

## PLAN ADOPTION RESOLUTIONS

### PLAN ADOPTION RESOLUTIONS

In accordance with Part 201.6 of the Disaster Mitigation Act of 2000 (DMA 2000), Rensselaer County, New York, has developed this Multi-Jurisdictional Hazard Mitigation Plan to identify hazards that threaten the County and ways to reduce future damages associated with these hazards.

Following this page are the signed adoption resolutions of the County and all participating jurisdictions that have adopted this plan, authorizing municipal government staff to carry out the actions detailed herein.

*Signed resolutions of adoption by all participating jurisdictions shall be inserted following this page after FEMA has reviewed and determined that the Draft plan is approvable. It is recommended that municipalities in Rensselaer County consider using the Sample Adoption Resolution from the FEMA Region 2 "Hazard Mitigation Plan Development Tool Kit CD", as shown below. Failure of any participating jurisdiction to ultimately adopt the plan and provide their adoption resolution to FEMA will result in a determination from FEMA that such jurisdiction has not successfully met the requirements of DMA 2000 and that the community does not have a plan "in place".*

SAMPLE ADOPTION RESOLUTION	
<p>Note: This sample plan adoption resolution has been extracted from FEMA Region 2's "Hazard Mitigation Plan Development Tool Kit CD (April 2008)". It is recommended that municipalities in Rensselaer County consider using this resolution when adopting the Final Plan.</p>	
(Name of Jurisdiction)	<u>Town A</u>
(Governing Body)	<u>Town Council</u>
(Address)	<u>100 Main Street, Town A</u>
<b>RESOLUTION</b>	
WHEREAS, <u>Town A</u> , with the assistance from URS Corporation, has gathered information and prepared the Rensselaer County, New York, Multi-Jurisdictional Hazard Mitigation Plan ("the Plan"); and	
WHEREAS, the Plan has been prepared in accordance with the Disaster Mitigation Act of 2000; and	
WHEREAS, <u>Town A</u> is a local unit of government that has afforded the citizens an opportunity to comment and provide input in the Plan and the actions in the Plan; and	
WHEREAS, <u>Town A</u> has reviewed the Plan and affirms that the Plan will be updated no less than every five years;	
NOW THEREFORE, BE IT RESOLVED by <u>Town Council</u> that <u>Town A</u> adopts the <u>Rensselaer County, New York, Multi-Jurisdictional Hazard Mitigation Plan</u> as this jurisdiction's Natural Hazard Mitigation Plan, and resolves to execute the actions in the Plan.	
ADOPTED this <u>(date)</u> day of <u>(Month)</u> , <u>(year)</u> at a meeting of the <u>Town Council</u> .	
(Mayor)	_____
(Clerk)	_____

## EXECUTIVE SUMMARY

Across the United States and around the world, natural disasters occur each day, as they have for thousands of years. As the world's population and development have increased, so have the effects of these natural disasters. The time and money required to recover from these events often strain or exhaust local resources. The purpose of hazard mitigation planning is to identify policies, actions, and tools for implementation that will, over time, work to reduce risk and the potential for future losses. Hazard mitigation is best realized when community leaders, businesses, citizens, and other stakeholders join together in an effort to undertake a process of learning about hazards that can affect their area and use this knowledge to prioritize needs and develop a strategy for reducing damages.

Section 322, Mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Stafford Act), enacted by Section 104 of the Disaster Mitigation Act of 2000 (DMA 2000), provides new and revitalized approaches to mitigation planning. Section 322 continues the requirement for a State mitigation plan as a condition of disaster assistance, and establishes a new requirement for local mitigation plans. In order to apply for Federal aid for technical assistance and post-disaster funding, local jurisdictions must comply with DMA 2000 and its implementing regulations (44 CFR Part 201.6).

While Rensselaer County has always sought ways to reduce their vulnerability to hazards, the passage of DMA 2000 helped County officials to recognize the benefits of pursuing a long-term, coordinated approach to hazard mitigation through hazard mitigation planning. The County has received grant funds from the Federal Emergency Management Agency (FEMA) for the purpose of developing this very hazard mitigation plan. Funding was received under the Hazard Mitigation Grant Program for development of a multi-jurisdictional hazard mitigation plan for the County and as many of its 22 municipalities that chose to participate. This **Rensselaer County Multi-Jurisdictional Natural Hazard Mitigation Plan** represents the collective efforts of the county and seven fully participating jurisdictions, the general public, and other stakeholders. Natural disasters cannot be prevented from occurring. However, over the long-term, the continued implementations of this Plan will gradually, but steadily, lessen the impacts associated with hazard events.

The Rensselaer County Multi-Jurisdictional Hazard Mitigation Plan has been developed by the Rensselaer County Hazard Mitigation Planning Team (the Planning Team), with support from outside consultants. The efforts of the Planning Committee were headed by Kelly Paslow, Director of the Rensselaer County Bureau of Public Safety (RCBPS). The Planning Committee was supplemented by a Core Planning Group (CPG) and Jurisdictional Assessment Teams (JATs), with one JAT for each of the County's participating jurisdictions.

The plan development process was initiated in earnest in the spring of 2009 with the project initiation meeting held on May 27, 2010. A Kickoff Meeting of the full Core Planning Group was conducted on July 12, 2010. Thereafter, the Core Planning Group met on October 4, 2010; November 1, 2010; November 30, 2010; and January 26, 2011. Jurisdictional Assessment Teams met individually throughout the plan development process as they deemed necessary. Following completion of the draft plan, a public meeting was held on **Date TBD**, 2011, to present the draft plan to County Legislators.

Community support is vital to the success of any hazard mitigation plan. The Planning Committee provided opportunities for participation and input of the public and other stakeholders throughout the plan development process, both prior to this Draft and before approval of the Final plan, providing citizens and other stakeholders with opportunities to take part in the decisions that will affect their future. On a mitigation planning section of the Rensselaer County web site, the RCBPS posted information on the plan development process and where to go for additional information or comments beginning in October 2010;

## EXECUTIVE SUMMARY

this web site has been and continues to be maintained and updated regularly. A link to this information also appeared on the County home page, and many municipal web sites. The County also conducted numerous other outreach actions throughout the planning process. The public and other stakeholders were apprised of the hazard mitigation planning process through the mitigation planning website; via the posting of the project fact sheet in various public buildings across the County; informational letters to stakeholders mailed by RCBPS in November 2010; a stakeholders information session held on November 30, 2010; information presented at various County and municipal board meetings throughout the course of the project; and several newsletter/newspaper articles. RCPBS also made efforts to speak of the mitigation planning process during other regularly-scheduled public presentations on emergency preparedness initiatives. Jurisdictional Assessment Team members supplemented County efforts by reaching out to the public and other stakeholders within their respective jurisdictions to get the word out through various means and provide opportunities for feedback and participation.

The hazard mitigation planning process consisted of the following key steps:

- Researching a full range of natural hazards to identify which hazards could affect the County;
- Identifying the location and extent of hazard areas;
- Identifying assets located within these hazard areas;
- Characterizing existing and potential future assets at risk;
- Assessing vulnerabilities to the most prevalent hazards; and
- Formulation and prioritization of goals, objectives, and mitigation actions to reduce or avoid long-term vulnerabilities to the identified hazards.

Natural hazards that can affect Rensselaer County that were studied in detail in the Plan are as follows:

- **Atmospheric hazards**, including: extreme temperatures, extreme wind, hurricanes and tropical storms, nor'easters, tornadoes, and winter storms;
- **Hydrologic hazards**, including: flooding, drought, and lakeshore erosion;
- **Geologic hazards**, including: earthquakes and landslides; and
- **Other hazards**, including: wildfires.

After evaluating these hazards and assets within the County to which they are vulnerable, the Planning Team developed a mitigation strategy to increase the disaster resistance of the County, along with procedures for monitoring, evaluating and updating the Plan to ensure that it remains a living document.

This Draft Plan is currently under review by the Planning Team, NYSEMO, FEMA, and the public and other stakeholders. Later, comments will be incorporated, and the County and all participating jurisdictions will each formally adopt the Final Plan. The Final Plan will include copies of adoption resolutions following Page i.

If you have any questions or comments on the Multi-Jurisdictional Natural Hazard Mitigation Plan for Rensselaer County, New York, additional information can be obtained by contacting:

Kelly Paslow, Director  
Rensselaer County Bureau of Public Safety  
Public Safety Building  
4000 Main Street  
Troy, New York 12180  
Phone: (518) 266-7676  
E-Mail: kpaslow@rensco.com

## **ACKNOWLEDGEMENTS**

Throughout the plan development process, the RCBPS worked tirelessly to involve all of its 22 municipalities. These local jurisdictions were not only invited to participate but were truly guided through the process by RCBPS at every stage.

The following municipal entities (Rensselaer County and all 22 of its constituent municipalities) successfully participated in the development of this plan by attending meetings and submitting the key deliverables:

### *Rensselaer, County of*

<i>Berlin, Town of</i>	<i>Hoosick Falls, Village of</i>	<i>Rensselaer, City of</i>
<i>Brunswick, Town of</i>	<i>Nassau, Town of</i>	<i>Sand Lake, Town of</i>
<i>Castleton-on-Hudson, Village of</i>	<i>Nassau, Village of</i>	<i>Schaghticoke, Town of</i>
<i>East Greenbush, Town of</i>	<i>North Greenbush, Town of</i>	<i>Schaghticoke, Village</i>
<i>East Nassau, Village of</i>	<i>Petersburgh, Town of</i>	<i>Schodack, Town of</i>
<i>Grafton, Town of</i>	<i>Pittstown, Town of</i>	<i>Stephentown, Town of</i>
<i>Hoosick, Town of</i>	<i>Poestenkill, Town of</i>	<i>Troy, City of</i>
		<i>Valley Falls, Village of</i>

A more detailed summary of the participation demonstrated by each municipality in the County, including attendance at meetings and submission of requested deliverables, is presented in Table 1.5.

In addition, the records show that the following stakeholder entities participated by attending at least one Core Planning Group and/or Stakeholders meeting. The Red Cross also provided information regarding shelters located within the County.

*American Red Cross of Northeastern New York  
Capital District Regional Planning Commission  
Cornell Cooperative Extension of Rensselaer  
Hudson Valley Community College  
New York State Department of Transportation  
New York State Electric and Gas  
New York State Emergency Management Office  
Questar III BOCES  
Rensselaer County Chamber of Commerce  
Rensselaer County Soil and Water Conservation Service*

URS Corporation (Wayne, NJ) acted as the plan development consultant providing hazard mitigation planning services.



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*This Working Draft Submittal is a preliminary draft document and is not to be used as the basis for final design, construction or remedial action, or as a basis for major capital decisions. Please be advised that this document and associated deliverables have not undergone internal reviews by URS*

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## SECTION 1 - INTRODUCTION

### Purpose

Rensselaer County is susceptible to a number of different natural hazards. These natural hazards have the potential to cause property loss, loss of life, economic hardship, and threats to public health and safety. While an important aspect of emergency management deals with disaster recovery ó those actions that a community must take to repair damages and make itself whole in the wake of a natural disaster ó an equally important aspect of emergency management involves hazard mitigation. Hazard mitigation measures are efforts taken *before* a disaster happens to lessen the impact that future disasters of that type will have on people and property in the community. They are things you do today to be more protected in the future.

Recognizing the risks that natural hazards pose to Rensselaer County, the Rensselaer County Bureau of Public Safety (RCBPS) submitted an application, and was approved for, grant monies from the Federal Emergency Management Agency (FEMA) under the Hazard Mitigation Grant Program in 2006 to be used to develop a hazard mitigation plan for the County.

This **Rensselaer County Multi-Jurisdictional Natural Hazard Mitigation Plan** (the "Plan") has been developed by the Rensselaer County Hazard Mitigation Planning Committee (the "Planning Committee"), with support from outside consultants at URS Corporation ("URS," the contractor responsible for providing the Planning Committee with hazard mitigation planning support services). The Plan represents the collective efforts of citizens, elected and appointed government officials, business leaders, volunteers of non-profit organizations, and other stakeholders.

Through the development of this Plan, the Planning Committee has identified the natural hazards that could affect the County, and has evaluated the risks associated with these hazards. The successful implementation of this Plan will make Rensselaer County more disaster-resistant because the County has taken the initiative to recognize the benefits that can be gained by planning ahead and taking measures to reduce damages before the next disaster strikes. The Plan will also allow Rensselaer County and participating jurisdictions to comply with the Disaster Mitigation Act of 2000 (DMA 2000) and its implementing regulations (44 CFR Part 201.6), thus resulting in eligibility to apply for Federal aid for technical assistance and post-disaster hazard mitigation project funding.

Natural disasters cannot be prevented from occurring. However, over the long-term, the continued implementation of this Plan will gradually, but steadily, lessen the impacts associated with hazard events.

**About the County**

**Overview**

Rensselaer County is located in the eastern part of New York State. It is bounded to the west by Saratoga and Albany Counties and to the east by the States of Vermont and Massachusetts. Washington Counties lies to the north, and Columbia County is to the south. As of the 2000 Census, the population of Rensselaer County was 152,538. The county seat is Troy. Rensselaer County is located in New York State's Capital District Region, the four counties of Albany, Rensselaer, Schenectady, and Saratoga surrounding the state's capital city of Albany. Figure 1.1 depicts the location of Rensselaer County in relation to the rest of New York State.

