This appendix provides the jurisdictional annex instructions and example template provided to Saratoga County and participating jurisdictions.

SARATOGA COUNTY PARTNER /COUNTY TEMPLATE

Instructions for completion

The following are instructions for the completion of the Partner Village/Town/County annex template that will need to be completed for the County and each municipality (Partner) in the Saratoga County Hazard Mitigation plan. The purpose of these instructions is to guide each Partner in the preparation of the information required for Disaster Mitigation Act (DMA) compliance. Each Partner should review and complete as much of the information as possible. Please submit your completed annex by September 30, 2009 to Cynthia Bianco (contact information below). Each planning partner will need to have the following to complete this template (all can be accessed on the CD distributed at the Workshop or the Shared website in the General Folder):

- ✓ **The draft Risk Assessment for Saratoga County (Hazard Profiles)**
- ✓ **Mitigation Goals and Objectives**
- ✓ **The Catalog of Hazard Mitigation Initiatives**

Any questions on what is required or how to complete this document should be directed to:

Cynthia Bianco

Tetra Tech Inc.

100 Enterprise Drive

Rockaway, NJ 07866

973-659-9996 x289

e-mail: cynthia.bianco@ttemi.com

This template has been set up as a Word document in a format that will be used in the final plan. Each Partner is asked to use this template with no other derivations or versions so that a uniform product will be completed for each partner. A digital copy of this template is available on the Saratoga County secure website at https://partners.ttemi.com/sites/Saratoga_HMP/default.aspx. Please provide both a hard copy and digital copy of the completed template to Tetra Tech upon completion of the template. If a Partner does not have Microsoft "Word" capability, they are requested to prepare the document in the available format and the planning team will convert it to the Word format.

Instructions:

Title Block: In the Title box, type in the complete official name of your Jurisdiction (i.e., Township of Mohawk, etc.). At this time, also change the name in the "header" box to coincide with this title.

A.) Hazard Mitigation Plan Point of Contact

Please provide the name, title, mailing address, telephone number, fax number and e-mail address for the primary point of contact for your jurisdiction for the elements that pertain to your jurisdiction for this

plan. This person would be that person responsible for monitoring, evaluating and updating the annex for your jurisdiction as outlined in this plan.

In addition, it is required to designate an alternate point of contact. This would be the person to contact should the primary point of contact is not available, or no longer employed by the community.

B.) Village/Town/County Profile

Complete the population box. State the most current population figure for your community based on an official means of tracking (i.e., US Census). Indicate when this population was, "as of". If your daytime population is significantly different than your residential population (major employers), indicate this number if known as well, and cite your source.

In this section please provide a profile of your community. Provide information specific to your community that was not provided in the risk assessment such as:

- ✓ Location within Saratoga County
- ✓ Date of Incorporation
- ✓ Brief history
- ✓ Geographical area
- ✓ Climate
- ✓ Growth Rate
- ✓ Development trends and Future Development (i.e., pending/approved major future residential/commercial development, infrastructure, etc.)
- ✓ Governing body format

For example:

<u>Location</u>: The City of Arcata is located on California's redwood coast, approximately 760 miles north of Los Angeles and 275 miles north of San Francisco. The nearest seaport is Eureka, five miles south on Humboldt Bay. Arcata is the home of Humboldt State University and is situated between the communities of McKinleyville to the north and Blue Lake to the east. It sits at the intersection of US Highway 101 and State Route 299.

<u>Brief History</u>: As the California gold rush brought gold fever to the interior mountains of northern California, the Arcata area was settled in the 1850s as a supply center for miners. As the gold rush died down, timber and fishing became the major resource based economy of the area. Arcata was incorporated in 1858 and by 1913 the Humboldt Teachers College, a predecessor to today's Humboldt State University was founded in Arcata. Recently, the presence of the college has come to shape Arcata's population into a young, liberal, and educated crowd. In 1981 Arcata developed the Arcata Marsh and Wildlife sanctuary, an innovative environmentally friendly, sewage treatment enhancement system. Its multiple uses include recreation, education, wildlife refuge along the Pacific Flyway, and wastewater treatment.

<u>Date of Incorporation</u>: 1858

Climate: Arcata's weather is typical of the Northern California coast, with mild summers and cool, wet winters. It rarely freezes in the winter and it is rarely hot in the summer. Annual average rainfall is over 40 inches, with 80% of that falling in the six-month period of November through April. The average year-round temperature is 59 degrees. Humidity averages between 72 and 87 percent. Prevailing winds are from the north, and average 5 mph.

Governing body format: The City of Arcata is governed by a five-member City Council. The City consists of 6 departments: Finance, Environmental Services, Community Development, Public Works, Police and the City Manager's Office. The City has 13 Committees, Commissions and Task Forces, which report to the City Council.

Growth/Development trends and Future Development: Based on the data tracked by the California Department of Finance, Arcata has experienced a relatively flat rate of growth. The overall population has increased only 3.4% since 2000 and has averaged 0.74% per year from 1990 to 2007. With this rate of growth, the anticipated development trends for Arcata are considered low to moderate, consisting of primarily residential development. The majority of recent development within the City of Arcata has been infill development. Residentially, there has been a focus on affordable housing and a push for more secondary mother-in-law units on properties. Another characteristic of development is the adaptive use of former mill sites.

