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Washington County Hazard Mitigation Plan - 2016 Update

June 15, 2016



Today's Topics

- Introductions
- Purpose for a Hazard Mitigation Plan
- Updating a Hazard Mitigation Plan
- Schedule
- Participation Expectations
- Planning Process
- Action Items



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Hazard Mitigation

“Mitigation” -

Sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event



“provides the blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and local ability...” (CFR).

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Washington County and DMA 2000

The mitigation plan update will:

- Help the County prepare for and mitigate the effects of disasters.
- Build more resilient communities.
- Continue to allow the county and participating partners to be eligible for pre- and post-disaster recovery and mitigation funding.
 - Public Assistance Funding
 - Post-Disaster Reimbursement for Permanent Work (Categories C-G)
 - Post-Disaster Mitigation for Damaged Structures/Infrastructure (406 Mitigation)
 - Pre-Disaster Mitigation Grant Funding (404 Mitigation)
- Support National Flood Insurance Program (NFIP) compliance and, potentially, policy rate reduction efforts

A **Local Mitigation Plan** demonstrates the jurisdiction's commitment to reducing risk and serves as a guide for decision makers as they commit resources to minimize the effects of natural hazards.

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Requirements for Local Mitigation Plan Updates

- Updated Risk Assessment - a factual basis for activities proposed in the Mitigation Strategy section include:
 - Overview of hazards (type, location, probability)
 - Vulnerability analysis (impact on buildings, infrastructure, economy, development trends)
 - Multiple jurisdictions (specific to each city/town/village)
- Updated Mitigation Strategy – a blueprint for reducing losses identified in the risk assessment
- Include the opportunity for public comment and for relevant agency and stakeholder involvement
- Plan Maintenance and Adoption Processes

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Plan Document

- Volume 1 will contain all information that applies to the whole planning area (county) such as description of the planning process, risk assessment, goals and objectives, County/multi-jurisdictional mitigation strategies and a plan maintenance program.
- Volume 2 will contain those elements that are “jurisdiction specific”. Your community’s chapter. These annexes will meet DMA requirements for each jurisdiction.

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Plan Update Process Steps

- Organize Resources
- Re-Assess the Risk
- Review and Update the Mitigation Plan
- Develop Procedures for Plan Implementation, Monitoring and Update
- NYS DHSES / FEMA Approval
- Adopt the Plan

Engage a Wide Range of "Stakeholders"

- Federal, State, Regional and Local Agencies
- Business and Civic Groups
- Academic Institutions
- Other "local governments"
- The Public



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Organization of the Planning Group

- County Management Team (Department of Public Safety)
- Contract Consultant (Tetra Tech)
- Steering Committee
- Municipal Planning Partnership
- Stakeholders (e.g. academic, police, fire, health care, business/industry, utilities)
- General Public

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Municipal Planning Partnership

- All municipalities are encouraged to participate to maintain DMA2000 coverage.
- FEMA has greatly expanded their scrutiny of “participation”... Municipalities are required to actively participate.
- All municipalities who wish to join the update process **must formally indicate their intent to participate** with a Letter of Intent to Participate.

Letters of Intent to Participate

Please be sure to forward your Letter of Intent to Participate (LOIP) for your community. Copies will be included in the HMP.

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Municipal Participation

- Attend planning partnership meetings/workshops
- Provide data and information in a timely manner
- Support public and stakeholder outreach in your jurisdiction
- Provide outreach and encourage involvement of property owners in floodplains
- Assist with the development of your jurisdictional annex
- Review and provide feedback on Draft and Final Plan documents
- Facilitate the adoption process – Governing Body must pass an Adoption Resolution once the plan is approved by FEMA
- Implement and Maintain the Plan

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Assemble Your Municipal Mitigation Team

*Here is who we suggest you include as part of your
Hazard Mitigation Planning team:*

- Municipal Mayor/Supervisor/Administrator
- NFIP Floodplain Administrator
- Building Code Official
- Public Works Superintendent
- Municipal Engineer
- Land Use Planner
- Municipal Clerk
- Municipal CFO/Fiscal Representative
- Police/Fire/EMS Representatives

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Municipal Participation Support

Municipal Involvement will be encouraged and promoted by:

- Three formal municipal planning partnership meetings (Kick-Off Meeting (today), FEMA Mitigation Strategy Workshop, Annex Completion Workshop)
- Data collection and annex tools, templates, surveys
- Local Data Collection Meetings (as requested)
- Completion of Municipal Annex supports “buy in” and “ownership”
- Planning process execution and municipal training programs designed to build local capability
- Local public outreach including RL/SRL flood structure outreach

