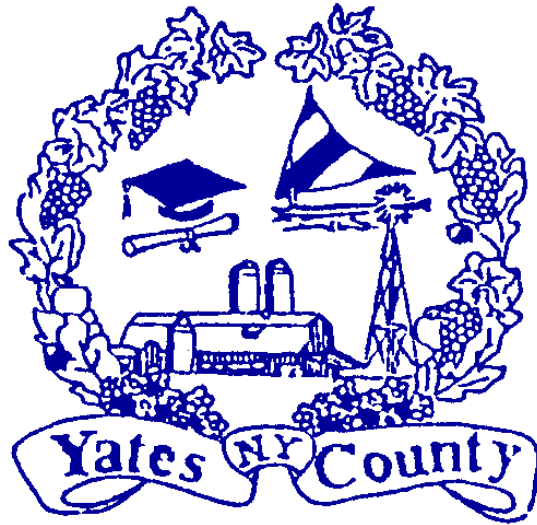


YATES COUNTY



DRAFT MULTI-JURISDICTION HAZARD MITIGATION PLAN

DRAFT:
OCTOBER 2009

1/4/2010

YATES COUNTY HAZARD MITIGATION PLAN

TABLE OF CONTENTS

I. Background..... 3

II. Planning Process..... 4

III. Risk Assessment and Hazard Analysis 6

IV. Hazard Profile
 Natural Hazards 13
 Man Made/Technological Hazards 20

V. Hazard Mitigation Strategies and Measures- Past and Present..... 23

VI. Hazard Mitigation Goals and Strategies- Future..... 26

VII. Maps..... 37

VIII. Plan Maintenance..... 37

IX. Table of Appendices and Annexes..... 39

YATES COUNTY HAZARD MITIGATION PLAN

I. Background

Yates County is located in the Finger Lakes Region of New York with Seneca Lake forming its eastern border and Canandaigua and Keuka Lakes forming the majority of the western border. Yates County is 338 square miles in area and has a population of 24,621 (2000 census). There are nine towns and four villages located within the boundaries of the County.

In 1823 Yates County was established from Ontario County and was named for New York State Governor Joseph Yates whom signed the act which established Yates County. In 1826, a portion of Steuben County was annexed but sections were lost to Seneca and Tompkins County in 1828. In 1946, the boundaries changed again when parts of Seneca Lake were gained from Seneca and Schuyler Counties.

Elevations range from 445 feet above sea level at Seneca Lake Shoreline to over 2,140 feet in the Town of Italy. According to the 2000 census, the total population in Yates County had grown from 19,009 (in 1830) to 24,621.

Yates County is the home to over 750 jobs that are directly related to the tourism industry. Notable historical figures include Jemima Wilkinson in the late 1700's, Marcus Whitman in the early 1800's and Robert Green Ingersoll in the mid 1800's. We are home to one of the largest Wenger Mennonite communities in the country.

Yates County is also home to three public school districts, a private college, several home school programs and thirty Mennonite schools.

In 1972, due to unequal representation based on population, the Yates County Legislature became the county governing body, replacing the nine member Board of Supervisors that had been in existence for 149 years. Yates County's nine towns are divided into four legislative districts represented by 14 Legislators whom are elected for two year terms. The local law creating the Legislature contains a provision that any elected Town Supervisor, Town Councilman, Village Mayor or Village Trustee may also be elected as a County Legislator. There are presently one elected Town Supervisor, one elected village trustee and one elected Town Councilman who are also serving as elected Legislators.

Yates County is one of the smallest counties in New York State but its sense of community is huge. Our community's diversity enhances the county's agri-tourism from cattle and cash crop farming to the ever growing vineyard/winery industry. Yates County is the home of open spaces and views that go on for miles over Keuka, Seneca and Canandaigua Lakes.

Based on the topography and community profile, Yates County is prone to several natural and man made hazards. In the past the County and its municipalities have worked cooperatively to identify hazards, plan and accomplish mitigation projects, and respond to emergency situations. Elected officials certainly understand the importance of mitigation, and have shown their commitment in the past to supporting mitigation planning and projects. Now, as the federal government has passed 44 CFR part 201, requiring municipalities to have written mitigation plans in order to qualify for mitigation project grants, the commitment to adopting a formal written hazard mitigation plan is strong. The County and its municipalities have worked cooperatively to identify the hazards that are most likely to affect our communities, have agreed to the goals and objectives to be accomplished in this plan, and have agreed to review and maintain this plan in the future. It is understood that this plan will be the road map to the future of mitigation in Yates County.

YATES COUNTY HAZARD MITIGATION PLAN

II. Planning Process

The purpose of this Hazard Mitigation Plan is to give the County and its municipalities a definitive direction for future mitigation projects. The goals and objectives set forth in this plan, and the action steps to be taken, have been cooperatively determined and agreed upon by all governing bodies within Yates County. It is understood that this is not a response plan, but a plan to guide future projects with the express goal of protecting lives and decreasing or eliminating damages to property and infrastructure caused by the natural and man-made hazards that affect our communities.

The nine Towns and three of the four Villages located within Yates County are currently included in this Hazard Mitigation Plan. The fourth village, the Village of Rushville, is located in both Yates and Ontario Counties and is included in the Ontario County Plan. The Yates County Office of Emergency Management is the coordinating agency that is working to create this County wide Hazard Mitigation Plan. Any local municipal hazardous mitigation plan will become annexes to the County Plan and will be referenced throughout the County Plan. The municipalities covered under this multi-jurisdictional plan are: The Town of Barrington, Town of Benton, Town of Italy, Town of Jerusalem, Town of Middlesex, Town of Milo, Town of Potter, Town of Starkey, Town of Torrey, Village of Dresden, Village of Dundee and the Village of Penn Yan.

Yates County Office of Emergency Management officials have been the lead in the Hazard Mitigation Planning Grant acquisition and All Hazard Mitigation Plan creation. Work on the plan actually began before the grant funding was secured as the requirement for the plan was already established by federal law, and the New York State Emergency Management Office (NYSEMO) Mitigation Section had briefed the county Emergency Management officials in early 2003 on the requirements under the law. NYSEMO affirmed in a Region V meeting in Geneva, NY that counties could, and should, begin work on the plans as soon as possible rather than waiting for the next round of grants to become available. Grant funding for the plan creation was applied for and secured on November 17, 2005. A kick-off meeting was held at the Yates County Auditorium on June 20, 2005, administered by NYSEMO with participation from NYS Department of Environmental Conservation, NYS Department of State Code Enforcement, National Weather Service, and many local officials. The agenda, list of who was invited and the attendance sheet can be found in *Appendix A*. These state and federal agencies have given support throughout the plan creation, supplying information (hard copy, phone and e-mail correspondence) on the planning process, hazard statistics, and information on mitigation projects and strategies.

Yates County completed its first Hazard Analysis / Risk Assessment (HAZNY) in July of 2003 and its second one on August 11, 2009. *See Appendix B for 2009 invite letter, invite list, attendance sheet, participant preworkshop review packet and completed report.* It was decided that these Yates County Officials would serve as the Risk Assessment Committee for the Hazard Analysis/Risk Assessment: Julie Simmons-Emergency Planner, Glen Miller- Director Emergency Mgmt., Lauren Snyder- Public Health Director, Ronald Spike- Sheriff, John Gleason- Undersheriff, NYSDEC, Rick Ayers/Soil and Water Conservation District, Bruce Warfield- Buildings and Grounds Supervisor, Dave Hartman- Highway Super., Chris Wilson- Planning Dept.

Julie Simmons was contracted as an Emergency Planner, LEPC Co-Chairperson, and is the author of the Hazard Mitigation Plan. Simmons was contracted through the Yates County Emergency Management Office, which is responsible for emergency operations during any natural disaster in Yates County.

YATES COUNTY HAZARD MITIGATION PLAN

Yates County's Mitigation Coordinator is Glen Miller. Yates County Soil and Water Conservation District Technicians Rick Ayers and Colby Petersen contributed greatly to the creation of the County's Multi-jurisdictional plan as they served as the experts providing the mapping needed for the mitigation planning. Glen Miller provided statistical and historical information on past mitigation projects. He also contributed substantially to the creation of goals and objectives for this multi-jurisdictional plan. Ayers as well as Dave Hartman (Yates County Highway Superintendent) are the lead for many of the County's mitigation activities, and will continue to be the lead in the future projects for Yates County and its municipalities. Technician Ayers works closely with the Department of Environmental Conservation and Army Corps of Engineers on stream stabilization and maintenance projects, and dam/wetland construction and maintenance projects. His vast knowledge of flood mitigation measures has been a great asset in the planning project.

The Yates County Planning Department and local town and village highway superintendents have also been valuable resources during the plan creation. Staff members of Yates County agencies have supplied statistics and maps for general purposes, and specific maps and statistics for flooding, landslides, land use, and future development.

The Contractor has met with representatives of every municipality in Yates County to obtain the data necessary to complete this plan and supplemented these meetings with phone calls and e-mail correspondence. These meetings were typically attended by the Highway Superintendents. Input or attendance was also given by the National Weather Service, NYS Department of Environmental Conservation and the Yates County Public Health Department.

The plan introduction was written, and further research on historical hazard data and vulnerabilities was accomplished during the latter half of 2007. Assessment for the county was completed at the above mentioned Hazard Analysis / Risk Assessment (HAZNY) workshops. The 2003 workshop compiled 16 hazards relevant to the county. The 2009 workshop and follow up work sessions review all 35 potential hazards. The results have been reviewed and we determined the top eleven hazards common to all municipalities. Local knowledge of the committee members regarding past events, and concerns of future events, was also utilized to help determine the list. Meetings were held with each municipality to discuss specific events, damages and costs, current mitigation activities, and future mitigation strategies. Review of the draft, with opportunity for additions/deletions and updates from municipal leaders and residents, was completed in 2009. Copies of the plan with instructions for comment submittal will be distributed to each municipality and made available to the public. Adoption of the Yates County All-Hazards Mitigation Plan by Yates County and each municipality within the County will be completed after FEMA acceptance of the plan has been given. The plan will be reviewed every two years by the LEPC, and every five years by each municipality's legislative body.

Through our local Health-related Emergency Operation Plan, Yates County Public Health prepares and maintains an emergency response book called the "Red Book" that is distributed and available for agencies in the county. The Red Book contains information on how, when and where to contact various agencies that serve Yates County when an emergency arises. The following is a list of categories that is contained within this annex:

Emergency Response Organizations (Local, State, Federal), Emergency Management Offices, Regional Emergency Preparedness Contacts, County Fire Departments, First Responders units and Ambulance Corps, Law Enforcement, Coroners, FBI, Physicians, Dentists, Clinics, Area Hospitals, Nursing Homes, Funeral Homes, Cemeteries, Area Specialty Contacts, Towing Services, Area Major Employers, Daycare, Schools, Libraries, Municipal Utilities, Out of County Skilled Nursing & Home Care Agencies, Center of Disease Control (CDC), Pharmacies,

YATES COUNTY HAZARD MITIGATION PLAN

NYSDOH SNS Points of Contacts, Emergency Smallpox Info, NYSDOH , Disease Control, Environmental Health, Family Health, NYS/Federal Ag and Markets, NYS Local Health Departments, NYS Laboratories & Hospital Labs, NYS Guidance for Response to Suspicious Substance, Veterinarians, Animal & Wildlife Control, County Public Health Emergency Notification Protocol, local Court Systems, Children's Camps & Campgrounds, Towns/Villages, Community Services/Churches, Media & Public Information Officers, Mental Health Resources, Public Health Core Team/ICS, Community Leaders, Public Health Staff Contacts/Pagers, County Departments Heads.

Americans live in the most severe weather-prone country on Earth. Each year, Americans cope with an average of 10,000 thunderstorms, 5,000 floods, 1,000 tornadoes, and an average of 2 land falling deadly hurricanes. This is on top of winter storms, intense summer heat, high winds and other deadly weather impacts. Yates County has taken steps to make sure our county is ready for the weather with the adoption and certification of the National Weather Service's **Storm Ready®** program.

Some 90% of all presidentially declared disasters are weather related, leading to approximately 500 deaths per year and nearly \$14 billion in damage. StormReady, a program started in 1999 in Tulsa, OK, helps arm America's communities with the communication and safety skills needed to save lives and property—before and during the event. StormReady helps community leaders and emergency managers strengthen local safety programs.

