



APPENDIX I – CORE PLANNING GROUP MEETINGS

Meetings at which representatives of all nine participating communities were encouraged to attend:

Date	Meeting	Documents in this Appendix
9/12/2008	Project Kickoff Meeting	Attendance sheets
		Consultant presentation (including agenda)
		Minutes
1/16/2009	Risk Assessment Progress Meeting	Attendance sheet
		Consultant presentation (including agenda)
		Minutes
3/26/2009	Risk Assessment Interim Deliverable Question and Answer Session	Attendance sheet
		Consultant presentation (including agenda)
4/16/2009	Mitigation Strategy Working Session	Attendance sheet
		Consultant presentation (including agenda)
1/26/2010	Mitigation Strategy Enhancement Meeting	Attendance sheets
		Consultant presentation (including agenda)

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
 Project Kickoff Meeting – September 12, 2008 (10:00 am)
 Martha's Restaurant at Simmons Way Inn in Millerton, NY



Last Name	First Name	Representing	Email Address	Phone
Palmer-Hare	Kati	Town of Dover	kphare@townofdover.us	(845) 877-3410
Pineda	Karen	Town of Pine Plains	karen@pineplains-ny.gov	(518) 398-8600
MAYER	MIKE	Town of PAULINA	mmMAYER40@AOL.com	845-855-8161
Zi To	Colette	Village of Pawling	Colette24@msn.com	(845) 855-1916
Hoxsie	Ed	DL Soil & Water	ed.hoxsie@ny.usda.gov	845-677-8011 x3
Stevens	Bob	Town of North East	rdstevens@optonline.net	518-789-4850
Cimino	Rosalind	Town of Dover GIS	RCimino@townofDover.us	
McLaughlin	Karen	Village of Millerton	vmillerton@msn.com	518-789-4489
Amber Jordan	Amber	Village of Millerton	vmillerton@msn.com	518-789-4489
Lucehese	Gene	NYS SEMO Region II	eugene.lucehese@semo.ny.us	845-454-0430
House	Andrew	NYS Senate	andrew.house86@gmail.com	845-765-5986
FLUNN	WAYNE	TOWN OF ARTHUR	FLUNNWAYNE@ARTHURNY.GOV	373-8866
Butler	Glenn	Town of Milan	gbutler12571@yahoo.com	845-758-5164
FRANKS	RICHARD	URS	richard_franks@urscorp.com	973-785-0700 x 449
Foley	Anna	URS	anna-foley@urscorp.com	973-785-0700 x 339

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
 Project Kickoff Meeting – September 12, 2008 (10:00 am)
 Martha's Restaurant at Simmons Way Inn in Millerton, NY



Last Name	First Name	Representing	Email Address	Phone
Macera	Nadine	NYS&MO		454-0438
Scutiari	John	Village of Millerton		789-4489
Adams	John	Town of Beekman	jadams@townofbeekman.com	724-5300
SHERMAN	DAVID	Town of North East	ne.supervisor@taconic.net	518-789-3658

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project

**Kickoff Meeting
September 12, 2008
10 am – 12 pm**



Today's Agenda

- Welcome and Opening Remarks...Kathryn Palmer-House, AHMP Liaison
- Overview of the Process...Anna Foley and Richard Franks, URS
- Questions and Answers
- Closing Remarks...Kathryn Palmer-House, AHMP Liaison
- Adjourn

**Our Team:
Partners in Protecting our Communities**



Town of Amenia
Town of Beekman
Town of Dover
Town of Milan
Village of Millerton
Town of North East
Town of Pawling
Village of Pawling
Town of Pine Plains

Our Team

URS

Anna Foley, Project Manager
973-785-0700 ext. 339
anna_foley@urscorp.com

Richard Franks, Deputy Project Manager
973-785-0700 ext. 449
richard_franks@urscorp.com

**Our Commitment:
A FEMA-Approved Plan**

URS-Wayne Office Hazard Mitigation Plans



**Intent of the Project:
Why Prepare a Hazard Mitigation Plan?**

- Study natural hazards,
- Evaluate hazard effects, and
- Identify **hazard mitigation** measures that will reduce risks.



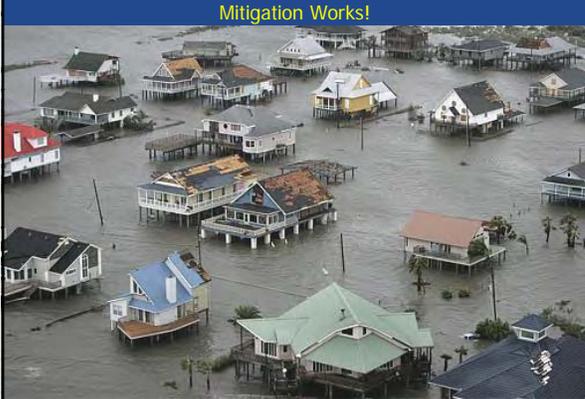


Mitigation Measures – Some Examples




- Elevating a house to reduce flood damages.
- Installing hurricane clips to a roof to reduce wind damage.
- Imposing setback distances to reduce erosion damages.
- Modifying building codes to incorporate hazard-resistant design.

Mitigation Works!



Elevated homes in Sweet Lake, LA (near Lake Charles) after Hurricane Rita (09/24/05).



Intent of the Project: Why Prepare a Hazard Mitigation Plan?



- Damages can be prevented by taking the time to:
 - ◆ learn about hazards and anticipate where and how they occur; and
 - ◆ allocate resources accordingly.



Intent of the Project: Why Prepare a Hazard Mitigation Plan?

- It simply costs too much to address the effects of disasters only after they happen.
- One study reports that, nationwide, hazard mitigation projects save an average of \$4 for every \$1 spent.



Intent of the Project: Why Prepare a Hazard Mitigation Plan?



- Disaster Mitigation Act of 2000 requires it!
- FEMA grant monies were received to do so (75% Federal share, 25% non-Federal match)
- Once the plan is approved by FEMA, participating jurisdictions will be eligible to apply for mitigation project grants.



Intent of the Project: What is a Multi-Jurisdictional Plan?

- Basic processes for single jurisdiction and multi-jurisdictional plans are identical.
- Difference lies in degree of complexity.



Intent of the Project: What is a Multi-Jurisdictional Plan?

- Communities joining together to participate in a single local mitigation plan development process.
- Common:
 - Planning Process
 - Hazards
 - Goals
 - Plan Maintenance Procedures
- Unique:
 - Risks
 - Mitigation Actions
 - Participation
 - Plan Adoption

Intent of the Project: Why Participate in a Multi-Jurisdictional Plan Development Process?

- There are tremendous economies of scale (resources, staff hours, and \$\$) that are realized by coming together in a joint process.
- By participating in a multi-jurisdictional plan, your municipality will gain **all the benefits** of having a plan with the **minimum level of effort** in plan development.

Organizational Structure of the Planning Team

Jurisdictional Assessment Teams:

- A small team for each participating jurisdiction
- Head member (plus alternate) on Core Planning Group is the lead
- Comprised of municipal officials, key local stakeholders, and the public

Overview of the Plan Development Process: Key Steps

- Researching a full range of natural hazard events to determine which are the most prevalent;
- Identifying the location and extent of hazard areas;
- Identifying assets located within these hazard areas;

Overview of the Plan Development Process: Key Steps

- Characterizing existing and potential future assets at risk;
- Assessing vulnerabilities to the most prevalent hazards; and
- Evaluating and prioritizing goals, objectives, and mitigation actions to reduce or avoid long-term vulnerabilities to the most prevalent hazards.

Key Steps

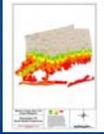
- Identification of Potential Hazards**
 - Evaluation of a full range of natural hazards
 - Hazards identified for inclusion & why
 - Hazards not identified & why not

What is the "full range" of hazards that we consider for possible inclusion in the plan?

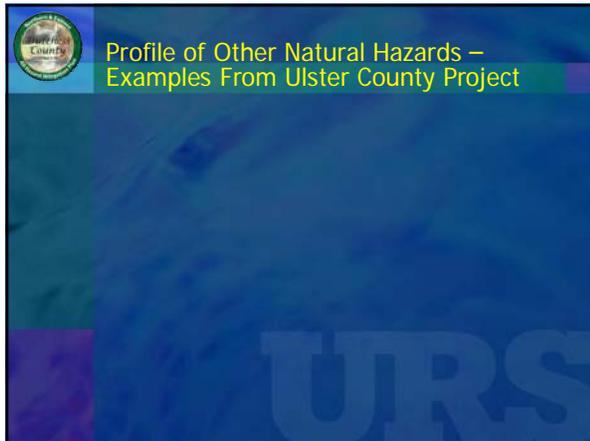
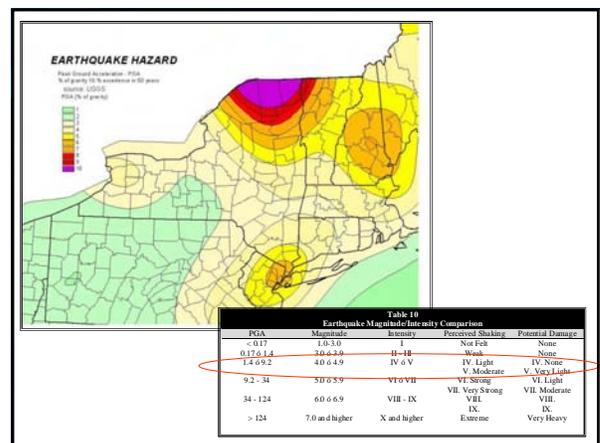
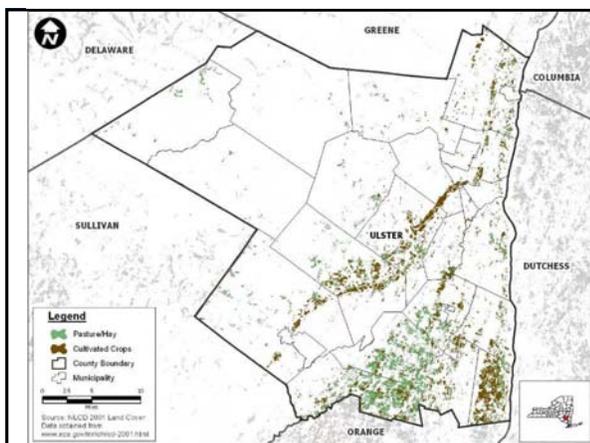
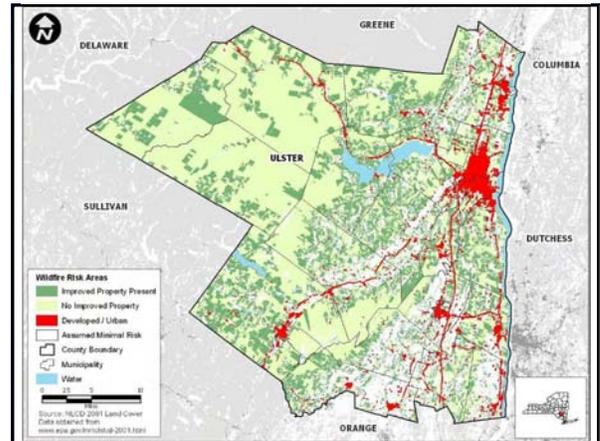
- Avalanches
- Coastal Erosion
- Wave Action
- Earthquakes
- Expansive Soils
- Floods
- Storm Surge
- Ice Jams
- Landslides
- Land Subsidence
- Drought
- Extreme Temps
- Hail
- Hurricanes / Tropical Storms
- Tornadoes
- Winter Storms / Ice Storms
- Tsunamis
- Volcanoes
- Wildfires
- Extreme Winds

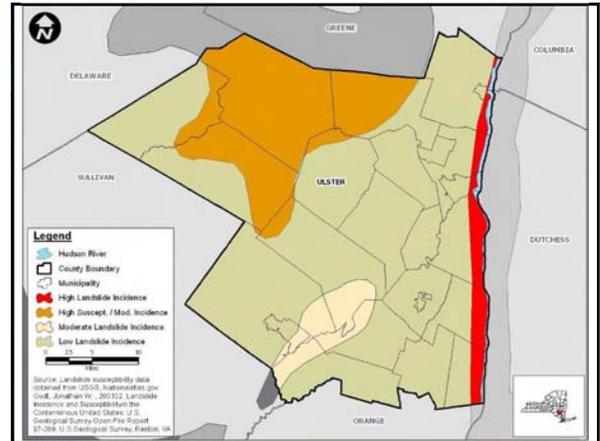
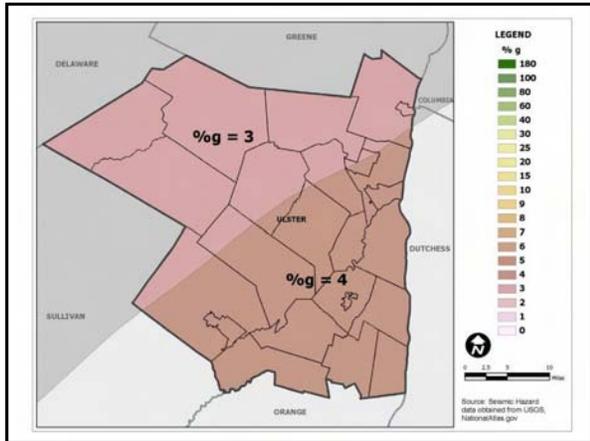
Key Steps

- Risk Assessment
 - Hazard Profiles
 - Description of hazard
 - Location of hazard area
 - Extent (magnitude or severity)
 - Previous occurrences
 - Probability/likelihood of future occurrences



Profile of Other Natural Hazards – Examples From Ulster County Project



Key Steps

- Risk Assessment
 - Asset Identification and Characterization
 - Quantifies what is at risk
 - Five key types of assets considered:
 - Improved property
 - Emergency facilities
 - Utilities
 - Historic & cultural resources
 - Population

Key Steps

- Risk Assessment
 - Damage Estimates
 - Estimate potential losses (dollars/qualitative) to assets located in hazard areas
 - Why? To identify centers where the cost of potential damage is the highest

Key Steps

- Risk Assessment
 - Existing Land Uses and Future Development Trends in Hazard Areas
 - Where is new development planned?
 - How much of this is in hazard areas?
 - Are there codes/regulations in place to provide a certain degree of protection from the most frequent events?