California state law requires that every county and city prepare and adopt a comprehensive long-range plan to serve as a guide for community development. The plan must consist of an integrated and internally consistent set of goals, policies, and implementation measures. In addition, the plan must focus on issues of the greatest concern to the community and be written in a clear and concise manner. City actions, such as those relating to land use allocations, annexations, zoning, subdivision and design review, redevelopment, and capital improvements, must be consistent with such a plan The City of Arcata adopted its general plan pursuant to this state mandate in July of 2000. Future growth and development within the City of Arcata will be managed as identified in its general Plan.

C.) Natural Hazard Event History:

List in chronological order (most recent first) any natural hazard event that has caused measurable impact to your Community. "Measurable impact" means that the event required response and incurred expenses and/or losses beyond usual levels. Please do not limit this to only declared disasters that impacted your community. Include the date of the event and the known or ***estimated*** dollar amount of damage it caused. Please refer to the Previous Events Matrix for a summary of natural hazard events within Saratoga County. For more detail, refer to the Draft Risk Assessment (Hazard Profiles) in Section 5.4 of the Plan. Sources of damage information could include:

- Preliminary damage estimates (PDA's) filed by your community to County and NYSEMO
- Insurance claims data
- Newspaper archives
- Other plans/documents that deal with emergency management (i.e., safety elements, emergency response plans)

Do not be afraid to make an estimate based on your interpretation of the risk assessment, and personal knowledge of past events. Rest assured that this information is not readily available at the local level, so estimations are completely acceptable. If you are making an estimate, indicate: "damages estimated

at___". If you are not comfortable making an estimate, then just state that "the information is not available".

Also under this section, indicate whether or not your community has any FEMA identified Repetitive Flood Loss (RL) properties and Severe Repetitive Loss properties (See Summary of Losses Matrix). A repetitive Loss property is any property that has had 2 or more flood insurance claims paid in excess of $1000 in any rolling 10-year period since 1978. If you have identified RL properties, indicate the number. If you have none, indicate "none". Next, indicate the number (if any) of your Repetitive Loss structures have been mitigated. Mitigated for this exercise means, flood protection has been provided to the structure from the source of flood damage potential. Repetitive Flood Loss statistics are posted on the Shared website in the General Folder.

According to section 1361A of the National Flood Insurance Act, as amended (NFIA), 42 U.S.C. 4102a, a severe repetitive loss property is defined as a residential property that is covered under an NFIP flood insurance policy and:

- Has at least four NFIP claim payments (including building and contents) over $5,000 each, and the cumulative amount of such claims payments exceeds $20,000; or
- For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.
- For both of the above, at least two of the referenced claims must have occurred within any 10-year period, and must be greater than 10 days apart.

Please note: The severe repetitive loss properties identified in the Summary of Losses Matrix were based only on the following criteria: properties with 4 or more losses with payments equal or greater than $20,000.

D.) Natural Hazard Risk/Vulnerability Risk Ranking:

Under this step, a ranking of risk will be performed as it pertains to your community. A county –wide risk ranking will be performed for the entire planning area during the Annex workshop and will be included in the risk assessment chapter of Volume 1 of the plan. However, each municipality will have differing degrees of risk exposure and vulnerability aside from the whole, and therefore will need to rank the degree of risk to each hazard separate from the County. This will allow for the appropriate selection and prioritization of initiatives that will reduce the highest levels of risk for each municipality. The exact same methodology that will be applied to the county-wide risk ranking will be applied to each planning partner. This will assure consistency in the overall ranking of risk.

This risk ranking exercise serves two purposes: To describe the probability of occurrence for each hazard and to describe the impact each would have on the people, property and economy of Saratoga County. Estimates of risk for Saratoga County were developed using methodologies promoted by FEMA's hazard mitigation planning guidance and generated by FEMA's HAZUS-MH risk assessment tool.

This risk ranking exercise works under the following parameters:

- The DMA 2000 hazard mitigation program focuses on loss reduction to improved property, critical facilities and critical infrastructure. This is not to say that FEMA is not concerned about

life safety issues, because they are. However, these mitigation programs focus on property as, generally, life safety initiatives are addressed in the preparedness and response components of FEMA and DHS Emergency Management programs.

- To be able to quantitatively rank risk, you must be able to generate measurable components to quantify. For improved property, this is fairly easy in that you apply an estimated damage function, to a determined value of property and you get a loss estimate. Since buildings don't voluntarily move, you can inventory buildings at risk based on their location to determine exposure. These approaches are measurable, quantifiable, and regionally consistent. The same can not be said for less tangible components such as people or economy.

- The reason we want to attempt to quantitatively rank risk is create a consistent platform that can be justified for all the partners in this planning effort. A more subjective approach eliminates consistency. Regional consistency is a primary objective for multi-jurisdictional planning effort. By having quantifiable results that have been generated using substantiated data, you are better able to justify initiatives and their priorities.