StormReady communities are better prepared to save lives from the onslaught of severe weather through better planning, education, and awareness. No community is storm proof, but StormReady can help communities save lives.



Yates County, NY, April 2009, from left: Glen Miller, Yates County, NY, Emergency Management Director; Dave Nicosia
Warning Coordination Meteorologist,
NWS Binghamton, NY.

III. Risk Assessment and Hazard Analysis/Vulnerability

Yates County conducted risk assessments and all-hazard analysis using the New York State Emergency Management Office HAZNY program for the County as a whole, and with each municipality within its borders. The HAZNY program is used as a discussion and analysis tool to include the following information for each hazard reviewed:

- **Where could this hazard occur** - the options available were a large region (affecting an area greater than half of the municipality), a small region (affecting an area one third to one half the municipality), several individual locations or a single location. For large scale hazards such as weather related incidents, large or small regions were generally chosen as weather spreads across

YATES COUNTY HAZARD MITIGATION PLAN

the county or municipality. For several hazards, such as hazardous materials release in transit, a small region was chosen as it was decided the hazard could happen anywhere along a transportation corridor. For some hazards, such as hazardous materials release from a fixed location, either a single location or several individual locations were chosen as the hazard was only possible at certain locations.

- **How often does the hazard occur** - historical data was analyzed to determine how often a hazard occurred in the municipality. The options available were a rare event (less than once every fifty years), an infrequent event (once every eight to fifty years), a regular event (once a year to once every seven years), a frequent event (more than once a year). There was, at times, rather lengthy discussions regarding past events, when and where they occurred, and what mitigation measures were taken after the event to prevent future occurrences.

- **What are the cascade effects** - the HAZNY actually asked “Could this trigger another hazard?”. However, we expanded the discussion to ask what the cascade affects actually were, and how often they occurred. *See Appendix C* for a history of Federal Disaster Declarations for 1972 until present.

- **How will the hazard impact the population, private property and public infrastructure** - This series of questions included options for the population- is serious injury or death unlikely, likely but not in large numbers, likely in large numbers, or likely to extremely large numbers. We defined “not in large numbers” as the number of victims that would not overwhelm our four area hospitals. Large numbers was defined as the number of victims would require an activation of the hospitals’ emergency plans. Extremely large numbers was defined as requiring the transport of victims to hospitals outside our county. For private and public property the options for damage was little, moderate or severe. We defined little as either 1. a significant number of structures still habitable or useable but in need of minor repair or 2. Severe damage to a very limited number of structures; moderate as not habitable or useable but able to be repaired and the damage was to a sizeable number (a quarter) of structures, and severe as a total loss and must be replaced to a sizeable number of structures.

- **How much warning will you receive** - options included no warning, several hours, one day, several days, more than a week.

- **How long will the hazard remain active** - options included less than one day, one day, two to three days, four days to a week, more than one week. The “hazard remains active” was defined as the actual hazard duration, such as a blizzard could be two to three days, flooding could be more than a week. However a hazard such as an explosion was less than one day as the explosion occurs and then is done; it is the after affects that remain.

- **How long will emergency operations continue** - options included less than one day, one to two days, three days to a week, one to two weeks, more than two weeks. “Emergency operations” was defined as operations “above and beyond normal work duties”. For instance, emergency operations would include around the clock or special crews that are needed to respond to the hazard or to recover to a point that the hazard does not pose a public threat. Highway crews cleaning up debris after a storm during their normal work hours is not considered emergency operations.

In addition to the HAZNY results, historical data of disaster declarations and damages due to natural and man made disasters has been compiled and was analyzed during each session. National Weather Service statistics from the National Climate Data Center were obtained and used to determine frequency and timing of the weather related incidents. *See Appendix D* for a listing from 1954 until present. Each municipality supplied a contact or long time resident, that recalled incidents or events, and the dates, times, etc. were verified through media coverage, municipal

Revised 2009

YATES COUNTY HAZARD MITIGATION PLAN

documents such as highway records for damages and repairs, documentation from local, state and federal disaster declarations, and documentation from state and federal agencies such as spill reports from the NYS Department of Environmental Conservation and weather event statistics from the National Weather Service.

The findings of the analysis show that Yates County and its municipalities have several reoccurring hazards, or imminent hazards, that must be addressed through a coordinated Hazard Mitigation Plan. Yates County is so small that if an event has an impact on one portion of the county it probably will impact the entire county. Yates County addressed all thirty five hazards in the August 2009 project. It was determined that the eleven (11) low hazards with a HAZNY ranking of under 150 would not be addressed in the Hazard Mitigation Plan because of no or low probability. These include:

- **Tsunami (44):** Yates County has no incidents in the past and we expect no incidents in the future. Lowest elevation is 445' above sea level.
- **Mine Collapse (107):** Yates County has one abandoned salt mine. The entrances were capped off with concrete – no risk. We expect no incidents in the future.
- **Radiological - Fixed Site (107):** Yates County has no incidents in the past and an occurrence is highly unlikely.
- **Radiological – In Transit (107):** Yates County has no incidents in the past and an occurrence is highly unlikely.
- **Avalanche (117):** Yates County has experienced no avalanches in the past as we don't have the terrain or the snowfall for such an event. We expect no incidents in the future.
- **Terrorism (122):** Yates County has experienced no terrorism incidents in the past. We are a small rural county with no major targets. We expect no incidents in the future.
- **Civil Unrest (133):** Yates County has experienced one small incident at Keuka College in the last 30 years. It produced no injuries and had no economic impact. We expect only minor incidents in the future.
- **Air contamination (138):** Yates County rarely experiences smog due to our rural nature. **Ice Jam (138):** Yates County has experienced one ice jam in the last 30 years. It had no economic impact and we expect no incidents in the future.
- **Drought (139):** While Yates County does experience drought conditions, there are no serious effects from drought, and conditions are generally short lived. We expect only minor incidents in the future.
- **Earthquake (143):** The risk in Yates County is low, minor economic impact. We expect only minor incidents in the future.

It was determined that eleven (11) moderately low hazards with a HAZNY ranking between 150 and 195 would not be addressed in the Hazard Mitigation Plan because of no or low probability. These include:

- **Structural Collapse (162):** Yates County has no large structures that pose serious risk. We expect no incidents in the future.
- **Food Shortage (163):** Yates County does not experience this problem as we are in a rural farming area. We expect no incidents in the future.

YATES COUNTY HAZARD MITIGATION PLAN

- **Epidemic (168):** Yates County is very well prepared to handle this through the planning and preparedness efforts of our Public Health Department. A separate plan is in effect to handle all related situations so further work is not needed.
- **Fuel Shortage (170):** Yates County is centrally located and has many transportation routes available to our county. We expect no incidents in the future.
- **Hazardous Materials - Fixed Sites (176):** Yates County has only 3 sites that utilized Hazardous Materials and they are covered under our SARAH Title Three Plan. We expect only minor incidents in the future.
- **Water Supply Contamination (178):** Yates County's communities utilize the Finger Lakes or wells for their supply. The systems are monitored by the NYS Department of Health and with the exception of some severe flooding events or water breaks; we expect only minor incidents in the future.
- **Explosions (178):** Yates County has the potential, but with no history. We expect only minor incidents in the future.
- **Dam Failure (178):** Yates County has a dam with six gates that controls the Keuka Lake Outlet. There is a low potential for a problem but with no history.
- **Infestation (180):** Yates County is home to a large farming community that utilizes the best practices available. There is a low potential for a problem with no history.
- **Blight (184):** Yates County is home to a large farming community that utilizes the best practices available. There is a low potential for a problem with no history.
- **Wildfire (195):** While Yates County experiences wild fires; they are planned for thoroughly by the fire service and do not need any further mitigation study.

It was determined that one (1) moderately low hazards with a HAZNY ranking between 196 and 250 would not be addressed in the Hazard Mitigation Plan. It was:

- **Fire (218):** While Yates County experiences structural fires; they are planned and trained for thoroughly by the fire service and do not need any further mitigation study.

It was determined that nine (9) out of ten (10) moderately low hazard with a HAZNY ranking between 196 and 250 would be addressed in the Hazard Mitigation Plan because of low to medium probability. These include:

- **Extreme Temperature (198):** Yates County experiences extreme temperatures (both high and low) that need to be planned for.
- **Tornado (198):** Yates County has had a few occurrences with minor damage in the past and so they will be addressed.
- **Transportation Accidents (200):** Yates County considers these accidents a routine event and while technically not required to be included in this plan we felt that we should take them into consideration.
- **Oil Spill (203):** Yates County considers these accidents a routine event and while technically not required to be included in this plan we felt that we should take them into consideration.
- **Haz Mat - In Transit (206):** Yates County considers these accidents a routine event and while technically not required to be included in this plan we felt that we should take them into consideration.

YATES COUNTY HAZARD MITIGATION PLAN

- **Winter Storm - Severe (216):** Yates County does experience severe winter storms in the past on a regular basis therefore we have planned for such occurrences.
- **Landslide (218):** While Yates County does have a few very small areas susceptible to landslide, municipalities reported the landside would not have an appreciable effect on residents or developed properties. The major impact has been on roadways in steep slope areas near the lakes.
- **Hurricane / Tropical Storms - Severe (229):** Yates County does experience these severe storms with significant rainfall in the past on a regular basis therefore we have planned for such occurrences.
- **Ice Storms (234):** Yates County does experience these events with significant damage in the past on a regular basis therefore we have planned for such occurrences.

It was determined that all three (3) moderately high hazards with a HAZNY ranking above 250 would be addressed in the Hazard Mitigation Plan because of a medium to high probability. These include:

- **Flooding (262):** Yates County does have areas that are susceptible to flash flooding near the steep slopes surrounding our lakes as well as flooding due to raised lake levels and high winds. Yates County has experienced this emergency in the past on a regular basis therefore we have planned for such occurrences.
- **Severe Storm (266):** Yates County does experience severe storms in the past on a regular basis therefore we have planned for such occurrences.
- **Utility Failure/Long term power outages (306):** Yates County does have areas that are susceptible to power outage which can be for long periods of time. Yates County has experienced this emergency in the past on a regular basis therefore we have planned for such occurrences.

It was determined, for the sake of efficient time and resource management that twelve of the top ranking hazards would be focused upon in the Hazard Mitigation Plan. The Risk Assessment committee determined that it was not practical to utilize time and efforts to address hazards that posed little or no threat to the county residents. They also determined that in order for the plan to be useful, it needed to be concise and should focus on those hazards that cause the greatest problems. However, several hazards were determined to be “an ever present threat that poses a serious public risk”, but have a low occurrence according to history. Therefore, the committee opted to incorporate these hazards into other similar categories that fell within the top eleven hazards.

“Ice storm”, “heavy snow” and “extreme cold temperature” were combined with “winter storm - severe” due to the fact that they are all winter weather threats and the mitigation measures are very similar. National Weather Service statistics from the National Climate Data Center tell us that Yates County has had 64 significant winter weather related events during the years 1993-2008. 29 events were “heavy snow”, 2 were record snow, 10 were classified as “Winter Storms”, and 7 were “ice storms”. There were 16 events that were considered extreme cold, record cold, extreme cold / wind chill. These figures do not include freezing rain or frosts. The committee confirmed that a “North Country” ice storm event (Northern NYS 1998) is always a possibility and a threat to Yates County, and should not be overlooked in the mitigation plan. The fact that we have been spared a storm of that magnitude for quite some time should not lull us into a false sense of security, but due the low occurrence, it did not warrant a separate section. The discussions regarding extreme temperatures all focused on cold temperatures that could lead to burst water mains and residential water pipes. Some discussion also focused on the elderly keeping thermostats set low during extremely cold winter days due to financial reasons, and suffering from cold related illnesses.

YATES COUNTY HAZARD MITIGATION PLAN

The second grouping of hazards was Tornados, Hurricanes / Tropical Storms, flooding and Severe storms. The National Weather Service statistics from the National Climate Data Center show that Yates County has had four F1 tornados during the time period 1/1/1950 to present. Damage from these four occurrences is listed at \$5,000,075. The committee decided that a tornado could hit Yates County at any time as Yates County receives several tornado watches and/or warnings each summer. Rather than overlook the hazard, it was decided to include it with Severe Summer Storm.