Key Steps

- **Capabilities and Resources**
 - Plans, codes, and ordinances currently in place
 - Can contribute to, or be utilized for, hazard mitigation
 - Local Municipalities, County, State, Federal



Key Steps

- **Mitigation Strategy**
 - Goals
 - Evaluate full range of actions
 - Select actions
 - Prioritize selected actions
 - Identify responsible party, potential funding source, and time frame



Key Steps

- **Plan Maintenance**
 - Final Plan is a living document+
 - DMA 2000 requires updates, 5 year cycle
 - Regular monitoring and review of progress



Key Steps

- **Plan Integration**
 - DMA 2000 requires integration of mitigation plan into
 - job descriptions,
 - other local plans,
 - permitting vehicles,
 - etc...



Participating Jurisdictions, Consultants, the Public and Other Stakeholders

- **Consultants will:**
 - ◆ Guide you through the process of meeting FEMA's requirements
 - ◆ Author the plan



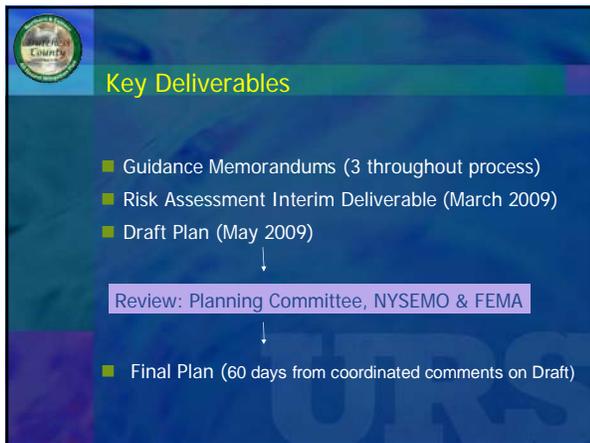
Participating Jurisdictions, Consultants, the Public and Other Stakeholders

- **Participating Jurisdictions will...**
 - ◆ Attend meetings
 - ◆ Provide applicable data/documents on the "Wish List"
 - ◆ Respond to questionnaires
 - ◆ Give the public and key stakeholders in their jurisdiction opportunities to participate in plan development
 - ◆ Select mitigation actions
 - ◆ Define implementation strategy
 - ◆ Adopt the plan
 - ◆ Participate in plan maintenance/updates





- ### Participating Jurisdictions, Consultants, the Public and Other Stakeholders
- Other Stakeholders are:
 - Neighborhood groups
 - Non-profit organizations (i.e. scout troops, Red Cross, Salvation Army)
 - Housing organizations
 - Environmental groups
 - Historic preservation groups
 - Parent-teacher organizations
 - Church organizations
 - Parks organizations
 - State, federal, and local government offices
 - Neighboring communities/counties
 - Business and development organizations
 - Academic institutions
 - Utility providers
 - Hospitals
 - Tribal groups
 - Transportation entities
 - Regional planning organizations
 - Emergency service providers
 - Jurisdiction web site managers / IT staff
 - Any local office and/or group with a public outreach focus
 - The public and other stakeholders will:
 - provide comments/feedback; advisory role.



- ### Other Deliverables
- Fact Sheet
 - Web Site Development Support
 - Sample Adoption Resolution
 - Meeting Minutes
 - Questionnaires
 - Hazard Identification
 - Land Uses and Development Trends
 - Capability Assessment
 - Mitigation Actions – Prioritization, Implementation Strategy
 - HFIP Questionnaire

Fact Sheet:

Please forward any non-flood pictures you may have handy to: richard_franks@uiscorp.com by 09/19/08 so we can finalize and distribute the fact sheet. Thank you!

Northern and Eastern Dutchess County Hazard Mitigation Planning Project PLAN FACTS

MISSION STATEMENT: The purpose of this project is to identify and assess the flood hazards in the Northern and Eastern Dutchess County region and to develop a plan to reduce the risk of flooding to the public and to the environment.

SCOPE: The project will cover the Northern and Eastern Dutchess County region, including the towns of Amenia, Beekmantown, Dover, Milan, Millerton, North East, Pawling, and Pine Plains.

GOALS: The project will identify and assess the flood hazards in the Northern and Eastern Dutchess County region and to develop a plan to reduce the risk of flooding to the public and to the environment.

DELIVERABLES: The project will produce a Hazard Mitigation Plan, a Fact Sheet, a Web Site, and a Sample Adoption Resolution.

CONTACT: Please contact Dr. Katie Palmer-House, AHMP Liaison, at katie.palmer@uiscorp.com or [845-885-1234](tel:845-885-1234).

Web Site:

www.townofdover.us/AHMP.cfm

Please consider making a link on your municipal web site to this page.

All Hazards Mitigation Plan Project
Partners in Protecting Our Communities

Town of Amenia • Town of Beekmantown • Town of Dover
Town of Milan • Village of Millerton • Town of North East
Town of Pawling • Village of Pawling • Town of Pine Plains

RECENT DOCUMENTS
All Hazards Mitigation Plan Information (on PowerPoint)
September 12, 2008 Meeting Agenda
Communities' Data "Wish List"

Please contact Dr. Katie Palmer-House, AHMP Liaison



Wish List

- ◆ Information/Data/Documents from Participating Jurisdictions
- ◆ **Deadline: October 13, 2008**
- ◆ Send To:



Kathryn Palmer-House
 AHMP Liaison
 Town of Dover Town Hall
 126 East Duncan Hill Road
 Dover Plains, NY 12522
 Phone: (845) 877-3410
 Fax: (845) 877-3335
 email: kphouse@TownofDover.us



Guidance Memo #1 and Outreach Log

- ◆ Participating Jurisdictions must provide the public and other stakeholders with opportunities to participate in the planning process.
- ◆ Guidance Memo #1 gives some suggestions
- ◆ Outreach Log for you to use for keeping track of your outreach activities (last page of GM# 1)





Questions and Answers





Northern and Eastern Dutchess County Communities
Regional Hazard Mitigation Planning Project
Kickoff Meeting

September 12th, 2008 at 10:00 a.m.

At

Martha's Restaurant at Simmons Way Inn, Millerton, NY

Meeting Minutes

Attending

See Attached Sign-in sheets

Agenda Items Discussed

- Katie Palmer-House (KPH) of the Town of Dover provided a brief introduction and opening remarks. The purpose of the meeting was to review the scope of the project, as well as the overall need for Hazard Mitigation planning. The Town of Dover will be acting as the "Lead Agency" for the Mitigation Planning Project, but all nine participating municipalities will have equal status within the plan. KPH was pleased to note that all nine towns and villages were represented at the meeting. KPH thanked New York State Senator Vincent Leibell (represented at the meeting by a member of his staff) and members of New York State Emergency Management Office for their efforts in helping to initiate the project. KPH also drew attendees' attention to items distributed on entry to the meeting, including:
 - Copy of the Municipal Agreement that participating jurisdictions have signed up to in order to cooperate in the planning process and share the costs
 - Schedule of anticipated deliverables and meetings
 - Schedule of invoicing
 - CD containing basic reference materials related to the project for input to individual municipalities' websites
- KPH handed over to URS Project Manager Anna Foley (AF) and Deputy Project Manager Richard Franks (RF) from URS, the Consultants hired to assist and guide the municipalities toward the successful approval by FEMA of the Hazard Mitigation Plan. AF provided a Powerpoint presentation giving an overview of the purpose and need for the planning project and its importance to each participating municipality. She stressed that a FEMA-approved Plan covering the participating municipalities is required by the Disaster Mitigation Act of 2000 for the municipalities to be eligible to

apply for mitigation project grants. She illustrated the benefits of such plans by pointing out that studies have shown that nationwide, hazard mitigation projects save an average of \$4 for every \$1 spent on them. AF also outlined the organizational structure of the planning team, which can be likened to an inverted pyramid: the top layer includes all representatives of the municipalities, the public, and other stakeholders; below this level is the Core Planning Group, (principally of two-person assessment teams representing each municipality), which interacts with the bottom layer, the project consultants (URS).

Continuing the presentation, RF outlined the key steps of the planning process, illustrating the process with a brief discussion of the natural hazards to be considered, and examples of the detailed hazard mapping that the URS team has provided for similar studies for other clients. RF mentioned that the Risk Assessment aspect of the plan would also aim to estimate potential future dollar losses for various hazards, where appropriate and possible, and that a key section of the plan would include mitigation actions developed by the municipalities, with the guidance of URS. RF also stressed the value placed by URS on the input of local knowledge, and gave examples of specific points in the process at which this input would be required.

AF continued the presentation by describing the FEMA approval process and clarifying that approval of the overall plan does not depend on 100% municipal participation: the final plan will be approved for any municipality meeting all the participation criteria. AF described the key deliverables which URS will provide, and the anticipated timeline. AF then presented the draft project fact sheet, for use by municipalities in public outreach activities, and invited the municipalities to provide additional photos showing a variety of hazards occurring throughout the project area, for inclusion in the final version of the fact sheet. Photos can be submitted through September 19, 2008, after which point the fact sheet will be finalized and distributed to all Core Planning Group members via KPH. AF also mentioned the "Wish List" of useful data and documents that has been distributed to the municipalities, with a deadline for return of information of October 13, 2008. AF concluded the meeting by drawing attendees' attention to Guidance Memorandum #1, and the accompanying Outreach Log, which municipalities are urged to use to document all actions they take to educate and encourage support for the plan among the public and other stakeholders.

- An open question and answer session followed the presentation. The principal issues raised were as follows:

- KPH requested that the anticipated dates of questionnaire distribution and deadlines for return could be distributed separately.
 - Ed Hoxsie of Dutchess County Soil and Water Conservation District suggested that municipalities should fully involve local fire advisory boards, highways superintendents, and school districts, and said that DCSWCD would be willing to share any relevant information for the planning process.
 - A question was asked regarding FEMA's response to municipal non-participation in the plan. AF and Nadine Macura of NYSEMO replied that failure to participate fully in the plan would result in that municipality not being eligible for future FEMA mitigation project funding, and that the municipality's eligibility for certain post-disaster FEMA funds may also be affected.
 - KPH drew attention to the in-kind match forms that have been distributed to each municipality, and encouraged attendees to fully document all activities and time spent contributing to the plan.
 - Roz Cimino of the Town of Dover asked if the enhanced provision of GIS capabilities for emergency management in individual municipalities could be included as a mitigation action. AF suggested that, in her opinion, it may be hard to make a case that GIS enhancements are true "mitigation" activities in FEMA's eyes (as opposed to improved response). She suggested that local municipalities may wish to contact FEMA directly for more information/clarification. If municipalities choose to include this type of action as a component of their mitigation strategy, she recommended that it not be the sole identified action item, and that municipalities would be best served by including in their mitigation strategies some actions typically eligible under the FEMA mitigation grant programs for which the plan enables them.
 - One attendee raised the issue of man-made hazards, specifically the possibility of transport accidents involving hazardous materials. AF confirmed that mitigation of man-made hazards was not a current FEMA requirement, and would not be included in the current plan, but mentioned that the municipalities could incorporate it in future plan updates if they felt it necessary.
- KPH thanked everyone for coming and the meeting was adjourned.