PROBABILITY OF OCCURRENCE

The probability of occurrence of a hazard event provides an estimation of how often the event occurs. This is generally based on the past hazard events that have occurred in the area and the forecast of the event occurring in the future. This is done by assigning a probability factor, which is based on yearly values of occurrence. The numerical value assigned to each category will be used to determine the risk rating of each hazard. Table 1 provides a place to list the probability of occurrence for each hazard as it pertains to your community. This would be the occurrence of an event that has caused property damage within your jurisdiction. These values will be assigned by high, medium and low occurrence:

- Frequent — Hazard event is likely to occur within 25 years **(Numerical value 3)**
- Occasional — Hazard event is likely to occur within 100 years **(Numerical value 2)**
- Rare — Hazard event is not likely to occur within 100 years **(Numerical value 1)**

For example: If you community has experienced 2 damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your community has experienced no damaging floods in the last 100 years, your probability of occurrence for flooding is low, and scores a 1 under this category.

TABLE 1.
PROBABILITY OF HAZARDS

Hazard Event	Probability	Numerical Value
Drought		
Earthquake		
Flood		
Ground Failure		
Severe Storm		
Severe Winter Storm/Extreme Cold		

Please note: Your jurisdiction's hazard frequency should not be higher than the County's.

IMPACT

The impact of each hazard was divided into three categories: people, property and economy. These categories were assigned weighted values: Impact on people was given a weighted factor of 3; impact on property was given a weight of 2 and impact on the economy was given a weighted factor of 1. Following the instructions below, complete Tables 2, 3 and 4 to summarize the impacts for each hazard. Please use the Summary of Losses Matrix to complete impact on people, property and economy.

Impact on People

For impact of people, consider the percentage of the total population in your jurisdiction that may be exposed to the hazard with the potential to experience a measurable impact (i.e., injury or death). For hazards with defined hazard zones, begin with the population located in this zone. However, exposure should not be limited to only those who reside in a defined hazard zone, but everyone who may be affected by the effects of a hazard event (e.g., people are at risk while traveling in flooded areas, or their access to emergency services is compromised during an event). The degree of that impact will vary and is not measurable. For hazards without defined hazard zones such as Extreme Temperature, consider the percentage of low income/elderly population in the jurisdiction that could potentially be impacted by the hazard event. For this step, use the following thresholds to measure impact on people:

- High = 30% or more of people exposed to a hazard with potential for measurable impact due to their extent and location.
- Medium = 15% to 29% of people exposed to a hazard with potential for measurable impact due to their extent and location.
- Low = 14% or less of people exposed to a hazard with potential for measurable impact due to their extent and location.

For example, if 30% or more of your population is exposed to a hazard with the potential to be measurably impacted, then the impact on people for that hazard is high. No impact would mean that there is no exposure to a hazard (i.e., droughts do not measurably impact people). A numerical value has been assigned for impact based on the following definitions. Insert the numerical value in Table 2 for the associated hazard:

- High Impact (numerical value = 3)
- Medium Impact (numerical value = 2)
- Low Impact (numerical value = 1)

To calculate the Total Impact on People, multiply the numerical value by the weighted value of 3. Insert this number into Table 2.

TABLE 2. HAZARD IMPACT ON PEOPLE			
Hazard Event	**Impact** (H, M or L)	**Numerical Value** (H = 3; M = 2; L = 1)	**Total Impact on People:** Multiply Numerical Value by weighted value of 3*
Drought			
Earthquake			
Flood			
Ground Failure			
Severe Storm			
Severe Winter Storm/Extreme Cold			

Notes: H = High; M = Medium; L = Low

* For example, if Impact is Medium, the Numerical Value is 2 and the Total Impact on People equals 6 [2 x 3 (the weighted value for people) = 6].

Impact on Property

For the purposes of this exercise, property is defined as a physical structure or infrastructure in your community and a building is defined as: "an improvement to real property that has 4 walls, a roof, and a replacement cost value of $1,000 or more." Please note that loss of crops, loss of services and loss of use of land is covered under *Impact on Economy*.

For impact on property, consider the replacement value of the general building stock (GBS) and infrastructure exposed to a hazard with the reasonable potential to experience a measurable impact, in comparison to the total replacement value of GBS and infrastructure in your community. For this step, use the following thresholds to measure property impact:

- High = Property exposure (replacement value of GBS and infrastructure exposed to this hazard) is 30% or more of the total GBS replacement value for your community.
- Medium = Property exposure (replacement value of GBS and infrastructure exposed to this hazard) is 15% to 29% of the total GBS replacement value for your community.
- Low = Property exposure (replacement value of GBS and infrastructure exposed to this hazard) is 14% or less of the total GBS replacement value for your community.

For example, if the exposure value of property is 20% of the total replacement cost value for your community, the impact on property is medium. No impact would mean that that there is no exposure to the hazard or that the impact of the hazard typically will not cause damage to property (i.e., droughts do not damage buildings; therefore they have no impact on buildings).

A numerical value has been assigned for impact based on the following definitions. Insert the numerical value in Table 3 for the associated hazard:

- High Impact (numerical value = 3)
- Medium Impact (numerical value = 2)
- Low Impact (numerical value = 1)

To calculate the Total Impact on Property, multiply the numerical value by the weighted value of 2. Insert this number into Table 3.

TABLE 3.
HAZARD IMPACT ON PROPERTY

Hazard Event	Impact (H, M or L)	Numerical Value (H = 3; M = 2; L = 1)	Total Impact on Property: Multiply Numerical Value by weighted value of 2*
Drought			
Earthquake			
Flood			
Ground Failure			
Severe Storm			
Severe Winter Storm/Extreme Cold			

Notes: H = High; M = Medium; L = Low
* For example, if Impact is Medium, the Numerical Value is 2 and the Total Impact on Property equals 4 [2 x 2 (the weighted value for property) = 4].

