SULLIVAN COUNTY COUNTY, TOWN, AND VILLAGE MULTI-JURISDICTIONAL

ALL HAZARD PRE-DISASTER MITIGATION PLAN

May 2004 Edition

(Updated July 2005)

Prepared by

Sullivan County Division of Public Works Department of Engineering 100 North Street Monticello, NY 12701

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i-iii
INTRODUCTION	iv-v
1. PLANNING PROCESS 1.1 COMMITTEE MEMBERS 1.2 PUBLIC PARTICIPATION 1.3 COORDINATION WITH AGENCIES	2-6 7-10
 2. RISK ASSESSMENT. 2.1 IDENTIFYING HAZARDS	13-29 30-46 47-50 50-52
 MITIGATION STRATEGY. ALL HAZARD/PRE-DISASTER MITIGATION GOALS. PLAN OF ACTION. PLAN MAINTENANCE PROCEDURES. 	57-58 59-61

TABLES

TABLE 1. SULLIVAN COUNTY PRE-DISASTER MITIGATION PLAN COMMITTEE MEMBERS	4
TABLE 2. RISK ASSESSMENT QUESTIONNAIRE RATING	54
TABLE 3. ALL HAZARD/PRE-DISASTER MITIGATION PLAN ACTION PLAN	61

FIGURES

FIGURE 1. PEAK ACCELERATION WITH 10% PROBABILITY OF EXCEEDENCE IN 50 YEARS	15
FIGURE 2. LANDSLIDE INCIDENCE LEVEL	21
FIGURE 3. TORNADO ACTIVITY IN THE UNITED STATES	25
FIGURE 4. OBSERVED FIRE DANGER CLASS	27
FIGURE 5. WIND ZONES IN THE UNITED STATES	28

APPENDICES

LAND AREA, SULLIVAN COUNTY, NEW YORK	.APPENDIX A
CRITICAL FACILITIES IN SULLIVAN COUNTY	.APPENDIX B
HAZMAT SITES & SPILLS 2003-2004	APPENDIX C
CHARTS: TOP 15 COUNTY, TOWN & VILLAGE HAZARDS, RESPONSIBILITIES,	
UPCOMING PROJECTS AND IMPACTED FACILITIES & GEOGRAPHIC AREAS	APPENDIX D
COUNTY, TOWN & VILLAGE PLAN ADOPTION RESOLUTIONS	.APPENDIX E
SPECIFIC EXAMPLE OF FLOOD DAMAGES	.APPENDIX F

EXECUTIVE SUMMARY

The following is a summary of the All Hazard/Pre-Disaster Mitigation Plan, which has been prepared in fulfillment of the requirements of the Pre-Disaster Mitigation (PDM) Grant agreement, between the New York State Emergency Management Office (SEMO) and Sullivan County. The planning process followed was in accord with the 44 Code of Federal Regulations described in Section 201.6 of the regulations entitled "Local Mitigation Plans". Hence, the process followed included but was not limited to the following key elements:

- Documentation of the Planning Process
- Risk Assessment
- Develop a Mitigation Strategy for Reducing Potential Losses
- Description of Pre-Disaster Mitigation Goals
- Providing a Plan of Action
- Public Participation
- Continued Maintenance of the Plan

The Sullivan County All Hazard/Pre-Disaster Mitigation Plan was prepared by the County's Division of Public Works under the supervision of the County's Hazard Mitigation Coordinator, in conjunction and as a sub-committee effort of the County's Comprehensive Emergency Management Planning/Local Emergency Planning Committee (SCEMP/LEPC).

i

The committee which provided input to the Plan was comprised of the heads of each Town and Village (Supervisors and Mayors), along with numerous other Town and Village officials. In addition, public input was obtained and incorporated through Town and Village Board Meetings and several special meetings held by the County.

The purpose of the plan was to develop a strategy and action plan for the implementation of Pre-Disaster mitigative measures to help reduce future losses due to natural and man-made hazards. On the basis of assessment of risks with respect to those that have had the most severe and repetitive impacts on the community, the Plan has identified goals and actions to be taken to reduce losses. In particular at this time to obtain the greatest degree of improvement using the limited resources that are available (biggest bang-for-the-buck), the following goals have been recommended:

- ✓ Reduce Impact of Ice Storms
- Reduce Impact of Winter Storms
- ✓ Reduce Impact of Floods
- ✓ Reduce Impact of Tornadoes
- ✓ Reduce Impact of Man-Made Hazards
 - Power Outage
 - Structural Fire
 - HAZMAT
- ii

Details as to parties responsible for implementing action are described within the plan. It is important to know that hazard mitigation is an evolving process. To this end the actions recommended in the Plan will address the most frequent and damaging events which include: **Ice Storms, Winter Storms, Floods, Tornadoes, and the Man-Made hazards of Power Outage, Structural Fire and HAZMAT**. In addition as the planning process has identified the need for more data and information concerning vulnerability of critical facilities, this has also been included in the recommendations for moving forward with productive actions towards decreasing future losses.

This plan has been adopted by the County of Sullivan and all of the multijurisdictional entities which include the:

Towns	<u>Villages</u>
Bethel Callicoon	Bloomingburg Jeffersonville
Cochecton	Liberty
Delaware	Monticello
Fallsburg	Woodridge
Forestburgh	Wurtsboro
Fremont	
Highland	
Liberty	
Lumberland	
Mamakating	
Neversink	
Rockland	
Thompson	
Tusten	

Copies of the instruments/resolutions for adoption can be found in Appendix E.

INTRODUCTION

The purpose of this Pre-Disaster Mitigation (PDM) Plan is to effectively reduce future disaster damages, public expenditure, private losses and a community's vulnerability to natural and man-made hazards. This plan provides an opportunity for Sullivan County, in conjunction with the communities that make up the County, to develop a comprehensive All Hazard-Pre-Disaster Mitigation Plan, which can be its best insurance against the impacts and costs of future disasters.

The Sullivan County Databook, prepared in December of 2002 by the Sullivan County Division of Planning and Community Development, states that Sullivan County was established through an act of the New York State Legislature on March 27, 1809. Over the recent decade, Sullivan County has seen its population increase from 69,277 persons in 1990 to 73,966 in 2000, a 6.8% increase. This makes Sullivan County one of the fastest growing counties in the State of New York. The County has a land area of 1,011 square miles and is located just beyond the New York metropolitan region. The terrain is generally hilly, with higher elevations in the northern portion of the County, ranging from 460 to over 3,000 feet above sea level.

Sullivan County is comprised of fifteen (15) Towns inclusive of the Towns of: Bethel, Callicoon, Cochecton, Delaware, Fallsburg, Forestburgh, Fremont, Highland, Liberty, Lumberland, Mamakating, Neversink, Rockland, Thompson and Tusten; and six (6) Villages namely: Bloomingburg, Jeffersonville, Liberty, Monticello, Woodridge, and Wurtsboro. In terms of the land area of Sullivan County, the Town of Mamakating is the largest with 100.0 square miles in total area, almost one-tenth of the total area of the County. While the Town of Delaware is the smallest town with a total area of 35.1 square miles and making up only 3.5% of the total area of Sullivan County. Appendix A titled, "Land Area, Sullivan County, New York", is added to the appendices to provide the total area (in square miles), acreage, and percent of the total County for each Town of Sullivan County.

The intentions of this plan are to meet the New York State and Federal requirements. Both Sullivan County and the Towns & Villages of Sullivan County will benefit from the planning and hazard mitigation grants that will aid in the implementation of the proposed ideas contained within the All Hazard/Pre-Disaster Mitigation Plan. The following are key documents which authorize and provide guidance for the preparation of this plan:

- Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended by Public Law 100-707
- Disaster Mitigation Act 2000
- 404 Hazard Mitigation Grant Program
- Code of Federal Regulations (CFR) 44 Parts 201 and 206
- Hazard Mitigation and Relocation Assistance Act of 1993
- FEMA 44 CFR Part 9 Floodplain Management and Protection of Wetlands and 44 CFR Part 10 - Environmental Considerations

۷

<u>1. PLANNING PROCESS</u>

The planning process generally followed for the development of this All Hazard/Pre-Disaster Mitigation Plan is consistent with the guidelines provided in the document entitled "State and Local Mitigation Planning, how-to guides" FEMA report 386-2. This document provides a step-by-step logical procedure for identifying hazards, profiling hazard events, creating an inventory of assets and estimating losses. In using this document we were able to better organize resources, assess risks, develop recommendations for pre-disaster mitigation measures, and also make recommendations for implementing the plan.

Also key to the development of an All Hazard/Pre-Disaster Mitigation Plan was the review of previous work which was completed by the County. In particular, the 1999 update to the County's Comprehensive Emergency Plan was reviewed to determine what aspects of this plan might be applicable to the All Hazard/Pre-Disaster Mitigation Plan. This document was prepared by the Sullivan County Emergency Management Committee/Local Emergency Planning Committee (SCEMP/LEPC).

The County's Comprehensive Emergency Management Plan contains the results of the hazard analysis which was performed by the Committee with the assistance of the State Emergency Management Office. This analysis utilized the States HAZNY program which is an automated interactive risk assessment tool that enables the quantitative assessment of risks. The HAZNY program facilitated the ranking of natural and man-made risks based upon the consideration of (1) the extent of areas impacted, (2) cascade effects, (3) frequency of occurrence, (4) amount of advance warning, (5) degree of impact, and (6) duration of events. The risk assessment provided by the County was then used as a benchmark for the use by Towns and Villages, as will later be shown, to assist them in identifying and prioritizing risks on a local level specific to their communities.

Also important to the planning process was the solicitation of ideas from the public and from other agencies. To this end several public meetings were held which invited the public and agencies to participate. Section 1.2 and 1.3 of this Plan summarize the successful efforts which were completed with respect to public participation and coordination with agencies.

1.1 COMMITTEE MEMBERS

The Sullivan County All Hazard/Pre-Disaster Mitigation Plan was developed by the County of Sullivan and the Towns & Villages of the County, with input from the public. This section of the plan describes the members of the committee who provided input and guidance with respect to their jurisdictional areas.

Participants in this planning process include representatives from the County, and each Town & Village. The Town Supervisors and the Village Mayors that were a part of the plan development are: Allan C. Scott, Town of Bethel; Gregg Semenetz, Town of Callicoon; Salvatore Indelicato, Town of Cochecton; William Moran, Town of Delaware; Steven Levine, Town of Fallsburg; John J. Sipos, Town of Forestburgh; James Greier, Town of Fremont; Allan T. Schadt, Town of Highland; Richard A. Martinkovic, Town of Liberty; John LiGreci, Town of Lumberland; Fred R. Harding, Town of Mamakating; Georgianna Lepke, Town of Neversink; Patricia S. Pomeroy, Town of Rockland; Anthony P. Cellini, Town of Thompson; Richard Crandall, Town of Tusten; Ronald Scott, Village of Bloomingburg; Edward Justus, Village of Jeffersonville; Edward P. Pankonin, Village of Liberty; Gary Sommers, Village of Monticello; James Slater, Village of Woodridge; and Robert Whitehead, Village of Wurtsboro.

Table 1, contains the list of the Pre-Disaster Mitigation Plan Committee Members including the Town Supervisors and the Village Mayors previously mentioned and additional other committee members. The additional members of the committee are primarily Highway Superintendents, and/or representatives of the Townships and Villages within Sullivan County. The representatives included, but are not limited to: Building Inspectors, Councilmen, Councilwomen, Trustees, Water/Wastewater providers, etc.

	PDM Committee Members		
Town/Village	Supervisor (T) / Mayor (V)		Addition Member Contact
BETHEL (T)	Allan Scott	Richard Yeomans	
	(845) 583-4350	(845) 583-4460	
BLOOMINGBURG (V)	Ronald Scott (Mayor)		
	(845) 733-1400		
CALLICOON (T)	Gregg Semenetz	James Hess	Thomas Bose (Councilman)
	(845) 482-5390	(845) 482-5505	(845) 482-4380
COCHECTON (T)	Salvatore Indelicato	Brian DuBios	
	(845) 252-7113	(845) 932-8737	
DELAWARE (T)	William Moran	William Eschenberg	
	(845) 887-5250	(845) 887-4660	
FALLSBURG (T)	Steven Levine	Howard Conklin	William Illing (Town Engineer)
	(845) 434-8812	(845) 434-6827	(845) 434-8812
FORESTBURG (T)	John "Bill" Sipos	Daniel Hogue, Jr	
	(845) 794-0611	(845) 794-8069	
FREMONT (T)	James Greier	Martin Meyer	
	(845) 887-6605	(845) 887-4883	
HIGHLAND (T)	Allan Schadt	Norm Sutherland	Daryl Barnes
	(845) 557-8901	(845) 557-6257	(845) 557-8901
	Edward Justus (Mayor)	(Louise Gorr (Village Clerk)
JEFFERSONVILLE (V)	(845) 482-4275		(845) 482-4275
LIBERTY (T)	Richard Martinkovic	Timothy Pellam	(0+0) +02 +210
	(845) 292-5111	(845) 292-4172	
LIBERTY (V)	()	(Shari Drollinger
			(845) 292-2250
	John LiCrosi	Charles Hellesk Ir	(0.10) _00
LUMBERLAND (T)	John LiGreci (845) 856-4777	Charles Hallock Jr. (845) 856-2300	
MAMAKATING (T)	Fred Harding	Richard Johnson	John O'Rourke (Town Board)
	(845) 888-3000	(845) 888-3033	(845) 888-3000
MONTICELLO (V)	Gary Sommers (Mayor)		Richard Sush (Village Manager)
	(845) 794-6130		(845) 794-6130
NEVERSINK (T)	Georgianna Lepke	Gary Van Valkenburg	George Haag (Code Enforcement)
	(845) 985-2262	(845) 985-2281	(845) 985-7685
ROCKLAND (T)	Patricia Pomeroy	Bowman Owen	
	(845) 439-4399	(845) 439-4213	
THOMPSON (T)	Anthony Cellini	Richard Benjamin Jr.	William Culligan (Superintendent)
	(845) 794-2500	(845) 794-5560	(845) 794-5280
TUSTEN (T)	Richard Crandall	Nathaniel Feagles III	Stephen Stuart(Code Enforcement)
	(845) 252-7146	(845) 252-7373	(845) 252-3310
WOODRIDGE (V)	James Slater (Mayor)		
	(845) 434-7447		
WURTSBORO (V)	Robert Whitehead (Mayor)		
	(845) 888-2522		
SULLIVAN COUNTY	Daniel L. Briggs	Peter Lilholt, Commissioner	Robert Trotta (Mitigation Coordinator)
	County Manager	Sullivan County DPW	(845) 794-3000
	(845) 794-0230	(845) 794-3000	Richard Martinkovic, Chairman SCEMP/LEPC
			(04E) 202 E111

(845) 292-5111

The lead person of the All Hazard/Pre Disaster Planning Committee was the County's Hazard Mitigation Coordinator, who is also a member of the County Emergency Management Planning Committee (SCEMP) and Local Emergency Planning Committee (LEPC). Assistance was also provided by the SCEMP/LEPC which is headed by the County's current Civil Defense and National Disaster Preparedness Department, Civil Defense Coordinator who is also the current Supervisor for the Town of Liberty.

The SCEMP/LEPC is a County Committee made up of County, State, and Private sector committee members inclusive of representatives from the State Emergency Management Office. Several meetings were held with this committee, to obtain assistance and multi-jurisdictional input to the preparation of the plan. A list of the CEMP committee members that participated in providing input to this Plan is provided as follows:

Representative, 98 th District Assemblyman	District Liaison
WVOS Radio Station	General Manager
New York State Department of Health	District Director
New York State Police	Com. Vehicle Enforcement Unit
S. C. Division of Public Safety	Commissioner
S. C. Cornell Cooperative Extension	Executive Director
Sullivan County Bureau of Fire	Secretary
Catskill Regional Hospital	Director of Facilities Management
Sullivan County Sheriff Department	Sheriff/Deputy Sheriff
New York State SEMO-Region II	Regional Coordinator
Sullivan County EMS	Coordinator
Sullivan County 911 Center	911 Coordinator

New York State Department of Health	Hazmat Representative
New York State Encon Police	Representative
American Red Cross	Director
National Park Service	Chief Resource Management
S.C. Department of Public Health	Director
Town of Fallsburg	Public Works; Engineering Dept.
Sullivan County Division of Public WorksEngin	eering Dept.
BOCES, Health, Safety, & Risk Management	Representative
Town of Liberty	Supervisor

The above indicated group consists of a multi-agency consortium, that in addition to providing technical input to the plan also aided in providing coordination of the plan with numerous involved agencies.

1.2 PUBLIC PARTICIPATION

Public involvement was provided in two tiers. On the localist level tier, each Town and Village held board meetings which were open to the public to discuss the All Hazard/Pre-Disaster Mitigation Plan development. This included board meetings which allowed the public to: obtain information on the planning process; discuss hazards, risks, and critical facilities; discuss the ranking of hazards; and obtain comment on mitigation goals. Where needed the County Hazard Mitigation Coordinator provided assistance to these local meetings by providing information and where requested making presentations at these meetings.

The second tier of public involvement was provided through the holding of three (3) formal meetings held at the County's Government Center. The first such meeting was held at the start of the planning process to acquaint the public and committee members with the process to be followed, objectives and goals of the All Hazard/Pre-Disaster Mitigation Plan. This meeting also served to obtain initial public comment, input and to answer questions. The second meeting was held to obtain public comment and input with respect to: (1) the ranking of risks for each individual Town and Village; (2) obtain comment on geographic areas subject to the impacts of hazards and to obtain public information regarding the severity of such and (3) obtain public input with regard to identifying critical facilities. The third public meeting which is currently scheduled to be held in October, is being planned to obtain public comment and input on the Draft All Hazard/Pre-Disaster Mitigation Plan. The following is a summary with respect to these meetings.

7

On September 23, 2002, a kick-off meeting took place, in the Legislative Hearing Room of the Government Center in Monticello, NY, to discuss the Pre-Disaster Mitigation Plan. Both the Public and committee members were invited to attend this meeting. During this meeting, various handouts were provided to all participants to aid in their familiarization with the requirements of the Pre-Disaster Mitigation Plan. The handouts included:

- Hazard Mitigation Grant Program Handbook
- Guidelines for Community-wide Planning
- Contact Information of New York State Department of Environmental Conservation, Central Office Flood-plain Management Coordinators, and Regional Flood-plain Management Coordinators
- New York State Department of Transportation Compilation of Design Standards/publication
- Federal Register, Volume 67, Number 38/Tuesday, February 26, 2002/rules and Regulations – 44 CFR Parts 201 and 206
- Pre-Disaster Mitigation Background Guide
- List of References
- Listing of the Committee Members

During the meeting of September 23, 2002, a presentation was made by the representatives of the State Emergency Management Office (SEMO). SEMO representatives provided a detailed description of the planning process, as well as a description of the goals and objectives to be achieved. The County's Hazard Mitigation Coordinator, Robert Trotta, also provided a presentation describing the specific action plan

for which the members of the committee would proceed with, toward the preparation of an All Hazard/Pre-Disaster Mitigation Plan.

This meeting also provided the opportunity for participation by other agencies. At this meeting presentations were made by the New York District of the United States Army Corps. Of Engineers and also the New York State Department Of Conservation. These presentations by agencies addressed wetlands and flood mitigation issues respectively.

On March 18, 2003, a second public meeting was held to obtain public comment and ideas with respect to the identified and prioritized risks for each Town and Village. In addition, members of the Public aided in identifying additional areas and critical facilities which may be subject to impacts due to various natural weather related severe events or man-made events. The County's Hazard Mitigation Coordinator made two like presentations which summarized the process and progress made to date with respect to plan development. The second presentation was made on the same evening as a number of the public arrived late for the meeting where it was deemed that a second presentation was needed. Handouts were given to the public along with a questionnaire to obtain input about critical facilities, history of impacts and to assist in collecting data concerning the geographic location of the impacts of hazards. The information provided by the public on the questionnaires was collected and read aloud at the meeting.

During this meeting, as a cooperative inter-agency effort, the American Red Cross set up a booth to distribute information concerning services which are available to the public for disaster mitigation and pre-disaster preparedness. The American Red Cross also made themselves available to answer questions and contributed information to the meeting.

This meeting was very successful in obtaining information from the public regarding:

the acceptability of the individual ranking of hazards by each Town and Village, adding to the information data base with respect to critical facilities and for providing information from the public with regard to the extent and nature of areas impacted by certain hazards. In general on the basis of the comments received from the public at this meeting, it is understood that the individual ranking of hazards by the Towns and Villages is in agreement with public concerns. In addition, it was confirmed that the risks are similar between all parts of the County with minor variability. It was also determined that the ranking of hazards are very similar to that which was developed previously on a Countywide basis by the County's SCEMP/LEPC committee. The public expressed acceptance of the rankings of the hazards at this meeting.

A third Public Meeting has been tentatively scheduled for October 28, 2003 at 7:00 PM. This meeting has been set to obtain public comment on the Draft All Hazard/Pre-Disaster Mitigation Plan. The results of this meeting with respect to the acceptability of this plan by the Public, will be discussed in the final edition of the plan.