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Data Collection Worksheets



WASHINGTON COUNTY HAZARD MITIGATION PLAN UPDATE
Outline of Worksheets on CD



Please work with your municipal planning team and complete these worksheets. Please send electronic Word version by July 15, 2016 to:
Jonathan Razer, CFM
Phone: 973-630-8042 E-mail: jonathan.razer@tetratech.com

#	Worksheet Name	Who is Responsible to Complete and Submit this Worksheet?	Where do you find the requested information?
1	Events/Losses	OEM, Police, Fire, DPW, Engineer	FEMA Project Worksheets (PWs) DPW records, Police response records
2	Capability Assessment	Code Official, Planner, CFO, Fiscal Rep, Clerk, and Municipal Mayor/Supervisor/Administrator	Code Book, e-Code, Municipal ordinances, Master Plan, Planning and Zoning Board Officials
3	NFIP Floodplain Administrator	Floodplain Administrator	NFIP Records
4	Mitigation Action Progress	HMP Main POC – see "Responsible Party" column in the table provided for guidance	LOIs, NYS DHSES Grants, Capital Improvement records
5	Plan Integration Questionnaire	HMP Main POC	Discuss with Engineer, Clerk, Administrator, Planner, CFO, and Municipal Mayor/Supervisor/Administrator
6	New Development Table	Engineer, Planner, Building Department	Redevelopment Plans, Permits

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Re-Assess the Risk



These are the Five Steps to Assess Risk:

1. Identify Hazards
2. Profile Hazards
3. Inventory Assets
4. Estimate Losses
5. Evaluate Mitigation Options

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Assess the Risk – Hazard of Concern Identification

Hazards of Concern (HOCs)- Those natural hazards that pose significant risk to the Planning Area – and we can address through mitigation rather than only through preparedness, response and recovery.

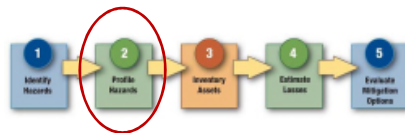
- Review and update the “hazards of concern” that we will carry through the planning process.
- Our effort should be proportional to the risk the hazards pose.
- Each municipality has differing risk to the HOCs.
- We are generally limiting this plan to natural hazards:
 - Flood (riverine, ice jam, flash, dam failure [incl. beaver dams])
 - Severe Storm (hail, wind, severe thunderstorms, tornadoes, hurricane, tropical storms and Nor/Easters)
 - Severe Winter Weather (heavy snow, blizzard, ice storm)
 - Climate Change will be discussed as an exacerbating condition of other hazards (e.g. storms, flood)
 - Wildfire – To Be Determined
 - Earthquake – To Be Determined



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Assess the Risk – Hazard Profiling (Worksheet #1 on your CD)

- Hazards are profiled (characterized) according to:
 - Background and local conditions
 - Historic frequency and probability of occurrence
 - Severity
 - Historic losses and impacts
 - Designated hazard areas
- What hazard events have occurred since the 2010 Plan?
- What County and local losses have occurred as a result of these events?



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Worksheet #1 on CD Events and Losses

WASHINGTON COUNTY HAZARD MITIGATION PLAN UPDATE
Worksheet #1 – Events and Losses

Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by July 22, 2016 to:
Jonathan Rasser, EPM
Phone: 973-630-8042 E-mail: jonathan.rasser@tcwa.org

Municipality: _____
Name and Title of Individual Completing Worksheet: _____

Who can provide information about events and losses: OEM Coordinator, Police, Fire, DPW, building inspector, municipal engineer. Refer to FEMA Project Worksheets (PWs), DPW records, police response records, etc.

In the table below, please identify events in which your community suffered significant damages/losses and describe those losses (e.g., flooded roads, road closures, DPW/Police overtime, debris management, opened shelter for two days, etc.). Please add other non-declared events that affected your community that are not listed.

Then, please fill out an "Event and Loss Summary Sheet" for the December 2008 event Hurricane Irene, and Hurricane Sandy. Feel free to add additional sheets for other major events that impacted your community.

Date of Event	Event Type (Disaster Declaration if applicable)	Washington County Designated?	Did your community suffer losses/losses from this event? (Yes/No - If yes, please complete an Event Loss Summary Sheet for this event.)	Notes on damages within County
December 11-31, 2008	Severe Winter Storm DR-1827	Yes	Yes - all records fill out an Event Loss Summary sheet for this event	
April 28-30				

If your community suffered significant damages/losses from this event, indicate "Yes" and complete an Event Loss Summary Sheet.