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
 Progress Meeting – January 16, 2009 (1:00 pm)
 Martha's Restaurant at Simmons Way Inn in Millerton, NY



Last Name	First Name	Representing	Email Address	Phone
ZITO	Colette	Village of Pawling	Colette24@msn.com	845-855-1916
MAYER	MIRE	Town of Pawling	MMMAYER40@AOL.com	845-855-8161
Palmer	Fadi	Town of Dover	kep26@cornell.edu	845-877-3410
EUBANK	WYANE	AMERICA	SUPERVISOR@AMTRAVY.CO	845-373-8860
Couse	ROBERT	PINE PLAINS	NONE	(518) 398-8600
Stevens	Robert	North East	rdstevens@optonline.net	518-789-4850
Barry	Jennifer	Harlem Valley Times	jbarry@midhudsoncentral.com	914-984-5600
Allyn	Cory	Millerton News	Cory.allyn@gmail.com	518-789-4401
SHELMAN	DANN	Town of North East	ne.supervisor@taconic.net	518-789-3658
Jordan	Amber	Village of Millerton	vmillerton@msn.com	518-789-6764
Foley	ANNA	URS	anna-foley@urscorp.com	973-785-0700
FRANCS	RICHARD	URS	richard-francks@urscorp.com	" "

Northern and Eastern Dutchess County Communities Regional Multi-Jurisdictional Hazard Mitigation Planning Project

**Progress Meeting
January 16th, 2009
1 pm**

Today's Agenda

- Welcome and Opening Remarks...Kathryn Palmer-House, AHMP Liaison
- Project Progress...Anna Foley and Richard Franks, URS
- Questions and Answers
- Closing Remarks...Kathryn Palmer-House, AHMP Liaison
- Adjourn

**Intent of the Project:
Why Prepare a Hazard Mitigation Plan?**

1

- Study natural hazards,
- Evaluate hazard effects, and
- Identify **hazard mitigation** measures that will reduce risks.

**Intent of the Project:
Why Prepare a Hazard Mitigation Plan?**

2

- Disaster Mitigation Act of 2000 requires it!
- Plan preparation is funded by a FEMA grant
- No out-of-pocket cost to local municipalities

**Intent of the Project:
Why Prepare a Hazard Mitigation Plan?**

3

\$\$ Once the plan is approved by FEMA, participating jurisdictions will be eligible to apply for mitigation project grants.

\$\$ Good projects will be "on the shelf" for fast turnaround when LOI's are requested.

Residential and Non-Residential Flood Mitigation

Gilchrist, Texas:
Home rebuilt in 2006 to withstand a Category 5 Hurricane. Shown here after Hurricane Ike (Cat2, 110 mph winds).



The Northern & Eastern Dutchess County Communities Regional Planning Project

IMPORTANT!

The plan will only apply to the County and any jurisdictions that:

- ◆ Participate in the process;
- ◆ Develop a mitigation strategy*; and
- ◆ Formally adopt the final plan

* Mitigation Actions – Identified by Each Jurisdiction

Municipality Participation

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
Status of Participants: January 16, 2008

Municipality	Expressed Interest in Participating	Attended Kickoff Meeting	Wish List	Land Use and Development	Capability Assessment	Hazard Identification
Amenia	•	•	•	•	•	•
Beekman	•	•	•	•	•	•
Dover	•	•	•	•	•	•
Milan	•	•	•	•	•	•
Milford	•	•	•	•	•	•
North East	•	•	•	•	•	•
Pawling (T)	•	•	•	•	•	•
Pawling (V)	•	•	•	•	•	•
Pine Plains	•	•	•	•	•	•

Project Progress Timeline to Draft Plan

- Kickoff Meeting: September 2008
- Plan Development: Ongoing
- Local Feedback: Ongoing
- Risk Assessment Interim Deliverable: March 2009
- Risk Assessment Q&A Session: March 2009
- Mitigation Strategy Working Session: April 2009
- Draft Plan: May 2009

Risk Assessment Interim Deliverable

- Working chapters of the overall plan:
 - Hazard Identification
 - Hazard Profiles
 - Asset Identification and Characterization
 - Vulnerabilities
 - Land Uses and Development Trends
 - Types of Mitigation Actions for Various Hazards

Risk Assessment Interim Deliverable

- Status: Under development at this time
- Target Date for Completion: March 11, 2009
- Question & Answer Session Target Date: March 26, 2009



Hazard Identification

Status: Completed

- Evaluation of a full range of natural hazards
 - Hazards selected for further analysis and reasons why
 - Hazards not selected and reasons why not



Hazard Identification

Summary Results of the Hazard Identification and Evaluation Process

ATMOSPHERIC	GEOLOGIC
<input type="checkbox"/> Avalanche	<input type="checkbox"/> Earthquake
<input checked="" type="checkbox"/> Extreme Temperatures	<input type="checkbox"/> Expansive Soils
<input checked="" type="checkbox"/> Extreme Wind	<input type="checkbox"/> Landslide
<input checked="" type="checkbox"/> Hailstorm	<input type="checkbox"/> Land Subsidence
<input checked="" type="checkbox"/> Hurricane and Tropical Storm	<input type="checkbox"/> Tsunami
<input checked="" type="checkbox"/> Lightning	<input type="checkbox"/> Volcano
<input checked="" type="checkbox"/> Nor'easter	
<input checked="" type="checkbox"/> Tornado	
<input checked="" type="checkbox"/> Water Storm	
HYDROLOGIC	OTHER
<input type="checkbox"/> Coastal Erosion	<input checked="" type="checkbox"/> Wildfire
<input checked="" type="checkbox"/> Dam Failure	
<input checked="" type="checkbox"/> Drought	
<input checked="" type="checkbox"/> Flood	
<input checked="" type="checkbox"/> Ice Jams	
<input type="checkbox"/> Storm Surge	
<input type="checkbox"/> Wave Action	

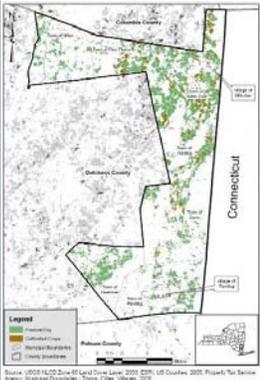
17 = Hazard considered significant enough for further evaluation through the multi-jurisdictional based risk assessment.
 23 natural hazards evaluated
 13 considered significant enough for further evaluation through risk assessment

Hazard Profiles

Status: Ongoing

- Description of hazard
- Location of hazard area
- Extent (magnitude or severity)
- Previous occurrences
- Probability/likelihood of future occurrences

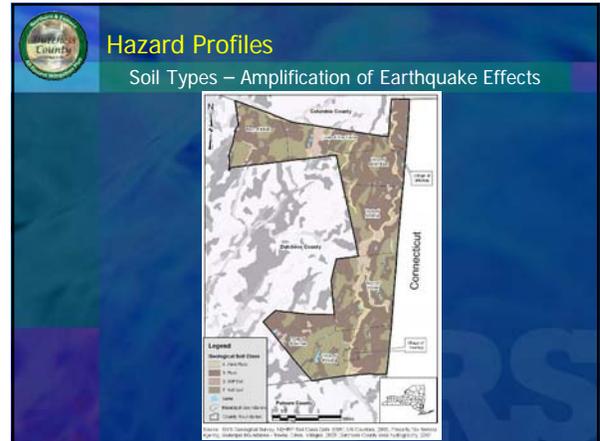
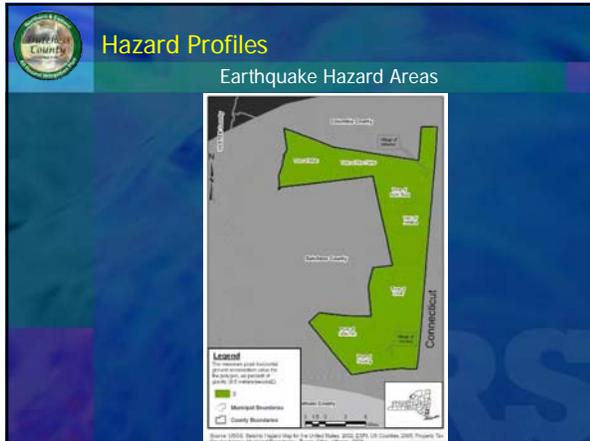
Hazard Profiles Drought Hazard Areas



Hazard Profiles Drought Hazard Areas

Table X.X Distribution of Agricultural Land in Participating Jurisdictions
 (Source: USGS National Wetland Inventory, 2003)

Municipality	Total Area (Acres)	Cultivated Cropland (Acres)	Cultivated Cropland (%)	Pasture Land (Acres)	Pasture Land (%)
North East	27,544	1726	6.3%	10,044	36%
Man	23,395	134	0.6%	3,346	14%
Pine Plains	19,921	986	5.0%	6,728	29%
Milford	385	1	0.2%	54	14%
Amenia	27,961	1536	5.5%	6,909	25%
Dover	36,025	669	1.9%	4,329	12%
Beekman	19,663	162	0.8%	4,418	22%
Pawling (T)	27,596	114	0.4%	4,159	15%
Pawling (V)	1,269	11	0.9%	262	20%
Totals	183,029	6330	2.9%	39,230	21%

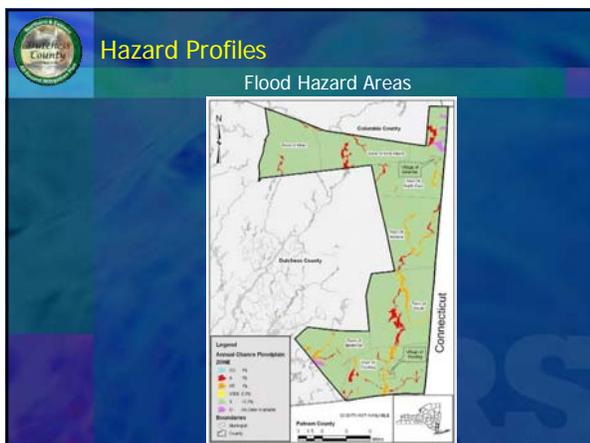


Hazard Profiles

Soil Types – Amplification of EQ Effects

Table X.XX
Participating Jurisdictions Geological Soils Classification: Improved Property Values
(Source: NEMRP - NYS Geological Survey)

Municipality	Total Value (millions)	A		B		C		D		E	
		Value (m)	%	Value (m)	%						
Amenia	\$404	\$72	18%	\$254	63%	\$45	11%	\$33	8%		0%
Beekman	\$1,196	\$142	12%	\$1,027	86%	\$26	2%	\$0	0%		0%
Dover	\$115	\$16	13%	\$60	52%	\$27	24%	\$13	11%		0%
Milan	\$250	\$145	58%	\$106	41%	\$0	0%	\$2	1%		0%
Millerton	\$53	\$0	0%	\$50	95%	\$1	1%	\$2	3%		0%
North East	\$253	\$60	24%	\$170	67%	\$4	1%	\$11	4%		0%
Pawling (T)	\$121	\$35	29%	\$74	61%	\$6	4%	\$3	2%		0%
Pawling (V)	\$32	\$5	16%	\$20	63%	\$0	0%	\$7	21%		0%
Pine Plains	\$38	\$7	19%	\$14	36%	\$17	43%	\$1	2%		0%
Totals	\$2,482	\$483	20%	\$1,765	72%	\$133	5%	\$71	3%		0%