1.3 COORDINATION WITH AGENCIES

County, regional, state, and federal agencies were consulted for relevant information and recommendations with regard to the Sullivan County All Hazard/Pre-Disaster Mitigation planning effort. Personnel from these agencies attended planning meetings, provided resources and information, reviewed minutes, and reviewed drafts of documents. The contributions from agencies and organizations that supported the planning process are briefly summarized below:

- **FEMA:** Involved in the review of the Draft All Hazard/Pre-Disaster Mitigation Plan and an information source through the access of the FEMA website.
- **USGS:** Accessed available information from USGS such as mapping and data through the online website.
- **NOAA:** Accessed information available from NOAA with respect to weather through the online website.
- **NYSEMO:** Representatives attended planning meetings, provided guidance as needed and are involved in the review of the Draft All Hazard/Pre-Disaster Mitigation Plan.

American Red Cross:

Attended planning meetings, provided brochures, and also, spoke to the public about the American Red Cross and organization's role.

Local Emergency Planning Committee:

Attended planning meetings, reviewed minutes, provided recommendations, and answered numerous hazard questions.

Sullivan County Planning Department:

Provided statistical County data.

Sullivan County Division of Public Works:

Provided research, conducted planning meeting presentations, organized the plan, coordinated with local Towns and Villages, coordinated with appropriate State and Federal agencies, administration of the plan, and attended hazard/disaster meetings.

United States Army Corps. Of Engineers:

Assisted in making a presentation at a public meeting and provided information and handouts.

New York State Department of Conservation:

Assisted in making a presentation at a public meeting and provided information and handouts.

City Of Yonkers:

Attended and participated in public meetings.

Sullivan County Soil and Water Conservation:

Provided information and answered questions.

2. RISK ASSESSMENT

The risk assessment process is made up of:

- identifying hazards
- profiling hazard events
- assessing vulnerability through:
 - identifying assets
 - estimating potential losses
 - analyzing development trends

The following subsections of the plan describes the effort made to: (1) identify the hazards to the community, (2) provide profiling of the hazard events and (3) to assess vulnerability.

2.1 IDENTIFYING HAZARDS

In order to ascertain which hazards are prevalent in Sullivan County, several resources for information were accessed. One source involved a literature search of the information available from the local newspapers; namely the Sullivan County Democrat, the River Reporter and the Times Herald Record. Other sources included: (1) a review of any available reports or plans, (2) consultation with community experts, (3) accessing available websites and (4) information provided by the public during the public meetings which were held. On the basis of this review, the predominating hazards that afflict the County are due to various types of storms or the combination of such that cause power outages, flooding, structural damage and cascade effects. Additionally, structural damage due to fire also appeared to be a predominating hazard. Other hazards appear to occur on a less frequent basis or have had a lesser impact historically speaking, based upon the information

collected. The following summarizes types of hazards and their applicability to Sullivan County on the basis of the investigations made.

As previously mentioned, the development of the plan followed the step-by-step process outlined in FEMA's publication 386-2 entitled "Understanding Your Risks, identifying hazards and estimating losses." In this publication a listing of hazards is identified as part of a worksheet for checking of applicability. These hazards are described in this section along with a statement as to applicability to the development of the Plan.

<u>Avalanche</u> - Is the slide of a significant amount of snow off mountainous terrain. Although Sullivan County is subject to significant snow storms, no avalanches were found to be an issue at this time.

<u>**Coastal Erosion</u>** - Is the loss of land mass due to oceanic tidal action upon shorelines. As Sullivan County is a mainland in the New York State area, with no portions adjacent to any tidal waters, coastal erosion is not an issue.</u>

Dam Failure - Is flood damage specifically caused by the structural failure of a man-made water impoundment. Sullivan County has several significant water impoundments controlled by dams and numerous smaller dams. Based upon historic information and information from experts, dam failure is a hazard applicable to the County.

Drought - Is the loss of water supply due to the lack of rainfall. The majority of water supply in Sullivan County is via the groundwater source. Groundwater is less subject to change than are surface water supplies. None the less drought impacts have been felt in Sullivan County based upon information from certain Towns & Villages. These impacts effect shallow wells and certain public water supplies.

Earthquake - a shaking or trembling of the earth that is volcanic or tectonic in origin. The following figure provides useful information with regard to the nature of seismic impacts.

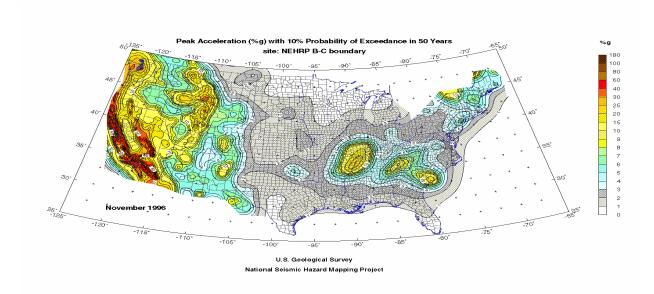


Figure 1. Peak Acceleration with 10% Probability of Exceedence in 50 Years

The values shown on the Figure1 are "peak ground acceleration (PGA) in percent of g with 10% probability of exceedence in 50 years". Therefore, the map represents ground motions that can be reasonably expected in a 50 year period. Sullivan County, as shown in the above figure, is located in the four (4) to five (5) %g region.

One can not predict exactly whether an earthquake of a given size will or will not occur in the next 50 years. The map takes the random nature of earthquakes into account. It was constructed so that there is a 10% chance that the ground acceleration values shown on the map will be exceeded in a 50 year time period.

On the basis of this information and the lack of any historic information or expert testimony to the contrary, earthquakes were not considered a predominating hazard in Sullivan County at this time. Although special pre-disaster consideration regarding seismic needs does not appear to be needed, it is recommended here that designers of building strictly follow the Building Code of the State of New York with respect to where seismic design should be incorporated into a facility. **Epidemic** - is the spreading of a contagious disease on a mass basis. No wide spread diseases have been found to impact the County based upon the lack of historic records of such.

Explosion - the rapid burning of material and gases yielding the violent release of energy. There is no known history of explosions in the County. Some concern was expressed by the Town of Delaware with regard to rail freight which may contain explosive materials that are shipped through the County. Although potential is there, consideration is not felt to be overly warranted in this area. In section 2.2, additional information to discuss under the topic of explosion can be found.

Extreme Heat - Condition caused by persistent long periods of hot spells, which can cause physical impacts upon human populations, wildlife, plant life and structures. Cascade effects can include enhanced fire possibility and drought. Generally, the climate of Sullivan County does not experience periods of extreme heat, hence this is a non-issue at this time.

<u>Flood</u> - Flooding is the submergence of lands in the vicinity of rising waterway levels generally adjacent to water bodies and drainage areas. Such may be caused due to excessive rainfall, rapid thaw of snow packs, failure of liquid impoundments, etc.

Historically, Sullivan County has been subjected to numerous flood events, induced both by the excessive rainfall and at times, rapid melt of snow packs. Cascade effects occur due to the failure of man-made water impoundments and impoundments made by wildlife (beaver). <u>Hailstorm</u> - Is due to the creation of frozen (ice) precipitation which may form in the atmosphere. Although hailstorms have occurred in Sullivan County causing some power outages at times and some structural damage, such occurrence and impact is not considered to be significant based upon historic and recent storms which have occurred.

HAZMAT - Fixed Sites - Is the discharge of hazardous materials (toxic, flammable or corrosive) into the environment from a facility located at a fixed site.

Generally HAZMAT issues from fixed sites in the County are limited in nature but an issue not to be ignored. In the Town of Liberty contamination of public water supplies with MTBE, a gasoline additive, due to a possible discharge from suspected gasoline stations was an issue over the last ten years. Due to numerous underground storage tanks used for fuel oil (homes & businesses), discharges to the environment from tanks as they get old will occur.

<u>HAZMAT - In Transit</u> - Is the discharge of hazardous materials (toxic, flammable or corrosive) during their transport via a variety of transportation means (motor vehicle, train, boat or plane).

In the past a train derailment was the cause for concern just outside the County, near the Delaware Valley. This has caused for heightened concern within the County although no derailments within the County have been reported to discharge any hazardous materials. Motor vehicle discharges have also occurred due to spillage of oil and fuel due to accidents.

<u>Hurricane</u> - A hurricane is a tropical cyclone with winds exceeding 74 miles per hour accompanied by rain, thunder and lightning.

Generally hurricanes have been considered for the purpose of this plan as a severe rain storm coupled with high winds. In this category the County has routinely been subjected to severe storms on a frequent basis. Such also includes other more coastal related storms such as northeasters due to the location of the County relative to Southern New York. Hence for the purpose of this plan, such storms have been included in other considerations found in this plan relative to severe storms. Naturally a hurricane impact on the County would be on the upper end of the severe storm consideration.

Lastly, please refer to the information provided in the windstorm subsection which indicates that Sullivan County is in a known Hurricane Susceptible Area.

Ice Jam - is the clogging of water bodies with blocks of ice. The ice is normally formed by the freezing of the water body and becomes dislodged due to hydraulic conditions whereby the ice floats and may jam at sections of the water body that have limited cross section (i.e. at bridges and natural channel contractions).

These have been reported by the public at meetings to be present in the County.

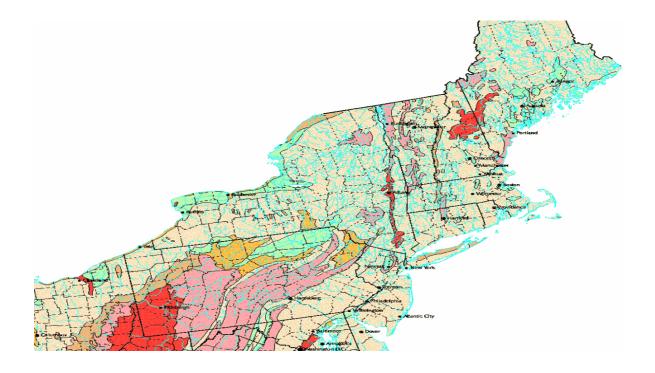
Ice Storm - freezing rains which cause for icing of roads, structures and vegetation can cause structural damages and create hazardous slippery conditions.

Ice storms have frequently occurred in the County based upon conversations with Public Works Officials. These routinely cause trees to topple due to the weight of the ice which produces structural damage of property and cause power outages.

Land Slide - Downward movement of a sloped land mass under the force of gravity.

Although not discussed herein, "liquefaction", which is the movement of soil as a viscous fluid which thereby produces a landslide is felt to be the cause for the occurrence of landslides in the County. Based upon historic information, landslides have occurred in the County on a localized basis and in particular in Craigie Clair, located in the Town of Rockland. Based on information from the County's Soil, Water Conservation District, landslides have a potential to occur in parts of the North Branch which is located in the Town of Callicoon.

Figure 2. Landslide Incidence Level



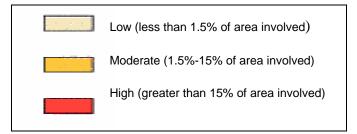


Figure 2 is a detailed map with regard to landslides taken from the USGS website. As one can see Sullivan County is in a region that is divided into two levels of landslide incidence, low and moderate. The northern and eastern parts of the County are within the low incident level area, where less than 1.5% of the area is involved in landslides and the southern and western part of the County is within the moderate level area, where 1.5% to 15% of the area is involved in landslides. The more susceptible regions are primarily the Town of Cochecton, Town of Tusten, Town of Highland, and the Town of Lumberland.

<u>Mass Gathering</u> - are caused by the congregation of large masses of people which can lead to civil problems, sanitary and health issues.

Sullivan County has been the site of the historic Woodstock music festival of 1969 which has had commemorative similar re-occurrences. Hence this is a bonafide concern to be considered by the plan.

<u>Mine Collapse</u> - is the structural failure of an underground mine used to harvest minerals from the earth

There are no known active mines in Sullivan County although there are abandoned copper mines and railroad tunnels which may have some potential for issues. As no historical problems are known to have occurred based upon our review of articles and information, mine collapse is not considered to be a major issue in the County.

<u>**Oil Spill**</u> - Is the discharge of oil into the environment by a fixed site or mobile site (vehicles).

This is similar to what has been mentioned with respect to Hazmat hazards. Historically it is known that fuel oil spills have resulted due to the lack of maintenance of oil storage facilities or due to damage as a consequence of a cascade effect resulting in the structural damage of an oil containing vessel.

21

<u>Power Failure</u> - a source or means of supplying energy that has fractured or given way under stress.

The power to the County is supplied by the following distribution companies: (1) Central Hudson Gas and Electric, (2) New York State Electric and Gas (NYSEG) and (3) Orange and Rockland Utilities, Inc. Power Failures are being handled more efficiently today due to the research and development of the Outage Management Systems (OMS). New GIS software is allowing utility companies to pinpoint exact locations of outages, rather than only knowing a general location, which in turn shortens the overall response time of the utility crews. Also, the development of more reliable circuit protection equipment for each circuit aids in the overall reliability of the circuit being protected.

Although new equipment and information is now available, power outages will still occur. They generally do not last more than a half a day typically, however there are those occasional day or two power outages that do occur.

<u>Radiological - In Transit</u> - A release of radioactive material into the environment while in transit due possibly to an accident or malfunction in the container which holds the material.

No historical data was found to be available to indicate that any radioactive material has been released into the County.

Certain Towns in the County expressed a concern with respect to radioactive discharges from both rail and vehicles, due to the transport of such materials through the County. As no history of losses are known, but public concern was locally moderate in areas, this hazard has been included for further consideration.

<u>Structural Collapse</u> - is the failure and caving in of a structure.

In and of itself, potential for structural collapse of a structure in the County was not historically found to be an issue unless such was caused by another hazard. Generally building code enforcement prevents fragrant issues from arising. In addition, programs for the demolition of abandoned structures have helped to get rid of potential problems.

<u>Structural Fire</u> - is the uncontrolled burning of residential, commercial, industrial, institutional or other property.

On the basis of the review of numerous newspaper articles, structural fires have been frequent in the County.

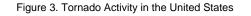
<u>**Terrorism**</u> - Is the systematic use of violence (as bombing) committed by groups in order to intimidate a population or government into granting their demands.

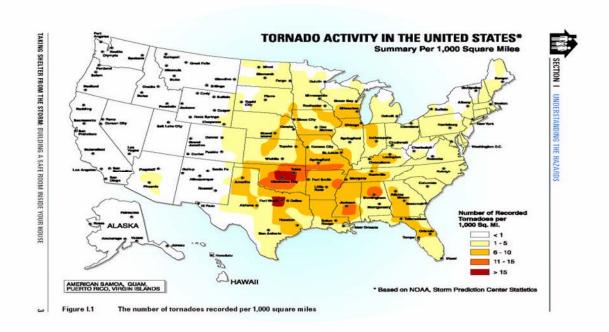
As a result of the programs implemented by FEMA stemming from the September 11th disaster, a study was conducted in Sullivan County to identify the potential for terrorism in the County. This study found that there are no significant targets in the County in comparison to other areas across the Country. Other areas outside of the County contain national landmarks, facilities and governmental establishments which would be more prone to terrorism due to the close proximity of dense population areas.

Tornado - Is a violent destructive whirling wind accompanied by a funnel-shaped cloud that

progresses in a narrow path over the land.

Figure 3, titled "Tornado Activity In The United States", reveals that Sullivan County falls under the light yellow shaded area. The yellow shaded area, as per the key, is an area where one (1) to five (5) tornadoes per 1,000 sq. miles have been recorded. This is not a large number, however, it does show that tornadoes do occur in Sullivan County. This figure was found on the FEMA website.





<u>**Transportation Accident</u>** - an unexpected happening causing loss or injury which is not due to any fault or misconduct on the part of the person injured but for which legal relief may be sought while using a means of conveyance or travel from one place to another.</u>

Historically, as is typical for much of the County, traffic accidents are typical for Sullivan County. Some of these are due to the cascade effect caused by other hazards such as severe winter weather, ice storms or other severe storms.

Train derailments have occurred and are felt to be a potential problem as mentioned previously due to the transport of hazardous materials. No known train derailments involving the release of hazardous materials were uncovered in the articles and queries made with officials of the County.

<u>Water Supply Failure</u> - the loss of water supply for a community due to either structural failure or contamination of the source.

As mentioned previously with respect to Hazmat issues, water supply has been disrupted in certain areas in the County for a temporary period of time due to contamination. At other times other types of hazards such as floods have damaged water conveyance facilities which has also caused for the temporary disruption of water supply.

Wildfire - Is a sweeping and destructive conflagration especially in a wilderness or a rural area.

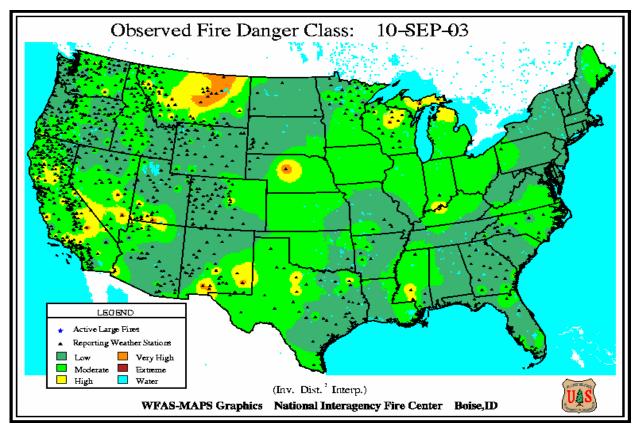


Figure 4. Observed Fire Danger Class

As shown in Figure 4, Sullivan County is in a Low Observed Fire Danger Class, as of September 10, 2003. This Class is ever changing as other variables related to wildfires change, i.e. if a summer produced very little precipitation, grasses and miscellaneous plant life would be drier and more susceptible to fire. For current fire class data, the above map can be obtained from the USDA Forest Service webpage.

Windstorm - a storm marked by high wind with little or no precipitation. Figure 5, titled "Wind Zones In The United States", reveals that Sullivan County is located in Wind Zone II (160 mph) and also within a designated Hurricane-Susceptible Region. This figure can be found on the FEMA website.

Figure 5. Wind Zones in the United States



Winter Storm - are storms which occur in the winter which can consist of various forms of precipitation such as snow, sleet, freezing rain and rain. Such storms which have particularly resulted in flooding have caused for the more harsher of conditions in Sullivan County. Major snow storms have been issues as well and demanding upon the Public Works Department of the County, Towns and Villages historically. Both such storms have historically caused cascade effects leading to structural damage and collapse, as well as power outages.

Most Prevalent Hazards

Based upon the information collected during the Identification of Hazards phase of this project, the following is a tabulation of the most prevalent hazards with respect to the Communities in Sullivan County:

Dam Failure	Hurricanes
Drought	Ice Jams
Earthquake	Landslides
Epidemic	Mass Gatherings
Explosion	Power Failure
Floods	Structural Fire
Hail Storm	Tornadoes
Hazmat - Fixed/In-Transit *	Transportation Accidents
(*Inclusive of Oil Spills and Radiological) Winter Storms	

Each of the above mentioned hazards will be explored (profiled) in Section 2.2, in greater detail to better define the frequency and level of impacts. On the basis of the type and magnitude of the impacts along with the level and nature of re-occurrence, the hazards will be ranked in priority (See Section 2.5) on a jurisdictional basis.

2.2 PROFILING AND ASSESSMENT OF HAZARD EVENTS

In Section 2.1 of this plan a listing of hazards along with a brief discussion of their applicability in Sullivan County was provided, inclusive of a tabulation of the hazards that would be profiled based upon their prevalence in the multi-jurisdictional areas. Section 2.2 provides a summary of hazard profiling that was completed along with an assessment of the impact of each hazard upon the community. The result of the Section 2.2 work was to help to identify the severity of the hazards in order to: (1) guide subsequent ranking of such hazards in order of the most severe and/or frequently occurring type, (2) help determine the highest priority of need with respect to implementation of pre-disaster action and (3) guide the focus for recommendations to be made by the Plan.

Each Town and Village was asked to provide information concerning the occurrence of hazards in their community and to help identify what areas these hazards affect. Where applicable Towns and Villages provided maps to help identify impacted areas. This information was combined with information provided by FEMA via the FEMA website and from SEMO with respect to relative cost of damages which are known for various declared disasters.

Section 2.2 has eliminated further discussion of avalanche, coastal erosion, extreme heat, mine collapse, structural collapse, terrorism, water supply failure and wildfire as these items appeared to have a low sense of priority in the County. These items could be incorporated at the time the Plan is updated in the future, should conditions change.

The following summarizes the information that was gathered with respect to profiling of the hazards which were identified to be of concern in Section 2.1 of this Plan.

Dam Failure - Major man-made water impoundments in Sullivan County include New York

City's Neversink Dam, Swinging Bridge Reservoir, Rio Reservoir, Toronto Reservoir, Mongaup Falls Reservoir, Lake Superior and Silver Lake. Certain other lakes have controlled discharge such as Morningside Lake which can represent some similar hazards.

Silver Lake Dam in the Village of Woodridge is an example of a recent failed structure. The foundation of this dam was undermined which began the failure of the structure. As a result of swift Village and County action, a controlled breaching of the dam was achieved which eliminated the hazard.