National Weather Service statistics from the National Climate Data Center tell us since 1973 that Yates County has experienced 48 Severe Summer Storms. At a recent Skywarn Training in Yates County, Meteorologist David Nicosia also noted that straight-line winds are often more damaging than the tornados we can expect in this area. It was decided that if we were prepared for straight-line winds and microbursts, we would be prepared for a tornado as well, as mitigation measures are the same. Yates County has had 13 high wind events recorded since 11/1/1995 according to the National Weather Service statistics from the National Climate Data Center. These have occurred during the months of September through March but primarily during the October through December time period.

These summer storms also include hail of various sizes. The National Weather Service statistics from the National Climate Data Center show that Yates County has had 15 instances of severe hail during the time period 1/1/1966 to present. Six of these had hail up to .75" in diameter, two of these had hail up to .88" in diameter, three of these had hail up to 1.00" in diameter and finally four of these had hail up to 1.75" in diameter.

Closely related to this group is the occurrence of flooding. Yates County does have areas that are susceptible to flash flooding near the steep slopes surrounding our lakes as well as flooding due to raised lake levels and high winds.

The third grouping of the top hazards identified consists of Transportation Accidents, Oil Spill and Hazardous Materials – In transit. While not in the upper level of concern but also covered in this section are hazardous materials – fixed site and radiological released in transit and fixed site. Yates County has numerous industries that use and store hazardous materials such as Ferro Electronic Materials and AES Greenidge. Discussions regarding oil spills focused mainly on industrial releases of oils, transportation accidents which release petroleum products, residential fuel oil leaks and gas station incidents. Discussions regarding explosions also focused mainly on residential propane tanks or natural gas lines, natural gas well drilling operations, and other explosions associated with flammable petroleum products.

There are some hazardous materials that are shipped within and through the County on a daily basis by road and rail. Hazardous Materials released in transit and those released from fixed facilities appear to be about equal according to the DEC statistics. The stats could be misleading as many are listed at residences or commercial facilities, when in fact the spill was associated with a motor vehicle accident near the residence or a leaking vehicle. The risk assessment considered each category individually. However, as the response is the same for all categories and the threat is present for all categories, the committee elected to combine the four separate categories into one for ease and efficiency as mitigation measures are the same for all.

Another category that is discussed under hazardous materials release and flood is water contamination. Several municipalities ranked water contamination within the top ten. These municipalities have current contamination issues due to residential septic systems being damaged and leaking into wells in close proximity, and contamination from agricultural products washing out of crop fields and into private or municipal wells. The committee did not feel water contamination warranted its own category as it affected a limited number of municipalities. The

YATES COUNTY HAZARD MITIGATION PLAN

contamination is caused by damage during flooding or agriculture products entering the water table. The four villages currently have municipal water systems and several of the towns have some of their area served by a municipal water system. The information was included under hazardous materials release. The category “flood” seemed to satisfy the concern of the affected municipalities, but did not add unneeded length or work to the plan. The HAZNY results for each hazard assessed by the County and each municipality are included in *Appendix B*. *Appendix D* also includes summary tables of the list of the hazards that were rated.

Vulnerability:

Following is a Flood Impact Map created by the Yates County Planning Department using FEMA Q3 data for the 100 year floodplains overlaid on a NYS Real Property Tax Map. Critical facilities are identified on the map as well. The accompanying data set shows statistics for each municipality within Yates County. The stats show how many properties in each municipality are located in the one hundred year floodplain, the total assessed value of the properties, and numbers of properties sorted by use codes. Statistics were created by the Planning Department in conjunction with Real Property information stored electronically by the Data Processing Department.

The entirety of each municipality within Yates County is vulnerable to the two remaining natural disasters, Severe Winter Storm and Severe Summer Storm. *Appendix E* includes information regarding property use and value for the Yates County and each Town/Village within Yates County. Each property is vulnerable to Severe Summer or Winter Storms, but generally speaking not all properties in a municipality would be affected by the hazard at the same time.

Severe Summer Storms are usually localized and there is a distinct swath across an area where the storm has hit. It is impossible to predict where a storm would track, therefore, prediction of which properties would be damaged, and which would not, can only be general. A conservative average estimate would be that, in any municipality, 5 to 10 percent of the properties would suffer damage during a Severe Summer Storm.

Severe Winter Storms, especially those involving heavy ice accumulations, can also be localized. However, as was seen in the North Country (NY) Ice Storm in 1998, Severe Winter Storms can also be widespread over several counties. If a storm the magnitude of the 1998 ice storm in northern New York were to hit Yates County, we would experience the same devastation that was seen in these northern counties. More localized storms could only effect hilltop properties, or may be limited to a geographic area such as the three towns in the southern portion of the county, the three northern towns, etc.

YATES COUNTY HAZARD MITIGATION PLAN

IV. *Hazard Profile:*

Natural Disasters

A. Flooding:

- Locations: All municipalities experience flooding in stream floodplains, and the within such floodplain, see maps provided in mapping section.

- Extent: Flash Flooding to creeks and small streams, causing thousands of dollars in damage, see narrative below.

- Previous Occurrences: Major flooding every five years on average, minor flooding every year, see narrative below, also see *Appendix C*.

- Probability of Future Events: Flooding of some magnitude occurs each year in Yates County. Without mitigation this trend can be expected to continue.

Yates County and its municipalities have a long history of flooding, with many larger events causing millions of dollars in damage. Yates County's problems can be attributed to Groundwater Flooding, and Erosion. Flooding may also occur with an Ice Jam, however, Yates County history shows no serious flooding due to an ice jam.

Serious flash flooding on the steep slopes throughout the County have been documented throughout history, and can be expected, on average, every 5 or 6 years. Smaller, localized flooding events due to drainage problems and ponding of rain or snow melt runoff occur on a more frequent basis, causing minor, localized damage.

Accurate, available documentation of flooding damages starts with one of the most destructive flood on record in Yates County. It was in June of 1972 when Hurricane Agnes moved into the region and collided with a low-pressure system over upstate New York. The two systems stalled over the region, dropping up to 14 inches of rain in some areas. Flooding damaged homes and roads throughout Yates County causing extensive damage. It received Federal Disaster Declaration 338.

In September of 1975, Yates County would again see a tropical system cause extensive flooding and damage. Hurricane Eloise took the same path as Agnes three years before, but moved through the area more quickly than her predecessor. It received Federal Disaster Declaration 487.

In 1984 Federal Disaster Declaration 725 occurred which consisted of a week of severe summer storms that caused flooding in the western part of the county with the Towns of Italy, Middlesex and Jerusalem being the hardest hit.

1996 would bring two flooding events to the county, one in January and another in November. In January, heavy rains combined with a heavy snow melt, causing widespread flooding. Residents would once again walk in water and the January storm received Federal Disaster Declaration 1095. Later that year in November, rains again brought flash flooding, which was intensified by fallen leaves clogging storm sewers and drainage structures. Over three million dollars in damage was caused by this event, however a Federal Disaster Declaration was not received.

Federal Disaster Declaration 1335 was the result of an unusual series of storms that occurred from May 3, 2000 – June 30, 2000. We were not included in the initial declaration of twelve counties that was made on July 21, 2000. The summer storms continued throughout July and the first part of August and six additional counties, including Yates, were added to the declaration on August 25, 2000.

YATES COUNTY HAZARD MITIGATION PLAN

Some of the most recent widespread flooding in Yates County occurred August 9, 2003. Storm systems had plagued the County for several weeks. Finally, on August 9, heavy rains in the western and southern portions of the County caused major damage to roads, bridges, private property and homes. Yates County received a Federal Disaster Declaration, 1486. A year later in August of 2004, Federal Disaster Declaration 1534 covered a series of storms from July and August 2004 which cause severe road and bridge damage. During this time period the northeast region of the county received three to 3 ½ inches of rain in very short time. Assistance from FEMA inspections totaled \$622,496. This storm period was highlighted by 5" of rain in an hour in and around the Village of Dundee in the southern part of the County. For a period of time the village was isolated with very limited access.

The County also had high water levels during the hurricane remnants of Frances and Ivan in August and September 2004, however damage was minimal and Yates County was not included in the disaster declarations.

Other smaller events, and reoccurring flooding problems, happen on a more frequent basis due to drainage and groundwater problems. These repetitive events may occur as often as three or four times a year. The costs of these events add up quickly for the municipalities that must repair and maintain the roads and bridges, as well as for the residents who suffer basement flooding, septic and well problems, property damage and erosion losses. Throughout the county creeks are prone to flash flooding due to their size, and the quick collection of debris and build up of sediment also contribute to problems.

The potential for ravine flooding from many of the County's streams was not evaluated when the Flood Insurance Study and Flood Insurance Rate Maps were prepared. Yet these streams have floodplains, many of which pose serious flood hazards. Because there is no floodplain designated on the FIRMs, development along these streams has not been regulated by the local laws for flood damage prevention. Therefore, development in these areas is at risk from both flooding and stream bank erosion. Hundreds of homes and businesses are located in these floodplains and experience flooding on a regular basis.

Flood Mitigation Action Plans for local municipalities will be addressed and considered in this multi-jurisdictional plan. This information will be reviewed regularly and action items that each municipality would like to complete on its own will be addressed on a local level. In general, actions that are common to several municipalities, or require assistance from the County, State and Federal Governments have been included in this multi-jurisdictional plan.

The Towns of Italy, Jerusalem, Barrington suffer the most flooding damage in many areas each year, and have scores of repetitive loss properties within their borders. The remaining Towns and Villages in Yates County have a great number of streams, creeks and small feeder streams that empty into Canandaigua, Keuka Lake and Seneca Lakes and all have valleys nestled in steep, forested hills. Each have streams and creeks that pose annual problems. These Town Highway departments are called out three to four times a year to clear debris from area creeks that is deposited on roadways, and they try to remove debris on a regular basis from area waterways. However, some of the Town Highway Departments have had to borrow the equipment necessary for these projects, as not every department owns machinery big enough to complete these jobs.

The Towns of Italy and Jerusalem, with the assistance of the Yates county soil and Water department, in the past have made great improvements with mitigation projects to control flooding. However, more needs to be done to alleviate problems in the low lying areas of each town.

Several towns in Yates County are still maintaining dirt roads, which are far more susceptible to flooding and erosion problems. Ditching efforts and maintenance to drainage structures are

YATES COUNTY HAZARD MITIGATION PLAN

attempted on a regular basis. However, due to the dirt road surface that is easily washed into these water conveyances, continual maintenance and road repairs are required during each spring runoff season, and after any heavy rain event. As these dirt roads are also in rural, heavy forested areas, debris clogging the drainage ways is always a problem.

B. Severe Summer Storm / Tornado

- **Location: All municipalities experience at one time or another.**
- **Extent: Thousands to Millions of dollars in damage see narrative.**
- **Previous Occurrences: Major damage about once a decade, localized damage every year, see narrative.**
- **Probability of Future Events: Three events per season, see narrative.**

According to National Weather Service statistics, Yates County has an average of 2 extremely severe summer storms and 3-5 severe summer storms per year. See Appendix D for a complete listing. These storms are localized and last from 15 to 30 minutes on average. Statistics also show us that these storms have yielded hail greater than .75 inches in diameter fourteen times from 1983 to 2002, and “Killer Hail” (greater than 1.5 inches in diameter) four times in the same period. There were four Tornadoes reported from 1/1/1950 to 12/31/08. High winds and heavy rains, which lead to power outages and flooding, are the most common storm elements. Many of these storms are fast moving and develop quickly. A program entitled “CAMP WARN” was developed in conjunction with the New York State Department of Health due to safety concerns for the children and staff at the ten summer camps and recreation programs throughout the county. Most of these programs are located along the shores of the three Finger Lakes that our county borders on. These fast moving summer storms are upon the camps quickly with little notice. The Camp Warn program provides notification to the camps from the 911 Dispatch Center and each camp was provided a NOAA weather radio by the County Emergency Management Office. The previous section on flooding goes into great detail about the dates many of these storms occurred and the damage that was caused.

Most of Yates County’s severe summer weather is very localized and not well documented. Local emergency responders generally remember 3-5 strong storms every summer. These storms were thunderstorms with high winds, hail, and severe lightening. Some residents recall the events due to trees coming down in their neighborhood, or due to their personal property being damaged. Highway records are incomplete but some employees recall replacing pipes, bridges, culverts, etc.