**Figure 1.1 - Location of Rensselaer County in New York State**

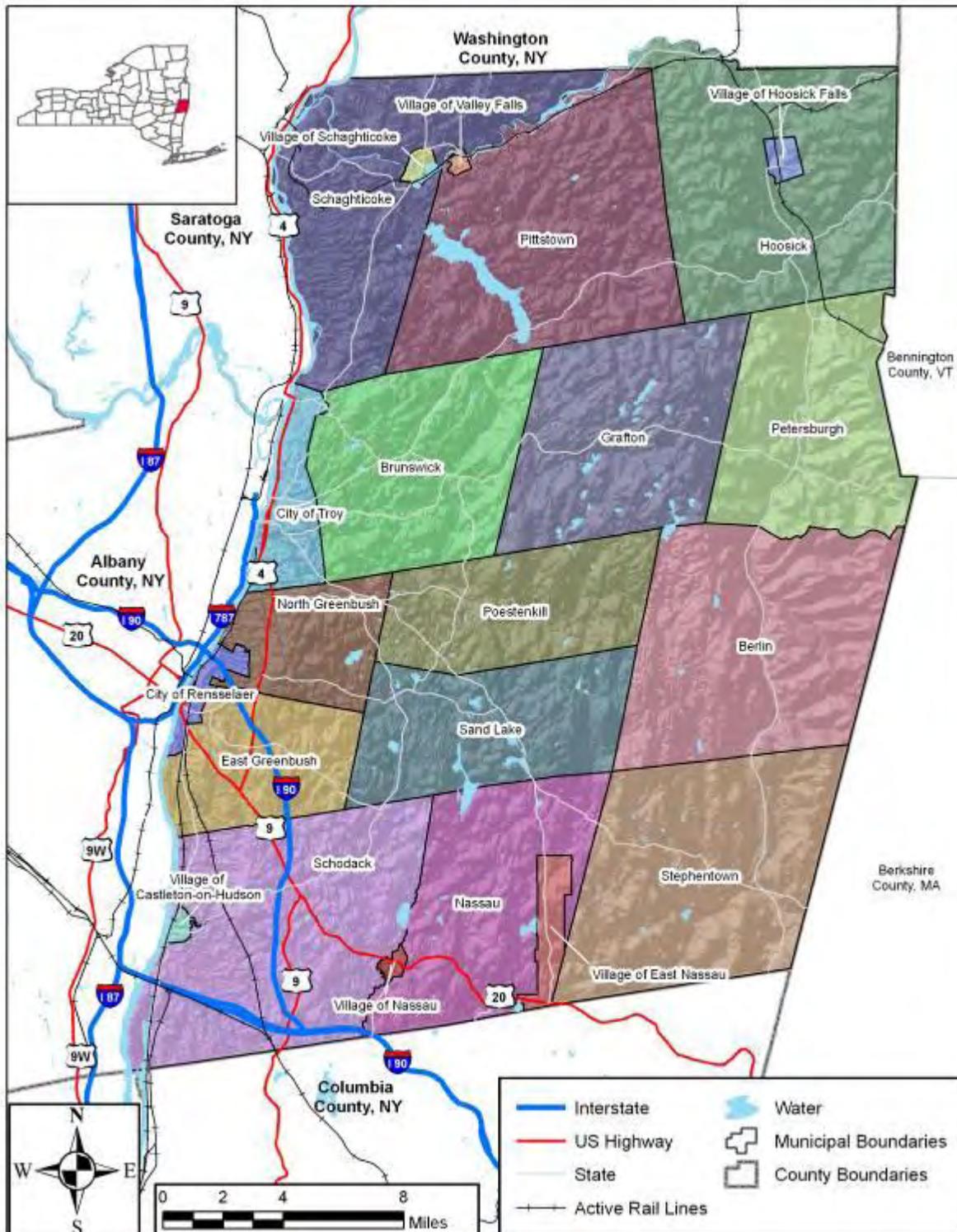


## INTRODUCTION

Rensselaer County is home to 22 municipalities (two cities, 14 towns, and six villages). They are the Cities of Rensselaer and Troy; the Towns of Berlin, Brunswick, East Greenbush, Grafton, Hoosick, Nassau, North Greenbush, Petersburg, Pittstown, Poestenkill, Sand Lake, Schaghticoke, Schodack, and Stephentown; and the Villages of Castleton-on-Hudson, East Nassau, Hoosick Falls, Nassau, Schaghticoke, and Valley Falls. The location and extent of all these municipalities, as well as significant highways are shown on the base map of the County in Figure 1.2.

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Figure 1.2 – Base Map of Rensselaer County



SOURCE: ESRI, U.S. Counties, 2005; New York Major Roads, 2000; Rensselaer County BRIS, Rensselaer County Municipal Boundaries, 2009; Rensselaer County Street Centerlines, 2010; U.S. Census Bureau, Census Railroads, New York State, 2001; Rensselaer, Columbia, Albany, Saratoga, Washington Counties, Area Hydrography, 2007; USGS, 1-Arc Second National Elevation Dataset, 2009

## INTRODUCTION

According to the US Census, the population of Rensselaer County in 1990 was 154,429 whereas, in 2000 it was 152,538 ó a decrease of approximately 1.2 percent over ten years. County-wide, this general downward trend reversed in the short term with the US Census Bureau estimating a population of 155,043 for 2009. The New York Statistical Information System at Cornell University projects the County's population to decrease steadily thereafter through 2035, back to a level of 137,187. Table 1.1 shows key County population changes (county-wide and for each municipality) as reported by the US Census Bureau.

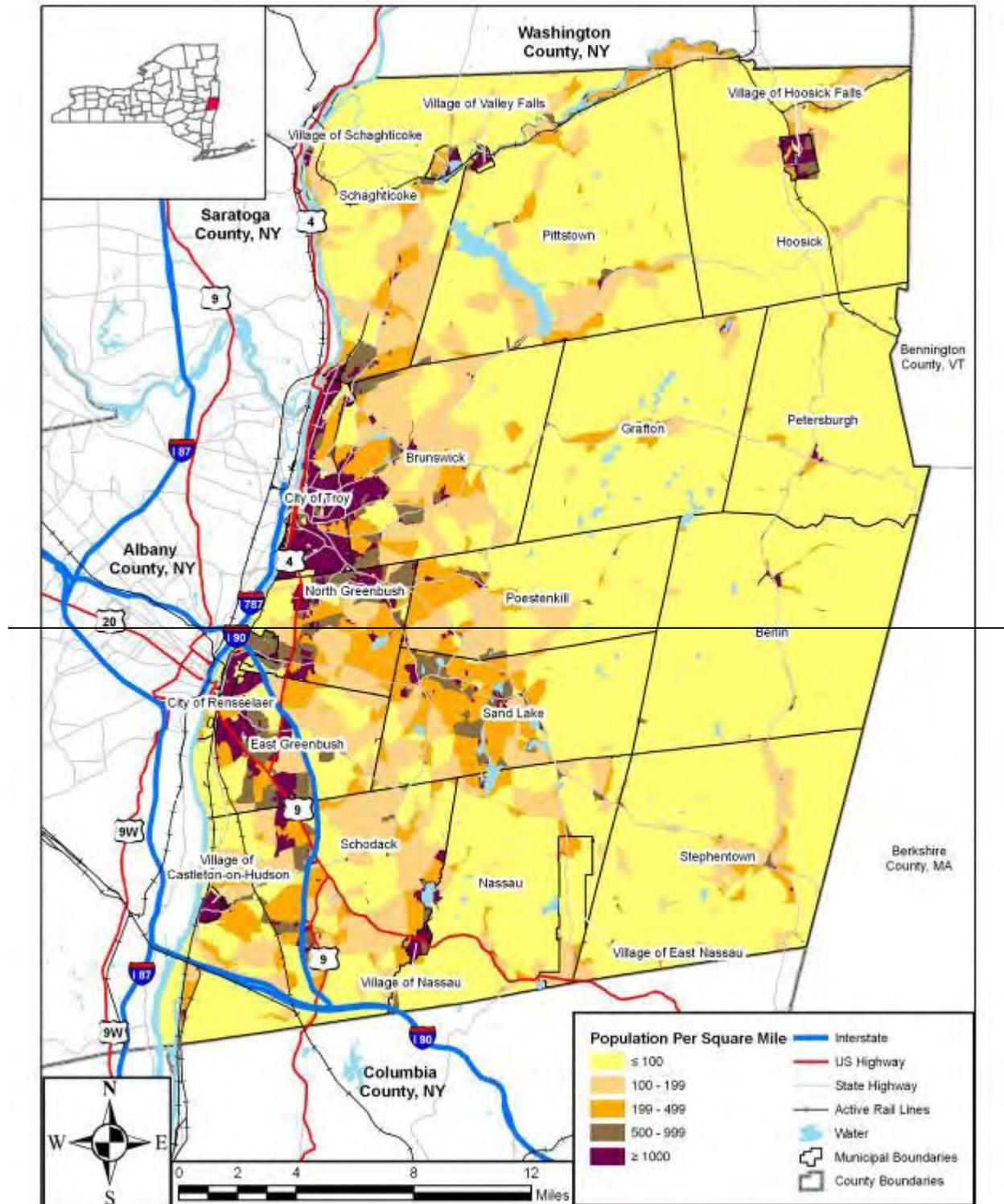
Municipality	Census Population 1990	Census Population 2000
<b>Rensselaer, County of</b>	<b>154,429</b>	<b>152,538</b>
Berlin, Town of	1,929	1,901
Brunswick, Town of	11,093	11,664
Castleton-on-Hudson, Village of	1,491	1,619
East Greenbush, Town of	14,076	15,560
East Nassau, Village of	<i>Not available **</i>	571
Grafton, Town of	1,917	1,987
Hoosick, Town of *	6,696	6,759
Hoosick Falls, Village of	3,490	3,436
Nassau, Town of *	4,989	4,818
Nassau, Village of	1,254	1,161
North Greenbush, Town of	10,891	10,805
Petersburgh, Town of	1,461	1,563
Pittstown, Town of *	5,468	5,644
Poestenkill, Town of	3,809	4,054
Rensselaer, City of	8,255	7,761
Sand Lake, Town of	7,642	7,987
Schaghticoke, Town of *	7,574	7,465
Schaghticoke, Village of	794	676
Schodack, Town of *	11,839	12,536
Stephentown, Town of	2,521	2,873
Troy, City of	54,269	49,170
Valley Falls, Village of	527	491

- \* Town of Hoosick includes Village of Hoosick Falls  
 Town of Nassau includes Village of East Nassau and part of Village of Nassau  
 Town of Pittstown includes part of Village of Valley Falls  
 Town of Schaghticoke includes Village of Schaghticoke and part of Village of Valley Falls  
 Town of Schodack includes Village of Castleton-on-Hudson and part of Village of Nassau
- \*\* Population of East Nassau 1990 is not available because the Village did not incorporate until 1998

According to the U.S. Census Bureau, Rensselaer County has a total area of 665 square miles, of which 654 square miles is land and 11 square miles is water.

The 2000 U.S. Census population density per square mile of land in Rensselaer County was 233 persons per square mile; whereas, in the 1990 U.S. Census, there were 236 persons per square mile ó a decrease of 1.2 percent in ten years. By 2009, the population density is projected to be just under 238 persons per square mile ó an increase of 2.1 percent over the year 2000 values. The population of Rensselaer County is mostly concentrated in the western regions of the County, nearest to the Hudson River. The majority of the remainder of the County is sparsely populated.

**Figure 1.3 – Rensselaer County Population Density**



## INTRODUCTION

The overall median age in 2000 has been estimated by the U.S. Census Bureau to be 36.8, up from 32.8 in 1990. The median age has been estimated to increase to 39.1 for 2005-2009. The percentage of the County population over 65 years of age according to the US Census Bureau was 14% in 2000 (slightly more than the national figure of 12.4%), with the Census Bureau estimating no significant change in 2005-2009. The portion of the County population under 5 years of age was 6.1% in 2000, with the Census Bureau estimating a slight decrease to 5.5% in 2005-2009.

**Income and Employment.** Over the course of the last decade both the median household and median family incomes in Rensselaer County exhibited a fractionally greater rise than rises in the national averages, according to the U.S. Census Bureau, as shown in Table 1.2. Also, according to the same sources, between 2000 and 2009 the percentages of families and individuals below the poverty line increased at a greater rate than the national figures, while unemployment decreased slower than the national rate over the same time period.

Economic Characteristic	2000		2009	
	Rensselaer County	USA	Rensselaer County	USA
Median Household Income	\$42,905	\$41,994	\$54,221	\$50,007
Median Family Income	\$52,864	\$50,046	\$68,516	\$60,374
Families Below Poverty Level	6.7%	9.2%	7.5%	9.8%
Individuals Below Poverty Level	9.5%	12.4%	11.1%	13.3%
Unemployed*	33.1%	5.8%	32%	4.2%

\*As a percentage of the population aged 16 years or more

**Transportation Links.** Rensselaer County is linked to the surrounding area by road, with Interstate 90 traversing the southwestern region of the County; Routes 7, 2, and 66/43 providing east/west access; and Route 22 running the length of the eastern side of the County from north to south. Interstate 87 provides major north/south access just across the county's western border in neighboring Saratoga County. Passenger rail service is provided by Amtrak out of the station in the City of Rensselaer (rated among the Top 10 busiest in the nation, servicing the entire northeast). Commercial rail services include CSX Transportation, Canadian Pacific Railway, and Guilford Rail System. Though no passenger air services are provided directly in Rensselaer County, such services are immediately accessible to local residents via the nearby Albany International Airport.