Based upon conversations with the Sullivan County Soil and Water Conservation District, a check of the available FEMA records and other information; large dam failure has not been an occurrence that resulted in major losses in the County. Minor smaller agricultural impoundments and other man-made privately owned impoundments have been generally known to have failed. One minor private dam upstream of Seminary Creek was reported to have failed which increased flooding of the Hamlet of Callicoon in 1996 and another private dam near Cooley was reported by the Soil Conservation District to have been a minor contribution to the flooding of Livingston Manor in the Town of Rockland that occurred in 2000. The Town of Highland also reported that there are seven (7) dams in their geographic area that are believed to be vulnerable. **However, based upon the following information from DEC and a check of historic records, none of the Town of Highland Dams have had an incident reported. Therefore, this does not substantiate any need for further profiling. In addition, no costs for damages were found to have resulted due to failure of any dams..**

As per conversations with the DEC (Dam Safety Section) and a search performed on the National Performance of Dams Program (NPDP) website (http://npdp.stanford.edu/NPDP/servlet/DIN.Incident), three (3) dam failures and two

DEC ID #	<u>Dam Name</u>	Failure Date	<u>Reason</u>
163-2772	Bear Pond	May 8, 1991	piping failure.
147-4234	Lincoln Pond	August 7, 1975	overtopping failure.
147-4972	Campbell Pond	May 1989	overtopped.
<u>NPDP ID #</u>	<u>Dam Name</u>	Incident Date	<u>Reason</u>
<u>NPDP ID #</u> NY00497	<u>Dam Name</u> Rio	<u>Incident Date</u> 1994	<u>Reason</u> earth embankment did not meet requirements of FERC.

(2) dam incidents have been reported as follows:

None of the above referenced failures have resulted in any known damages to public or private properties. None of these events are considered to be significant. Hence, based upon the data we have collected and received, a significant dam failure has not been known to occur. In addition, as is revealed from the data above, the frequency of occurrence is very low. **Drought** - Periods of drought have had limited and localized impacts in the County.

At times, inadequate water supply has been an issue for the Village of Liberty and the Village of Woodridge. With respect to Woodridge, seasonal demands are problematic due to a high seasonal population. In the Village of Liberty, a surface water supply is used, which is susceptible to drought impacts.

No major losses resulting from droughts are known to be documented and no disaster declarations are known to be applicable to drought in Sullivan County.

Earthquake - As previously mentioned in Section 2.1, no major impacts have been historically caused by earthquakes in the County. Hence earthquakes are not felt to be an issue at this time.

<u>Epidemic</u> - No epidemics have been known to plague the County, however the County has been active recently with respect to ascertaining the threat of the West Nile Virus. Consideration with respect to the need to provide pre-disaster planning appears to be low for epidemics. The County has been active in preparing an annex section to its Comprehensive Management Plan that addresses biological hazards caused by bioterrorism. This effort dove tails with epidemics and would appear to be adequate at this time, in addressing pre-disaster needs of this item.

Explosion - No major explosive events are known to have presented themselves in Sullivan County, with the exception of an event which occurred in neighboring Pennsylvania. This event involved a railroad derailment of hazardous materials, where it is

reported that explosions occurred in Shohola, Pennsylvania which were felt in the Town of Highland. Information regarding any Sullivan County losses due to this explosive event was not found to be available.

<u>Floods</u> - As previously mentioned in Section 2.1 of the Plan, floods have historically plagued the County on a frequently re-occurring basis. The following is a short list of Federally declared disaster events involving flooding.

- FEMA 1095-DR-NY January 1996. Major flood disaster occurred due to a severe winter rain storm that also caused for a rapid thaw of snow packs.
 Losses which were funded by FEMA totaled \$6,438,406.00 inclusive of County, Town and Village damages.
- FEMA 1335-DR-NY May 3, 2000 to September 14, 2000. Major rain storms caused for severe flooding. More than \$1.4 million in damages were recorded.

In addition a major winter rain storm occurred during December 16 to December 17, 2000 which did not receive any Federal or State aide. This event caused for \$2,716,297.00 in flood damages to municipal facilities and \$2,615,330.00 in damages to private individuals, totaling \$5,331,627.00 in flood damages.

Some specific areas which have been identified by the Towns and Villages as particularly susceptible to flooding include:

33

Town of Delaware	Flooding due to the Delaware River and the Callicoon
Cr	eek.

- **Town of Fremont** Washout areas due to Flooding are found on Ruebman Road, Weiss Road, Karow Road, the intersection of Specht Road and Glen Ellyn Road, the intersection of McColly Road and Deer Lake Road, Basket Road and Winkler Road.
- **Town of Highland** Approximately twenty areas of flooding within the Town.
- **Village of Jeffersonville** The low areas surrounding the Callicoon Creek and Laundry Brook are areas where flooding occurs.

Town of TustenFlooding due to the Delaware River and the Ten Mile
River and its stems.

The **Delaware River** and the **Callicoon Creek** have been areas of concern due to flooding. They have a few low areas that surround them in the Village of Jeffersonville, the Town of Delaware and the Town of Tusten. The Town of Highland also reports Delaware River as a flood hazard.

Lastly but not least, in addition to the major flood damages reported in this section the table on the following page lists other flood damages that were reported as part of the National Flood Insurance Program.

Flood Data For Sullivan County in the past 15 years:

(*Data below used courtesy of <u>www.fema.gov/nfip/10400212.htm</u>)

<u>Town / Village</u>	<u> Total Flood Loss 1/1/78 - 12/31/02</u>	Avg. Annual Loss
Bethel	\$2,607.94	\$173.86
Bloomingburg	\$0,000.00	\$0,000.00
Callicoon	\$28,469.22	\$1,897.95
Cochecton	\$1,209.12	\$80.61
Delaware	\$39,380.89	\$2,625.39
Fallsburg	\$250.00	\$16.67
Forestburg	\$8,370.22	\$558.01
Fremont	\$7,630.71	\$508.71
Highland	\$22,314.07	\$1,487.60
Jeffersonville	\$53,061.15	\$3,537.41
(T) Liberty	\$11,881.12	\$792.07
(V) Liberty	\$55,527.21	\$3,701.81
Lumberland	\$1,649.98	\$110.00
Mamakating	\$62,156.16	\$4,143.74
Monticello	\$0,000.00	\$0,000.00
Neversink	\$20,273.65	\$1,351.58
Rockland	\$987,027.32	\$65,801.82
Thompson	\$105,939.31	\$7,062.62
Tusten	\$19,815.99	\$1,321.07
Woodridge	\$118.00	\$7.87
Wurtsboro	\$11,340.45	\$756.03
TOTAL	\$1,439,022.51	\$95,934.83

From the above data, Sullivan County has estimated losses due to floods of almost \$96,000.00 annually. And of that \$96,000.00, almost two-thirds of the annual loss is reported from the Town of Rockland. As per the National Weather Service (NWS), in Binghamton, NY, there were eighteen (18) flood events from 1993 to 2002, therefore the frequency of occurrence during this time period is almost two (2) flood events a year. The events were localized events, in flood prone areas, lasting anywhere from hours to days.

<u>Hail Storm</u> - For the purposes of this Plan, hail storm events have been combined with the hazard entitled Ice Storms. Please refer to Ice Storms for further discussion. This has been done as generally hail storms on their own have not been found to be major problems in the County. However, such storms accompanied by icing as is the case with ice storms is a more frequent and damaging hazard in our local area. The NWS classifies hail storms into two groups hail (all greater than .75 inches but less than 1.5 inches in diameter) and killer hail (greater than 1.5 inches in diameter). The combined number of events from 1983 to 2002 is twenty-three (23) or slightly more than one (1) event a year. The events are generally highly localized and have a duration of 10 to 30 minutes.

<u>Hazmat - Fixed Site, Hazmat - In Transit, Oil Spills, and Radiological</u> - The above titled hazards have been combined for consideration. On the basis of concerns provided by the Towns and Villages, and in particular from the Towns of Delaware, Tusten, Cochecton, Fallsburg, Forestburg, Highland, Lumberland, Rockland, Neversink, and Thompson, along with the Village of Wurtsboro, Hazmat is an issue which is high with respect to public interest. The following is a listing of certain concerns that were made: Town of Delaware HAZMAT - In Transit and Radiological - In Transit on local railroads, Route 17B, Route 52/52A and Route 97. Transportation Accidents or explosions on Route 17B, Route 52/52A and Route 97.

Town of Highland HAZMAT - Fixed is a hazard found at five locations.

Town of Tusten Transportation Accidents due to the Conrail (Erie - Lackawanna Div.).

HAZMAT - In Transit on Route 97.

General Concern The following roads within Sullivan County have been locations of potential hazards: Route 17, Route 17B, Route 52/52A and Route 97. Hazardous and radiological materials are purported to travel over these roads and in the event of a collision or accident, a major hazard has potential to develop. Railroads in the Town of Delaware and the Town of Tusten have the same hazards of concern, as the railroads transport hazardous materials through Sullivan County.

Some of the concern in the Southwestern portion of the County is due to a past train derailment near Shohola, Pennsylvania, where hazardous materials were reported to be

released into the environment. An explosion was also reported to have occurred at that time that could be felt in the Town of Highland. This serious occurrence has raised public concern as a freight railroad continues to run through the Towns of Tusten, Cochecton, Delaware and Fremont.

Due to issues with rail freight, similar concern is with respect to trucking of materials through the County. Road accidents which cause for fuel and oil spills by tanker trucks have confirmed these fears to those concerned.

Hazmat has had other issues from fixed sites such as gas stations, private and commercial buildings where fuel spills via worn out storage tanks and spills have repetitively been issues on a limited scale. A list of sites & spills from the past year has been included in Appendix C. MTBE was a highly publicized issue in the Village of Liberty due to the contamination that was suspected from a gas station.

Costs associated with spills and discharges of hazardous materials could not be readily identified. On average, from the spill data obtained from the DEC website for the past year, spills occur approximately every 3 to 4 days. The spills are typically minor and are taken care of immediately to prevent costly damages.

As per conversation with the SCEMP/LEPC, Sullivan County does not have any Town or Village that has prevalent problems with regard to Hazmat events. State Route 17 and other primary State Routes do have the volume of traffic that would generate truck traffic for chemical, oil and gasoline tank incidents. We also have had a few No. 2 oil tank trucks that have had minor spills as a result of a motor vehicle accident, but not at any particular reoccurring location.

Also, there has not been any significant events in Sullivan County as of recent. The last memorable event occurred in 1988 with a chemical spill from a railroad car near Callicoon. None have occurred since. "Small" events are spread out throughout the County that may include oil spills from transport trucks, as well as other motor vehicles leaking fluids.

Costs associated with the large, moderate or small events are related to recovery of products that may be spilled (oil, gas, etc.) plus clean up by licensed environmental companies. A numerical value could not be determined.

<u>Hurricanes</u> - Many rain storms in the County have been associated with an increase in winds. As Sullivan County is basically inland, hurricane impacts still occur but appear to be in-line with what occurs for other major precipitation events. Hence for the purpose of this plan, they are deemed to be included with the concerns for flooding and structural collapse that may occur due to storms of various types.

Ice Jams - Although these have been mentioned as a concern of citizens and certain officials in the County, based upon the experience of the Sullivan County Division of Public Works with 400 bridges and large culverts, jamming under bridges has not been the cause of major structural damages to these structures. Hence, although this issue is visible and a concern to the public it has not caused damages to bridge structures.

With regard to erosion issues and damages to vegetation and land, ice jams could be an issue, but no data could be found at this time regarding the cost of any damages incurred.

39

Landslides - The most visible landslides in the County, in the Craigie Claire area, still have incidence of lesser scale since repairs and improvements have been made to mitigate such. In the past these landslides closed off a portion of the Town of Rockland's highway system, where the portion closed off had an estimated value of about \$800,000. As per the Sullivan County Soil & Water Conservation District (SWCD), there are six (6) known areas where landslides have occurred, namely:

- Russel Peters Farm (Rte 121 North Branch), steep slope adjacent to North Branch Callicoon Creek.
- Ernie Reimer Farm (Rte 95 Obernburg Road North Branch), steep slope adjacent to Callicoon Creek.
- County Route 128, between Jeffersonville and North Branch, corrected by Sullivan County.
- Along Craigie Claire Road, near Clear Lake adjacent to Beaver Kill, which caused for the closure of the road for several years.
- Steep slope along Rte 151, South of Lew Beach, required extensive grading & reforestation by SWCD.
- Shin Creek Road, East of Irving Berlin home, slide into Shin Creek.

Generally, landslides in these areas have not been frequent in nature with exception to Craigie Claire. Over the past ten (10) years the Craigie Clare Road area has had about three (3) to four (4) events. However, hazard mitigation work has been completed to stabilize and reduce the impact of the problem. As a result of such work more minor and less frequent slides have occurred. It is too early to update the frequency in this particular area. <u>Mass Gatherings</u> - As previously mentioned, mass gatherings have been particularly expressed as a concern to the Town of Bethel. This is due to the proximity of the original Woodstock concert site. In the past, it is estimated that the financial impact upon the County, Town and State to provide emergency services and temporary facilities to handle such an event, is in the several hundred thousand dollar level. Such events can reoccur.

Power failure - Power Failure is not an easy hazard to profile. Due to the fact that human beings rely so highly on electricity, the loss of such can easily disrupt many daily activities. Emergency services would not function at full power due to the many electrical devices that they rely on in emergency situations such as radios, dispatching equipment, computers, etc. The Sullivan County economy would suffer as workers would no longer be able to complete their tasks without computers, office equipment, etc. This hazard is reported as the hazard having the most potential impact on Sullivan County. The two major companies responsible for power distribution in Sullivan County are Central Hudson Gas and Electric and New York State Electric and Gas.

The frequency of occurrence of a significant power failure is approximately once a year and usually with a duration of less than a single day (24 hours). One event occurred in November of 2002, where power was lost for as long as up to five days in various areas of the County. This event was due to freezing rain in combination with an ice storm.

Estimations of potential losses range from simply an inconvenience to some residents, to huge economic losses for the utility companies doing the repair. Although accurate figures were not found to be available to assess the cost of power outages, disruption of services, spoiling of food and loss of work production could range from the hundreds of thousands to a million dollars.

41

The following recent event of power outage was declared a Federal Disaster:

FEMA-3186-EM, New York Incident Period: August 14-16, 2003

FEMA intends to provide appropriate supplemental assistance for required emergency measures, authorized under Title V of the Stafford Act to save lives, protect property, and public health and safety, or to lessen or avert the threat of a catastrophe in the designated areas. Specifically, FEMA is authorized to provide emergency protective measures, (Category B) under the Public Assistance program at 75 percent Federal funding. This assistance is for all counties in the State of New York.

<u>Structural Fires</u> - Structural Fires are quite common to Sullivan County. Though, as you have seen for Wildfires, Sullivan County is in a Low Observed Fire Danger Class. This hazard is a man-made hazard generally caused by neglect and/or accidents. In a review of newspapers from the last few years, structural fires, on average, tend to occur every few months. These fires are generally residential fires on homes that average in value of approximately \$95,000. If six homes, of average value, burned down completely, this would estimate to be an annual expense of nearly \$600,000. This figure does not include the numerous minor fires that may occur on a monthly, or even bi-monthly basis. A decent estimate of annual expenses including the minor fire expenses would be somewhere around \$750,000.00.

The potential impact of this hazard is injury, death, damage or loss of private property, and cost of manpower or resources to put the fires out.

Tornadoes are much easier to profile. The occurrences of tornadoes are typically documented for the most part. Using data collected from FEMA and using ESRI software, tornadoes on average, occur every 8 years in Sullivan County. Though the occurrences are

infrequent, the impacts can be great. Sullivan County is in Wind Zone II (160 mph) and located within a hurricane susceptible region of the United States. There are one to five recorded tornadoes per 1,000 square miles in Sullivan County, based on NOAA, Storm Prediction Center Statistics. Tornadoes can either come through neighborhoods and miss everything, or other times millions of dollars worth of damages can occur. A quantitive value cannot be determined for this hazard. Estimations of hundreds of millions of dollars worth of damage can be assumed for heavily populated and well developed areas and estimations of millions of dollars worth of damages can be assumed for smaller less populated areas, similar to Sullivan County. A list of known Sullivan County Tornado events is listed below.

<u>Date</u>	<u>Hour</u>	Deaths	<u>Injuries</u>	<u>F Scale</u>
May 9, 1961	1810	0	4	F2
June 9, 1972	1615	0	2	F2
June 16, 1986	1115	0	2	F1
Nov. 16, 1989	1040	0	0	F1
Oct. 13, 1990	1235	0	0	F1

* The above list is courtesy of www.tornadoproject.com/alltorns/nytorn.html

<u>Transportation Accidents</u> can occur at any time. There are generally, two to three major accidents a year that prove to be fatal in Sullivan County. Damages include: loss of life, bodily damages, car damages, structural damages, etc. Transportation accidents give no warning and generally last no more than a few hours in duration. As per the Sullivan County Democrat, in March of 2000, a single car accident occurred on Route 17B just East of Hortonville. A 1994 Cavalier was completely totaled and the driver was left with minor injuries. This incident left damages of about \$10,000, however, more severe accidents do occur.

As previously mentioned, traffic accidents resulting in the discharge of hazardous materials as, oil, gasoline and other materials are a high concern to the Towns and Villages. These are further discussed in the Hazmat subsection of Section 2.2.

<u>Winter Storms</u> - Winter storms have impacted the whole County. The warning is similar to that of an ice storm and can be found in the same manner, by way of weather reports. The Blizzard of 1996, combined with flooding that followed, hit the Appalachians, Mid-Atlantic, and the Northeast of the United States (including Sullivan County) and drew a total of over \$3.0 billion dollars in damages. This storm also accounted for 187 deaths, as per information obtained from the National Climatic Data Center. In general, damages can estimate anywhere from thousands of dollars to billions of dollars, as in the above event.

In the Section of 2.2 entitled "Floods", information is provided concerning the 1996 and 2000 winter storms, that through excessive precipitation major flooding and consequential structural damages occurred. Snow storms have also exerted major impacts on the County, Towns and Villages.

The following events which occurred recently are examples of major snow events.

FEMA-3184-EM, New York Incident Period: February 17-18, 2003 Public Assistance (assistance to State and local governments for the repair or replacement of disaster-damaged public facilities is provided to Sullivan County. Costs were not available at the time of the writing of this plan.

44

FEMA-3173-EM, New York Incident Period: December 25-26, 2002 and January 3-4, 2003

FEMA intends to provide assistance for emergency protective measures (Category B) under the Public Assistance program to save lives, protect public health and safety, and property. This emergency assistance will be provided for a period of 96 hours for Sullivan County.

A total of \$897,750 was obligated to applicants in Sullivan County including \$119,682.71 for the County of Sullivan, as per information provided by SEMO.

As per the NWS, fifty-five (55) winter storm events occurred between 1993 and

2002. This calculates to a frequency of occurrence of 5.5 annual winter storm events.

These events are widespread throughout the County and usually last one (1) to two

(2) days. The costs involved with winter storms involves the repairs to damaged

structures, loss of utilities, snow removal equipment maintenance and man-power

for snow removal. Actual costs can range from the thousands to millions depending

upon severity, duration and nature of the event.

2.3 IDENTIFY ASSETS

Similar to most communities, Sullivan County and its Towns and Villages have numerous critical facilities These include but are not limited to the E 911 Emergency Center, schools, fire departments, hospitals medical centers, County and Town highway garages, government agencies, Town and Village Halls, police departments, local operational offices for telephone and electrical power utilities, airports, water supply facilities, waste water treatment facilities, etc. For the purpose of the preparation of this planning document a list of these facilities was prepared using information provided by the County, Towns and Villages. This list is presented in Appendix B which provides the name of each facility and its location. In all there are approximately 230 facilities which the Towns and Villages consider as being critical to their communities. In addition, information regarding these facilities was obtained via public input that was provided at the second public meeting that was held on March 18, 2003. This listing has been provided as an appendix section to the plan.

With respect to risk assessment, the facilities which are located near or adjacent to water bodies would be at a higher risk than other facilities. Most of the critical facilities are not located in a manner to be impacted by flood waters. However such facilities as water treatment and supply facilities which utilize surface water for supply and wastewater treatment plants that discharge into adjacent waters, are by nature more susceptible to flood and water related damages. Even so, normally such facilities as wastewater treatment plants are designed to operate for certain flood conditions (but naturally no planning can accommodate all instances).

Other than for water and wastewater treatment systems, no critical facilities were

indicated to be located in an area where greater risk would occur, as compared to if located in any other reasonably sited location in the County. Therefore, for the purpose of the plan at this time, no special consideration is needed for critical facilities.

A set of tables has been inserted into Appendix D to show the Top 15 Hazards of the County, Towns & Villages (Table D-1), the types of Impacted Facilities and the Geographic Areas that can be potentially impacted (Table D-4) due to the listed hazards. The lists will be updated as necessary, as the plan is updated. Also worth noting, as per the U.S. Census Bureau (Census 2000), of the 44,730 total housing units in Sullivan County, 20,145 units were built prior to 1960 (at minimum 44 years old), this is more than 45 %. This reveals that many of the units may be more susceptible to being impacted by an ice storm, winter storm, windstorm, etc. Also, again worth noting, the median value of a housing unit in Sullivan County is \$93,300 (Census 2000). Therefore, if .1 % (or 44.73 total housing units) were impacted by a storm, \$4,173,309 worth of damages are possible.

The degree to which public and private assets are damaged due to the various natural hazards is quite variable. The hazard which has the most specific data with respect to damages is that of floods. In Section 2.2, Floods, the overall costs due to several floods are well documented. In addition to the information provided in Section 2.2, Appendix F provides specific information on damages caused to both public and private assets due to a typical major winter storm. The information in Appendix F provides fine detail in this area as an example of what and when can be impacted by a disaster event. Although this event (December 17, 2000) was

devastating to the community, no appreciable federal or state funding came to the aid of the victims of this event. As shown in the Appendix F information, basements, bridges, roads, stream banks, buildings, vehicles, personal property, parking areas and recreational areas have been damaged by winter storms. This information is for a specific example only. Floods have been the biggest issue impact the County and each of its jurisdictions.