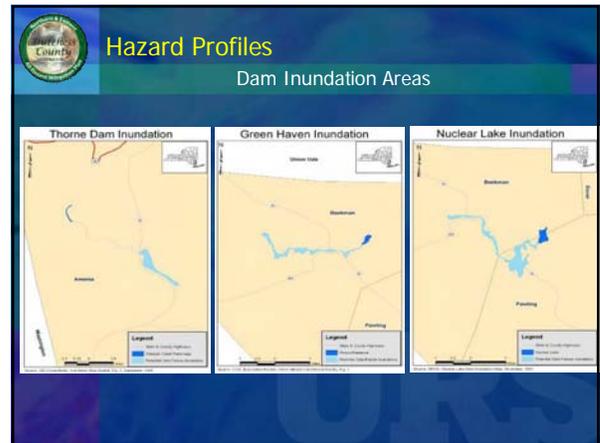
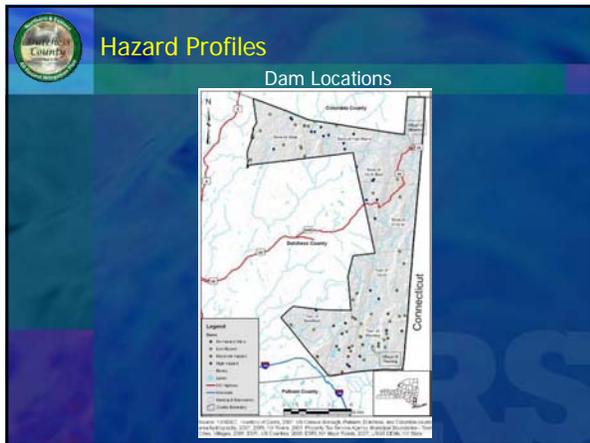


Hazard Profiles

Flood Hazard Areas

Table X.XX
Flood Data by Municipality: Improved Property Values in Identified Flood Hazard Areas
(Source: FEMA Q3 Flood Data)

Municipality	Total Improved Value (millions)	Value in High Flood Risk Areas (millions)	Value in High Flood Risk Area %	Value in Moderate Flood Risk Areas (millions)	Value in Moderate Flood Risk Areas (millions)
Amenia	\$404	\$80	20%	\$0	0%
Beekman	\$1,196	\$81	7%	\$0.62	0.1%
Dover	\$115	\$19	16%	\$0.34	0.3%
Milan	\$250	\$8	3%	\$0	0%
North East	\$253	\$26	14%	\$0	0%
Pawling	\$121	\$17	14%	\$0	0%
Pine Plains	\$38	\$3	7%	\$0	0%
V. of Millerton	\$53	\$6	11%	\$0	0%
V. of Pawling	\$32	\$14	44%	\$0	0%
Total	\$2,482	\$263	11%	\$0.96	0.04%

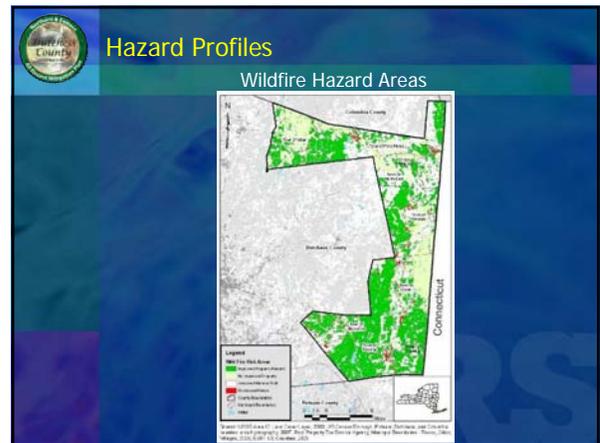


Hazard Profiles

Dam Inundation Areas

Table X.XX
Estimated Potential Exposure of Improved Property to Dam Failure

Municipality	Exposed Improved Value	Total Municipal Improved Value	Exposed Value as % of Municipal Total
Thorne Dam			
Amenia	\$7,742,275	\$424,121,524	1.9%
Nuclear Lake Dam			
Beekman	\$7,236,113	\$1,196,340,230	0.6%
Pawling	\$350,181	\$120,927,657	0.3%
Green Haven Dam			
Beekman	\$6,793,464	\$1,196,340,230	0.6%



Hazard Profiles

Wildfire Hazard Areas

Table X.XX
Length of Urban/Wildland Interface by Municipality

Municipality	Length - Feet	Length - Miles
Amenia	119,548	22.6
Beekman	212,719	40.9
Dover	162,106	30.7
Milan	151,122	28.6
V of Millerton	5,716	1.1
North East	62,636	11.9
Pawling (T)	131,594	24.9
Pawling (V)	26,713	5.1
Pine Plains	61,897	11.7
Total	934,152	176.9

- ### Asset Identification and Characterization
- Status: complete in draft form
- Quantifies what is at risk
 - Five key types of assets considered:
 - Improved property
 - Emergency facilities
 - Critical infrastructure & utilities
 - Historic & cultural resources
 - Population
 - Other key facilities

Asset Identification and Characterization

- Improved Property: Almost \$2.5 Billion

Improved Property by Jurisdiction				
Jurisdiction	Total Number of Parcels	Number of Improved Parcels	Percentage of Improved Parcels	Total Value of Improvements
Amenia	1,075	1,397	75%	\$404,121,634
Beekman	4,918	4,126	84%	\$1,196,340,238
Dover	3,281	2,531	77%	\$114,963,175
Milan	1,731	1,123	65%	\$260,001,980
Milerton	444	393	89%	\$52,656,677
North East	1,359	917	67%	\$262,909,620
Pawling (T)	3,269	2,476	75%	\$120,927,667
Pawling (V)	756	675	89%	\$32,077,681
Pine Plains	1,677	1,083	65%	\$30,221,662
Grand Total	19,329	14,734	76%	\$2,462,300,173

Asset Identification and Characterization

- Emergency Facilities: 20

Table X.X Emergency Facilities by Jurisdiction				
Jurisdiction	Fire Stations	Police Stations	Ambulance Stations	Hospitals
Amenia	2	1	0	0
Beekman	2	1	0	0
Dover	1	1	1	0
Milan	2	0	1	0
Milerton Village	1	1	0	0
North East	0	0	1	0
Pawling (T)	3	0	0	0
Pawling (V)	0	1	0	0
Pine Plains	1	1	0	0
Totals	12	6	2	0

Asset Identification and Characterization

- Critical Infrastructure and Utilities: 13

Table XXX Critical Infrastructure and Utilities by Jurisdiction						
Jurisdiction	Water Treatment Facilities	Wastewater Treatment Facilities	Public Works Facilities	Passenger Railroad Stations	Airports	Communication Facilities
Amenia, Town of	0	0	0	2	0	0
Beekman, Town of	0	1	0	0	1	0
Dover, Town of	0	0	0	2	0	0
Milan, Town of	0	0	0	0	0	0
Milerton, Village of	0	0	0	0	0	0
North East, Town of	0	0	0	0	0	2
Pawling, Town of	1	0	0	0	0	1
Pawling, Village of	0	1	0	1	0	0
Pine Plains, Town of	1	0	0	0	0	0
Total	2	2	0	5	1	3

Asset Identification and Characterization

- Historic and Cultural Resources: 18 identified locations
- Located in 6 of the 9 participating jurisdictions
- (Report: multi-page table, not included here)
- Sites as per NYSHPO and National Register, plus other significant locations identified through general internet research and local feedback

Asset Identification and Characterization

Historic and Cultural Resources

Table X.X Historic and Cultural Resources by Jurisdiction	
Jurisdiction	Asset Name/Description
Amenia	Lewis Mumford House
Amenia	Hendrik Winegar House
Amenia	Indian Rock Schoolhouse
Amenia	Beth David Synagogue
Amenia	St. Thomas' Episcopal Church
Amenia	Maxon Mills
Dover	Taber Wing House
North East	Hiddenhurst House
North East	Coleman Station Historic District
North East	Ezra Clark House
North East	Dakin-Coleman Farm
North East	Oliver Barnett House
North East	Thomas N. Wheeler Farm
Pawling (T)	Oblong Friends Meetinghouse
Pawling (T)	Akin Free Library
Pawling (V)	John Kane House
Pine Plains	The Pines House
Pine Plains	Graham-Bush Log House

Asset Identification and Characterization

- Population: 44,500 (U.S. Census 2007 estimate)



Asset Identification and Characterization

- Other Key Facilities: 16

Jurisdiction	Schools	Senior Care Facilities
Amenia	2	0
Beekman	1	0
Dover	4	0
Milan	0	0
Millettton	1	0
Northeast	3	0
Pawling (T)	2	1
Pawling (V)	2	0
Pine Plains	0	0
Totals	15	1



Capability Assessment

- Completed questionnaires from 2 municipalities
- Draft plan section is intended to summarize:
 - Legal and Regulatory Capabilities
 - Administrative and Technical Capabilities
 - Fiscal Capabilities
 - Capabilities and Resources – State
 - Capabilities and Resources - Federal



Other Steps

- Damage Estimates – Ongoing
- Land Uses and Development Trends – Ongoing
- Mitigation Strategy – Local Municipalities to do in April 2009
- Plan Maintenance and Integration – Local Municipalities to Provide Feedback to KPH by March 4, 2009



To-Do List For Local Jurisdictions: Now to Draft Plan Completion

JANUARY

- **January 17:** Scheduled last day to return completed Capability Assessment Questionnaire (which was released in November). Also, if you have not returned either of the two prior questionnaires, please do so now! They are the Land Uses and Development Trends Questionnaire, and the Hazard Identification Questionnaire.



To-Do List For Local Jurisdictions: Now to Draft Plan Completion

FEBRUARY

- None



To-Do List For Local Jurisdictions: Now to Draft Plan Completion

MARCH

- **March 4:** Last day to submit feedback on plan maintenance and plan integration (from Guidance Memos 2 and 3, which are due to be released on February 9)
- **March 12 – March 26:** Review the Risk Assessment Interim Deliverable
- **March 26:** Attend a Q&A Session on the Risk Assessment Interim Deliverable

* **Note:** March 26 is a targeted meeting date; the specific date will be confirmed at a later date and you will be notified accordingly.



To-Do List For Local Jurisdictions: Now to Draft Plan Completion

APRIL

- **April 4:** Last day to submit Outreach Log (initially distributed as part of Guidance Memo 1 in September 2008)
- **April 5:** Last day to submit comments on the Risk Assessment Interim Deliverable
- **April 16*:** Attend Mitigation Strategy Working Session
- **April 23:** Last day to submit Mitigation Options Questionnaire, Prioritization Worksheet, Implementation Strategy Worksheet, and NFIP Questionnaire (to be distributed in the Risk Assessment Interim Deliverable on March 12)

* **Note:** April 16 is a targeted meeting date; the specific date will be confirmed at a later date and you will be notified accordingly.



To-Do List For Local Jurisdictions: Now to Draft Plan Completion

MAY

- **May 5 – July 5:** Review the Draft Plan
- **Date TBD (possibly May, June, or July):** Attend a meeting to present the Draft Plan



To-Do List For Local Jurisdictions: Now to Draft Plan Completion

JUNE

- **May 5 – July 5:** Review the Draft Plan



To-Do List For Local Jurisdictions: Now to Draft Plan Completion

JULY

- **July 5:** Last day to submit comments on the Draft Plan

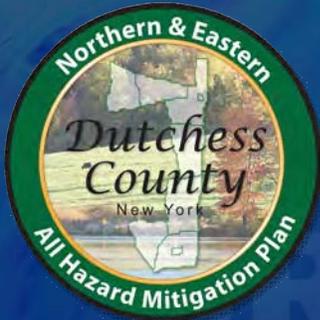


To-Do List For Local Jurisdictions: Now to Draft Plan Completion

ONGOING

- Continue your Jurisdictional Assessment Team (JAT) Meetings.
- Continue outreach to the Public and Other Stakeholders in your jurisdiction and document activities in Outreach Log (last page of Guidance Memo #1).

Questions and Answers





Northern and Eastern Dutchess County Communities
Regional Multi-Jurisdictional Hazard Mitigation Planning Project
Progress Meeting
January 16th, 2009, 1pm.
Martha's Restaurant, Millerton, NY

Meeting Minutes

Attending

See attached sign-in sheet.

Agenda Items Discussed

Katie Palmer-House (KPH) of the Town of Dover provided a brief introduction and opening remarks. KPH distributed copies of the Quarterly Progress Report, including a summary of planning tasks/plan components either completed or ongoing. KPH then introduced the URS Project Manager, Anna Foley (AF), and Deputy Project Manager, Richard Franks (RF).

AF and RF conducted a joint presentation during which they provided an overview of the project's progress. AF reinforced the project intent and benefits of having a hazard mitigation plan in place. Planning will help to evaluate hazard impacts and identify good projects that will reduce risks. Participation in the process and adopting the final plan approved by FEMA will ensure that participating jurisdictions will become eligible to apply to FEMA for hazard mitigation project grant monies.