**FEMA Disaster Declarations.** Disaster declarations, for the county or counties affected by a disaster, are declared by the President of the United States under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the "Stafford Act"). FEMA then manages the entire process, including making federally-funded assistance available in declared areas; coordinates emergency rescue and response efforts; provides emergency resources; and provides other related activities/funding in the process of aiding citizens and local governments in a nationally-declared disaster. Tables 1.3 and 1.4 provide a summary of disaster and emergency declarations for the State of New York (based on review of the FEMA and NYSEMO web sites and the New York State Hazard Mitigation Plan), with an indication as to whether Rensselaer County was part of the declared area, and the type of assistance the County was eligible for: PA ó Public Assistance, IA ó Individual Assistance.

Since 1954, Rensselaer County has been designated as eligible for at least one form of FEMA assistance in 13 Federally-declared disasters and five Federally-declared emergencies.

<b>Table 1.3</b> <b>New York State Major Disaster Declarations: 1954 – 2010</b> <i>(Source: FEMA, online at <a href="http://www.fema.gov/news/disasters_state.fema?id=36">http://www.fema.gov/news/disasters_state.fema?id=36</a></i> <i>NYSEMO, online at <a href="http://www.semo.state.ny.us/programs/recovery/History.cfm">http://www.semo.state.ny.us/programs/recovery/History.cfm</a></i> <i>And Appendix N of the New York State Hazard Mitigation Plan)</i>				
Year	Date	Disaster Type	Disaster Number	Was Rensselaer County Designated?
2010	16-Apr	Severe Storms and Flooding	1899	
2009	31-Dec	Severe Storms and Flooding Associated with Tropical Depression Ida and a Nor'easter	1869	
2009	1-Sep	Severe Storms and Flooding	1857	
2009	4-Mar	Severe Winter Storm	1827	Yes; PA only
2007	31-Aug	Severe Storms, Flooding, and Tornado	1724	
2007	2-Jul	Severe Storms and Flooding	1710	
2007	24-Apr	Severe Storms and Inland and Coastal Flooding	1692	
2006	12-Dec	Severe Storms and Flooding	1670	
2006	24-Oct	Severe Storms and Flooding	1665	
2006	1-Jul	Severe Storms and Flooding	1650	Yes; PA only
2005	19-Apr	Severe Storms and Flooding	1589	Yes; PA and IA
2004	1-Oct	Tropical Depression Ivan	1565	
2004	1-Oct	Severe Storms and Flooding	1564	
2004	3-Aug	Severe Storms and Flooding	1534	
2003	29-Aug	Severe Storms, Tornadoes and Flooding	1486	Yes; IA only
2003	12-May	Ice Storm	1467	
2002	16-May	Earthquake	1415	
2002	1-Mar	Snowstorm	1404	
2001	11-Sep	World Trade Center Terrorist Attack	1391	Yes; PA only
2000	21-Jul	Severe Storms	1335	Yes; PA only
1999	19-Sep	Hurricane Floyd	1296	Yes; IA only
1998	11-Sep	Severe Storms	1244	
1998	7-Jul	Severe Storms and Flooding	1233	
1998	16-Jun	New York Severe Thunderstorms and Tornadoes	1222	Yes; PA only
1998	10-Jan	Ice Storm	1196	
1996	9-Dec	Severe Storms/Flooding	1148	
1996	19-Nov	Severe Storms/Flooding	1146	
1996	24-Jan	Severe Storms/Flooding	1095	Yes; PA and IA
1996	12-Jan	Blizzard	1083	Yes; PA only
1993	2-Apr	World Trade Center Explosion	984	
1992	21-Dec	Coastal Storm, High Tides, Heavy Rain, Flooding	974	
1991	16-Sep	Hurricane Bob	918	
1991	21-Mar	Severe Storm, Winter Storm	898	
1987	10-Nov	Severe Winter Storms	801	Yes; PA only
1987	15-May	Flooding	792	
1985	18-Oct	Hurricane Gloria	750	
1985	22-Mar	Snow Melt, Ice Jams	734	
1985	20-Mar	Flooding	733	
1984	25-Sep	Severe Storms/Flooding	725	
1984	17-Apr	Coastal Storms/Flooding	702	
1977	5-Feb	Snowstorms	527	
1976	3-Sep	Hurricane Belle	520	Yes; PA and IA
1976	21-Jul	Severe Storms/Flooding	515	
1976	29-Jun	Flash Flooding	512	

<b>Table 1.3</b> <b>New York State Major Disaster Declarations: 1954 – 2010</b> (Source: FEMA, online at <a href="http://www.fema.gov/news/disasters_state.fema?id=36">http://www.fema.gov/news/disasters_state.fema?id=36</a> NYSEMO, online at <a href="http://www.semo.state.ny.us/programs/recovery/History.cfm">http://www.semo.state.ny.us/programs/recovery/History.cfm</a> And Appendix N of the New York State Hazard Mitigation Plan)				
Year	Date	Disaster Type	Disaster Number	Was Rensselaer County Designated?
1976	19-Mar	Ice Storm, Severe Storms, Flooding	494	
1975	2-Oct	Hurricane Eloise	487	
1974	23-Jul	Severe Storms/Flooding	447	
1973	20-Jul	Severe Storms/Flooding	401	Yes; PA and IA
1973	21-Mar	High Winds, Wave Action and Flooding	367	
1972	23-Jun	Tropical Storm Agnes	338	
1971	13-Sep	Severe Storms/Flooding	311	
1970	22-Jul	Heavy Rains, Flooding	290	
1969	26-Aug	Heavy Rains, Flooding	275	
1967	30-Oct	Severe Storms/Flooding	233	
1965	18-Aug	Water Shortage	204	
1963	23-Aug	Heavy Rains, Flooding	158	
1962	16-Mar	Severe Storm, High Tides, Flooding	129	
1956	29-Mar	Flood	52	Not Recorded
1955	22-Aug	Hurricanes Connie and Diane	45	Not Recorded
1954	7-Oct	Hurricanes Carol and Hazel	26	Not Recorded

<b>Table 1.4</b> <b>New York State Emergency Declarations: 1954 – 2010</b> (Source: FEMA, online at <a href="http://www.fema.gov/news/disasters_state.fema?id=36">http://www.fema.gov/news/disasters_state.fema?id=36</a> NYSEMO, online at <a href="http://www.semo.state.ny.us/programs/recovery/History.cfm">http://www.semo.state.ny.us/programs/recovery/History.cfm</a> And Appendix N of the New York State Hazard Mitigation Plan)				
Year	Date	Emergency Type	Declaration Number	Was Rensselaer County Designated?
2008	18-Dec	Severe Winter Storm	3299	Yes; PA only
2007	23-Feb	Snow	3273	
2006	15-Oct	Snowstorm	3268	
2005	30-Sep	Hurricane Katrina Evacuation	3262	Yes; PA only
2004	3-Mar	Snow	3195	
2003	23-Aug	Power Outage	3186	Yes; PA only
2003	27-Mar	Snowstorm	3184	
2003	26-Feb	Snowstorm	3173	Yes; PA only
2002	1-Jan	Snowstorm	3170	
2000	4-Dec	Snow Storm	3157	
2000	11-Oct	Virus Threat	3155	Yes; PA only
1999	18-Sep	Hurricane Floyd	3149	
1999	10-Mar	Winter Storm	3138	
1999	15-Jan	Snow Emergency	3136	
1993	17-Mar	Severe Blizzard	3107	
1980	21-May	Chemical Waste, Love Canal	3080	
1978	7-Aug	Chemical Waste, Love Canal	3066	
1977	29-Jan	Snowstorms	3027	
1974	2-Nov	Flooding (NYS Barge Canal)	3004	

## Plan Development Process

### Multi-Jurisdictional Approach

Rensselaer County took a multi-jurisdictional approach to preparing its hazard mitigation plan. The County had resources (i.e., funding, data, GIS, etc.) which local jurisdictions lacked. However, the County could not develop the plan on its own. To undertake such a regional planning effort, the County needed to involve its member municipalities since only they have the legal authority to enforce compliance with land use planning and development issues. Throughout the plan development process, the Rensselaer County Bureau of Public Safety (RCBPS) worked tirelessly to involve all of its 22 municipalities. These local jurisdictions were not only invited to participate but were truly guided through the process by RCBPS at every stage.

The following municipal entities (Rensselaer County and all 22 of its constituent municipalities) participated successfully in the development of this plan by attending meetings and submitting the key deliverables:

<i>Rensselaer, County of</i>		
<i>Berlin, Town of</i>	<i>Hoosick Falls, Village of</i>	<i>Rensselaer, City of</i>
<i>Brunswick, Town of</i>	<i>Nassau, Town of</i>	<i>Sand Lake, Town of</i>
<i>Castleton-on-Hudson, Village of</i>	<i>Nassau, Village of</i>	<i>Schaghticoke, Town of</i>
<i>East Greenbush, Town of</i>	<i>North Greenbush, Town of</i>	<i>Schaghticoke, Village</i>
<i>East Nassau, Village of</i>	<i>Petersburgh, Town of</i>	<i>Schodack, Town of</i>
<i>Grafton, Town of</i>	<i>Pittstown, Town of</i>	<i>Stephentown, Town of</i>
<i>Hoosick, Town of</i>	<i>Poestenkill, Town of</i>	<i>Troy, City of</i>
		<i>Valley Falls, Village of</i>

A more detailed summary of the participation demonstrated by each municipality in the County, including attendance at meetings and submission of requested deliverables, is presented in Table 1.5.

In addition, the records show that the following stakeholder entities participated by attending at least one Core Planning Group and/or Stakeholders meeting. The Red Cross also provided information regarding shelters located within the County.

*American Red Cross of Northeastern New York*  
*Capital District Regional Planning Commission*  
*Cornell Cooperative Extension of Rensselaer*  
*Hudson Valley Community College*  
*New York State Department of Transportation*  
*New York State Electric and Gas*  
*New York State Emergency Management Office*  
*Questar III BOCES*  
*Rensselaer County Chamber of Commerce*  
*Rensselaer County Soil and Water Conservation Service*

URS Corporation (Wayne, NJ) acted as the plan development consultant providing hazard mitigation planning services.

Readers are invited to review the contents of **Appendix G – Planning Committee Membership Information** for a list of municipal representatives.

**Table 1.5**  
**Rensselaer County Jurisdictions Plan Participation**  
 \*note: this is current as of ~~01/23/11~~ 09/27/11\*

Jurisdiction	Returned Statement of Authority to Participate	Meetings Attended				Key Deliverables Submitted						
		Kickoff Meeting 7/12/10	Progress Meeting 10/04/10	Risk Assessment Q & A 11/01/10	Mitigation Working Session 11/30/10	Wish List Items	Land Use and Development Trends Questionnaire	Hazard Identification Questionnaire	Outreach Log	Capabilities Assessment Questionnaire	Mitigation Prioritization / Implementation Worksheets	NFIP Compliance Actions Worksheets
Rensselaer County												
Berlin, Town of												
Brunswick, Town of												
Castleton-on-Hudson, Vill. of												
East Greenbush, Town of											FORTHCOMING	FORTHCOMING
East Nassau, Village of												
Grafton, Town of												
Hoosick, Town of											FORTHCOMING	FORTHCOMING
Hoosick Falls, Village of												FORTHCOMING
Nassau, Town of												
Nassau, Village of												
North Greenbush, Town of												
Petersburgh, Town of											FORTHCOMING	FORTHCOMING
Pittstown, Town of												
Poestenkill, Town of											FORTHCOMING	
Rensselaer, City of												
Sand Lake, Town of												
Schaghticoke, Town of												
Schaghticoke, Village of												
Schodack, Town of												
Stephentown, Town of											FORTHCOMING	FORTHCOMING
Troy, City of											FORTHCOMING	FORTHCOMING
Valley Falls, Village of												

While the County retained the services of a consultant (URS Corporation) to guide participants through the process and author the plan, participating jurisdictions contributed throughout the overall planning process, as follows:

- Each participating jurisdiction provided staff to participate in the overall county-wide Core Planning Group (CPG). Each municipality was encouraged to form a Jurisdictional Assessment Team, to be responsible for reviewing information, data and documents, submitting feedback to the Consultant, completing questionnaires/forms, reaching out to the public and other stakeholders in their respective jurisdictions, developing a unique mitigation strategy for their municipality, and reviewing and commenting on draft documents. The jurisdiction's CPG member(s) were lead member(s) of their municipality's Jurisdictional Assessment Team (JAT). *More information on the planning team structure and roles/responsibilities is presented later in this section.*
- The Consultant provided “**Guidance Memorandum 1- Assessing Community Support, Building the Planning Team, and Engaging the Public and Other Stakeholders**” at the project outset (June 22, 2010). This memorandum was later distributed to all CPG members at the Kickoff Meeting and various points thereafter (via email and/or subsequent meeting handouts). This memorandum was prepared to provide Rensselaer County and its participating jurisdictions with suggestions for: assessing community support, building the planning team and engaging the public and other stakeholders throughout the plan development process and prior to plan approval. The Jurisdictional Assessment Team for each municipality used this memorandum as a guide for outreach, documented their completed activities in the memorandum's **Outreach Log**. **A total of 24 The County and 22** jurisdictions provided a summary of their outreach activities to the Consultant for incorporation into the plan.
- Participating jurisdictions provided feedback during the Hazard Identification and Hazard Profile steps of the process (Sections 2 and 3.a of the plan, respectively) through their completion and submittal of a **Hazard Identification Questionnaire** to the Consultant. This questionnaire summarized the Consultant's evaluation of a full range of natural hazards, including whether or not each hazard was recommended for inclusion in the plan and why. Municipalities were asked to provide information as to whether or not they concurred with the consultant's findings, and information on impacts from past events in their respective communities. Local responses were used by the Consultant to supplement hazard information obtained through research of past disaster declarations in the County, review of the New York State Hazard Mitigation Plan (2008), and review of readily available online information from reputable sources (such as federal and state agencies). The County and 22 jurisdictions returned this questionnaire or provided a statement of full concurrence with the Consultant's findings.
- Participating jurisdictions provided feedback during the evaluation of Land Uses and Development Trends step of the process (Section 3.d of the plan) through their completion and submittal of a **Land Uses and Development Trends Questionnaire** to the Consultant. This questionnaire asked jurisdictions to: (1) describe development trends occurring within their jurisdiction, such as the predominant types of development occurring, location, expected intensity, and pace by land use; and (2) describe any regulations/ordinances/codes their jurisdiction enforces to protect new development from the effects of natural hazards. Local responses were used by the Consultant to supplement information presented in the County Cross-Acceptance Report. The County and 22 jurisdictions returned this questionnaire.
- Participating jurisdictions provided feedback during the Capability Assessment step of the process (Section 4 of the plan) through their completion and submittal of a **Capability Assessment Questionnaire** to the Consultant. This questionnaire asked respondents to examine their jurisdiction's abilities to implement and manage a comprehensive mitigation strategy, which includes a range of mitigation actions. The questionnaires requested information

pertaining to existing plans, polices, and regulations that contribute to or hinder the ability to implement hazard mitigation actions. They also requested information pertaining to the legal and regulatory capability, technical and administrative capacity, and fiscal capability of each jurisdiction. **A total of 21 The County and 22** jurisdictions submitted completed questionnaires illustrating their capability to implement a mitigation strategy.

- Participating jurisdictions provided feedback regarding **problem areas in need of mitigation and possible mitigation alternatives**. Some municipalities provided this type of information to the consultant separately, either via email or separate written correspondence. Their feedback was incorporated into the plan. At a working session of the Core Planning Group on November 30, 2010, participating jurisdictions were asked to consider a range of various types of hazard mitigation actions, and identify a mitigation strategy for their municipality. Rensselaer County and all of its participating jurisdictions have developed a unique mitigation strategy. **However, as of the date of this Draft (January 23, 2011), several are still forthcoming for incorporation into appropriate appendices.**
- The Consultant provided “*Guidance Memorandum #2 – Plan Maintenance Procedures: Monitoring, Evaluating and Updating the Plan*” to the RCBPS on July 2, 2010. This memorandum provided an overview of the requirements regarding plan maintenance, types of plan maintenance activities that can be selected to meet the requirements, and some examples of plan maintenance strategies from other FEMA-approved plans in FEMA Region 2. RCBPS was asked to review the memo and provide the consultant with feedback. The memorandum also included draft plan text for review. This same plan text was included for CPG member review and comment as part of the Risk Assessment Interim Deliverable of October 2010 as well as the Working Draft Plan of December 2010. No comments were received. RCBPS and the consultant worked to develop a county-wide plan maintenance strategy that would best suit the County and its jurisdictions while meeting the minimum requirements of DMA 2000 and its implementing regulations.
- The Consultant provided “*Guidance Memorandum #3 – Plan Integration*” to the RCBPS on July 2, 2010. The memorandum summarized requirements in terms of how mitigation recommendations will be integrated into job descriptions, or existing planning mechanisms such as comprehensive plans, capital improvement plans, zoning and building codes, site reviews, permitting and other planning tools, where such tools are appropriate. Various ways that the hazard mitigation plan can be integrated into local planning mechanisms were presented, along with sample text from other plans approved by FEMA Region 2. RCBPS was asked to review the memo and provide the consultant with feedback. The memorandum also included draft plan text for review. This same plan text was included for CPG member review and comment as part of the Risk Assessment Interim Deliverable of October 2010 as well as the Working Draft Plan of December 2010. No comments were received. RCBPS and the consultant worked to develop a county-wide plan integration strategy that would best suit the County and its jurisdictions while meeting the minimum requirements of DMA 2000 and its implementing regulations.

## Rensselaer County Hazard Mitigation Planning Committee

This Plan has been developed by the **Rensselaer County Hazard Mitigation Planning Committee (the “Planning Committee”)**, with support from an outside consulting firm (URS Corporation, “URS”). The efforts of the Planning Committee were headed by Kelly Paslow, Director of the RCBPS with assistance from Jonathan Goebel, also of RCBPS. The Plan represents the collective efforts of citizens, elected and appointed government officials, business leaders, volunteers of non-profit organizations, and other stakeholders.

The overall **Planning Committee** consisted of members of Rensselaer County, each participating jurisdiction, and the public and other stakeholders. The overall Planning Committee did not meet together in one place during the planning process. Instead, a team concept was used to more evenly distribute responsibilities and to make best of use of every participant's unique capabilities.

As shown in Figure 1.4, the overall Planning Committee was divided into a **Core Planning Group (CPG)** and a series of **Jurisdictional Assessment Teams (JATs)**, with one JAT for each of the County's participating jurisdictions. Each jurisdiction was encouraged to form a JAT by bringing together personnel from their local government organization, ideally utilizing people with knowledge and experience of local administration, planning, hazards, and infrastructure. While in practice each individual JAT varied in number and composition, each participating municipality provided at least one person who was actively involved throughout the planning process. The names of all JAT members whose participation was documented by attendance at meetings or completion of the various deliverables are included in Appendix G.

### **The Role of the County in the Plan Development Process**

The role of the County in the plan development process was to act as lead agency and facilitator on behalf of the participating jurisdictions. The County was originally responsible for securing the grant funding for the plan and for originally soliciting the participation of all jurisdictions. The County was responsible for selecting the consultant, administering the contract, and ensuring payment to the consultant.

As well as acting as a jurisdiction in its own right, the County took on the responsibility of managing all communications between the consultant and the CPG (principally through the use of a master email mailing list), distributing all drafts to jurisdictions and reviewing agencies, distributing deliverables and outreach materials, and facilitating meetings. For each meeting the County was responsible for procuring a venue and presentation equipment, distributing invitations, and disseminating any subsequent relevant information. The County also hosted the central hazard mitigation planning website, including the interactive mitigation survey, the results of which the County was also responsible for processing and forwarding to the consultant. The RCBPS was the County agency tasked with meeting the County's responsibilities, and the plan coordinator and main point of contact was Mr. Kelly Paslow (see the Executive Summary, Page iii).

This team concept was beneficial for two reasons: (1) the Consultant and the County's main points of contact was the Rensselaer County Planning Committee and the CPG; and (2) JATs with intimate local knowledge were best suited for coordination and outreach within their respective jurisdictions.

### **RCBPS Efforts to Involve All of the County's Municipalities in the Project**

On June 24, 2010 RCBPS sent formal correspondence to each jurisdiction in the county inviting them participate in the multi-jurisdictional hazard mitigation planning process. The letter explained the process, invited local participation in the multi-jurisdictional plan, and outlined some advantages to having a plan in place and participating in a larger multi-jurisdictional plan. Each municipality was asked to sign and return one of two formal statements of authority – one indicating a desire to participate and the second indicating a desire to decline. Municipalities were advised that if opting to participate, they should identify a single representative and an alternate to represent their jurisdiction on the Core Planning Group and fill this information in on the appropriate line of an attached Statement of Authority to Participate. In this same letter, municipalities were also invited to attend one of two project Kickoff Meetings scheduled for July 12, 2010 (at their choice of 2pm or 6pm) at the Rensselaer County Government Center, 1600 Seventh Avenue, Troy, NY in Conference Room A.

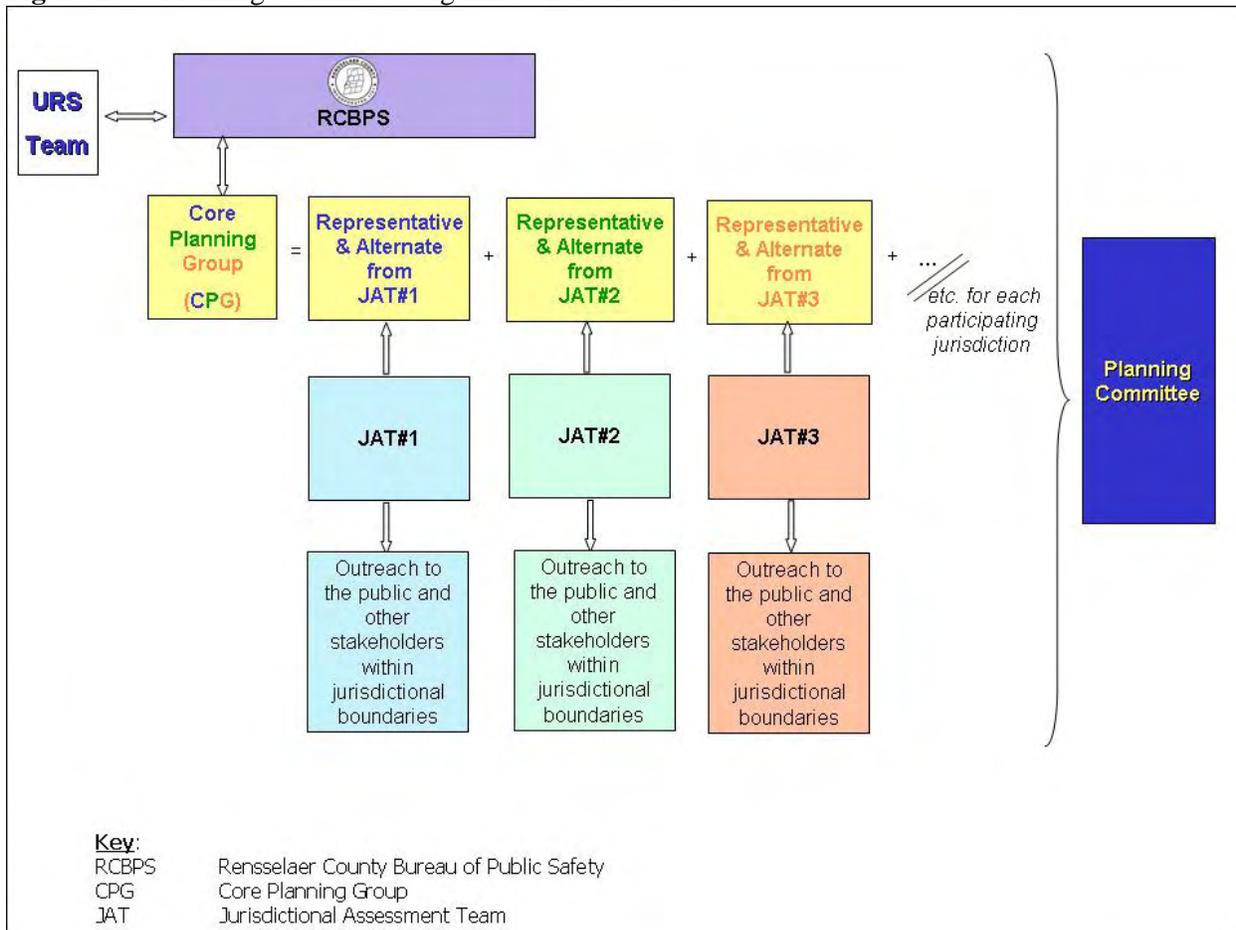
Municipal participation subsequent to the June invitation letter and the July 12<sup>th</sup> Kickoff Meeting was minimal. Recognizing the importance of expanding and enhancing local jurisdiction participation with an aim toward participation by all of the county's municipalities, RCBPS contacted each municipality not represented at the Kickoff Meeting via phone on July 13<sup>th</sup>, and sent out a subsequent letter, again inviting participation and providing a copy of all presentation materials and handouts from the Kickoff Meeting.

Outreach to the municipalities was conducted on an ongoing basis thereafter. Regular telephone calls were made between the County and/or consultant and CPG members to offer assistance, support, reminders regarding meetings and upcoming deliverables, etc. RCBPS also sent out periodic to every jurisdiction in the county (regardless of stated desire to participate) regarding the project overview, status, current level of municipal participation and ongoing invitation to join in the process, upcoming meetings, current deliverables due for completion by CPG members and subsequent delivery to consultant, and next steps in going forward. These email messages were distributed on the following occasions during the plan development process: August 16, 2010; September 17, 2010; October 20, 2010; November 16, 2010; December 1, 2010; and January 4, 2011.

As a result of all of these efforts of the RCBPS, all of the County's 22 municipalities ultimately participated successfully by attending meetings, providing feedback, selecting action items, etc.

DRAFT

**Figure 1.4 – Planning Committee Organizational Structure**



All members of the CPG and the JATs were also members of the overall Planning Committee. The CPG included head members of each JAT (the County and each of the municipalities who elected to participate in the process). The Rensselaer County Planning Committee was responsible for managing the overall plan formulation activities. The CPG was responsible for attending CPG meetings and providing information and feedback, and coordinating an outreach program within their municipality, JAT and beyond to the public and other stakeholders. Each JAT was responsible for coordinating and facilitating local efforts, sending CPG representatives to meetings, providing information and feedback, involving the public and local community stakeholders in the planning process, assessing mitigation alternatives, selecting a course of action to be followed for their community, adopting the plan, and participating in plan monitoring and implementation.