Impact on Economy

For impact on economy, consider the estimated losses from a major event of each hazard. Losses include but are not limited to GBS damages, agricultural losses, business interruption, impacts to tourism and tax base for the local community. Damages to GBS are a measurable component to the equation, using a damage function to established building replacement values. Other economic components such as loss of use, functional downtime and social economic factors are less measurable with a high degree of uncertainty. Please use your best judgment to determine the economic losses your community experiences due to a particular hazard. For this step, use the following thresholds to measure economic impact:

- High = Losses (including GBS damages, agricultural losses, business interruption) are 20% or more of the total GBS replacement value for your community.
- Medium = Losses (including GBS damages, agricultural losses, business interruption) are 10% to 19% of the total GBS replacement value for your community.
- Low = Losses (including GBS damages, agricultural losses, business interruption) are 9% or less of the total GBS replacement value for your community.

For example, if the loss potential is 20% or more of the total replacement cost value for your community, the impact on property is high. No impact would mean that there is no exposure to the hazard, or that that the occurrence of the hazard would not cause measurable damages to improved property.

A numerical value has been assigned for impact based on the following definitions. Insert the numerical value in Table 4 for the associated hazard:

- High Impact (numerical value = 3)
- Medium Impact (numerical value = 2)
- Low Impact (numerical value = 1)

To calculate the Total Impact on Economy, multiply the numerical value by the weighted value of 1. Insert this number into Table 4.

TABLE 4.
HAZARD IMPACT ON ECONOMY

Hazard Event	**Impact** (H, M or L)	**Numerical Value** (H = 3; M = 2; L = 1)	**Total Impact on Economy =** Numerical Value x weighted value of 1*
Drought			
Earthquake			
Flood			
Ground Failure			
Severe Storm			
Severe Winter Storm/Extreme Cold			

Notes: H = High; M = Medium; L = Low

* For example, if Impact is Medium, the Numerical Value is 2 and the Total Impact on Economy equals 2 [2 x 1 (the weighted value for economy) = 2].

RISK RANKING

The risk ranking for each hazard is determined by multiplying the assigned numerical value for probability by the sum of the weighted numerical values of impact on people; property and economy (see Table 5). The following equation shows the risk rating calculation:

Risk Rating = Probability x Impact (people + property + economy)

TABLE 5.
RISK RATING

Hazard Event	Probability (Table 1)	Impact				Total= (Probability x Impact)
		People (Table 2)	Property (Table 3)	Economy (Table 4)	Total Impact (people + property + economy)	
Drought						
Earthquake						
Flood						
Ground Failure						
Severe Storm						
Severe Winter Storm/Extreme Cold						

Once Table 5 has been completed above, complete the table under Section D of your Template.

**Please be advised that it is not the intent of this exercise to eliminate subjectivity based on your knowledge of the history of natural hazard events within your jurisdiction. If this risk ranking exercise generates results other that what you know based on substantiated data and documentation, you may alter this ranking based on this knowledge. If this is the case, please note this fact in the comments at the end of the Template. Remember, one of the purposes of this exercise is to support your selection and prioritization of initiatives in your Plan. If you identify an initiative with a high priority that mitigates the risk of a hazard you have ranked low, that project will not be competitive in the grant arena.

Note: For every "high" ranked hazard, FEMA would like to see at least one mitigation action.

E.) Capability Assessment

.) Legal and regulatory capability

Describe the legal authorities available to your community and/or enabling legislation at the state level affecting all types of planning and land management tools that can support hazard mitigation initiatives. Complete the table as indicated. Which of these regulatory tools does your community have available. If you do not have the regulatory tool as described, indicate as such. This may help you identify an initiative.

For the purposes of this section, "prohibitions" and "higher jurisdictional authority" are defined as follows:

✓ *Prohibitions*: Are there any regulations or laws that may prohibit an initiative you have selected. Examples would be: floodway regulations, Endangered Species Act or Clean Water act regulations, etc.

✓ *Higher Regulatory Authority*: Are there regulations that may impact your initiative that are enforced or administered by another agency. For example; a state agency, special purpose district.

Under the comments section, please site the code or ordinance # and its data of adoption.

2.) Administrative and Technical Capability

This section requires you to take inventory of the staff/personnel resources available to your community to help your community in hazard mitigation planning and implementation of specific mitigation actions. This information can be utilized in the preparation of the mitigation strategy for your community

3.) Financial Resources

Identify what financial resources are available to your community to aid you in the implementation of possible mitigation initiatives. The Hazard Mitigation Grant Program and the Pre-disaster mitigation grant program are not listed here since it is assumed that the grant programs will be pursued since this plan is a prerequisite for these programs. "Accessible" means this is a resource that is accessible to your community, or there are limitations or prerequisites that may hinder your eligibility for this resource.

4.) Community Mitigation Related Classifications

Program	Classification	Date
Community Rating System (CRS)		
Building Code Effectiveness Grading Schedule (BCEGS)		
ISO Public Protection Program		
Storm Ready		
Firewise		

The classifications listed above and in Table E.4 are related to your community's effectiveness in providing services that may impact your vulnerability to the natural hazards identified.