Preparation of this plan is being funded by a grant from FEMA, and there are no out-of-pocket costs to be borne by participating jurisdictions; only staff resources and time. The planning process will identify good projects that will be "on the shelf" for fast turnaround during post-disaster scenarios when Letters of Intent (LOI's) are requested. Attendees were reminded that the final regional plan will not automatically apply to all of the region's municipalities; it will only be recognized by FEMA for those jurisdictions that participate in the process, develop a mitigation strategy (actions/projects), and adopt the final plan. An overview was presented of each jurisdiction's participation status. All nine jurisdictions expressed interest in participation, attended the kickoff meeting, and provided at least some of the items on the "Wish List". However, jurisdictional response

to subsequent participation tasks (Land Use and Development Trends Questionnaire, Hazard Identification Questionnaire, Capabilities Assessment Questionnaire) has so far been less than 100%.

AF presented an overview of the project timeline, from the Kickoff Meeting that was previously held in September 2008 to the Draft Plan target date of May 2009. She noted that the Risk Assessment Interim Deliverable (R.A.I.D.) - working chapters of the overall plan - is targeted for distribution on March 11, 2009. A question and answer session on the RAID is currently scheduled for March 26, 2009.

The RAID will summarize the following steps of the mitigation planning process:

- ✚ Hazard Identification
- ✚ Hazard Profiles
- ✚ Asset Identification and Characterization
- ✚ Vulnerabilities
- ✚ Land Uses and Development Trends
- ✚ Types of Mitigation Actions for Various Hazards

RF then presented some of the draft components of the RAID in more detail: The Hazard Identification step has been completed. Of the 23 natural hazards that were evaluated, 13 were considered significant enough for further investigation in the risk assessment. Municipalities have been given the opportunity to comment on this evaluation via the Hazard Identification Questionnaire that was distributed in October 2008.

The Hazard Profile step (ongoing) involves, for identified hazards, the hazard description, location, extent, previous occurrences, and probability or likelihood of future occurrences. RF presented some components of the Hazard Profile report section, including mapping of identified drought areas, earthquake hazard/soil type areas, flood hazard areas, wildfire hazard areas, and dam locations.

The Asset Identification and Characterization section is complete in draft form. It involves a quantification of total assets in each municipality (improved property, emergency facilities, critical infrastructure and utilities, historic and cultural resources, population and other key facilities) as well as a tally of assets in each of the identified hazard areas. RF presented some tables from the draft Asset Identification plan section, including population, emergency facilities and critical infrastructure as described above, and total improved property values for each municipality. RF said that the figures in the individual tables are expected

to be revised to reflect more detailed local knowledge when municipalities review the RAID.

Mr. Wayne Euvrard of the Town of Amenia expressed doubts that the total improved property values presented for certain municipalities were accurate. RF undertook to revisit the analysis to ensure that the equalization rates have been applied correctly.

AF then described how the Capability Assessment involves a summary of each municipality's report of legal and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, as well as similar capabilities at the State and Federal levels.

Other steps that will be summarized in the RAID are ongoing and include: estimation of damages for each hazard, land uses and development trends summary, and types of mitigation actions that can be considered for each identified hazard.

Local municipalities will use the RAID to develop unique, jurisdiction-specific mitigation strategies in April 2009.

The final plan will have a section discussing Plan Maintenance and Plan Integration. Guidance Memorandums 2 and 3 on these topics will be distributed February 9th, and municipal feedback (as requested in the memos) is required by March 4th.

AF concluded with an overview of 'to-do' items for each municipality from now through the completion of the Draft Plan.

- ✚ March 4: Last day to submit comments on Plan Maintenance (Guidance Memo 2) and Plan Integration (Guidance Memo 3).
- ✚ March 12 – March 26: Read Risk Assessment Interim Deliverable (RAID).
- ✚ March 26: Attend RAID Question & Answer Session.
- ✚ April 4: Last day to submit a completed Outreach Log to URS.
- ✚ April 5: Last day to submit comments on the RAID.
- ✚ April 21 (To be confirmed): Attend the Mitigation Strategy Working Session.
- ✚ April 28 (to be confirmed): Last day to submit mitigation actions (Prioritization Worksheet & Implementation Strategy Worksheet). THIS IS ABSOLUTELY MANDATORY FOR FEMA TO RECOGNIZE YOUR PARTICIPATION.
- ✚ May 5 – July 5: Review and Comment on the Draft Plan.

- ✚ Ongoing: Continue your Jurisdictional Assessment Team (JAT) Meetings.
- ✚ Ongoing: Continue outreach to the Public and Other Stakeholders in your jurisdiction and document all activities in the Outreach Log (last page of Guidance Memo #1) which is due April 4.

A brief period of questions and answers followed:

Ms. Colette Zito of the Village of Pawling requested that a condensed form of the presentation be made available for use in outreach activities. A brief discussion of outreach activities followed, in which AF stressed that FEMA will assess the outreach activities based on the level of effort made by the municipalities, rather than the public's response to these efforts. AF reminded attendees to make use of the project Fact Sheet, and KPH reminded attendees that reference material for the plan is available on the website (<http://www.townofdover.us/AHMP.cfm>)

KPH thanked attendees for coming and the meeting was adjourned.

DRAFT

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
 Q&A Session on the Risk Assessment Interim Deliverable – March 26, 2009 (1:30 pm)
 Dover Town Hall, Dover Plains, NY



Last Name	First Name	Representing	Email Address	Phone
MAYER	MIKE	Town of Pawling	MMMAYER40@AOL.COM	845-855-4464 TOWN 845-855-8161 HOME
Jordan	Amber	Village of Millerton	umillerton@msn.com	518-789-4489
EURYAN	WAYNE	TOWN OF AMERICA	SUPERVISOR@AMERICANY.CO	845 373-8660
ZITO	Colette	Village of Pawling	Colette24@msn.com	855-1916
Stevens	Robert	Town of North East	nehwy@optimum.net	518-789-4850
SHERMAN	DAVID	TOWN OF NORTH EAST	ne.supervisor@tacnet.net	518-789-3658
Couse	ROBERT	TOWN OF PINE PLAINS	NONE	(518) 398-1945
Adams	John	Town of Beekman	jadams@townofbeekman.com	845-724-5300
Butler	Glenn	Town of Milan	gbutler12571@yahoo.com	845-758-5164
COURTSON	RYAN	TOWN OF DOVER	SUPERVISOR@TOWNOFDOVER.US	845-832-3206
FRANKS	RICHARD	UNS	richard_franks@usncorp.com	473 785 0700 x469
Horsie	Ed	Dutchess Co SWED	ed.horsie@nyvacd.net	845-677-8011 ext 3
Macura	Nadine	NYSEMO	nadine.macura@semo.state.ny.us	845-454-0930
Palmer-Ham	Fabi	Town of Dover	tep26@cornell.edu	845-877-3410

**Northern and Eastern Dutchess County
Communities Regional
Hazard Mitigation Planning Project**

**Risk Assessment Interim Deliverable
Question & Answer Session
March 26, 2009
1:30 pm**

Today's Agenda

- Welcome & Opening Remarks: *Katie Palmer-House, Local Liaison*
- Risk Assessment Interim Deliverable Overview: *Anna Foley, URS; Richard Franks, URS*
 - Hazard Identification
 - Hazard Profiles
 - Asset Identification and Characterization
 - Land Uses and Development Trends
 - Capability Assessment
 - Damage Estimates
 - Types of Mitigation Actions to Consider for Various Hazards
- To-Do Actions for Introduction: *Anna Foley, URS; Richard Franks, URS*
- Questions & Answers: *All*
- Adjourn: *Katie Palmer-House, Local Liaison*

Project Progress Timeline to Draft Plan

- Kickoff Meeting: September 12, 2008
- Plan Development: Ongoing
- Local Feedback: Ongoing
- Risk Assessment Interim Deliverable: March 10, 2009
- Risk Assessment Q&A Session: March 26, 2009
- Mitigation Strategy Working Session: April 16, 2009 *
- Draft Plan: May 4, 2009

* Note that April 16th is an approximate target date.

Risk Assessment Interim Deliverable

- Working chapters of the overall plan:
 - Hazard Identification
 - Hazard Profiles
 - Asset Identification and Characterization
 - Land Uses and Development Trends
 - Damage Estimates
 - Types of Mitigation Actions to Consider for Various Hazards

Hazard Identification

- Evaluation of a full range of natural hazards
- Hazards selected for further analysis and reasons why
- Hazards not selected and reasons why not

Hazard Identification

Summary Results of the Hazard Identification and Evaluation Process

ATMOSPHERIC <input type="checkbox"/> Avalanche <input checked="" type="checkbox"/> Extreme Temperatures <input checked="" type="checkbox"/> Extreme Wind <input checked="" type="checkbox"/> Hailstorm <input checked="" type="checkbox"/> Hurricane and Tropical Storm <input checked="" type="checkbox"/> Lightning <input checked="" type="checkbox"/> Nor'easter <input checked="" type="checkbox"/> Tornado <input checked="" type="checkbox"/> Winter Storm	GEOLOGIC <input checked="" type="checkbox"/> Earthquake <input type="checkbox"/> Expansive Soils <input type="checkbox"/> Landslide <input type="checkbox"/> Land Subsidence <input type="checkbox"/> Tsunami <input type="checkbox"/> Volcano
HYDROLOGIC <input type="checkbox"/> Coastal Erosion <input checked="" type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Ice Jam <input type="checkbox"/> Storm Surge <input type="checkbox"/> Wave Action	OTHER <input checked="" type="checkbox"/> Wildfire

☐ = Hazard considered significant enough for further evaluation through the multi-product hazard risk assessment. (13)

Hazard Profiles

- Description of hazard
- Location of hazard area
- Extent (magnitude or severity)
- Previous occurrences
- Probability/likelihood of future occurrences

Hazard Profiles

Drought Hazard Areas

Hazard Profiles

Earthquake Hazard Areas

Hazard Profiles

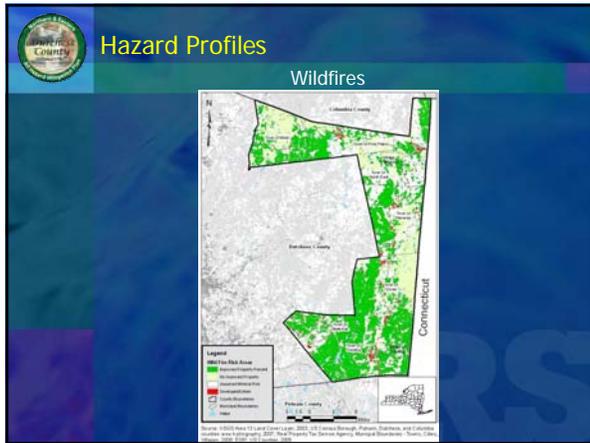
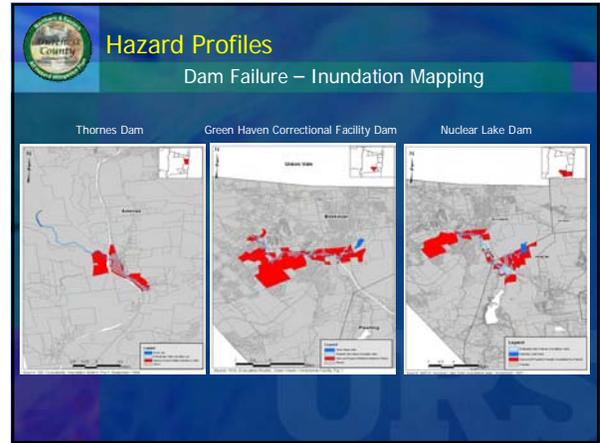
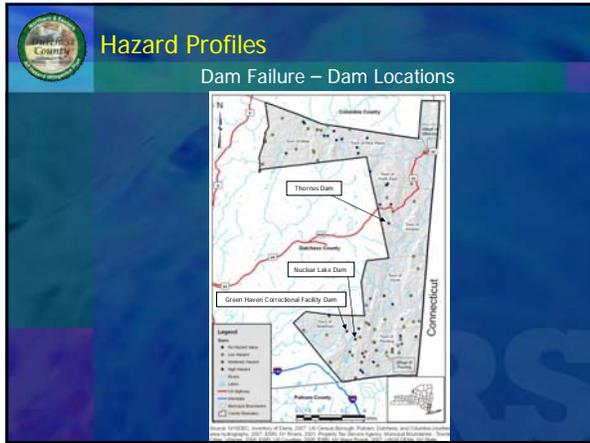
Soil Types – Amplification of Earthquake Effects

Hazard Profiles

Flood Hazard Areas

Hazard Profiles

Flood Hazard Areas – Repetitive Loss Properties



- ### Asset Identification and Characterization
- Quantifies what is at risk
 - Six categories of assets considered:
 - Improved property
 - Emergency facilities
 - Critical infrastructure & utilities
 - Historic & cultural resources
 - Population
 - Other key facilities

Asset Identification and Characterization

- Improved Property: More Than \$4.8 billion

Improved Property by Jurisdiction			
Jurisdiction	Total Number of Parcels	Number of Improved Parcels	Total Value of Improvements*
Amenia, Town of	1,875	1,397	\$404,121,634
Beckman, Town of	4,918	4,126	\$1,196,340,238
Dover, Town of	3,281	2,531	\$718,519,830
Miln, Town of	1,731	1,123	\$260,081,800
Millerton, Village of	444	393	\$61,541,706
North East, Town of	1,359	917	\$307,271,704
Pawling, Town of	3,289	2,476	\$1,218,720,414
Pawling, Village of	755	675	\$323,281,916
Pine Plains, Town of	1,677	1,096	\$312,013,435
Total	19,329	14,734	\$4,801,892,677

* No inclusions for public buildings and other non-residential structures.