With regard to meetings, RCPBS was responsible for setting meeting dates and times, securing a meeting facility, and notifying all team members of upcoming meetings. They also played a very large role in reminding CPG members of certain project deadlines. The Consultant prepared meeting agendas, handouts, PowerPoint presentations, and minutes for the project initiation meeting. RCBPS maintained the County's web site posting various informational materials and plan documents.

The plan development process was initiated in earnest in the spring of 2010 with the Rensselaer County Hazard Mitigation Plan Project Initiation Meeting held on May 27, 2010. At this meeting, the consultant met with the RCBPS to refine the project work plan, discuss schedule and the anticipated level of County

labor support. The Consultant provided a Wish List of information, data and documents they hope each participating jurisdiction can submit for their review and incorporation into the plan. The Consultant also provided a draft of Guidance Memorandum #1 (as a follow up to the meeting on June 22, 2010) regarding assessing community support, building the planning team, and engaging the public. At this meeting, expectations regarding the CPG Project Kickoff Meeting were discussed. Handouts included the project scope of work, targeted implementation schedule and Wish List.

While Jurisdictional Assessment Teams met individually throughout the plan development process as they deemed necessary, the following is an overview of CPG meetings held during the plan development process.

- July 12, 2010 Core Planning Group Kickoff Meeting. This was the first meeting of the Core Planning Group. Participants were provided with an overview of: the intent of the project; the organizational structure of the planning group; the plan development process overall; the role of participating jurisdictions, contractors, the public and other stakeholders; what it means to participate; key deliverables; data collection/supporting documents; the project timeline; and next steps. Handouts included the PowerPoint presentation, targeted implementation schedule, Wish List, sources of information on hazard mitigation planning, project Fact Sheet and Guidance Memo #1.
- October 4, 2010 Core Planning Group Progress Meeting. This meeting was conducted to provide an overview of plan development progress and continued work to be completed. RCBPS also reiterated the benefits of municipal participation and the requirements that must be met for a municipality to be considered fully participating.
- November 1, 2010 Risk Assessment Question and Answer Session. The purpose of the meeting was to provide CPG members with an opportunity to ask questions and submit feedback on the recently distributed Risk Assessment Interim Deliverable (October 19, 2010). The Risk Assessment Interim Deliverable comprised the following working chapters of the draft report: Hazard Identification, Hazard Profiles, Asset Identification, Vulnerability Assessment, Mitigation Goals, Range of Mitigation Actions to be Considered, Plan Maintenance, and For More Information.
- November 30, 2010 Mitigation Strategy Working Session. At this working session, attendees conducted an evaluation and prioritization of hazard mitigation actions and developed an implementation strategy for selected mitigation actions. For jurisdictions not present, or those who were present but who needed more time to complete the Prioritization and Implementation Strategy sheets, an opportunity was provided for jurisdictions to do so remotely. Following this meeting, the County and 21 municipal jurisdictions had evaluated, prioritized, and developed a strategy for implementing their selected actions.
- January 26, 2011 Meeting to Present the Draft Plan. The CPG convened one last time prior to the plan being submitted to NYSEMO and FEMA for review. The purpose of this meeting was to discuss the Draft Plan. An internal Working Draft was completed in December 2010 and emailed to CPG members for advance review on January 4, 2011; the Draft Plan was completed in January and emailed to CPG members on January 24, 2011.

See Appendix H for agendas, attendance sheets, and copies of presentations made at the CPG meetings listed above.

### **The Role of the Contractors in the Plan Development Process**

This Hazard Mitigation Plan is the County's plan; as such, its success rests on the decisions and directions set by the Planning Committee members throughout the plan development process. URS was contracted

by Rensselaer County to work with the RCBPS and the Planning Committee to assist them in developing a plan that would meet the requirements of DMA 2000. URS Corporation (URS) was the lead firm for this assignment, doing so from their local office in Wayne, New Jersey. URS was the direct County point of contact, assisted in the hazard identification and risk assessment, lead the hazard mitigation planning efforts, authored the final document, and provided overall contract administration.

URS assisted the Planning Committee by conducting the analyses necessary to provide the team members with the information they needed to make sound decisions, and helped guide them through the necessary steps of the plan development process. The Planning Committee, in turn, took the lead by including the local community, assessing the alternatives, and ultimately selecting the course of action to be followed. At the end of the planning process, URS prepared this Plan text (with feedback from the Planning Committee) to document the group's efforts, along with hazard information and findings, in a manner consistent with applicable regulations (DMA 2000), criteria (44 CFR Part 201.6), and guidance (FEMA's Mitigation Planning How-To Guides; FEMA's Multi-Hazard Mitigation Planning Guidance document of March 2004 (Revised July 2008)).

A series of three Guidance Memorandums were distributed to RCBPS by URS Corporation, at various meetings and also were posted on the County's mitigation planning web site. These three memos provide a summary of key information presented in DMA 2000, its implementing regulations (IFR), and the FEMA How-To Guides for three key topic areas. The memos are intended to serve as a supplement to and not as a replacement to the FEMA documents. Each memo provides suggestions to municipalities in a certain topic area, and requests feedback from each municipality at the end of the process regarding their decisions. A summary of the Guidance Memos is presented below.

Guidance Memorandum #1 – Assessing Community Support, Building the Planning Team, and Engaging the Public and Other Stakeholders, dated June 5, 2010, describes the project and its goal of identifying the risks associated with natural hazards in Rensselaer County. It is centered on developing the structure of the Planning Committee and identifying the jurisdictions that are interested in participating in the plan; reaching out to various parties (general public, local residents, business owners, non-profit organizations, community leaders and other stakeholders) during the development and maintenance processes; identifying the role of contractors in the planning process; and ultimately, documenting the planning process. This memo was distributed by RCBPS to the CPG.

Guidance Memorandum #2 - Plan Maintenance Procedures: Monitoring, Evaluating and Updating the Plan, dated June 30, 2010, highlights the essential steps necessary for monitoring, evaluating and maintaining the plan, and its value as a vital tool for mitigating hazards and reducing risk. The memo stresses several key factors that need to be undertaken by the Planning Committee: organizing resources, i.e., identifying and organizing interested parties, including the public, during the planning process; assessing the risks, i.e., identifying the natural hazards that generally affect Rensselaer County; how the communities will be impacted by the hazards; and developing a mitigation plan, i.e., once the risks have been identified, the Planning Committee determines the methods and strategies for avoiding or minimizing the risks. The memo also conveys the importance of following the regulations that require the plan to be monitored, evaluated and updated within a five-year cycle, and the importance of periodically measuring the effectiveness of the actions contributing to the overall success of the plan. The memorandum also included draft plan text for RCBPS review. This same plan text was included for CPG member review and comment as part of the Risk Assessment Interim Deliverable of October 2010 as well as the Working Draft Plan of December 2010. No comments were received. RCBPS and the consultant worked to develop a county-wide plan maintenance strategy that would best suit the County and its jurisdictions while meeting the minimum requirements of DMA 2000 and its implementing regulations.

*Guidance Memorandum #3 - Plan Integration*, dated June 30, 2010, recapitulates the importance of using existing processes and resources by the Planning Committee during plan implementation; thus, saving time and effort in meeting the plan's goals and objectives. The memo states that by following the requirements and key steps previously discussed, the next essential goal is taking action by integrating the objectives into daily activities and by implementing the plan in a timely manner. The memorandum also included draft plan text for RCBPS review. This same plan text was included for CPG member review and comment as part of the Risk Assessment Interim Deliverable of October 2010 as well as the Working Draft Plan of December 2010. No comments were received. RCBPS and the consultant worked to develop a county-wide plan maintenance strategy that would best suit the County and its jurisdictions while meeting the minimum requirements of DMA 2000 and its implementing regulations.

The memos are valuable tools that guide the team members through each step toward the establishment of the hazard mitigation plan and the planning process that leads to the formal adoption of the plan.

In addition, URS also: (1) Distributed questionnaires for CPG member completion, as described previously beginning on Page 1-12. They were the: Hazard Identification Questionnaire, Land Uses and Development Trends Questionnaire, Capability Assessment Questionnaire; (2) Assisted the CPG through preparation of a project Fact Sheet (discussed on Page 1-21) and development of a project web site (discussed beginning on Page 1-20); and (3) presented at each CPG meeting to guide participating jurisdictions through the process, and advise CPG members regarding each step of the process such as hazards identified and profiled, risks and vulnerabilities identified, possible types of mitigation solutions, etc.

### **Opportunities for Public Involvement in the Plan Development Process**

The role of public involvement in the plan development process is to provide the general public with some variety of means to not only learn about the process that the Planning Committee is undertaking, but to voice concerns and to provide input throughout the planning process. CPG members undertook a range of activities to: (a) alert the public to the fact that the Planning Committee was working to develop this Hazard Mitigation Plan, and (b) provide the public an opportunity to participate with a forum to ask questions, and submit comments and/or suggestions on the process.

The Planning Committee pursued a variety of different ways to provide the public with an opportunity to become involved and engaged during the planning process, in addition to ensuring that the participating jurisdictions were also fully aware of the process and were able to contribute and voice their concerns as well as the general public. As such, the following key activities were employed:

- Rensselaer County Multi-jurisdictional Mitigation Planning web site
- *Plan Facts* project fact sheet
- Open Public Meetings
- Press
- Other Outreach Activities by RCBPS and CPG Members

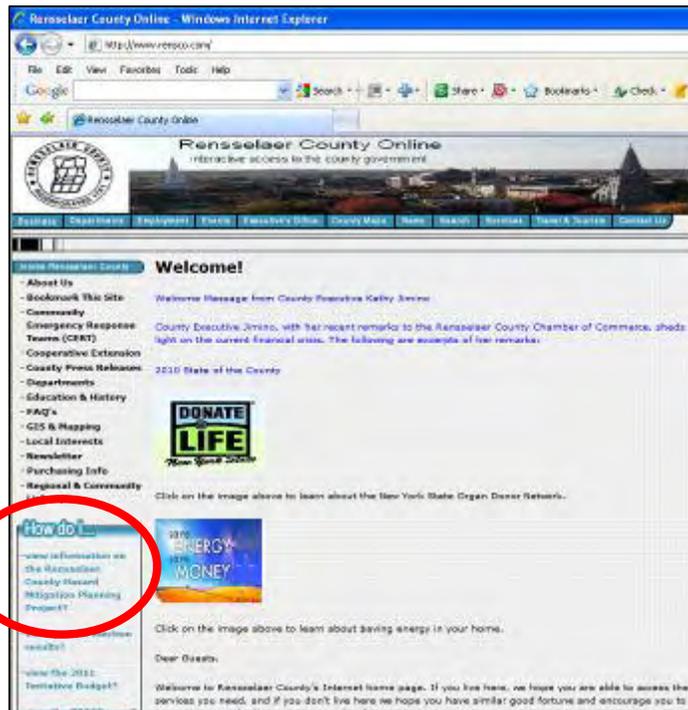
#### *Rensselaer County Multi-Jurisdictional Hazard Mitigation Planning Web Site*

The CPG made an effort to involve the public and other stakeholders in the process during the drafting stage of the plan in part through a mitigation planning web site. The Rensselaer County Web site contains a new section on the county-wide multi-jurisdictional hazard mitigation planning process. It can be found online at: [www.rensco.com/publicsafety\\_hmpp.asp](http://www.rensco.com/publicsafety_hmpp.asp)

The web site was initiated in October 2010 and will continue to be maintained and updated by RCBPS on a regular basis. The additional web pages were incorporated into the site for the purpose of informing the public (including businesses, local citizens and the residents that are part of the Rensselaer County communities) about the importance of hazard mitigation planning and their opportunity to participate and provide feedback during the process. In this section, the RCBPS provides general information about the process, the organizational structure of the planning team, meeting information (agendas, presentations, handouts, and minutes), other reference materials, a link for the Draft Plan, and more. Contact information for the RCBPS Coordinator is also provided and individuals are invited to reach out to this person for information on how to become involved or to provide comments. The image below is a screen-capture of the main mitigation planning web page on the County's site. Many municipal jurisdictions also included links on their web sites to this overall project page (screen captures of municipal links can be found in Appendix I).



A link to this page appeared on the County home page as well (see below).



The main page of the website contains as illustrated above presents an introduction to hazard mitigation planning, outlining the purpose and need for the plan, municipal participation and Core Planning Group structure, the basic steps in the process, and key dates in the schedule. A series of links in the center of the main page provides access to the following additional information:

- General Information: Definitions of hazard mitigation, explanations of the purpose and need for the plan, participation requirements, planning group structure, and the overall schedule.
- Project fact sheet: Plan Facts (see below) in PDF format for downloading.
- Planning Committee Organizational Structure: The roles of the County, municipalities, other stakeholders, and the consultant.
- Meetings: Overview of topics discussed at CPG meetings.
- Participating Jurisdictions: Listing of municipalities participating in the project.
- The Draft Plan: PDF copies of the Draft Plan for downloading.
- Useful Links: Links to the NY State Emergency Management Office and to various FEMA web pages giving information on mitigation planning, grants, and disasters.
- For More Information: Full contact details for RCBPS.