The above referenced classifications can be viewed as a gauge of this community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation). These classifications are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. Classifications range on a scale of 1 to 10 with class one being the best possible classification, and class 10 representing no classification benefit. Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at http://www.isomitigation.com/ppc/0000/ppc0001.html
- The National Weather Service Storm Ready website at http://www.weather.gov/stormready/howto.htm
- The National Firewise Communities website at http://firewise.org/

If your community does not participate in a program, indicate NA in the appropriate field. Access to the various classifications will be provided through technical assistance.

F.) Hazard Mitigation Action Plan:

Complete the table to include those initiatives your community would like to pursue with this plan. Some important points to remember when completing this section:

- ✓ Know what is, and is not grant eligible under the Hazard Mitigation Grant Program (HMGP) and Pre-disaster Mitigation Grant Program (PDM). (*See attachment "B"*). It is key to remember, that listing HMGP or PDM as a potential funding source for an ineligible project will be a huge red flag once this plan goes through review.
- ✓ Know the overall goals, objectives and guiding principles of the Saratoga County Natural Hazard Mitigation Plan.
- ✓ Identify projects where the benefits will exceed the costs (see section G).
- ✓ Include any project that your community has committed to pursuing regardless of grant eligibility.
- ✓ Refer to the ***Mitigation Catalog*** for mitigation options you might want to consider that are hazard specific and consistent with the goals and objectives of the plan.

A lot of detail is not needed in the description of the initiative. This will come when you apply for the project grant. Provide enough information to identify the project's scope and impact. However, each initiative will need to be described such that it clearly illustrates how the action will reduce the risk for the targeted hazard(s). For example:

- ✓ Address NFIP identified Repetitive Loss properties. Through targeted mitigation, acquire, relocate or retrofit the 5 repetitive loss structures within Anytown as funding opportunities become available.
- ✓ Non-structural, seismic retrofit of Arcata City Hall.
- ✓ Floodplain Property acquisition in Freylands subdivision.
- ✓ Assess and enhance the County flood warning capability by joining the NOAA "Storm Ready" program.

Also, if you have projects that are not HMGP or PDM grant eligible, but do mitigate part or the entire hazard and may be eligible for other grant programs sponsored by other agencies, include them in this section. Also, a hazard specific project ***is not*** required for each hazard you have ranked in order to be eligible for an HMGP project grant after a "declared" disaster. In other words, if you have not identified an earthquake related project, and an earthquake occurs that causes damage within your community, you are not discounted from HMGP project grant eligibility. The key here is to identify at least 1 initiative for your highest ranked risk(s).

Identify the hazard(s) the initiative will mitigate and illustrate who will be the lead in administering the project. This will most likely be your governing board. Identify funding source(s) for project. If it is a grant, include the funding source(s) for the cost share. Refer to your capability assessment to identify possible sources of funding. Indicate the time line as "short term" (1 to 5 years) or "long term" 5 years or greater. Identify by number the Saratoga County Hazard Mitigation plan objective(s) the project will meet. There is no need to list the goals since we made sure that our objectives would meet all goals through the selection process. These have been provided in the Steering Committee meeting minutes that were forwarded to you in the past. Technical assistance will be available to your community in completing this section during the technical assistance visit.

G.) Analysis of Mitigation Actions

Complete the table to summarize the participant's mitigation actions by hazard of concern and the six mitigation types to illustrate that the jurisdiction has selected a comprehensive range of actions/projects. The six mitigation types include the following:

1. **Prevention:** Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
2. **Property Protection:** Actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
3. **Public Education and Awareness:** Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.
4. **Natural Resource Protection:** Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

5. **Emergency Services:** Actions that protect people and property, during and immediately following, a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.
6. **Structural Projects:** Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

H.) Prioritization of Mitigation Initiatives

Complete the information in table G. The purpose of this exercise is to prioritize your initiatives in a matter such that meets the requirements of section 201.6 of 44CFR. A brief description of each category is as follows:

- Initiative #: indicate the number of the initiative from Table F.
- # of Objectives met: How many objectives will the initiative meet?
- Benefits: Enter high, medium or low as defined below.
- Costs: Enter high medium or low as defined below. **If you know the estimated cost of a project because it is part of an existing/on-going program, indicate the amount.**
- Do benefits exceed the cost?: Enter yes or no. This is an anecdotal assessment. For example, a high benefit over a medium cost would = yes.
- Is the project grant eligible? Refer to attachment A.
- Can Project be funded under existing program budgets? Yes or no. in other words, is this initiative currently budgeted for? Or would it require a new budget authorization or funding from another source such as grants?
- Priority: List the initiative priority as high, medium or low as defined below.

Benefit/Cost Review

This is not intended to be a detailed benefit/cost analysis that is required of HMGP/PDM project grants. This is a "review" to determine that the initiatives you have identified meet one of the primary objectives of the Disaster Mitigation Act. What this exercise hopes to achieve is to identify projects where the probable benefits ***will not*** exceed the probable costs of this project. When performing an anecdotal B/C review, use the following parameters to define the benefits and costs of a proposed project as high, medium or low.

Costs

High: Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Medium: Could budget for under existing work-plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.

Low: Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.

