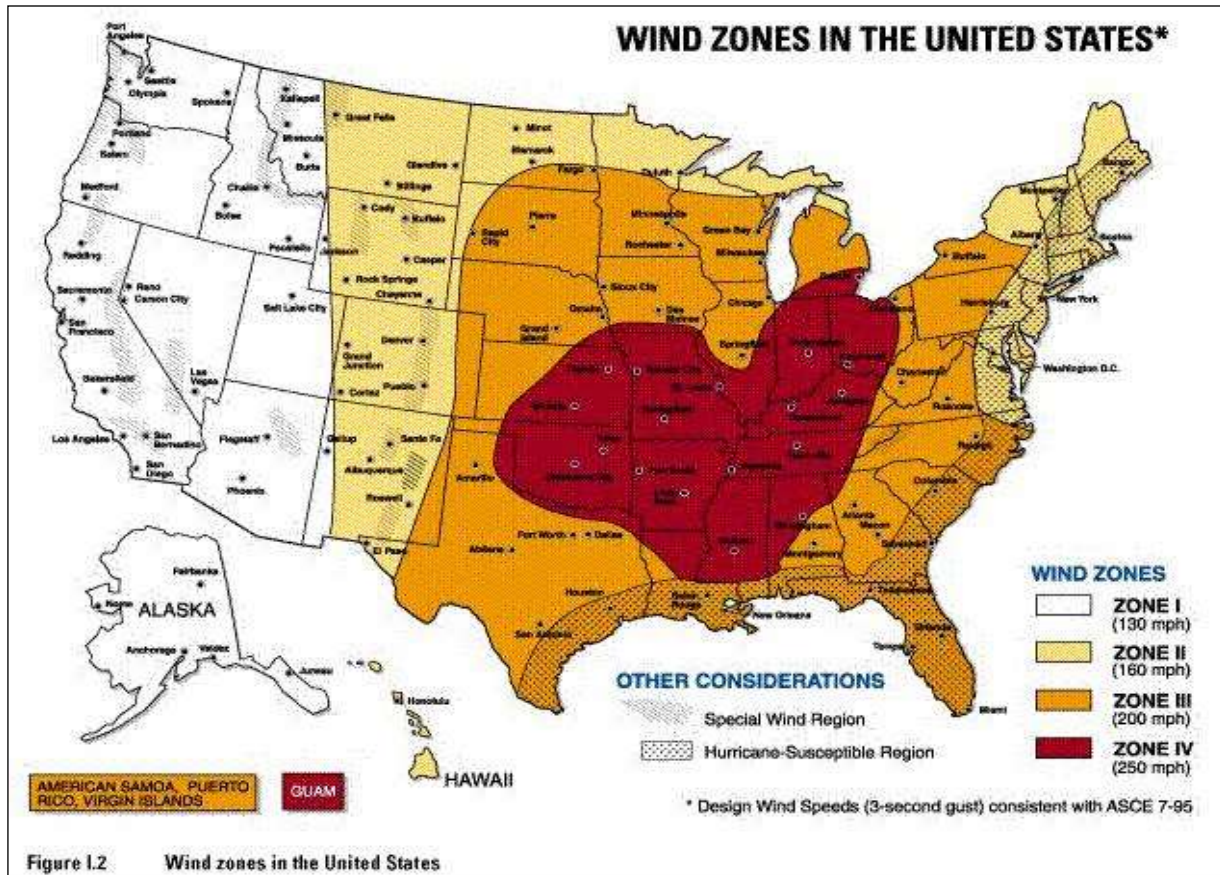
SECTION 6.2: SEVERE STORMS

6.2.A: Definition: Severe storms include weather events such as hail storms, windstorms, and severe thunderstorms. A severe thunderstorm is one which produces tornados, hail 0.75 inches or more in diameter, or winds of 50 knots (58 mph) or more. Structural damage caused by high wind may imply the occurrence of a severe thunderstorm.

Hurricanes were not considered a hazard on their own, but they were not excluded from this analysis. Instead they were considered part of Severe Storms because remnants of a hurricane, in the form of a severe storm are more likely

to be a threat to the county. Hurricane effects could also be associated with flooding, utility failure, transportation accident, or Hazmat in Transit all of which are *Hazards of Concern* and covered under their own sections.

As the map below indicates Wyoming County is not within the Hurricane Susceptible Region of New York, nor a Special Wind Region.



High winds are often associated with severe storms. The map above illustrates Wind Zones in the United States. FEMA considers Wyoming County to be located in U.S. Wind Zone III which covers most of the western half of New York State and is considered to have wind potential of up to 200 mile per hour^{ix}. See section 6.5 for Tornado information.

6.2.B: History: 39 severe storms have been recorded in Wyoming County since the Existing Plan between 2006-2012 bringing the total number of severe storms to 280 between 1902-2012. See Appendix Ch-6 *Hazard Events*. Severe Storms include hail storms, windstorms, and severe thunderstorms. These storms have occurred multiple times each year throughout the county. These storms may cascade into problems including utility failure, transportation accidents, structural damage, fire, and flooding. One known lightning injury is on record which occurred in Gainesville in 1998, but several occurrences of property damage from lighting strikes have occurred.

Notable severe storms:

9/9/2004 – The remnants of Hurricane Frances passed through the County. See Appendix Ch-6 *Hazard Events*.

4/28/2011 - A severe storm affecting the county was included as part of a Presidential Disaster Declaration for NYS. Wyoming County was considered one of the counties affected and eligible for assistance.^x See Appendix Ch-6 *Hazard Events*.

10/28/2012 – A severe storm associated with Hurricane Sandy was part of a Presidential Disaster Declaration for NYS. Wyoming County was affected by this storm but not enough to be designated for assistance.^{xi} See Appendix Ch-6 *Hazard Events*.

6.2.C: Impacts: Severe storms have interrupted utility services by downing power lines and telephone lines, and trees as well as damage to automobiles, windows, homes, and buildings.

6.2.D: Damage: Recent damages occurring since 2005 total around \$1,895,000, bringing the total reported damage on record to approximately \$180,443,000 although costs have not been provided for all storms. This total does not include many of the economic costs such as those associated with closed businesses, reduced operations, employee absence, and limited or delayed agricultural operations.

6.2.E: Future Probability: 280 events/110 years = 255%. This hazard is considered a High Probability.

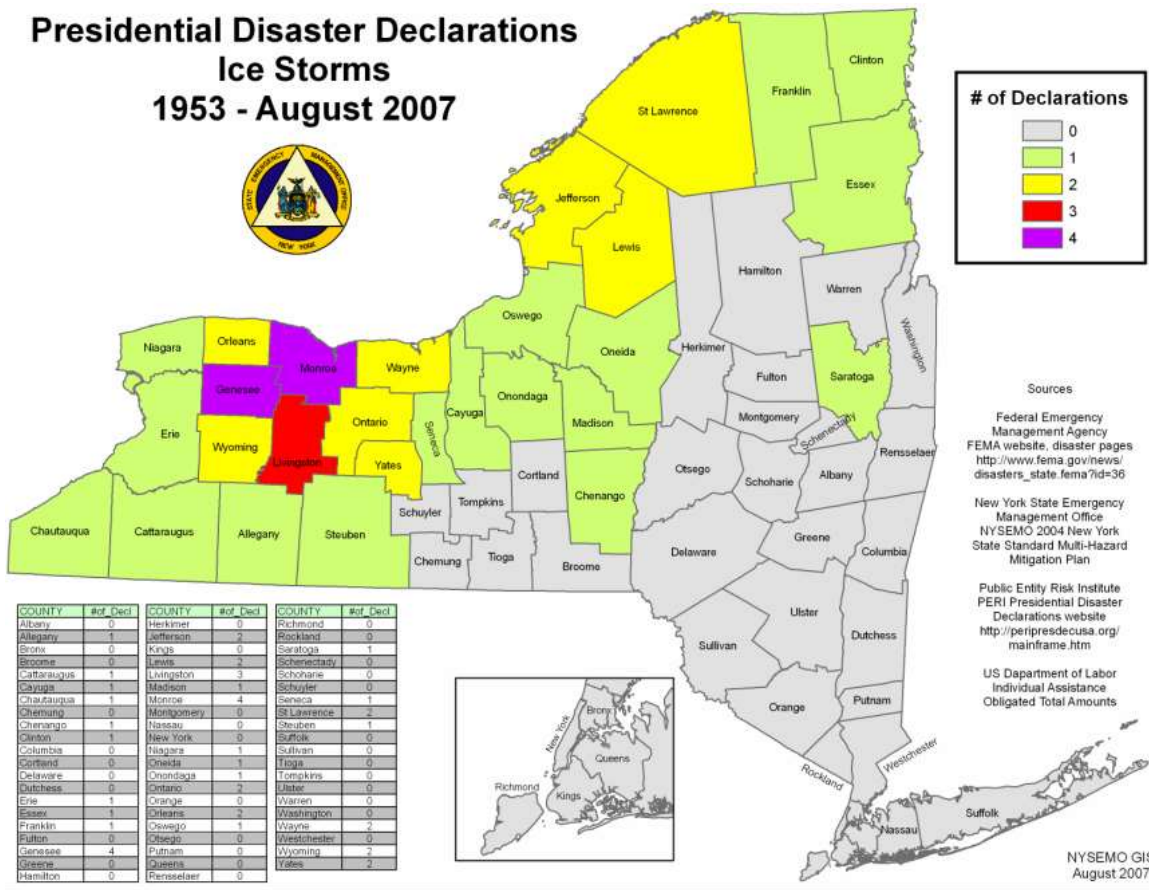
6.2.F: Research: Severe storm data was obtained from the National Climatic Data Center (NCDC) and spanned from 1955-2012. Other sources included archived materials at the Wyoming County Historian's Office and the *Western New Yorker* archives. The first severe storm incident recorded in this report occurred on July 5, 1902.

SECTION 6.3: ICE STORMS

6.3.A: Definition: Freezing rain which accumulates in a substantial glaze layer of ice resulting in serious disruptions of normal transportation and possible downed power lines.

6.3.B: History: Three major ice storms have been recorded in Wyoming County since the Existing Plan between 2006-2012 bringing the total number of major ice storms on record to 10 between 1900-2012, in addition to other more minor ice storms that occur every year. See Appendix Ch-6 *Hazard Events*. These storms can occur anytime during the winter months and can cascade into problems such as utility failure, extreme temperatures, transportation accidents, flooding, water supply contamination, ice jams, and structural damage. These storms have occurred county-wide.

The map shows the number of Presidential Disaster Declarations by county in New York State for Ice Storms^{xii}. This map indicates that between 1953 and 2007 Wyoming County has had two federal Ice Storm disaster declarations. However, several more minor ice storms have occurred in the County than are indicated on this map. These events were addressed by local resources without calling in federal or state assistance.



6.3.C: Impacts: Ice storms have caused power outages; damage to automobiles, homes and other buildings; downed trees and wires; and closings of schools and businesses.

6.3.D: Damage: Recent damage associated with the three events that occurred between 2006-2012 was approximately \$130,000. Damage estimates were not provided for previous events. This total does not include many of the economic costs such as those associated with closed businesses, reduced operations, employee absence, and limited or delayed agricultural operations.

6.3.E: Future Probability: 10 events/112 years = 8.9%. This hazard is considered a Low Probability.

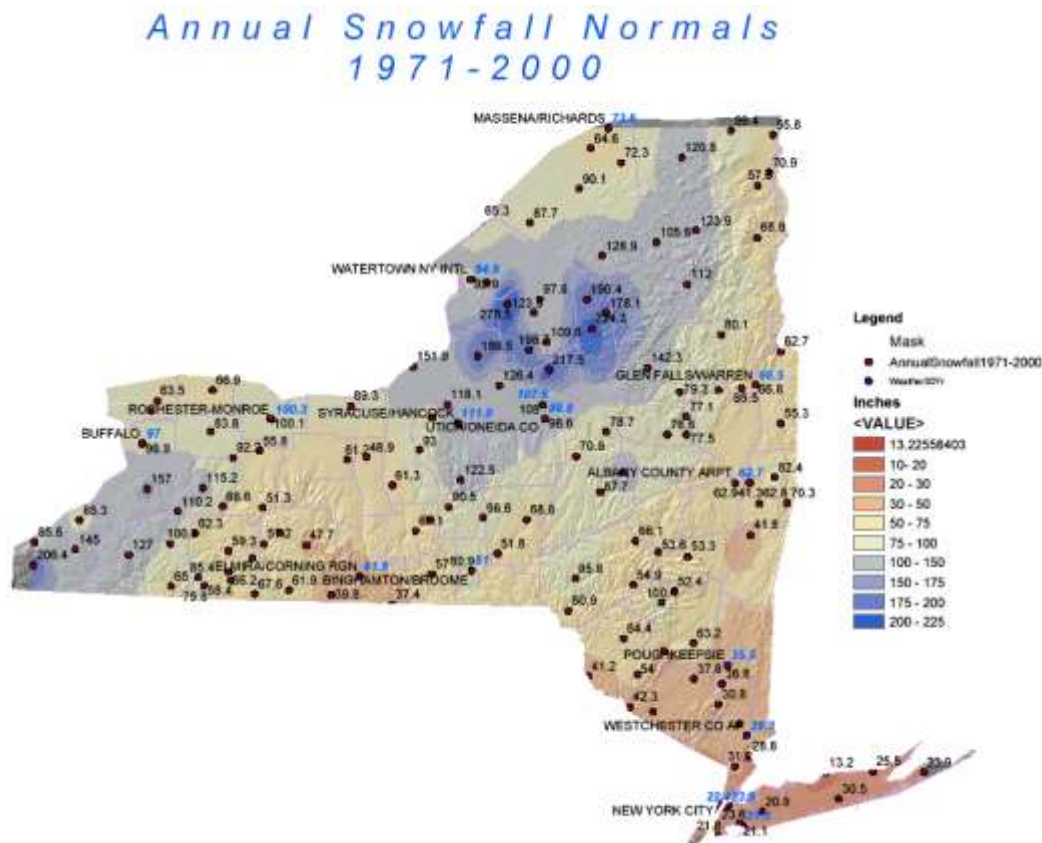
Like the future probability calculation for flooding, this calculation does not reflect the potential for widespread damage resulting from ice storms, and so it should not be considered definite. Many more minor ice storm events have occurred in the past, although available records do not provide detailed cost estimates. This hazard should be considered a High Probability.

6.3.F: Research: Ice storm data was obtained from the National Climatic Data Center (NCDC) and spanned from 1955-2012. Other sources included archived materials at the Wyoming County Historian's Office and the *Western New Yorker* archives. The first ice storm incident recorded in this report occurred on March 16, 1936.

SECTION 6.4: WINTER STORMS

6.4.A: Definition: A storm system that develops in late fall to early spring and deposits wintry precipitation, such as snow (including lake effect), sleet, or freezing rain, with a significant impact on transportation systems and public safety.

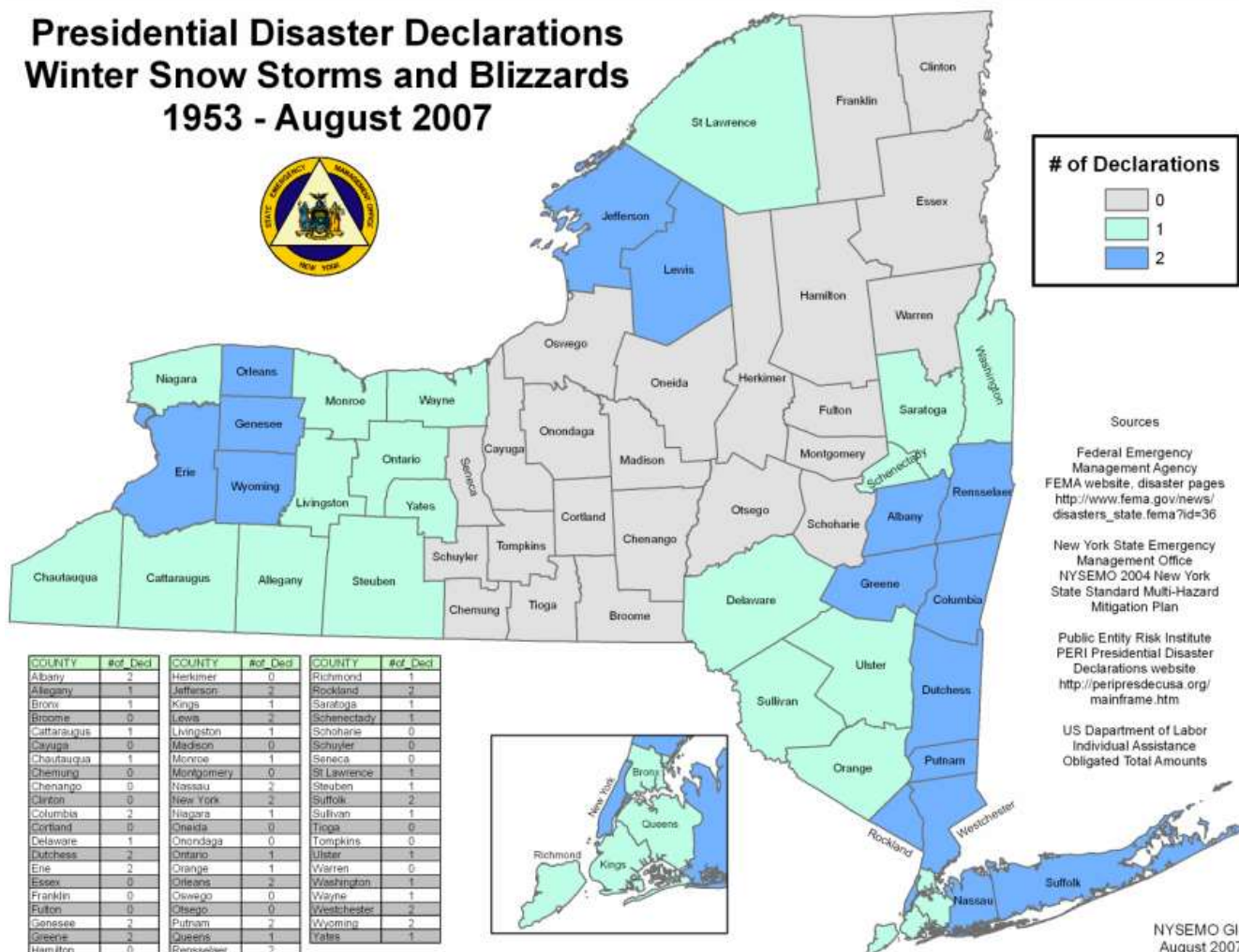
6.4.B: History: 38 major winter storms have been recorded in Wyoming County since the Existing Plan between 2006-2012 bringing the total number of major winter storms to 105 between 1985-2012, in addition to other more minor winter storms. See Appendix Ch-6 *Hazard Events*. Winter storms occur frequently in the winter months from November through April. These storms may cascade into a range of problems including transportation accidents, utility failures, extreme temperatures, and structural damage. These storms have deposited large amounts of snow county-wide, but typically the western towns receive the heaviest snowfall amounts. Generally, winter storms are the result of lake effect systems moving east from Lake Erie. Winter storms have occurred regularly throughout the County's history.



The map above depicts the average annual snowfalls in various parts of the state for a 30 year period ending in 2009^{xiii}. As this map indicates, Wyoming County is at risk for heavy snowfall and, by extension, severe winter weather. As a result of the County's location due east of Lake Erie, the western and central towns receive the heaviest snowfalls.

The map below shows the number of Presidential Disaster Declarations by County in New York State^{xiv}. The map indicates that between 1953 and 2007 Wyoming County has had two federal Winter Snow Storm/Blizzard disaster declarations. However, many more winter storms have occurred in the County than were indicated on this map. These events were addressed by local resources without calling in federal or state assistance.

Presidential Disaster Declarations Winter Snow Storms and Blizzards 1953 - August 2007



6.4.C: Impacts: Severe winter storms generally cause power outages; downed lines, wires, and trees; transportation accidents; school and business closings, and can cause structural damage to poorly built and maintained buildings.

6.4.D: Damage: Recent damage associated with the 38 events that occurred between 2006-2012 was approximately \$782,000. Damage estimates were not provided for previous events. This total does not include many of the economic costs such as those associated with closed businesses, reduced operations, employee absence, gradual deterioration of roads due to salt and plowing, or the effects of spring snow melt.

6.4.E: Future Probability: 105 events/27 years = 389%. This hazard is considered a High Probability. Severe Winter Storms take place multiple times each year.

6.4.F: Research: Severe winter storm data was obtained from the New York State Standard Multi-Hazard Mitigation Plan and the National Climatic Data Center (NCDC) between 1985-2012. The first severe winter storm incident recorded in the NCDC's database and included in this report occurred on January 21, 1985.

SECTION 6.5: TORNADO

6.5.A: Definition: A local atmospheric storm, generally of short duration, formed by winds rotating at very high speeds, usually in a counterclockwise direction. The vortex, up to several hundred yards wide, is visible to the observer as a whirlpool-like column of winds rotating about a hollow cavity of funnel. Winds have been estimated to be as high as 400 mph.