Asset Identification and Characterization

- Percentage of Improved Property in Delineated Hazard Areas:

Percentage of Improved Property in Delineated Hazard Areas							
Municipality	Total Value of Improvements	Flood (High Risk)	Flood (Moderate Risk)	Dam Failure	Wildfire	Earthquake (Soil Type E)	Earthquake (Soil Type D)
Amenia, Town of	\$404,121,634	7.0%	0.0%	1.9%	34.5%	14.0%	10.4%
Beckman, Town of	\$1,196,340,238	1.6%	0.3%	1.2%	38.8%	0.0%	4.2%
Dover, Town of	\$718,519,830	6.5%	1.4%	0%	41.2%	19.0%	22.2%
Miln, Town of	\$260,081,800	0.9%	0%	0%	69.4%	1.3%	6.5%
Millerton, Village of	\$61,541,706	3.9%	1.5%	0%	8.9%	4.5%	5.5%
North East, Town of	\$307,271,704	3.0%	0.5%	0%	33.9%	7.8%	2.9%
Pawling, Town of	\$1,218,720,414	2.5%	0.2%	0.3%	54.3%	3.1%	4.1%
Pawling, Village of	\$323,281,916	11.9%	0.6%	0%	23.2%	26.6%	0.0%
Pine Plains, Town of	\$312,013,435	1.7%	0%	0%	36.2%	4.5%	47.2%
Total	\$4,801,892,677	3.8%	0.4%	0.5%	42.5%	7.5%	9.9%

Asset Identification and Characterization

■ Emergency Facilities: 20

Emergency Facilities by Jurisdiction				
Jurisdiction	Fire Stations	Police Stations	Ambulance Stations	Hospitals
Amenia, Town of	2	1	0	0
Beekman, Town of	2	1	0	0
Dover, Town of	1	1	1	0
Milan, Town of	2	0	0	0
Millerton, Village of	1	1	0	0
North East, Town of	0	0	1	0
Pawling, Town of	3	0	0	0
Pawling, Village of	0	1	0	0
Pine Plains, Town of	1	1	0	0
Totals	12	6	2	0

Asset Identification and Characterization

■ Critical Infrastructure and Utilities: 15

Critical Infrastructure and Utilities by Jurisdiction						
Jurisdiction	Water Treatment Facilities	Wastewater Treatment Facilities	Public Works Facilities	Passenger Railroad Stations	Airports	Communication Facilities
Amenia, Town of	0	0	0	2	0	0
Beekman, Town of	0	1	0	0	1	0
Dover, Town of	0	0	0	2	0	0
Milan, Town of	0	0	1	0	0	1
Millerton, Village of	0	0	0	0	0	0
North East, Town of	0	0	0	0	0	2
Pawling, Town of	1	0	0	0	0	1
Pawling, Village of	0	1	0	1	0	0
Pine Plains, Town of	1	0	0	0	0	0
Totals	2	2	1	5	1	4

Asset Identification and Characterization

■ Other Key Facilities: 16

Other Key Facilities by Jurisdiction		
Jurisdiction	Schools	Senior Care Facilities
Amenia, Town of	2	0
Beekman, Town of	1	0
Dover, Town of	4	0
Milan, Town of	0	0
Millerton, Village of	1	0
North East, Town of	3	0
Pawling, Town of	2	1
Pawling, Village of	2	0
Pine Plains, Town of	0	0
Totals	15	1

Asset Identification and Characterization

■ Historic and Cultural Resources: 20

Historic and Cultural Resources by Jurisdiction		
Jurisdiction	Asset Name/Description	Location
Amenia, Town of	Lewis Memorial House	Lansdale Road
Amenia, Town of	Heath/Warner House	SE of Amenia on SR 2 off NY 343
Amenia, Town of	Indian Rock Schoolhouse	Myrtle Road
Amenia, Town of	Bank Cover Structure	East Main Street
Amenia, Town of	Dr. Thomas Sprague's Church	Lansdale Road, south side, west of the 45
Amenia, Town of	Mason Mills	Main Street and Putnam Bank Road
Dover, Town of	Tabor Wag House	NY 22 and Coventry Rd
Milan, Town of	Palmer Restaurant	Public Storage Road, off Turkey Hill Road
Milan, Town of	The Wilson House	Wilson Park
North East, Town of	Hildebrand House	Shelton Hill Rd. off of rd with Shelton Chapel Rd
North East, Town of	Coleman Station Historic Depot	Coleman Station, Indian Lake, Pigeon and the Rock Hill Rd.
North East, Town of	Egan Clark House	Mt. Rd
North East, Town of	Coleman-Coleman Farm	Coleman Station Road
North East, Town of	Oliver Burnett House	Prager Road
North East, Town of	Thomas B. Whitson Farm	Indian Lake Road
Pawling, Town of	Oliver/Peterson House	McIntoshes Rd on Quaker Hill
Pawling, Town of	Alan Fox Library	37 Quaker Hill Rd
Pawling, Village of	John Case House	124 B Main St
Pine Plains, Town of	The Peace House	Maple Dr
Pine Plains, Town of	Coleman-Brook Log House	NY 199 (Church Street)

Note: Includes resources provided by local sources which are not currently on the state or national register of historic places.

Asset Identification and Characterization

■ Population (2000) = 41,716

Jurisdiction	Population		Households	
	Total	% of Planning Area	Total	% of Planning Area
Amenia, Town of	4,048	10%	1,625	11%
Beekman, Town of	13,655	33%	3,751	26%
Dover, Town of	8,565	21%	3,034	21%
Milan, Town of	2,356	6%	882	6%
Millerton, Village of	925	2%	375	3%
North East, Town of	2,077	5%	771	5%
Pawling, Town of	5,288	13%	1,904	13%
Pawling, Village of	2,233	5%	919	6%
Pine Plains, Town of	2,569	6%	988	7%
Totals	41,716	100.00%	14,249	100%

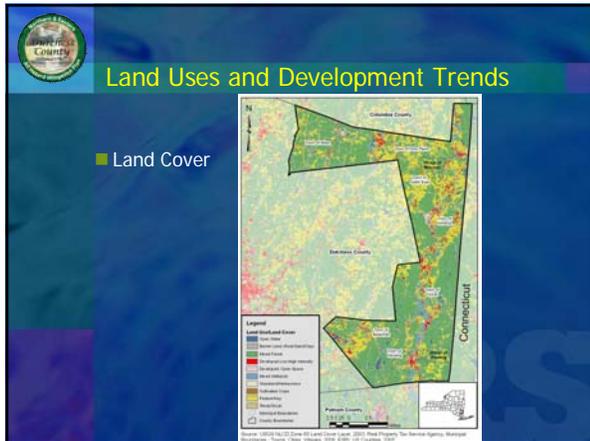
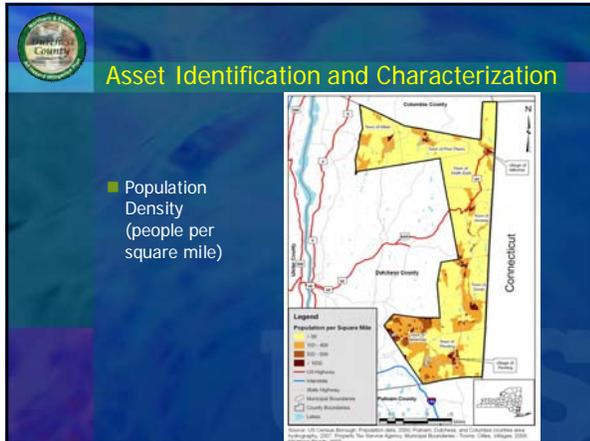
Note: similar breakdown data for years later than 2000 is not yet available.
*Census 2000s corrected by Dutchess County Planning to correct an error in the Census regarding incorrect coding of Greenon Prison in Milan rather than Beekman.

Asset Identification and Characterization

■ Population – Vulnerable Sectors (2000) = 7,113

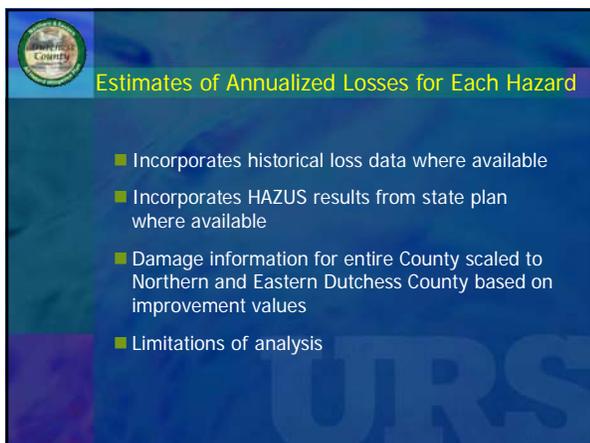
Vulnerable Sectors of the Population by Jurisdiction (2000 Census)							
Jurisdiction	Total Population	Under 5 Years	% of Municipal Total	65 Years and over	% of Municipal Total	Total Vulnerable Population	% of Municipal Total
Amenia, Town of	4,048	222	5%	694	17%	916	23%
Beekman, Town of	11,452	905	8%	859	8%	1764	15%
Dover, Town of	8,565	562	7%	779	9%	1341	16%
Milan, Town of	4,559	153	3%	301	7%	454	10%
Millerton, Village of	925	39	4%	143	15%	182	20%
North East, Town of	2,077	82	4%	278	13%	360	17%
Pawling, Town of	5,288	355	7%	645	12%	1000	19%
Pawling, Village of	2,233	93	4%	495	22%	588	26%
Pine Plains, Town of	2,569	124	5%	384	15%	508	20%
Totals	41,716	2,535	6%	4,578	11%	7,113	17%

Note: similar breakdown data for years later than 2000 is not yet available.



Land Uses and Development Trends

Land Cover Estimates		
Land Cover Category	Acres	Percent of Planning Area
Forest	110,273	60.0%
Pasture/Hay	39,238	21.3%
Developed, Open Space	8,395	4.6%
Wetlands	8,042	4.4%
Grassland/Shrub/Scrub	5,843	3.2%
Cultivated Crops	5,338	2.9%
Developed, Built Up	4,211	2.3%
Open Water	2,120	1.2%
Barren Land (Rock/Sand/Clay)	368	0.2%
Planning Area Total	183,829	100.0%



Estimates of Annual Losses for Each Hazard

Annual Loss Estimates - Summary, All Natural Hazards												
Jurisdiction	Total Value of Improvements	Exposure to Flood	Exposure to Wind	Exposure to Earthquake	Flood	Ice Storm	Downfall	Lightning	Debris	Tornado	Wildfire	Other Weather Events
Amenia, Town of	\$43,121,624	N	N	U*	\$19,277	\$21,645	U	\$102	\$26,576	\$354	U	U*
Berkshire, Town of	\$1,196,340,230	N	N	U*	\$57,065	\$14,592	U	\$1,486	\$3,016	\$2,533	U	U*
Doves, Town of	\$718,519,830	N	N	U*	\$34,273	\$35,602	U	\$892	\$12,454	\$1,521	U	U*
Milan, Town of	\$260,081,800	N	N	U*	\$12,406	\$1,729	U	\$323	\$2,495	\$551	U	U*
Millerton, Town of	\$61,540,706	N	N	U*	\$2,736	\$1,237	U	\$78	\$19	\$130	U	U*
North East, Town of	\$302,279,704	N	N	U*	\$14,657	\$7,694	U	\$382	\$92,132	\$651	U	U*
Pawling, Village of	\$1,218,720,414	N	N	U*	\$58,133	\$22,890	U	\$1,514	\$2,322	\$2,580	U	U*
Pawling, Village of	\$323,281,916	N	N	U*	\$15,421	\$29,371	U	\$401	\$203	\$684	U	U*
Pine Plains, Town of	\$112,013,435	N	N	U*	\$14,033	\$40,444	U	\$338	\$11,336	\$661	U	U*
Planning Area Total	\$4,601,892,677	N	N	U*	\$229,000	\$138,764	U	\$5,944	\$99,375	\$10,167	U	U*

U Currently Unquantifiable
 U* Currently Unquantifiable but potentially significant
 N Assumed Insignificant

Damage Estimates

- Ranking of Primary Hazards by Estimated Annual Damage:
 1. Earthquake ~ \$229,000 per year
 2. Flood ~ \$139,000 per year
 3. Drought ~ \$99,000 per year
 4. Tornado ~ \$10,000 per year
 5. Lightning ~ \$6,000 per year

Others: negligible or unquantifiable with current readily available data.