Worksheet #1 on CD Events and Losses (Continued)

WASHINGTON COUNTY HAZARD MITIGATION PLAN UPDATE
Worksheet #1 – Events and Losses

Event and Loss Summary Sheet
DR-1897 December 11-31, 2008 Severe Winter Storm

Event Date and Description (incl. DR# if applicable): _____

Life Safety (evacuation, sheltering, injuries, deaths): _____

Loss of Service (e.g. road closures, utility outages, commercial closures – include location, time of closure and/or number of affected): _____

Infrastructure Damage (e.g. roads, bridges, culverts, treatment facilities, lift stations, etc.): _____

Facility/Structural Damage – Public (e.g. police, school, etc.): _____

Assess the Risk – Inventory Assets

What is at risk? People, Property, Economy, Environment

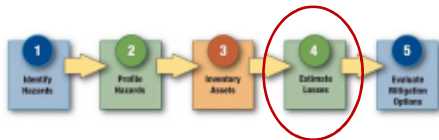
- Population and Demographics – Has this changed since 2010?
- Building Stock (Residential, Commercial, Industrial, Educational, etc.) – Has this changed since 2010?
- Facilities (critical and essential facilities, utilities, transportation features, high-potential loss facilities and user-defined facilities)
 - Police, Fire, Emergency Services
 - Hospitals and Medical Care Facilities
 - Schools and Care Facilities
 - Sheltering Facilities
 - Infrastructure (Transportation Systems, Utilities)



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Assess the Risk – Estimate Losses

- Vulnerability Assessment - What do we predict our suffering to be if we do nothing to mitigate our risk:
 - Given current conditions, which have changed since 2010?
 - Given our improved understanding of risk, and tools to assess that risk, which have changed since 2010?



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Assess the Risk – Evaluate Mitigation Options

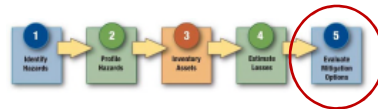
➤ Re-evaluate Hazard Mitigation Goals and Objectives

Goals: General guidelines that state what we want to achieve.
Should be consistent with the State goals and other local goals.

Example: “Protect property”

Objectives: Define strategies or implementation steps to attain a stated goal.

Example: “Enact or enforce regulatory measures that ensure new development will not increase flood threats to existing properties”.



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Assess the Risk – Evaluate Mitigation Options

➤ Evaluate Capabilities

What resources do we have at our disposal to Mitigate Risk?

“Proposed mitigation actions will be evaluated against the backdrop of what is feasible in terms of your government’s legal, administrative, fiscal and technical capacities”
(FEMA 386-3)

- Serve to identify legal authority and administrative, technical and fiscal capabilities in the state, county and jurisdictions that will facilitate or hinder hazard mitigation goals and objectives.
- State Capability Assessment is in the State HMP
- Part of this Planning Process is to build County and Local Mitigation Capabilities
- Training, Workshops and Seminars

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Capability Assessments (Worksheet #2 on CD)

Please work with your planning team to complete the worksheets and return to Jonathan Raser by July 15, 2016.

- Municipal Mayor/Supervisor
- Administrator
- Building Code Official
- Municipal Engineer
- Land Use Planner
- Municipal Clerk
- Floodplain Administrator
- CFO/Fiscal Representative

WASHINGTON COUNTY HAZARD MITIGATION PLAN UPDATE
Worksheet #2 - Capability Assessment

Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by July 22, 2016 to:
Jonathan Raser, LPM
Phone: 973-620-8242 Email: jonathan.raser@tetratech.com

Municipality: _____
Name and Title of Individual Completing Worksheet: _____

1. **Planning and Regulatory Capability:** Please indicate whether the following planning or regulatory tools and programs are currently in place or under development for your jurisdiction by placing an "X" in the appropriate box, followed by the date of adoption/implementation. Then, for each particular item in place, identify the department or agency responsible for its implementation. In addition, indicate the code chapter, and name of plan including any explanation of activity in the right-most column.

Who can assist with completing this table: Municipal Planner, Clerk, Code Official. Refer to your municipal codes and ordinances, Master Plan.

Tool / Program (Name of Ordinance, Plan)	Is Item in place? (Yes/No)	Adoption Date, Agency (Year)	Responsible Department	Code Chapter and Ordinance (Code Chapter, name of plan, explanation of activity, etc.)
Master Plan				
Capital Improvement Plan				
Floodplain Management - Base Plan				
Stormwater Management Plan				
Open Space Plan				
Storm Control Management Plan				
Watershed Management or Protection Plan				

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NFIP Compliance

We need the NFIP Floodplain Administrator Involved!