### PlanFacts

The CPG made an effort to involve the public and other stakeholders in the process during the drafting stage of the plan in part through a fact sheet. The Planning Committee increased public awareness of the hazard mitigation plan process by providing a two-page summation on hazard mitigation facts and the mitigation planning process to the public, community leaders, business owners, local residents and other stakeholders in the plan. The flyer, entitled *Rensselaer County Multi-Jurisdictional Natural Hazard Mitigation Planning Project PlanFacts*, furnishes pertinent plan data that explains the purpose and need for the mitigation plan in Rensselaer County.

The two-page flyer begins by providing a basic understanding to “What is hazard mitigation?” It then contains information on the plan development process and how jurisdictions can participate in the plan or prepare their own hazard mitigation plans in compliance with DMA 2000 requirements. It also provides an overview of the Hazard Mitigation Planning Committee members and their roles; the steps in the mitigation process (goals, objectives, natural hazards evaluation, etc.); the plan scheduled target completion date; and a point of contact at RCBPS for more information.

*PlanFacts* was distributed to the attendees at the Core Planning Group Kickoff Meeting on July 12, 2010. It was also posted by several Core Planning Group Members on local notice boards throughout the county. The Fact Sheet can be found electronically (PDF format) at the Rensselaer County Office of Emergency Management web site address given above.

*PlanFacts* was also distributed in hard copy format widely throughout the County by CPG members. Locations that it has been posted/distributed include local libraries, fire departments, and city/town halls. Copies were also made available at the RCBPS booth at the Schaghticoke Fair. A copy of the full fact sheet is presented here:

**Rensselaer County Multi-Jurisdictional Hazard Mitigation Planning Project PLAN FACTS**

**WHAT IS HAZARD MITIGATION?**  
 Natural hazards have the potential to cause property damage, loss of life, economic hardship, and threats to public health and safety.  
 Hazard mitigation measures are the things you do today to be more protected in the future. They are measures taken before a disaster happens to reduce the impact that future disasters will have on people and property in the community. Mitigation reduces the risk of loss and creates a more disaster-resistant and sustainable community. Hazard mitigation measures are essential to breaking the typical disaster cycle of damage, reconstruction, and repeated damage.

**PURPOSE AND NEED FOR THE PLAN**  
 Hazard mitigation plans are developed BEFORE a disaster strikes. The plans identify community policies, actions, and goals for long-term implementation to reduce risk and potential for future losses. Adopted, implemented and maintained on an ongoing basis, these plans will gradually, but steadily, lessen the impacts associated with hazard events.  
 As of November 1, 2009 communities without a FEMA-approved hazard mitigation plan are not eligible for FEMA project grant monies under programs such as the Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance Program (FMA) and Pre-Disaster Mitigation Grant Program (PDM).

**PARTICIPATION**  
 Jurisdictions who wish to be recognized by FEMA as being compliant with DMA 2000 must either (a) participate in the multi-jurisdictional plan development process and formally adopt the final plan, or (b) prepare their own hazard mitigation plan. All jurisdictions in Rensselaer County are being invited to participate in the multi-jurisdictional planning process.  
 To be recognized in FEMA's eyes as successfully participating in the multi-jurisdictional plan, jurisdictions must: participate actively in the planning process; develop unique jurisdictional mitigation actions and formally adopt the final plan. Active participation involves attending meetings, providing feedback, and reaching out to the public and other key stakeholders in the community.  
 While the primary advantage of having a mitigation plan in place is the jurisdiction's eligibility to apply for FEMA hazard mitigation project grant monies, participation has other advantages as well:  
 • Because a consulting team has been hired to conduct the analyses and author the plan, participation involves relatively little effort on the part of jurisdictions.  
 • Because Federal grant monies have been received to develop the plan, participation involves little cost to local jurisdictions - only allocation of staff time to participate in the process, and a contribution toward the grant's 25% matching funds.  
 • Multi-jurisdictional hazard mitigation plans are essential for addressing issues that do not recognize political boundaries.  
 • Over time, implementation of the plan will reduce economic damages resulting from future natural disasters.

**STRUCTURE**  
 Elected and appointed government officials, business leaders, members of nonprofit organizations, citizens, and other stakeholders who choose to participate will become part of our overall Rensselaer County Multi-Jurisdictional Hazard Mitigation Planning Committee. To keep meeting sites to workable numbers, the Planning Committee will be broken up into a Core Planning Group (CPG) and Jurisdictional Assessment Teams (JATs).  
 The CPG will include representatives of Rensselaer County and any of the county's jurisdictions who elect to participate in the process. The CPG will manage the overall plan formulation activities and contribute

to the decision making process. Representatives on the CPG will coordinate the plan efforts by organizing outreach by means of a team concept through the JATs.  
 The JATs will include representatives from the individual participating jurisdictions. It will be responsible for local community involvement in the multi-jurisdictional mitigation plan.  
 Regardless of team, all participating jurisdictions must:  
 • Coordinate and facilitate local efforts.  
 • Attend meetings.  
 • Provide information and feedback.  
 • Involve the public and community stakeholders in the planning process.  
 • Assess mitigation alternatives.  
 • Select a course of action to be followed for their communities.  
 • Plan implementation, monitoring and updates.

**PROCESS**  
 • Research a full range of natural hazards.  
 • Identify subset of significant hazards; these will be the focus of the plan.  
 • Identify location and extent of hazard areas.  
 • Identify assets located within hazard areas.  
 • Characterize existing and potential future assets at risk.  
 • Assess vulnerabilities to the identified hazards.  
 • Evaluate and prioritize goals, objectives, and hazard mitigation actions.  
 • Document the plan and monitor its progress.

**SCHEDULE**  
 The mitigation plan development process will occur over approximately one year, beginning in summer 2010. A Draft Plan is targeted for completion in December of 2010.

**OUR WEBSITE**  
 A Multi-Jurisdictional Hazard Mitigation Planning Page is currently under development on the County's web site. We encourage you to check back for additional information and updates at: [www.rnsco.com](http://www.rnsco.com)

**FOR MORE INFORMATION**  
 Thank you for your interest! For questions or other feedback, please contact:  
 Kelly Pedron, Director  
 Rensselaer County  
 Bureau of Public Safety  
 Phone: 518-356-7632  
 E-mail: [kp@rnsco.com](mailto:kp@rnsco.com)

**Open Public Meetings**

Several participating jurisdictions spoke about the mitigation planning process at regularly scheduled meetings in their respective municipalities (i.e., board meetings), granting the public and other stakeholders an opportunity to participate in the process. See Table 1.6 for more information. In addition, there will be open meetings of local governing bodies before resolutions are passed to formally adopt the plan (see individual resolutions for more information).

Following completion of the draft plan, a public meeting will be held on INSERT DATE HERE to present the Draft Plan to County Legislators. In addition to Legislators and members of the public, who were encouraged to review the plan and make comments, this meeting was attended by members of the local news media, and the meeting was featured on local TV news (INSERT HERE). See Appendix I for screen captures and text from the accompanying online article. (NOTE to FEMA Reviewers: the County wishes to present the plan to legislators after it receives your öAPAö.)

#### *Press*

Information regarding the hazard mitigation planning project appeared in various news outlets over the course of the project. Specifically: *The Eastwick Press* ö July 16 and 23, 2010 and December 17 and 23, 2010; *The Advertiser (South)* - September 30, 2010; *The Village Green* ö October 2010; County Press Release ö January 5, 2011; and WNYT Article ö January 7, 2011. Copies of these articles can be found in Appendix I.

#### *Other Outreach Activities by RCBPS and CPG Members*

In addition to the web site, fact sheet, and open public meetings held, the Core Planning Group (through their respective JATs) undertook the actions summarized in chronological order in Table 1.6 to raise awareness of the plan development process among those not directly tasked with involvement in the plan process, and provide the public and other stakeholders with a forum for participating in - and providing feedback throughout - the plan development process. While participating jurisdictions have provided comments, to date, no documented feedback from the public or other stakeholders has been received. Comments received in time to be incorporated into the Final will be reviewed by the Consultant and RCBPS and integrated into the plan as applicable. As this is a living document, other comments will be considered for integration during future maintenance cycles and plan updates.

**Table 1.6  
Summary of Jurisdiction Outreach Activities**

Date	Jurisdiction	Action Type	Action Details	Action Lead
July 2010	North Greenbush, Town of	Public meeting	Plan discussed at Town Board public meeting; Jay Wilson, Chairman, North Greenbush Fire District, named to CPG	Town Board
July 2010	Berlin, Town of	Meeting	Town Highway Superintendent held a meeting with one of the Town's key stakeholder groups, the Berlin Volunteer Fire Company (Chief William Osterhout), to discuss the project and invite the Fire Company to be involved.	Town Highway Superintendent
07/02/10	Rensselaer, County of	Letter to Stakeholders	County sent a letter to key stakeholders regarding the project, and inviting them to attend the CPG's Kickoff Meeting on 7/12/10	RCBPS
07/08/10	Grafton, Town of	Public meeting	Plan discussed at Town Board public meeting	Town Supervisor, Highway Superintendent
07/08/10	Grafton, Town of	Public notice	Announcement regarding the project posted on Town bulleting board	Town Supervisor, Town Clerk
07/08/10	Berlin, Town of	Public meeting	Plan discussed at Town Board public meeting; resolution passed to participate.	Supervisor Jaeger and Town Board
07/13/10	Schaghticoke, Town of	Web posting	Information about the project was posted on the Town web site	Supervisor Carlson
07/15/10	Valley Falls, Village of	Public meeting	Plan discussed at Village Board public meeting	Village Clerk
07/16/10	Grafton, Town of	News article	Information about the project published in the <i>Eastwick Press</i>	Supervisor
07/17/10	Sand Lake, Town of	Web posting	Information about the project posted on the Town web site	Councilman
07/17/10	Sand Lake, Town of	Newsletter article	An article explaining Sand Lake's involvement in the plan was published in the local newsletter.	Town Clerk
07/19/10	Nassau, Town of	Meeting	Meeting between Highway Superintendent and a member of the Natural Resource Committee. Town briefed NRC on the mitigation plan and discussed help opportunities from NRC	Highway Superintendent
07/19/10	Nassau, Town of	Public meeting	At a regularly scheduled public meeting of the Natural Resource Committee, the project was discussed and the NRC offered their assistance going forward	Highway Superintendent
07/21/10	Nassau, Town of	Web posting	Town website posted public notice of Town's participation in the project	Highway Superintendent , Town Supervisor, Supervisor's Secretary, Town Webmaster
07/21/10	Nassau, Town of	Public notice	Public notice of Town's participation in the project posted on billboards in Town Clerk's office and Town Supervisor's office	Town Supervisor, Supervisor's Secretary, Town Clerk, and Highway Superintendent
07/23/10	Berlin, Town of	News article	Information about the project was published in an article in the <i>Eastwick Press</i> .	Town Board
August 2010	Sand Lake, Town of	Public meeting	Plan discussed at Town Board public meeting	Councilman
08/12/10	Grafton, Town of	Public meeting	Plan discussed at Town Board public meeting	Town Supervisor
08/16/10	Stephentown, Town of	Public meeting	Plan discussed at Town Board public meeting	Town Board
08/16/10	Stephentown, Town of	News article	Information about the project published in local paper	Town Board
08/17/10	Stephentown, Town of	Meeting	Coordination with Code Enforcement Officer	
08/23/10	Nassau, Town of	Public meeting	At a regularly scheduled public meeting of the Natural Resource Committee, Fred McCagg attended and gave a public briefing of the Town's participation on the project and tasked members with help in completing questionnaires/worksheets/etc. going forward	Highway Superintendent and Natural Resource Committee members
September 2010	North Greenbush, Town of	Public meeting	Plan discussed at Town Board public meeting; Josephine Ashworth, Town Supervisor, named to CPG	Town Board
September 2010	Hoosick, Town of	Fact Sheet posting	A hard copy of the project fact sheet was posted on the town bulletin board	Councilman
September 2010	Hoosick, Town of	Public meeting	Plan discussed at Town Board public meeting	Supervisor
September 2010	Rensselaer, County of	Fact Sheet posting	Copies of the Fact Sheet were made available at the RCBPS booth at the Schaghticoke Fair.	RCBPS
09/07/10	Schaghticoke, Village of	Public meeting	Plan discussed at Village Board public meeting	Village Board
09/09/10	Grafton, Town of	Public meeting	Plan discussed at Town Board public meeting	Town Supervisor
09/13/10	Castleton-on-Hudson, Village of	Public meeting	Plan discussed at Village Board public meeting	Mayor, Trustees, Clerk and Department of Public Works