The following provides an estimated dollar figure for losses associated with each hazard. These costs were developed on the basis of past historic information and the use of engineering judgement. The list provided represents a range of costs for a small to large event.

	Private Sector	Public Sector
Dam Failure	\$1,000 - \$5,000	\$1,000,000
Drought	\$10,000 - \$100,000	Not known at this time
Earthquake	Not known at this time	Not known at this time
Floods	\$118 - \$3,000,000	\$2,000,000 - \$7,000,000
Hail Storm	\$100 - \$25,000	Negligible
Hurricanes *	Insufficient data	Insufficient data
Ice James	No known losses	No known losses
Landslides	Insufficient data	\$2,000 - \$500,00 **
Tornadoes **	\$10,000 - \$10,000,000	\$0 - \$10,000,000

NATURAL HAZARDS: RANGE OF POTENTIAL DAMAGES (\$)

Winter Storms ***\$118 - \$3,000,000\$2,000,000 - \$7,000,000* May be similar to flood damages, no specific cost data is available.** Speculative as no data is available regarding the level of damages due to past

events was found.

*** Winter Storms resulting in flooding due to quick thaw have the same impacts as floods.

2.4 ANALYZING DEVELOPMENT TRENDS

Trends as to the type and extent of development need to be considered during the assessment of hazards. Development can increase or decrease risks and can introduce new hazards to contend with. Generally the past development of the County centered around tourism, secondary and primary homes and light commercial businesses. Due to limitations in water supply and waste disposal, heavy industrial development does not appear likely. Hence continued light commercial development is expected to continue. (i.e. warehousing, shopping centers, etc.).

As reflected in the current growth trend which is manifesting itself from the Southern portion of the County; as housing in Orange County continues to be more expensive than in Sullivan County, residential growth into Sullivan County will continue. Also, the event of Casino Gaming will continue to propagate tourism as a resort area which will lend itself to second home growth as well.

As can be expected, the population growth will expose more people to the hazards which arise in the County. However, this is felt to be at a status quo with the rest of New York, and is not expected to have a significant effect on the strategy needed for predisaster mitigation efforts. Future updates of this Plan will need to ascertain if this assumption will remain appropriate. Hence, for the purposes of this Plan, development trends in Sullivan County are not at this time a factor in the decision making process for the recommendation of pre-disaster action.

Specifically with respect to the impact of growth and trends as they relate to the potential for increased impacts and cost damages in the future, the following is provided. It can be expected that growth will be adding a 2% to 4 % increase in population, and with such, a directly proportionate increase in housing stock. Hence, private sector losses could be expected to increase at the rate of 2% to 4% a year on average. Additional private sector losses may occur due to a 1% to 2% increase in commercial activity which may follow along with the growth of population.

With respect to public sector losses we would not expect as great of an increase as may occur within the private sector. Hence, a .5% to 1% increase in public sector losses per year at most may occur. The lesser growth in loss rate within the public sector is anticipated as the growth of public facilities is expected to lag private sector growth.

In response to attributing such losses to the natural hazards, the percentages should be applied to the information provided in Section 2.3 that provides the potential damage costs. The percentages should be provided equally to any of the hazards described in Section 2.3.

The location of these additional damages which will go hand-in-hand along with growth are expected to be distributed uniformly throughout the Towns and Villages. This assumption is made as the growth in the County, on average, is expected to be uniform in nature.

2.5 RANKING OF RISKS AND PRIORITIZING OF GOALS

As mentioned in the section entitled "1. Planning Process", the County's SCEMP/LEPC Committee utilized the State's HAZNY computer program to assess risks on a County-wide basis. Table 2 summarizes the results of the County-wide analysis of the twenty-six hazards. A questionnaire asking the Towns and Villages to rank the hazards in their geographic area was distributed along with instructions for each community to rank the hazards from one to twenty-six, where a "1" would indicate the hazard of the most significance to the community in terms of past damages and potential damages, while a "26" would indicate the hazard with the least impact.

The results of the survey of Towns and Villages with respect to the ranking of hazards is also summarized on Table 2. In general 9 out of 10 of the top ten hazards which were indicated by the ranking accomplished by the SCEMP/LEPC committee, were on average indicated by the Towns and Villages to be on their top 10 list of hazards of concern.

Specifically the County is homogeneous with respect to impacts due to natural hazards, as all parts of the County have had an equivalent exposure to natural hazards. Table D-1, in Appendix D, summarizes the impact of the top fifteen hazards in the County.

51

RISK ASSESSMENT QUESTIONNAIRE RATING

Hazard	Bethel (7)	Bloomingburg (V)	Callicoon (7)	Cochecton (T)	Delaware (T)	Fallsburg (7)	Forestburg (T)	Fremont (T)	Highland (T)	Jeffersonville (V)	Liberty (T)	Liberty (V)	Lumberland (7)	Mamakating (T)	Monticello (V)	Neversink (T)	Rockland (T)	Thompson (T)	^T usten (T)	Woodridge (V)	Wurtsbaro (V)	** Sullivan County Weight Rating	**Sullivan County Overall Rating	***Town & Village Weight Rating	Quotient	***Town & Village Overall Rating	7
Power Failure	3	1	1	1	9	1	1	10	1	1	4	1	2	3	2	3	2	1	2	1	1	354.2	1	51	2	1	1
Structural Fire	-	2	2	2	10	2	2	8	2	9	8	2	1	4	1	5	6	2	7	5	2	338.2	2	82	3	3	1
Tornado		13	4	3	15	3	3	7	3	25	6	8	14	11	15	14	22	3	11	16	3	337.1	3	199	9	7	1
Ice Storm	4	4	3	4	8	4	4	2	4	4	2	3	3	2	3	1	3	4	4	6	4	321.2	4	76	3	2	
Dam Failure		6	24	5	19	5	5	25	5	19	17	9	10	16	26	15	21	5	15	8	5	316.1	5	260	12	13	
Winter Storm	1	3	6	6	7	6	6	3	6	3	3	4	4	1	4	2	4	6	3	3	6	312.2	6	87	4	4	1
HAZMAT - Fixed Sites		9	13	7	5	7	7	22	7	21	10	10	7	17	17	6	20	7	10	9	7	303.1	7	218	10	8	1
Flood	5	14	5	8	6	8	8	1	8	2	1	5	6	15	16	4	1	8	5	7	8	301.8	8	141	6	5	L
Transportation Accidents		8	9	9	3	9	9	12	9	6	9	11	12	5	5	8	8	9	6	17	9	301.3	9	173	8	6	1
Stuctural Collapse Oil Spill		15	12	10	18	10	10	11	10	10 12	11 13	12 13	15	12 6	6	12 16	9	10	17	18	10 11	301.2 299.8	10	238 243	11	10	1
HAZMAT - In Transit		э 7	11 10	11 12	14	11 12	11 12	18 21	11 12	12	13	13	13 16	0	13 18	10	10	11 12	18	15 13	12	299.8 295.3	11 12	243 220	11 10	11 9	1
Ice Jam		23	10	12	11	12	12	6	12	20	15	22	0	22	23	17	12	12	9	13	12	295.3	12	304	10	9 16	
Land Slide		23 19	20	13	20	13	13	9	13	18	19	16	9	22	23	13	12	13	9 19	20	13	203.0	13	304	14	10	1
Water Supply Failure		10	8	15	17	15	15	20	15	7	7	6	18	14	12	20	11	15	8	20	15	269.8	15	250	11	12	1
Explosion		10	16	16	4	16	16	13	16	15	16	17	10	18	11	19	16	16	12	14	16	251.7	16	295	14	15	1
Epidemic		20	18	17	19	17	17	16	17	14	20	18	19	19	19	18	17	17	13	10	17	250.5	17	342	16	20	
Civil Unrest		26	21	18	23	18	18	17	18	17	21	23	22	23	20	25	19	18	21	21	18	243.5	18	407	19	22	1
Drought	7	17	17	19	16	19	19	15	19	11	12	7	21	10	9	11	14	19	20	4	19	238.5	19	305	14	17	1
Terrorism		16	14	20	22	20	20	14	20	16	22	19	20	20	14	21	18	20	22	12	20	235.8	20	370	17	21	
Windstorm	2	18	7	21	13	21	21	4	21	5	5	20	5	9	7	9	15	21	16	11	21	221.2	21	272	12	14	
Wildfire		12	19	22	12	22	22	5	22	24	14	21	11	8	8	10	7	22	14	22	22	217.5	22	319	15	18	1
Mass Gathering	6	25	23	23	24	23	23	19	23	23	24	24	23	24	10	24	23	23	23	23	23	203.5	23	456	21	24	1
Earthquake		24	25	24	25	24	24	23	24	26	23	15	24	25	21	22	24	24	24	24	24	180.8	24	469	22	25	L
Radiological - In Transit		22	22	25	2	25	25	24	25	22	25	25	25	13	24	26	25	25	25	25	25	179.2	25	455	21	23	1
Mine Collapse		21	26	26	26	26	26	26	26	27	26	26	26	26	26	23	26	26	26	26	26	127.5	26	513	24	26	1
Waste Water Plant Failure										*8														8	0	27	

*Additional Hazard of the Village of Jeffersonville

Table 2

Based on Sullivan County's Assessment. *Based on Town & Village Assessments.

~The column titled "Quotient" is a rounded whole integer, calculated by dividing the Town & Village Weight Rating by the number of Towns & Villages.

3. MITIGATION STRATEGY

Based upon the data and information collected during the preparation of this All Hazard/Pre-Disaster Mitigation Plan and the prioritization of hazards which was accomplished by the Towns and Villages, the elements needed for recommending strategies for implementation of the pre-disaster initiatives have been assembled. In order to maximize results using the limited resources which are available, it was agreed by the committee members who participated in the plan development, to concentrate on the top five hazards with respect to goals and actions. Hence, the five hazards that were ranked the highest in priority by the Towns and Villages were selected as the priority items to be mitigated. As several of the Towns (Delaware, Rockland, and Tusten) as well as the Villages (Bloomingburg and Monticello) indicated that Hazmat concerns are within their top five concerns, it was felt that recommendations should include this hazard as well. The following subsections describe the recommended All Hazard/Pre-Disaster Mitigation goals and the plan of action to implement measures towards goal achievement.

The prioritization of actions was found to be based upon cost, as an approach to getting the biggest bang-for-the-buck was applied. In addition by implementing mitigation actions as part of everything we do, and not as an afterthought, we hope to incorporate actions at minimal cost as these become a planned integral part of projects and the norm for operations. Funding is needed as shown in, Table D-3 in Appendix D. An elaboration of the strategy is described in section 3.2 of this plan. A comparison of the SCEMP/LEPC listing to the Town/Village list is as follows:

<u>Rank</u>	<u>Town/Village</u> <u>Hazard</u>	<u>Rank</u>	<u>County</u> <u>Hazard</u>
<u>Rank</u> 1 2 3 4 5 6 7 8 9	Power Failure Ice Storm Structural Fire Winter Storm Flood Transportation Accident Tornado Hazmat-Fixed Sites Hazmat-In Transit	<u>Капк</u> 1 2 3 4 5 6 7 8 9	Power Failure Structural Fire Tornado Ice Storm Dam Failure Winter Storm Hazmat-Fixed Sites Flood Trans. Accident
10	Structural Collapse	10	Structural Collapse
11	Oil Spill	11	Oil Spill
12	Water Supply Failure	12	Hazmat-In Transit
13	Dam Failure	13	Ice Jam
14	Windstorm	14	Land Slide
15	Explosion	15	Water Supply Failure

The top five (5) Natural Hazards comparing the SCEMP/LEPC listing to the Town & Village list is as follows:

	<u>Town/Village</u>		<u>County</u>
<u>Rank</u>	<u>Hazard</u>	<u>Rank</u>	<u>Hazard</u>
1	Ice Storm	1	Tornado
2	Winter Storm	2	Ice Storm
3	Flood	3	Winter Storm
4	Tornado	4	Flood
5	Windstorm	5	Ice Jam

For the purposes of this All Hazard/Pre-Disaster Mitigation Plan the Town/Village list has been adopted with respect to the priority of concerns in the County. The Town/Village list will therefore be the focus for the recommendation of goals to be discussed in Section 3.1 of the plan.

3.1 ALL HAZARD/PRE-DISASTER MITIGATION GOALS

The prime objective of goal setting is to aid in the reduction and/or the elimination of losses. In concentrating on the top five natural hazards of concern which include: Ice Storm, Winter Storm, Flood, Tornado and Windstorm; resources can be better focused for achieving progress towards minimizing impacts. Important to goal creation is to have goals that are tangible. The following is a listing of the goals which would help towards diminishing the impacts of the five natural hazards of concern. A five year time period was selected as it is the norm to have a five year plan for governmental budgeting and near range guidance towards achieving accomplishments.

- GOAL #1 Reduce the Impact of Ice Storms
- GOAL #2 Reduce the Impact of Winter Storms
- GOAL #3 Reduce the Impact of Floods
- GOAL #4 Reduce the Impact of Tornadoes
- GOAL #5 Reduce the Impact of Windstorms

In addition to the above primary goals to minimize the impacts of the five naturally caused disasters, a sixth goal was determined to be necessary to address the man-made hazmat disaster of hazardous materials in transit. This is necessary due to the strong concerns expressed by the Public as well as each participating local government. Therefore the following sixth goal is to:

GOAL #6 Reduce the Impact of the following man-made hazards:

- •
- Power Outage Structural Fire
 - HAZMAT

.

•

3.2 PLAN OF ACTION

As much work will be necessary to make progress towards achieving the goals, a five-year program will be established to implement the work needed. This section outlines what specific work would be undertaken towards providing action with respect to the goals. In addition this section also describes the responsible parties for forming the work. To more clearly depict the responsible parties with regard to each goal please review Table D-2 labeled "Responsibilities" in Appendix D.

In addition, the plan will be implemented through the existing programs and budgeting process in the expediting of capital improvements. Table D-3 entitled "Upcoming Projects" in Appendix D lists upcoming projects in the next five (5) years that the County, Towns & Villages plan on participating in. These projects or "actions" include culvert upgrades, bridge repairs and replacements, upgrades to existing structures, all of which will help reduce the impact of various hazards. In particular flood impacts would be reduced due to improved hydrants and the use of flood proof structures.

Table D-2 illustrates the responsible parties for each jurisdiction which has participated in this plan for implementing work towards making progress with respect to the goals. With respect to the County, the SCEMP/LEPC Committee will both coordinate the efforts by the County and also, obtain the input from the Towns & Villages. The County, Towns and Villages will incorporate work completed for the implementation of the goals into the zoning and building regulations that are implemented by each.

Table 3 describes the five goals that were recommended for action along with specific actions to be implemented. As previously mentioned in Section 3.1, the actions are

primarily implementable through the use of existing budgets that are available in the County and in each Town and Village. Where capital projects need additional funding such needs are mentioned in Table D-3 of Appendix D.

We therefore use the available budgets of administration, building departments, planning departments and the County SCEMP/LEPC to put into action public education, building code enforcement, etc.

ALL HAZARD/PRE-DISASTER MITIGATION PLAN ACTION PLAN

	GOAL		ACTION
<u>#1</u>	Reduce the Impact of Ice Storms		Continue to maintain the proper building codes and to make sure that these codes are enforced.
<u>#2</u>	Reduce the Impact of Winter Storms	•	Continue to maintain the proper building codes and to make sure that these codes are enforced.
<u>#3</u>	Reduce the Impact of Floods	•	Encourage homeowners to buy flood insurance to protect belongings.
		•	Promote the review of Flood Insurance Rate Maps (FIRM) prior to new development in certain flood
			prone areas.
		•	Educate the Community about flooding, specifically types of areas where flooding occurs, causes of
			flooding, etc.
		•	Modify, repair or replace bridges, drainage, piping, etc.
<u>#4</u>	Reduce the Impact of Tornadoes		Distribute information about Tornadoes, discussing how to build a home to withstand this hazard.
			Considerations will be taken to retrofit structures to strengthen the structure.
<u>#5</u>	Reduce the Impact of Windstorms	•	Continue to maintain the proper building codes and to make sure that these codes are enforced.
<u>#6</u>	Reduce the Impact of Man-Made	•	Conduct meetings with the local utility companies to discuss better ways to reduce the impacts of the
	 Hazards Power Outage 		Power Outage hazard.
	Structural Fire HAZMAT	•	The County will construct a Fire Training Facility to educate and train the Community to prepare for
			Structural Fires.
			Consideration will be taken to require the use of fire-retardant materials in any new constructions.

• SCEMP/LEPC will conduct meetings with the Railroad to discuss HAZMAT concerns.

*Please note that all responsible parties are listed on the table titled "RESPONSIBILITIES" found in Appendix D-2.

** Budgeted routinely by County, Towns and Villages.

Table 3

<u>COST</u>

Budgeted, No Additional**
Budgeted, No Additional**
Town/Village Announcements** Building Inspectors**
Cost Undetermined
See Table D-3**
Cost Undetermined
Implemented through Building Permits** Budgeted, No Additional**
Cost of Officials**
County, \$2,000,000.00
Implemented through Building Permits**

Budgeted, No Additional**

4. PLAN MAINTENANCE PROCEDURES

The All Hazard/Pre-Disaster Mitigation Plan will be updated by addendum at any time a **significant re-zoning of the County, a Town or a Village takes place, a change in the budget occurs, or a** major significant change has occurred to warrant such. This is not anticipated at this time except if one of the hazards which were of a lower priority manifests itself through a high degree of current damage. In this case there may become an urgent need to re-focus goals and activities. The addendum would allow for the basic plan to remain in-tact while addressing current needs.

At the end of the fourth year of the date of the Plan's acceptance by FEMA and SEMO, the Plan will start to be updated. **A meeting will be held in March of the fourth year on a date to be determined by the SCEMP/LEPC Committee.** Any addendum will be directly incorporated into the body of the Plan at that time. Prior to the passing of five years from the date of acceptance, a revised and updated plan will be submitted to SEMO for review and coordination with FEMA.

During the updating process, the Towns and Villages will be contacted to provide updated information concerning the elements of the plan. This will be done through the issuance of a questionnaire to be completed and returned to the County's SCEMP/LEPC committee. The committee will utilize the information provided on the questionnaire to update the sections of the Plan. The SCEMP/LEPC will appoint a sub-committee for the purpose of updating the plan.

Upon the completion of a draft of the updated All Hazard/Pre-Disaster Mitigation Plan, each Town and Village will be given a copy of the plan for review and comment. **Following their comments, each Town or Village will submit an Adoption Resolution**

stating their approval of the newly revised Plan. The new adoption resolutions will supercede & replace the old resolutions and will be attached to the Plan in Appendix

E. Comments will be incorporated after which the draft will be made available to the public at libraries, on the County web site and at the government offices of the County, Town and Villages. A public meeting to obtain public comment on the revised plan will be held.

Subsequent to the receipt of Public comment and the incorporation of such into the plan, the updated plan will be submitted to SEMO.

APPENDIX A

LAND AREA

SULLIVAN COUNTY, NEW YORK

Land Area

Sullivan County, New York

	Total Area		Percent of
	(Square Miles)	Acres	Total County
Sullivan County	1,011.3	647,212.8	100.0%
Bethel Town	93.5	59,846.4	9.2%
Callicoon Town	49.6	31,769.6	4.9%
Cochecton Town	38.1	24,358.4	3.8%
Delaware Town	35.1	22,444.8	3.5%
Fallsburg Town	79.2	50,713.6	7.8%
Forestburgh Town	56.7	36,262.4	5.6%
Fremont Town	51.4	32,876.8	5.1%
Highland Town	50.6	32,390.4	5.0%
Liberty Town	81.9	52,403.2	8.1%
Lumberland Town	50.4	32,268.8	5.0%
Mamakating Town	100.0	64,019.2	9.9%
Neversink Town	86.9	55,584.0	8.6%
Rockland Town	97.3	62,252.8	9.6%
Thompson Town	90.5	57,907.2	8.9%
Tusten Town	50.2	32,115.2	5.0%

Source: Sullivan County Department of Public Works. Prepared by Sullivan County Division of Planning & Community Development.