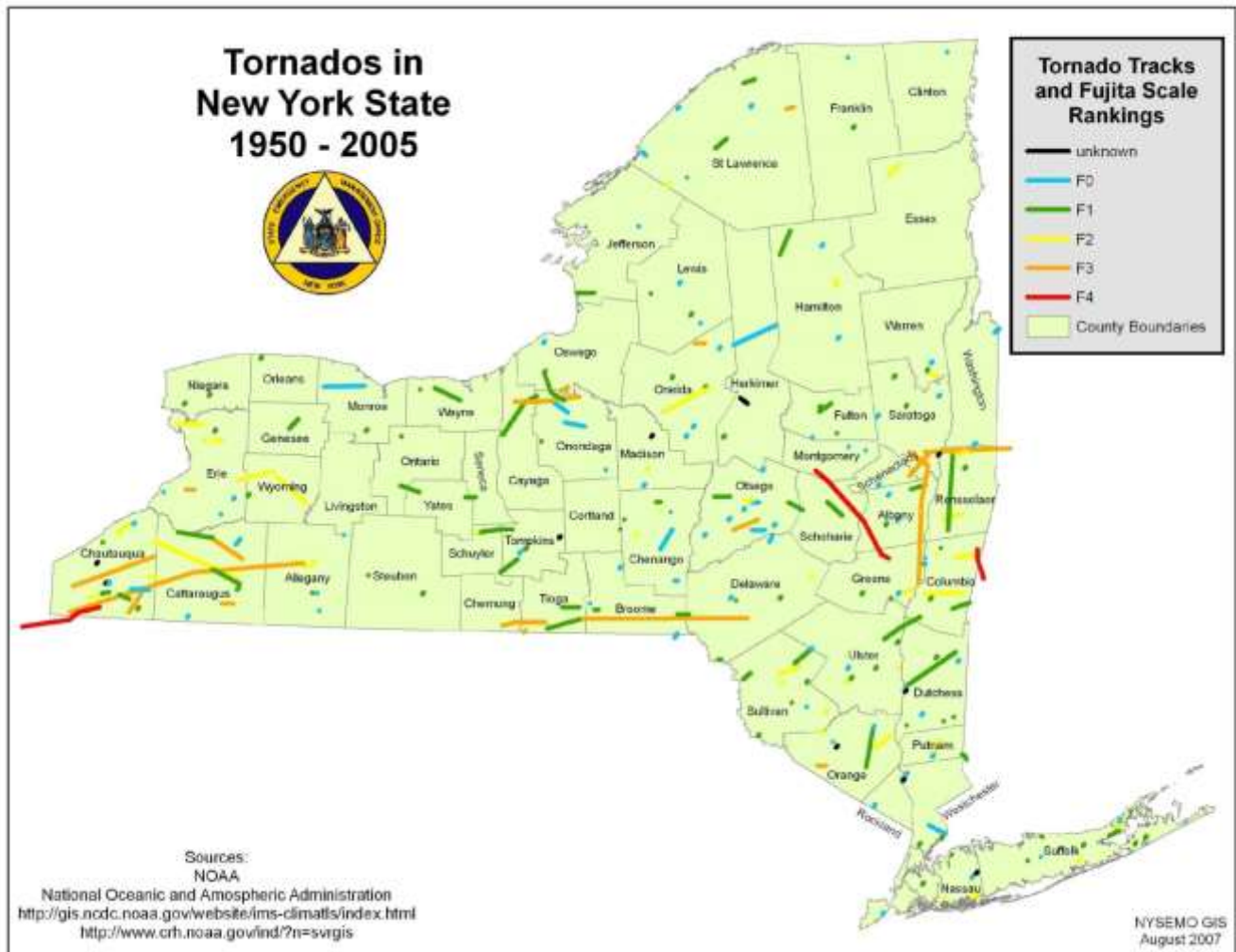
FEMA considers Wyoming County to be located in U.S. Wind Zone III which covers most of the western half of New York State and is considered to have wind potential of up to 200 mile per hour^{xv}. 200 mile per hour winds when translated into the Fujita Scale is at the top of the F4 ranging meaning that it could be possible for Wyoming County to experience an F1, F2, F3, or F4 tornado, with smaller magnitudes being more likely.

6.5.B: History: No tornados have been recorded in Wyoming County since the Existing Plan between 2006-2012. Before that, at least eight tornadoes are recorded to have occurred in Wyoming County during the past 105 years. See Appendix Ch-6 *Hazard Events*. They are rare occurrences and have not caused any deaths or injuries. However, they have been responsible for over \$1 million in property damages, the vast majority of which was caused by a single tornado which struck the County in 1998. Tornadoes may cascade into problems including utility failure and structural damage.

Table 6.1 Tornadoes 1900-2012

Date	Location	Damage (\$)	Description
5/4/1919	Warsaw		A tornado tore through Warsaw destroying barns, downing trees and wires and ripping roofs off of houses.
9/12/1925	Bennington/Sheldon	15,000	A tornado stormed through laying waste to multiple farms, clearing orchards of trees and knocking down silos, barns and roofs.
4/19/1963	Arcade		A tornado razed farm buildings, killed livestock, felled trees, and damaged utility poles leaving areas without electricity.
5/2/1972	Varysburg		A tornado touched down in Varysburg destroying a barn, milk house, swimming pool and a house roof.
7/7/1965	Wyoming County	25,000	A tornado with a magnitude of F1 struck the area in the late afternoon hours.
8/17/1988	Pike		A tornado destroyed a Pike barn.
5/1/1991	Wyoming County	25,000	An F1 tornado with winds up to 84 mph damaged swept through parts of Wyoming County damaging buildings, felling trees and knocking out utilities.
6/2/1998	Orangeville Center	1,000,000	A tornado struck Wyoming County and did substantial damage to numerous structures and completely destroyed several others.

The map below shows known tornado tracks in New York State for the time between 1950 and 2005^{xvi}. This map indicates that one F2 (wind speeds of between 113 and 157 miles per hour) tornado crossed much of the County. However, this event was an exception: the map indicates that most of the tornadoes that have struck the State are either F0 (wind speeds of between 40 and 72 miles per hour) or F1 (wind speeds of between 73 and 112 miles per hour), although some tornadoes have an unknown ranking. Historically, only the 1998 tornado is known to have caused widespread damage in Wyoming County; this event did not result in any deaths and is profiled in greater detail below. Historical records indicate that at least five additional tornadoes have occurred in the County since 1900. See Appendix Ch-6 *Hazard Events*.



6.5.C: Impacts: Tornadoes caused downed tree limbs and wires and were responsible for the damage or destruction of multiple structures.

6.5.D: Damage: Damage estimates were available for four of the eight tornadoes which totaled approximately \$1,065,000. This total does not include many of the economic costs such as those associated with closed businesses, reduced operations, employee absence, and limited or delayed agricultural operations.

6.5.E: Future Probability: 8 events/112 years = 7.1%. This hazard is considered a Low Probability.

Probability decreases when going by the National Climatic Data Center records which list Wyoming County as only experiencing three significant tornadoes since 1950. While still considered a threat, the probability of a tornado occurring in Wyoming County and having major effects is low.

According to the National Severe Storm Laboratory, Wyoming County falls into an area with the following probability of tornado occurring within 25 miles of any point^{xvii}:

- Any tornado - between 0.2 and 0.4 days per year
- Significant Tornado of F2 or greater - between 0 and 5 days per 100 years

- Very Strong Tornado of F4 or F5 - 0-5 days per 1000 years

6.5.F: Research: Tornado data was obtained from the National Climatic Data Center (NCDC) beginning in 1955 and the *Western New Yorker* archives beginning in 1900. The first tornado recorded in this report occurred on May 4, 1919. Additional tornado probability information was obtained from the National Severe Storm Laboratory.

SECTION 6.6: EARTHQUAKE

6.6.A: Definition: A sudden motion of the ground caused by release of subterranean strain energy, due to plate tectonics, resulting in surface faulting (ground rupture), ground shaking, or ground failure (collapse).

According to the Multidisciplinary Center for Earthquake Engineering Research (MCEER):

Major earthquake zones throughout the world generally coincide with major fault zones. There are no major fault zones within the Western New York area, but the Clarendon–Linden fault in the Attica area has been the chief source of quake activity in this area. This fault is not part of a larger system of faults as is found in California; it is not as active, nor does it pose a strong threat to this area as does the San Andreas Fault system to California.^{xviii}

6.6.B: Impacts: Earthquakes have caused minor structural damage such as collapsed chimneys, cracked plaster, bulged walls, and broken windows. They have also caused minor damage to the contents of buildings, such as broken dishes and items knocked from shelves. At least one earthquake, the 1929 Attica event, caused several water wells in the area to dry up. A large earthquake could cascade into fires, utility failure and major structural damage, but there is no historical precedent in Wyoming County for *severe* property damage and/or injury/loss of life from earthquakes.

According to the Multidisciplinary Center for Earthquake Engineering Research (MCEER):

The severity of an earthquake is determined by a recording of the magnitude and an assessment of the intensity. The Modified Mercalli Scale expresses intensity by Roman numerals I–XII and is based on the relative amount of resultant physical damage. Field data is gathered from individuals within the area of a recent quake; the effects of the tremor on man, structures and the earth’s surface are reported. An earthquake of intensity I on the Modified Mercalli Scale would most likely go unnoticed; a tremor of about intensity VI would probably be felt by everyone and cause slight damage; whereas, a quake of intensity XII would result in almost total destruction of buildings, objects thrown into the air and waves seen on the earth’s surface.

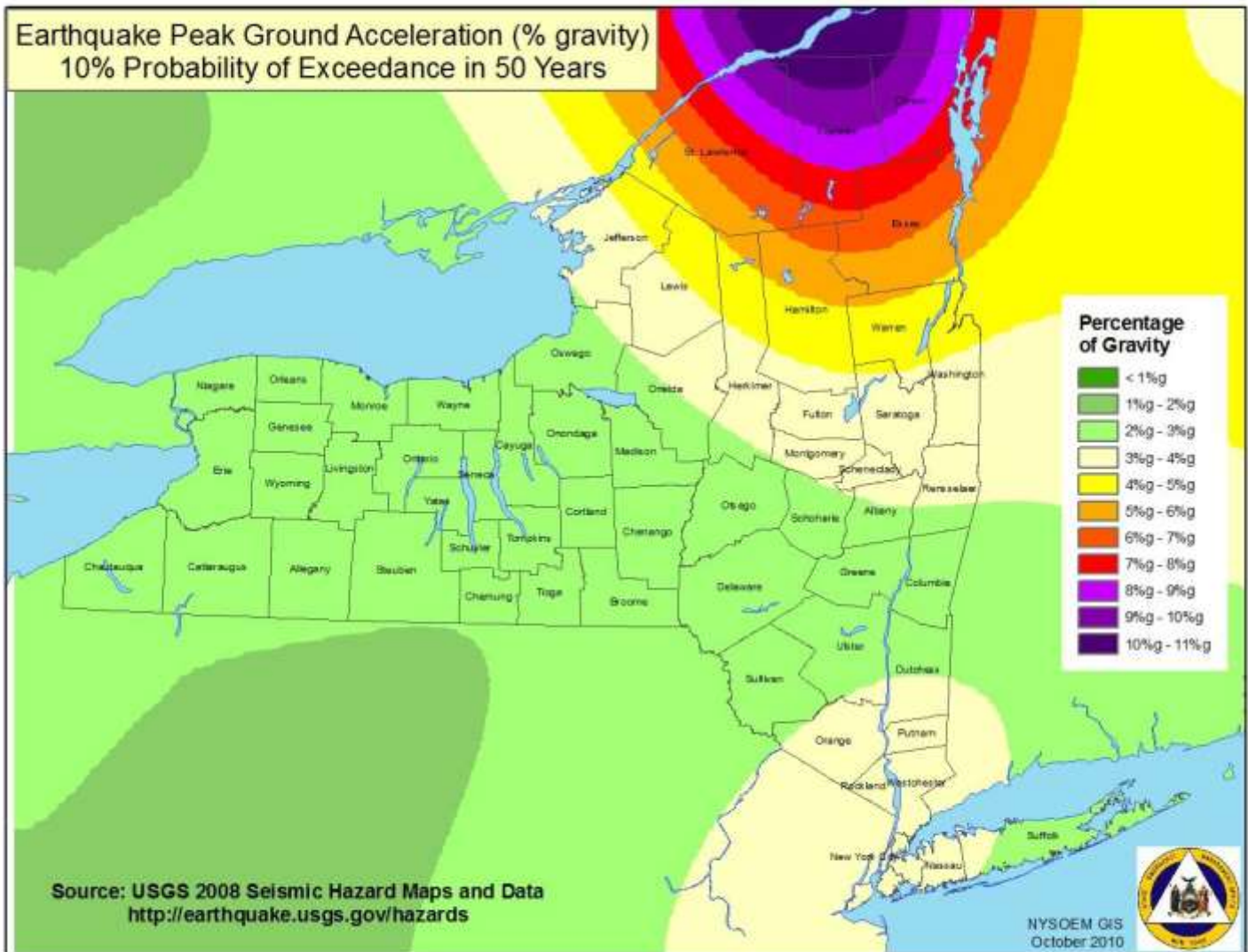
The magnitude of an earthquake is reported on the Richter Scale and is a measurement of the amount of energy released at the source of a quake. This data is gathered on seismographic recordings from a worldwide network of seismological stations. A minor earthquake registering a magnitude 2 on the Richter Scale is about the weakest felt by humans. Quakes of a magnitude 7 or more are classified as major. Some of the largest in the world have been measured at 8.8 or 8.9 on the Richter Scale.^{xix}

Table 6.2 Earthquake Magnitude and Intensity ComparisonSource: 2011 *NYS Hazard Mitigation Plan*, Table 3-52

Magnitude and Intensity Comparison	
Richter Magnitude Scale	Typical Maximum Modified Mercalli Intensity
1.0 to 3.0	I
3.0 to 3.9	II to III
4.0 to 4.9	IV to V
5.0 to 5.9	VI to VII
6.0 to 6.9	VII to IX
7.0 and Higher	VIII or Higher
Defined Modified Mercalli Intensity Scale Rating	
I	Not Felt except by a very few under especially favorable conditions
II	Felt only by a few persons at rest, especially on upper floors of buildings
III	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration Estimated
IV	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors, disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken
VIII	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
XI	Few, if any (masonry) structures remain standing. Bridges destroyed.
	Rails bent greatly.
XII	Damage total. Lines of sight and level are distorted. Objects thrown into the air.

The map below depicts New York State's vulnerability to earthquakes^{xx}. This map, from the U.S. Geological Survey, shows the Peak Ground Acceleration (PGA) values with a 10% chance of being exceeded over any given 50 year period. Peak Ground Acceleration is a measure of the strength of ground movements. This map shows the geographic area affected (all colored areas on the map), the probability of an earthquake of each given level of severity (10% chance in 50 years), and the severity (the PGA is indicated by color). Areas with the least earthquake risk are shown in green and areas with the greatest risk are shown in purple.

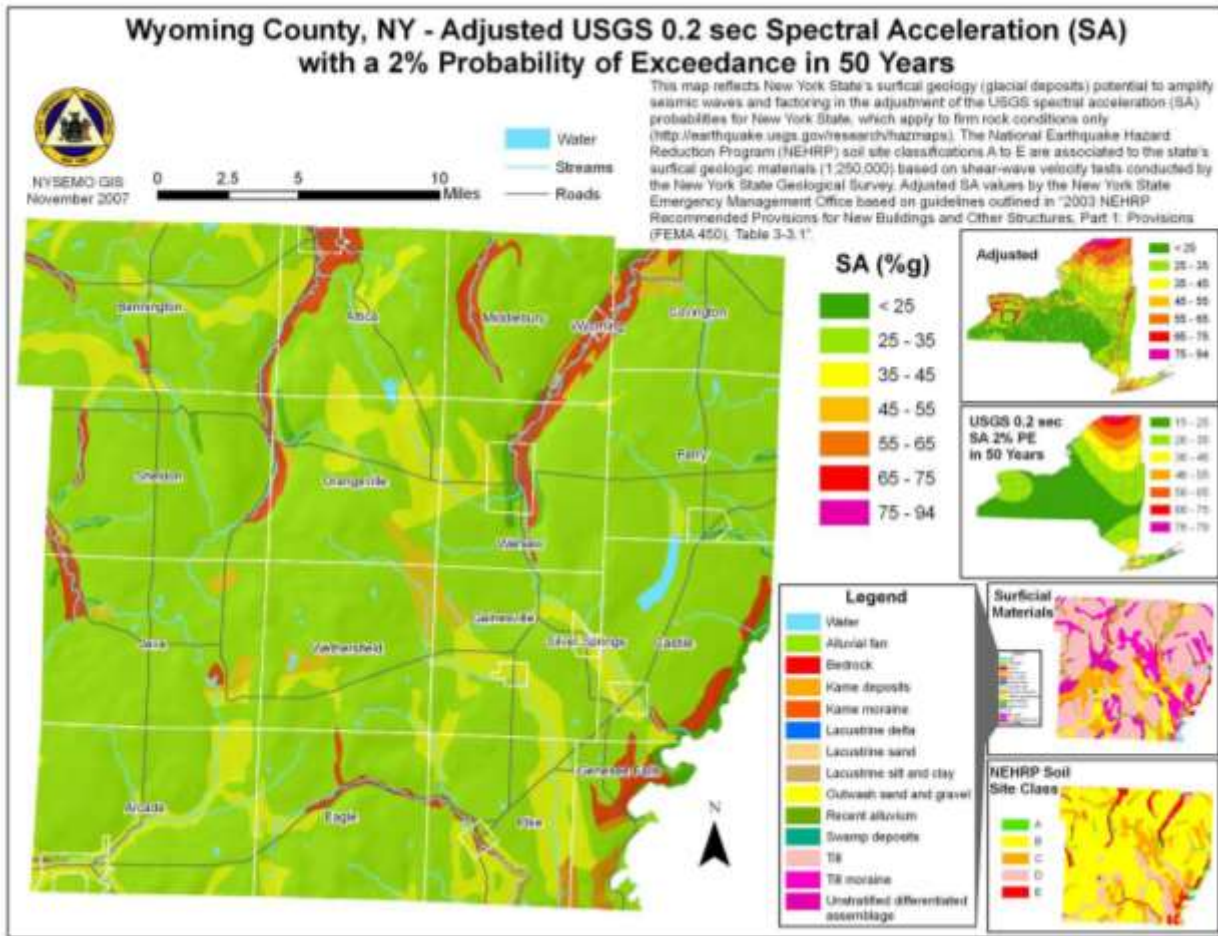
As the map below indicates that Wyoming County has a PGA between 2-3% of gravity (light green color) for earthquakes with a 10% chance of occurring within 50 years.



The Map below illustrates Spectral Acceleration (SA)^{xxi}. According to section 3.12 - Earthquake Hazard Profile, of the NYS Hazard Mitigation Plan the map:

...portrays Spectral Acceleration across NYS combined with the NEHRP soil classes. As opposed to Peak Acceleration which is what is experienced by a particle on the ground, SA (spectral acceleration) is approximately what is experienced by a building. This advancement in mapping allows for greater insight into location specific vulnerabilities. It is recommended that any jurisdiction that is portrayed with some vulnerability fully examine their earthquake risk. One key note is that this map creates a better understanding of risk to jurisdictions than that of the 10% Peak Acceleration map. For instance jurisdictions that may fall under 3% PGA on the previous map may actually have some areas of high vulnerability within their borders.^{xxii}

Figure 3-190



According to the map above all municipalities are vulnerable in terms of Spectral Acceleration. The municipalities with portions of the highest SA vulnerability in the county include:

Arcade, Town
Arcade, Village
Attica, Town
Attica, Village
Bennington, Town
Castile, Town
Covington, Town
Eagle, Town
Genesee Falls, Town
Java, Town
Middlebury, Town
Orangeville, Town
Pike, Town
Sheldon, Town
Warsaw, Town
Warsaw, Village
Wyoming, Village

6.6.C: Damage Estimation:

The following table is excerpted from the New York State Standard Multi-hazard Mitigation Plan. It provides information on the potential financial impacts of earthquakes to Wyoming County. This data indicates that the County could suffer up to \$92,000.00 per year in losses due to earthquakes.

Table 6.3 HAZUS MH Earthquake Annualized Loss Estimation and Ranking Results Source: 2011 NYS Hazard Mitigation Plan, Table 3-52										
County	Total Exposure [x \$1,000]	Annualized Capital Stock Losses	Annualized Income Losses	Annualized Total Losses [x \$1,000]	Annualized Loss Ratio [in dollars per \$1 million of exposure]	Annualized Loss per Capita [in Dollars]	Exposure Rank	Exposure Ratio Rank	Annualized Loss Rank	Annualized Loss per Capita Rank
Wyoming	2,368,856	82	10	92	39	2.12	56	37	53	40

Table 6.3 (3-59 of the 2011 NYS Hazard Mitigation Plan) shows the following potential loss estimation for Wyoming County from earthquakes during four time frames:

2,500 Years – \$87,280,000

1,000 Years – \$20,706,000

500 Years – \$5,627,000

250 Years – \$1,441,000

6.6.D: History: Earthquake history has been updated based on data gathered from the Multidisciplinary Center for Earthquake Engineering Research (MCEER), and the 2011 NYS Hazard Mitigation Plan.

According to the New York State Standard Multi-Hazard Mitigation Plan, there have not been any Presidential Disaster Declarations made for Wyoming County. From 1950 to 2005, only one such declaration was made for the entire state; this was the 2002 earthquake affecting the northeast corner of the state.