**Table 1.6  
Summary of Jurisdiction Outreach Activities**

Date	Jurisdiction	Action Type	Action Details	Action Lead
09/13/10	Stephentown, Town of	Public meeting	Plan discussed at Town Board public meeting	Town Board and Highway Supervisor
09/29/10	Nassau, Village of	Fact Sheet posting	Posted the project fact sheet on Village Hall bulleting board - community has access to the bulleting board	Clerk's office
09/29/10	Nassau, Village of	Web posting	Information about the project posted on the Village web site	Village IT staff
09/30/10	Castleton-on-Hudson, Village of	Public notice	Public notice in Village Hall bulletin board - fliers at Clerk's desk	Village Clerk and Department of Public Works
October 2010	North Greenbush, Town of	Meeting	Meeting held with town officials and key stakeholders regarding the plan, including: North Greenbush Water and Sewer, Defreestville Fire Department, Zoning Board of Appeals, Town Supervisor, Town Historian, Highway Superintendent, Chief of Police, Town Board, Town Clerk, Planning Board.	Supervisor Ashworth
10/01/10	Nassau, Village of	Newsletter article	Article published in Village newsletter regarding the project; sent to all residents of the Village (October 2010 issue of The Village Green)	Village Clerk
October 2010	Schaghticoke, Village of	Fact Sheet posting	Project fact sheet was posted at various public notice boards	Village Clerk
October 2010	East Nassau, Village of	Fact Sheet posting	Fact sheet was posted at the Village office	Mayor, DPW Superintendent
October 2010	East Nassau, Village of	Web posting	Information about the project posted on the Village web site	Mayor, Webmaster
October 2010	Rensselaer, County of	Web posting	Detailed project information posted under the RCBPS page for the multi-jurisdictional planning project. A direct link was included on the overall County web site home page	RCBPS
10/02/10	Castleton-on-Hudson, Village of	Meeting	Meeting held with DPW and Zoning Chairperson regarding the plan and how it ties in with the zoning process	Department of Public Works
10/07/10	Brunswick, Town of	Web posting	Information on plan posted to Town web site	Assistant Supervisor
10/07/10	Brunswick, Town of	Fact Sheet posting	Information on plan posted on Town Hall bulletin board	Town Clerk
10/07/10	Brunswick, Town of	Town Newsletter	Information on plan published in Town newsletter	Carolyn Abrams
10/12/10	Pittstown, Town of	Public meeting	Plan discussed at Town board public meeting	Town Board and Highway Supervisor
10/13/10	Nassau, Village of	Public meeting	A presentation was made regarding the project during the Village Board's regular monthly meeting that is open to the public. The project fact sheet was also handed out.	Village Clerk
10/14/10	Pittstown, Town of	Web posting	Information about the project posted on the Town web site	Town Clerk, Webmaster
10/16/10	Rensselaer, City of	Fact Sheet posting	A hard copy of the project fact sheet was posted on a bulletin board in City Hall; copies also made available to pick up	Planning Department
November 2010	North Greenbush, Town of	Web posting	Information on plan posted to Town web site	Supervisor Ashworth
November 2010	Castleton-on-Hudson, Village of	Meeting	Meeting held with DPW and Planning Board Chairperson regarding the hazard mitigation plan and how it ties in with the local planning process	Department of Public Works
November 2010	Schaghticoke, Village of	Public meeting	Plan discussed at Village Board public meeting	Village Clerk
November 2010	Schaghticoke, Village of	News article	Information about the project published in local newspaper	Village Clerk
November 2010	Poestenkill, Town of	Fact Sheet posting	Hard copy of the project fact sheet was posted on the Town Hall notice board	Town Clerk
November 2010	Rensselaer, City of	Web posting	Information was posted on the City web site regarding the project and a link was provided to the overall project page hosted by the County.	Planning Department
11/08/10	Rensselaer, County of	Letter to Stakeholders	County sent a letter to key stakeholders regarding the project, and inviting them to attend a Stakeholders Information Session of 11/30/10	RCBPS
11/16/10	Stephentown, Town of	Web posting	Information about the project was posted on the Town web site	Webmaster, Supervisor, and Highway Superintendent
11/18/10	North Greenbush, Town of	Public meeting	Plan discussed at Town Board public meeting; reported on recent activities.	Supervisor Ashworth and Town Board
11/22/10	Rensselaer, City of	Fact Sheet posting	Hard copy of the project fact sheet was posted at the Rensselaer Public Library	Planning Department
11/22/10	Rensselaer, City of	Public meeting	Plan discussed at a public meeting of the Zoning Board of Appeals	Planning Department
11/22/10	Rensselaer, City of	Public meeting	Plan discussed at a public meeting of the Common Council	Planning Department/ Common Council

**Table 1.6**  
**Summary of Jurisdiction Outreach Activities**

Date	Jurisdiction	Action Type	Action Details	Action Lead
11/23/10	Pittstown, Town of	Meeting	Meeting with two rescue squads and 5 fire companies to update the local emergency plan; presented information regarding the hazard mitigation plan	Town Board
11/23/10	Pittstown, Town of	Meeting	Meeting with Town Board and Chair of Planning Board regarding the project to discussed possible areas for hazard mitigation	Town Board, Chair of Planning board
11/26/10	Schodack, Town of	Web posting	Information about the project was posted on the Town web site	Webmaster
11/30/10	Schaghticoke, Town of	Newsletter article	Local newsletter article briefly describing some of the aspects of the plan sent to approximately 2000 households.	Supervisor Carlson
11/30/10	Rensselaer, County of	Stakeholders Information Session	Information Session held for key stakeholders.	RCBPS
December 2010	North Greenbush, Town of	News article	Information on plan noted in Supervisor's column in local Advertiser with reference to web page	Supervisor Ashworth
December 2010	Petersburgh, Town of	Web posting	Information about the project posted on the Town web site	Town Supervisor
December 2010	Petersburgh, Town of	Fact Sheet posting	Fact sheet was posted at the following locations: Town Hall notice board, Town Clerk notice board, and Post Office notice board	Town Clerk
December 2010	Berlin, Town of	Web posting	Information was posted on the Town web site regarding the project and a link was provided to the overall project page hosted by the County.	Supervisor Rob Jaeger
December 2010	Berlin, Town of	Fact Sheet posting	A hard copy of the project fact sheet was posted on the Town Clerk's office board, and also on the bulletin board at Town Hall.	Supervisor Rob Jaeger
December 2010	Hoosick, Town of	Web posting	Information was posted on the Town web site regarding the project and a link was provided to the overall project page hosted by the County.	Web designer, Supervisor, Councilman
December 2010	Hoosick, Town of	Public meeting	Plan discussed at Town Board public meeting	Councilman
December 2010	Poestenkill, Town of	Web posting	Information was posted on the Town web site regarding the project and a link was provided to the overall project page hosted by the County.	Town Supervisor
December 2010	Poestenkill, Town of	Public meeting	Plan discussed at Town Board public meeting	Town Supervisor
December 2010	Schodack, Town of	Fact Sheet posting	A hard copy of the project fact sheet was posted on the Town bulletin board and in the Clerk's office	Planning Department
12/02/10	Rensselaer, City of	Public meeting	Plan discussed at a public meeting of the Common Council	Planning Department/ Common Council
12/03/10	East Greenbush, Town of	Fact Sheet posting	Project fact sheet was posted at the Town Hall and library	Commissioner of Public Works
12/03/10	East Greenbush, Town of	Web posting	Information about the project posted on the Town web site	IT-Web Administrator
12/04/10	North Greenbush, Town of	Meeting	Meeting to identify potential hazard mitigation projects; Supervisor, Highway Superintendent, Working Supervisor for Water and Sewer, CEO North Greenbush Ambulance, reps from Fire District Companies, members of Public Safety Committee	Supervisor Ashworth
12/06/10	Schodack, Town of	Public meeting	Plan and mitigation strategy discussed at a public meeting of Planning Board	Planning Department
12/08/10	East Greenbush, Town of	Public meeting	Plan discussed at Town Board public meeting	Building Inspector / Code Enforcement
12/13/10	Rensselaer, City of	Public meeting	Project facts were presented and questions answered at a public meeting of the Planning Commission	Planning Department
12/17/10	Hoosick, Town of	News article	Information about the project was published in the <u>Eastwick Press</u>	Councilman
12/23/10	Berlin, Town of	News article	Information about the project was published in the <u>Eastwick Press</u>	Town Supervisor
January 2011	Petersburgh, Town of	Public meeting	Plan discussed at Town Board public meeting, invited feedback/participation/comments, and provided information on where to go for more information	Planning Board head
January 2011	Petersburgh, Town of	Public meeting	Plan discussed at Planning Board public meeting, invited feedback/participation/comments, and provided information on where to go for more information	Planning Board head
01/05/11	Rensselaer, County of	Press Release	County press release issued regarding the project.	RCBPS and County PIO

**Table 1.6  
Summary of Jurisdiction Outreach Activities**

Date	Jurisdiction	Action Type	Action Details	Action Lead
August, September, October, November, and December 2010	Berlin, Town of	Public meetings	All Town Board meetings are held on the second Thursday of each month and are open to the public and other stakeholders. At each of the meetings during the plan development process, the Board discussed the hazard mitigation plan. Attendees (public and other stakeholders) were able to provide comments/feedback. Key stakeholder groups that participated directly included: Little Hoosick Water Shed Association (a nonprofit group that works in conjunction with the Town to restore the river and reduce flooding) - Carl Greene, President; the Disaster Plan Committee - Ivan Wager, Chairman; and the Comprehensive Plan Committee - Tara Fisher, Chairperson.	Supervisor Rob Jaeger and other Town Board Members
Jul/Aug 2010	East Nassau, Village of	News article	Information about the project published in The Advertiser weekly	Mayor
Ongoing	East Nassau, Village of	Public meeting	Mayor ensured discussion of the plan at every Village Board public meeting	Mayor, DPW Superintendent
Mid-2011	Troy, City of	Notice of public comment	Posted public comment solicitation on public web site	Deputy Director of Public Information and Jeff Pirro
07/21/11	Troy, City of	Solicited public comment	During city council finance committee meeting, stated public comment was being sought by City and to contact Jeff Pirro for more information	Deputy Director of Public Information and Jeff Pirro
07/12/11	Troy, City of	Solicited public comment	During monthly neighborhood watch meeting, state public comment was being sought by City and to contact Jeff Pirro for more information	Deputy Director of Public Information and Jeff Pirro
Mid-2011	Troy, City of	Solicited report input	Discussed report with various departments	Deputy Director of Public Information and Jeff Pirro
1-5-2011	Rensselaer, County of	Emails	E mails to the Municipalities and County Departments regarding Draft Hazard Mitigation Plan	Bureau of Public Safety
1-5-2011	Rensselaer, County of	Emails	E mails to the Municipalities and County Departments with meeting info for 1-26-2011	Bureau of Public Safety
11-16-2010	Rensselaer, County of	Emails	E mails to the Municipalities and County Departments with meeting i for 11-30-2010	Bureau of Public Safety
11-9-2010	Rensselaer, County of	Emails	E mails to the Stakeholders regarding meeting information for 11-30-2010	Bureau of Public Safety
10-20-2010	Rensselaer, County of	Emails	E mails to the Municipalities and County Departments regarding meeting information for 11-1-2010	Bureau of Public Safety
9-22-2010	Rensselaer, County of	Emails	E mails to the Municipalities and County Departments regarding meeting information for 10-4-2010	Bureau of Public Safety
9-1-2010 to 9-6-2010	Rensselaer, County of	Dissemination of fact sheet	Plan Fact sheets were available for distribution to the General Public; Plan Fact sheets were available at the County Fair	Bureau of Public Safety
8-16-2010	Rensselaer, County of	Emails	E mails to the Municipalities and County Departments with Plan Facts, Wish List, Haz ID, and LUDT Questionnaire	Bureau of Public Safety
7-2-2010	Rensselaer, County of	Emails	E mails to the Stakeholders regarding meeting information for 7-12-2010	Bureau of Public Safety
6-25-2010	Rensselaer, County of	Emails	E mails to the Municipalities and County Departments regarding meeting information for 7-12-2010 and Statement of Authority	Bureau of Public Safety
6-24-2010	Rensselaer, County of	Emails	E mail to NYSOEM Repetitive Loss Information Request Letter	Bureau of Public Safety
5-7-2010	Rensselaer, County of	Emails	E mails to the Other County Departments with meeting info for 5-27-2010	Bureau of Public Safety
6-25-2010 to present	Rensselaer, County of	Emails	E mails to the Municipalities and County Departments Many questions and answers to the Municipalities and County Departments	Bureau of Public Safety
October 2010	Rensselaer, County of	Web site	Mitigation planning section goes live on the county web site	Bureau of Public Safety

## **Opportunities for Involvement of Other Stakeholders in the Plan Development Process**

In order to meet Federal requirements, the plan development process must be open to stakeholders beyond planning group members and the general public. That is, opportunities must be available for other stakeholders (such as businesses, neighboring communities, academia, other relevant private and non-profit interests, and other interested parties) to become involved in the planning process.

As with the general public, other stakeholders must be provided with some variety of means to not only learn about the process that the Planning Committee is undertaking, but to voice concerns and to provide input throughout the planning process. With support and guidance from URS, each JAT took the lead in pursuing a range of activities to: (a) alert other stakeholders to the fact that the planning was working to develop this Hazard Mitigation Plan, and (b) provide other stakeholders with a forum to ask questions, and to submit comments and/or suggestions on the process or directly participate.

The Core Planning Group determined that outreach activities to the general public as summarized in the previous section would also reach and provide the same opportunities for other stakeholders such as businesses, neighboring communities, academia, other relevant private and non-profit interests, and other interested parties. Note, however, that many actions undertaken by the CPG Member as summarized in Table 1.6 also incorporate direct outreach to key local municipal stakeholder entities. To supplement these efforts, RCBPS undertook a separate outreach program to key stakeholders at the county level. Activities included: email coordination with other stakeholders on July 2, 2010 to invite them to attend the July 12<sup>th</sup> Kickoff Meeting; distribution of a letter on November 8, 2010 inviting participation and attendance at the Stakeholders Information Session of November 30, 2010. In addition, the RCBPS Program Coordinator and/or his assistant spoke with key stakeholder groups at various times during the plan development stage to alert them to the fact that the plan was under development and open the door for their participation and feedback.