In late May and early June of 1998, a system of severe thunderstorms spawned at least 20 tornadoes in northeast Pennsylvania and central New York. Although funnel clouds were spotted forming, no tornadoes touched down in Yates County. These storms produced large hail (up to 2 inches in diameter) which damaged cars. Short-lived tornado-like storms have been reported numerous times in the past, bringing down trees, damaging homes and vehicles but were not confirmed as tornadoes but cloud bursts.

The spring of 2004 proved to be an eventful one. We had numerous rain, hail and strong wind events in April and May that have caused very localized and minor damage including downed trees and limbs and scattered power outages. There was an entire week in May during which there was a severe thunderstorm warning or tornado watch/warning every single day in our area.

Yates County and its municipalities recognize one of their greatest deficiencies during summer and a winter storm is tree maintenance and removal. The County and the municipalities try to make an effort each year to remove, or contract to remove, dead or damaged trees. However, despite these efforts, the most prevalent issue during summer and winter storms, besides flooding,

YATES COUNTY HAZARD MITIGATION PLAN

is still the damage to homes and vehicles, the utility infrastructure and blocked roadways by downed trees or limbs. Our highway crews and first responders are put in harms way many times when they respond to one tree down, and another tree comes down with the electric lines tangled in it.

The Towns and Village have all expressed concern regarding electrical service and communications during Severe Summer Storm (and winter storm) events. These municipalities are served by two different service offices of NYSEG. Notifications to the town, village and the County Emergency Management Office have greatly improved and are normally relayed in a timely manner. However on occasion, the fact that a power outage exists and residents may need assistance sometimes never reaches the proper authorities.

As Towns of Italy, Jerusalem and Barrington are rural areas with many hills on the edge of the County, communication has been an historical problem. There are many “dead” spots for radio communications due to the hilly terrain. Cell phone service with the addition of the Bluff Point tower has greatly improved. In some areas of the county the residents are also extremely limited in their ability to receive local broadcast media stations. They may not always receive hazardous weather warnings in a timely manner from these local radio stations.

C. Severe Winter Storms / Ice Storms

- **Location: All municipalities experience severe winter storms.**
- **Extent: Thousands of dollars, and threat to life.**
- **Previous Occurrences: Every year, see narrative.**
- **Probability of Future Events: 3 to 4 events per season, see narrative.**

National Weather Service Statistics tell us that Yates County experiences an average of 4 severe winter storms per year, see *Appendix D*. There were 29 heavy snow events from 1993 through 2008, and seven ice storm events in the same reporting period. All together there were 64 significant winter weather related events during this time period. These storms last from 1 to 2 days on average according to the Weather Service. Yates County has lots of hilly terrain as well as lake valleys which can create areas of low snow / high snow due to the changes in elevation.

Due to our geographical location, we are “expected” to receive more snow and ice in Upstate New York than the coastal areas of the State, or the southern states in the U.S. Therefore, there is also an expectation that we can efficiently manage our winter weather without difficulty. As we are a rural county rather than a heavily urbanized area, we have different types of problems associated with snow and ice as compared to large cities that receive significant winter precipitation amounts, such as Rochester or Buffalo. However, this does not minimize the problems we face each season. The larger cities tend to get more attention, and more help, with their winter weather problems than Yates County due to their size and the large population affected. Yates County, its municipalities, and its residents, must fend for themselves and fix their own problems without benefit of aid from outside agencies.

The Blizzard of 1978 went into the history books as a benchmark for severe winter storms. Information from the National Weather Service states that hurricane force winds and record breaking snowfalls made this blizzard one of the most intense storms of the century. In Yates County snowfall totals reached one and one half to two feet. White- outs from blowing and drifting snow and treacherous road conditions were reported.

YATES COUNTY HAZARD MITIGATION PLAN

The 1991 Ice Storm shut down schools, businesses and roads. Scattered power outages and trees down were reported. NYSEG officials were quoted as saying the damage was held down by the lack of wind during the heavy ice period.

In March 1993, a major storm event dumped massive amounts of snow from the Gulf Coast States northeastward through New England. At least 243 deaths were attributed to the storm and over 3 million customers were without electricity along the storm path. Damages nationwide were estimated at \$2 billion. In Yates County, this storm produced heavy snow and blizzard conditions, with over three feet of snow accumulating in a two-day period. Police officers were transported in snowplows. This storm resulted in a food shortage, which lasted for several days. It was necessary to provide food and shelters at local Fire Departments.

Another snowstorm one year later almost to the day resulted in scattered power outages in Yates County. Approximately three feet of snow was again dumped on the area. Some people were without electricity for several days. Again, families were sheltered.

Most of Yates County's severe winter weather is localized and not well documented. Residents recall numerous events due to the heavy snow and cold curtailing activities and making driving almost impossible, trees coming down in their neighborhood, or due to their personal property being damaged. Highway records are limited but the employees do recall long hours spent clearing roads and debris, but cannot pin point dates or costs. Local costs to municipalities include overtime, equipment wear and tear and damages due to debris or overuse, or costs associated with deicing materials that are lost due to inadequate storage facilities, or that run out and emergency purchases must be made at inflated rates due to high demand. Also, the loss of lives and damage to vehicles in car crashes due to poor weather conditions are not documented.

The most common and costly problems, other than flooding, from both severe summer and winter storms is the wind and ice damage to trees and property, and traffic crashes. All municipalities report problems with trees and limbs falling into roadways, taking down utility lines, and damaging houses and cars. In many of the rural areas, our Volunteer Fire Departments are called out to help with trees down, water across roadways, etc. Most do not have all the equipment necessary, or the training, to respond to these calls. Additional chainsaws for our fire fighters, training in their use, and proper protective equipment is needed. Swift water rescue training and equipment such as and approved life preservers and dry suits are needed, As was mentioned in the summer storm section, the Towns/Villages have also expressed concern regarding electrical service during these severe winter storms. The fact that a power outage exists and residents may need assistance sometimes never reaches the proper authorities. In one case in the winter of 2002-2003, there were residents without power for approximately three days.

Another concern is that a large portion of the County is extremely rural and has a rather large elderly population living in single family homes. These residents have to drive many miles to find pharmacies for their prescription drugs. Some residents have only one small local grocery store with a limited inventory, which is quickly depleted when a winter storm advisory is published. This store is "good" for picking up a few items, but major pharmaceuticals and other special needs must be accessed in the larger areas many miles away. The elderly residents sometimes find it impossible to buy enough food, water and drugs to last them long enough to manage while the storm hits and while clean up is accomplished enough for them to be able to drive.

During winter storms, obtaining and storing deicing materials has become an issue. The towns of Barrington, Middlesex and Milo and Yates County and the villages of Dundee and Penn Yan have salt/sand storage enclosed structures. The towns of Italy, Jerusalem, Potter, Starkey and Torrey and the Villages of Dresden and Rushville do not have enclosed salt/sand storage facilities. The Town of Benton utilizes both enclosed structure and open pile. Therefore, approximately one half

YATES COUNTY HAZARD MITIGATION PLAN

of the counties municipalities store their materials outside and are at risk for lost due to wind, rain and freezing as well as the possibility of containing local groundwater supplies with salt. In the past the practice of salt “rationing” in the state has occurred due to low production and high demand. This has made costs for buying salt prohibitive for the smaller municipalities as well. They are forced to use sand or other materials that are less effective, and require greater quantities to get the job done. This forces crews to be out longer, use more materials, more fuel and more time to cover the required distance, with results that are mediocre as compared to salt use. Due to the lesser quality deicing capability of the materials used, traffic crashes occur more often and emergency responders have a more difficult time getting to calls for help.

Yates County reports a budget of \$550,000 for snow removal and winter weather incidents.

D. Epidemic- Communicable Disease

- **Location: Every municipality can experience epidemics**
- **Extent: Hundreds to Thousands of people seeking medical attention.**
- **Previous Occurrences: Each year for flu, approximately one to three times a decade for other illnesses, see narrative.**
- **Probability of Future Event: Expect once every 10 years.**

Yates County’s Public Health Director has grave concerns regarding the spread of a communicable disease on an epidemic level (occurring “naturally” as opposed to a terrorist biological agent release which is covered under terrorism). Past experience tells us that our ability to provide adequate health care would quickly be overwhelmed. While this hazard did not make the top ten in our assessment, the Public Health Director made her case at the Risk Assessment Committee meeting, and the hazard was added to the plan. The concern is that Yates County is going to be faced with an epidemic in the future, and the local health care system will be quickly overwhelmed. The Risk Assessment Committee agreed that something must be done to help fortify the current health care system in Yates County before an epidemic strikes, and lives are lost due to the failure of the system to handle the number of ill.

Since the emergence of West Nile Virus in New York State, and subsequently in Yates County, the Health Department has taken steps to educate the public on the disease, its transmission and prevention techniques. To date Yates County has confirmed that the virus is present, evidenced by dead birds being tested. We have had just one confirmed active human cases of West Nile Virus. People who have sought medical attention and have had testing showed negative results, however, they did show antibodies for the virus indicating that they had the disease previously. It is assumed that the illness was too mild to raise concerns in the patients, or it was an asymptomatic illness. Yates County does have a substantial number of elderly residents that are considered “at risk” for the disease. Should we begin to experience human cases, the Health Department and local Hospitals are fearful that widespread panic will cause a large number of residents to request medical services and overwhelm the system. The State Health Department issued warnings in 2004 regarding pesticide poisonings resulting from spraying of mosquitoes. Also, documented cases of St. Louis and Eastern Equine Encephalitis have been documented in Upstate New York in 2004. These diseases strike residents of New York from time to time, and when they are present the public becomes very fearful due the serious nature and high mortality of the diseases.

Yates County had no SARS cases but it was very apparent to the Public Health Director that Yates County would not be able to handle an incident the size of that experienced in Toronto, Canada or

YATES COUNTY HAZARD MITIGATION PLAN

in China. The County's hospital has very limited "surge capacity" to handle an influx of patients above the normal admissions, and there are very few negative pressure isolation rooms available in the community. The public fear that resulted from the media coverage for a case that was documented in a nearby county was enough to keep health staff at a constant level of activity. Phone calls and community concern rose dramatically for a week or more before worries subsided.

As this plan is being written an outbreak of H1N1 flu has broken out. The County health department is very well prepared for this event. The next few weeks could be very interesting as this whole thing plays out.

Yates County has adequately planned for our own residents, but cannot handle a large influx of out-of-county residents or out-of-state residents from its large tourism. During a recent functional exercise for a Small Pox epidemic, the surrounding counties that participated requested during the exercise that Yates County care for their victims as they were not prepared to treat them. If SARS cases present in adjacent counties, Yates County has a high possibility of having to treat them, as well as our own population.

The Influenza season of 2003-2004 has also been a dramatic one for Yates County. Media coverage sparked a flurry of activity, with a record number of people requesting flu shots. Due to the supply of vaccine running low with a high demand still present, several surrounding counties announced to their residents that Yates County still had vaccine, and that they should attend our vaccination clinics if they wanted their shots. The County did not want to turn anyone away, so our clinics were heavily attended causing problems with waiting room and parking issues. Again, it is feared that surrounding counties, because they are significantly farther behind Yates County in their planning and do not provide the level of service that Yates County provides, will do the same thing when a serious epidemic occurs.

Another epidemic worry is with rabies transmission. Each year, during the later summer months, Yates County sees a sharp increase in the number of bats reported in homes. It is hypothesized that possibly young bats, just venturing out on their own for the first time, may become confused and enter the living areas of homes rather than leave for the outdoors. New York State statistics tell us that all the fatal human rabies cases on record for the state have been attributed to human contact with bats. Therefore, there is a valid concern about rabies transmission during this annual phenomena. The County's Environmental Health Department spends the entire month of August investigating bat complaints and contacts. Thus far, we have not had any statistically abnormal issues regarding rabies, however, it is recognized that the possibility exists.

There has been noted rises over the past decade in rabies among the raccoon population, and other wild animals such as foxes, that also have high contact with humans. As humans expand their living and commercial areas, and lessen the amount of wildlife habitat, human contact with wild animals will only increase. Also, after the events of September 11, 2001, more and more people are turning to cheaper, "domestic" activities for family recreation as a way to save money and protect themselves against terrorist threats. Camping, hiking and touring national, state and local parks have become very popular vacations for our residents. Part of the lure is seeing and interacting with the wildlife in these areas, again increasing human contact with possibly rabid animals.