Table 6.4 Earthquakes in Western New York & Southern Ontario, Canada			
Date	Modified Mercalli Intensity	Location	Affected Area (sq. mi.)
*10.23.1857	VI	Buffalo, NY	18,000
01.15.1858	II	Niagara Falls, CA	
07.06.1873	VI	Ontario, CA	30,000
01.08.1876	II	Lockport, NY	
08.21.1879	V	Buffalo, NY	1,300
11.12.1927	IV	Niagara Falls, CA	
*08.12.1929	VIII	Attica, NY	100,000
12.02.1929	V	Attica, NY	local
12.03.1929	IV	Attica, NY	local
01.17.1930	I	Attica, NY	local
04.02.1931	IV	Buffalo, NY	
02.23.1939	III	Attica, NY	
02.26.1944	I	Buffalo, NY	

08.16.1955	V	Attica, NY	
03.27.1962	V	Niagara Falls, NY	
07.16.1965	IV	Attica, NY	local
08.27.1965	IV	Attica, NY	local
*01.01.1966	VI	Attica, NY	3,500
*06.13.1967	VI	Attica, NY	3,000
08.12.1969	IV	Attica, NY	
*Considered Significant (VI or Greater) according to Table 3-54, 2011 NYS Hazard Mitigation Plan			
Source: <i>Earthquakes in Western New York State</i> , Multidisciplinary Center for Earthquake Engineering Research (MCEER), http://mceer.buffalo.edu/info-service/reference_services/westernNewYorkEQs.asp			

While very minor earthquakes occur more often, according to the table above there have been 11 notable earthquakes in Wyoming County occurring since 1857. Of these earthquakes, only three are considered “significant” (Modified Mercalli Intensity of VI or greater).^{xxiii}

Significant Wyoming County Earthquakes (VI or Greater)

Attica - 8.12.1929

VIII - Modified Mercalli Intensity

5.6 – Richter Scale

This was the largest earthquake on record in Wyoming County and one of the largest in WNY. Extensive damage occurred in the Attica area. Two hundred and fifty chimneys were destroyed. Several buildings were affected including damaged walls (including cracked and fallen plaster, and damage to Attica Prison walls), and damage to building contents. Cemetery monuments were also damaged. The Attica reservoir experienced an increased flow for several days, and a number of wells went dry. Surrounding areas such as Batavia and others at similar distances sustained significant damage. A wall cracked as far away as Sayre, Pennsylvania. The earthquake was felt throughout a 250,000 square kilometer area: most of New York and the New England states, northeastern Ohio, northern Pennsylvania, and southern Ontario, Canada. Attica experienced strong aftershocks on December 2 and 3.^{xxiv}

Attica - 1.1.1966

VII - Modified Mercalli Intensity

4.7 – Richter Scale

This earthquake caused damage to chimneys and walls in Attica and Varysburg. At the Attica State Prison, plaster fell and the main smokestack was damaged. The quake was felt over a 46,500 square kilometer area.

Attica - 6.13.1967

VII - Modified Mercalli Intensity

(No additional details)

6.6.E: Future Probability:

Future probability based on past event occurrences:

Earthquake - ranging from I-V Modified Mercalli Intensity

11 Events/155 years = 7%. Considered a Low Probability.

Significant Earthquake – VI or higher Modified Mercalli Intensity

3 Events/155 years = 1.9%. Considered a Low Probability.

Based on the past century of records, earthquakes have a low probability of occurrence; they are ranked as a “moderately low” hazard in the County’s HAZNY report also due to the low incident rate. However, earthquakes have the potential to cause widespread physical damage to structures and the population in the County. Therefore, they should be considered as a higher priority for the County and municipalities to actively mitigate than the probability ranking may indicate. County-wide earthquake mitigation actions can be found in Section 8 and include more detailed seismic vulnerability studies, seismic protection plans, and enforcement of building codes related to earthquakes.

6.6.F: Research: Updated Earthquake data was obtained from the NYS Hazard Mitigation Plan, the USGS Earthquake Hazards Program, and The Multidisciplinary Center for Earthquake Engineering Research.

SECTION 6.7: EPIDEMIC

6.7.A: Definition: The occurrence or outbreak of disease to an unusual number of individuals or proportion of the population, human or animal.

6.7.B: History: Since 2006 one epidemic has occurred in Wyoming County: H1N1, also known as “Swine Flu”. There were six recorded incidents of epidemic or epidemic related activity in Wyoming County before this from 1900 to 2005. Four of these related to the screening and prevention of rabies, and another was in regards to the prevention of a cattle illness called Bang’s Disease.

H1N1 Details

From April 2009 to March 2010 an H1N1 Epidemic declaration was in effect nationwide and was one of the biggest epidemics to ever occur in Wyoming County. In October of 2009 an H1N1 State of Emergency was declared by the NYS Governor. Up until February 2010 supply of vaccinations were limited, and were only given to priority groups including emergency services workers, and high risk groups such as elderly, the sick and children. A school program was created which resulted in the vaccination of 300 teachers and 1500 students^{xxv}. The Wyoming County Health Department gave 3,337 vaccines to Wyoming County residents between October 2009 and January 2010. In February 2010 an adequate supply of vaccines became available and all Wyoming County residents were encouraged to get vaccinated.^{xxvi} Overall approximately 17% of the population was vaccinated.

6.7.C: Impacts: Epidemics in general cause strain on medical facilities and staff, and have huge expenditures for screening and immunizations.

H1N1 was an influenza-like illness. Most of those infected experienced mild illness did not require medical care or treatment, but more extreme cases also occurred. Symptoms included difficulty breathing, chest pain, blue/grey skin color, poor fluid intake, severe persisting vomiting, difficulty waking, extreme irritability, confusion, sudden dizziness, flu symptoms improving then worsening, coughing, and fever.^{xxvii}

6.7.D: Damage: Costs related to screening and immunizations.

6.7.E: Future Probability: 7 events/112 years = 6.25%. This hazard is considered a Low Probability. While probability may be low, the effects of an epidemic could be huge, including a potentially large number of deaths and should therefore still be considered a high priority. Wyoming County Health Department and Emergency Management have been planning for epidemics for years which helped with response when H1N1 hit. Wyoming County has used the experience with the H1N1 outbreak to make improvements to public health planning preparation and response related to epidemic, and has re-development the County’s Strategic National Stockpile plan. The Plan allows the Health Department to prepare and respond to any health emergency while providing direction, policy, and procedures for staff to follow to be able to request, receive, and distribute vaccine to county residents.^{xxviii}

6.7.F: Research: Epidemic data was data was obtained from the Wyoming County Health Department. Historic information was obtained from a variety of sources archived in the Wyoming County Historian’s Office, including

Historical Wyoming Vol. 42 No. 2 and the *Western New Yorker* archives. The first epidemic event included in this report was 1913.

PART II: HUMAN-CAUSED HAZARD PROFILES

The following hazard profiles are included in this Plan to provide additional information on potential hazards the Planning Committee considered important to assess. Inclusion of man-made hazards is not a technical requirement of the FEMA hazard mitigation planning process, but the Planning Committee determined that these hazards are also important to protect the County from in addition to the natural hazards profiled above.

SECTION 6.8: FIRE

6.8.A: Definition: The uncontrolled burning in residential, commercial, industrial, institutional, or other structures in developed areas.

6.8.B: History:

Since the Existing Plan, 491 structure fires were recorded since 2006. These include major fires where buildings were destroyed, and very minor fires. Detailed information regarding each fire was not available. The Existing Plan recorded a total of 254 major fire events are recorded between 1900 and 2005.

Fires have occurred frequently throughout Wyoming County's history. A review of files in the County Historian's office indicates that fires have occurred for many reasons, ranging from lightning strikes to faulty equipment to human carelessness and error.

6.8.C: Impacts: Fires have caused structural damage and fatalities, and have cascaded into other hazards such as explosions, air contamination, and structural damage.

6.8.D: Damage: Damage amounts were not able to be obtained pertaining to fires that have occurred since the Existing Plan. Reported damages between 1900-2005 totaled approximately \$12,666,400, but costs were not been available for all fires. Fires have cause significant damage to private homes and cottages, local businesses, manufacturing plants, barns and farm buildings. Major agricultural losses have included livestock, crops in storage, and farm equipment.

This total does not include many of the economic costs such as those associated with closed businesses, reduced operations, employee absence, and limed or delayed agricultural operations.

6.8.E: Future Probability:

Recent Probability of any structure fire – $491 \text{ events} / 6 \text{ years} = 8,183\%$. Many structure fires occur every month of every year in Wyoming County.

Past Probability of a major fire - $254 \text{ events} / 105 \text{ years} = 242\%$. This hazard is considered a High Probability. Major fires are likely to occur more than once per year in Wyoming County.

6.8.F: Research: Fire data was obtained from the Wyoming County Sheriff's Office. Attempts were made to obtain detailed fire event data from NYS Office of Fire Prevention and Control but were unsuccessful. Historic data was originally obtained from the Wyoming County Historian's Office and the *Western New Yorker* archives. The first fire event included in this report occurred on June 15, 1900.

SECTION 6.9: HAZARDOUS MATERIALS - IN TRANSIT

6.9.A: Definition: The uncontrolled release of materials (including oil) during transport, which when released can result in death or injury to people and/or damage to property and the environment through the material's flammability, toxicity, corrosiveness, chemical instability and/or combustibility. Include oil spill.

6.9.B: History: Between 2006-2011 there have been 69 HAZMAT in Transit incidents^{xxix} (see Appendix Ch-6 *Hazard Events*), which brings the total number of incidents on record to 246 since 1978. HAZMAT in transit accidents occur multiple times each year and involve trains, commercial trucks, and automobiles. The most common elements spilled include diesel fuel, gasoline, hydraulic oil, fertilizers, and other petroleum products. In addition, spills of agricultural waste such as manure have also periodically occurred. These spills may cascade into problems including water contamination, air contamination, soil contamination, fire, explosion and transportation accidents. Arcade, Attica, Covington, Perry Silver Springs, Sheldon, and Warsaw were the most common spill sites, though these incidents have occurred county-wide.

6.9.C: Impacts: HAZMAT In Transit incidents often caused water, soil and air contamination.

6.9.D: Damage: Costs not provided.

6.9.E: Future Probability: 246 events/33 years = 745.5 %. This hazard is considered a High Probability.

6.9.F: Research: Hazmat in transit data was obtained from the Department of Environmental Conservation (DEC) Spills Database beginning in 1978. It is likely that other spills occurred prior to this date, but those records are not readily available.

SECTION 6.10: WATER SUPPLY CONTAMINATION

6.10.A: Definition: The contamination or potential contamination of surface or subsurface public water supply by chemical or biological materials that results in restricted or diminished ability to use the water source.

6.10.B: History: There are no recorded incidents of water supply contamination large enough to cause major issues with drinking water supply. There is potential for water supply contamination but protections are in place at water supply and treatment plants to determine if water is contaminated to prevent tainted water from being distributed to the public.

Groundwater and water bodies/waterways have been contaminated in the past by HAZMAT spills. According to DEC between 2006-2011 a total of 30 spills affected either groundwater or surface water, and another 123 spills had some effect on soil. Flood events and heavy rain also have the potential to contaminate water through carrying runoff from contaminated sites.

The Existing Plan used a different method to categorize events that could affect water supply contamination. 182 incidents were considered water supply contamination between 1978-2005 which was based on any spill that was over one gallon. This categorization was too broad which is why the method was changed to focus on spills that the DEC considered to affect groundwater or surface water (with additional consideration given to spills affecting soil).

The most common materials spilled include gasoline, diesel fuel, and other petroleum products, as well as fertilizers, manure, and raw sewage. These incidents have occurred county-wide.

6.10.C: Impacts: Water contamination has resulted in surface water contamination, fish kills, and algae.

6.10.D: Damage: Costs not provided.

6.10.E: Future Probability

Major drinking water contamination: 0 events/33 years = Low Probability.

Groundwater/surface water contamination: 30 events/6 years = 500%. High Probability.

While there is no record of a large drinking water contamination event, the probability is not zero. There is potential for contamination but protections are in place at water supply and treatment plants to determine if water is contaminated to prevent tainted water from being distributed to the public.

Groundwater/surface water contamination is much more probable and occurs every year, although most events are rather small in scale/effect.

6.10.F: Research: Water supply contamination data was obtained from the Department of Environmental Conservation (DEC) Spills Database beginning in 1978.

SECTION 6.11: HAZARDOUS MATERIALS – FIXED SITE

6.11.A: Definition: The uncontrolled release of material from a stationary facility, which when released can result in death or injury to people and/or damage to property and the environment through the material's flammability, toxicity, corrosiveness, chemical instability and/or combustibility. Includes oil spill.

6.11.B: History: Since the Existing Plan, there have been 115 HAZMAT Fixed Site incidents between 2006-2011 ^{xxx} (see Appendix Ch-6 *Hazard Events*), which brings the total number of incidents on record to 679 since 1978. HAZMAT Fixed Site spills occur multiple times each year (20 times per year on average). The most common elements spilled include diesel fuel, gasoline, oils (motor, hydraulic, transformer, etc.), sewage, agricultural materials and manure along with a few other chemicals. These spills may cascade into problems including water contamination, air contamination, soil contamination, explosion, utility failure and fire. These incidents have occurred county-wide, though most frequently in Arcade, Attica, Castile, Perry and Warsaw.

6.11.C: Impacts: Hazmat fixed site incidents often caused soil, water and air contamination.

6.11.D: Damage: Costs not provided.

6.11.E: Future Probability: 679 events/33 years = 2057%. This hazard is considered a High Probability.

6.11.F: Research: Hazmat fixed site data was obtained from the Department of Environmental Conservation (DEC) Spills Database. Other spills occurred prior to his date, but records are not readily available.

SECTION 6.12: TRANSPORTATION ACCIDENT

6.12.A: Definition: A mishap involving one or more conveyances on land, sea, and/or in the air which results in casualties and/or substantial loss of property.

6.12.B: History: According to the Wyoming County Sheriff's Department between 2006-2011 a total of 27 major transportation accidents occurred where a fatality occurred. During this same timeframe 3043 accidents resulted in some form of property damage, but it is unknown how many resulted in major damage. 1020 accidents caused human injury. A total of approximately 177 major traffic accidents occurred between 1900 and 2011. Most accidents occurred on major state roads such as Routes 20A, 39 and 77, but have also occurred throughout the county. These accidents may cascade into problems including HAZMAT spills, fires and explosions.

6.12.C: Impacts: Transportation accidents have caused spills of hazardous materials; contamination of the air, soil and water; loss of and damage to goods and livestock, and human injuries and fatalities.

6.12.D: Damage: Costs not provided.

6.12.E: Future Probability: Major Accidents - 177 events/111 years = 159.5%. This hazard is considered a High Probability.

6.12.F: Research: Transportation accident data was obtained from the Wyoming County Sheriff's Department as well as the Department of Environmental Conservation (DEC) Spills Database beginning in 1978. Additional data was obtained from the *Western New Yorker* archives beginning in 1900.

SECTION 6.13: UTILITY FAILURE

6.13.A: Definition: Loss of electric and/or natural gas supply, telephone service or public water supply as a result of an internal system failure and not by the effects of disaster agents.

6.13.B: History: There are no recorded instances of utility failures occurring as a result of internal system failures. Utility failure has been mostly due to weather events and associate effects such as downed power lines. Since the Existing Plan, there have been 12 significant utility failures between 2006-2012 bringing the total number to approximately 75 between 1900-2012. Almost all of the events on record were electricity failure and were the result of severe storms, winter storms and ice storms as opposed to internal system failures. Most utility failures have occurred in the winter months. Utility failure may cascade into problems such as water supply contamination, air contamination, fire, explosion and flooding.

6.13.C: Impacts: Utility failures due to storm events have caused power outages and have left people without telephone services, heat or fuel.

6.13.D: Damage: Damages were not reported specific to utility failure. Costs were reported for total storm damage.

6.13.E: Future Probability:
Utility Failure due to system failure (non-weather) - 0 events/112 years = 0%. This hazard is considered a Low Probability

6.13.F: Research: Utility failure data was obtained from the National Climatic Data Center (NCDC) beginning in 1955. Other sources included archived materials at the Wyoming County Historian's Office and the *Western New Yorker* archives.

Chapter 7: Risk Assessment

PURPOSE

The purpose of the risk assessment is to:

- Inventory Critical Facilities and Community Asset facilities in Wyoming County;
- Assess the vulnerability of the Critical Facilities and Community Asset Facilities to the high priority hazards identified in the hazard analysis;
- Estimate potential losses in a hazard event; and
- Assess future vulnerability based on development trends.

PART I CRITICAL FACILITY AND COMMUNITY ASSET FACILITY IDENTIFICATION

ORIGINAL METHODOLOGY

Initial identification of facilities in the original plan was conducted as follows:

The original planning committee was provided with draft criteria to be used in developing a consistent list of Critical Facilities and Community Asset Facilities. Using the FEMA How-To Guide *Understanding Your Risks* and the DRAFT Ontario County Multi-Jurisdictional All-Hazard Mitigation Plan, a set of criteria were developed by G/FLRPC. The criteria were reviewed and approved by the planning committee, and used to develop the list of facilities.

The Wyoming County Emergency Management Office began identifying the county's Critical Facilities and Community Asset Facilities by creating a database of key locations that was then given to G/FLRPC. G/FLRPC staff used this information to produce maps depicting the locations and an accompanying master list. At the March Planning Committee Meeting the attendees began working with these maps and lists by adding locations to them.

The list and maps of Critical Facilities and Community Asset Facilities were updated by G/FLRPC staff. The revised list and maps were reviewed in the County Agency/Non-Municipal and Regional meetings in late April, where County and municipal officials added a number of additional facilities to the list. After these meetings, G/FLRPC staff again updated the list and maps. The list and maps were reviewed for a final time by the planning committee at its June meeting. Apart from a handful of minor changes, the Committee approved the results.

UPDATE METHODOLOGY

The identified Critical Facilities and Community Asset Facilities from the Existing Plan were reviewed by the Update Committee and municipalities to determine needed changes. At the four regional municipal meetings 10/19/11 and 10/20/11 G/FLRPC and Wyoming EMO presented the list of facilities that were included in the Existing Plan and walked attendees through the process of identifying Critical Facilities and Community Asset Facilities in each of the categories of facilities for each municipality. This same process was repeated at the County level at the 4/30/12 Update Committee meeting in order to finalize the list. In both instances attendees were instructed to send any additional facilities they thought of after the meeting. Municipalities that were not represented at the meetings were informed of the facilities that the group wanted to include and were asked to respond with any additions they would like to make.

In some cases facilities were added that were new, or that the committee believed should be included regardless of whether they were in the Existing Plan or not. Some facilities were removed that no longer existed. The criteria used to identify and update the lists of facilities was the same as the Existing Plan, which is outlined below.

SECTION 7.1 CRITICAL FACILITY AND COMMUNITY ASSET CRITERIA

Criteria for Inventory of Critical Facilities and Community Asset Facilities

Critical Facilities are facilities important to the community. They include essential facilities, transportation systems, lifeline utility systems, high potential loss facilities, and hazardous materials facilities.

Essential Facilities are essential to the health and welfare of the whole population and are especially important following hazard events. The potential consequences of losing them are so great that they should be carefully inventoried. Vulnerability is based on the service they provide rather than just their physical aspects; therefore, not only their structural integrity and content value should be considered, but also the effects of interrupting their functions. Essential facilities include hospitals and other medical facilities, police and fire stations, emergency operations centers and evacuation shelters, and schools.

Transportation Systems include airways – airports, airstrips, and heliports; highways – bridges, tunnels, roadbeds, overpasses, and transfer centers; railways – tracks, tunnels, bridges, rail yards, and depots; waterways – canals, locks, seaports, ferries, harbors, dry docks, and piers.

Lifeline Utility Systems such as potable water, wastewater, oil, natural gas, electric power, and communication systems. This includes such facilities as electrical sub stations, water treatment facilities, telephone central offices, and wastewater facilities.

High Potential Loss Facilities are facilities that would have a high loss associated with them, such as nuclear power plants, dams, military installations, and prisons.

Hazardous Material Facilities include facilities housing industrial/hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials, and toxins.

Community Asset Facilities are other community elements that might be vulnerable to particular types of hazards, and could present a different type of loss than a Critical Facility. Community assets include vulnerable populations, economic elements, historic and cultural resource areas, natural resource and recreation areas, high density development areas, and facilities providing important services.

Vulnerable Populations are people, such as non-English speakers or the elderly, who may require special response assistance or special medical care after a disaster. Locations identified may include senior citizen complexes, group homes or mobile home parks. Also included in this category are groups of properties that are vulnerable to certain hazards, such as FEMA flood zones.

Economic Elements are major employers and financial centers in the County that could affect the local or regional economy if significantly disrupted. Major employers are those with 50 employees or more, and may even be located outside the county, while still employing a significant number of County residents.

Historic and Cultural Resource Areas are historic properties and cultural facilities that are identified and protected on the State and National Register of Historic Places, as well as those identified by the Planning Committee as significant to local history and culture.

Natural Resource and Recreation Areas include major natural resource and recreational areas that are considered unique or valuable to the community. Possible resources include major waterbodies, streams, wetlands, parks, forested areas, and large areas potentially susceptible to wildfires.

High Density Development Areas are areas of high-density residential or commercial development that, if damaged, could result in high death tolls and injury rates.

Facilities Providing Important Services are facilities that provide key services, and could include government buildings, banks and certain commercial establishments, such as grocery stores, hardware stores and gas stations.

The types of Critical Facilities and Community Asset Facilities identified in the Plan are summarized under the subsections below.

Critical Facilities:

Essential Facilities

- Emergency Operations Centers
- Evacuation Centers
- Sheriff & Police Stations
- County Courthouse & Jail
- Fire Stations
- Schools
- Hospitals, Clinics & Other Medical Facilities
- Village DPW & Town Highway Garages

Transportation Systems(Infrastructure)

- Railroads
- State & County Roads
- State & County (selected) Bridges

Lifeline Utility Systems

- Water Supply Infrastructure
- Sewage Systems and Treatment Infrastructure
- Communication Facilities
- Telephone Facilities
- Electric Lines, Substations, etc.