APPENDIX B

CRITICAL FACILITIES IN SULLIVAN COUNTY

PUBLIC SCHOOLS IN SULLIVAN COUNTY

Eldred School District:

Eldred Central School 600 Route 55, PO Box 249 Eldred, NY 12732

George Ross Mackenzie Elementary School 1045 Proctor Road, PO Box 249 Glen Spey, NY 12737

Fallsburg Central School:

Benjamin Cosor Elementary School 15 Old Falls Road Fallsburg, NY 12733

Fallsburg Junior-Senior High School 115 Brickman Road Fallsburg, NY 12733

Liberty Central School:

District Office 115 Buckley Street Liberty, NY 12754-1600

Liberty High School 125 Buckley Street Liberty, NY 12754-1600

Liberty Middle School 145 Buckley Street Liberty, NY 12754-1600

Liberty Elementary School 201 North Main Street Liberty, NY 12754-1828

White Sulphur Springs Elementary School 32 School House Road White Sulphur Springs, NY 12787-0156 Livingston Manor Central School: School Street Livingston Manor, NY 12758

Monticello Central School:

Monticello High School 39 Breakey Avenue Monticello, NY 12701

Robert J Kaiser Middle School 39 Breakey Avenue Monticello, NY 12701

Kenneth L. Rutherford Elementary School 9 Patricia Lane Monticello, NY 12701

George L. Cooke Elementary School Franklin Avenue Monticello, NY 12701

Cornelius Duggan Elementary School Drawer H White Lake, NY 12701

Emma C Chase Elementary School 50 Pennsylvania Avenue Wurtsboro, NY 12701

Roscoe Central School:

Roscoe Central School 6 Academy Street Roscoe, NY 12776

Tri-Valley Central School:

Tri-Valley Central School Route 55 Grahamsville, NY 12740

Sullivan County Board of Cooperative Educational Services (BOCES):

Main Campus and Administration Building 19 Ferndale-Loomis Road Liberty, NY 12754-2908

Youngsville School For Alternative Education North Road Youngsville, NY 12791

Center For Career Development 35 Plaza Drive Monticello, NY 12701

Sullivan County Community College (SCCC):

112 College Road Loch Sheldrake, NY 12759

Sullivan West CSD:

Delaware Valley Campus 6240 Route 97 Callicoon, NY 12723

Jeffersonville-Youngsville Campus Box 308 Schoolhouse Road Jeffersonville, NY 12748

Lake Huntington Campus P.O. Box 6604 Lake Huntington, NY 12752

Narrowsburg Campus 5 Erie Avenue Narrowsburg, NY 12764

HOSPITALS IN SULLIVAN COUNTY

Catskill Regional Medical Center

68 Harris-Bushville Road Harris, NY 12742

Catskill Regional Medical Center

Grover Hermann Division Route 97 Callicoon, NY 12723

FIRE DEPARTMENTS IN SULLIVAN COUNTY

Beaverkill Valley Fire Company Bloomingburg Fire Company #1 Bullville Fire Department Callicoon Vol. Fire Department Callicoon Center Vol. Fire Company Circleville Fire Department Claryville Vol. Fire Department Cochecton Fire Station Cooks Falls Fire Department Fallsburg Fire Department Forestburgh Fire Company No. 1 Grahamsville Fire Department Hankins - Fremont Center Fire Dept. Highland Lake Vol. Fire Company Hortonville Vol. Fire Company Hurleyville Fire Department Kauneonga Lake Fire Department Kenoza Lake Fire Department Lake Huntington Fire Department Lava Fire Department Lew Beach Fire Department Liberty Fire Department

Livingston Manor Fire Department Loch Sheldrake Fire Company No. 1 Long Eddy Fire Department Lumberland Fire Company Mountaindale Fire Department Municipality of Monticello Fire Dept. Narrowsburg Fire Department, Inc. Neversink Fire Department North Branch Fire Department Protection Hose Company No. 1 Rock Hill Fire Department Roscoe/Rockland Fire Department Smallwood-Mongaup Valley Fire Company Summitville Fire Company No. 1 Swan Lake Fire Department Thompson Ridge Fire Department Westbrook Fire Company White Lake Fire Department White Sulphur Springs Fire Department Woodbourne Fire Department

Woodridge Fire Department

Wurtsboro Fire Department

Youngsville Fire Department

Yulan Fire Department

AMBULANCE CORPS IN SULLIVAN COUNTY

American Legion Ambulance Service	Mamakating First Aid Squad					
Bethel Vol. Ambulance Corps	MobileMedic					
Town of Cochecton Vol. Amb. Corps	Monticello Vol. Amb. Corps.					
Grahamsville First Aid Squad	Mountaindale Fire Dept. First Aid Squad					
Catskill Hatzalah	Neversink Fire Dept. Amb. Aux.					
Hurleyville Emergency Relief Squad	Rock Hill Vol. Amb. Corps.					
Jeffersonville Vol. First Aid Squad	Roscoe/Rockland Vol. Amb. Corps					
Town of Liberty Vol. Amb. Corp.	Town of Tusten Vol. Amb. Corps. Upper Delaware Vol. Amb. Corps.					
Vol. Amb. Corps. Of Livingston Manor						
Lumberland Fire Dept. Amb. Corps.	Woodbourne Fire Dept. First Aid Squad					

TOWN/VILLAGE-BY-TOWN/VILLAGE CRITICAL FACILITIES IN SULLIVAN COUNTY

Town of Bethel:

Town Hall Building Department Highway Department Justice Court Transfer/Recycling Center Senior Citizens Center Sewer Plant Post Office

Village of Bloomingburg:

Village of Bloomingburg Post Office

Town of Callicoon:

Town Hall Town Barn Post Office

Town of Cochecton:

Town Hall Highway Department Post Office Police Department

Town of Delaware:

Town Hall Town Barn Sewer Plant Court

Town of Fallsburg:

Town Hall Highway Department Justice Court Loch Sheldrake Waste Water Treatment Plant Sewer/Water Department Post Office Police Department Sullivan/Woodburne Cemeteries

Town of Forestburg:

Town Hall Highway Department Justice Court Post Office

Town of Highland:

Town Hall/Town Court Highway Department Post Office Police Department

Village of Jeffersonville:

Village of Jeffersonville Sewer Plant Waste Water Plant Post Office Lake Jeff. Dam & Hydro-Elec. Plant

Town of Liberty:

Town Hall Highway Department Justice Court Sewage Treatment Plant Water & Sewers Post Office DPW Garage Walnut Mountain Nursing Home Light and Life Christian School Saint Peters Elementary School C.P. Clinic Local churches

Village of Liberty:

Village of Liberty Justice Court Sewage Plant Water Works Police Department

Town of Lumberland:

Town Hall Highway Department Justice Court Senior Citizen Center Post Office Police Department Telephone Switching Station

Town of Mamakating:

Town Hall Highway Department Town Justice Post Office Town Park

Village of Monticello:

Village of Monticello Buildings & Grounds Department Highway Department Justice Court Sanitation Department Senior Citizen Center Sewer Department Water Department Post Office Police Department

Town of Neversink:

Town Hall Highway Department Transfer Station Post Office Local churches NYC DEP Sewer Plant

Town of Rockland:

Town Hall Highway Department Sewer & Water Department Post Office

Town of Thompson:

Town Hall Building Department Highway Department Justice Court Sewer & Water Department Post Office Sullivan County D.T.C.

Town of Tusten:

Town Hall Town Justice Post Office Water/Sewer Plants Senior Hall

Village of Woodridge:

Village of Woodridge Justice Court Public Works Department Waste Water Treatment Plant Water Department Post Office Police Department

Village of Wurtsboro:

Village of Wurtsboro Justice Court Water Department Post Office Police Department

COUNTY CRITICAL FACILITIES IN SULLIVAN COUNTY

Sullivan County Court House (Monticello)

Sullivan County Government Center (Monticello)

Sullivan County Liberty Complex (Liberty)

Sullivan County Division of Public Works

- Harris Facility
- Barryville Facility
- Livingston Manor Storm Station
- Callicoon Storm Station
- Liberty Storm Station
- Wurtsboro Storm Station
- Kenoza Lake Storm Station

Sullivan County International Airport (White Lake)

Sullivan County E 911 Building (White Lake)

Sullivan County Landfill Treatment Plant (Monticello)

New York State Police (Liberty, Mamakating, Narrowsburg, Roscoe, Wurtsboro)

Sullivan County Jail (Monticello)

Utility Companies, Central Hudson and NYSEG (Various Locations)

Telephone Companies, Verizon, Sprint, and AT&T (Various Locations)

APPENDIX C

HAZMAT SITES & SPILLS

2003-2004

S
Sites
xed
-1
15
TT.
i.
ï.
ï
ï
ĭ.
ŭ.
ŭ.
ŭ.
1
ŭ.
ŭ.
ŭ.
ŭ.
1
1
1
1
1
1
1
1
1
1
1
1
1
1
ŭ.
1
1
1
1
1
1

Updated Name	A the Avenue of Location is a set of	Address	CityStZb	Owner	Emand Contact	Phonet	Amb	E
2/28/03: A.T. Reynolds & Sons	4496 SR 42	P.O. Box 168	Klameshia, NY 12751	Same	Harold Reynolds	794-2187	Mont	Mont
2/5/03 Agway	Chestnut Street Ext	P.O. Box 151	Liberty, NY 12754	Agway	Scott Sicular	888-249-2924	ЪЪ	Lib
2/5/03 Agway	Townsend Rd, WSS	P.O. Box 151	Liberty, NY 12754	Agway	Scott Sicular	888-249-2924	9	WSS
2/5/03 Burnwell/SC Gas	78 Cold Spring Road	Same	Monticello, NY 12701	Howard Roder	Neil Bell, Jr.	794-8484	Mont	Mont
DISIDE CES	Lays Inn	52 Sulivan Ave	LIDERY, NY	CES	Mike Taylor	794-1210	3	2
2/18/03 Combined Energy Sure	Kohle Distrik Der ST 200 Musteham		Woodridge, NY 12/68	Man Kosensnein	Same	434-6000	Marg	Mund
2/18/03 Combined Energy Svcs	Linitad Bavarana 1243 Okt 8417 Familala	DO DAY 1388	Montoello, NY 12701	Michael Taylor	Same	0770-HR/	Mont	Mont
2/18/03 Combined Energy Svcs	Paradise Resort, Haven Rd, Wurtsboro	PO Box 138b	Monticello NY 12701	Michael Taylor	Same	794-6776	Mama	Wurts
2/18/03 Combined Energy Svcs	Camp Simcha, 430 White Road, Glen Spey	PO Box 1388	Monticello, NY 12701	Michael Tavlor	Same	794-6226	Mont	Mont
2/18/03 Combined Energy Svcs	Mon	PO Box 1388		Michael Taylor	Same	794-6226	Mont	Mont
2/18/03 Combined Energy Svcs	-B Oak Street, Liberty	PO Box 1388	ž	Michael Taylor	Same	794-6226	P	Lib.
2/18/03 Combined Energy Svcs	505 Thompsonville-Heiden Rd, Thompsonville	PO Box 1388		Michael Taylor	Same	794-6226	Mont	Mont
2/18/03 Combined Energy Svcs	Shop Rite, 1943 SR 52, Liberty	PO Box 1388		Michael Taylor	Same	794-6226	e P	9
2/10/03/Comptined Energy Svcs	2/0 East Broadway, Monticello	PO Box 1388	Monticello, NY 12701	Michael Taylor	Same	794-6226	Mont	Mont
of and Combined Energy SVCS	Wearster, 184 Cold Spring Rd, Montcello	PO BOX 1300	Montreello, NY 12/UT	Michael Taylor	Same	194-6226	Mont	Mont
2/18/03 Combined Energy SVCB	VValmart, 33 Anawana Lake Koad, Monucello	PO BOX 1388	Monucello, NY 12/01	Michael Taylor	Same	794-6226	Mont	Mont
2/4/03 Fallshirn Gas	ZEO Cast Diosavey, Monucero	P D Box 1300	South Entrehing NY 1270	MIChael Laylor	Same	184-02.20	MONT	TUOM
2/4/03 Fallsburg Gas	4999 Main Street South Fallsburg	P.O. Box F	South Fallsburn NY 12779	L 0	Michael Gold	1785-665	Falls	Falle
Leisure Time	See A.T. Revnolds							
8/21/03 Through Natural Law	137 Waldemere Rd, Livingston Manor	137 Waldemere Rd	Livingston Manor, NY 12758	Same	Kenneth Ebel	439-5018	Liv Man	Liv Man
2/18/03 Mid Valley Oil Company	Monticello Xtra Mart - Rt 42 & Hammond Str	PO Box 4092	New Windsor, NY 12553	Company	Sandra Theilig	845-561-4000 X105		Mont
2/18/03 Mid Valley Oil Company	Liberty Xtra Mart - 27 Mill Street	PO Box 4092	New Windsor, NY 12553	Company	Sandra Theilig	845-561-4000 X105	Lb b	LIB
5/29/03 Mirabito Fuel Group	187 Rockland Road, Roscoe	44 Grand Street	Sidney, NY 13838	Holdings	Piers	800-633-2353	Ros	Ros
2/24/03 Mirant NewYork, Inc.	Grahamsville Hydro Plant	Four Executive Blvd	Suffern, NY 10901	Mirant New York, Inc.	Richard Rothe	914-854-2203	Gra	Gra
2014/03 Mirant New York, Inc.	Mongaup Plant & Garage, Plank Rd	Four Executive Bivd	Suffern, NY 10901	Mirant New York, Inc.	Ricahrd Rothe	914-584-2203	Mont	Forest
ALTON NY POWER AUMORITY	Montrcello Main & Storage Facility	Koute 1/B	Monticello, NY 12/01	NY Power Authority	Stephen Coonradt	607-588-6061	Mont	Mont
1/28/03 NYC DEP	District Office 7870 SR 42	P.O. Box 358	Grahamsvilla NV 10740	NYCOED	Duesal Detters	0107-010 086 7846	New	ADA C
1/28/03 NYC DEP	7051 SR 55. Neversink Intake	P.O. Box 358	Grahamsville NY 10740	NYCIED	Priceal Battare	086.7816	Nav	Nen
1/28/03 NYC DEP	7866 SR 42	P.O. Box 358	Grahamsville, NY 12740	NYC DEP	Edward Storck	985-7816	Gra	Gra
2/18/03 NYSEG	Route 17B, Coopers Comers	P.O. Box 3607	Binghamton, NY 13902	NYSEG	Lawanda Ervin	800-572-1131	Mont	Mont
2/18/03 NYSEG	-	P.O. Box 3607	Binghamton, NY 13902	NYSEG	Lawanda Ervin	800-572-1131	ĘP.	P
7/24/03: Premium Gas Services, Inc.	-	PO Box 247	Ferndale, NY 12734	Michael Blank	Robert Blank	292-4550	Lb	Lib
3/7/03 Sullivan Materials	Liberty Plant - SR 17, Exit 99	1245 Kings Road	Schnectady, NY 12303	Callahan Industries	James Carnell	914-455-8600	P	P
or ruos cullvan Materials	Bridgeville Plant	100 Sullivan Street	Monticello, NY 12/01	Callahan Industries	Mike Hughson	814-797-2015	Mont	Mont
2//US SUIIVAN MATCHAIS	Fosterdale Plant - SK 32	1245 Kings Koad	Schnectady, NY 12303	Callahan Industries	James Carnell	914-455-8600	Coch	LK Hunt
CORDA SVDA Foundation	371 Brickman Doad		South Fallsburg, NY 12770		Gary Freeman	434-2000		
2/4/03. UPS	20 Queens Mtn Rd Famdala	6075 Northern Blud	Fact Surarise NV 13057	SOIL	lim Mix	001-424 4001		
3/19/03 VEO	155 Kinaston Ave. Wurtsboro	P.O. Box 1440	Monticello NY 12701	Same	Jan VanFitan	704.8715	Mama	Wint
3/19/03 VEO	85 St John Street, Monticello	P.O. Box 1440	Monticello, NY 12701	Same	Jan VanEtten	794-8715	Mont	Mont
3/19/03 VEO	131 Forestburgh Rd, Monticello	P.O. Box 1440	Monticello, NY 12701	Same	Jan VanEtten	794-8715	Mont	Mont
3/19/03 VEO	183 Mill Street, Liberty	IP.O. Box 1440	Monticello, NY 12701	Same	Jan VanEtten	794-8715	LIB	q
3/19/03 VEO	4 Katrina Falls Rd, Rock Hill	P.O. Box 1440	Monticello, NY 12701	Same	Jan VanEtten	794-8715	RH	RH
3/19/03 VEO	176 Main Street, South Fallsburg	P.O. Box 1440	Monticello, NY 12701	Same	Jan VanEtten	794-8715	Falls	Falls
2/21/03 Verizon	334 Main Street - Grahamsville	221 E 37th Str, 4th FI	New York, NY 10016		Thomas Fisher	888-696-3973	Gra	Gra
2/21/03 Verizon	3482 SR 55 - Kauneonga Lake	221 E 37th Str, 4th FI	New York, NY 10016		Richard Strobel	914-455-1372	Bethel	Kaun
2/21/03 Verizon	21 Oberferst St - Liberty	221 E 37th Str, 4th FI	New York, NY 10016		William Thelman	888-696-3973	EP.	2
2/21/03 Verizon	10 St John Street - Monticello	221 E 37th Str, 4th FI	New York, NY 10016		James Moore	888-696-3973	Mont	Mont
	5/21 S 42 - Failsburg	221 E 3/IN SU, 401 FI	New York, NY 10016	第二日 第二日	Richard Strobel	914-455-1372	Falls	Falls
COLUCE Vericon	14 Maple Ave - Jenersonville	54	Naw Tork, NY 10016		Kichard Strobel	914-455-13/2	Ten	Hen
2/21/03 Verizon	78 Main Street - Liv Manor		New York, NY 10016	A HAN	Richard Strobel	914-455-1372	I W	N
2/21/03 Verizon	5324 SP 42 - South Falls				INDUM A CONTRACT	4 101 -004-610	indre .	
		221 E 3/IN SU, 4IN FI	New York, NY 10016		Richard Strobel	914-455-1372	Falls	Falls

.

Spill number	Date spill reporte d	Spill name	County	City/town	Address
1.	02/11/2003	ROADWAY	Sullivan	MONTICELLO	JEFFERSON ST
2.	02/18/2003	WOODBOURNE AUTO SERVICE	Sullivan	WOODBOURNE	MAIN STREET
3.	02/22/2003	RESI: RYAN	Sullivan	MAMAKATING	988 ROOSA GAP RD
4.	02/25/2003		Sullivan	FERNDALE	STANTON CORNERS ROAD
5.	02/25/2003	MOBIL STATION	Sullivan	WURTSBORO	STATE RT 209/SULLIVAN ST
6.	03/04/2003		Sullivan	CALLICOON	RT 17B
7.	03/13/2003	X/S COUNTY RT 164	Sullivan	HORTONVILLE	STATE RT 17B
8.	03/19/2003	MISCIONE RESIDENCE	Sullivan	TUSTEN	RTE 52/ACROSS HOFFMAN RD
9.	03/21/2003	PUMP STATION	Sullivan	WOODRIDGE	36 GREENFIELD ROAD
10.	03/21/2003	OLSEN RESIDENCE	Sullivan	LIBERTY	68 ACADEMY STREET
11.	03/24/2003	DELANO VILLAGE TRL PK	Sullivan	MONTECELLO	800 OLD LIBERTY RD
12.	03/24/2003	SULLIVAN CO AIRPORT	Sullivan	MONTICELLO	100 NORTH ST
13.	03/25/2003		Sullivan	MONTICELLO	26 EDWARDS AVE
14.	03/27/2003		Sullivan	CALCUN	20 RAILROAD AV
15.	03/28/2003	CORTESE BODY SHOP	Sullivan	TUSTEN	RT.97 & COUNTY RD 25
16.	03/28/2003	APARTMENT BLDG	Sullivan	FALLSBURG	PLEASANT VALLEY RD
17.	03/31/2003	STATE RT 42	Sullivan	MONTECELLO	DINGLE DAISY RD
18.	04/02/2003	44 CONTINENTAL AVENUE	Sullivan	NAPANOCH	44 CONTINENTAL AVENUE
19.	04/03/2003		Sullivan	GRAHAMSVILLE	1 TWINS HAVEN ROAD
20.	04/07/2003	LAUREL GARDEN APTS	Sullivan	SOUTH FALLSBURGH	13 LAUREL GARDEN DR
21.	04/10/2003	LANDFILL PRETREATMENT S	Sullivan	MONTICELLO	91 LANDFILL DR

		PLT			
22.	04/18/2003	BARNES LANDFILL	Sullivan	HIGHLAND	WOODS RD
23.	04/21/2003	12 WOODCLIFF AVE	Sullivan	MONTICELLO	12 WOODCLIFF AVE
24.	04/28/2003	ONTEORA SCHOOL	Sullivan	BOICEVILLE	RT 28
25.	05/01/2003	SULLIVAN DIAGNOSTIC TREAT	Sullivan	THOMPSON	HARRIS ROAD
26.	05/08/2003	LABELLA FRAM	Sullivan	SWAN LAKE	FRASIER RD
27.	05/14/2003	SWINGING BRIDGE HYDRO PLN	Sullivan	FORRESTBURG	SWINGING BRIDGE RD
28.	05/19/2003		Sullivan	LIBERTY	220 SOUTH MAIN STREET
29.	05/19/2003	IN THE VICINITY OF	Sullivan	WOODRIDGE	GLENWILD RD & OLD GLEN WI
30.	05/23/2003	NEXT TO LAST PROPERTY	Sullivan	BLOOMINGBURG	MAPLE DR
31.	05/27/2003	TAYLOR RESIDENCE	Sullivan	MONTICELLO	126 RT17B
32.	05/28/2003	RIO DAM ROAD AND	Sullivan	GLENS BAY	KNIGHT ROAD
33.	05/31/2003		Sullivan	ROCKHILL	200 ROCKHILL DR
34.	06/03/2003		Sullivan	LIVINGSTON MANOR	35 FINCH ST
35.	06/11/2003		Sullivan	BARRYVILLE	MONUMENT RD & OLD MINISIC
36.	06/14/2003	MB CONSULTING	Sullivan	SOUTH FALLSBURG	MAIN ST
37.	06/29/2003	ACROSS FROM	Sullivan	LIBERTY	24 SHEEHAN RD
38.	07/07/2003	BAUMS TOWING	Sullivan	FERNDALE	OLD 17
39.	07/08/2003	ELDERD SCHOOL BUS GARAGE	Sullivan	ELDERD	PROCTOR RD
40.	07/11/2003	ERTZ PUMBLING	Sullivan	LIBERTY	21 JORDON AVE
41.	07/11/2003		Sullivan	MONTICELLO	8 HIGH STREET
42.	07/11/2003	VFW POST	Sullivan	LIBERTY	RT 52 & FRANKY LANE
43.	07/15/2003		Sullivan	MONTICELLO	ROUTE 17B & RACETRACK RD
44.	07/16/2003	ROUTE 17	Sullivan	MAMAKATING	BY EXIT 114