Types of Mitigation Actions to Consider for Various Hazards

- General and specific goals
- More detailed list of actions to address specific hazards
- To be used to initiate discussion and evaluation of potential mitigation actions: **not** intended to be a definitive list, municipalities are encouraged to research and develop additional alternatives where possible

To-Do List For Local Jurisdictions: Now to Draft Plan Completion

APRIL:	<ul style="list-style-type: none"> April 5: Last day to submit Outreach Log (initially distributed as part of Guidance Memo 1 in September 2008) April 5: Last day to submit comments on the Risk Assessment Interim Deliverable April 16: Attend Mitigation Strategy Working Session April 23: Last day to submit Mitigation Options Questionnaire, Prioritization Worksheet, Implementation Strategy Worksheet, and NFIP Questionnaire (to be distributed in the Risk Assessment Interim Deliverable on March 12)
MAY:	<ul style="list-style-type: none"> May 5 – July 5: Review the Draft Plan Date TBD (possibly May, June, or July): Attend a meeting to present the Draft Plan
JUNE:	<ul style="list-style-type: none"> May 5 – July 5: Review the Draft Plan
JULY:	<ul style="list-style-type: none"> July 5: Last day to submit comments on the Draft Plan
ONGOING:	<ul style="list-style-type: none"> Continue your Jurisdictional Assessment Team (JAT) Meetings. Continue outreach to the Public and Other Stakeholders in your jurisdiction and document activities in Outreach Log (last page of Guidance Memo #1).

***April 16 is a carryover meeting date. The specific date will be announced as a later date and will be notified accordingly.

Questions and Answers



Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
 Mitigation Strategy Working Session – April 16, 2009 (10:00 am)
 Dover Town Hall, Dover Plains, NY



Last Name	First Name	Representing	Email Address	Phone
Jordan	Amber	Village of Millerton	vmillerton@msn.com	518-789-4489
Adams	John	Town of Beekman	jadams@townofbeekman.com	845-724-5300
Palmer House	Kathryn	Town of Ponding Dover	kep26@cornell.edu	845-877-3410
ELURANN	WAYNE	Town of Amenia	SUPERVISOR@AMENIA NY. GOV	845 373-8600
SHERMAN	DAVID	Town of North East	ne.supervisor@taconic.net	518-789-3658
Butler	Glenn	Town of Milan	gbutler12571@yahoo.com	845-758-5164
Couse	ROBERT	Town of Pine Plains	NONE	(518) 398-1945
FOLEY	ANNA	URS	ANNA_FOLEY@URSCORP.COM	973-785-0700 x339
FRANKS	RICHARD	URS	RICHARD-FRANKS@URSCORP.COM	973-785-0700 x449



Dutchess County Communities Regional Hazard Mitigation Planning Project

Mitigation Strategy Working Session April 16, 2009

10:00 am
Dover Town Hall



Today's Agenda

- Welcome and Opening Remarks
- Reminders
- Any public comments?
- Mitigation Strategy Working Session
 - ◆ Completion of worksheets to evaluate and prioritize actions and develop implementation strategies
- Next Steps
- Questions and Discussion



Reminders

- Please remember to sign in
- Please submit your **Outreach Log** if you have not already done so




Comments so far from the Public and/or Other Stakeholders??

- Please tell us what and from whom.
- We will incorporate into appropriate section of the plan.
- If not today, then please get back to us by next Friday the 24th.



Worksheet Completion

- The Worksheets:
 1. Mitigation Options Survey
 2. Evaluation and Prioritization of Actions
 3. Documenting an Implementation Strategy
 4. NFIP Worksheet
- Circulated April 9, 2009
- Return to URS no later than Friday, April 24, 2009



Worksheet Completion

FEMA Requirements – apply to EACH municipality on an individual basis:

- Identify and analyze a comprehensive range of projects for each hazard
- Select projects that address reducing the effects of hazards on both new and existing buildings and infrastructure
- Identify, analyze and prioritize actions related to continued compliance with the NFIP



Worksheet Completion

FEMA Requirements (cont'd):

- Document the process and criteria used for prioritizing the projects
- Identify how each project will be implemented and administered, who will be responsible, resources for completion, targeted time frame?



Worksheet Completion

FEMA Requirements (cont'd):

- For each project, the estimated cost and documentation of cost-benefit review
- Identifiable action items for each participating jurisdiction



1. Mitigation Options Survey

- Ranking 6 categories of actions to reflect each municipality's local preferences
 - Preventive Measures
 - Asset Protection
 - Emergency Services
 - Structural Projects
 - Natural Resources Protection
 - Public Information



Northern and Eastern Dutchess County
Communities Regional
Hazard Mitigation Planning Project

Mitigation Options Survey

Municipality: _____

Please score the following generic descriptions of mitigation measures to the extent that you consider them to be most preferred by your community, with 1 = most preferred through 5 = least preferred.

1. Preventive measures Regulations Building codes Zoning	<input type="checkbox"/>
2. Asset protection Insurance (vibration/health) Homeownership Financial incentives	<input type="checkbox"/>
3. Emergency services Mutual aid communication system Shared warning systems Response resources	<input type="checkbox"/>
4. Structural projects Floodwalls/dikes Channel improvements Channelization Dams	<input type="checkbox"/>
5. Natural resource protection Setback (development) for public/open space Wetland/riparian restoration	<input type="checkbox"/>
6. Public Information Newsletters Information at civic association meetings Public notices Local media	<input type="checkbox"/>



Now we'll talk about PROJECTS...



The Role of a Local Jurisdiction

```

graph TD
    A[Your list of mitigation projects] --> B[Projects at sites that the municipality owns]
    A --> C[Projects at sites owned by someone else]
  
```



**NORTHERN AND EASTERN DUPAGE COUNTY
COMMITTEE REGIONAL
HAZARD MITIGATION PLANNING PROJECT**

WHAT IS THE ROLE OF A LOCAL JURISDICTION IN MITIGATION?

In describing your list of mitigation projects, you may think of some projects that will be undertaken at sites or facilities owned by your municipality. For example, maybe you would like to upgrade or otherwise change streets, raise a health-care facility, or relocate the local public library out of the floodplain. But what happens if you own a road for a mitigation project or a site or facility for which your municipality has no authority? For example, what if a County road runs through your municipality and you think a certain portion of the road should be raised to prevent the road from being overtopped during a flood event? What if there is a existing home on your community's floodplain, and you think there would be a great benefit to building a floodwall around the facility? Or how about residential structures that you think are located in an area? There are some projects which we hope will clarify the role of local jurisdiction under these two circumstances.

If your municipality DOESN'T own the facility in need of mitigation...	If your municipality DOES own the facility in need of mitigation...
1. Meet with the facility owner/owner. Note of the problem.	1. Identify feasible alternatives to mitigate the problem. This may require a consultation request to conduct a detailed evaluation of the site and specific mitigation alternatives for the facility.
2. Request the facility owner to identify feasible alternatives to mitigate the problem. This may require a consultation request to conduct a detailed evaluation of the site and specific mitigation alternatives for the facility.	2. Fund the most cost-effective mitigation alternative (subject through local operating budget, or funded through funding sources at the state or federal levels, such as FEMA's Post-Disaster Mitigation Program (PDM), Hazard Mitigation Grant Program (HMGP), or Flood Mitigation Assistance Program (FMA)).
3. If requested by the facility owner, with the owner's consent, offer the owner's consent to fund the facility mitigation project funding for the most cost-effective mitigation alternative. (Offered through local operating budget, or if needed through funding sources at the state or federal levels, such as FEMA's Post-Disaster Mitigation Program (PDM), Hazard Mitigation Grant Program (HMGP), or Flood Mitigation Assistance Program (FMA)).	3. Submit the proposal when funding is received.



The Role of a Local Jurisdiction

- If municipality has ownership, then your action is to undertake the project.
- If the owner is anyone else, then your action is to: advise the owner of the problem, work with them to identify a solution, and submit a grant application on their behalf to obtain funding to complete the project.



The Role of a Local Jurisdiction – An Example

- **The Project:** Acquire 10 residential structures that have repeatedly flooded in the past.
- Your municipality's "action" is **NOT** to acquire the houses (unless your local budget has a lot of extra funds!)
- Your municipality's "action" is to meet with the homeowner to advise them of the risks they face and the benefits of acquisition, and apply to FEMA on their behalf for mitigation project grant funding.



2. Evaluation and Prioritization of Actions

- FEMA's "S T A P L E E"
- Qualitative and subjective level of analysis of overall benefits and costs in lieu of formal benefit-cost analysis
- Acceptable for the planning phase



2. Evaluation and Prioritization of Actions

- Socially acceptable
- Technically feasible
- Administratively possible
- Politically favored
- Legally possible
- Economically viable
- Environmental impact

PRIORITIZATION OF ACTIONS

(Name of jurisdiction): _____

When completing this form, your jurisdiction should already have considered the full range of possible mitigation actions set forth in the Risk Assessment Technical Bulletin, and selected a subset of the actions that your jurisdiction would like to implement. This worksheet is intended to help you consider a range of actions that you have selected.

First, in order to prioritize the mitigation actions your jurisdiction has selected, identify the benefits and costs of each action using a FEMA planning concept called STAPLEE.

	S	T	A	P	L	E	E
S Social							
T Technical							
A Administratively possible							
P Politically favored							
L Legally possible							
E Economically viable							
E Environmental impact							

When discussing "costing" in a "benefit" or a "cost", use the following sliding scale to document your findings:

	Low (1-2)	Medium (3-4)	High (5-6)
Benefit			
Cost			

Think, using the same scale, consider these factors: (1) Can the project be implemented quickly? (2) Does the project address multiple objectives? and (3) Can the project be implemented quickly? (If the answer is "yes" in a benefit or "no" in a cost.)

Finally, using a 1-5 Likert Likert scale, assign OVERALL Scores to CIVILIAN costs for each action (high, medium, or low). Use this comparison to assign a priority (high, medium, or low) for each action item. (i.e., a project with low benefits and high costs would be ranked as a low priority. Relative scores are assigned to each criterion for a qualitative assessment - you do not have to tally up "+" and "-". You may find that in some instances, one or several criteria outweigh the others. If so, enter the score of the project given "X" across all the rows across the board (except the "E" column), you don't have to give them a high priority. Specific high scores might outweigh all the other benefits, and result in your assessment that the action should receive a low priority, despite the many benefits.)

Action	STAPLEE							Overall Benefits	Overall Costs	Priority
	S	T	A	P	L	E	E			
HAZARD MITIGATION OF HIGH-RISK project with benefits to many citizens, along with high cost that needs mitigation!	+	+	+	+	+	+	+	High	High	Low
HAZARD MITIGATION OF HIGH-RISK project with some minor political and legal issues, neither of which outweigh the rest of the project's benefits	+	+	+	+	+	+	+	High	Low	High
HAZARD MITIGATION OF HIGH-RISK project with moderate economic and political costs that are outweighed by high, social, and political benefits that are outweighed by high benefits, social, and environmental benefits	+	+	+	+	+	+	+	Medium	Medium	Medium

PRIORITIZATION OF ACTIONS

(Name of Jurisdiction) _____

Action	**= cost (feasible)					**= benefit (feasible)	**= benefit (feasible)		(\$/yr, medium, or low)		Priority
	S	T	A	P	E	E	Can be implemented quickly	Can be implemented quickly	Overall Benefit	Overall Cost	

3. Implementation Strategy Development

- What hazards will the project address?
- Will the project affect existing assets, future assets, or both?
- Who will take the lead?
- What authority does the municipality have to do the project?
- When will the project be completed?
- How much will the project cost? (\$'s, or H/M/L)
- Where will the funds come from to do the work?