High Potential Loss Facilities

- Dams
- Prisons

Hazardous Material Facilities

- Gasoline/Diesel Fuel Storage and/or Distribution
- Manufacturing and Processing Facilities
- Farms – Fertilizer/Chemical Storage

Community Asset Facilities:

Vulnerable Populations

- Nursing Homes
- Homes for the Aged
- Intermediate Care Facilities
- Child Care Centers
- Mobile Home Parks

Economic Elements

- Major Employers
- Manufacturing and Processing Facilities

Historic and Cultural Resource Areas

- Architectural Landmarks
- Historic Sites
- Public Libraries, Community Centers, Recreation Halls

Natural Resource and Recreation Areas

State Owned Public Parks, Recreation Areas, and other Multiple Use Areas

County Owned Public Parks and Recreation Areas

Town/Village Public Parks and Recreation Areas

Marinas

Racetracks

Facilities Providing Important Services

Government Offices (Town & Village Halls, County Buildings)

SECTION 7.2 UPDATED CRITICAL FACILITY AND COMMUNITY ASSET FACILITY INVENTORY

With the exception of the Village of Perry, Critical Facilities and Community Asset Facilities located in villages were incorporated within the figures for the towns in which the Village lies. All locations in the Village of Perry were included with the figures for the Town of Perry, even though part of the Village is located in the Town of Castile. This was done to so that the Village could be treated as a single entity and would not be divided between the two towns.

The Existing Plan identified 234 Critical Facilities and 49 Community Asset Facilities in the County, for a total of 283 sites. These numbers were increased significantly in the Plan Update to 703 Critical Facilities and 84 Community Asset Facilities for a total of 787 sites.

The large increase in Critical Facilities and Community Asset Facilities did make collection and analysis of data for individual facilities more difficult. Future updates could consider prioritizing the top Critical Facilities in order to potentially reduce the number of facilities, and increase the amount of data collection and analysis for each.

Much of this increase (over 200) was due to the inclusion of each individual wind tower in the County which causes the Towns of Eagle, Sheldon and Wethersfield to stand out as having the three highest numbers of Critical Facilities in the County.

Tables 7.1 and 7.2 list the number of Critical Facilities and Community Asset Facilities in the County identified by the Wyoming County All-Hazard Mitigation Planning Committee and include the sites identified in the Town and Village of Arcade All-Hazard Mitigation Plan. Structures that housed more than one type of facility were counted as individual facilities, i.e. a building that contained a police station and a town hall was counted as one Critical Facility and one Community Asset Facility. These tables, like all subsequent tables in this chapter, are organized by township.

Table 7.1: Critical Facilities by Town

Town	Total Critical Facilities	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Arcade	62	7	13	19	0	23
Attica	59	13	10	18	1	17
Bennington	34	4	10	8	1	11
Castile	37	3	1	8	0	25
Covington	12	3	0	0	0	9
Eagle	112	3	4	99	0	6
Gainesville	40	7	3	8	0	22
Genesee Falls	13	2	2	3	0	6
Java	18	4	1	4	0	9
Middlebury	12	4	1	1	0	6
Orangeville	12	1	0	6	1	4
Perry	51	11	8	18	0	14

Pike	27	3	0	5	0	19
Sheldon	111	5	9	80	0	17
Warsaw	33	12	6	6	1	8
Wethersfield	70	3	0	63	0	4

Table 7.2: Community Asset Facilities by Town

Town	Total Community Asset Facilities	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Arcade	11	4	4	0	1	2
Attica	3	0	1	0	1	1
Bennington	4	0	2	1	0	1
Castile	8	1	1	1	3	2
Covington	3	1	1	0	0	1
Eagle	4	0	0	1	1	2
Gainesville	5	1	1	1	0	2
Genesee Falls	4	1	0	1	1	1
Java	1	0	0	0	0	1
Middlebury	1	0	1	0	0	0
Orangeville	1	0	0	0	0	1
Perry	14	8	1	1	2	2
Pike	4	0	0	1	2	1
Sheldon	5	3	1	0	0	1
Warsaw	12	5	1	0	0	6
Wethersfield	4	1	2	0	1	0

Map 12 – *Wyoming County Critical Facilities* & Map 13 - *Wyoming County Community Asset Facilities* illustrate the tables above geographically. The maps are also organized by township.

PART II VULNERABILITY ASSESSMENT

SECTION 7.3 HAZARD CONCERN/IMPACT AREAS

Hazard concern/impact areas were reviewed from the Existing Plan, and determined to be the same in general. The text descriptions and tables were adjusted and reformatted to reflect current Hazards of Concern, and to add more information where possible.

Many hazards-such as weather events-have the potential to occur anywhere in the County, and therefore have a county-wide impact area encompassing all municipalities. (See Table 7.3 Hazard Concern/Impact Areas). Other hazards have set locations where they would likely occur (such as flooding, see Map 12 – *Wyoming County 100-Year Flood Zones*) but could also affect specific areas in each municipality. None of the *Hazards of Concern* create vulnerability limited to individual municipalities. Specific hazard events on the other hand do have the potential to only affect one or a few municipalities depending on the details of each event.

Table 7.3: Hazard Concern/Impact Areas

Hazards:	County-wide Hazard Concern/Impact Areas:	Municipal Concern/Impact Areas
Natural		
Flood	100 year flood zones (see Map 14 – Wyoming County 100-Year Flood Zones) and areas right on the edge of flood zones.	Flood zone areas of all municipalities (22 NFIP municipalities plus 2 at risk to flooding in the process of being NFIP)(see Map 14 – Wyoming County 100-Year Flood Zones). Village of Arcade and Town of Warsaw historically impacted the more than others. NFIP
Severe Storms	Entire county	All Municipalities, impact location based on the specific storm.
Ice Storm	Entire county	All Municipalities, impact location based on the specific storm.
Severe Winter Storm	Entire county	All Municipalities, impact location based on the specific storm.
Tornado	Entire county	All Municipalities, impact location based on the specific storm.
Earthquake	Entire county, magnitude 6.5 earthquakes are possible in the region	All Municipalities. Magnitude could be similar county-wide, but impact could vary depending on structure age/size/material/condition/etc.
Epidemic	Entire county	All Municipalities. Higher density/population municipalities could potentially be impacted more.
Human-Caused		
Fire	Entire county	All Municipalities
Hazmat (In Transit)	Most of county. Areas located adjacent to roads and rail lines. (See Map 15 – Wyoming County Transportation Infrastructure)	All Municipalities to some extent. More potential for impact in areas with rail lines: Arcade T&V, Attica T&V, Castile T&V, Covington, Gainesville T, Silver Springs V, Genesee Falls, Java, Middlebury, Sheldon, Warsaw T&V. All municipalities have State Routes, and County Roads susceptible to HAZMAT accidents. (See Map 15 – Wyoming County Transportation Infrastructure)
Water Supply Contamination	Entire county	All Municipalities
Hazmat (Fixed Site)	Many individual sites	All Municipalities have identified the presence of HAZMAT sites.
Transportation Accident	Areas located adjacent to roads, bridges, and rail lines are vulnerable	All Municipalities susceptible to auto accidents. All have State routes, County roads and local roads. Trucking accidents more likely on State and County Roads. Rail accidents could occur in municipalities with rail lines: Arcade T&V, Attica T&V, Castile T&V, Covington, Gainesville T, Silver Springs V, Genesee Falls, Java, Middlebury, Sheldon, Warsaw T&V. All municipalities have State Routes, and County Roads susceptible to HAZMAT accidents. (See Map 15 – Wyoming County Transportation Infrastructure)
Utility Failure	Entire county	All Municipalities
Oil Spill	Roads, rail lines, and individual site	All municipalities. Areas surrounding Hazmat sites, roads, and rail lines.

SECTION 7.4: VULNERABILITY ASSESSMENT OF CRITICAL FACILITIES AND COMMUNITY ASSET FACILITIES

For the Plan Update, the existing Vulnerability Assessment was reviewed and the methodology was used as a template to update.

Because many hazards have very large, usually county-wide impact potential – such as ice storms, winter storms, and severe storms - most Wyoming County residents as well as Critical Facilities and Community Assets are generally vulnerable to these types of hazards.

Specific facility vulnerability to each hazard was determined on a case by case basis and included a determination of whether a hazard would affect different types of facilities. Vulnerability of facilities in the Existing Plan was used as a starting point, but specific facility vulnerability to each hazard was adjusted in many cases. The facility vulnerability is somewhat generalized because whether a certain hazard would affect a specific facility is entirely dependent on the specific hazard situation, how severe it is, the area it affects, how large the cascade effects are, etc.

To assess the vulnerability of each Critical Facility and Community Asset Facility to a Hazard with set extents, such as flooding, G/FLRPC plotted facilities to determine which were located within the hazard extents.

Some hazards were grouped together when they could affect the same group of facilities, for example Earthquakes and Tornadoes which could have a major effect on all Critical Facilities and Community Asset Facilities.

Affected – this both includes buildings that are in a hazard area, and in many cases include facilities that are important during the event (except flooding?)

7.4.A: Natural Hazards

Floods

Records of all Critical Facilities that have sustained floods are not available. These types of records should be collected and maintained in the future. For flooding, facilities that were located just outside of the flood zone were also considered vulnerable. This is both because 500 year flood zones are not available, and because flood zones have not been updated recently and an official GIS coverage of the 100 year flood zone is not available. (Zones were digitized years and years ago by G/FLRPC based on paper maps).

Table 7.4.1: Critical Facilities Affected by Floods

Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	20	4	12	4	0	0
Town of Attica	14	3	6	3	0	2
Town of Bennington	12	3	6	1	1	1
Town of Castile	5	2	1	0	0	2
Town of Covington	2	1	0	0	0	1
Town of Eagle	3	1	1	0	0	1
Town of Gainesville	15	5	3	0	0	7
Town of Genesee Falls	3	1	2	0	0	0
Town of Java	7	4	1	0	0	2
Town of Middlebury	6	3	1	1	0	1
Town of Orangeville	4	1	0	0	1	2

Town of Perry	14	5	5	3	0	1
Town of Pike	1	1	0	0	0	0
Town of Sheldon	7	3	4	0	0	0
Town of Warsaw	14	4	6	2	0	2
Town of Wethersfield	1	1	0	0	0	0

Table 7.4.2: Community Asset Facilities Affected by Floods

Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	3	1	0	0	0	2
Town of Attica	2	0	0	0	1	1
Town of Bennington	0	0	0	0	0	0
Town of Castile	6	0	0	1	3	2
Town of Covington	0	0	0	0	0	0
Town of Eagle	2	0	0	1	1	0
Town of Gainesville	2	0	1	0	0	1
Town of Genesee Falls	0	0	0	0	0	0
Town of Java	1	0	0	0	0	1
Town of Middlebury	0	0	0	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	4	1	0	0	1	2
Town of Pike	4	0	0	1	2	1
Town of Sheldon	0	0	0	0	0	0
Town of Warsaw	3	0	0	0	0	3
Town of Wethersfield	0	0	0	0	0	0

Severe Storms, Ice Storms and Winter Storms**Table 7.4.3: Critical Facilities Affected by Severe Storms, Ice Storms and Winter Storms**

Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	62	7	13	19	0	23
Town of Attica	59	13	10	18	1	17
Town of Bennington	28	4	10	5	1	8
Town of Castile	37	3	1	8	0	25
Town of Covington	12	3	0	0	0	9
Town of Eagle	112	3	4	99	0	6
Town of Gainesville	38	7	3	7	0	21
Town of Genesee Falls	11	2	2	2	0	5
Town of Java	18	4	1	4	0	9
Town of Middlebury	12	4	1	1	0	6
Town of Orangeville	12	1	0	6	1	4
Town of Perry	51	11	8	18	0	14
Town of Pike	27	3	0	5	0	19
Town of Sheldon	111	5	9	80	0	17
Town of Warsaw	33	12	6	6	1	8
Town of Wethersfield	70	3	0	63	0	4

Table 7.4.4: Community Asset Facilities Affected by Severe Storms, Ice Storms and Winter Storms

Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	11	4	4	0	1	2
Town of Attica	3	0	1	0	1	1
Town of Bennington	4	0	2	1	0	1
Town of Castile	8	1	1	1	3	2
Town of Covington	3	1	1	0	0	1
Town of Eagle	4	0	0	1	1	2
Town of Gainesville	5	1	1	1	0	2
Town of Genesee Falls	4	1	0	1	1	1
Town of Java	1	0	0	0	0	1
Town of Middlebury	1	0	1	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	14	8	1	1	2	2
Town of Pike	4	0	0	1	2	1
Town of Sheldon	5	3	1	0	0	1
Town of Warsaw	12	5	1	0	0	6
Town of Wethersfield	4	1	2	0	1	0

Tornadoes and Earthquakes**Table 7.4.5: Critical Facilities Affected by Tornadoes and Earthquakes**

Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	62	7	13	19	0	23
Town of Attica	59	13	10	18	1	17
Town of Bennington	34	4	10	8	1	11
Town of Castile	37	3	1	8	0	25
Town of Covington	12	3	0	0	0	9
Town of Eagle	112	3	4	99	0	6
Town of Gainesville	40	7	3	8	0	22
Town of Genesee Falls	13	2	2	3	0	6
Town of Java	18	4	1	4	0	9
Town of Middlebury	12	4	1	1	0	6
Town of Orangeville	12	1	0	6	1	4
Town of Perry	51	11	8	18	0	14
Town of Pike	27	3	0	5	0	19
Town of Sheldon	111	5	9	80	0	17
Town of Warsaw	33	12	6	6	1	8
Town of Wethersfield	70	3	0	63	0	4

Table 7.4.6: Community Asset Facilities Affected by Tornadoes and Earthquakes

Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	11	4	4	0	1	2
Town of Attica	3	0	1	0	1	1
Town of Bennington	4	0	2	1	0	1

Town of Castile	8	1	1	1	3	2
Town of Covington	3	1	1	0	0	1
Town of Eagle	4	0	0	1	1	2
Town of Gainesville	5	1	1	1	0	2
Town of Genesee Falls	4	1	0	1	1	1
Town of Java	1	0	0	0	0	1
Town of Middlebury	1	0	1	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	14	8	1	1	2	2
Town of Pike	4	0	0	1	2	1
Town of Sheldon	5	3	1	0	0	1
Town of Warsaw	12	5	1	0	0	6
Town of Wethersfield	4	1	2	0	1	0

Epidemic

Table 7.4.7: Critical Facilities Affected by Epidemic

Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	4	4	0	0	0	0
Town of Attica	13	11	0	0	1	1
Town of Bennington	4	3	0	0	0	1
Town of Castile	1	1	0	0	0	0
Town of Covington	4	3	0	0	0	1
Town of Eagle	3	2	0	0	0	1
Town of Gainesville	3	3	0	0	0	0
Town of Genesee Falls	3	2	0	0	0	1
Town of Java	4	3	0	0	0	1
Town of Middlebury	3	3	0	0	0	0
Town of Orangeville	2	1	0	0	0	1
Town of Perry	11	9	1	0	0	1
Town of Pike	1	1	0	0	0	0
Town of Sheldon	4	4	0	0	0	0
Town of Warsaw	10	9	0	0	1	0
Town of Wethersfield	3	3	0	0	0	0

Table 7.4.8: Community Asset Facilities Affected by Epidemic

Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	6	4	0	0	0	2
Town of Attica	1	0	0	0	0	1
Town of Bennington	1	0	0	0	0	1
Town of Castile	3	1	0	0	0	2
Town of Covington	2	1	0	0	0	1
Town of Eagle	1	0	0	0	0	1
Town of Gainesville	2	1	0	0	0	1
Town of Genesee Falls	2	1	0	0	0	1
Town of Java	1	0	0	0	0	1

Town of Middlebury	0	0	0	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	9	8	0	0	0	1
Town of Pike	2	0	0	0	1	1
Town of Sheldon	3	3	0	0	0	0
Town of Warsaw	10	5	1	0	0	4
Town of Wethersfield	2	1	0	0	1	0

7.4.B: Human-Caused Hazards**Fire****Table 7.4.9: Critical Facilities Affected by Fire**

Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	39	6	0	10	0	23
Town of Attica	37	13	1	6	1	16
Town of Bennington	20	4	0	5	0	11
Town of Castile	35	3	0	7	0	25
Town of Covington	12	3	0	0	0	9
Town of Eagle	106	3	0	97	0	6
Town of Gainesville	39	7	2	8	0	22
Town of Genesee Falls	11	2	0	3	0	6
Town of Java	17	4	1	3	0	9
Town of Middlebury	11	4	0	1	0	6
Town of Orangeville	8	1	0	3	1	3
Town of Perry	36	11	1	10	0	14
Town of Pike	26	3	0	4	0	19
Town of Sheldon	99	5	0	77	0	17
Town of Warsaw	25	12	1	3	1	8
Town of Wethersfield	70	3	0	63	0	4

Table 7.4.10: Community Asset Facilities Affected by Fire

Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	10	4	4	0	0	2
Town of Attica	2	0	1	0	0	1
Town of Bennington	4	0	2	1	0	1
Town of Castile	8	1	1	1	3	2
Town of Covington	3	1	1	0	0	1
Town of Eagle	4	0	0	1	1	2
Town of Gainesville	5	1	1	1	0	2
Town of Genesee Falls	4	1	0	1	1	1
Town of Java	1	0	0	0	0	1
Town of Middlebury	1	0	1	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	14	8	1	1	2	2
Town of Pike	4	0	0	1	2	1

Town of Sheldon	5	3	1	0	0	1
Town of Warsaw	12	5	1	0	0	6
Town of Wethersfield	4	1	2	0	1	0

HAZMAT in Transit and Transportation Accidents

Table 7.4.11: Critical Facilities Affected by HAZMAT in Transit and Transportation Accidents						
Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	52	7	13	9	0	23
Town of Attica	45	13	10	6	0	16
Town of Bennington	30	4	10	5	1	10
Town of Castile	37	3	1	8	0	25
Town of Covington	12	3	0	0	0	9
Town of Eagle	108	2	4	96	0	6
Town of Gainesville	38	7	3	6	0	22
Town of Genesee Falls	12	2	2	2	0	6
Town of Java	16	4	1	2	0	9
Town of Middlebury	11	4	1	0	0	6
Town of Orangeville	6	1	0	1	1	3
Town of Perry	41	11	8	8	0	14
Town of Pike	24	3	0	2	0	19
Town of Sheldon	108	5	9	77	0	17
Town of Warsaw	29	11	6	3	1	8
Town of Wethersfield	70	3	0	63	0	4

Table 7.4.12: Community Asset Facilities Affected by HAZMAT in Transit and Transportation Accidents						
Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	7	0	4	0	1	2
Town of Attica	3	0	1	0	1	1
Town of Bennington	3	0	2	0	0	1
Town of Castile	6	0	1	0	3	2
Town of Covington	2	0	1	0	0	1
Town of Eagle	1	0	0	0	0	1
Town of Gainesville	3	0	1	0	0	2
Town of Genesee Falls	1	0	0	0	0	1
Town of Java	1	0	0	0	0	1
Town of Middlebury	1	0	1	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	4	0	1	0	2	1
Town of Pike	2	0	0	0	1	1
Town of Sheldon	2	0	1	0	0	1
Town of Warsaw	6	1	1	0	0	4
Town of Wethersfield	2	0	2	0	0	0

Vulnerability related to bridges^{xxxi}:

According to NYSDOT there are 133 highway bridges in the county, which are inspected at least every two years. 90 bridges are considered in good condition or better by the state. 43 highway bridges are considered structurally deficient which means they are in need of maintenance, or rehab, but this does not mean that they are unsafe. Any bridge that is considered unsafe is closed.

NYSDOT's bridge inspection program meets or exceeds Federal Highway Administration (FHWA) standards and consistently scores high in Federal Highway Administration Review.

Of the 133 bridges, 18 are considered structurally deficient by FHWA standards which are less strict than NSDOT. Structurally deficient means that either load carrying elements of the bridge are in poor condition, it has inadequate load capacity (requiring weight limits), or it floods often.

NYSDOT's high standard of inspections ensures low vulnerability to transportation accidents (and HAZMAT in transit) due to bridge failure. There is no record could be found of a bridge failure occurrence in Wyoming County.