- We need to know specific information about the NFIP program in your community.
- Your NFIP Floodplain Administrator (FPA) **MUST** be actively involved in the update process.
- NFIP Administrator to work with Tetra Tech to complete **Worksheet #3** (best done in a short interview – live or phone)

WASHINGTON COUNTY HAZARD MITIGATION PLAN UPDATE
Worksheet #3 - NFIP Floodplain Administrator Questionnaire

Please work with your municipal planning team and complete this questionnaire. Please send electronic Word version by July 22, 2016 to:
Jonathan Raser, LPM
Phone: 973-620-8242 Email: jonathan.raser@tetratech.com

Municipality: _____
NFIP Floodplain Administrator Name/Title: _____

Flood Vulnerability Summary

- Does the municipality maintain inventories of properties that have been Declared? If so, does the inventory identify property owners who are interested in mitigation (e.g. elevation, acquisition)?
- Characterize/quantify the number of structures damaged during Flood, Inund, Storm or other events. If possible, can you provide a table of those structures indicating the number of residential / commercial / industrial?
- Do you make Substantial Damage estimates, and how many were declared for Flood or other events?
- How many are interested in mitigation (elevation or acquisition), and how many are currently in the process of mitigation?

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Update, Identification and Analysis of Mitigation Actions

- Mitigation strategies need to be realistic, achievable and action-oriented.
- Will include both regional (county-wide) strategies, as well as jurisdiction-specific.
- For each proposed mitigation strategy, the following will be identified:
 - Implementation timeline
 - Estimated budget
 - Potential funding sources
 - Lead agency or department
 - Supporting agencies
 - Priority
 - For prior/old strategies provide update of status
- Proposed mitigation activities are evaluated using a Cost-Benefit Screening



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Update Progress on 2010 Actions

- Identify progress made on mitigation actions identified in 2010 Plan.
- If an action wasn't completed, why not?
- This strategy review process is NOT meant to blame or punish. The answer can reveal things that need to be addressed to allow mitigation to progress, for example:
 - Obstacle: We do not have the technical resources to prepare a grant application.
 - Possible Action: Develop a county-level support team trained in application development.

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Update Progress on 2010 Actions (Worksheet #4 on CD)

Please work with your planning team to complete the worksheets and return to Jonathan Raser by July 15, 2016.

Washington County Hazard Mitigation Plan Update
Worksheet #4 - Mitigation Action Review Worksheet for
Washington County

Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by July 22, 2016 to:
Jonathan Raser, EPM
Phone: 973-630-8242 E-mail: jon.raser@tcwash.com

Who can provide you information about past mitigation actions? See the "Responsible Party" column in the table below which identifies who put this action in the 2010 HMP (e.g., EOP, Engineer, Code Official, Planner, OEM Coordinator).

Please use the following table to indicate progress and next steps on your community's mitigation strategy identified in the 2010 HMP. Please be as detailed as possible.

Mitigation Action	Responsible Party	Status (Is program/program completed?)	Describe Status 1. Please describe what was accomplished and include completion. 2. If there were no progress, indicate what obstacles, why, and how to overcome. 3. If there were progress, how far have you been (e.g., FEMA 40002 grant, local budget)?	Next Step Describe to 2016 HMP or Worksheet?	Describe Next Step 1. If including action in the 2016 HMP, indicate current or next priority for implementation. 2. If not, describe what you plan to do.
Example: Elevate Main Street Bridge	JMP	In Progress	1. The program 2. Budget and personnel resources have received 400 grants that are moving forward 3. The building contract	Included in 2016 HMP	1. Elevate Main Street Bridge above the base flood elevation. 2. Elevate Main Street above base flood elevation. The elevation will raise the roadway to 400 ft MSL. Design is to be issued by the State.
Improve drainage of other vulnerable roads to meet or exceed the current standards in the past	County and PFD (WVDE)	Complete		Complete	
Purchase equipment to provide for local government to conduct the drainage improvement	County and PFD (WVDE)	Complete		Complete	

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New Mitigation Actions for 2015 HMP Update

- Opportunity to add new mitigation actions
- This includes all in-progress grant applications (FEMA or other related grant programs)
- Proposed mitigation actions should address identified vulnerabilities
- FEMA's Mitigation Workshop – August 2016



"At the first sign of a flood, you just push this little button."