*Albany County*  
*\*\* American Red Cross of Northeastern New York*  
*\*\* Capital District Regional Planning Commission*  
*Columbia County*  
*\*\* Cornell Cooperative Extension of Rensselaer*  
*Greene County*  
*\*\* Hudson Valley Community College*  
*Lansingburgh CSD*  
*National Grid*  
*National Weather Service - Albany*  
*\* New York State Department of Transportation*  
*\* New York State Electric and Gas*  
*\*, \*\* New York State Office of Emergency Management*  
*Northeast Health / Samaritan Hospital*  
*\*\* Questar III BOCES*  
*\*\* Rensselaer County Chamber of Commerce*  
*\*\* Rensselaer County Soil and Water Conservation Service*  
*Rensselaer Polytechnic Institute*  
*Russell Sage College*  
*Saratoga County*  
*Seton Health / St. Mary's Hospital*  
*Washington County*

Stakeholders in attendance at the Kickoff Meeting of July 12, 2010 are as noted above with an asterisk (\*). Those in attendance for the Stakeholders Informational Session of November 30, 2010 are as noted above with a double asterisk (\*\*). The Red Cross provided information on shelter locations to the consultant.

## **Review and Incorporation of Existing Plans, Studies, Reports, and Technical Information**

In the process of preparing this hazard mitigation plan, many other existing plans, studies, reports, and technical information were evaluated. These sources are noted throughout this report as various topics are discussed. In summary, the development of this hazard mitigation plan included the review and incorporation as applicable of data from the following sources:

- Readily available on-line information from federal and state agency web sites including: FEMA, NYSEMO, NY State Department of Environmental Conservation, US Forest Service National Avalanche Center, US Geological Survey, National Oceanic and Atmospheric Administration (including National Weather Service and National Climatic Data Center, and the National Severe Storms Laboratory), U.S. Department of Agriculture Natural Resources Conservation Service, U.S. Army Cold Regions Research and Engineering Laboratory USGS National Geomagnetism Program, National Drought Mitigation Center Drought Impact Reporter, USGS National Earthquake Information Center, NASA Space Environment Center, and the US Department of Transportation Federal Highway Authority.
- New York State Hazard Mitigation Plan (January 2008)
- FEMA Q3 Flood Data and municipal Flood Insurance Studies
- NYSDEC Coastal Erosion Hazard Area Mapping (evaluated, though none in Rensselaer County)
- Rensselaer County GIS data
- Town of Berlin Comprehensive Plan
- Town of Berlin Emergency Plan
- Town of Berlin Site Plan Review Act
- Town of Berlin Zoning Ordinance
- Town of Berlin Land Subdivision Regulations
- Village of Castleton-on-Hudson Comprehensive Plan
- Village of Castleton-on-Hudson Stormwater Management Plan
- Town of East Greenbush Land Use Plan
- Town of East Greenbush Comprehensive Zoning Law
- Town of East Greenbush Emergency Operations Plan
- Town of East Greenbush Community Amenities Enhancement Strategy
- Town of East Greenbush Stormwater Management Program Services
- Final Design Report for Intersection Improvements at Route 4 and 151
- Route 4 Corridor Study
- Town of East Greenbush Master Plan
- Final Report for Route 9 and 20 Corridor
- Village of East Nassau Comprehensive Plan
- Town of Grafton Subdivision Regulations
- Town of Grafton Road Specifications
- Town of Grafton Master Plan
- Town of Grafton Emergency Plan
- Town of Nassau Comprehensive Plan
- Town of Nassau Zoning Ordinance

- Town of North Greenbush Comprehensive Plan
- Town of North Greenbush Recreation Master Plan
- Town of Pittstown Land Use Regulations
- Town of Pittstown Comprehensive Plan
- Quackenderry Creek Dam Emergency Action Plan
- City of Rensselaer Stormwater Management Plan
- City of Rensselaer Flood Damage Prevention Ordinance
- City of Rensselaer Comprehensive Plan
- City of Rensselaer Transportation Study
- Town of Schaghticoke Stormwater Management Plan
- Town of Schaghticoke Comprehensive Plan
- Town of Schaghticoke Zoning Ordinance
- Village of Schaghticoke Emergency Response Plan
- Engineering Report, Slope Movement Evaluation Behind the A.E. Diver Memorial Library (Clough Harbour, May 2006)
- Town of Schodack Flood Damage Prevention Ordinance
- Town of Schodack Emergency Plan
- Town of Schodack Erosion and Sediment Control Code
- Town of Stephentown Land Use Regulations
- Town of Stephentown subdivision Regulations
- Village of Valley Falls Floodplain Regulations
- USGS Earthquake History of New York State
- NY State Geological Survey NEHRP Soil Class Mapping
- NY State Landslide Inventory Mapping
- USGS National Landslides Program Landslide Mapping
- USGS Fact Sheet 165-00, Land Subsidence in the United States
- National Agricultural Statistics Service, Rensselaer County Profile 2007
- New York agricultural Statistics Service, Rensselaer County Profile, 2002
- HAZUS-MH database for emergency facilities and utilities
- NYSDEC Inventory of Dams
- Stanford University National Performance of Dams Program web site
- U.S. Army Corps of Engineers National Inventory of Dams
- New York State Historic Preservation Office GIS shape files for state and federally listed historic and cultural resources
- The NYS Park System: An Economic Asset to the Empire State ó Parks and Trails New York/ The Political and Economic Research Institute of the University of Massachusetts
- The American Society of Civil Engineers Standard 7-02, Minimum Design Loads for Buildings and Other Structures and öWind Zones in the United Statesö map
- New York City Area Consortium for Earthquake Loss Mitigation website
- FEMA Publication 320: Taking Shelter from the Storm
- FEMA NFIP Community Status Book
- FEMA data for NFIP Repetitive Loss Properties and Community Rating System communities
- FEMA's öNFIP Floodplain Management Requirements: a Study Guide and Desk Reference for Local Officials (FEMA-480)ö
- USGS Landslide Overview Map of the Conterminous United States, prepared in hard copy format in 1982 by Dorothy H. Radbruch-Hall, Roger B. Colton, William E. Davies, Ivo Lucchitta, Betty A. Skipp, and David J. Varnes (Geologic Survey Professional Paper 1183), compiled digitally by Jonathan W. Godt (USGS Open File Report 97-289), as viewed on NationalAtlas.gov

- American Society of Civil Engineers (ASCE) Standard 7-98: Minimum Design Loads for Buildings and Other Structures
- FEMA's Multi-Hazard Identification and Risk Assessment (1997)
- American Meteorological Society's Glossary of Meteorology
- In addition, to conduct their Capability Assessments, local jurisdictions considered relevant plans, codes, and ordinances currently in place such as building codes, zoning ordinances, subdivision ordinances, special purpose ordinances, site plan review requirements, growth management ordinances, comprehensive plans, capital improvements plans, economic development plans, emergency response plans, post-disaster recovery plans, post-disaster recovery ordinances, and real estate disclosure ordinances. For additional information, please see the "Capabilities and Resources" section of this plan.

## **Regulatory Compliance**

This Hazard Mitigation Plan was prepared in a manner consistent with applicable regulations, criteria, and guidance. The Plan's components address the local hazard mitigation planning requirements of the DMA 2000. The Planning Group used FEMA's Multi-Hazard Mitigation Planning Guidance document of March 2004 (Revised July 2008) as a guide. This document contains what is known as a Crosswalk Reference Document for FEMA reviewers to track where in a document various criteria are addressed. Each criteria must be addressed satisfactorily for a plan to be approved by FEMA. There are three exceptions, with regard to assessing vulnerability. They are:

- Assessing Vulnerability: Identifying Structures: §201.6(c)(2)(ii)(A)
- Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B)
- Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C)

For these three criteria, highlighted in gray in Table 1.8, actions are strongly encouraged by FEMA, though not required by the DMA 2000 Interim Final Rule. While FEMA encourages communities to address such criteria, they are not required for Plan approval. For the Rensselaer County Multi-Jurisdictional Hazard Mitigation Plan, these three criteria were addressed to the greatest extent practicable in the time available and using the best readily-available data.

The following table summarizes specific requirements in the Interim Final Rule, and whether the regulation implementing DMA 2000 is addressed in this plan. Information in this plan is presented in the order of the plan review criteria for NYSEMO/FEMA reviewer's ease in evaluating compliance.

**Table 1.7  
FEMA Plan Review Criteria**

FEMA Plan Review Criteria	Addressed in this Plan
<b>Prerequisites</b> Adoption by the Local Governing Body: §201.6(c)(5) Multi-Jurisdictional Plan Adoption: §201.6(c)(5) Multi-Jurisdictional Planning Participation: §201.6(a)(3)	Placeholder following page i Placeholder following page i Section 1, Apdx F
<b>Planning Process</b> Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)	Section 1 and Apdx. A
<b>Risk Assessment</b> Identifying Hazards: §201.6(c)(2)(i) Profiling Hazards: §201.6(c)(2)(i)	Section 2 Section 3
Assessing Vulnerability: Overview: §201.6(c)(2)(ii) Assessing Vulnerability: Addressing Repetitive Loss Properties: §201.6(c)(2)(ii)	Section 3 and Apdx. A-C Section 3
Assessing Vulnerability: Identifying Structures: §201.6(c)(2)(ii)(A) Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B)	Section 3 and Apdx. C Section 3
Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C) Multi-Jurisdictional Risk Assessment: §201.6(c)(2)(iii)	Section 3 Section 3
<b>Mitigation Strategy</b> Local Hazard Mitigation Goals: §201.6(c)(3)(i) Identification and Analysis of Mitigation Actions: §201.6(c)(3)(ii) Identification and Analysis of Mitigation Actions: NFIP Compliance: §201.6(c)(3)(iii) Implementation of Mitigation Actions: §201.6(c)(3)(iii) Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(iv)	Section 5 Sections 6 - 7 and Apdx. D Sections 6 - 7 and Apdx. D Section 8 and Apdx. E Section 8 and Apdx. E
<b>Plan Maintenance Process</b> Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(i) Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(ii) Continued Public Involvement: §201.6(c)(4)(iii)	Section 9 Section 9 Section 9

## Document Organization

This Multi-Jurisdictional Hazard Mitigation Plan for Rensselaer County is organized into the following major sections.

**Introduction.** Plan purpose, overview of Rensselaer County, summary of plan development process, document organization, and key terms.

**Identification of Potential Hazards.** Documentation of the Planning Committee's evaluation of a full range of natural hazards, and indication of which hazards were identified for inclusion in this plan (and why) versus those that were not identified (and why not).

**Risk Assessment.** Hazard profiles, identification and characterization of assets in hazard areas, damage estimates, and summary of land uses and development trends in hazard areas.

**Capabilities and Resources.** Overview of local, state, and federal resources for hazard mitigation.

**Mitigation Goals.** Summary of hazard mitigation goals for the State Hazard Mitigation Plan and also for this county-wide multi-jurisdictional hazard mitigation plan.

**Range of Alternative Mitigation Actions Considered.** Summary of mitigation actions considered by participating jurisdictions.

**Action Item Evaluation and Prioritization.** Information regarding the methodology and process followed by participating jurisdictions to evaluate and prioritize unique hazard mitigation actions for their communities.

**Implementation Strategy.** Summary of hazard mitigation actions selected by each participating jurisdiction.

**Plan Maintenance.** Procedures selected for monitoring, evaluating, and updating this mitigation plan; including participation of the public and other stakeholders in plan maintenance, and plan integration.

## Key Terms

For the purpose of clarity throughout this document, the following definitions are briefly outlined:

- **Hazard mitigation** is the method by which measures are taken to reduce, eliminate, avoid or redirect natural hazards in order to diminish or eradicate the long-term risks to human life and property.
- A **natural hazard** is any hazard that occurs or results from acts of nature such as floods, earthquakes, hurricanes, tornadoes and coastal storms, to name a few.
- A **hazard mitigation plan** is a well-organized and well-documented evaluation of the natural hazards and the extent that the events will occur. In addition, the plan identifies the vulnerability to the effects of the natural hazards typically present in a certain area, as well as the goals, objectives and actions required for minimizing future loss of life and property damage as a result of natural hazards.
- **Hazard mitigation planning** is the process of managing actions taken by individual citizens and professional organizations involved in mitigation activities. The process involves carrying out plans to reduce loss of life, injuries and damage to property, as well as reducing the costs associated with losses from natural hazards. It is a long-term process with benefits best realized over time.
- A **disaster** is any catastrophic event that causes loss of life, injuries and widespread destruction to property. For the purpose of this document, a disaster is the result of a natural hazard, whether anticipated (such as flash flood warnings) or fortuitous (such as earthquakes).
- The term **human-caused hazards** refers to technological hazards + terrorism, where *technological hazards* are incidents that arise from human activities such as the manufacture, transportation, storage, and use of hazardous materials, where the incidents are accidental and their consequences unintended; and *terrorism* is the intentional, criminal, and/or malicious acts resulting from the use of Weapons of Mass Destruction (WMD), including biological, chemical, nuclear, and radiological weapons; arson, incendiary, explosive and armed attacks; industrial sabotage and intentional hazardous materials releases; and cyberterrorism.