Water Supply Contamination**Table 7.4.13: Critical Facilities Affected by Water Supply Contamination**

Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	43	7	0	13	0	23
Town of Attica	39	13	1	9	1	15
Town of Bennington	20	4	0	5	1	10
Town of Castile	33	3	0	5	0	25
Town of Covington	10	3	0	0	0	7
Town of Eagle	9	2	0	2	0	5
Town of Gainesville	35	6	2	7	0	20
Town of Genesee Falls	10	2	0	2	0	6
Town of Java	16	4	1	3	0	8
Town of Middlebury	8	4	0	1	0	3
Town of Orangeville	6	1	0	1	1	3
Town of Perry	41	11	3	14	0	13
Town of Pike	25	3	0	4	0	18
Town of Sheldon	23	5	0	2	0	16
Town of Warsaw	24	11	1	3	1	8
Town of Wethersfield	6	3	0	0	0	3

Table 7.4.14: Community Asset Facilities Affected by Water Supply Contamination

Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	11	4	4	0	1	2
Town of Attica	2	0	0	0	1	1
Town of Bennington	2	0	1	0	0	1
Town of Castile	6	1	0	0	3	2
Town of Covington	2	1	0	0	0	1
Town of Eagle	1	0	0	0	0	1
Town of Gainesville	2	1	0	0	0	1
Town of Genesee Falls	2	1	0	0	0	1

Town of Java	1	0	0	0	0	1
Town of Middlebury	0	0	0	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	12	8	0	0	2	2
Town of Pike	2	0	0	0	1	1
Town of Sheldon	4	3	0	0	0	1
Town of Warsaw	11	5	1	0	0	5
Town of Wethersfield	2	1	0	0	1	0

HAZMAT Fixed Site**Table 7.4.15: Critical Facilities Affected by HAZMAT Fixed Site**

Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	40	7	0	10	0	23
Town of Attica	35	12	1	5	1	16
Town of Bennington	21	4	0	6	0	11
Town of Castile	34	3	0	6	0	25
Town of Covington	12	3	0	0	0	9
Town of Eagle	105	2	0	97	0	6
Town of Gainesville	33	7	2	4	0	20
Town of Genesee Falls	10	2	0	2	0	6
Town of Java	17	4	1	3	0	9
Town of Middlebury	10	4	0	0	0	6
Town of Orangeville	8	1	0	3	1	3
Town of Perry	34	11	1	9	0	13
Town of Pike	27	3	0	5	0	19
Town of Sheldon	99	5	0	77	0	17
Town of Warsaw	26	12	1	4	1	8
Town of Wethersfield	70	3	0	63	0	4

Table 7.4.16: Community Asset Facilities Affected by HAZMAT Fixed Site

Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	11	4	4	0	1	2
Town of Attica	2	0	1	0	0	1
Town of Bennington	3	0	2	0	0	1
Town of Castile	7	1	1	0	3	2
Town of Covington	2	0	1	0	0	1
Town of Eagle	2	0	0	0	1	1
Town of Gainesville	3	1	1	0	0	1
Town of Genesee Falls	3	0	0	1	1	1
Town of Java	1	0	0	0	0	1
Town of Middlebury	1	0	1	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	10	6	1	0	1	2
Town of Pike	1	0	0	0	0	1
Town of Sheldon	3	1	1	0	0	1

Town of Warsaw	11	4	1	0	0	6
Town of Wethersfield	2	0	2	0	0	0

Utility Failure**Table 7.4.17: Critical Facilities Affected by Utility Failure**

Town	Total	Essential	Transportation	Lifeline Utility	High Potential Loss	Hazardous Materials
Town of Arcade	49	7	0	19	0	23
Town of Attica	49	13	1	17	1	17
Town of Bennington	24	4	0	8	1	11
Town of Castile	36	3	0	8	0	25
Town of Covington	12	3	0	0	0	9
Town of Eagle	107	2	0	99	0	6
Town of Gainesville	39	7	2	8	0	22
Town of Genesee Falls	11	2	0	3	0	6
Town of Java	18	4	1	4	0	9
Town of Middlebury	11	4	0	1	0	6
Town of Orangeville	12	1	0	6	1	4
Town of Perry	41	11	1	15	0	14
Town of Pike	27	3	0	5	0	19
Town of Sheldon	102	5	0	80	0	17
Town of Warsaw	27	12	1	5	1	8
Town of Wethersfield	70	3	0	63	0	4

Table 7.4.18: Community Asset Facilities Affected by Utility Failure

Town	Total	Vulnerable Population	Economic Element	Historic & Cultural	Natural Resource & Rec	Important Services
Town of Arcade	11	4	4	0	1	2
Town of Attica	2	0	1	0	0	1
Town of Bennington	3	0	2	0	0	1
Town of Castile	8	1	1	1	3	2
Town of Covington	3	1	1	0	0	1
Town of Eagle	3	0	0	1	1	1
Town of Gainesville	4	1	1	0	0	2
Town of Genesee Falls	4	1	0	1	1	1
Town of Java	1	0	0	0	0	1
Town of Middlebury	1	0	1	0	0	0
Town of Orangeville	1	0	0	0	0	1
Town of Perry	14	8	1	1	2	2
Town of Pike	4	0	0	1	2	1
Town of Sheldon	5	3	1	0	0	1
Town of Warsaw	12	5	1	0	0	6
Town of Wethersfield	4	1	2	0	1	0

SECTION 7.5: ESTIMATED POTENTIAL LOSS

Determining Facility Values

This section was updated by applying the existing methodology to the updated facility lists, and current facility values.

Most of the estimated potential financial loss of the updated Critical Facilities and Community Asset Facilities was estimated by using assessment values from real property tax assessments. G/FLRPC gathered Wyoming County property and structure assessment values. Wyoming County EMO and Wyoming County Real Property supplied additional assessment information in some instances. Municipalities were asked to add any assessment information that was missing if possible. For most facilities, the structure assessment was used when available, which does not include the value of the land. Total assessments (land plus structure assessments) were used for facilities that specifically utilize the land as part of their primary operation such as farms. Total assessment was also used in some cases where this was the only value available.

Estimates were created for some facilities that did not have assessment values where possible, such as bridges. Bridge sizes were determined and potential loss was determined based on a formula of cost to rebuild per square foot obtained from NYS Dept. of Transportation.

Values of entire roads and rail lines were not estimated. Damage to these facilities would be at specific locations; therefore an estimate of the cost to replace every mile of critical roads in the County would not be helpful.

Some facility values were not able to be obtained or estimated. This was the case for a number of smaller utility facilities such as pump stations, lift stations, and wells. This was not as much a problem with the major utility facilities such as substations, reservoirs, water plants, and water treatment plants; most of which assessment information was available for.

Critical Facility Loss Estimation by Municipality

Assessment values do not represent the costs to rebuild facilities (except bridges); replacement costs are often much higher than assessment values, especially for older structures, therefore these values used can be considered conservative estimates. Given the resources available for developing this plan, and the number of facilities, there was no practical way of determining the cost to rebuild each facility.

Each Critical Facility and Community Asset was calculated at a 25%, 50% and 75% loss. These estimates do not consider functional or content loss. Given the resources available for developing this plan, and the number of facilities, there was no practical way of determining the cost of repairing each facility or to estimate the amount of damage that could occur to each individual facility based on each hazard at multiple magnitudes. The range of repair costs is almost unlimited depending on the building, location, hazard type, magnitude, etc. As a result this method gives a basic estimate of potential loss and illustrates how much property value is at risk.

This method does however provide an accurate indicator of the potential property tax revenue loss for the municipalities should a hazard event destroy a Critical Facility or Community Asset Facility.

Estimated losses for villages are included within the towns they are located within.

Summary of Criteria for Critical Facilities and Community Asset Facilities

- Essential Facilities (*i.e. hospitals, police/fire stations, schools, evacuation shelters*)
- Transportation Systems (*i.e. airports, highways, railways, waterways, bridges, tunnels*)
- Lifeline Utility Systems (*i.e. facilities for potable water, wastewater, oil, gas, electric*)
- High Potential Loss Facilities (*i.e. prisons, dams*)

- Hazardous Material Facilities (*i.e. facilities housing industrial or hazardous materials*)
- Vulnerable Populations (*i.e. senior citizen complexes, group homes, or mobile home parks*)
- Economic Elements (*i.e. major employers and financial centers*)
- Historic and Cultural Resource Areas (*i.e. historic properties, cultural facilities*)
- Natural Resource and Recreation Areas (*i.e. water bodies, wetlands, parks, forests*)
- Facilities Providing Important Services (*i.e. government buildings*)

Table 7.5: Critical Facility and Community Asset Facility Loss Estimation

Arcade				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$11,397,230	\$8,547,923	\$5,698,615	\$2,849,308
Transportation	\$17,091,686	\$12,818,765	\$8,545,843	\$4,272,922
Lifeline Utility	\$1,326,642	\$994,982	\$663,321	\$331,661
High Potential Loss				
Hazardous Materials	\$16,837,800	\$12,628,350	\$8,418,900	\$4,209,450
Vulnerable Population	\$1,096,500	\$822,375	\$548,250	\$274,125
Economic Element	\$4,945,000	\$3,708,750	\$2,472,500	\$1,236,250
Historic & Cultural				
Natural Resource & Rec	\$217,400	\$163,050	\$108,700	\$54,350
Important Services	\$292,800	\$219,600	\$146,400	\$73,200
Attica				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$30,546,300	\$22,909,725	\$15,273,150	\$7,636,575
Transportation	\$9,123,075	\$6,842,306	\$4,561,538	\$2,280,769
Lifeline Utility	\$9,401,200	\$7,050,900	\$4,700,600	\$2,350,300
High Potential Loss	\$28,000,000	\$21,000,000	\$14,000,000	\$7,000,000
Hazardous Materials	\$10,500,391	\$7,875,293	\$5,250,196	\$2,625,098
Vulnerable Population				
Economic Element	\$274,300	\$205,725	\$137,150	\$68,575
Historic & Cultural				
Natural Resource & Rec				
Important Services	\$373,900	\$280,425	\$186,950	\$93,475
Bennington				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$499,900	\$374,925	\$249,950	\$124,975
Transportation	\$12,987,650	\$9,740,738	\$6,493,825	\$3,246,913
Lifeline Utility	\$922,800	\$692,100	\$461,400	\$230,700
High Potential Loss	\$324,800	\$243,600	\$162,400	\$81,200
Hazardous Materials	\$291,400	\$218,550	\$145,700	\$72,850
Vulnerable Population				
Economic Element				
Historic & Cultural	\$10,800	\$8,100	\$5,400	\$2,700
Natural Resource & Rec				
Important Services	\$57,000	\$42,750	\$28,500	\$14,250
Castile				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$421,000	\$315,750	\$210,500	\$105,250
Transportation				

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Lifeline Utility	\$5,515,881	\$4,136,911	\$2,757,941	\$1,378,970
High Potential Loss				
Hazardous Materials	\$17,089,051	\$12,816,788	\$8,544,526	\$4,272,263
Vulnerable Population				
Economic Element	\$207,200	\$155,400	\$103,600	\$51,800
Historic & Cultural	\$162,400	\$121,800	\$81,200	\$40,600
Natural Resource & Rec	\$556,400	\$417,300	\$278,200	\$139,100
Important Services	\$237,600	\$178,200	\$118,800	\$59,400
Covington				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$22,304,900	\$16,728,675	\$11,152,450	\$5,576,225
Transportation				
Lifeline Utility				
High Potential Loss				
Hazardous Materials	\$2,741,500	\$2,056,125	\$1,370,750	\$685,375
Vulnerable Population	\$563,300	\$422,475	\$281,650	\$140,825
Economic Element	\$1,568,100	\$1,176,075	\$784,050	\$392,025
Historic & Cultural				
Natural Resource & Rec				
Important Services	\$297,000	\$222,750	\$148,500	\$74,250
Eagle				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$291,900	\$218,925	\$145,950	\$72,975
Transportation	\$4,465,372	\$3,349,029	\$2,232,686	\$1,116,343
Lifeline Utility	\$148,964,300	\$111,723,225	\$74,482,150	\$37,241,075
High Potential Loss				
Hazardous Materials	\$1,322,800	\$992,100	\$661,400	\$330,700
Vulnerable Population				
Economic Element				
Historic & Cultural	\$115,200	\$86,400	\$57,600	\$28,800
Natural Resource & Rec	\$10,900	\$8,175	\$5,450	\$2,725
Important Services	\$174,100	\$130,575	\$87,050	\$43,525
Gainesville				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$22,347,700	\$16,760,775	\$11,173,850	\$5,586,925
Transportation	\$1,228,500	\$921,375	\$614,250	\$307,125
Lifeline Utility	\$984,277	\$738,208	\$492,139	\$246,069
High Potential Loss				
Hazardous Materials	\$9,912,335	\$7,434,251	\$4,956,168	\$2,478,084
Vulnerable Population				
Economic Element	\$2,020,000	\$1,515,000	\$1,010,000	\$505,000
Historic & Cultural				
Natural Resource & Rec				
Important Services	\$314,400	\$235,800	\$157,200	\$78,600
Genesee Falls				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$238,900	\$179,175	\$119,450	\$59,725
Transportation	\$1,377,936	\$1,033,452	\$688,968	\$344,484

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Lifeline Utility	\$349,447	\$262,085	\$174,724	\$87,362
High Potential Loss	\$0	\$0	\$0	\$0
Hazardous Materials	\$557,075	\$417,806	\$278,538	\$139,269
Vulnerable Population	\$370,000	\$277,500	\$185,000	\$92,500
Economic Element				
Historic & Cultural	\$400,000	\$300,000	\$200,000	\$100,000
Natural Resource & Rec	\$400,000	\$300,000	\$200,000	\$100,000
Important Services	\$115,400	\$86,550	\$57,700	\$28,850
Java				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$582,800	\$437,100	\$291,400	\$145,700
Transportation	\$116,900	\$87,675	\$58,450	\$29,225
Lifeline Utility	\$643,100	\$482,325	\$321,550	\$160,775
High Potential Loss				
Hazardous Materials	\$2,708,900	\$2,031,675	\$1,354,450	\$677,225
Vulnerable Population				
Economic Element				
Historic & Cultural				
Natural Resource & Rec				
Important Services	\$112,200	\$84,150	\$56,100	\$28,050
Middlebury				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$2,640,200	\$1,980,150	\$1,320,100	\$660,050
Transportation	\$1,638,000	\$1,228,500	\$819,000	\$409,500
Lifeline Utility				
High Potential Loss				
Hazardous Materials	\$2,446,989	\$1,835,242	\$1,223,495	\$611,747
Vulnerable Population				
Economic Element	\$196,600	\$147,450	\$98,300	\$49,150
Historic & Cultural				
Natural Resource & Rec				
Important Services				
Orangeville				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$311,300	\$233,475	\$155,650	\$77,825
Transportation				
Lifeline Utility	\$1,130,708	\$848,031	\$565,354	\$282,677
High Potential Loss	\$3,827,600	\$2,870,700	\$1,913,800	\$956,900
Hazardous Materials	\$4,587,963	\$3,440,972	\$2,293,982	\$1,146,991
Vulnerable Population				
Economic Element				
Historic & Cultural				
Natural Resource & Rec				
Important Services	\$311,300	\$233,475	\$155,650	\$77,825
Perry				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$8,423,500	\$6,317,625	\$4,211,750	\$2,105,875
Transportation	\$4,646,650	\$3,484,988	\$2,323,325	\$1,161,663

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Lifeline Utility	\$3,612,962	\$2,709,722	\$1,806,481	\$903,241
High Potential Loss				
Hazardous Materials	\$6,914,700	\$5,186,025	\$3,457,350	\$1,728,675
Vulnerable Population	\$1,118,000	\$838,500	\$559,000	\$279,500
Economic Element	\$300,100	\$225,075	\$150,050	\$75,025
Historic & Cultural	\$69,600	\$52,200	\$34,800	\$17,400
Natural Resource & Rec	\$271,700	\$203,775	\$135,850	\$67,925
Important Services	\$308,200	\$231,150	\$154,100	\$77,050
Pike				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$297,500	\$223,125	\$148,750	\$74,375
Transportation				
Lifeline Utility	\$669,400	\$502,050	\$334,700	\$167,350
High Potential Loss				
Hazardous Materials	\$4,652,200	\$3,489,150	\$2,326,100	\$1,163,050
Vulnerable Population				
Economic Element				
Historic & Cultural	\$48,900	\$36,675	\$24,450	\$12,225
Natural Resource & Rec	\$67,700	\$50,775	\$33,850	\$16,925
Important Services	\$14,700	\$11,025	\$7,350	\$3,675
Sheldon				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$1,069,800	\$802,350	\$534,900	\$267,450
Transportation	\$4,403,750	\$3,302,813	\$2,201,875	\$1,100,938
Lifeline Utility	\$162,760,500	\$122,070,375	\$81,380,250	\$40,690,125
High Potential Loss				
Hazardous Materials	\$7,398,600	\$5,548,950	\$3,699,300	\$1,849,650
Vulnerable Population	\$1,011,500	\$758,625	\$505,750	\$252,875
Economic Element	\$38,000	\$28,500	\$19,000	\$9,500
Historic & Cultural				
Natural Resource & Rec				
Important Services	\$259,600	\$194,700	\$129,800	\$64,900
Warsaw				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$26,911,000	\$20,183,250	\$13,455,500	\$6,727,750
Transportation	\$6,782,686	\$5,087,015	\$3,391,343	\$1,695,672
Lifeline Utility	\$2,703,836	\$2,027,877	\$1,351,918	\$675,959
High Potential Loss	\$876,200	\$657,150	\$438,100	\$219,050
Hazardous Materials	\$4,074,561	\$3,055,921	\$2,037,281	\$1,018,640
Vulnerable Population	\$3,614,600	\$2,710,950	\$1,807,300	\$903,650
Economic Element	\$876,200	\$657,150	\$438,100	\$219,050
Historic & Cultural				
Natural Resource & Rec				
Important Services	\$1,927,300	\$1,445,475	\$963,650	\$481,825
Wethersfield				
Facility Type	Total Value	75% Loss	50% Loss	25% Loss
Essential	\$600,000	\$450,000	\$300,000	\$150,000
Transportation				

Lifeline Utility	\$102,479,824	\$76,859,868	\$51,239,912	\$25,619,956
High Potential Loss				
Hazardous Materials	\$294,424	\$220,818	\$147,212	\$73,606
Vulnerable Population				
Economic Element	\$1,188,700	\$891,525	\$594,350	\$297,175
Historic & Cultural				
Natural Resource & Rec	\$260,100	\$195,075	\$130,050	\$65,025
Important Services				

The NYS Hazard Plan estimates the values of structures and residential structures specifically in floodplains for the purpose of loss estimation, but because Wyoming County does not have detailed Q3 data available, this data is not available.^{xxxii} See section 7.6.E for estimates of these values.

SECTION 7.6 NATIONAL FLOOD INSURANCE PROGRAM

7.6.A: Explanation

According to FEMA, the NFIP is a federal insurance program that enables property owners in member communities to purchase flood insurance. This insurance is only made available to municipalities that adopt and enforce a floodplain management ordinance. The fundamental goal of NFIP floodplain management requirements is to reduce the threat to lives and the potential for property damage in flood-prone areas. Each municipality that participates in the NFIP has a Flood Insurance Rate Map (FIRM) that is issued by FEMA. This document maps out flood hazard areas in the municipality.

The flood zones used for the Plan Update to determine flood vulnerability are Zone A in the FIRMs, which are defined as 100-year flood zones or areas with 1% annual chance of flooding. The vulnerability of specific facilities to flooding was determined by using a GIS model to compare the flood zones with the locations of the Critical Facilities and Community Asset Facilities.

7.6.B. Wyoming County Role

In Wyoming County, code enforcement has been consolidated from the municipal level to the County level (except for the Village of Warsaw). In other counties and municipalities, the municipal code enforcement officers are often fill the role of floodplain manager and are responsible for ensuring that flood regulations are followed. Because of the consolidation in Wyoming County, the County Code Enforcement Officer does much of this enforcement as it relates to building code and flood permits, but Floodplain Administration is not his primary role.

Some municipalities issue flood permits, but otherwise it is done at the County level. Development in Wyoming County is relatively slow which in many areas results in proposed development in the floodplain being very rare. One advantage of centralized County floodplain management in a slow developing county is that the County Code Enforcement Officer can be more experienced with floodplain development regulations through using them more often than individual municipal officers would. In a very slow developing town a municipal representative designated as the floodplain manager could go years without ever issuing a floodplain development permit. In addition most Wyoming County municipalities have a very small number of NFIP policies resulting in very few floodplain management incidents; only three municipalities have more the 10 policies (see table 7.7).

The County Planning Department and County Planning Board consider the floodplain and related regulations in their review of proposed developments and recommendations. If a municipality does not realize that a proposed development is in the floodplain the board would alert them of this.

In 2013 details pertaining to any development within flood areas is being recorded and tracked in a database countywide. The database includes the floodplain permit application date, the permit number, project cost, and a

project description. So far between January and October only three minor developments have taken place in 2013 including a deck, garage addition, and repair of a boathouse. This database and process will continue to be used and will be helpful in determining floodplain development trends in the coming years.

7.6.C: Participation by municipality

Table 7.6 identifies the Wyoming County municipalities that currently participate in the National Flood Insurance Program (NFIP), and how they participate.

Table 7.6: NFIP Participation and Information								
Municipality:	Arcade (T)	Arcade (V)	Attica (T)	Attica (V)	Bennington (T)	Castile (T)	Castile (V)	Covington (T)
NFIP Member	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of Current FIRM	1992	1992	1986	1986	1983	1983	1982	1983
FIRMS have been reviewed and update needs have been considered?(Dates refer to Letter of Map Amendments/Changes - LOMA/LOMC)	2002, 2008, 2012	1998, 1999, 2000, 2001, 2003, 2006, 2007, 2009, 2011	Yes	2008, 2010	2008	2000, 2007, 2009, 2010, 2011, 2012		2012
Date of Flood Insurance Study	1992	1992	1986	1986	n/a	n/a	n/a	n/a
Adoption of floodplain law to regulate development (FEMA minimum standards)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enforcement of floodplain management laws	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Person designated for administering floodplain management	Yes	Yes	Yes	Yes		Yes		Yes
Floodplains and floodplain management has been considered in planning processes, updates to plans, laws, grant applications, etc.	Yes	Yes	Yes			Yes		Yes
Flood insurance info and/or flood damage prevention info is provided to property owners (when applicable)	Yes	Yes	Yes			Yes		Yes

Municipality:	Eagle (T)	Gainesville (T)	Gainesville (V)	Genesee Falls (T)	Java (T)	Middlebury (T)	Orangeville (T)	Perry (T)
NFIP Member	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Date of Current FIRM	1983	1983	1985	1984	1983	n/a	1983	1983
FIRMS have been reviewed and update needs have been considered?(Dates refer to Letter of Map Amendments/Changes - LOMA/LOMC)	Yes	Yes	Yes			n/a		Yes
Date of Flood Insurance Study	n/a	n/a	n/a	1983	n/a	n/a	n/a	n/a

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Adoption of floodplain law to regulate development (FEMA minimum standards)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enforcement of floodplain management laws	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Person designated for administering floodplain management	Yes	Yes	Yes		Yes	Yes		Yes
Floodplains and floodplain management has been considered in planning processes, updates to plans, laws, grant applications, etc.	Yes	Yes	Yes			n/a		Yes
Flood insurance info and/or flood damage prevention info is provided to property owners (when applicable)	Yes	Yes	Yes			n/a		Yes

Municipality:	Perry (V)	Pike (T)	Sheldon (T)	Silver Springs (V)	Warsaw (T)	Warsaw (V)	Wethersfield (T)	Wyoming (V)
NFIP Member	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Date of Current FIRM	1977	1983	1983	1984	1983	1981	1982	1981
FIRMS have been reviewed and update needs have been considered?(Dates refer to Letter of Map Amendments/Changes - LOMA/LOMC)	Yes	Yes	2003		2007			
Date of Flood Insurance Study	n/a	n/a	n/a	n/a	n/a	1981	n/a	1981
Adoption of floodplain law to regulate development (FEMA minimum standards)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Enforcement of floodplain management laws	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Person designated for administering floodplain management	Yes	Yes		Yes	Yes	Yes	No	
Floodplains and floodplain management has been considered in planning processes, updates to plans, laws, grant applications, etc.	Yes	Yes		Yes				
Flood insurance info and/or flood damage prevention info is provided to property owners (when applicable)	Yes	Yes		Yes				
Source: Municipal Meeting/survey and FEMA National Flood Insurance Program Community Status Book, http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book								

As the table indicates, twenty-two of the twenty-four municipalities in Wyoming County currently participate in the NFIP. None of the Wyoming County municipalities participate in the Community Rating System (CRS).