45.	07/17/2003	LAST HOUSE ON RIGHT SIDE	Sullivan	MONTICELLO	CAMP ROAD
46.	07/18/2003	SAMS TOWING	Sullivan	LIBERTY	2 SULLIVAN AVE
47.	07/18/2003		Sullivan	LIBERTY	2582 STATE RT 52
48.	07/23/2003		Sullivan	MAPLEWOOD	COOPERS CORNERS ROAD
49.	07/24/2003		Sullivan	LIBERTY	333 CHESTNUT ST
50.	07/31/2003	STEWARTS SHOP #307	Sullivan	FALLSBURG	5 BRICKMAN RD
51.	08/04/2003		Sullivan	BETHEL	WESTSHORE ROAD
52.	08/07/2003	STEVE FERRARIE	Sullivan	PARKSVILLE	107 LILLY POND RD
53.	08/10/2003	SUNOCO GAS STATION	Sullivan	JEFFERSONVILLE	5 CENTER STREET
54.	08/13/2003	FRED STABBERT	Sullivan	JEFFERSONVILLE	5026 RT.52
55.	08/19/2003	SULLIVAN WEST CENTRAL SCH	Sullivan	YOUNGSVILLE	1815 SHANDELEE RD
56.	08/21/2003	UNITED METHODIST CHURCH	Sullivan	MONTICELLO	445 BROADWAY
57.	08/22/2003		Sullivan	SMALLWOOD	166 BALLARD RD
58.	08/22/2003		Sullivan	LIBERTY	REVONAH HILL RD
59.	08/24/2003	RESI: POPPE	Sullivan	LIVINGSTON MANOR	493 GROVILLE RD
60.	08/26/2003	M&M FORD LIN MERCURY	Sullivan	LIBERTY	127 MILL ST
61.	08/26/2003		Sullivan	LOCH SHELDREAKE	301 FOX CROST VILLAGE
62.	09/02/2003	GREENFIELD PUMP STATION	Sullivan	WOODRIDGE	34 GREENFIELD AV
63.	09/02/2003	WILSEY VALLEY ROAD &	Sullivan	WERTSBORO	KINGSTON AVE
64.	09/04/2003	CROTTY'S AUTO PARTS	Sullivan	JEFFERSONVILLE	4920 RT 52
65.	09/10/2003	COCHECTON GENERAL STORE	Sullivan	COCHECTON	COUNTY RT 114
66.	09/11/2003		Sullivan	MONTICELLO	153 EAST BROADWAY
67.	09/11/2003		Sullivan	CALICOON	BRIDGE AND MAIN ST

68.	09/12/2003	ULTRA POWER	Sullivan	WHITE LAKE	1488 ROUTE 17B
69.	09/22/2003	DELAWARE VALLEY JOB CORPS	Sullivan	CALLICOON	9368 STATE ROUTE 97
70.	09/23/2003	36 GREENFIELD RD	Sullivan	WOODRIDGE	36 GREENFIELD RD
71.	09/23/2003	LIBERTY EXTRA MART	Sullivan	LIBERTY	RT52 27 MILL ST
72.	09/23/2003	RT 55A &	Sullivan	NEVERSINK	ROCKY HILL RD
73.	09/24/2003		Sullivan	BLOOMINGBURG	13 ASPEN LANE
74.	10/01/2003	RACEWAY MOTEL	Sullivan	MONTICELLO	121 JEFFERSON STREET
75.	10/02/2003	RACE WAY MOTEL	Sullivan	MONTESELLO	121 JEFFERSON ST
76.	10/10/2003	ROADWAY	Sullivan	CRAWFORD	301 BULLVILLE RD
77.	10/16/2003	BLACKTOP AND LAND	Sullivan	NEVERSINK	497 MEYERS RD
78.	10/18/2003		Sullivan	LIBERTY	STATE ROUTE 52 & MILL ST
79.	10/27/2003	GREENFIELD PUMP STATION	Sullivan	WOODRRIDGE	36 GREENFIELD AVE
80.	10/29/2003	36 GREENFIELD RD	Sullivan	WOODRIDGE	36 GREENFIELD RD
81.	10/30/2003		Sullivan	HURLEYVILLE	BAKER HILL RD & CT RT 104
82.	10/30/2003		Sullivan	ROCKHILL	41 LUCKY LAKE DR
83.	11/03/2003	STATE ROUTE 17 E/B	Sullivan	WURTSBORO	BTWN EXITS 113 & 114
84.	11/04/2003	4 DELAWARE AVENUE	Sullivan	LIBERTY	4 DELAWARE AVENUE
85.	11/05/2003	GENERAL ASSOC. OF DSDA	Sullivan	MOUNTAINDALE	UNKNOWN
86.	11/06/2003	NARROWSBURG PUMP STATION	Sullivan	NARROWSBURG	DELAWARE DR
87.	11/08/2003	PUETZ RESIDENCE	Sullivan	HARRIS	18 SACHS RD
88.	11/10/2003	STEWARTS STORE # 288	Sullivan	MONTICELLO	12 FORESTBURG RD
89.	11/10/2003		Sullivan	MONTICELLO	FAIRCHILD PLACE
90.	11/11/2003	IN ROADWAY	Sullivan	ROCKLAND	RT 17 & ROSCOE EXIT

91.	11/13/2003	ROSCOE CENTRAL	Sullivan	ROCKLAND	6 ACAMEDY ST
92.	11/13/2003	POLE #9 LINE #1418	Sullivan	LOCH SHELDRAKE	STATE RT. 52
93.	11/15/2003	STREAM	Sullivan	NEVERSINK	108 OVERLOOK RD
94.	11/15/2003	STEWARTS STORE 288	Sullivan	MONTICELLO	12 FORESTBURG AVE
95.	11/19/2003	HARRIS CAMPUS-CENT FOR DI	Sullivan	HARRIS	BENMOSHE RD
96.	11/19/2003		Sullivan	WHITE LAKE	AYLER RD
97.	11/20/2003		Sullivan	BLOOMINGBURG	GODEFFROY RD & MAIN ST
98.	11/20/2003		Sullivan	WOODRIDGE	36 GREENFIELD RD
99.	11/21/2003		Sullivan	SOUTH FALLSBURGH	203 LAVISTA DR
100.	11/23/2003	SHELDRAKE STREAM	Sullivan	SOUTH FALLSBURG	RT42 & GRIFF COURT
101.	12/01/2003	STEWARTS	Sullivan	MONTICELLO	RT42 SOUTH FORRGSBURG
102.	12/11/2003	GREENFIELD PUMP STATION	Sullivan	WOODRICH	36 GREENFIELD
103.	12/12/2003	RESIDENT	Sullivan	LIVINGSTON MANOR	393 CATTAIL RD
104.	12/15/2003	ON THE STREET	Sullivan	WOODRIDGE	9 LEW STREET
105.	12/23/2003	EXXON STATION	Sullivan	ROSCO	OLD RT. 17 EXIT 94
106.	12/23/2003	RESIDENCE	Sullivan	ROSCO	MANOR ST
107.	12/25/2003	GREENFIELD PUMP STATION	Sullivan	VILLAGE OF WOODRIDGE	36 GREENFIELD
108.	12/26/2003	ON ROAD	Sullivan	FALLSBURGH	RIVER ROAD
109.	12/26/2003	GREENFIELD PUMP STATION	Sullivan	WOODRIDGE	36 GREENFIELD RD
110.	12/29/2003	RESIDENCE	Sullivan	LIBERTY	4 ANDREW STREET
111.	12/29/2003	RESIDENCE	Sullivan	COCHECTON	370 BERNAS ROAD
112.	12/29/2003	REISDENCE	Sullivan	CALLICOON	14 DELL VIEW TERRACE
113.	12/30/2003	NEWBURGH EGG	Sullivan	WOODRIDGE	NOVOGRODSKI ROAD

114.	01/01/2004		Sullivan	LIBERTY	13 MEADOW VIEW DR
115.	01/05/2004	RESIDENCE	Sullivan	MONTECELO	128 KENNY BROOK PARK
116.	01/16/2004	RACEWAY EXXON	Sullivan	MONTICELLO	CORNER 17B/JEFFERSON
117.	01/21/2004	PRIVATE RESIDENCE	Sullivan	WURTSBORO	26 SUNRISE TRAIL
118.	01/23/2004	FLEET BANK	Sullivan	NARROWSBURG	MAIN STREET
119.	01/27/2004	MAHAN RESIDENCE	Sullivan	MONTICELLO	88 FORRESTBURG ROAD
120.	02/03/2004	AUTOMOTIVE STATION	Sullivan	MONTICELLO	WAVERLY AVE
121.	02/05/2004	STEWARETS SHOP #288	Sullivan	MONTICELLO	12 FORRESTBURGH ROAD

APPENDIX D

TABLES

***TABLE D-1: TOP 15 COUNTY, TOWN & VILLAGE**

HAZARDS

***TABLE D-2: RESPONSIBILITIES**

***TABLE D-3: UPCOMING PROJECTS**

***TABLE D-4: IMPACTED FACILITIES & GEOGRAPHIC**

AREAS

TABLE D-1

County, Town & Village Top 15 Hazards

County (C), Towns (T) & Villages (V)	Population	Land Area (so	Power -	Structor	Toural Fire	lce o	Dam r	Winter	HAZMAT - File	Sites 'xed	Transportai	Accident Structure	Collapse	HAZMAT - In	Iransit Ico :	Land	Water Subnit.	Failure	En: 1	Civit	Dr.c.	Jers	Wis-	Mindstorm	Mase	Gathering	· / د.	Iransit II Mine Collapse
Sullivan (C)	73966	1011	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х											
Bethel (T)	4362	93.5	Х			Х		Х		Х											Х		Х		Х			
Callicoon (T)	3052	49.6	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х		Х					Х	Х					
Cochecton (T)	1328	38.1	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х											
Delaware (T)	2719	35.1	Х	Х	Х	Х		Х	Х	Х	Х		Х	Х	Х			Х					Х	Х			Х	
Fallsburg (T)	12234	79.2	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х											
Forestburgh (T)	833	56.7	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х											
Fremont (T)	1391	51.4	Х	Х	Х	Х		Х		Х	Х	Х			Х	Х		Х			Х	Х	Х	Х				
Highland (T)	2404	50.6	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х											
Liberty (T)	9632	81.9	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х			Х				Х		Х	Х				
Lumberland (T)	1939	50.4	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х						Х					
Mamakating (T)	11002	100	Х	Х	Х	Х		Х		Х	Х	Х	Х	Х			Х				Х		Х	Х			Х	
Neversink (T)	3553	86.9	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х					Х		Х					
Rockland (T)	3913	97.3	Х	Х		Х		Х		Х	Х	Х	Х	Х	Х	Х	Х				Х		Х	Х				
Thompson (T)	14189	90.5	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х											
Tusten (T)	1415	50.2	Х	Х	Х	Х	Х	Х	Х	Х	Х			Х	Х		Х	Х	Х					Х				
Bloomingburg (V)	N/A	N/A	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х			Х	Х						Х				
Jeffersonville (V)	N/A	N/A	Х	Х		Х		Х		Х	Х	Х	Х	Х			Х	Х	Х		Х		Х					
Liberty (V)	N/A	N/A	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х			Х				Х					Х		
Monticello (V)	N/A	N/A	Х	Х	Х	Х		Х			Х	Х	Х				Х	Х			Х	Х	Х	Х	Х			
Woodridge (V)	N/A	N/A	Х	Х		Х	Х	Х	Х	Х			Х	Х			Х	Х	Х		Х	Х	Х					
Wurtsboro (V)	N/A	N/A	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х											

Key: X denotes that the listed hazard is of concern in the noted jurisdiction

TABLE D-2

RESPONSIBILITIES

				GOALS			
County (C), Towns (T) & Villages (V)	GOAL #1 Reduce Impact of Ice	GOAL #2 Reduce Impact of Winter	GOAL #3 Reduce Impact of Floods	Impact of		Ice Impact of Man-I	
	Storms	Storms	-	Tornadoes	Power Outage	Structural Fire	HAZMAT
Sullivan (C)	C,A,H	C,A,H	C,A,H	C,A,B,H	C,A	C,A,H	C,A
Bethel (T)	A,H	A,H	B,H,Z	A,B	A		A
Callicoon (T)	A,H	A,H	B,H,Z	A,B	A		A
Cochecton (T)	A,H	A,H	B,H,Z	A,B	A		A
Delaware (T)	A,H	A,H	B,H,Z	A,B	А		А
Fallsburg (T)	A,H	A,H	B,H,Z	A,B	А		А
Forestburgh (T)	A,H	A,H	B,H,Z	A,B	А		А
Fremont (T)	A,H	A,H	B,H,Z	A,B	А		А
Highland (T)	A,H	A,H	B,H,Z	A,B	А		А
Liberty (T)	A,H	A,H	B,H,Z	A,B	А		А
Lumberland (T)	A,H	A,H	B,H,Z	A,B	А		А
Mamakating (T)	A,H	A,H	B,H,Z	A,B	А		А
Neversink (T)	A,H	A,H	B,H,Z	A,B	А		А
Rockland (T)	A,H	A,H	B,H,Z	A,B	А		А
Thompson (T)	A,H	A,H	B,H,Z	A,B	А		А
Tusten (T)	A,H	A,H	B,H,Z	A,B	А		А
Bloomingburg (V)	A,H	A,H	B,H,Z	A,B	А		А
Jeffersonville (V)	A,H	A,H	B,H,Z	A,B	А		А
Liberty (V)	A,H	A,H	B,H,Z	A,B	А		А
Monticello (V)	A,H	A,H	B,H,Z	A,B	А		А
Woodridge (V)	A,H	A,H	B,H,Z	A,B	А		А
Wurtsboro (V)	A,H	A,H	B,H,Z	A,B	А		А

Note: Branch of Govern	ment Participant Codes
SCEMP/LEPC	С
Administrative/ Disaster Planners	А
Building Inspector/ Code Enforcement	В
Highways/Public Works	н
Planning Board	Р
Zoning Board	Z

TABLE D-3

UPCOMING PROJECTS

OUNTY (C), TOWN (T) OR VILLAGE (V) NAME	LOCATION	PROJECT DESCRIPTION	ESTIMATED COST	ESTIMATED DATE	
Sullivan (C)	County Road 55	Bridge #31 Replacement	\$200,000.00	2004	
	County Road 101	Bridge #322 Replacement	\$200,000.00	2004	
	County Road 105	Bridge #139 Replacement	\$200,000.00	2004	
	Town Highway 40	Bridge #275 Replacement	\$180,000.00	2004	
	Town Highway 14	Bridge #221 Deck Replacement	\$20,000.00	2004	
	County Road 123	Bridge #26 Replacement	\$350,000.00	2004	
	County Road 157	Bridge #187 Replacement	\$1,925,000.00	2004	
	County Road 144	Bridge #230 Replacement	\$1,150,000.00	2004	
	County Road 55	Bridge #33 Replacement	\$200,000.00	2005	
	Town Highway 11	Bridge #281 Replacement	\$180,000.00	2005	
	Town Highway 43	Bridge #185 Replacement	\$180,000.00	2005	
	County Road 121	Bridge #112 Replacement	\$200,000.00	2005	
	Town Highway 14	Bridge #372 Replacement	\$180,000.00	2005	
	Town Highway 28	Bridge #430 Deck Replacement	\$80,000.00	2005	
	County Road 53	Bridge #45 Replacement	\$1,846,595.00	2005	
	Town Highway 30	Bridge #158 Replacement	\$1,000,000.00	2005	
	County Road 55	Bridge #29 Replacement	\$200,000.00	2006	
	County Road 61	Bridge #152 Replacement	\$200,000.00	2006	
	Town Highway 13	Bridge #278 Replacement	\$130,000.00	2006	
	Town Highway 17	Bridge #241 Replacement	\$180.000.00	2006	
	Town Highway 13	Bridge #251 Replacement	\$180,000.00	2006	
	Town Highway 16	Bridge #70 Deck Replacement	\$100,000.00	2006	
	Town Highway 39	Bridge #192 Replacement	\$1,040,000.00	2006	
	Town Highway 39	Bridge #192 Replacement	\$1,040,000.00	2006	
	County Road 55	Bridge #36 Replacement	\$200,000.00	2000	
	Town Highway 36	Bridge #186 Replacement	\$200,000.00	2007	
	Town Highway 20	Bridge #183 Replacement	\$180,000.00	2007	
	Town Highway 22	Bridge #270 Replacement	\$180,000.00	2007	
	County Road 156	Bridge #216 Replacement	\$200,000.00	2007	
	Town Highway 38	Bridge #261 Replacement	\$180,000.00	2007	
	County Road 49	Bridge #82 Replacement	\$1,492,517.00	2007	
	County Road 179	Bridge #359 Replacement	\$1,320,505.00	2007	
	County Road 55	Bridge #34 Replacement	\$200,000.00	2008	
	Town Highway 28	Bridge #432 Replacement	\$180,000.00	2008	
	Town Highway 21	Bridge #272 Replacement	\$180,000.00	2008	
	Town Highway 97	Bridge #286 Deck Replacement	\$80,000.00	2008	
	Oberfest Road	Bridge #436 Replacement	\$180,000.00	2008	
	Town Highway 32	Bridge #268 Replacement	\$180,000.00	2008	
	Town Highway 51	Bridge #224 Replacement	\$750,000.00	2008	
	Town Highway 42	Bridge #309 Replacement	\$1,187,342.00	2008	
	County Road 162	Drainage	\$454,000.00	2004-2009	
	County Road 74	Drainage	\$600,000.00	2004-2009	
	County Road 94	Pile Driving, Embankment & Road Stabilization	\$400,000.00	2004-2009	
	County Road 14/141	Drainage	\$551,700.00	2004-2009	
	County Road 164	Drainage	\$528,000.00	2004-2009	
	County Road 113 County Roads 14/141,	Drainage	\$567,600.00	2004-2009	
	94, 113, 162 & 164	Engineering	\$187,451.00	2004-2009	
Ploominghurg (1)	Main Chroat	Installation of Storm Drainage	\$225,000.00	2000	
Bloomingburg (V)	Main Street	Installation of Storm Drainage Installation of a By Pass Road to Winterton	\$225,000.00	2006 2008	
			ψ2,000,000.00	2000	
Bethel (T)	Happy Avenue	Installation of 4' Steel Culvert 40" Long, Raise the Road Surface by 16" for 50', Pave	\$10,500.00	2004-2009	
	Kortrite Road	Trenching for 500', Installation of Drop Box Basin, Installation of 140' of 16" Diameter Culvert Pipe, Backfill	\$3,500.00	2004-2009	
	Baim Road	Small Culvert Replaced with Larger 14" Culvert, Fill and Raise Road for 30'	\$2,900.00	2004-2009	
	Creamery Road	Trenching a Drainage Ditch, Installation of Larger Culvert Under the Road and Create a Sediment Pond to Collect Erosion	\$2,700.00	2004-2009	
	Fuhrer Road	Installation of New & Larger Culvert, Repave Road Section and Trench to Daylight	\$1,600.00	2004-2009	
	Corner of Cumberland Trail and Woodland Way	Replacement of Small Tube with Larger Culvert of 14", Filling Road and Raising Grade of Traveled Way by 8" for 40', Repave Road Surface	\$2,800.00	2004-2009	
	Corner of Corwin	Replacement of Small Tube with Larger Culvert of 14", Filling Road and Raising Grade of Traveled Way by 8" for 40', Repave	\$3,400.00	2004-2009	
	Avenue and woodland Way	Road Surface			
Callicoon (T)		Road Surface Widen Road & Install New Base Including Extensive Tree & Stone Removal in some areas	\$80,000.00	2004-2009	