YATES COUNTY HAZARD MITIGATION PLAN

Man-Made/Technological Hazards

E. Terrorism

- **Location: Possible in all municipalities, but most probable in Town of Torrey or the Village of Penn Yan**
- **Extent: Could cause millions in damages and high fatality rates.**
- **Previous Occurrences: None**
- **Probability of Future Events: Local airport and schools ranked high by New York State as probable targets.**

Terrorism, Homeland Security, or Domestic Preparedness, is a recent phenomenon in our nation, and is a newly emerging concern in Yates County. Due to current events, such as the terrorist attacks on the World Trade Center and Pentagon in September 2001, the failed attempt by terrorists on Flight 93 that crashed in Pennsylvania, the anthrax mailing incidents closely following the September attacks, and the on-going threats made against the United States, have elevated concerns of terrorism throughout the country. Yates County, like other communities in the nation, has concerns.

The analysis of terrorist threats to Yates County, based on information from both Federal and State agencies, have determined that a release of a biological agent would be the most likely to affect the County, and the most difficult to manage. Health reports say that many of the biological agents that could be used as a weapon against the people of the United States could first appear to be the flu, food poisoning, or other common illness. Many of the diseases on the “list of potential weapons” have no available vaccine and no remedy once the disease is contracted. Compounding these diagnosis and treatment problems is the fear that will erupt in our communities. Managing the panicked public with our limited resources will be as daunting a task as trying to open treatment facilities and manage symptomatic victims with limited resources.

Of particular concern to Yates County administration in the event of a bio-terrorism event, is how the County will handle the demand for vaccination and treatment for residents of adjacent counties and Pennsylvania. Yates County has been very active in planning for bio-terrorism. We have conducted a functional exercise to test our plan for opening small pox treatment facilities. As Yates County is on the border of rural parts of Schuyler, Steuben and Ontario counties we expect those residents to come to Yates County rather than drive a longer distance to a metropolitan center in their own county.

The State has also advised us that our County airport is of concern. Seneca Flight Operations has its own hanger and fleet of planes at our airport. Concern exists over a terrorist stealing a plane from there for the purpose of crashing it, similar to the incidents on September 11, 2001.

Each weekend, from the end of April until just before Christmas, the Windmill Farm and Craft Market in the Town of Barrington can be visited by up to 10,000-12,000 visitors. This is a huge influx of people with the majority of them traveling from outside of the county. We are ever mindful of the potential for problems that this creates.

While Yates County scores very low as a probable target for an international terrorist attack, the probability for a “local” to cause significant damage or unrest for personal reasons is very real, as illustrated above. There is an increasing trend in America toward the use of violence in reaction to stress or displeasure. Weapons have been found in Yates County residences on several occasions by Law Enforcement officers responding to calls at the homes.

YATES COUNTY HAZARD MITIGATION PLAN

Due to the stressful current economic climate, area employers are experiencing difficulties and are laying off employees or downsizing operations. While the majority part company peacefully, there are disgruntled employees that could be considered “at risk” for committing a large scale violent act.

F. Hazardous Materials Release: Fixed / In Transit, Oil Spills, Radiological Release: Fixed / In Transit

- **Location: Potential for all municipalities, but most often in the Town of Torrey, see Appendix D for listing of events.**
- **Extent: Thousands in damages to the environment, irreparable damage to the environment, serious threat to public health.**
- **Previous Occurrences: See Appendix D and narrative**
- **Probability of Future Events: Expect many events each year**

Yates County is traversed by few major transportation routes. Due to the rural agricultural nature located in Yates County, we have undeclared hazardous materials that are transported through the County on a daily basis. Hazardous materials released within the County over the past ten years as documented in the DEC data bases is found in *Appendix F*.

Yates County is home to a handful of industries that engage in a variety of manufacturing processes. Chemicals reported on Tier Two forms for 2009 are shown in *Appendix G*.

Of great concern to Yates County is the fact that we have limited access to a Spill Response Team. The Dresden Fire Department is trained to handle petroleum products. The closest NYSDEC office is located in Avon, NY. Yates County calls upon Seneca County for their HAZMAT Team. The spill response time is 2 to 3 hours. During a serious event, supplies and expertise that are needed from the DEC are delayed for several hours, resulting in the possibility of more damage to the environment. For example a car / gasoline tanker crash on Rte 14 in the Town of Torrey resulted in a fatality and the tanker releasing approximately 2,000 gallons of gasoline oil on to the ground.

The Town of Torrey, which is protected by the Dresden Fire Department, has most of the concentration of industry and fixed sites which store hazardous materials.

Yates County has 10 volunteer fire departments. These departments cover “routine” fire response which includes traffic crashes with petroleum spills. All of the 10 departments are equipped with a limited supply of pads and booms for petroleum spill response measures. If additional funding would become available, we would like all departments to increase their supply of petroleum response equipment.

The Village of Penn Yan is the home of S&S Memorial Hospital with a bed capacity of 25 and an Emergency Room. Also in Penn Yan are the following Nursing/Adult Care Homes; Penn Yan Manor Nursing Home, Clinton Crest Manor, The Homestead and St Mark’s Terrace. Combined they have a relatively high elderly population of approximately 350 people. There are five special needs group homes in Penn Yan with approximately 33 residents living in total. There are also several businesses located there, as well as the Fire Department. The Village of Penn Yan is also home to a large water filtration plant which supplies the Villages of Penn Yan and Dresden as well as parts of the Towns of Jerusalem, Benton, Milo and Torrey. They are very concerned about incidents in the Village, should a hazardous material be released, as the Village would be engulfed by the plume very quickly, with the Fire Department also potentially in the plume. Being a very rural municipality on the corner of the County, mutual aid would be long in coming. Another

YATES COUNTY HAZARD MITIGATION PLAN

concern is traffic that drives through Penn Yan on New York State route 14A, 54 and 54A. Rte 14A coming into the village has a steep hill in which at the bottom of the hill is S & S Memorial Hospital, Penn Yan Manor Nursing Home and a gas station/convenience store, which is a potential landing point for vehicles coming down the hill. The resulting explosion could potentially affect the Fire Department as well.

The Town of Torrey has the same problems as the Village of Penn Yan. They have New York State route 14 traveling through the town as a main traffic corridor which has numerous Hazardous Materials traveling through on a daily basis. Torrey also the home of the AES Greenidge facility which receives materials via rail line which runs in close proximity to Rte 14 and to Ferro Electronic Materials, manufacturer of Electronic Ceramic and Surface Finishing materials. The hazardous material plume could involve businesses as well as residential homes. They have already experienced hazardous materials in transit emergency in which a MVA between fuel truck and vehicle met with the result of loss of life as well as hazardous materials spill. During the emergency the homes in the area were evacuated for fear of contamination and potential explosion.

A more recent growing concern is that of the proliferation of Methamphetamine (Meth) Labs in the Southern Tier of New York and the Northern Tier Pennsylvania. Yates County as all counties is concerned of the growing drug trafficking and possible processing within the County. Awareness training for highway departments, code enforcement officers, public visiting nurses, Social Services employees and first responders has been provided by the New York State Office of Fire Prevention and Control's program on Clandestine Drug Labs. To date eighty eight Emergency Responders have attended these classes which were held through out the County. This type of training will be continued through out the county in the future.

Our law enforcement officers are put at risk more and more often, when they are exposed to drug making products during what they think are routine traffic stops, or when responding to 9-1-1 calls for assistance. Almost all officers in Yates County have been involved in a drug related arrest. A County Sheriff's Deputy was injured on 12/21/2002 after coming in contact with Anhydrous Ammonia that was thrown from a vehicle during a traffic stop. As the drug manufacturing ingredients becomes more profitable, it is feared that violence amongst producers and users will give our law enforcement agencies even greater challenges.

The products used in the making of methamphetamine include anhydrous ammonia, lye, lithium, iodine crystals, gasoline, Coleman Fuel, lacquer thinner, mineral spirits, kerosene, denatured alcohol, ether, phosphorus, hydrochloric acid, sulfuric acid, and chloroform. These products are currently used in the area by Meth producers, and transported through our county by producers in contiguous counties. These locations and vehicles are obviously not placarded, and the presence of these products are usually only known when a first responder is exposed and suffers ill effects or the products cause a fire.

Stores are limiting the amount of cold medications and other Meth ingredients that can be bought at one time, and they now report when these items are purchased at one time by the same individual.

For several years many residents in the County have taken advantage of the interest by gas companies to drill for natural gas. The towns of Barrington, Italy, Jerusalem, Middlesex, Milo, Potter and Starkey have had fifty six gas well projects occur within the last ten years. The Fire Departments in these areas are concerned about the risk for fire, as well as for explosions. There is a new heightened level of activity and the potential risk will increase as the interest in the hydrofracking process grows in the search for natural gas in the Marcellus Shale field continues as more active wells are drilled and put into use in the future.

YATES COUNTY HAZARD MITIGATION PLAN

In addition to the ongoing exploration (drilling) of gas the ongoing construction of the 77 mile long Empire Connector natural gas pipeline project runs the full length of Yates County through the towns of Barrington, Milo, Torrey and Benton. This project is connecting the existing Empire State natural gas pipeline that runs from near Buffalo to Syracuse to the new Millennium pipeline, which is a new 186-mile section of pipeline from Corning, N.Y. to Ramapo, N.Y. The Millennium pipeline replaces and upgrades an existing Columbia Gas Transmission natural gas pipeline:

G. Transportation Accident

- **Location: Any roadway in every municipality, but most common in transportation corridors. See attached map.**
- **Extent: Any number of fatalities and injuries per accident, hundreds to thousands of dollars in property damages.**
- **Previous Occurrences: See statistics in Appendix H and narrative.**
- **Probability of Future Events: Will increase as numbers of vehicles on the road increase.**

As stated earlier, Yates County has many New York State highways within its boundaries, a railroad line and small county airport. There have been numerous transportation accidents within the County, resulting in fatalities, property damage, and hazardous materials releases. See *Appendix H* for a breakdown of all transportation accidents from 1996 until 2008.

Some of the most common factors associated with the crashes as reported by police are snow and ice conditions, driver error/confusion, and deer. The major highways for the largest collision sites are State Route 54, State Route 54A, State Route 14 and State Route 14A.

The Village of Dresden and Town of Torrey also have an active railroad which transports coal that is being used by AES Power Station. Incidents in the past involving rail include accidents involving motor vehicles on the tracks and minor derailments.

Penn Yan Airport since its establishment as increased the amount of air travel in Yates County. The air facility is the host of annual events including the July 4th Fly in Breakfast which created heavy air traffic with the increased potential of an incident.

Incidents at the air facility in the past have included a plane crash / fire that destroyed a \$5,000,000 air craft, a vehicle crash into a hanger and a jet plane and a plane into a small structure. Additionally the Fire Department has had several standbys at the airport over the years for planes having engine problems.

V. *Mitigation Strategies and Measures- past and present*

Yates County and its municipalities have shown their commitment and willingness to mitigate hazards in our community. However, our elected officials realize that much more needs to be done to help lessen the impact of the hazards that affect our residents. Therefore, a collaborative effort to continue our past practices and embark on new projects has been embraced by all governing bodies within Yates County.

The following past and present measures taken by Yates County and its municipalities will be continued in the future.

A. **Flooding**

YATES COUNTY HAZARD MITIGATION PLAN

After Agnes caused great destruction in 1972, flood mitigation efforts became a goal of Yates County officials. Items that have been completed or are of a local nature will be maintained or addressed on an individual municipal level. Those items that require County, State or Federal assistance, or are new action items, have been included in this plan and will be implemented either through this plan, or when feasible, will be added to the local plans and implemented.

Flood control systems on Keuka Lake existed before 1972, but were not adequate to control the flood waters of Agnes. After the flood, these control structures were only restored to past conditions, they were not heightened to give further protection. However, after 1972 activity began for projects to help impound water that would flow from Keuka Lake via the Outlet to Seneca Lake and the many creeks and streams. The largest of the projects was the rebuilding of six gates along the Outlet under the Main Street Bridge.

There are numerous other small streams that are monitored by each municipality in their jurisdiction, The Yates County Emergency Management Office, along with various other county departments, assist these agencies and municipalities in planning and emergency response operations and maintenance projects.