Town of Middlebury's NFIP Status

The Town of Middlebury is currently working to become an NFIP community. They have a FIRM map from 1982, and have adopted and are enforcing Flood Plain Management regulations in the 2009 Zoning Code. The Town is working with NYSOEM and FEMA to make sure they meet all of the NFIP requirements in order to be included in the program.

Town of Wethersfield's NFIP Status

The Town of Wethersfield was an NFIP community until 1992 when they were suspended from the program. The Town is currently working with NYSOEM and FEMA to meet requirements in order to be reinstated as soon as possible. Wethersfield already has a FIRM map, and on July 8th 2013 the Town Board adopted a floodplain regulation based on the NYS DEC 2007 Model Local Law for Flood Damage Prevention, and has applied to FEMA for participation in the NFIP.

Out of Date FIRMs

Arcade has the most recent FIRMs but they are still over 20 years old. Most municipalities have FIRMs that are around 30 years old. The FIRMs do not have 500 year flood zones, and do not have official digital GIS data.

In 2003 eleven municipalities developed flood mitigation measures. Almost every municipality identified areas outside of the floodplain where FIRMs could be incorrect. 8 of the 11 municipalities identified multiple properties with significant flooding that were outside the floodplain boundaries. These areas should likely include in the 100-year floodplain; there are presumably many more properties throughout the County outside of the floodplain that could be at risk.

These outdated maps, that lack official GIS layers make planning, analysis and enforcement much more difficult. While the Letter of Map Change program allows small updates when an error is noticed, this is not enough. Wyoming County and all municipalities request that FEMA work with them to update FIRM maps as soon as possible.

7.6.D: NFIP Policies, Claims and Payments

The table below illustrates the number of NFIP policies, coverage, claims and payouts since 1978. The table is organized by the Total Coverage, which relates to potential loss/vulnerability, but does not represent all potential loss or vulnerability because all properties and structures in the flood zone do not have NFIP coverage. See sec 7.7E for additional estimates regarding structures.

Table 7.7 NFIP Policies, Claims and Payments by Municipality since 1978						
Federal Emergency Management Agency, NFIP Insurance Report, New York, 2013						
Community Name	Total Premium (\$)	A-Zone* Policies	Total Policies	Total Coverage (\$)	Total Claims Since 1978	Total Paid Since 1978 (\$)
Arcade (V)	39,912	37	45	5,661,300	26	500,465
Eagle (T)	11,743	10	12	1,453,300	4	5,049
Pike (T) (including existing Village data)	5,827	10	13	1,033,900	23	126,590
Attica (T)	5,547	2	7	768,400	7	89,844
Warsaw (T)	3,339	2	4	749,700	6	11,094
Sheldon (T)		1	4		2	

	3,326			719,000		16,362
Perry (T)	5,780	6	6	680,500	3	5,735
Arcade (T)	3,491	3	5	637,600	5	7,377
Wyoming (V)	2,193	1	4	633,000	0	-
Castile (T)	6,844	4	6	520,900	1	2,648
Covington (T)	3,327	3	4	504,000	0	-
Perry (V)	4,159	4	4	455,000	0	-
Bennington (T)	1,060	0	2	436,600	0	-
Genesee Falls (T)	4,436	6	6	432,700	0	-
Java (T)	1,986	2	3	399,000	1	8,228
Warsaw (V)	4,215	3	4	368,900	6	5,337
Gainesville (V)	1,309	2	3	240,000	0	-
Orangeville (T)	995	0	2	211,800	0	-
Gainesville (T)	1,276	1	2	132,100	1	1,513
Castile (V)	554	1	1	51,000	0	-
Attica (V)	d.n.a.	d.n.a.	d.n.a.	d.n.a.	d.n.a.	d.n.a.
Silver Springs (V)	d.n.a.	d.n.a.	d.n.a.	d.n.a.	d.n.a.	d.n.a.
Middlebury (T)						
Wethersfield (T)						
County Total :	111,319	98	137	16,088,700	85	780,242
*Areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply. http://www.fema.gov/floodplain-management/zone						
d.n.a. - data not available						
Table obtained from the Bureau of Flood Protection and Dam Safety, NYS Department of Environmental Conservation						

7.6.E: Parcels and Structures in Floodplain

Information regarding exactly how many structures or parcels in the floodplain is not available at the local level because funding and staffing floodplain administrators is almost non-existent. Code enforcement officers (which are often the people who traditionally acted as floodplain administrators) are no longer employed by each municipality, but rather code enforcement has been consolidated at the County level. This makes determining detailed information such as a number of structures within the flood zone in each municipality difficult to determine.

Funding, time and lack of data prevented an in-depth determination of the number of structures in the floodplain. If GIS data showing building footprints existed at the county, this could be used to determine how many structures were within the floodplain, but this information is not available.

Instead a basic estimate was created by reviewing GIS RPS/Parcel data to determine how many parcels were “in” the floodplain. Because the floodplain is not based upon parcel boundaries, many parcels are partially in the floodplain.

Parcels “in” the floodplain fell into three categories:

- Completely Within the Floodplain – parcels that are completely contained by the floodplain. Structures are therefore within the floodplain.
- Significantly Within the Floodplain – parcels with a center point in the floodplain. Roughly 50%-99% of the parcel area is within the floodplain in most cases. Structures may or may not be in the floodplain depending on placement on parcel.
- Small Portion Within the Floodplain – parcels that cross into the floodplain, but their center point is not within the floodplain. Roughly 1%-49% of the parcel area is within the floodplain in most cases. Structures may or may not be in the floodplain depending on placement on parcel.

This analysis resulted in an estimated range of structures at risk. The low end of the range represents parcels that are “Completely Within” the floodplain, while the higher end of the range also includes parcels that are Significantly Within” the floodplain. It is unknown whether structures in this category are within the floodplain or not. Ideally they would have been built on the portion outside of the floodplain but this is not always the case. Many properties had a “Small Portion Within” the floodplain; this category was excluded from the estimate.

Property classes were reviewed to estimate which properties had structures in the “Completely Within” and “Significantly Within” categories. Parcels were estimated to have 1 structure or 0 structures based on their property class, for example a single family residential parcel was presumed to have 1 main structure, while a crop field parcel was presumed to have 0. While these assumptions are not completely accurate they do help give a very general idea of how many structures could be at risk of flooding.

Table 7.8 Estimate of Parcels and Structures within the Floodplain

Munic	Completely Within			Significantly Within		
	Parcels	Structure Est.	Residential Struct. Est.	Parcels	Structure Est.	Residential Struct. Est.
Arcade T&V	83	66	38	182	138	100
Attica T&V	55	46	33	164	128	98
Bennington	0	0	0	52	33	31
Castile T&V	23	22	21	108	100	95
Covington	3	3	3	40	19	17
Eagle	22	22	20	84	68	62
Gainesville T&V, Silver Springs	14	7	7	62	34	26
Genesee Falls	19	16	12	36	25	19
Java	30	4	4	88	36	34
Middlebury*						
Orangeville	1	0	0	28	18	17
Perry T&V	51	33	31	101	63	56
Pike	19	12	7	80	51	39
Sheldon	3	3	2	54	35	34
Warsaw T&V	15	10	10	87	57	52

Wethersfield	1	1	1	37	17	17
Wyoming V	0	0	0	18	9	6
*GIS Floodplain not available						

7.6.E: Repetitive Loss Properties

Repetitive loss properties are defined as those that have had two or more NFIP claims within a 10 year period of over \$1,000. Six properties within Wyoming County could be considered repetitive loss properties. Five of these were located in the Village of Arcade and one was in the Town of Warsaw (see Map 16 Wyoming County Repetitive Loss Areas). These twelve claims (two per property) totaled over \$225,000 for building damages, and over \$85,000 for content damages. Two of these properties were single family, one was 2-4 family, and three were non-residential according to information gathered from the New York State Department of Environmental Conservation. No Severe Repetitive Loss properties were present in the County. Severe Repetitive Loss properties are those that are either single family or multifamily residential having either four or more NFIP claims each (at least two of which having occurred within 10 years of each other) for more the \$5,000, totaling over \$20,000; or at least two claims that when combined equal more than the market value of the property.

Chapter 8: Mitigation Strategy Update

According to the Federal Emergency Management Agency (FEMA), mitigation is the cornerstone of emergency management planning. Mitigation involves long-term actions taken to reduce and/or eliminate the impact of disasters on people's lives and the built environment. Pre-disaster planning saves lives, protects property, and lessens the cost of disaster response and recovery.

Chapter 8 outlines the methodology used in developing the Plan's Mitigation Strategy, the Goals and Objectives that structure the Mitigation Strategy, and the proposed Mitigation Measures that provide specific suggestions aimed at reducing and/or eliminating the risks associated with the County's vulnerability to various hazard events.

SECTION 8.1 METHODOLOGY UPDATE

In general the Mitigation Strategy Update was created based on new and old information throughout the Plan Update, as well as strategies that were included in the Existing Plan. The process followed was similar to the Existing Plan, but also included a review, analysis and update of existing mitigation strategies. The process began with a review of the Existing Plan's: goals/objectives; mitigation actions; priorities; and other data. Specific methodology updates are included by section below.

EXISTING METHODOLOGY

The Mitigation Strategy was developed with direct input from the Wyoming County All-Hazard Mitigation Planning Committee. The strategy was developed in several phases.

G/FLRPC staff distributed a document to the committee members that outlined the procedures of developing the Mitigation Strategy. This document was based on FEMA guidelines, such as those found in the FEMA publication "Developing the Mitigation Plan: Identifying Mitigation Actions and Implementation Strategies," FEMA 386-3. The attendees then discussed and developed goals and objectives for the Plan. These five goals serve to structure the Mitigation Strategy.

The Planning Committee approved the goals and their accompanying objectives. At this time the committee members discussed some potential hazard mitigation projects, but they did not finalize any mitigation measures.

A series of Regional (Municipal) meetings and a County Agency meeting were held to give municipal and County officials the opportunity to discuss their mitigation concerns in depth with G/FLRPC staff and to develop specific mitigation measures.

The result of these meetings was a comprehensive list of specific mitigation measures that addressed the highest ranked hazard events. Following these meetings, the mitigation measures were ranked at the following Planning Committee Meeting. County officials were asked to assign a priority of high, medium, or low to each mitigation measure. Municipal officials were asked to select a number of mitigation measures from the master list that they wished to prioritize for their municipalities. The committee members used the STAPLEE criteria to prioritize the mitigation measures. These mitigation measures were included in the Existing Plan.

SECTION 8.2 MITIGATION GOALS AND OBJECTIVES

G/FLRPC presented the existing Goal and Objectives to the Committee for consideration at the February 20th 2013 Committee meeting. The committee discussed whether or not these Goals and Objectives were still relevant in the Update, and whether they should be changed. The committee agreed that Goals and Objectives should remain unchanged in the Plan Update.

The existing Goals and Objectives were originally proposed by G/FLRPC with input from the Planning Committee during the creation of the first Plan. They were formulated to help guide the development of the mitigation measures. The five Goals are overarching concepts that provide a framework for the intentions of the Plan, and are still relevant to the Plan Update. The various Objectives are measurable actions intended to support the realization of each goal.

Goal 1 Protect life and property from the impacts of natural, technological and human-caused disasters.

- Objective 1.1 Set the priority on hazards that cause repetitive damage and/or pose severe risk.
- Objective 1.2 Develop and implement strategies that make Critical Facilities and Community Assets, as well as private homes and businesses, more resistant to the impact of hazard events.
- Objective 1.3 Encourage preventative measures for existing and new development in areas vulnerable to hazards, and develop strategies that support municipal officials working towards responsible development in hazard-prone areas.

Goal 2 Enhance awareness and education of the risks associated with natural, technological, and human-caused hazards.

- Objective 2.1 Recognize what issues the public needs to understand about hazard mitigation.
- Objective 2.2 Develop and execute education and outreach programs to increase public awareness of both the risks associated with hazards, and strategies that can be adopted to lessen the impact of hazard events.
- Objective 2.3 Provide information on resources available for implementing mitigation strategies.

Goal 3 Build a hazard mitigation infrastructure and promote pre-disaster mitigation as the most effective means to reduce future disaster losses.

- Objective 3.1 Utilize the All-Hazard Mitigation Plan effectively by clearly communicating about plan implementation, maintenance and updates. This includes helping people to understand what their role is in both disaster response and pre-disaster mitigation.
- Objective 3.2 Identify agencies, personnel and resources available to implement pre-disaster mitigation activities and initiatives.
- Objective 3.3 Track and/or recommend Federal, State and local legislation related to hazard mitigation.

Goal 4 Reduce barriers to implementing coordinated hazard mitigation strategies across Federal, State, Regional, County and Municipal agencies.

- Objective 4.1 Foster an awareness of the efforts and practices already in place through the efforts of various agencies and organizations, and develop a coordinated way to work together.
- Objective 4.2 Coordinate participation and encourage communication among various stakeholders in order to effectively implement mitigation strategies and respond to hazard events.
- Objective 4.3 Encourage leadership within public and private sector organizations to prioritize and implement local, County, regional and state hazard mitigation strategies.

Goal 5 Encourage the development and implementation of long-term, cost-effective and environmentally sound local mitigation projects.

- Objective 5.1 Balance watershed planning, natural resource management, and land use planning with hazard mitigation to protect life, property, and the environment.
- Objective 5.2 Consider other long-term regional, County and municipal plans, and mesh the implementation of the hazard mitigation strategies into these long-term visions for the future.

SECTION 8.3 MITIGATION MEASURES - UPDATE

At the February 20th, 2013 Committee meeting, the Mitigation Measures included in the Existing Plan were reviewed in detail. Prior to the meeting Committee members were asked to review the exiting Mitigation Measures and discuss

with their colleagues the concepts that were to be discussed at the meeting to be prepared to report on implementation progress, needed changes and discuss strategies going forward.

Each action was discussed to first determine what implementation progress had been made. Next the Committee considered whether the specific action was still relevant and would help reduce hazard vulnerability, and whether it should be included in the Plan Update or removed. Other actions were removed because they had been completed. Many of the actions were adjusted in one way or another to address current conditions or to make improvements that could reduce vulnerability further. The committee discussed what new action ideas should be included in the Plan as well. Some of these were used to create entirely new measures, while many were combined with existing measures, or used to adjust existing measures. Committee members were encouraged to return to their agencies to review the concepts discussed and provide any follow up additions or comments.

Analysis of Mitigation Measures - Update

A detailed cost-benefit analysis of each mitigation measure was beyond the scope and intent of the Existing Plan as well as the Plan Update. Mitigation measures were prioritized in the Existing Plan using the STAPLEE method described below. For the Plan Update, the STAPLEE process was not repeated, but rather the committee used the priorities create in the Existing Plan as a basis, and decided if priorities had changed for existing actions with consideration given to things like: updated vulnerabilities; new information in the Plan Update; general cost/benefit of the actions; feasibility; County/municipal priorities; etc. Additional mitigation measures were prioritized in the same way.

The STAPLEE method originally used is explained below:

STAPLEE is a widely accepted evaluation process used throughout the country in hazard mitigation planning. It provides a systematic procedure for assessing the practicality of proposed mitigation measures.

STAPLEE is an acronym that stands for the following:

- S** – Social: Consider public acceptance and support of the mitigation measure.
- T** – Technical: Evaluate whether the proposed action is technically feasible.
- A** – Administrative: Evaluate the anticipated staffing, funding, and maintenance requirements of the mitigation measure.
- P** – Political: Determine the local political leadership’s support of the mitigation measure.
- L** – Legal: Evaluate the community’s legal authority to implement a mitigation measure.
- E** – Economic: Consider the cost-effectiveness of the action, potential funding sources, and the potential impact on local economic conditions.
- E** – Environmental: Evaluate how the action affects local environmental concerns.

During the Existing Plan’s creation each mitigation measure was initially prioritized by the Planning Committee members. The Committee used the STAPLEE categories to *qualitatively* assess the ability of each mitigation measure to effectively address a potential hazard. After this initial assessment was complete, G/FLRPC staff prepared a *quantitative* assessment of each mitigation measure by assigning a numerical value to each of the seven STAPLEE criteria. This assessment resulted in the assignment of High, Medium, or Low priorities to each mitigation measure.

High priority actions were determined to be actions that would solve the most pressing hazard issues in the County, have the greatest long term mitigation benefits, enjoy broad public and political backing, be technically feasible and environmentally sound, and be easily implemented through existing administrative and legal channels once support for the action is put in place.

Medium priority actions met all the above criteria, except that they addressed less pressing potential hazard issues and less hazard-prone conditions.

Low priority actions also met the above criteria, except that they address the least pressing potential hazards and the least hazard-prone conditions.

Municipal prioritization in the Existing Plan also used the STAPLEE criteria, but at a different scale. Municipal officials were asked to select a number of mitigation measures from the master list to address their hazard concerns. These officials then ranked the mitigation measures they selected for their municipalities

Mitigation Measures – Categories

For consistency, updated Mitigation Actions were grouped into the six key categories used in the Existing Plan:

- 1. Prevention.** Government administrative or regulatory actions or processes that influence the way land and building are developed or built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and storm water management regulations.
Example: Review and update floodplain local laws
- 2. Property Protection.** Actions that involve the modification of existing buildings or structures to protect them from a hazard, or removal from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
Example: Town Board will encourage property owners to consider flood proofing their properties, and attempt to procure funding to defray the costs
- 3. Public Education and Awareness.** Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers and school-age and adult education programs.
Example: Disclosure of flood hazards to potential property owners
- 4. Natural Resource Protection.** Actions that, in addition to minimizing hazard loss also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
Example: Implement erosion and sediment control projects
- 5. Emergency Services.** Actions that protect people and property during and immediately after a disaster or hazard event. Services include warning systems, emergency response services, and protection of Critical Facilities.
Example: Develop a flood warning system that includes installation of a rain gauge and marking bridges with critical flood elevations
- 6. Structural Projects.** Actions that involve the construction of structures to reduce the impact of a hazard. Structures include dams, levees, floodwalls, seawalls, retaining walls, and safe rooms.
Example: Village DPW will work with appropriate parties to ensure that storm sewers are installed at certain locations

SECTION 8.4 MITIGATION MEASURES – MITIGATION ACTION PLAN

The Existing Action Plan was used as a template to create the Updated Mitigation Action Plan Table. Existing mitigation measures was reviewed and updated based on committee input, County/municipal input, and current

conditions in order to lessen the impacts of hazard events in Wyoming County. Implementation progress is listed for each action. Adjustments, changes and removal of any past actions were also noted in the table. Additional actions were created and action plans were developed for each.

Mitigation Actions were rearranged to be listed by Hazard, then Priority, and finally Mitigation Category

Each Mitigation Action in the table includes the following information described below:

– Refers to the number assigned to each mitigation measure in the above Master List. Mitigation Measure Number 1 on the Master List is also Number 1 in the table, and so on.

Category – Refers to one of the six categories laid out by FEMA into which mitigation measures can be grouped. Each mitigation measure in this plan is assigned to one of these categories.

Hazard – Refers to the hazard/s that the mitigation measure is intended to address. When “All” appears under this heading, the mitigation measure applies to all potential hazards.

Mitigation Measure – The abbreviated Mitigation Measure from the Master List. Please refer back to the Master List for the full Mitigation Measure; the measures were shortened simply to save space in the tables.

Priority – Refers to the order in which the mitigation measures will be implemented on a *County-wide* scale. High priority mitigation measures will be carried out first, followed by Medium and then Low priority measures. This prioritization does not apply to the municipalities; each municipality has its own customized list of prioritized mitigation measures (see Appendix Ch-8.2 Municipal Mitigation Plans).

Time Frame Goal – Refers to the estimated time period during which the mitigation measure should ideally be implemented.

Potential Funding Sources – A suggestion of organizations, or grants where funding might be available. With over 70 mitigation actions for the County alone, an in depth review of all the funding opportunities related to each individual action was not feasible. Instead the potential funding source column is intended to point the Lead and Involved agencies in the right direction so that they which agencies and grants they should look further in to for the specific action they wish to implement. See Ch-8.3 *Potential Programs and Grants* for more detailed funding information.

Potential Lead Agency – The Department, Agency, Municipality, or organization that will take the lead in implementing the mitigation measure.

Involved Agencies – Any Department, Agency, Municipality, or organization that potentially has a supporting role in implementing the mitigation measure.

Approximate Cost – The estimated cost of carrying out the mitigation measures. This figure is a suggested *estimate* and should be used as a guide, rather than as a definitive cost statement. Categories: Low = \$0-\$10k, Med = \$11k-\$50k, High>\$50k

Where insufficient information was available to provide a reasonable estimate, costs will be included in future revisions of this plan as additional information becomes available. “TBD” (to be determined) is inserted as a placeholder until sufficient information becomes available.