IMPLEMENTATION STRATEGY WORKSHEET

(Name of Jurisdiction) _____

Before completing this form, your jurisdiction should consult the Federal Register for updates to the Risk Assessment Review Order, which contains a list of actions that your jurisdiction would like to implement, and fill out the "Implementation Worksheet". See, on this page, sections from the "Implementation Worksheet" such as action and its priority rank, then fill in the remainder of the form.

PRIORITY	Mitigation Action	Please list the hazards that the action will address.	Please say whether the action will affect other assets, or both?	What municipal department will take the lead in moving forward with this project?	What is the existing authority or best planning mechanism through which the action can be implemented?	What is the estimated cost of the project?	What is the target date for project completion?	What is the estimated level of completion of mitigation studies, or cooperative agreements?	What funding sources do you anticipate? (i.e., local staff, local budget, grant funding, etc.)

4. NFIP Compliance Actions Worksheet

- All 9 municipalities participate in FEMA's NFIP, therefore:
- Everyone's mitigation strategy must identify, analyze and prioritize actions related to continued compliance with the NFIP

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
NFIP COMPLIANCE ACTIONS WORKSHEET

(Name of Jurisdiction) _____

Info:

- Please fill in the following table. (Note: All 9 municipalities participate in the NFIP; therefore, your municipality DOES have a floodplain management ordinance AND a Floodplain Administrator on the books.)

Name of Your Jurisdiction	Adoption Date of your Current Floodplain Management Ordinance	Name of Your Jurisdiction's Designated Floodplain Administrator	Number of Municipal Staff with Roles in Enforcement of Floodplain Management Ordinance

Please give a brief description of activities currently undertaken by your municipality to enforce your floodplain management ordinance:

Note:

- If your current floodplain management ordinance was adopted before 1996 and has not been subsequently revised, then fill in Row 1 on Pages 2 and 3. (Please leave Row 1 blank if your ordinance is current as of 1996 or later.)
- If your jurisdiction does not have a specific person designated to act as your local Floodplain Administrator, or if the person filling this position is unaware of their role as Floodplain Administrator, then fill in Row 2 on Pages 2 and 3. (Otherwise please leave Row 2 blank.)
- If you consider the present level of staffing insufficient to adequately enforce your floodplain management ordinance, then fill in Row 3 on Pages 2 and 3. (Please leave Row 3 blank if you feel current staffing levels are adequate.)
- Please fill in Row 4 on Pages 2 and 3 to evaluate how you plan to update your floodplain management ordinance to be consistent with revised Flood Insurance Rate Maps that may be adopted in the future in Dutchess County. FEMA estimates new DFIRMs will go into effect on or about November 2009. (Everyone should fill in Row 4.)
- If floodplain management staff members in your municipality are not Certified Floodplain Managers (CFMs), then please fill in Row 5 on Pages 2 and 3. (Please leave Row 5 blank if your floodplain managers are already CFMs.)
- If your municipality is not already a participant in FEMA's Community Rating System (CRS), please fill in Row 6 on Pages 2 and 3. (None of the 9 jurisdictions currently participate in the CRS, so everyone should fill in Row 6.)
- If you consider there to be additional activities that could be undertaken to enforce your municipality's floodplain management ordinance beyond what your municipality is already doing, please list these actions in the blank Rows 7 and 8 on Pages 2 and 3. (Otherwise, you can leave Rows 7 and 8 blank.) *Add five to attach additional pages if you need more space.

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
NFIP COMPLIANCE ACTIONS WORKSHEET

(Name of Jurisdiction) _____

PRIORITIZATION

NFIP Compliance Action	**= cost (feasible)					**= benefit (feasible)	**= benefit (feasible)		(\$/yr, medium, or low)		Priority
	S	T	A	P	E	E	Can be implemented quickly	Can be implemented quickly	Overall Benefit	Overall Cost	
1. Update/review floodplain management ordinance to comply with latest FEMA regulations.											
2. Designate/infill a specific person to be your municipality's Floodplain Administrator.											
3. Adequately increase members of staff to adequately enforce NFIP regulations/floodplain management ordinance.											
4. Update/review floodplain management ordinance to be consistent with new DFIRMs.											
5. Register staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).											
6. Join the Community Rating System (CRS).											
7.											
8.											

Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
NFIP COMPLIANCE ACTIONS WORKSHEET
 (Name of Jurisdiction) _____

IMPLEMENTATION STRATEGY

Priority	NFIP Compliance Action	Applies to Community Assets (Existing / New / Both)	Primary Department Responsible	Existing Local Planning Mechanism through which the action will be implemented	Target Date	Cost Estimate	Funding Source
	1. Update/review floodplain management ordinances to comply with local FEMA regulations						
	2. Designate/retail a specific person to be your municipality's floodplain administrator						
	3. Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances						
	4. Update/review floodplain management ordinances to be consistent with new FEMA regulations						
	5. Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFM)						
	6. Join the Community Rating System (CRS)						
	7.						
	8.						

Next Steps

- If you are not turning in your forms today, please email or fax to URS by Friday, April 24th
- Draft Plan targeted for distribution on May 4, 2009
- Concurrent review – CPG, NYSEMO, FEMA
- CPG Comments by July 5, 2009



Questions????



Northern and Eastern Dutchess County Communities Regional Hazard Mitigation Planning Project
Meeting – January 29, 2010 (10:00 am)
Dover Town Hall, Dover Plains, NY



Last Name	First Name	Representing	Email Address	Phone
Mike MAYER	MIKE	Town of Pawling	MMMAVERY0@AOL.COM	855-8161
OSBORN	WAYNE	VILLAGE OF PAWLING		855 1122
WARREN	DOUG	" " " Highway	_____	855-1344
SHERMAN	DAVID	TOWN OF NORTH EAST	ne.supervisor@taconic.net	518-789-3658
Cause	ROBERT	TOWNS OF PINE PLACES	NONE (TOWN HALL)	(518) 398-1945
Daley	John	Town of Pawling Highway	john.daley@pawling.org	855-5010
Palmer-Hove	Felix	Town of Dover	Hofelt@ad.com	877-3410
Zulauf	Barbara	Town of Beekman	BSZulauf@Frontiernet.net	845-249-8448
Butler	Glenn	Town of Milan	gbutler12571@yahoo.com	845-758-5164
EURARD	WAYNE	TOWN OF AMERICA	SUPERVIA@AMERICAN.GOV	845-373-8860 x107
RICHARD	FRANKS	URS	richard.franks@urscorp.com	973 785 0700 x449



Dutchess County Communities Regional Hazard Mitigation Planning Project

Meeting
January 29, 2010

10:00 am

Dover Town Hall



Today's Agenda

- Welcome and Opening Remarks
- Brief Overview of FEMA's Plan Feedback
- Completion of Revised Prioritization Worksheets
- Completion of Implementation Strategy Worksheets
- Discussion and Selection of Future Local Liaison and Regional Liaison
- Closing Remarks



Brief Overview of FEMA's Plan Feedback

- 20 main plan review criteria scored by FEMA
 - ◆ 12 Satisfactory
 - ◆ 8 Areas for Improvement
 - ◆ 6 -Required
 - ◆ 2 - Recommended



Brief Overview of FEMA's Plan Feedback

LOCAL HAZARD MITIGATION PLAN REVIEW WORKSHEET
 Jurisdiction: Dutchess County - Northern & Eastern Communities, NY Reviewing Agency: FEMA REGION 2

LOCAL MITIGATION PLAN REVIEW SUMMARY

The plan cannot be approved if the plan has not been formally adopted. Each requirement includes a specific reference to a section of the requirement under the label "Reference to Code". The requirements are listed in the table below. The table is organized by the type of requirement. The requirements are listed in the table below. The table is organized by the type of requirement. The requirements are listed in the table below. The table is organized by the type of requirement.

Scoring System

Review these areas and the following for each requirement:

- **Check Satisfactory:** The plan does not need the reference for the requirement. (Reviewers' comments will be positive.)
- **Subsatisfactory:** The plan needs the reference for the requirement. Reviewer's comments are encouraged but not required.

Mitigation Plan Steps

	M	S
13. Local Hazard Mitigation Plan (SOP 801.201)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Identification and Analysis of Mitigation Actions (SOP 801.201)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. Identification and Analysis of Mitigation Actions: WRF Compliance (SOP 801.201)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Implementation of Mitigation Actions (SOP 801.201)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Multi-Jurisdictional Mitigation Actions (SOP 801.201)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Plan Adoption Process

	M	S
18. Monitoring, Evaluating, and Updating the Plan (SOP 801.201)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Implementation of Mitigation Planning Mechanisms (SOP 801.201)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Contract Public Involvement (SOP 801.201)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Additional Plan Requirements

	M	S
Event Date Requirement	<input type="checkbox"/>	<input type="checkbox"/>
Event Date Requirement	<input type="checkbox"/>	<input type="checkbox"/>
Event Date Requirement	<input type="checkbox"/>	<input type="checkbox"/>

LOCAL MITIGATION PLAN APPROVAL STATUS

Plan Not Approved

Plan Approved



Brief Overview of FEMA's Plan Feedback

2. Multi-Jurisdictional Plan Adoption: Part 201.6(c)(5)

To be addressed by: DCCR Communities

- Wait until FEMA deems the plan to be "approvable pending adoption"
- Formally adopt the plan
- Send Katie a copy of your adoption resolution (Katie will forward to SEMO, SEMO will forward to FEMA)




Brief Overview of FEMA's Plan Feedback

6. Profiling Hazards

To be addressed by: URS

- Discuss DFIRMS
- Incorporate State-level earthquake hazard mapping and revise exposure tables accordingly
- Incorporate NOAA NSSL mapping regarding number of tornado days per year and revise event frequency estimates accordingly



Brief Overview of FEMA's Plan Feedback

7. Assessing Vulnerability: Overview
To be addressed by: URS

- Clarify difference in methodologies for calculating improved property in the 100-year floodplain between State Plan and URS' plan for the DCCR
- Revise earthquake loss estimates to incorporate soil type mapping in the State Plan



Brief Overview of FEMA's Plan Feedback

9. Assessing Vulnerability: Identifying Structures, Infrastructure and Critical Facilities
To be addressed by: URS

- FEMA **recommends** clarifying difference in methodologies for calculating improved property in the 100-year floodplain between State Plan and URS' plan for the DCCR (*duplicate*)



Brief Overview of FEMA's Plan Feedback

10. Assessing Vulnerability: Estimating Potential Losses
To be addressed by: URS

- FEMA **recommends** estimates of potential dollar losses to vulnerable structures for extreme temperatures, extreme wind, dam failure, winter storms, ice jams, wildfire and severe weather events.
- These are unquantifiable due to lack of generally accepted methodologies, and/or lack of sufficient data to apply an existing methodology. Text to clarify.



Brief Overview of FEMA's Plan Feedback

14. Identification and Analysis of Mitigation Actions
To be addressed by: DCCR Communities

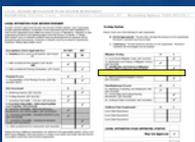
- Reviewers now would like to see at least one action for each identified hazard
- We will address this in a group setting today



Brief Overview of FEMA's Plan Feedback

16. Implementation of of Mitigation Actions
To be addressed by: DCCR Communities

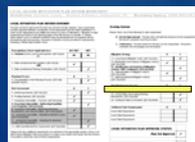
- Reviewers now would like to see at least one action for each identified hazard
- We will address this in a group setting today (new Prioritization worksheets, STAPLEE)



Brief Overview of FEMA's Plan Feedback

18. Monitoring, Evaluating and Updating the Plan
To be addressed by: DCCR Communities

- Discuss details of how and when the Regional Liaison will be designated
- Discuss details of how and when the Local Liaison will be designated
- We will address this in a group setting today





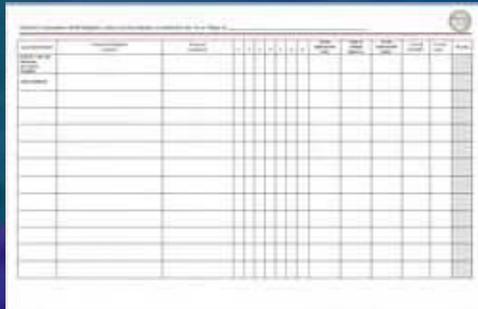
Completion of Revised Prioritization Worksheets



Page 1 of 2



Completion of Revised Prioritization Worksheets



Page 2 of 2



Completion of Implementation Strategy Worksheets




Discussion and Selection of Future Local Liaison and Regional Liaison