COUNTY (C), TOWN (T) OR VILLAGE (V) NAME	LOCATION	PROJECT DESCRIPTION	ESTIMATED COST	ESTIMATED DATE
	Dietz Road	Widen Road by 300' & Install New Base Including Extensive Tree & Stone Removal	\$33,000.00	2004-2009
	Earl Myers Road	Replacement of Bridge	\$100,000.00	2004-2009
	Mall Road Kimball Road & Buck	Widen Road & Install New Base	\$63,000.00	2004-2009
	Brook Road	Replacement of two (2) Bridges	\$200,000.00	2004-2009
Delaware (T)	Intersection of Main Street and Beechwoods Road	Installation of 440' of 42" Diameter Plastic Pipe, 940' of 36" Diameter Plastic Pipe, & 1040' of 24" Diameter Plastic Pipe; Installation of five (5) Catch Basins, five (5) Cast Iron Frame and Grates, nineteen (19) Catch Basins with Frames and Grates, Backfilling Material and Re-profile & Re-pave Road the Distance of the Project	\$175,000.00	Pending Funding
Forestburgh (T)		Upgrade Town Bridge #6 to a Larger Structure	\$70,000.00	2004
J		Upgrade Town Bridge #12 to a Larger Structure	\$50,000.00	2005-2010
		Replacement of Culverts near Town Bridges #8 and #13	\$20,000.00	2005-2010
		Upgrade a Weak Gunther Bridge	\$35,000.00	2005-2010
		Upgrade Culvert near French Clearing	\$10,000.00	2005-2010
Highland (T)	Throughout Town	Four (4) Pipe Replacements	\$25,000.00	2004
Jeffersonville (V)	Durr Road, Maple Avenue & Willy Avenue	Resurfacing and Ditching		2004-2009
Liberty (T)	Midway Road	Steel Culvert Replacement	\$15,000.00	2004-2009
Liberty (1)	Midway Road	Concrete Bridge Replacement with Concrete Box Culvert	\$50,000.00	2004-2009
	Lenape Lake Road	Concrete Bridge Replacement with Concrete Box Culvert	\$50,000.00	2004-2009
	Airport Road	Steel Culvert Replacement	\$15,000.00	2004-2009
	Anderson Road	Concrete Bridge Replacement with Concrete Box Culvert	\$50,000.00	2004-2009
	Cold Spring Road	Steel Culvert Replacement	\$15,000.00	2004-2009
Liberty (V)	Clements Street (Edgar Street)	Box Culvert		2004-2009
	Elementary School Yard & Police Facility	Box Culvert		2004-2009
Neversiek (T)	Deposton Hollow Dood	Installation of Lorger Culturet	\$20,000,00	2004
Neversink (T)	•	Installation of Larger Culvert	\$20,000.00	2004
	Schumway Road	Drainage	\$10,000.00	2004-2009
	Thunder Hill Road	Drainage	\$10,000.00	2004-2009
	Sunrise Drive	Drainage	\$10,000.00	2004-2009
Rockland (T)	Hardy Street	Sewer Line Removal, Installation of a Collection Box and the Pumping of Sewage (as needed), Removal of Water Line, Temporary Over Ground Service, Replacement of Lines as Construction Progresses and Road Repair	\$250,000.00	2004-2009
	Dutch Hill Road	Bridge Replacement	\$75,000.00	2004-2009
	Beaverkill Valley Road	Reparation of 1000' of Washed Out Road Shoulder	\$200,000.00	2004-2009
	Craige Claire Road	Reparation of 600' of Washed Out Road Shoulder	\$120,000.00	2004-2009
	Craige Claire Road	Aid In Bridge Replacement of County Bridge #158 (Repair	\$125,000.00	2004-2009
	, , , , , , , , , , , , , , , , , , ,	Shoulder Failure and Guide Rail)	•	
	Craige Claire Road Beaver Lake Road	Mountain Side Repair for Stability Road Repair Associated with Dam Failure	\$100,000.00	2004-2009
	Grooville Road	Upgrade Bridge Piping	\$100,000.00	
	Shin Creek Road	Upgrade Road and Stabilize Mountain Side		
	Hoos Road	Replacement of Road Shoulder	\$40,000.00	2004-2009
	Creamery Road	Concrete Pipe Replacement for 30', Installation of Guide Rail and Bank Stabilization	\$50,000.00	2004-2009
	Willowemoc Road	500' Section of Shoulder Replacement, Tree Removal and Installation of Guide Rails		2004-2009
	Mongaup Road	Road Repair requiring Engineering, Permits, Construction, etc.		2004-2009
Tusten (T)	Erie Avenue, School	Drainage Rehabilitation	\$200,000.00	2004-2005
	Street Second Avenue	Flats Drainage	\$75,000.00	2005-2006
	Second Avenue		\$75,000.00	2005-2006
	Swamp Pond Road	IBridde Updrade/Restoration		
	Swamp Pond Road McHugh Road	Bridge Upgrade/Restoration Bridge Upgrade/Restoration		
	Swamp Pond Road McHugh Road Blind Pond Road	Bridge Upgrade/Restoration Bridge Upgrade/Restoration Pipe Replacement	\$200,000.00 \$150,000.00 \$60,000.00	2007-2008 2008-2009
Woodridge (V)	McHugh Road	Bridge Upgrade/Restoration	\$150,000.00	2007-2008

TABL	E D-4
------	-------

			CR	ITICAL	FACILI	TIES II	MPACT	ED					GEO	OGRAF	PHIC AI	REAS I	MPAC	TED
HAZARDS	GOVERNM	LAW ENT-	1	EDUCATION CE FACILITIES	1	1	RAILROAD SYSTER.		COUNTY -	STATE DC	Sakov	RESIDENT	COMMEDC	INDUSTRIC	AGRICIU -	RESERVO	GROUNNIIS, LAKES, STREAL	/ /
NATURAL HAZARDS																		
TORNADO	Х	Х	Х	Х		Х	Х	Х	Х	Х		Х	Х	Х	Х			
ICE STORM	Х	Х	Х	Х		Х					П	Х	Х	Х	Х			
WINTER STORM	Х	Х	Х	Х		Х		Х	Х	Х		Х	Х	Х	Х			
FLOOD	Х	Х	Х	Х		Х	Х	Х	Х	Х		Х	Х	Х	Х	Х		
ICE JAM																		
LANDSLIDE								Х	Х									
EPIDEMIC												Х	Х	Х	Х			
DROUGHT												Х	Х	Х	Х	Х	Х	
WINDSTORM	Х	Х	Х	Х		Х		Х	Х	Х		Х	Х	Х	Х			
EARTHQUAKE	Х	Х	Х	Х		Х	Х	Х	Х	Х		Х	Х	Х	Х			
TECHNICAL HAZARDS																		
POWER FAILURE	Х	Х	Х	Х		Х	Х					Х	Х	Х	Х			
STRUCTURAL FIRE	Х	Х	Х	Х								Х	Х	Х	Х			
DAM FAILURE	1							Х	Х	Х		Х	Х		Х	Х		
HAZMAT - FIXED SITES	1												Х	Х	Х		Х	
TRANSPORTATION ACCIDENT	1					Х	Х				П							
STRUCTURAL COLLAPSE	Х	Х	Х	Х							П	Х	Х	Х	Х			
OIL SPILL	1							Х	Х	Х	П	Х	Х	Х	Х		Х	
HAZMAT - IN TRANSIT							Х	Х	Х	Х						Х		
WATER SUPPLY FAILURE	Х										П	Х	Х	Х				
EXPLOSION	1						Х				П							
WILDFIRE	1											Х			Х			
RADIOLOGICAL - IN TRANSIT							Х	Х	Х	Х								
MINE COLLAPSE																		
HUMAN CAUSED HAZARDS																		
CIVIL UNREST	Х	Х	Х	Х														
TERRORISM	X										Ħ							
MASS GATHERING	X	Х						Х			Ħ							

APPENDIX E

COUNTY, TOWN & VILLAGE PLAN ADOPTION RESOLUTIONS

RESOLUTION NO. 105-04 INTRODUCED BY THE PUBLIC WORKS COMMITTEE TO AUTHORIZE LEGISLATIVE APPROVAL AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE- DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Sullivan County Legislature by Resolution 145-03 authorized the County Manager to enter into an agreement with the New York State Emergency Management Office to provide funding for the preparation of the Plan; and

WHEREAS, the Division of Public Works has completed the Plan; and

WHEREAS, Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan;

NOW, THEREFORE, BE IT RESOLVED, that the Sullivan County Legislature, hereby accepts and adopts the "Sullivan County, County, Town And Village, Multi-Jurisdictional, All- Hazard, Pre- Disaster Mitigation Plan".

Moved by Mrs. LaBuda, seconded by Mr. Rouis, put to a vote, carried and declared duly adopted on motion February 19, 2004.

STATE OF NEW YORK)

COUNTY OF SULLIVAN)

I, DENIESE A. HARTING, Deputy Clerk to the Legislature of the County of Sullivan, do hereby certify that I have compared the foregoing copy of a resolution with the original thereof now on file in my office and that the same is a correct transcript therefrom and of the whole of said original.

WITNESS my hand and seal of said Legislature this 19th day of February 2004.

δ:

DEPUTY CLERK TO THE SULLIVAN COUNTY LEGISLAPORE

MAR 0 3 2004

P

11-14

Town of Bethel 3454 Route 55, P.O. Box 300 White Lake, New York 12786-0300 www.town.bethel.ny.us (845) 583-4350 Fax: (845) 583-4710

Rita J. Sheehan Town Clerk

Dina M. Sturm Deputy Clerk

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Town of Bethel has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Town of Bethel hereby accepts and adopts the Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan.

Moved by Harold Russell, to adopt resolution seconded by Victoria Simpson, put to a vote and carried 4-0.

State of New York County of Sullivan County Office of the Clerk of the Town of Bethel

This is to certify that I, Rita J. Sheehan, Town Clerk of the Town of Bethel in the said County of Sullivan, have compared the foregoing resolution with the original now on file in this office, and that the same is a correct and true transcript of such original and the whole thereof.

In Witness Whereof, I have hereunto set my hand and affixed the seal of said Town this 13th day of February 2004.

J. Shedhan

Town Clerk of the Town of Bethel Sullivan County, New York

FFB 1 7 2004

RESOLUTION VILLAGE OF BLOOMINGBURG

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PREDISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS.

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Village of Bloomingburg of has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Village of Bloomingburg hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by:	R. SCOTT		
Seconded by:	C. Teict		
And adopted c	on motion:	2/5/04	, 2004

The Resolution was thereupon declared duly adopted.

Dated: 2/5/04

Jean M. Dougherty, Village Clerk

JAN 3 0 2004

RESOLUTION BY THE TOWN OF CALLICOON - ADOPTED DECEMBER 8, 2003 THY. CHICKLE HE IN

RESOLUTION #23-2003 - ON A MOTION BY COUNCILMAN BOSE, SECONDED BY COUNCILMAN SCHADT TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS.

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Town of Callicoon has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Town of Callicoon hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

I certify that the attached is a true copy as filed in the Town of Callicoon.

STATE OF NEW YORK SS: COUNTY GE CULLIVAN ON THIS 28" DAY OF JAN 2004 BEFORE ME PERSONALLY CAME

JANET BRAHM

TO ME PERSONALLY KNOWN TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE FOREGOING DOCUMENT.

NOTARY PUBLIC

BONNIE M. HUBERT Notary Public, State of New York

Sullivan County Clerk's #2322 Commission Expires July 25, 20 **Resolution 021104** # 33

RESOLUTION BY THE TOWN OF COCHECTON

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY; COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS.

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation plan accept and adopt such plan, and

WHEREAS, the Town of Cochecton has reviewed the plan and has found it to be acceptable;

NOW THEREFORE, BE IT RESOLVED, that the Town of Cochecton hereby accepts and adopts the "Sullivan County; County, Town, and Village, Multi-Jurisdictional, All-Hazard, Pro-Disaster Mitigation Plan."

Moved by: Councilperson Richardson,

Seconded by: Councilperson Maas

and adopted by a vote of	Supervisor Salvatore Indelicato	Ave
	Councilperson Larry Richardson	
	Councilperson Daisy Smith	Aye
	Councilperson Crystal Lauter	Aye
	Councilperson Gary Maas	Aye

Hollye Schulman

Town Clerk certify this is a true and accurate resolution as passed by the Town Board of the Town of Cochecton on February 11, 2004 at the regular Town Board Meeting.

FEB 1 7 2004

TOWN OF DELAWARE 104 Main Street, PO Box 129 Hortonville, New York 12745 Phone: 845/887-5250 FAX: 845/887-5228

At the February 18, 2004 meeting of the Town Board, on motion of Councilman Connors, seconded by Councilwoman Boyle, the following resolution was offered:

RESOLUTION #10-2004: AUTHORIZING THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Town of Delaware has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Town of Delaware hereby accepts and adopts the "Sullivan County, County, Town and village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan."

Resolution was thereupon ADOPTED: AYES-5, NAYS-0.

STATE OF NEW YORK)) ss.: COUNTY OF SULLIVAN)

I, TESS McBEATH, Town Clerk of the Town of Delaware, Sullivan County, do hereby certify that I have compared the foregoing resolution with the original thereof now on file in the Office of the Town of Delaware, 104 Main Street, Hortonville, New York, 12745, and that the same is a correct transcript therefrom and of the whole of said original.

WITNESS my hand and seal of said Town of Delaware this 19th day of February, 2004.

Tess McBeath Town of Delaware Town Clerk

INSERT TOWN OR VILLAGE

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL- HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the (insert Town or Village) of (Insert name of Town or Village) has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the (insert Town or Village) of (Insert name of Town or Village) hereby accepts and adopts the "Sullivan County, County, Town And Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by <u>Councilman Seletsky</u>, Seconded by <u>Councilman Perrello</u>, and adopted on motion <u>February 10</u>, 2004.

> Ine Town Clerk, Tax Collector, Registrar and R of the Fown of Fallsburg, Sullivan County, New York, do hereby certify that I have compared this copy with the original record on file in this office and find that it is a true transcript and copy and whole of using original thereof.

Dated this Town Clerk, Tax Collector, Registrar & RMO



TOWN OF FORESTBURGH P.O. Box 114 Forestburgh, New York 12777

> Tel. (845) 794-0611 Fax (845) 794-0678

RESOLUTION BY THE TOWN BOARD OF THE TOWN OF FORESTBURGH

RESOLUITON TO AUTIIORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTINAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Town Board of the Town of Forestburgh has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Town Board of the Town of Forestburgh hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan."

MOVED BY: Councilman Galligan Seconded by: Councilwoman Mack And adopted on Motion_3/4/04_____

TOWN CLERK - TOWN OF FORESTBURGH

RESOLUTION BY THE

Town INSERT TOWN OR VILLAGE

OF Fremont

INSERT NAME OF TOWN OR VILLAGE

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL- HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the (insert Town or Village) of (Insert name of Town or Village) has reviewed the plan and has found it to be acceptable;

FED 1 7 2004

NOW, THEREFORE, BE IT RESOLVED, that the (insert Town or Village) of (Insert name of Town or Village) hereby accepts and adopts the "Sullivan County, County, Town And Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by <u>C. Ronald Rhodes</u>, Seconded by <u>C. John Niflot</u>, and adopted on motion <u>February 11</u>, 2004.

Resolution No.

* RESOLUTION BY THE TOWN OF HIGHLAND

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Town of Highland has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Town of Highland hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by Alan SchADT, Supervisor	
Seconded by Robert Burlow. CouncilmAN	,
and adopted on motion FERNARY 8	, 2005

I, <u>Doreen Hanson</u>, Clerk to the Town of Highland, do hereby certify that I have compared the foregoing copy of a resolution with the original thereof now on file in my office and that the same is a correct transcript therefrom and of the whole said original.

WITNESS my hand and seal of the Town of Highland this <u>g</u> day of <u>FEBRUARY</u>, 2005.

Clerk to the Town of Highland

WED 10:40 FAX 7918462

05

Resolution No.

RESOLUTION BY THE VILLAGE OF JEFFERSONVILLE

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF P'JBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Village of Jeffersonville has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Village of Jeffersonville hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazment and States Mitigation Plan".

Moved by	TRUSTEE	PEGGY	JOHMUSEN	
Seconded by		PETER	CIACCIÓ	;
and adopted	on motionF	EBRUMEY	9	, 2005

I, Louise A. Gorr, Clerk to the Village of Jeffersonville, do hereby certify that I have compared the foregoing copy of a resolution with the original thereof now on file in my office and that the same is a correct transcript therefrom and of the whole said original.

WITNESS my hand and seal of the Village of Jeffersonville this 10th day of

Clerk to the Village of Jeffersourtain

RESOLUTION BY THE TOWN OF LIBERTY.

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VAILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATIN PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Town of Liberty has reviewed the plan and has found it to be acceptable;

NOW, THEREORE, BE IT RESOLVED, that the Town of Liberty hereby accepts and adopts the "Sullivan County, County, Town And Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by	Councilperso	on Thoma	as Hasbrouck		
Seconded by	Councilpers	son Lynn	Killian	,	
And adopted	on motionF	February	9,	,	. 2004

State of New York, County of Sullivan Town Clerk's Office of the Town of Liberty { ss.

I, Janet LeRoy SULLIVAN COUNTY, N.Y., do hereby certify that I have compared the annexed copy of <u>a resolution authorizing</u> the acceptance and adoption of the "Sullivan County, County Town and Village, Multijuris-

dictional, All-Hazard, Pro-Disaster-Mitigation-Plan"; which was prepared by the Sullivan Co. with the one remaining on record in this office, and that the same is a correct transcript and copy thereof, and of the whole DPG of said original.

IN TESTIMONY WHEREOF, I have hereu	unto set my hand and affixed the seal of the Town of Liberty, this
day of Mesmany A	.D. 192004) 4 1)
0	Jane L. Letoy
	Town Clerk of the Town of Liberty, Sullivan County, N.Y.

State of New York, County of Sullivan Village Clerk's Office of the Village of Liberty } SS

I LUDY H Zurawski VILLAGE CLERK OF THE VILLAGE OF LIBERTY, SULLIVAN COUNTY, NEW YORK do hereby certify, that I have compared the annexed copy of <u>Resol</u> # 12-2004 - Adoption of SC All-Hazard/Re-Disaster Mitigation Plan with the one remaining on record in this office, and that the same is a correct transcript and copy thereof,

and of the whole of said original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seal of the Village of I	libert
this day of	Liberty
No 4714349	bi.
Qualified in Sullivan County 220 Commission Expires March 30, Willage Clerk of the Village of Liberty, Sullivan) A
Commission Express March SU, _VIIage Clerk of the Village of Liberty, Sullivan	Co., NY

HAZARD/PRE-DIASTER PLAN RESOLUTION

RESOL. # Motion by Trustee Stoddard, seconded by Trustee Gozza and unanimously carried approving Resolution #12-2004

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS.

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6 $\mathbb{C}(5)$, requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Village of Liberty has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED that the Village of Liberty hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Mayor Smith stated that by adopting this resolution it would put the Village on the front line for FEMA funds

CONSIDER JOINT WORKSESSION WITH TOWN OF LIBERTY

Town Supervisor Frank Deway said he would like to hold this meeting to work together and come up with different store that would be beneficial to the Town and the Village

Mave smith suggested that the Boards might be able to get more accomplished by having their subcommittees (two from each Board) meet

Resolution #62, 2005

RESOLUTION BY THE TOWN OF LUMBERLAND

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS.

WHEREAS: the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 210.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS: the Town of Lumberland has reviewed the plan and has found it to be acceptable; and

WHEREAS: the Town of Lumberland Comprehensive Emergency Plan is still the lead Emergency Plan in the Town of Lumberland.

NOW, THEREFORE, BE IT RESOLVED: that the Town of Lumberland hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

*A motion to waiver the 5 day rule was presented by Supervisor LiGreci, seconded by Councilman Wilson, all in favor, so carried.

Moved by <u>Supervisor John LiGreci</u> Seconded by <u>Councilman Faber Wilson</u> Vote <u>3 - 0</u>, <u>Councilwomen Jenny Mellan and Nadia Rajsz were Absent</u> And adopted on motion <u>May 9, 2005</u>

I, Virginia V. Horn, Clerk to the Town of Lumberland, do hereby certify that I have compared the foregoing copy of a resolution with the original thereof now on file in my office and that the same is a correct transcript therefrom and of the whole said original.

WITNESS my hand and seal of the Town of Lumberland this 10^{17} day of May, 2005.

Clerk to the Town of Lumberland

RESOLUTION TOWN OF MAMAKATING

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PREDISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS.

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Town of Mamakating has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Town of Mamakating hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

R. SAUNDERS Moriarty Moved by: Seconded by: J. And adopted on motion: 2004

The Resolution was thereupon declared duly adopted.

Dated: 3/2/04

Jean M. Dougherty, Town Clerk

VILLAGE OF MONTICELLO



RECEIVED JUN 0 9 2005 SULLUVAN COUNTY DV SPEUBLIC WORKS

STATE OF NEW YORK COUNTY OF SULLIVAN VILLAGE OF MONTICELLO

I, Edith Schop, Village Clerk of the Village of Monticello, Sullivan County, New York, do hereby certify that the attached is a correct, true and full copy of a <u>Resolution</u> duly adopted by the Village Board of Trustees of the Village of Monticello, Sullivan County, New York on the <u>6th day of June, 2005</u>, and is the whole thereof,

IN WITNESS WHEREOF, I have hereto set my hand and affixed the seal of said Village of Monticello this 7^{th} Day of

June, 2005.

S E A L

EDITH SCHOP VILLAGE CLERK

2 PLEASANT ST. MONTICELLO, N.Y. 12701 (845) 794-6130 FAX (845) 794-2327 WWW,VILLAGEOFMONTICELLO.COM

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN," WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Village of Monticello has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Village of Monticello hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan."

A motion was made by Trustee Marinello, seconded by Trustee VanDermark, unanimously approved on a roll call vote to adopt the above resolution.

TOWN OF NEVERSINK TOWN BOARD RESOLUTION 2 OF 2004

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participation in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan: and

WHEREAS, the Town of Neversink has reviewed the plan and has found it to be acceptable:

NOW, THEREFORE, BE IT RESOLVED, that the Town of Neversink hereby accepts and adopts the "Sullivan County, County, Town And Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by Richard I. Coombe Jr., Seconded by Bryan Delaney, and adopted on motion February 11, 2004

I certify that I have compared the preceding resolution with the original on file in this office and that the same is a correct transcript therefrom of the whole such original resolution, and was adopted on the 11th of February, 2004.