Progress – An explanation of any related progress that has occurred pertaining to mitigation actions that were included in the Existing Plan.

Going Forward – A description of how the existing mitigation action will remain in the Plan Update, be adjusted, or removed. Actions that are to be changed or removed include an explanation of why. This column also includes any changes to a mitigation actions priority, and an explanation of why any other columns were changed for example lead agencies, etc.

The *Mitigation Action Plan* is in table format and is located in Appendix Ch-8.1

Actions Emphasizing New and Existing Buildings and Infrastructure

Both the *Mitigation Action Plan* (Appendix Ch-8.1) and the *Municipal Mitigation Plans* (Appendix Ch-8.2) contain action strategies aimed at protecting new and existing buildings and infrastructure. Some actions are more based county-wide, while others are specific to each municipality.

Below are a few examples of actions that fit into this category. See Appendix Ch-8.1 and 8.2 for specific actions.

- Building upgrades – upgrading buildings to: be more wind resistant; protect sensitive documents; and be flood proofed
- Building Relocation – finding ways to help certain problem properties relocate out of the flood zone; property buyout if possible; and relocating salt and sand storage facilities away from eroding slopes
- Structural projects reducing flood risk – including actions such as: improving drainage systems; and building/upgrading culverts
- Infrastructure specific – Bridge replacement; conducting a dam safety assessment; assessment of sewers determining safeguards, needs, age, material, quality, etc.
- Studies - seismic vulnerability/protection study
- Backup generators at identified critical facilities
- Code enforcement - specific to earthquakes and flood regulations
- Streambank stabilization near roads - to protect from erosion and damage to roads and infrastructure
- Tree trimming and channel clearing - could prevent log jams and flooding
- Education - raising awareness of hazards and flood regulations - could reduce development in floodplain, increase floodproofing, increase the number of flood insurance policies
- Protection of wetlands – to maintain natural drainage

SECTION 8.5 MUNICIPAL MITIGATION MEASURES

During the Existing Plan creation, each of the twenty-five (now twenty-four) municipalities agreed that the Mitigation Measures were relevant and important to the County. However each municipality selected actions from the list that were priorities for their municipalities specifically. This was done in order to allow municipalities to focus their efforts rather than being overwhelmed by a huge list of actions.

The April 25th 2013 meeting focused on municipal mitigation measures. Prior to the meeting municipal representatives were asked to review the exiting Mitigation Measures and discuss with their municipalities the concepts that the meeting was going to focus on.

At the meeting municipal representatives supplied information regarding what action implementation progress had been completed since the Existing Plan was created. Municipal representatives determined which existing actions should remain in the Plan Update and whether any municipal actions should be adjusted or removed. They also reviewed the Mitigation Action priority and determined whether priority was the same, or should be adjusted.

Municipalities were also invited to make action additions. Attendees were encouraged to take the forms that were distributed before the meeting back to their municipalities to include other representatives in finalizing their mitigation actions, and then return the information.

Due to the broad overlap between town and village hazard concerns, mitigation measures for villages are included in the tables for the towns within which the village lies.

The *Municipal Mitigation Plans* are located in Appendix Ch-8.2

Since the Existing Plan was completed, many municipal actions have not been completed and many have not been attempted yet either. Municipal funding is very scarce and staff has been reduced in many Wyoming County Communities making implementation of many of these actions difficult. In most cases though, communities wanted to keep various actions that were important to them, and could attempt implementation if funding became available.

SECTION 8.6 FINAL HAZARD MITIGATION MEASURES – MASTER LIST

The Final Hazard Mitigation Measures Master List was created based on the Updated Action Plan and includes the changes and additions that were made. This only includes the final actions, not items from the Existing Plan that were removed. Many of the actions were elaborated on in this section and have more detail than the Mitigation Action Plan Table.

Natural Hazard Actions (and “All” Hazard Actions)

1. County Departments and Municipalities should utilize the newly created County Records Retention Building to protect sensitive and irreplaceable documents.

Many vital records and documents are not currently protected, and could never be replaced if lost in a hazard event, such as a fire or flood. County Departments and Municipalities, especially those lacking data protections/off site backup, should conduct an assessment of documents that should be protected, and begin the process of backing up and storing documents at the Records Retention Building.

2. Back-up power generators should be installed in the following facilities (listed below). Some of these facilities currently have back-up power generation capabilities, and those capabilities should be assessed to ensure generators are in good working order. A list should be created of facilities that do not have generators but would need them in an emergency. This list could be used to determine and prioritize where to bring portable generators in an emergency and as a list of facilities to buy generators for. In the event of a power outage, these generators will allow the continuation of key public services and the use of these facilities as emergency operations centers and public shelters:

- Town/Village Halls.
- Local Police/Fire stations.
- County Sheriff/State Police stations.
- Schools.
- Community Centers.
- Waterworks, Water towers, Pump stations.
- Water Treatment Plants and Sewer lift stations.
- Town Highway Department/Village DPW Garages.
- Nursing/Group Homes.

3. The Wyoming County Highway Department’s aging Fuel Farm system requires upgrades to ensure its continued safety and viability. Some upgrades have been made recently such as a gas tank replacement and the fuel pumps will be updated this year to include card reader and fuel distribution systems, but further upgrades could be made in the

future. This system serves not only the Highway Department, but also the County Sheriff and other County departments/agencies.

4. New Action. Wyoming County Water Resources Agency (WCWRA) should assess the needs for backup generators for water systems, and determine grant opportunities/funding for purchases. WCWRA was established 1/2013 through a NYS DOS Local Government Efficiency Implementation Grant, and will study needs for and could provide unified services, testing, emergency power, etc. Most water supply infrastructure has general security but additional improvements could be made.

5. The Wyoming County Emergency Management Office will coordinate the development and delivery of Public Education/Outreach initiatives on critical local hazards, especially flooding and severe weather incidents such as ice storms and severe winter storms, as well as earthquakes, extreme temperature events, and other natural hazards:

- Educate the public on the threat posed by earthquakes to the County.
- Educate the public on the dangers of flooded roadways.
- Educate the public on what routes to use in case of flooding.
- Educate the public on the dangers of quick rising flood waters.
- Educate the public on the Tonawanda Flood Warning system after it is installed.
- Educate the public about winter storm dangers and how to survive.
- Educate the public on basic property maintenance actions such as trimming trees close to houses, clearing walks and driveways, and keeping gutters clear of debris.
- Educate the public the use of landscaping plantings that will be resistant to ice buildup.
- Educate the public on the National Flood Insurance Program (NFIP).
- Publicize the locations of designated shelters – where they are, how to get to them.
- Provide information to the public that will explain what can be done to reduce the danger posed by extreme heat and cold events.

Public education, awareness, and outreach programs will be coordinated on a County level, especially for inter-municipal projects. These programs will include a wide range of dissemination techniques, including news releases and public meetings, brochures and pamphlets, and informational booths at venues such as the County Fair and other civic gatherings.

6. The County should adopt a systematic countywide signage/numbering system. Emergency response services, along with other governmental agencies such as the County Highway Department, frequently encounter problems while trying to locate an address that is not clearly marked.

7. A systematic numbering and signage system for Silver Lake cottages in the Town of Castile is needed. Emergency responders often have trouble finding a specific address due to the absence of street signs and house numbers among the densely built up cottage community.

8. Emergency service organizations need an operations plan to assist people with disabilities when an emergency event occurs after regular hours. Utilize relevant info from the County's Functional Needs Plan.

9. The Castile Town/Village Hall was destroyed by fire along with many documents in October 2012. The new Town/Village hall needs to include plans to protect sensitive records and should be available to use as an emergency shelter/operations center. Additionally documents and records should be stored at the Wyoming County Records Retention Building.

10. Municipalities should work to improve and update local land use laws. Updates should work towards standardizing and improving laws through cooperation with other municipalities and County Planning Department.

Appendix Ch3 Wyoming County Local Law Assessment identifies gaps in local plans, studies, and regulations regarding hazard mitigation practices and should be used as a resource by local officials.

A major issue in Wyoming County is the lack of uniform standards for local land use law documents; including comprehensive plans, zoning codes, and subdivision regulations, among the towns and villages. Many municipalities are working with antiquated and out-of-date local laws, while other municipalities do not have any of these documents.

County Planning should assist by acting as a clearinghouse for model local laws. Several specific tasks should be considered by municipalities, including:

- Creation of comprehensive plans and zoning codes for those communities lacking them.
- Updating comprehensive plans and zoning codes for communities with out-of-date regulations.
- Every municipality should have an up-to-date Flood Prevention Ordinance (FPO) as a component of its local laws, such as a section within its zoning code.
- Improving site plan regulations and review procedures
- Adopt/include environmental protection overlay districts (EPODs) for sensitive areas such as floodplains, steep slopes, bluffs, wetlands, and habitat for local development review procedures.
- Require property owners to demolish and remove unsafe structures on their properties.

The approved and adopted All-Hazard Mitigation Plan Update will be used when developing and revising municipal land use regulations. The creation of new plans and regulations or update of Existing Plans and regulations should reflect the goals objectives and mitigations actions of the All-Hazard Mitigation Plan Update where appropriate.

11. Run seminars at least every other year with NYSOEM officials for local officials who are interested in obtaining more information on the hazard mitigation grant application process.

12. Prepare and maintain a list of historic structures eligible for local preservation efforts, including those on the State and National Register of Historic Places. Historic structures are sometimes subject to neglect and may not have been properly maintained, which increases the risk of damage due to hazard events. Not all structures should be demolished and removed from floodplains, especially those of significant local or national significance. Placing a property on the state or national list does not command any protection, but rather, local municipalities should develop strategies to maintain their historic buildings.

13. Streambank stabilization is needed along several roads in the County, including:

- East Arcade Road in the towns of Arcade and Eagle.
- Prospect Street in the Village of Attica.
- Shoelkopf Road and Manley Road in the Town of Bennington.

The Wyoming County Flood Mitigation Plan lists additional roads where bank stabilization is needed. This document should be consulted by municipal officials when they are developing their municipal flood mitigation programs.

14. Prepare long term plans for maintaining and augmenting emergency service capabilities to address the County's increasing number of elderly residents. More volunteers with special training to handle the frail and infirm are needed, and more special equipment (such as oxygen tanks and wheelchairs) may be necessary as well. Plans and policies need to be prepared for assisting the growing number of poor senior citizens who are living in their homes and cannot afford nursing homes. Utilize relevant info from the County's Functional Needs Plan.

15. Run drills for the evacuation of schools and mass casualty incident drills. These drills should be regularly scheduled and coordinated among the school districts, the County sheriff's office, the emergency management office, and the local Red Cross.

16. Investigate whether having one School Resource Officers (SROs) rotating among schools in the County is sufficient.

17. Have school buildings upgraded so they can be used as emergency shelters and cooling centers. Maintain emergency shelter needs and upgrade as needed.

18. Train personnel to focus on “de-escalating” potentially violent situations in schools, public buildings and Wyoming County Hospital. Ensure school/social services personnel are adequately trained to accomplish this.

19. Relocate town salt and sand storage facilities away from eroding slopes. Specifically, the Town of Genesee Falls would like to move its facility away from the Genesee River due to danger posed by ongoing erosion. The Town of Pike would like to move its facility away from Emery Brook due to repeated flooding problems. The cost of land acquisition must be included in any proposals for these projects.

20. Several bridges should be replaced due to deterioration and for improved safety:

- The Main St. bridge in Perry
- The Silver Lake outlet bridge in Perry.
- Replace Rt. 436 Bridge between Wyoming and Livingston counties
- Walker road culvert is a current priority.

Work with NYSDOT/FHWA for repairs/upgrades to Bridges with lower condition ratings, and Structurally Deficient Ratings (see Section 6.12)

21. The Town and Village of Warsaw would like to build a new joint town/village public safety building.

22. County department heads should hold routine meetings to inform and update their counterparts on current issues and projects. These meetings should be regular occurrences, such as on a bi-monthly schedule, and will facilitate the accurate and timely exchange of current information among County departments as well as assist with the coordination and implementation of multi-agency programs.

23. Set up a joint local command center for the Town and Village of Attica. This facility should be away from the railroad tracks due to the possibility of spills.

24. Action Removed. (Build new Perry Public Safety Building)(see Appendix Ch8.1)

25. Action Removed (Pike Town hall retrofits complete)(see Appendix Ch8.1)

26. The County’s municipal Flood Insurance Rate Maps (FIRMs) require updates. Only two of the County’s twenty-four municipalities are not currently in the program but both the Town of Middlebury, and Town of Wethersfield have taken action to fulfill program requirements and are close to being NFIP communities.

As Table 7.6 indicates most municipalities have FIRMs that are around 30 years old. The most up-to-date FIRMS are in the Town and Village of Arcade which are still over 20 years old.

The County and Municipalities need to continue to work with FEMA, NYSOEM, and Army Corps of Engineers (ACE) to determine how all FIRMs can be updated as soon as possible. This is a top priority for the County. 100 year Floodplains need to be reexamined and mapped. There are many instances of properties flooding in the past that are outside of the 100 year flood zone which should be examined to determine if they should be included. 500 year floodplains need to be established and mapped for the first time, if they are to be used in hazard mitigation. Elevation data needs to be added to maps, and maps need to be in digital GIS format.

27. Raise awareness of and enforce existing floodplain regulations. All municipalities but two are participating in the National Flood Insurance Program, and therefore have flood regulations. Ensure that regulations are being enforced either by a municipal Flood Plain Administrator, or by designating County Code Enforcement as the Floodplain Administrator. Municipalities and County Code Enforcement need to make sure both parties understand who is ultimately taking responsibility for Flood Plain Administration, so that there is no confusion. G/FLRPC has a Certified Flood Plain Administrator on staff who can offer some assistance with this if needed.

28. Action Addition. Streambank stabilization and channel clearing has been identified as a need for the Tonawanda Creek in the Town of Attica between the Town of Bennington line and Village of Attica line. There are several areas along the stretch with log jams and erosion problems. The Town has applied for grants to address these issues.

29. Establish a Wyoming County Drainage Program (WCDP). This program should include a long-term maintenance schedule for cleaning and maintaining ditches, culverts, catch basins and main tributaries. Flooding problems in the County are mainly due to debris accumulation in streambeds and along “choke points” in watercourses such as bridges and culverts. Localized flooding problems can be solved by removing debris such as fallen trees and branches on a regular basis. County and municipal officials are aware of these sites, but they do not have a cohesive program or the resources to address this issue at the County and municipal level. Local officials want to remove debris, stabilize banks, and where necessary contain new development in sensitive areas.

Local and state agencies, specifically the Soil & Water Conservation District, the County Highway Department, NYS DEC, and NYS DOT should coordinate this program with input from Town and Village officials and affected property owners. Broader coordination among these stakeholders is required to properly address drainage issues.

Specific areas where drainage is a problem include:

- Stretches of French Road in Sheldon and Bennington
- Liberty Street Bridge in Warsaw. Debris in the stream bed needs to be cleaned out to prevent flooding of nearby properties.

Inventories of areas with drainage issues and their issues should continue to be created and updated.

30. Municipal officials should consider participating in the Community Rating System (CRS), a program that rewards communities for performing extra flood plain activities beyond the minimum requirements for the National Flood Insurance Program. The CRS awards points to participating communities, which reduce the flood insurance premiums paid by the residents of that community. None of the municipalities in Wyoming County are currently participating in the voluntary CRS program through FEMA.

31. Municipal Flood Plain Administrators should take advantage of training opportunities offered by the NYS DEC. Because code enforcement is done at the County level, many municipalities rely on the County Code Enforcement Officer to be their Flood Plain Administrator; therefore the County Code Enforcement Officer should attend floodplain training and become a Certified Floodplain Manager.

32. Municipal officials should begin implementing the municipal flood/drainage mitigation programs included within the Wyoming County Flood Mitigation Plan, which describes in considerable detail the location and nature of flooding problems in the Tonawanda Creek and Oatka Creek watersheds. Municipalities that do not have a flood/drainage mitigation program in the Flood Mitigation Plan should prepare one, using the Flood Mitigation Plan as a guide.

33. Assist flood prone homeowners/businesses to relocate out of flood zones especially NFIP repetitive loss properties (five in Arcade, one in Warsaw)(see sec 7.6). Based on the updated FIRMs, each municipality should identify flood-prone properties and offer to work with the land owners to accomplish the relocation.

34. Assist flood prone homeowners/businesses who do not want to relocate out of a designated flood zone with upgrading their properties to make them more flood-resistant, especially NFIP repetitive loss properties (five in Arcade, one in Warsaw)(see sec 7.6).

35. The Town and Village of Perry would like to purchase several residential properties in order to eliminate repetitive flood problems and to improve drainage conditions. Coordinate with property owners and FEMA to see if purchase is possible. The following properties should be acquired and the structures on them removed:

- Purchase No. 52 South Main St., demolish old building, use site for storm drain system
- Purchase and remove a house next to the Silver Lake outlet.
- Purchase three houses in a low area along Rt. 246 and use this site for the storm sewer runoff right-of-way. This will solve the village's storm sewer runoff problems.

36. Reduce erosion and sediment loss from farm fields by encouraging measures aimed at erosion and sediment control. Erosion and sediment control is critical for managing flooding and water supply contamination. The County and all municipalities are encouraged to follow the New York State guidelines and standards in developing effective erosion and sediment control practices. Any erosion and sediment control measures that are implemented should consider the increasing number of short, heavy rain storms such as cloudbursts.

A critical consideration in this case is the role of agricultural operations. Farmers often inadvertently change the drainage conditions around the edges of farm fields by expanding their fields and removing hedgerows, which lead to increased water and sediment runoff.

SWCD should continue to provide technical assistance to farmers and municipalities. The Agricultural Environmental Management Program (AEM), which includes working with farmers on erosion and sediment control best management practices both in the planning phase and implementation phase, should be continued and additional funding should be sought to increase the program if possible.

37. An inter-municipal flood and erosion control program should be created to address flooding and erosion problems along the Tonawanda Creek. Flood control, erosion control, and streambank stabilization projects are needed to prevent problems such as properties being divided by the meandering river bed, falling tax revenues due to the loss of land, and potential structural damage to homes and infrastructure if erosion is left unchecked. This program should be overseen by the Soil & Water Conservation District and the towns of Attica, Bennington, Orangeville, and Sheldon, along with the Village of Attica, should actively participate in this program. Furthermore, any flood mitigation activities carried out in Wyoming County should be coordinated with similar programs along the Tonawanda in Genesee County. The "Flood Mitigation Action Steps" in the Wyoming County Flood Mitigation Plan should be used as the basis for this program.

38. An inter-municipal flood and erosion control program should be created to address flooding and erosion problems along the Oatka Creek. Flood control, erosion control, and streambank stabilization projects are needed to prevent problems such as properties being divided by the meandering river bed, falling tax revenues due to the loss of land, and potential structural damage to homes and infrastructure if erosion is left unchecked. This program should be overseen by the Soil & Water Conservation District and the towns of Covington, Middlebury, Gainesville, and Warsaw along with the villages of Warsaw and Wyoming, should actively participate in this program. Furthermore, any flood mitigation activities carried out in Wyoming County should be coordinated with similar programs along the Oatka in Genesee County. The "Flood Mitigation Action Steps" in the Wyoming County Flood Mitigation Plan should be used as the basis for this program, as well as information and recommendations included in the Oatka Creek Watershed Management Plan upon its completion.

39. Drainage problems with the inlet and outlet at Silver Lake in the Town and Village of Perry need to be addressed. The inlet and outlet are near each other at the northeastern end of the lake. This area is negatively affected by swampy,

low lying, flood prone land. The dam holding back the lake should be relocated to improve drainage conditions. Determine where to send dredged materials. Look into the proposed bridge options and costs.

40. Encourage the protection of wetlands and aquifers wherever possible. Wetlands are capable of absorbing large amounts of flood water, slowing and reducing downstream flow, and filtering water of both sediment and pollutants. Many people are not aware of the critical role that wetlands play in the natural system. Development in or near wetlands is regulated by the Army Corps of Engineers and the NYS DEC. Integrating the wetlands permit process with education and enforcement would improve wetlands protection. Utilize wetland protection recommendations in Watershed Management Plans.

41. Set up a flood warning system along the Tonawanda Creek. This system should have a distinctive siren and use radio announcements to warn flood prone areas when there is a flood danger. This warning system should be publicized with a public outreach program to inform people about it (see mitigation measure 27). In the very short term manual checks could be done during times of suspected flooding. When a flood occurs, a flood alarm should be sounded and reverse 911 should be used for warning. This system should then be automated as soon as possible.

42. Solve repetitive flooding problems by implementing flood mitigation projects modeled on the Village of Arcade's flood mitigation project. This involves acquiring empty land and constructing stormwater retention basins to prevent floodwaters from sweeping through a developed area. The following municipalities would like to see such a project carried out:

- Town and Village of Attica
- Town and Village of Pike

43. Assess the safety of the Wiscoy Creek dam in Pike. Funding is currently being sought for an engineer/structure assessment. If this survey determines the dam requires repairs or replacement, the Town of Pike can follow through with this project by including a proposal for a dam reconstruction project in future versions of the all-hazard mitigation plan.

44. Box culverts should be installed to prevent flooding in the following locations:

- Town of Eagle – West Hill Road, off Rt. 362, a box culvert is needed to prevent road flooding in this area. County should monitor and repair County owned culverts, and municipalities should do the same.

45. Work with the NYS DEC to mitigate beaver-caused flooding. Beavers can cause significant flooding and property damage, but a permit is required to trap or remove beavers, or to remove beaver lodges and dams. The NYS DEC indicates that the beaver population in New York State is currently above management objectives, which is resulting in greater beaver/human conflicts. The DEC hopes to “integrate current beaver damage control technology with in season trapping, permit issuance, standardized operation procedures and sound technical advice” to manage beaver damage complaints.