Benefits

High: Project will have an immediate impact on the reduction of risk exposure to life and property.

Medium: Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.

Low: Long term benefits of the project are difficult to quantify in the short term.

In using this approach, projects that result in positive benefits versus costs categorical ratios (i.e., high over high, high over medium, medium over low, etc.), will be considered cost beneficial and should be prioritized accordingly.

Prioritize you projects as "high," "medium" or "low" priorities as defined below.

Remember, it is not the intent of this exercise to be overly technical. It is a "review" exercise meant to provide additional information in identifying and prioritizing mitigation initiatives.

Explanation of priorities

- **High Priority**: A project that meets multiple plan objectives, benefits exceeds cost, has funding secured under existing programs or authorizations, or is grant eligible, and can be completed in 1 to 5 years (i.e., short term project) once project is funded.

- **Medium Priority**: A project that meets at least 1 plan objective, benefits exceeds costs, funding has not been secured and would require a special funding authorization under existing programs, grant eligibility is questionable, and can be completed in 1 to 5 years once project is funded.

- **Low Priority**: Any project that will mitigate the risk of a hazard, benefits exceed costs, funding has not been secured, project is not grant eligible, and time line for completion is considered long term (5 to 10 years).

I.) Future needs to better understand risk/vulnerability

In this section, identify any future studies, analyses, reports, or surveys your community needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates such as EPA's Bio-terrorism assessment requirement for Water District.

J.) Hazard Area Extent and Location:

Maps will be provided in this section to indicate the hazard area extent and locations.

K.) Additional comments:

Use this section to add any additional information pertinent to hazard mitigation and your district not covered in this template.

Attachment "A"

Hazard Mitigation Grant Program (HMGP)
Pre-Disaster Mitigation Grant Program (PDM)

FACT SHEET

I. HAZARD MITIGATION GRANT PROGRAM (HMGP)

What is the Hazard Mitigation Grant Program?

Authorized under Section 404 of the Stafford Act, the Hazard Mitigation Grant Program (HMGP) administered by the Federal Emergency Management Agency (FEMA) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

Who is eligible to apply?

Hazard Mitigation Grant Program funding is only available to applicants that reside within a Presidentially declared disaster area. Eligible applicants are

- State and local governments
- Indian tribes or other tribal organizations
- Certain non-profit organizations

What types of projects can be funded by the HMGP?

HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters. Projects must provide a long-term solution to a problem, for example, elevation of a home to reduce the risk of flood damages as opposed to buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. Examples of projects include, but are not limited to:

- Acquisition of real property for willing sellers and demolition or relocation of buildings to convert the property to open space use
- Retrofitting structures and facilities to minimize damages from high winds, earthquake, flood, wildfire, or other natural hazards
- Elevation of flood prone structures
- Development and initial implementation of vegetative management programs
- Minor flood control projects that do not duplicate the flood prevention activities of other Federal agencies
- Localized flood control projects, such as certain ring levees and floodwall systems, that are designed specifically to protect critical facilities
- Post-disaster building code related activities that support building code officials during the reconstruction process

What are the minimum project criteria?

There are five issues you must consider when determining the eligibility of a proposed project.

- Does your project conform to your State's Hazard Mitigation Plan?
- Does your project provide a beneficial impact on the disaster area? i.e. the State
- Does your application meet the environmental requirements?
- Does your project solve a problem independently?
- Is your project cost-effective?

II. PRE-DISASTER MITIGATION GRANT PROGRAM (PDM)

What is the Pre-Disaster Mitigation competitive grant program?

The Pre-Disaster Mitigation (PDM) competitive grant program provides funds to State, Tribal, and local governments for pre-disaster mitigation planning and projects primarily addressing natural hazards. Cost-Effective pre-disaster mitigation activities reduce risk to life and property from natural hazard events before a natural disaster strikes, thus reducing overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. Funds will be awarded on a competitive basis to successful Applicants for mitigation planning and project applications intended to make local governments more resistant to the pacts of future natural disasters.

Who can apply for a PDM competitive grant?

Eligible PDM competitive grant Applicants include State and Territorial emergency management agencies, or a similar office of the State, District of Columbia, U.S. Virgin Islands, Commonwealth of Puerto Rico, Guam, American Samoa, Commonwealth of the Northern Mariana Islands, and Federally-recognized Indian Tribal governments.

- ✓ Eligible Sub-applicants include State agencies; Federally-recognized Indian Tribal governments; and local governments (including State recognized Indian Tribal governments and Alaska native villages).
- ✓ Applicants can apply for PDM competitive grant funds directly to FEMA, while Sub-applicants must apply for funds through an eligible Applicant.
- ✓ Private non-profit organizations are not eligible to apply for PDM but may ask the appropriate local government to submit an application for the proposed activity on their behalf.

What are eligible PDM projects?

Multi-hazard mitigation projects must primarily focus on natural hazards but also may address hazards caused by non-natural forces. **Funding is restricted to a maximum of $3M Federal share per project.** The following are eligible mitigation projects:

- ✓ Acquisition or relocation of hazard-prone property for conversion to open space in perpetuity;
- ✓ Structural and non-structural retrofitting of existing buildings and facilities (including designs and feasibility studies when included as part of the construction project) for wildfire, seismic, wind or flood hazards (e.g., elevation, flood proofing, storm shutters, hurricane clips);
- ✓ Minor structural hazard control or protection projects that may include vegetation management, Stormwater management (e.g., culverts, floodgates, retention basins), or shoreline/landslide stabilization; and,
- ✓ Localized flood control projects, such as certain ring levees and floodwall systems, that are designed specifically to protect critical facilities and that do not constitute a section of a larger flood control system.