Kisam. Gara Lisa M. Garigliano, Fown Clerk

Dated: February 12, 2004

SUSAN KITSON Notary Public, State of New York Sullivan County Clerk's #2647 Commission Expires Jan. 6, 20 08 Sec that

Jebruary 12, 2004

RESOLUTION BY THE

TOWN INSERT TOWN OR WIEKAXOB

OF ROCKLAND

INSERT NAME OF TOWN OR WELACE

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL- HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the (insert Town or Village) of (Insert name of Town or Village) has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the (insert Town or Village) of (Insert name of Town or Village) hereby accepts and adopts the "Sullivan County, County, Town And Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

and adopted	on motion	FEB.	5	,	2004.
Seconded by	COUNCILMAN	OWEN			
Moved by	COUNCILMAN		1		

STATE OF NEW YORK COUNTY OF SULLIVAN

ON THIS & DAY OF FEB , 20 04 BEFORE ME PERSONALLY CAME

JUDY A. NEWMAN

TO ME PERSONALLY KNOWN TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE FOREGOING DOCUMENT.

TARY PUBLIC

ROSE MARY HANKINS Notary Public, State of New York Sullivan County Clerk's #2616 Commission Expires June 23, 20<u>07</u> SULLIVAN COUNTY ALL HAZARD/PRE-DISASTER MITIGATION PLAN FEB 1 1 2004 The Following Resolution Was Duly Adopted: Res. No. 92 of the Year 2004.

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Town of Thompson has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Town of Thompson hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by: Councilman William J. Rieber, Jr. Seconded by: Councilman Peter T. Briggs And adopted on motion February 03, 2004.

STATE OF NEW YORK SULLIVAN COUNTY Office of the Clerk of the TOWN OF <u>THOMPSON</u> (SEAL) (SEAL) Town of <u>Th</u> have compare Town of Th RE: <u>Hazard</u> with the origin transcript of su Jn <u>mitnes</u>	CERTIFICATE NO. 439 tify that I, Donald S. Price, Town Clerk of the tompson in the said County of Sullivan, d the foregoing copy of Res. No. 92 of 2004 from ompson Town Board Minutes of 02/03/2004 /Pre-disaster mitigation plan. al now on file in this office, and that the same is a correct and true uch original and the whole thereof. # Millivan, Max, Max
--	--

MAR 2 6 200.

Office of the Town Clerk Town of Tusten P.O. Box 195 Narrowsburg, NY 12764 (845)252-7146 xt. 11 townclerk@tusten-narrowsburg.org

RESOLUTION #50-04 ADOPT SULLIVAN COUNTY HAZARD MITIGATION PLAN

On motion of Councilman Knapp, seconded by Councilwoman Falk, the following resolution was

ADOPTED - AYES 4 NAYS 0

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and WHEREAS, the Town of Tusten has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Town of Tusten hereby accepts and adopt the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

This is a true and correct copy of Town Resolution No. 50-04.

Carol J. Wingert Tusten Town Clerk

RESOLUTION BY THE VILLAGE OF WOODRIDGE

RESOLUTION TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE "SULLIVAN COUNTY, COUNTY, TOWN AND VILLAGE, MULTI-JURISDICTIONAL, ALL-HAZARD, PRE-DISASTER MITIGATION PLAN", WHICH WAS PREPARED BY THE SULLIVAN COUNTY DIVISION OF PUBLIC WORKS

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multijurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Village of Woodridge has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Village of Woodridge hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by Trustee Andrea Roberts Seconded by Trustee Arlene Messina , and adopted on motion May 2 . 2005

I, Diane Garritt, Clerk to the Village of Woodridge, do hereby certify that I have compared the foregoing copy of a resolution with the original thereof now on file in my office and that the same is a correct transcript therefrom and of the whole said original.

WITNESS my hand and seal of the Village of Woodridge this 3rd day of May , 2005.

Clerk to the Village of Woodridge

RESOLUTION BY THE VILLAGE BOARD OF THE VILLAGE OF WURTSBORO

Resolution to authorize the acceptance and adoption of the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan", which was prepared by the Sullivan County Division of Public Works.

WHEREAS, the Title 44 Code of Federal Regulations (CFR), Chapter 1 FEMA, Part 201.6(c)(5), requires each local government participating in the preparation of a multi-jurisdictional Local Mitigation Plan to accept and adopt such plan; and

WHEREAS, the Village Board of the Village of Wurtsboro has reviewed the plan and has found it to be acceptable;

NOW, THEREFORE, BE IT RESOLVED, that the Village Board of the Village of Wurtsboro hereby accepts and adopts the "Sullivan County, County, Town and Village, Multi-Jurisdictional, All-Hazard, Pre-Disaster Mitigation Plan".

Moved by Michelina	Maher	
Seconded by Robert	Whitchead	
And adopted on motion	February 9	, 2004

APPENDIX F

SPECIFIC EXAMPLES OF FLOOD DAMAGES

Sullivan County Disaster of December 17, 2000 Summary of Damages Reported

Original Damages Reported to FEMA in December 2000

Municipal Damages	
County	\$ 80,000*
Town of Bethel	\$ 300,000*
Town of Cochecton	\$ 40,000*
Town of Calicoon	\$ 95,090*
Town of Highland	\$ 16,150*
V. of Jeffersonville	\$ 2,000*
Town of Liberty	\$ 500,000*
V. of Liberty	\$ 100,000*
Town of Neversink	\$ 110,000*
Town of Rockland	\$ 500,000*
Town of Tusten	\$ 25,000*
	\$ 1,768,240 (M1)

* All figures are based upon preliminary information provided in writing to the Hazard Mitigation Coordinator by the impacted Towns or the Civil Defense Coordinator.

Private Damages		
Residential	\$ 350,000	
Businesses	\$ 46,500	
	\$ 396,500	(P1)

*Preliminary Estimates - These figures do not reflect final actual costs which may be higher or lower than the reported figures.

Appeal Damages Reported in Addition to The Damages Reported in December 2000

Appeal Municipal Damages	<u>.</u>	
County Highways/Bridges	\$ 4	13,000
Town of Bethel \$	96,596	
Town of Callicoon	\$	2,000
Town of Fremont	\$ 1	1,461
Village of Liberty	\$ 64	15,000
Livingston Manor Schools	<u>\$ 15</u>	50,000
Total Appeal Municipal \$	948,057	(M2)
Appeal Private Damages		

Private Damages	\$ 2,218,830.10	(P2)

Total Costs (Original Estimates plus Appeal)

Municipal (Public Assistance PA)	\$ 2,716,297	(M1+M2)
Private (Individual Assistance IA)	\$ <u>2,615,330</u>	(P1+P2)
Total Estimated Costs Reported	\$ 5,331,627	Total PA and IA Damages Reported

Private Individuals December 2000 Flood Damages AAdditional Damages for Appeal@

Party/Location	Type of Damages	Estimated Costs
Diane Garry: P.O Box 632, Kauneonga Lake, NY 12749 PH: 845-583-8506	Basement Flooding, Unreimbursed Damages	\$ 362.10
John & Isabel Mulvihill: PO Box 232,(3977 Route 52), Youngsville,, NY PH: 845- 482-3325	Footing damage to home \$10,000, personal property flood damaged including: two concrete vibrators \$ 560, heater \$150, two power climbers \$7000, cables \$ 600 and nail gun \$ 375.	\$ 18,685
Harry Markarian: 410 Glen Wild Road, NY 12758 PH: 845-434-4721	Basement Flood damage to property \$8,500; Debris removal and exterior property damages \$ 10,000	\$ 18,500
Peter Fadis :178 Jaketown Rd Bethel NY, Sect 15 Lot 21.2 Bl 1; PH: 845-482-3349 or Work 212-480-7359	500 feet of road washed out , called on 3/15/00 and indicated that a contractor could do the work for \$3,750 (6" shale , graded & crowned)	\$ 3,750
Stephen D. Seginak,: RD1 Box 390 Willowemoc Rd.,Livingston Manor NY 12758 PH: 439-4132	Private Bridge replacement and channel stabilization	\$ 20,000
Nicholas Trotta: 53 Trotta Way, Livingston Manor NY 12758(RR! Box 390A Livingston Manor NY 12758) PH: 845-539-3020	Road Washed out lost red shale and No. 2 Stone, Ruts exposed	\$3,100
Multiple private owners both residential and commercial: Chestnut Street stream bank/ box culvert system behind Liberty Post Office, Village of Liberty Contact: Mayor Kevin P. Mullen 845-292-2250	Culvert/channel major erosion of stream banks, undermining of private crossings, retaining walls, box culverts (Estimated by Mayor 1 to 1.5 million dollars to repair)	\$ 1,000,000
Private properties beginning park dam down to Chestnut Street/Lewis Street Contact: Mayor Kevin P. Mullen 845-292-2250	Major stream bank erosion, undermining of private crossings, retaining walls, box culverts etc	\$ 80,000
Residential/Commercial properties behind Mill Street Contact: Mayor Kevin P. Mullen 845-292-2250	Collapsed buildings, damaged vehicles	\$ 80,000
Residential/ Commercial properties from Scherfs Pond parallel with Main Street Contact: Mayor Kevin P. Mullen 845-292-2250	Bank erosion and damaged retaining walls	\$ 15,000
Ross Electric Building parking lot Contact: Mayor Kevin P. Mullen 845-292-2250	Parking lot damages	\$ 87,500
Hospicare Contact: Mayor Kevin P. Mullen 845-292-2250	Basement damage, furnace damage and electrical damage	\$ 45,000
Other private homes and businesses, varying locations Contact: Mayor Kevin P. Mullen 845-292-2250	Various unspecified damages	\$ 150,000
Sullivan County Soil & Water Conservation Service Newman Hill Rd., USGS Callicoon Grid #957311 Town of Freemont & Debra Winger property SCSWCS Contact: Brian Brustman PH: 292-6552	Replace road culvert remove brush from stream, repair spillway to repair flood damages	\$ 15,000
Sullivan County Soil & Water Conservation Service DeBruce Road, USGS Willowemoc Grid #225398 Town of Rockland & Walter Kocher property SCSWCS Contact: Brian Brustman PH: 292-6552	Replace culverts & regrade road bed or install a bridge. Re- establish stream channel to repair flood damages 1 & bang 200 LF	\$ 120,000
Sullivan County Soil & Water Conservation Service Midway Rd. Grid # 115290, Town of Liberty & Patty DeVoe property SCSWCS Contact: Brian Brustman PH: 292-6552	Reset bridge, install heavy rock rip-rap to repair flood damages	\$ 10,000
Sullivan County Soil & Water Conservation Service USGS Jeffersonville Grid # 099282, Robert & Rose Farrantello, Youngsville, NY	Remove snags from stream, skim gravel bar, install dumped riprap, install stacked riprap, reseed disturbed areas to repair flood damages	\$ 20,000

SCSWCS Contact: Brian Brustman PH: 292-6552		
Sullivan County Soil & Water Conservation Service USGS Liberty West Grid # 200275, Mrs Ferland 278 Chestnut St. Liberty NY SCSWCS Contact: Brian Brustman PH: 292-6552	Erosion damages either install new culverts or gabions or concrete wall to repair flood damages	\$ 25,000
Sullivan County Soil & Water Conservation Service USGS Livingston Manor Quad., Turtle Hill Road Town of Rockland & Alexandria Brinsford SCSWCS Contact: Brian Brustman PH: 292-6552	Re-establish 1000 feet of road ditch and seeding to repair flood damages	\$ 2000
Louis Totone: 518 Jeffersonville, North Branch Road, North Branch NY 12766 PH. 845-482-5833	High Frank Hill wash out of driveway 200 feet off CR 128	\$ 2,000
Bob Condon: 9 Trotta Way, Livingston Manor NY 12738/Mail Address: 345 Woodland Dr. Brightwaters , NY 11718 PH: Work 631-242-0594/Home 631-665-6648/Local 845-439-3010	Creek erosion behind home that abuts foundation, embankment eroded needs rip-rap /embankment stabilization, debris removal (tree) and channel re-shaping	\$ 5,000
Carol and Herbert Adolph: 57 Beaverkill Rd Livingston Manor, 12758 PH: 845-439-4885	Little Island Brook flooded and washed out driveway 200 feet, debris	\$ 1,800
Ruth Zelaskowski: 49 Beaverkill Rd, Livingston Manor NY 12758 PH: 845- 439 3951	Bank Erosion, debris	\$ 1,000
Mr & Mrs McNamara: Warren Florence 59 Beaverkil Road PH: 201- 386 1845 609	Bank and road erosion, debris	\$ 1,000
Andrea Bluver/Roberts: PO Box 693, Woodridge , NY 12789 PH: 845-434 1459 per Wayne Pirnos	Grounds erosion, garage door panels, foundation wall buckling	\$ 3,000
Joe Decker: 152 Scheibe Rd., Liberty NY 12754, PH: 794-7100 Sheriff=s Office	Driveway wash 200 feet, 4 feet deep loss.	\$ 2,500
Lou Klugman: 8 Old Lilypond Road, Parksville NY PH: 295-2640	Driveway washed out, sluice clogged, debris	\$ 10,000
Morton Neufeld: 61 Lilypond Road, Parksville 12768 PH: 292- 9224	300 feet driveway washed out	\$ 2,500
Zoli (Sol) Kleinberger:: 23 Main Street, Parksville 12768 PH: 845-292-2976	140 feet of fence, Little Beaverkill has moved towards the house foundation by 30 feet and is undermining building, Private property loss \$ 18,000, \$ 14,000 exterior damages inclusive of fencing, stream embankment stabilization to correct building undermining \$ 150,000	\$182,000
Debbie Ferland: 278 Chestnut Street Liberty NY PH: 295 0332	Retaining walls of brook lost \$18,000, flooded basement, personal property, lost sidewalk	\$ 25,000
Timothy McAuliffe: 124 Beaver Lake Rd., Livingston Manor , NY 12758 PH: 845-439-3862	Bridge lost, dam eroded, driveway lost, garage slab washed away	\$ 30,000
Catherine Rosenthal: PO Box 43 Livingston Manor NY 12758, Riverstreet last house 439-5214 Georgia Costello: 439-5139	All furnishings went under water Livingroom damaged, all furniture damage, beds and dressers , floor buckled	\$ 10,000
Allan and Anna Stephenson: 58 Wordenland, Liberty NY PH: 292- 7556 Town Contact: Pam Winters 292-8511	Driveway washed away	\$1,400
Kim & Patty Devoe: 91 Midway Road, Liberty NY PH: 292-4136, 796-3300 X2381 Town Contact: Pam Winters 292-8511	Washed pillars out from under bridge cannot drive over to house	\$ 9,700
Don Maci Lellan: 324 N. Main Street , Liberty , NY 12754 PH: 295-0900 Town Contact: Pam Winters 292-8511	Foundation erosion and boiler ruined	\$ 9,000
Michael Fritz Deanna: 186 Salem Ridge, Liberty NY PH Town Contact: Pam Winters 292-8511: 292-6752, 292-6640	Driveway washed away	\$ 5,000
Joe Decker Sull Co. Golf Co.Liberty route 52 Liberty NY 12754		

PH: 794-7100 Town Contact: Pam Winters 292-8511	Pond washed out at golf course	\$ 8,000
Sabrina Snell: 201 Cold Spring Road PH: 295-0360 Town Contact: Pam Winters 292-8511	Subflooring, walls and insulation damaged needs replacement/ repairs	\$ 1,000
Tom & Michelle Caltebellotta , Liberty PH: 292-0202 Town Contact: Pam Winters 292-8511	Yard damages and lost hot water heater	\$ 5,000
Diane Hurdis 2219 Route 17 Liberty Town Contact: Pam Winters 292-8511	Stream wall is gone; damaged camper and private property	\$ 1,000
Stan Hurdis: Route 17, Liberty NY PH: 295-5442 Town Contact: Pam Winters 292-8511	Damaged basement wall	\$ 1,000
Tom Malley: 87 Mill Street, Liberty, NY PH: 292-2630, 292-0766 Town Contact: Pam Winters 292-8511	Retaining wall directly behind store damaged	\$10,000
Terry Wilson: Elk Point Road, Liberty, NY PH: 292-9240 Town Contact: Pam Winters 292-8511	Driveway washed away	\$ 2,200
Laurie Dutcher: 137 Castle Hill Road, Liberty, NY PH: 292-2968 Town Contact: Pam Winters 292-8511	Motor flooded and damaged	\$ 5,000
William Staesser: 3 Old Route 17, Livingston Manor 12758 PH: 439-4792	Lost bridge abutments and 500 feet of private road	\$ 20,000
Elizabeth Hrechka: 36 Columbia Street, Liberty, NY 12754 AH Home: 292-0612 PH WK: 292-7900 X175	Oil tank ruptured in basement due to flood damages	\$7,033
Clifford Ulshafer: 62 Wegman Rd., Roscoe NY 12776 PH: 607 498-5322, FL: 941-426-0385	Furnace damages, damages to doors entering basement, molding and window in basement, refrigerator dryer (\$ 4,473 carpentry only)	\$ 5,500
Thomas J. Finn: 340 North Main Street, Liberty NY 12754 PH: 292-7281	Cellar flooded, oil burner major damaged private property in basement destroyed, retaining walls on adjacent stream damaged, driveway washed out and yard debris(\$1100 oil burner, \$ 5,000 tiewall,\$ 2500 driveway, \$300 debris, 1,500 property)	\$ 10,400
Elaine Jensen, Lynn Urso 38 Wegman Rd., Hazel, NY 607-498-4616 Called in by Virginia Stevens of 42 Wegman Rd	Damaged home insulation etc Cost to repair unknown Guesstimate \$ 2,500	\$ 2,500
Leslie & Julius Valiunas 17 County Road 116, Lake Huntington, NY 12752 PH: 932-7920	Damaged boiler (\$400), personal property (\$1,000)	\$1,400
Heidi Wiggs, Covered Bridge Campsites, 68 Conklin Hill Road, Livingston Manor, NY 12758 PH: 439-4093	Flood washed away: septic system, decks, picnic tables, playground equipment, roads and bridges (Damage estimated prelim. \$ 70,000)	\$70,000
Patty Parisella, 3508 Route 52 West, PO Box 444, White Sulphur Springs, NY 12787 PH: 292-0592	500 feet of driveway washed away Cost unkown. Guess \$ 2,000	\$ 2,000
Gary Hartung, 742 Aden Hill Road Property, Mailing address 300 Shields Rd, Neversink, NY 12765 Phone 985-2996	Property stream bank erosion. Cost to repair not indicated at this time. (\$2,000 used temporarily until more information is made available)	\$2,000
Mark Brinn, Hospicare, 18 South Main Street, Liberty, NY 12754	Furnance Damaged, Phone System ruined, major loss of inventory, basement damages	\$50,000
Elaine Jensen 79 Wexford Drive, Oakdale, NY 11769	Water Damage	\$ 1,500
	Total	\$2,218,830.10

Municipal December Flood Damages AAdditional Damages for Appeal@

Party/Location	Type of Damages Es	timated Costs
Mr Sementz, J. Hess Supt. Town of Callicoon contacted.	Dike/ditch maintained by the Town of Callicoon needs to be repaired by Town Boband C Spielman Roan, Ann Donagan Property	\$ 2,000
County Bridge 237, Livingston Manor Covered Bridge Park, Town of Rockland	Erosion, damaged post and rail fencing, debris, silt deposition	\$ 8,000
County Stone Arch Bridge Park, Town of Delaware near State Routes 52/52A	Erosion, silt and debris deposition, loss of fill around the reflection pool	\$ 5,000
Livingston Manor Central School 19 School Street, Livingston Manor NY PH: 439 4400 Ext. 209 Contact: Christine Bergner, Business Manager	Retaining wall damaged approx. 600 feet long 7 feet high, loss of mortar joints on stone wall requires repointing,	\$ 150,000
Town of Bethel	1)Jaketown Rd. \$ 36,457, 2)Baum Rd. \$ 15,260, 3) Deppa Rd. \$ 10,252, 4) Huff Rd. \$ 1,873, 5) Stevenson Rd \$ 6,963, 6) Perry Rd. \$2,499, 7) Royce Rd. \$ 2,970, 8) Kortright Rd. \$3,908, 9) Brook Rd. \$10,409, 10) Old Tacy Rd \$3,698, Laird Rd.\$ 2,307	\$96,596
Town of Fremont	Damages to Town Roads 64, 10, 31, 56, 70 and 22 including ditching, shaping, hauling spreading material and culverts.	\$ 11,461
Village of Liberty: Griebel Park Dam and downstream Contact: Mayor Kevin P. Mullen 845-292-2250	Extensive dam erosion requires repairs, stream bank erosion	\$ 62,500
Village of Liberty: Reach from Griebel Park Dam down towards Chestnut Street/Lewis Street Contact: Mayor Kevin P. Mullen 845-292-2250	Major stream bank, retaining walls, box culverts damage	\$20,000
Village of Liberty: Chestnut Street near Liberty Post Office Contact: Mayor Kevin P. Mullen 845-292-2250	Culvert/channel damage and damages to retaining walls	\$ 500,000
Village of Liberty properties beginning downstream of Chestnut Street to Neversink Road and Southward Contact: Mayor Kevin P. Mullen 845-292-2250	Damage to large retaining wall south of Neversink Road	\$62,500
Stream Keeper, Diane L. Akins: 27 Jordan Avenue, Liberty NY, PH: 845-292-8547	Damages to Ecosystem noted loss of reinforcements. Costs not reported	
County Bridge 240 off CR 164	Dredging of stream require to remedy severely clogged four sided box culvert clogging. Remove snags from stream and skim gravel bar.	\$ 30,000
	Total	\$948,057.00

Costs as of 3:34PM 2/09/01