Yates County and several municipalities have completed numerous smaller projects such as rip rap and enlarging drainages to aid improvement of flow capacity, stream cleaning and maintenance, and stabilization of stream banks. Projects to protect roads, bridges and properties have also been completed. Yates County continues to include these mitigation projects in their yearly road updates. In recent years municipalities have sought to acquire funds to implement mitigation efforts to improve areas of repeated damage. Yates County will continue its flood mitigation efforts and debris removal.

Many of the Town and the County Highway Departments have also purchased new equipment to help mitigate flooding. This equipment includes dump trucks, excavators, bulldozers and wood chippers. The County Highway department owns a hydro seeder and several towns and the County Soil and Water Conservation District combined their funds to purchase a second unit. The Soil and Water Conservation District also owns a bail mulcher. Additionally some equipment has been modified to make tasks more achievable. For example, “thumbs” have been added to the County’s excavators. This allows the excavators to be operated more efficiently when filling gabion baskets and placing rip rap. All of this equipment has been used by our Soil and Water Conservation District and the County’s municipalities to complete mitigation projects such as wet land construction, debris removal and ditching.

The Towns and County complete numerous projects each year, replacing culverts, pipes and armoring roads and bridges. Each municipality’s budget varies, from \$30,000 annually to approximately \$500,000 annually. All municipalities use a portion of their New York State CHIPS funding for mitigation projects as well.

County and municipal legislative bodies have also taken non-structural mitigation measures, such as local laws and regulations governing development in flood plains, zoning laws and the creation of conservation/agricultural districts and storm water management activities. All of these activities will continue in the future. With the help of community organizations, Yates County can better warn residents and businesses of impending flooding so that protective measures of properties can be completed before flooding becomes severe, thus reducing damage and reducing risk to lives. Yates County has done their part by implementing the Storm Ready program from the National Weather Service.

YATES COUNTY HAZARD MITIGATION PLAN

B/C. Severe Summer/Winter Storms

In the past, Yates County and its municipalities had more of a reactive, rather than proactive, approach to summer and winter storms. With the implementation of the Storm Ready program we feel that has changed. The Emergency Management Office, with assistance from the Red Cross, takes every opportunity to remind residents to be prepared. We advocate the Family Emergency Plan, the Family Emergency Kit, and remind the public whenever possible to store nonperishable food, water, batteries, flashlights, a battery powered radio and manual can opener all year long. The County participates in the biannual Hazardous Weather Awareness Week sponsored by the National Weather Service, when we use the local media to remind residents of the proper procedures to take outside or inside during inclement weather, and to know the signs of approaching inclement weather.

D. Epidemics

Yates County's Public Health Department is a "partial service" department, offering annual flu and pneumonia vaccination clinics to the public, well baby vaccinations for low income residents, and public STD clinics. The County and the community hospital participate in the Finger Lakes Office of Surveillance and Epidemiology disease and illness surveillance program instituted after 9-11, which attempts to quickly identify an outbreak of illnesses and diseases as well as symptoms associated with chemical exposures.

E. Terrorism

Yates County and its municipal agencies are currently complying with all Federal and State requirements regarding terrorism. Penn Yan Aero /Yates County Airport have taken all security measures required by the FAA and Homeland Security, including a new fence around the property. The Villages of Dundee, Penn Yan and Rushville have also followed the new regulations regarding their municipal water systems. Our first responders have taken steps to ensure their equipment and uniforms are not stolen, and access to facilities is stricter, according to guidelines. Our County Public Health Department and hospital have complied with all health surveillance regulations and are current with all training and deliverables for New York State Health Department requirements and regulations. Yates County has received the Weapons of Mass Destruction equipment cache trailer from New York State; it has been inventoried and is ready for service. All necessary and required response plans are written and in place.

F. Hazardous Materials Releases

Yates County supports an active Local Emergency Planning Committee, and assists all local industry and businesses in chemical storage planning and spill prevention planning whenever requested to do so. We have cooperated with the Finger Lakes Solid Waste Authority's "Household Hazardous Materials Day", during which homeowners can dispose of old chemical products for free. Our volunteer fire fighters are trained in hazardous materials response for petroleum spills, have limited equipment to dike/absorb petroleum spills, and also take an active role in training with the industries in their jurisdictions. Currently more advanced hazardous materials training courses are being offered for volunteer fire fighters.

G. Transportation Accidents

All of the law enforcement agencies in Yates County provide road patrols and strictly enforce existing laws. The Yates County Sheriff is head of the local traffic safety board and all agencies have very active DWI patrols.

YATES COUNTY HAZARD MITIGATION PLAN

VI. Hazard Mitigation Goals and Strategies - Future

Present mitigation measures will be continued in the future. However, it is understood and well known that more mitigation measures need to be taken in the future so that Yates County and its municipalities can realize their goals of saving lives, properties and the environment from the devastating effects of natural and man made hazards.

The Risk Assessment Committee reviewed all pertinent information in the Risk and Vulnerability Assessment and Hazard Analysis. The following action items were created to reflect the risk assessment and by examining options in the following categories:

- Prevention: government administrative or regulatory actions or processes that influence the way land and buildings are developed and built.
- Property Protection: actions that involve the modification of existing buildings or structures to protect them from a hazard or remove them from the hazard area.
- Public Education and Awareness: actions to inform and educate the public.
- Natural Resource Protection: actions that preserve or restore the functions of natural systems.
- Emergency Services: actions that protect people and property during and immediately after a disaster.
- Structural Projects: actions that involve the construction of structures to reduce the impact of a hazard.

The action items were then prioritized using the STAPLEE formula, which includes the use of a cost/benefit analysis. Most items received a high rating as they are inexpensive actions or are already budgeted, and they are important to the community. Several items rated medium or low due to the cost factor, there was no funding available, or it is not a high priority based on community opinion.

A. FLOODING

GOAL: TO MAKE YATES COUNTY MORE RESISTANT TO FLOOD DAMAGE

OBJECTIVE #1: Continue mitigation efforts in area streams. -All municipalities

In the future, Yates County and its municipalities will continue stream bank stabilization efforts, stream cleaning and maintenance, and participation in flood control system inspections and maintenance. More aggressive programs will be created to address problems in creeks that have not been maintained in the past, and for others when necessary. Should a flooding event create the need for a specialized program to be instituted, the County and the Towns will again participate.

TIME FRAME: Ongoing

FUNDING: Existing budgets and mitigation grants when available.

LEAD: Soil and Water Conservation District

SUPPORT: Highway, EMO, State and Federal agencies

STAPLEE RATING: HIGH

OBJECTIVE #2: Create a public education program for residents to ensure stream mitigation efforts are not defeated. – Yates County

Currently, the county would like create a stream information workbook for landowners and municipalities, explaining how buffers and greenways can be used to reduce flooding damage, and explaining the “do’s and don’ts” of stream maintenance and use. It is our hope that this education

YATES COUNTY HAZARD MITIGATION PLAN

tool will help prevent future damage by reducing development in flood prone areas and by discouraging landowners from detrimental behaviors such as throwing debris in the streams or removing rocks or dirt that serves as bank erosion protection. The publication would be targeted to those living along creeks, streams, and Seneca, Keuka and Canandaigua Lakes, to help ensure maintenance efforts in that waterway are not defeated by area residents, and to those residents living along other waterways within the County.

TIME FRAME: unconfirmed at this time.

FUNDING: Existing budgets and grants when available.

LEAD: NYS Department of Environmental Conservations

SUPPORT: Soil and Water Conservation District, EMO, Cornell Cooperative

STAPLEE RATING: HIGH

OBJECTIVE #3: Create public education programs and prevention legislation for urban residents regarding yard waste, debris and storm water runoff. –All municipalities

Another public education program that is needed is for the urban residents who place yard debris at the roadside. During rain events, this debris washes onto storm sewer grates, clogging the sewers and creating “urban flooding”, as we saw in the November 1996 flooding event. Many of the municipalities have yard debris pick-up programs in the spring and fall, and some municipalities have local regulations or Code Enforcement Officers that address property maintenance. These programs would continue, and if more funding was to become available, more aggressive and useful campaigns could also be implemented. Legislation and enforcement to address “dumpers”, those people who dump household trash, furniture and appliances, and lawn debris along area waterways are greatly needed.

TIME FRAME: When funding becomes available

FUNDING: Grants when available.

LEAD: Municipalities

SUPPORT: Soil and Water Conservation District, EMO, Cornell Coop.

STAPLEE RATING: HIGH

OBJECTIVE #4: Secure funding to buy out properties in flood plains that pose repetitive loss problems, and raise or modify properties when cost efficient. –Yates County

TIME FRAME: When funding becomes available

FUNDING: Grants when available, possibly Federal or State Funding if associated with flood control project creation.

**LEAD: Soil and Water Conservation District / Yates County
Legislature/Municipalities**

SUPPORT: Highway, State and Federal Agencies

STAPLEE RATING: MEDIUM

OBJECTIVE #5: Continue to support Environmental Emergency Services as it relates to Keuka Lake. –All municipalities

Yates County and its municipalities will continue to support the efforts of Environmental Emergency Services (EES) and its Flood Warning Service. The data provided by the rain and river gauges maintained and monitored by the Flood Warning Service Staff and their ability to accurately predict water runoff and lake crests, is invaluable to Yates County during a flood event. Their predictions based on current precipitation can give Yates County notice of impending problems.

YATES COUNTY HAZARD MITIGATION PLAN

TIME FRAME: Ongoing

FUNDING: Existing budget and support of grants when EES applies.

LEAD: EMO

SUPPORT: County and Municipal governments

STAPLEE RATING: HIGH

OBJECTIVE #6: Continue to uphold the requirements to maintain Storm Ready designation. -Yates County

Yates County earned the National Weather Service “Storm Ready” designation in 2009. In an effort to continue our work, we are in the process of creating a campaign to encourage residents and businesses to purchase NOAA Weather Radios. We feel that the service provided by these radios would help Yates County residents prepare sooner for flooding events, thereby decreasing the number of life threatening incidents due to people staying in their homes when they should be leaving. The NOAA radio also offers the quickest avenue to hazardous weather warnings, showing their greatest benefit during severe summer storms when warning time may only be minutes. In the past the Yates County Legislature provided funding to purchase almost one hundred NOAA weather radios for distribution to fire departments, ambulance corps, highway departments, schools, children’s camps, county departments, hospitals, nursing facilities and other organizations.

TIMEFRAME: Ongoing

FUNDING: Existing budgets and future grants when available.

LEAD: EMO

SUPPORT: National Weather Service

STAPLEE RATING: HIGH

OBJECTIVE #7: Create legislation that will promote “best practices” and provide funding for ongoing mitigation projects. – All municipalities

Mitigation efforts that the County and its municipalities would like to institute include tax incentives for landowners that leave buffers or green areas along streams, and for landowners that allow storm water projects to be built on their property for the protection of downstream residents. We would also like to create special drainage/stream tax districts to fund stream maintenance projects and other mitigation efforts, such as buy outs or raising structures. Other opportunities for landowners include the construction of flood attenuation wetlands for the reduction of flooding, reduction of stream bank erosion, improvement of water quality, groundwater conservation, and enhancement of wildlife habitat.

TIMEFRAME: Five years.

FUNDING: Current budgets or grants, if needed. None expected for legislation.

LEAD: County and Municipal government

SUPPORT: Soil and Water Conservation District, EMO

STAPLEE RATING: HIGH

OBJECTIVE #8: Complete LIDAR database. -Yates County

The County has a Geographical Information System (GIS) database that includes information on soils, tax maps and land use from current and past aerial photos. This allows us to develop watershed models for zoning and land use decisions, design regional storm water projects, and to

YATES COUNTY HAZARD MITIGATION PLAN

give better information to the municipal boards making land use decisions. This GIS system is very useable and beneficial as demonstrated by all of the maps that accompany this plan.

The Yates County Soil and Water Conservation District is also seeking funding to collect LIDAR (Light Imaging Detection and Ranging) topographic data for the entire county. Currently only the Canandaigua Lake Watershed area which covers approximately 25% of the county is included. This airborne laser technology enables development of a digital topographic data layer with one-foot contours. The availability of LIDAR topographic data will facilitate the design of wetlands (for flood attenuation and other purposes) by reducing the expense of field surveying. The data will also be used for hydrologic modeling. It is anticipated that once LIDAR topographic data is available, the NYS Department of Environmental Conservation will utilize this information to develop updated digital Flood Insurance Rate Maps for Yates County. LIDAR topographic mapping and aerial photography can also be used to improve site planning and storm water management.