Mitigation Project Requirements

Projects should be technically feasible (see Section XII. Engineering Feasibility) and ready to implement. Engineering designs for projects must be included in the application to allow FEMA to assess the effectiveness and feasibility of the proposed project. The project cost estimate should complement the engineering design, including all anticipated costs. FEMA has several formats that it uses in cost estimating for projects. Additionally, other Federal agencies' approaches to project cost estimating can be used as long as the method provides for a complete and accurate estimate. FEMA can provide technical assistance on engineering documentation and cost estimation (see Section XIII.D. Engineering Feasibility).

Mitigation projects also must meet the following criteria:

1. Be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster, consistent with 44 CFR 206.434(c)(5) and related guidance, and have a Benefit-Cost Analysis that results in a benefit-cost ratio of 1.0 or greater (see Section X. Benefit-Cost Analysis). **Mitigation projects with a benefit-cost ratio less than 1.0 will not be considered for the PDM competitive grant program**;

2. Be in conformance with the current FEMA-approved State hazard mitigation plan;

3. Solve a problem independently or constitute a functional portion of a solution where there is assurance that the project as a whole will be completed, consistent with 44 CFR 206.434(b)(4);

4. Be in conformance with 44 CFR Part 9, Floodplain Management and Protection of Wetlands, and 44 CFR Part 10, consistent with 44 CFR 206.434(c)(3);

5. Not duplicate benefits available from another source for the same purpose, including assistance that another Federal agency or program has the primary authority to provide (see Section VII.C. Duplication of Benefits and Programs);

6. Be located in a community that is participating in the NFIP if they have been identified through the NFIP as having a Special Flood Hazard Area (a FHBM or FIRM has been issued). In addition, the community must not be on probation, suspended or withdrawn from the NFIP; and,

7. Meet the requirements of Federal, State, and local laws.

What are examples of Ineligible PDM Projects?

The following mitigation projects are ***not*** eligible for the PDM program:

- ✓ Major flood control projects such as dikes, levees, floodwalls, seawalls, groins, jetties, dams, waterway channelization, beach nourishment or re-nourishment;
- ✓ Warning systems;
- ✓ Engineering designs that are not integral to a proposed project;
- ✓ Feasibility studies that are not integral to a proposed project;
- ✓ Drainage studies that are not integral to a proposed project;
- ✓ Generators that are not integral to a proposed project;
- ✓ Phased or partial projects;

- ✓ Flood studies or flood mapping; and,
- ✓ Response and communication equipment.

9.X TOWN OF XXXXX

This section presents the jurisdictional annex for the Town of XXXXX.

A.) HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mailing Address: Phone: E-mail:	Name/Title: Mailing Address: Phone: E-mail:

B.) TOWN PROFILE

Population

INSERT INFO HERE

Location

INSERT INFO HERE

Climate

INSERT INFO HERE

Brief History

INSERT INFO HERE

Governing Body Format

INSERT INFO HERE

Growth/Development Trends

Please identify and insert any major residential/commercial development and major infrastructure development that are identified for the next five (5) years. If there are no specific plans that exist, please state this.

New Development/Potential Development in Municipality					
Property Name	Type Residential or Commercial	Number of Structures	Address	Block and Lot	Description/Status

C.) NATURAL HAZARD EVENT HISTORY SPECIFIC TO THE TOWN

Type of Event	FEMA Disaster # (if applicable)	Date	Primary Damage Assessment

Number of FEMA Identified Repetitive Flood Loss Properties: X
Number of FEMA Identified Severe Repetitive Flood Loss Properties: X

Source: FEMA Region 2, November 2008

D.) NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

Rank #	Hazard Type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard [a,c]	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking [b]

a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
b. High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 16-30
Low = Total hazard risk ranking below 15
c. The valuation of general building stock and loss estimates determined in Saratoga County were based on the default general building stock database provided in HAZUS-MH MR3 (RSMeans 2006).
d. Severe storm and severe winter storm hazard 500-year MRP loss estimate is structural value only; does not include the value of contents. For severe winter storm, the loss estimate is 5% of total general building stock value.
e. Loss estimates for both structure and contents (500-year MRP for the flood hazard and 2,500-year MRP for the earthquake hazard).
f. 0% of the Town's general building stock is located within the landslide hazard area and thus vulnerable.

E.) CAPABILITY ASSESSMENT

This section identifies the following capabilities of the local jurisdiction:

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification.