46. Action Removed. (Switch County from NYS DEC Region 9 to Region 8)(see Appendix Ch8.1)

47. Action Removed (Drainage Village of Wyoming)(Complete)

48. Tree limbs should be trimmed away from buildings and structures that could be damaged if the limbs fall due to high winds or ice buildup. Municipal officials will oversee the trimming of branches away from public buildings and facilities, especially Critical Facilities, but private landowners should ensure their properties are sufficiently protected as well.

49. Community/municipal Critical Facilities, such as town halls, highway/public works garages, schools, and other such buildings, will be renovated to ensure they are wind-resistant and meet design wind speeds.

50. Schools will continue to be used as tornado (and emergency) shelters, rather than constructing new tornado shelters across the County, which would cost a tremendous amount of money, and may not be feasible. The County Emergency Management Office should investigate whether structural upgrades are needed for shelter portions of schools. Cost/benefit is low because cost of upgrading schools is high, while frequency, past magnitude, and past injuries related to Tornados are very low (see section 6.5 for more information).

51. Action Removed. (Review/regulate tree locations)(see Appendix Ch8.1)

52. Action Removed. (Review/regulate tree locations)(see Appendix Ch8.1)

53. The Office of Emergency Management will have a countywide seismic vulnerability survey prepared (to be known as the Wyoming County Seismic Vulnerability Survey). This survey will assess the vulnerability of key dams; bridges; and public, institutional, and utility buildings and facilities to earthquakes.

54. Upon completion of the Wyoming County Seismic Vulnerability Survey, a seismic protection plan for each of the Critical Facilities identified by the survey will be prepared by the agency responsible for overseeing the maintenance and operation of the facility.

55. The County Department of Fire & Building Codes will enforce the New York State Building Code for all new, remodeled, repaired, and expanded buildings with the aim of making such buildings more resistant to earthquakes. In general, all construction and reconstruction of existing buildings in the County should be designed to withstand a magnitude 6.5 earthquake, but specific regulations are based on a number of things related to the proposed structure type as well as the site and location. These include (According to Ch16 NYS Building Code Section1613-Earthquake Loads): Seismic Design Category (A classification assigned to a structure based on its occupancy category and the severity of the design earthquake ground motion at the site), Site Class (A classification assigned to a site based on the types of soils present and their engineering properties), etc.

56. County officials will coordinate with state officials on any state-sponsored project aimed at studying the earthquake hazard in Wyoming County and reducing the County's vulnerability to this hazard. This collaboration should be included in the seismic vulnerability assessment and protection plan for vulnerable facilities. Critical facilities should take priority in being assessed and having protection plans created. The entire county is vulnerable to earthquakes, and many municipalities are at a higher risk (see section 6.6).

Human-Caused Hazard Actions

57. NYS DEC Open Burning Regulations should be enforced. These regulations are considered sufficient, therefore creation of local laws is not necessary. Open Burning Regulations were created in 2009 with a major intent being to reduce fires and wildfire. The regulation bans burning trash, and puts limits on controlled burning related to: the size of the fire, municipalities where its allowed based on population, materials allowed to be burned, and in some instances the time of year that other controlled fires can take place. Enforcement is based mostly on complaints. DEC regulations should be enforced locally. Reports of open burning should be investigated by Fire Depts.

58. Review emergency response capabilities with regards to a major manure spill. Hazmat teams must have the training and equipment to address these incidents. Emergency Management will work on adopting a HAZMAT plan / mitigation plan for a major manure spill.

59. A communication strategy should be created between Wyoming County Hospital and County Emergency Management to establish how emergency information will be shared with the hospital and what people and departments are responsible for sharing information. A specific need this would fill is sharing information regarding the types of materials involved in a HAZMAT in transit incident (Rail or Trucking) occurring near the hospital. The strategy should include how Emergency Management communicates with other groups to forward information such as

County Sheriff's Department, Warsaw Police, Warsaw Fire and Rail companies. Rail companies should be included in this strategy to create a quick way to determine what materials a train is carrying should a derailment occur.

60. Several dangerous intersections in the County need improvements to make them safer. Improvements could consist of better lighting and/or signage, the addition of turning lanes, installing traffic signals, or the complete reconstruction of an intersection to improve lines of sight and reduce steep grades.

Dangerous intersections in the County include:

- Castile – Denton Corners – Rt. 39 & Rt. 19A (west end of Castile)
- Castile – Rt. 39 & Rt. 436
- Castile – Rt. 19A & Rt. 436
- Java – Intersection at Rts. 78 & 77 needs to be rebuilt to make it safer.
- Middlebury & Wyoming – Buffalo Road & Rt. 19
- Perry – Rt. 20A and Silver Lake Road
- Perry – Rt. 246 and Rt. 39 – widen intersection to for truck turning
- Perry – Stoplight needed on Rt. 246 at commercial strip and school driveway. Traffic congestion due to influx of Pioneer Credit Recovery employees.
- Pike – Rt. 39, Rt. 19, and Griffiths Road
- Pike – Rt. 39, Rt. 19, and Newcomb Road
- Middlebury - Dale and W. Middlebury Capwell RR Crossing

State and Municipal roads are the responsibility of state and municipalities.

61. Remove abandoned railroad trestles in the County. Specifically, the abandoned railroad trestle on Rt. 362 in the Town of Eagle should be demolished and the road below it widened from a single lane to one lane each way. Frequent accidents and traffic congestion occur at this location. The railroad is no longer in operation and the trestle could be removed without affecting rail service. This would have the added benefit of solving flooding problems in this area. Rail companies should be contacted and serve as the lead agency.

62. Replace railroad trestles that are still in use but are decaying. Specifically, the railroad trestle on East Buffalo Street in the Village of Warsaw should be replaced. The current trestle is rapidly deteriorating and has problems with its height above the road and angle. Rail companies should be contacted and serve as the lead agency.

63. New Action. Wyoming County Water Resources Agency (WCWRA) should partner with municipalities to obtain funding and purchase/implement system protections, and improve water quality testing. WCWRA was created through NYS DOS Local Government Efficiency Implementation Grant. WCWRA goals include obtaining specialized equipment such as leak detection equipment, as well as recertification of a water testing lab in the County.

64. General security upgrades are needed for local water supply infrastructure:

- The Town and Village of Perry would like to make basic upgrades to their water supply infrastructure, including fencing and a security system for the water plant.
- The Town of Pike would like to make basic upgrades to their water supply infrastructure, including fencing and a security system for the water plant.
- The Village of Wyoming and the Town of Middlebury would like to drill a back-up well to secure their water supply. Currently, only a two day reserve is held in the tank.
- The Village of Warsaw has an open-air water reservoir that needs to be covered for security reasons. An engineering study for this project has been completed and the project is ready to go when funds become available.

WCWRA should take the lead in determining security needs and how to implement improvements/upgrades. One of the WCWRA goals is to develop a "shared asset management service" between municipalities which includes will include development of facility security, safety plans and maintenance and repair.

65. New Action. Wyoming County Water Resources Agency (WCWRA) should partner with municipalities to create training opportunities related to water supply system operation, maintenance and security. WCWRA was created through NYS DOS Local Government Efficiency Implementation Grant.

66. The Town and Village of Perry would like to improve and safeguard their sewage service by running sewers to Perry Center.

67. A countywide survey of existing sewer lines should be carried out to determine the age, material, and quality of infrastructure. Where necessary, old and/or decaying sewage infrastructure should be replaced. In particular, the Village of Perry wants to upgrade its sewer lines from cast iron to plastic. Wyoming County Water Resource Agency should lead this effort along with municipalities.

68. A countywide survey of existing water lines should be carried out to determine the age, material, and quality of infrastructure. Where necessary, old and/or decaying water supply infrastructure should be replaced. In particular, the Village of Perry wants to upgrade its water lines from cast iron to plastic. Wyoming County Water Resource Agency should lead this effort along with municipalities.

69. Action Addition. Oil and gas extraction should be investigated to determine effects on the County especially in light of the current debate surrounding whether or not the State should allow Horizontal Hydrofracking. Investigation should include potential impact on roads, water quality, etc. Investigation may be adjusted and dependent the final NYS decision of whether to allow Horizontal Hydrofracking or not.

70. Maintain a countywide inventory of manure storage facilities and update as needed. This inventory will be used for assisting emergency service personnel in preparing for and in the event of an accident involving manure.

71. Set up a joint water supply between the Town and Village of Perry and the Town of Covington. Build a water supply system to share water service between these municipalities. Build a new water treatment plant to supply this system. Recommendations should be requested from Wyoming County Water Resource Agency.

72. The Town of Middlebury and the Village of Wyoming should increase water storage capacity (either by creating a new tower or upgrading the existing tower). Town and Village should review the recent water system engineering study and their options to decide whether a new tower should be built or the existing tower should be upgraded.

73. The Village of Warsaw would like to build a water storage tank at its treatment plant. This is important because the Village has storage issues that this could mitigate. Village system does not have a high volume and can't run for a long time (although hospital has its own back up supply). Recommendations should be requested from Wyoming County Water Resource Agency.

Chapter 9: Plan Adoption, Maintenance, and Update Procedures

SECTION 9.1: PURPOSE

The purpose of the Plan Update remains the same as the Existing Plan:

The Wyoming County Multi-Jurisdictional All-Hazard Mitigation Plan is intended to guide Wyoming County and its municipalities over the next five years in their efforts to eliminate and/or minimize the impact of hazard events to Critical Facilities and Community Assets. The Plan will serve as a continually evolving guidebook that addresses the hazard issues identified within it.

This chapter discusses the procedures by which the County and all twenty-four municipalities within it will adopt, maintain, and regularly update the All-Hazard Mitigation Plan; as well as means by which the Plan's contents will be integrated into local land use documents and regulations.

SECTION 9.2: PLAN UPDATE ADOPTION SYSTEM

The Plan Update will be adopted in the same way as the Existing Plan:

FEMA regulations (44 CFR Part 201 Mitigation Planning; Section 201.6: Local Mitigation Plans) stipulate that local units of government must formally adopt hazard mitigation plans. Plan adoption is accomplished by following the standard legal procedures for the adoption of local laws. The Wyoming County Board of Supervisors and the municipal governing boards will adopt the Plan Update by passing resolutions after FEMA approves the draft Plan.

The Wyoming County Board of Supervisors is the first governing body that will adopt the Plan following FEMA's approval of the draft Plan. Once the Board of Supervisors adopts the Plan, it will forward the Plan to each municipality along with a request that each local governing body adopt the Plan. Each of the county's twenty-four municipalities has a governing body (Town Board or Village Board) that will adopt the Plan Update.

The Board of Supervisors and each municipal board will then provide a copy of the passed resolutions to the Wyoming County Emergency Management Office. These copies will be included in the final document within the final appendix to verify that each unit of local government has officially adopted the Plan.

SECTION 9.3: LOCAL LAW INTEGRATION

The Existing Plan's Local Law Integration section remains relevant and was included in the Plan Update:

A critical long-term objective (Objective 5.2) of the hazard mitigation planning process is the integration of the completed hazard mitigation plan, especially the Mitigation Strategy, with local land use documents such as comprehensive plans, zoning codes, and subdivision regulations. This should be done to institutionalize hazard mitigation planning within local ordinances.

A detailed assessment update of local land use documents was completed for the Wyoming County All-Hazard Mitigation Plan, and reviewed and revised for this Plan Updated. This assessment update was carried out in order to determine what provisions, if any, currently exist in local land use laws for reducing hazard impacts. This assessment identified gaps in the local laws that can be filled, in part, by various mitigation measures. The process of upgrading local laws to reflect and implement hazard mitigation goals, objectives, and measures should begin as soon as the Plan is adopted. The results of this assessment can be found in Appendix Ch-3 *Wyoming County Local Law Assessment Update*.

Municipal governments will seek to incorporate the Goals and Objectives of the all-hazard mitigation plan, as well as (where relevant) specific mitigation measures, into future revisions and updates of their local land use law documents. When local land use law documents are undergoing revision, the all-hazard mitigation plan will be consulted and its recommendations incorporated into new local laws. When the all-hazard mitigation plan is undergoing revision, local land use law documents will be consulted and their contents factored into the revised version of the all-hazard mitigation plan.

SECTION 9.4: CAPACITY AND CAPABILITY ASSESSMENT

Funding for programs and staff for Wyoming County communities is very limited for Hazard Planning (as well as many other processes). There are no large reserve funds available or significant amounts of staff time available to spend solely on Hazard Mitigation. Many programs have already been cut or consolidated at the County level, such as Code Enforcement. For this reason, municipalities and Wyoming County have to utilize the staff they already have, and the programs and processes already in place to work toward hazard mitigation.

Municipal tax authority is used to fund the municipal budget and staff, and it is essential that hazard mitigation be integrated into these existing processes and job responsibilities. Beyond this, the potential to specifically complete large projects is tied directly to the availability of grant funding.

Much of the capacity and capability related to hazard planning and mitigation lies at the County level, thus some capacity is the same from town to town. *Appendix Ch-9.1 Capability Assessment* illustrates more specific information by municipality.

SECTION 9.5: PLAN UPDATE IMPLEMENTATION SYSTEM

The implementation section of the Existing Plan was very general, so it has been expanded and more specific details have been added. Implementation methods were discussed at the April 25th Committee Meeting, and implementation methods modeled after the Town and Village of Arcade's implementation methods were distributed prior to the meeting to Committee Members. Committee Members were asked to review these methods before the meeting with other representatives from their municipalities to decide on which implementation methods they would use. The Committee was also encouraged to do the same after the meeting, and submit final implementation decisions.

At the County level, the Wyoming County Board of Supervisors is the governing body and ultimately has the responsibility for implementing the Plan Update recommendations related to County facilities and operations. County departments will also be responsible for specific recommendations (see Lead Agency and Involved Agency columns of *Appendix Ch-8.1 Mitigation Action Plan*). Key departments responsible for implementation include: Emergency Management, Planning, Soil and Water Conservation District and Highway Department.

At the municipal level, Town and Village boards are primarily responsible for implementing mitigation action for their jurisdiction, but some measures will be the responsibility of municipal departments or boards such as a highway department or department of public works, and a planning board.

Hazard mitigation projects can also be realized through partnerships between government and local entities such as hospitals, fire departments, emergency service responders, school districts, businesses, community organizations and environmental agencies.

Appendix Ch-9.2 illustrates specific implementation methods by municipality (and County department).

SECTION 9.6: PLAN MAINTENANCE SYSTEM

2008 Plan Maintenance System

The 2008 system set forth for plan maintenance, was not completely successful, therefore the method was adjusted and simplified to require fewer meetings, but still require sufficient review, monitoring and evaluation.

After approval of the 2008 Plan, annual review annual review did not occur in 2009 or 2010 as recommended. In 2011 the Hazard Planning Committee did not meet for the “Annual Plan Review” meeting either, but the in-depth review of the plan began in October 2011 when the current Plan Update process began. Between 2012 and late 2013 review and maintenance took the form of the detailed update process explained throughout this plan. During the 2008 to late 2011 time period individual County agencies such as Emergency Management, Planning, and the Soil & Water Conservation District utilized the 2008 Plan and worked on implementation of mitigation actions (see Appendix Ch-8.1 *Mitigation Action Plan*) but did not meet formally. Municipalities continued to review and use the 2008 Plan throughout this time period but did not meet formally as a group to review the Plan as a whole (see Appendix Ch-9.3 *Existing Monitoring and Implementation Methods by Municipality*). Ideally the group should have met every year, even if briefly to discuss the plan, any issues with it, suggested improvements, and any progress that had been made.

Updated Maintenance Plan

Because the previous update and maintenance schedule was not successful, the group would like to simplify it to focus on necessary maintenance. The method from the 2008 Plan, the Arcade All-Hazard Mitigation Plan, and guidance from FEMA were all used to create the new method.

The strategy is as follows:

Monitoring – The Wyoming County Office of Emergency Management will coordinate ongoing monitoring with county and municipal Hazard Planning Representatives (see Hazard Planning Committee 2.1 Hazard Plan Update Committee). Each year, after the annual Plan Review and Evaluation Meeting, Wyoming County EMO will distribute Appendix Ch-9.4 *Mitigation Action Progress Form* and instruct municipal and county representatives to use the form to monitor progress throughout the year. Forms will be submitted to Wyoming EMO each year at the Annual Plan Review and Evaluation Meeting and progress will be discussed. See Appendix Ch-9.4 for list of progress questions that are included.

Plan Evaluation – Wyoming County Emergency Management will coordinate the annual review and evaluation of the plan document. County and municipal Hazard Planning Representatives (see Hazard Planning Committee 2.1 Hazard Plan Update Committee; Hazard Planning Representative in Appendix Ch-9.2 *Implementation Methods*; or lead hazard planning rep. in Appendix Ch-9.1 *Capability Assessment*) will be sent Appendix Ch-9.5 *Plan Update Evaluation Worksheet* and instructed to review the plan and complete the worksheet in preparation for the Annual Plan Review and Evaluation Meeting. Representatives will communicate with their respective departments or municipalities before the meeting to complete the worksheet. See Appendix Ch-9.5 for specific evaluation questions.

The public will be made aware of the Annual Plan Evaluation and will be invited to review the Plan and provide comments and questions at the Annual Review and Evaluation Meeting.

Annual Plan Review and Evaluation Meeting - Wyoming County Emergency Management will coordinate the Annual Plan Review and Evaluation Meeting to be held one year after FEMA approval and then again during each successive year. County and municipal Hazard Planning Representatives (see Hazard Planning Committee 2.1 Hazard Plan Update Committee)(See Hazard Planning Representative in Appendix Ch-9.2 *Implementation Methods* for additional information; and lead hazard planning rep. in Appendix Ch-9.1 *Capability Assessment*) and additional stakeholders and citizens will meet to discuss:

- progress made in implementing the Mitigation Strategy – this will include a review of completed Appendix Ch-9.4 *Mitigation Action Progress Forms*.
- evaluation of the plan based on the 23 topic areas in the returned Appendix Ch-9.5 *Plan Update Evaluation Worksheets*.

These meetings will be publicized by press releases published in local newspapers and on the Internet. These notices will announce the annual review and evaluation process, provide the link to where copies of the Plan can be obtained, and request the submittal of comments to the Planning Committee, before the meeting if possible. The notice will be made at least 30 days before the meeting to give sufficient time for public review.

In addition to the regular annual Plan Review and Evaluation Meetings, the EMO will organize an additional Meeting following a major disaster event (a disaster in which state and/or federal aid is received by the County and/or any of its municipalities). This meeting will also utilize Appendix Ch-9.5 *Plan Update Evaluation Worksheet* for the discussion with specific emphasis toward the recent event.

Annual Plan Review Meeting Summary/Progress – Wyoming County Emergency Management will record discussions from the Annual Meeting and distribute the summary to Committee members. Emergency Management will report the meeting summary/progress to the Board of Supervisors (See Appendix Ch-9.2 Implementation Methods – boxes entitled: Annual Review and Plan Review for additional information). Committee members will report meeting summary/progress to their respective departments or municipalities. Submitted Mitigation Action Progress Forms and Plan Update Evaluation Worksheets will be compiled and kept by the EMO along with meeting summaries for use during future meetings and will be utilized for the 5 Year update process.

SECTION 9.7: PLAN UPDATE PROCESS

Going forward the Plan Update Process will be very similar to the process illustrated in the 2008 Plan.

FEMA regulations (44 CFR Part 201 Mitigation Planning; Section 201.6: Local Mitigation Plans) mandate that the Wyoming County All-Hazard Mitigation Plan be updated every five years. This means that every five years FEMA Region II must review and re-approve an updated version of the Plan. In order for Wyoming County and its municipalities to remain eligible for FEMA project grant funding, this update must be completed and FEMA's approval of the revised Plan obtained by the five year anniversary of FEMA's initial approval of the Plan.

In order to ensure sufficient time for the FEMA review process, work on the Plan Update will begin no later than the three and a half year anniversary of the Plan's initial FEMA approval. The Wyoming County Emergency Management Office will coordinate the update process.

The update process will incorporate changes and discussions from the Annual Review Evaluation Meetings and incorporate progress reported. The update process also includes an in-depth review and revision of every section of the plan. Most of the process will be repeated, but existing information and decisions will guide the process.

When the Update is complete, the Emergency Management Office will forward the Plan to NYSOEM for review. NYSOEM will return the plan to the Emergency Management Office with comments/revisions to address. Upon completion of the revision and NYSOEM approval, the plan will be forwarded to FEMA for review. Necessary changes will be made and the Plan will be returned to FEMA for approval.

After FEMA approves the updated Plan, the Wyoming County Board of Supervisors and the town and village boards will adopt a resolution approving a revised and updated version of the Plan.

ENDNOTES

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- ^{xiii} *Annual Snowfall Normals 1979-2009*, NYS Hazard Mitigation Plan, NYS Office of Emergency Management, <http://www.dhSES.ny.gov/oem/mitigation/documents/3.7-Winter-Storm-2011.pdf>
- ^{xiv} *Presidential Disaster Declarations – Winter Snow Storms and Blizzards 1953 - August 2007*, NYS Hazard Mitigation Plan, NYS Office of Emergency Management, <http://www.dhSES.ny.gov/oem/mitigation/documents/3.7-Winter-Storm-2011.pdf>
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- ^{xvii} *Probability of Any Tornado (Days Per Year), Probability of F2 or Greater Tornado (Days Per Century), Probability of F4 or Greater Tornado (Days Per Millennium)*, National Severe Storm Laboratory, National Oceanic and Atmospheric Administration, <http://www.nssl.noaa.gov/research/tornadoes/>
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