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Types of Mitigation Actions

- **Plans and/or Regulations.** Measures such as zoning and building code, ordinances, planning (comprehensive/master plans, stormwater management plans, open space), hazard/risk insurance (e.g. NFIP).
- **Property Protection.** Measures such as acquisition, elevation, relocation, structural retrofits, storm shutters, rebuilding, barriers, floodproofing.
- **Public Education and Outreach.** Measures such as public awareness projects, real estate disclosure, hazard information centers, technical assistance.
- **Natural Resource Protection.** Measures such as erosion and sediment control, stream corridor protection, vegetative management, wetlands preservation.

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Plan Implementation

- Your mitigation strategy section provides a “blueprint” to follow for progressively reducing your community’s natural hazard risk.
- It will include two types of initiatives/projects – those that your community can “self fund”, and those that will require outside (e.g. grant) funding.
- Mitigation grant opportunities open regularly:
 - The annual HMA grant window opens in June of each year (just passed!).
 - HMGP funding comes in the wake of Declared Disasters in the State.

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Integration with Other Plans and Programs

The Hazard Mitigation Plan should complement and support other Plans and Regulatory Mechanisms

- Emergency Operations Plan (EOP) / Comprehensive Emergency Management Plans (CEMP)
- Master Plans (regional and local) – these plans guide and direct land use and development
- Capital Improvement Plans (some of these projects are grant eligible)
- Higher Regulatory Standards (e.g. increased free-board, cumulative substantial damages)
- Stormwater Management Plans

Plan Integration (Worksheet #5 on your CD)

- For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. We need to gather an understanding of your community's progress in plan integration, as well identify potential integration opportunities that you may pursue in the future.
- Circulate to your "team" to complete. Please expand on your answers when appropriate!



WASHINGTON COUNTY HAZARD MITIGATION PLAN UPDATE
 Worksheet #5 - Capability Assessment and Plan Integration Worksheet

Municipality: _____
Name and Title of Individual Completing Worksheet: _____

Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by July 22, 2016 to:
 Jonathan Moore, ODM
 Phone: 977-639-8947 Email: jonathan.moore@ntnash.com


For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. We would like to gather an understanding of your community's progress in plan integration, as well identify potential integration opportunities that your community may pursue in the future.

Who can assist with completing this table: The ODM main point of contact should discuss with the Engineer, Clerk, Mayor/Administrator, Planner, CIO, Building Code Official, 911/IT/Planning Administrator


Applicable Department/Agency	Plan Programs/Initiatives, etc.
Please list all applicable departments/agencies (e.g., Planning, Public Works, etc.)	Planning Does your municipality have a Master/Comprehensive Plan (not-use plan), or are you currently working on an update of your Master/Comprehensive Plan?
Please list all applicable planning/development/land use/ordinance (e.g., zoning, subdivision, etc.)	If so, does it include, or are you considering, at least one of the following (e.g., flood plain zones, steep slopes)?
Does your Master/Comprehensive plan refer to a local or Countywide Hazard Mitigation Plan?	

New Development (Worksheet #6 on your CD)

- Please indicate any major new development since 2010 AND any known or anticipated major new residential/commercial development and major infrastructure development that are identified for the next five (5) years in your municipality.



WASHINGTON COUNTY HAZARD MITIGATION PLAN UPDATE
Worksheet #6 – Potential New Development



Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by July 22, 2016 to:
Jonathan Raser, CFM
Phone: 973-630-8042 E-mail: jonathan.raser@tetratech.com

Municipality: _____

Name and Title of Individual Completing Worksheet: _____

Please indicate any recent development within your community from 2010 to present. Additionally, please indicate known or anticipated major residential and/or commercial development and major infrastructure development that are identified for the next five (5) years in your community.

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to Present					

Schedule

- Municipal Kick-Off Meeting: June 15, 2016
- Municipal Data Collection –
Local Support Meetings: June-July, 2016
- FEMA Mitigation Workshop: August 2016
- Draft Plan to NYS DHSES: October 2016
- Municipal Annex Completion Workshop: October 2016
- Final Plan to State and FEMA Region II: December 2016
- County and Municipal Plan Adoption: Upon FEMA Approval

Worksheets #1 – #6

Please work with your planning team to complete the worksheets and return to Jonathan Raser by July 15, 2016.

All electronic templates are on your CD in the 'Worksheets' folder.

#	Worksheet Name	Who is Responsible to Complete and Submit this Worksheet?	Where do you find the requested information?
1	Events/Losses	OEM, Police, Fire, DPW, Engineer	FEMA Project Worksheets (PWs) DPW records, Police response records
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3	NFIP Floodplain Administrator	Floodplain Administrator	NFIP Records
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6	New Development Table	Engineer, Planner, Building Department	Redevelopment Plans, Permits

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