E.1) Legal and Regulatory Capability

Regulatory Tools (Codes, Ordinances., Plans)	Local Authority (Y or N)	Prohibitions (State or Federal) (Y or N)	Higher Jurisdictional Authority (Y or N)	State Mandated (Y or N)	Code Citation (Section, Paragraph, Page Number, date of adoption)
1) Building Code					
2) Zoning Ordinance					
3) Subdivision Ordinance					
4) NFIP Flood Damage Prevention Ordinance (if you are in the NFIP, you **must** have this.)					
5) Growth Management					
6) Floodplain Management / Basin Plan					
7) Stormwater Management Plan/Ordinance					
8) Comprehensive Plan / Master Plan/ General Plan					
9) Capital Improvements Plan					
10) Site Plan Review Requirements					
11) Open Space Plan					
12) Economic Development Plan					
13) Emergency Response Plan					
14) Post Disaster Recovery Plan					
15) Post Disaster Recovery Ordinance					
16) Real Estate Disclosure req.					
17) Other [Special Purpose Ordinances (i.e., critical or sensitive areas)]					

E.2) Administrative and Technical Capability

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
1) Planner(s) or Engineer(s) with knowledge of land development and land management practices		
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure		
3) Planners or engineers with an understanding of natural hazards		
4) NFIP Floodplain Administrator (if you are in the NFIP, you **must** have one.)		
5) Surveyor(s)		
6) Personnel skilled or trained in "GIS" applications		
7) Scientist familiar with natural hazards in the Town of XXXXX.		
8) Emergency Manager		
9) Grant Writer(s)		
10) Staff with expertise or training in benefit/cost analysis		

E.3) Fiscal Capability

Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
1) Community development Block Grants (CDBG)	
2) Capital Improvements Project Funding	
3) Authority to Levy Taxes for specific purposes	
4) User fees for water, sewer, gas or electric service	
5) Impact Fees for homebuyers or developers of new development/homes	
6) Incur debt through general obligation bonds	
7) Incur debt through special tax bonds	
8) Incur debt through private activity bonds	
9) Withhold public expenditures in hazard-prone areas	
10) State mitigation grant programs (e.g. NYSDEC, NYCDEP)	
11) Other	

E.4) Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	NP	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	NP	N/A
Public Protection	NP	N/A
Storm Ready	NP	N/A
Firewise	NP	N/A

Note: N/A = Not applicable. NP = Not participating. - = Unavailable

The classifications listed above relate to the community's effectiveness in providing services that may impact it's vulnerability to the natural hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class one (1) being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at http://www.isomitigation.com/ppc/0000/ppc0001.html
- The National Weather Service Storm Ready website at http://www.weather.gov/stormready/howto.htm
- The National Firewise Communities website at http://firewise.org/

F.) PROPOSED HAZARD MITIGATION INITIATIVES

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Support agencies	Estimated Cost	Sources of Funding	Timeline

Notes: Short term = 1 to 5 years. Long Term= 5 years or greater. OG = On going program. DOF = Depending on funding. NA = Not applicable. PDM = Pre-Disaster Mitigation Grant Program.
*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure?

G.) ANALYSIS OF MITIGATION ACTIONS

This table summarizes the participant's mitigation actions by hazard of concern and the six mitigation types to illustrate that the Town has selected a comprehensive range of actions/projects.

Hazard of Concern	Mitigation Type					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Earthquake						
Flooding (riverine, flash, coastal and urban flooding)						
Ground Failure						
Severe Storms (windstorms, thunderstorms, hail, lightning and tornados)						
Severe Winter Storm (heavy snow, blizzards, ice storms)						

Notes:

1. **Prevention:** Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
2. **Property Protection:** Actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
3. **Public Education and Awareness:** Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.
4. **Natural Resource Protection:** Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
5. **Emergency Services:** Actions that protect people and property, during and immediately following, a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.
6. **Structural Projects:** Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

H.) PRIORITIZATION OF MITIGATION INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)

Notes: H = High. L = Low. M = Medium. N = No. N/A = Not applicable. Y = Yes.
*This initiative has a Medium priority based on the prioritization scheme used in this planning process (implementation based on grant funding), however it is recognized that addressing repetitive and severe repetitive loss properties is considered a high priority by FEMA and SEMO (as expressed in the State HMP), and thus shall be considered a High priority for all participants in the planning process.

Explanation of Priorities

- ***High Priority*** - A project that meets multiple objectives (i.e., multiple hazards), benefits exceeds cost, has funding secured or is an on-going project and project meets eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation Grant Program (PDM) programs. High priority projects can be completed in the short term (1 to 5 years).
- ***Medium Priority*** - A project that meets goals and objectives, benefits exceeds costs, funding has not been secured but project is grant eligible under, HMGP, PDM or other grant programs. Project can be completed in the short term, once funding is completed. Medium priority projects will become high priority projects once funding is secured.
- ***Low Priority*** - Any project that will mitigate the risk of a hazard, benefits do not exceed the costs or are difficult to quantify, funding has not been secured and project is not eligible for HMGP or PDM grant funding, and time line for completion is considered long term (1 to 10 years). Low priority projects may be eligible other sources of grant funding from other programs. A low priority project could become a high priority project once funding is secured as long as it could be completed in the short term.

  Prioritization of initiatives was based on above definitions: Yes

  Prioritization of initiatives was based on parameters other than stated above: Not applicable.

I.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

None at this time.

J.) HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map has been generated and is provided below for the Town of XXXXX to illustrate the probable areas impacted within the Town. This map is based on the best available data at the time of the preparation of this Plan, and is considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of XXXXX has significant exposure. The County maps are provided in the hazard profiles within Section 5.4, Volume I of this Plan.

INSERT MAP

K.) ADDITIONAL COMMENTS

No additional comments at this time.