TIMEFRAME: LIDAR must be done in the fall when there are no leaves and no snow.

FUNDING: Approximately \$100,000 in grant money or State member item funding must be available for LIDAR project to continue.

LEAD: County GIS Committee, Soil and Water Conservation District

SUPPORT: Municipalities, New York State

STAPLEE RATING: HIGH

OBJECTIVE #9: Provide technical assistance to municipalities for more effective legislation regarding land use, zoning laws, storm water management, etc. –All municipalities

All municipalities in Yates County adhere to the New York State Building Codes and enforce these codes through the municipal Code Enforcement Officers for all new construction. However, our towns and villages need further assistance in creating more effective zoning laws and land use regulations, and further assistance in enforcing all of these laws. Technical assistance for identifying floodplains and flood prone areas must be completed first, along with education for town and village officials, so that new regulations and laws are properly applied and enforced. All municipalities need assistance to develop and implement storm water management programs consistent with the requirements of their MS4 permits. Many components of these storm water programs will require additional staff time and expertise to implement, however, current staffing levels are not sufficient and staff does not have the expertise to complete these tasks. Municipalities would like to work cooperatively to reduce costs for planning and implementation.

TIMEFRAME: As soon as possible

FUNDING: Mitigation Grant when available and approved.

LEAD: SCT, County and Municipal Governments

SUPPORT: NYS

STAPLEE RATING: HIGH

OBJECTIVE #10: Complete various construction and maintenance projects, and create a schedule for ongoing maintenance of completed projects. –All municipalities

All county and municipal public works/highway departments need funding and assistance for ditching programs, debris removal programs, and drywell and drainage system installation and maintenance projects as appropriate. The areas that have recurring flooding problems and would benefit from these mitigation projects by preventing or lessening damage need to be identified by each municipality if funding became available for drainage improvement.

YATES COUNTY HAZARD MITIGATION PLAN

TIMEFRAME: As soon as possible, when funding becomes available.

FUNDING: Existing budgets for a portion if supplemented by grants, State or Federal funds.

LEAD: Highway Superintendents in all municipalities

SUPPORT: Municipal Governments, NYS and Federal Governments

STAPLEE RATING: MEDIUM

OBJECTIVE #11: Upgrade all dirt roads to at least oil and stone and install proper drainage structures.

The towns that are still maintaining dirt roads would like to have these roads oiled and stoned, and have proper drainage structures installed. If funding were available to complete these projects, the majority of the flooding problems would be removed. Each town would need to provide an estimate on the cost to oil and stone these roads and install the proper drainage structures. The towns routinely share rented equipment and contractors when undertaking road projects, and would work cooperatively in this project to ensure the most efficient completion for their money.

TIMEFRAME: When funding becomes available.

FUNDING: Existing budgets for a portion if supplemented by grants, State or Federal funds.

LEAD: Highway Superintendents in effected municipalities

SUPPORT: Municipal Governments, NYS and Federal Governments

STAPLEE RATING: MEDIUM

B. SUMMER / WINTER STORMS

GOAL: TO PREVENT INJURY AND LOSS OF LIVES AND REDUCE DAMAGE TO INFRASTRUCTURE AS A RESULT OF SEVERE SUMMER AND WINTER STORMS.

OBJECTIVE #1: Create a NOAA Weather Radio awareness and discount purchase campaign. – Yates County

Again, the County is currently trying to create a campaign for NOAA Weather Radio purchases by residents and businesses. We feel these will be very beneficial for the summertime storms that usually receive very little warning, giving people added minutes to prepare and get to shelter.

TIMEFRAME: Within one year.

FUNDING: None expected, grant funding if needed and available.

LEAD: EMO

SUPPORT: Local retail outlet, NWS

STAPLEE RATING: HIGH

OBJECTIVE #2: Create a cooperative tree maintenance program among the municipalities and NYSEG, and bury utilities when feasible. –All municipalities and NYSEG

We would like to work cooperatively with New York State Electric and Gas Corporation (NYSEG) to devise a tree removal plan in road and utility rights-of-way. Highway Departments do not have the time, money or people to undertake massive tree trimming/removal projects, nor do they have the experience for working near the power lines. We hope that a cooperative effort with NYSEG would allow enough staff and equipment to undertake such a project, if funding were to become available. An alternative to removing trees is to bury utility lines when feasible

YATES COUNTY HAZARD MITIGATION PLAN

and appropriate. This project, due to the cost involved, would have to apply to new installations, not existing utilities.

TIMEFRAME: When funding becomes available.

FUNDING: Grants when available.

LEAD: Yates County, NYSEG

SUPPORT: Municipalities

STAPLEE RATING: MEDIUM

OBJECTIVE #3: Assist municipalities with timbering regulations to help prevent runoff and fire load hazards. - Yates County

Yates County, with assistance from New York State Forest Rangers would like to assist municipalities in creating timbering regulations so that runoff is better controlled, road and utility rights-of-way are cleared, and fire loads (fire caused by lightning strikes) can be lessened.

TIMEFRAME: Within five years

FUNDING: None expected, existing budget or grant funding if needed.

LEAD: Yates County, NYS DEC

SUPPORT: Municipalities

STAPLEE RATING: LOW

OBJECTIVE #4: Research cooperative buying and storage programs for de-icing materials. - All municipalities

Another serious issue facing the County and its municipalities is a lack of available de-icing materials and the money to purchase and store these materials. Currently some towns do not have storage facilities for de-icing materials. Several others need upgrades to their facilities to better store and protect the materials. Due to salt rationing and the lack of cinders, a far better product than sand or gravel, more money is being spent on less satisfactory results.

TIMEFRAME: Within five years for research and solution possibilities.

FUNDING: Existing budgets for a portion if supplemented with grants or State/Federal funding.

LEAD: Highway Supervisors, Municipal Governments

SUPPORT: NYS, Federal Governments

STAPLEE RATING: MEDIUM

OBJECTIVE #5: Research possible food supply solutions for those facilities without in-house food preparation capabilities, and food/drug solutions for elderly residents in extremely rural areas. -Yates County

An issue that came to light during the 1993 blizzard was that many residents were without power for a long period of time as road conditions were so bad it made it difficult to set up food in some shelters.

TIMEFRAME: Within five years.

FUNDING: Depends on solutions suggested.

LEAD: EMO

SUPPORT: Red Cross, Office of the Aging, DSS, private businesses

STAPLEE RATING: HIGH

YATES COUNTY HAZARD MITIGATION PLAN

OBJECTIVE #6: Research possible solutions for increasing the amount of portable power for each municipality due to the rural nature of Yates County and the increase in long term power outages. – Yates County

TIMEFRAME: Within five years.

FUNDING: Depends on solutions suggested.

LEAD: EMO

SUPPORT: NYSEMO and HOMELAND SECURITY

STAPLEE RATING: HIGH

C. EPIDEMIC

GOAL: TO IDENTIFY CONTAGIOUS DISEASE OR ILLNESS TRENDS IN A TIMELY FASHION AND STOP THE SPREAD OF SUCH ILLNESS/DISEASE AS QUICKLY AS POSSIBLE.

OBJECTIVE #1: Continue participation in the Finger Lakes Office of Surveillance and Epidemiology program. - Yates County

This program is an information sharing network that can quickly identify the spread of numerous diseases or identify illness trends. It is assumed that if a disease or illness is quickly identified, the spread of the disease or illness can be prevented.

TIMEFRAME: Ongoing

FUNDING: Existing budget when needed, possible grant use in future for updates to the system.

LEAD: Yates County Public Health Dept.

SUPPORT: Hospitals, NY State Dept. of Health (NYSDOH)

STAPLEE RATING: HIGH

OBJECTIVE #2: Continue vaccination clinics for flu, pneumonia, childhood immunizations, and other preventable diseases. - Yates County

Yates County Public Health Department will continue its efforts to immunize and vaccinate as many people as possible for contagious diseases when feasible and medically advised.

TIMEFRAME: Ongoing

FUNDING: Existing funds, use of grants in future if needed.

LEAD: Yates County Public Health

SUPPORT: NYSDOH, EMO

STAPLEE RATING: HIGH

OBJECTIVE #3: Lobby New York State for mutual aid plans and exceptions to licensing regulations when needed and practical, and clarify authority for quarantine. - Yates County

Yates County would like to see State legislation and planning for mutual aid across county and state borders in the event of an epidemic. There needs to be clearer, concrete rules regarding when a quarantine of an individual/household can be ordered, and who has the authority to enforce the quarantine. The County would like to create a database of medical personnel that has retired or moved into administration, but can still use their medical skills accurately and efficiently. We have been very thorough in our planning for contagious disease, for mass vaccination/treatment facilities; however, we realize that we do not have enough personnel to run these programs if we need them. There are many retired nurses, doctors, etc. that still have skills that could be used during an emergency if the State would allow them to work without a current professional license.

YATES COUNTY HAZARD MITIGATION PLAN

TIMEFRAME: Lobbying efforts are ongoing, the database can only be created after State approval.

FUNDING: None expected, existing funds or grants if needed.

LEAD: Yates County Public Health

SUPPORT: NYSDOH, EMO

STAPLEE RATING: HIGH

OBJECTIVE #4: Create an agreement with Finger Lakes Health a treatment facility during an epidemic. - Yates County

Yates County has involved staff of the Finger Lakes Health in our Contagious Disease Response Plan, and we have local agreements for a portion of the facility to be used as a treatment facility if needed. However, the County Public Health Director would like to have a more formal agreement in place that outlines partnering responsibilities, liabilities, and commitments with flexibilities to work with the capacities of the facility and the needs of the epidemic.

TIMEFRAME: As soon as possible

FUNDING: None expected

LEAD: Yates County Public Health

SUPPORT: EMO, Yates County, NYS Dept. of HEALTH

STAPLEE RATING: HIGH

OBJECTIVE #5: Research grant opportunities to re-fund training programs for Food service workers regarding prevention of disease transmission. – Yates County

The Yates County Public Health department would like funding to conduct training for restaurant, tavern, and grocery store employees on the prevention of disease transmission. In light of the fact that several of the incidents in Yates County have been food/water borne illnesses transmitted by employees, the Public Sanitarians would like to see the training programs reinstated.

TIMEFRAME: As soon as possible

FUNDING: None expected for research, grants when available for training

LEAD: YATES COUNTY PUBLIC HEALTH

SUPPORT: EMO, NYSDOH, Local food/beverage and grocery establishments

STAPLEE RATING: MEDIUM

D. HAZARDOUS MATERIALS

GOAL: TO PREVENT HAZARDOUS MATERIALS RELEASES; AND TO PREVENT INJURY AND THE LOSS OF LIVES, AND PROTECT THE ENVIRONMENT, FROM THE EFFECTS OF HAZARDOUS MATERIALS RELEASES.

OBJECTIVE #1: Educate the public and business community in proper hazardous materials storage and disposal, continue disposal programs, and continue/create legislation and training programs. – Yates County

In the future, Yates County would like to create and deliver an educational program for residents and businesses regarding the safe storage and disposal of hazardous materials and continue to support the efforts of the Finger Lakes Solid Waste authority. Local municipalities should create zoning laws that would be beneficial for ground water, streams and water bodies and they should continue to encourage local business and industry to train with their fire department and to remain in compliance with all laws and regulations regarding hazardous materials handling, storage and disposal.

YATES COUNTY HAZARD MITIGATION PLAN

TIMEFRAME: Ongoing and as soon as possible.
FUNDING: Existing budgets, grants when available.
LEAD: Yates County LEPC, Cornell Cooperative
SUPPORT: Municipalities, Local Industry
STAPLEE RATING: HIGH

OBJECTIVE #2: Lobby for tougher hazardous materials release laws, enforcement and penalties. –Yates County

Yates County would like to see tougher laws and stricter enforcement for the unscrupulous individuals that “park and dump” hazardous materials. We find that many transportation accidents in which loads or fuel are lost begin with the driver of the vehicle trying to “dump the load” (either the load being hauled or from a ruptured fuel tank) and drive off before being caught. Many are reported before they are able to escape, and the truth of the situation is untold.

TIMEFRAME: As soon as possible.
FUNDING: None expected.
LEAD: EMO, LEPC
SUPPORT: NYS DEC
STAPLEE RATING: HIGH

OBJECTIVE #3: Continue training and acquire additional materials to respond to hazardous materials release in our community. –Yates County

While we understand budget constraints, we still feel this is vital to our area.

TIMEFRAME: Ongoing
FUNDING: None locally, funding needed at State level.
LEAD: EMO, LEPC
SUPPORT: NYS DEC
STAPLEE RATING: HIGH

OBJECTIVE #4: Educate the public on the proper procedures to take if a hazardous material is released near their location. –Yates County

Yates County would like to implement a media campaign to educate the public on shelter in place procedures should a hazardous materials release occur near their location and they must shelter for protection. Information on evacuation/fleeing procedures would also be included. Recently the National Weather Service added emergency categories that can be used for NOAA Weather Radio alerts. These categories include hazardous materials releases. Education and a discount purchase program for NOAA Weather Radios for communities is also needed.

TIMEFRAME: Ongoing
FUNDING: None expected, LEPC grant funding if needed.
LEAD: LEPC
SUPPORT: EMO, NWS
STAPLEE RATING: HIGH

OBJECTIVE #5: Provide further training and equipment for first responders/law enforcement regarding Meth labs and hazardous materials releases. –Yates County

Yates County still has a long way to go in the training of our first responders and law enforcement officers regarding Meth labs and hazardous materials spills. Training is needed on an ongoing

YATES COUNTY HAZARD MITIGATION PLAN

basis; however, budget/funding is not always available. Training cannot be completed until the overtime and training costs can be covered.

TIMEFRAME: As soon as possible, when funding is available

FUNDING: Grant money when available

LEAD: EMO, Law Enforcement Agencies

SUPPORT: Municipal Highway/Code Enforcement, Fire Depts, EMS, OFPC

STAPLEE RATING: MEDIUM

OBJECTIVE #6: Provide each fire department with hazardous materials response equipment, such as booms and pads for containing petroleum spills – Yates County

Only a few of our fire departments currently have equipment to respond to the most common spills, those involving petroleum. We would like every fire department to have a supply of equipment, thereby lessening the environmental damage.

TIMEFRAME: When funding is available

FUNDING: Grants when available

LEAD: EMO, Fire Coordinator

SUPPORT: Fire Departments

STAPLEE RATING: MEDIUM

E. TERRORISM

GOAL: TO REDUCE OPPORTUNITIES FOR ACTS OF TERRORISM OR “HOME GROWN” TERRORISM IN YATES COUNTY; AND TO RESPOND IN THE MOST EFFICIENT MANNER POSSIBLE IN ANY PURPOSEFUL EVENT TO ALLOW THE LEAST AMOUNT OF DAMAGE AND IMPACT ON THE COUNTY.

Two crucial needs for terrorism mitigation in Yates County are an Emergency Operations Center (EOC), and a radio communications system with the ability to allow interagency communications.

OBJECTIVE #1: Continue to install state of the art equipment needed serve the EOC for Yates County. -Yates County

Yates County’s EOC has recently been upgraded but there is a need to properly stock/install specialized equipment to increase communications throughout Yates County.

TIMEFRAME: As soon as possible.

FUNDING: Grants or member item from State or Federal governments.

LEAD: EMO

SUPPORT: Yates County, NYS, Federal Governments

STAPLEE RATING: HIGH+

OBJECTIVE #2 Obtain training and equipment for terrorism response for all law enforcement agencies. –Yates County

Our County does not have an organized SWAT team. We rely on the resources of Ontario County and the New York State Police. The Yates County Sheriffs Office (YCSO) recently received via the 2007 LETTP grant personnel protective equipment, to include soft & hard body Armor, ballistic helmets, shields and personnel bunkers.

YCSO has had some basic terrorism and WMD instruction but any additional training would only enhance their abilities to share resources, gather intelligence and share information. Due to

YATES COUNTY HAZARD MITIGATION PLAN

overwhelming training requirements that already need to be met by law enforcement, this “added training” needs funding for training costs and overtime.

TIMEFRAME: As soon as funding becomes available.

FUNDING: Federal and State grants when available.

LEAD: Law Enforcement Agencies

SUPPORT: EMO, Municipalities

STAPLEE RATING: MEDIUM

OBJECTIVE 3: Lobby the State and neighboring Counties for more effective regulations regarding the use of medical personnel, and for more effective mutual aid plans. – Yates County

Turning to Health Department concerns, much of what we would like to do on a local level needs approval or assistance from New York State. We have already identified that a lack of health care staff and treatment facilities will be our main stumbling blocks in a terrorist biological or chemical incident. Yates County would like to create a database of retired medical personnel (nurses mainly) that could be called up for duty in a terrorist event. The State would have to make some type of provision for experienced medical personnel to be put into service regardless of their license status. Many retired nurses do not have current licenses; however, they still have their skills and could be utilized during an event. Mutual aid plans for our regional area and a State mutual aid plan for public health are also needed to help effectively control the use of staff and the treatment of victims. As mentioned elsewhere in this plan, Yates County will receive an influx of residents from surrounding counties in New York and tourism due to a lack of available services in their home counties. Yates County Public Health Medical Reserve Corp Unit was developed to assist Yates County Public Health in providing services to the citizens of our small rural county (population about 25,000). Membership in our MRC Unit includes both medical and non-medical volunteers, who can assist our community during emergencies, including disaster situations related to weather, disease and/or environment. Our MRC volunteers would assist Yates County Public Health in receipt and distribution of SNS supplies, creation and operation of PODs, delivery of healthcare at set up shelters, maintenance of case investigation activities and continuity of operations (COOP) of the department. During non emergency times, our MRC volunteers will assist our Yates County Public Health staff at clinics (rabies and influenza, exercises and drills). Key partners of our volunteer corps include our entire emergency planning community, i.e. Emergency Management, Yates County Chapter of American Red Cross, Local law enforcement, Soldiers and Sailors Memorial Hospital, Department of Social Services, Local school districts and other community citizens and representatives. Our MRC unit has recruited 137 medical and non medical volunteers to date. Yates County Public Health leaders created MRC roles/positions that would provide MRC volunteers direction in assisting Public Health staff during emergency events and/or drills. Volunteers are welcomed and encouraged to select specific roles/positions that meet their credentials and interests. We have created an YCPH MRC handbook and a formal orientation program. We have utilized MRC volunteers in the delivery of care during Point of Dispensing clinics and other drills in the past years. Currently we have two volunteer coordinators and they both participate on our Yates County Health Emergency Operations Planning Task Force and Yates County Public Health Emergency Preparedness Core Planning Team.

TIMEFRAME: Ongoing

FUNDING: None expected, grants when available and needed.

LEAD: YATES COUNTY PUBLIC HEALTH

SUPPORT: EMO, Adjoining Counties, NYSDOH

STAPLEE RATING: HIGH

YATES COUNTY HAZARD MITIGATION PLAN

F. TRANSPORTATION ACCIDENTS

GOAL: TO REDUCE TRANSPORTATION ACCIDENTS ON ROADWAYS AND TO LESSEN THE IMPACT OF POSSIBLE AIR INCIDENTS WITH QUICK AND EFFICIENT RESPONSE

OBJECTIVE #1: Continue to support current training activities and form a closer working relationship with PY AERO and the County Airport to deal with transportation accidents. – Yates County

The current committees that are active in the County regarding transportation issues will have a tremendous impact on the future of accident prevention. Through these committees ideas are discussed and needs are addressed. Currently plans are being made to coordinate activities. There is a need for message boards when traffic detours are needed in key areas within the County.

TIMEFRAME: Ongoing

FUNDING: Existing budgets and grants when available.

LEAD: Yates County, Municipal Governments

SUPPORT: Participating Committee agencies

STAPLEE RATING: HIGH

OBJECTIVE #2: Create media campaigns with safe driving messages appropriate to the season. –Yates County

Yates County Emergency Service providers would like to educate all communities and get several message suggestions aimed at the most common driving errors associated with crashes in Yates County, based on our crash reporting system.

TIMEFRAME: As soon as possible

FUNDING: Grants when available

LEAD: Yates County Law Enforcement

SUPPORT: Yates County Public Information Officer, Law Enforcement Agencies

STAPLEE RATING: HIGH

G. MAPS

A series of maps was created by the Yates County Soil and Water Conservation District for the 13 municipalities that are covered by this plan. These maps include:

- | | |
|-----------------------|--------------------------|
| Transportation | Topography |
| Hydrologic Soil Group | Prime Agricultural Soils |
| Landuse | Hydrology |
| Hydric Soils | Highly Erodible Soils |
| Agricultural District | |

H. PLAN MAINTENANCE

Yates County and each municipal governing body within the County will adopt the Yates County Hazard Mitigation Plan by March or 2010. Implementation of the plan will begin no later than December of 2010.

The LEPC will review the Yates County Hazard Mitigation Plan on a bi-annual schedule. The committee will receive a report from each municipality in January of the review year, and will meet to review and discuss the progress and comments made by each municipality. At this time, measurable goals and objectives will be reviewed, and any changes necessitated by economic,

YATES COUNTY HAZARD MITIGATION PLAN

environmental or other factors will be made. Review criteria included whether Goals or Objectives have been met, if conditions have changed and warrant a change in Goals or Objectives, if funding sources warrant a change in Goals or Objectives, or if resources have been added or lost and warrant a change in Goals or Objectives. The first review year will be January of 2012, and will occur every other year thereafter.

The Yates County Emergency Planner will host a meeting for all municipal leaders in the September prior to each five year anniversary of the plan. The plan as a whole will be discussed, along with any suggestions for changes to the plan. The public will have the opportunity to express opinions and comments to their respective municipal governments at the August board/legislative meetings before the September meeting. Public notice will be published in the Chronicle Express to inform the public of their opportunity to comment. A copy of the most current plan will be available in each Municipality for year around public access.

Every fifth year, the comments and suggestions will be reviewed by the LEPC, and updates to the plan will be made as necessary. All governing bodies will adopt the updated plan upon completion, and the plan will be distributed to all necessary entities, including State and Federal agencies.

The Yates County Hazard Mitigation Plan will be implemented through inclusion in the County's Comprehensive Emergency Management Plan as "Section I", and through each municipal response plan. Yates County and all its municipalities will ensure that comprehensive emergency management plans will include the hazard mitigation plan as an annex, appendix, chapter, or otherwise reference the hazard mitigation plan.

When appropriate, objectives will be met through inclusion in Capital Improvement and Economic Development Plans, Master Plans, Zoning and Land Use plans and ordinances, and other appropriate planning and regulatory actions.

The county will establish provisions in the protocol for county capital development or improvement that that will require review of current and future capital improvement projects for hazard vulnerability and incorporation of hazard resistant construction standards into the design, engineering, and location of the project. In particular, the provisions will encourage consideration for the incorporation of hazard resistant design and citing standards that exceed local ordinances especially for essential infrastructure & critical facilities such as county government buildings, waste & drinking water treatment plants and emergency operations facilities.

The county will encourage all municipalities to develop protocol to ensure that prior to land-use or zoning designation or changes, the hazard mitigation plan and other appropriate hazard analysis and vulnerability material will be reviewed to ensure consistency and compatible land use. Similarly, prior to any development permitting and during the process to review and approve site plans, municipalities will ensure review and consider the hazard mitigation and other appropriate hazard analysis and vulnerability assessment material to ensure consistency and prevent incompatible land use.

YATES COUNTY HAZARD MITIGATION PLAN

TABLE OF ANNEXES AND APPENDICES

APPENDICES

- A. LIST OF MEETING ATTENDANCE SHEETS
- B. COUNTY WIDE HAZARD ANALYSIS / RISK ASSESSMENT
- C. HISTORY OF FEDERALLY DELARED DIASTERS
- D. NATIONAL CLIMATE DATA CENTER INFORMATION
- E. PROPERTY USE AND VALUE
- F. HAZARDOUS MATERIALS LIST OF EVENTS
- G. TIER TWO FORM INFORMATION
- H. TRANSPORTATION ACCIDENTS
- I. NATIONAL FLOOD INSURANCE DATA
- J. SAMPLE ADOPTION RESOLUTION